



EPB

PLASTERBOARD

NOISE CONTROL SYSTEMS

March 2025

www.epb.co.nz

EPB Plasterboard Noise Control Systems Manual

These publications are continuously being updated and superseded.

It is important to check to ensure you have the latest publication. Call Freephone 0800 353 742.

Liability for systems and performances that are not designed and installed in accordance with this publication will not be accepted by Elephant Plasterboard (NZ) Limited.

Copyright

All the material in this document including text, diagrams, figures, patterns, pictures, tables and cad drawings are protected by copyright.

Cad Drawings

Pictures and CAD drawings may be downloaded and used in consented plans for generic references only. Elephant Plasterboard (NZ) Limited takes no liability in CAD drawing details shown. It is up to the designer and or builder to provide specific details and or building construction methods in each case. All pictures and CAD details are generic only.

Elephant Plasterboard (NZ) Limited Trademarks:

EPB Plasterboard®, Elephant Plasterboard®, Elephant Board®, EPB Standard®, EPB FireSmart®, EPB MultiSmart®, EPB AquaSmart®, EPB CeilingSmart®, EPB BraceSmart®, EPB NoiseSmart®, EPB Smartboard®, Elephant Standard Plasterboard®, SmartRock Plasterboard®, Elephant FireSmart®, Elephant MultiSmart®, Elephant AquaSmart®, Elephant CeilingSmart®, Elephant SpanSmart®, Elephant SuperSmart®, Elephant BraceSmart®, Elephant NoiseSmart®, Elephant UltraSmart®, Elephant Standard-Plus®, Elephant ImpactSmart®

All past and future references to Elephant Plasterboard and EPB Plasterboard are interchangeable.

Introducing new 10mm EPB FireSmart & 10mm EPB CeilingSmart®

10mm EPB FireSmart is a higher density board compared to 10mm EPB Standard and provides enhanced fire performance.

10mm EPB CeilingSmart is especially developed to span ceiling battens at 600mm centers providing a light weight and cost effective ceiling lining solution compared to using 10mm Standard Plasterboard at 450mm centres or 13mm Standard Plasterboard at 600mm centre.

All past and future references and installations of 10mm Standard-Plus is interchangeable with 10mm EPB FireSmart and vice versa.

Elephant Plasterboard (NZ) Limited Product & System Warranty

EPB Plasterboard wall and ceiling linings are supported by Elephant Plasterboard (NZ) Limited Quality Guarantee. This Warranty covers EPB Plasterboard products and or systems for a minimum of 10 years from the date of the purchase. Elephant Plasterboard (NZ) Limited supplies products which are warranted to be free from defects. Any products found to be defective before or after installation will be replaced and/or repaired, provided installation has been in accordance with EPB Plasterboard's technical literature.

Freephone

0800 353 742

Email

info@epb.co.nz

Website

www.epb.co.nz

Telephone

+64 (09) 818-7706

Elephant Plasterboard (NZ) Limited

14 Bancroft Crescent, Glendene, Auckland 0602

P.O. Box 21-436, Waitakere 0650

New Zealand



CONTENTS

SYSTEM SELECTOR TABLE 4-23

INTRODUCTION 24-29

Building Acoustics
 NZ Building Code Clause G6 Airborne & Impact Sound
 Habitable Space
 Household Unit
 Impact Insulation Class
 Acceptable Solution G6/AS1
 Sound Transmission Class (STC)
 Timber Framed Walls Fire Ratings & Noise Control
 Steel Framed Walls Fire Ratings & Noise Control
 Floor/Ceiling Fire Ratings & Noise Control
 Timber Joists
 Composite Joists
 Steel Joists
 Suspended Ceiling Grid
 Condition of Use
 Sound Transmission Class (STC)
 Flanking Transmission Paths

NOMENCLATURE 30

Specification Reference - Walls
 Specification Reference - Ceilings

NOISE CONTROL SYSTEMS - FULL INTERTENANCY 31-102

Timber Double Frame wall
 Timber Frame with Resilient Mount
 Timber Frame with Resilient Rail
 Steel Double Framed wall
 Steel Double Frame wall
 Steel Double Frame wall with MultiSmart Central Liner
 Steel Frame with Resilient Mount
 Steel Frame with Resilient Rail
 Quiet Steel Frame
 Staggered Steel Stud
 Direct Fix Clip - Floor/Ceiling - Timber Joist
 Suspended Grid - Floor/Ceiling
 Direct Fix Clip - Floor/Ceiling - Steel Joist

NOISE CONTROL SYSTEMS - SUB INTERTENANCY 103-148

Single Timber Frame walls
 Double Timber Frame walls
 Single Timber Frame with Resilient Mount
 Single Timber Frame with Resilient Rail
 Single Steel Frame walls - Non Load Bearing
 Single Steel Framed walls - Load Bearing
 Double Steel Frame wall systems
 Steel Frame with Resilient Rail
 Quiet Steel Frame
 Staggered Steel Frame
 Suspended Grid - Floor/Ceiling
 Direct Fix Clip - Floor/Ceiling

CONSTRUCTION DETAILS 149

Double Timber Frame Wall Details
 Double Timber Frame Floor/Ceiling Junctions
 Single Timber Frame Floor/Ceiling Junctions
 Timber Frame with Resilient Mount Junctions
 Timber Frame with Resilient Rail Junctions
 Double Steel Frame Wall Junctions
 Steel Frame with Resilient Rail Junctions
 Steel Frame with Resilient Mount Junctions
 Quiet Stud
 Composite Floor Deflection Head Detail
 Roof Cavity Detail
 Penetration Detail
 Rail and Mount Installation details
 Ceiling Perimeter Details

SYSTEM COMPONENTS 180

PRODUCT RANGE 182



Full Intertency - Fire Rated Walls

| System Number | Lining Suffix | FRR | Load Bearing Ability | Noise Control | | Lining Requirements | Page |
|---|---------------|----------|----------------------|---------------|----|--|------|
| | | | | STC | Rw | | |
| Timber Double Frame Walls - Load Bearing | | | | | | | |
| E3TDLA30 | -F30 | 30/30/30 | LB | 55 | 54 | 1 x 10mm EPB FireSmart one side 2 x 10mm EPB FireSmart other side | 31 |
| | -S39 | 30/30/30 | LB | 57 | 56 | 1 x 13mm EPB Standard one side 2 x 13mm EPB Standard other side | 31 |
| | -M30 | 30/30/30 | LB | 58 | 57 | 1 x 10mm EPB MultiSmart one side 2 x 10mm EPB MultiSmart other side | 31 |
| E4TDLA45 | -S40 | 45/45/45 | LB | 58 | 57 | 2 x 10mm EPB Standard each side | 32 |
| E2TDLA60 | -M26 | 60/60/60 | LB | 55 | 54 | 1 x 13mm EPB MultiSmart each side | 33 |
| E3TDLA60 | -MS39 | 60/60/60 | LB | 58 | 57 | 1 x 13mm EPB MultiSmart one side 2 x 13mm EPB Standard other side | 34 |
| | -M33 | 60/60/60 | LB | 59 | 58 | 1 x 13mm EPB MultiSmart one side 2 x 10mm EPB MultiSmart other side | 34 |
| | -M39 | 60/60/60 | LB | 61 | 60 | 1 x 13mm EPB MultiSmart one side 2 x 13mm EPB MultiSmart other side | 34 |
| E4TDLA60 | -S46 | 60/60/60 | LB | 59 | 58 | 1 x 10mm EPB Standard and 1 x 13mm EPB Standard each side | 35 |
| | -F40 | 60/60/60 | LB | 60 | 59 | 2 x 10mm EPB FireSmart each side | 35 |
| | -S52 | 60/60/60 | LB | 61 | 60 | 2 x 13mm EPB Standard each side | 35 |
| | -M40 | 60/60/60 | LB | 62 | 61 | 2 x 10mm EPB MultiSmart each side | 35 |
| E2TDLA75 | -F32 | 75/75/75 | LB | 56 | 55 | 1 x 16mm EPB FireSmart each side | 36 |
| E4TDLA90 | -F52 | 90/90/90 | LB | 64 | 63 | 2 x 13mm EPB FireSmart each side | 37 |
| | -M52 | 90/90/90 | LB | 67 | 66 | 2 x 13mm EPB MultiSmart each side | 37 |
| Timber Single Frame Walls with Resilient Mount - Load Bearing | | | | | | | |
| E3TMLA30 | -S39 | 30/30/30 | LB | 55 | 54 | Framing Side: 1 x 13mm EPB Standard Mount Side: 2 x 13mm EPB Standard | 38 |
| | -M30 | 30/30/30 | LB | 56 | 55 | Framing Side: 1 x 10mm EPB MultiSmart Mount Side: 2 x 10mm EPB MultiSmart | 38 |
| E4TMLA30 | -F40 | 30/30/30 | LB | 58 | 57 | Framing Side: 2 x 10mm EPB FireSmart Mount Side: 2 x 10mm EPB FireSmart | 39 |
| E4TMLA45 | -S52 | 45/45/45 | LB | 61 | 60 | Framing Side: 2 x 13mm EPB Standard Mount Side: 2 x 13mm EPB Standard | 40 |
| E3TMLA60 | -M39 | 60/60/60 | LB | 58 | 57 | Framing Side: 1 x 13mm EPB MultiSmart Mount Side: 2 x 13mm EPB MultiSmart | 41 |
| E4TMLA60 | -M40 | 60/60/60 | LB | 62 | 61 | Framing Side: 2 x 10mm EPB MultiSmart Mount Side: 2 x 10mm EPB MultiSmart | 42 |
| E4TMLA90 | -M52 | 90/90/90 | LB | 63 | 62 | Framing Side: 2 x 13mm EPB MultiSmart Mount Side: 2 x 13mm EPB MultiSmart | 43 |
| Timber Single Frame Walls with Resilient Rail - Load Bearing | | | | | | | |
| E4TRLA45 | -S52 | 45/45/45 | LB | 55 | 54 | Framing Side: 2 x 13mm EPB Standard Rail Side: 2 x 13mm EPB Standard | 44 |
| E4TRLA60 | -M40 | 60/60/60 | LB | 55 | 54 | Framing Side: 2 x 10mm EPB MultiSmart Rail Side: 2 x 10mm EPB MultiSmart | 45 |
| E4TRLA90 | -F52 | 90/90/90 | LB | 56 | 55 | Framing Side: 2 x 13mm EPB FireSmart Rail Side: 2 x 13mm EPB FireSmart | 46 |
| | -M52 | 90/90/90 | LB | 57 | 56 | Framing Side: 2 x 13mm EPB MultiSmart Rail Side: 2 x 13mm EPB MultiSmart | 46 |



Full Intertency - Fire Rated Walls

| System Number | Lining Suffix | FRR | Load Bearing Ability | Noise Control | | Lining Requirements | Page |
|---|---------------|----------|----------------------|---------------|----|--|------|
| | | | | STC | Rw | | |
| Steel Double Frame Walls - Non Load Bearing | | | | | | | |
| E3SDA30 | -S39 | -/30/30 | NLB | 55 | 54 | 1 x 13mm EPB Standard one side 2 x 13mm EPB Standard other side | 48 |
| | -M30 | -/30/30 | NLB | 56 | 55 | 1 x 10mm EPB MultiSmart one side 2 x 10mm EPB MultiSmart other side | 48 |
| E4SDA45 | -F40 | -/45/45 | NLB | 58 | 57 | 2 x 10mm EPB FireSmart each side | 49 |
| E2SDA60 | -M26 | -/60/60 | NLB | 55 | 54 | 1 x 13mm EPB MultiSmart each side | 50 |
| E3SDA60 | -MS39 | -/60/60 | NLB | 57 | 56 | 1 x 13mm EPB MultiSmart one side 2 x 13mm EPB Standard other side | 51 |
| | -FM33 | -/60/60 | NLB | 58 | 57 | 1 x 13mm EPB FireSmart one side 2 x 10mm EPB MultiSmart other side | 51 |
| | -M33 | -/60/60 | NLB | 58 | 57 | 1 x 13mm EPB MultiSmart one side 2 x 10mm EPB MultiSmart other side | 51 |
| | -M39 | -/60/60 | NLB | 61 | 60 | 1 x 13mm EPB MultiSmart one side 2 x 13mm EPB MultiSmart other side | 51 |
| E4SDA60 | -S52 | -/60/60 | NLB | 61 | 60 | 2 x 13mm EPB Standard each side | 52 |
| | -M40 | -/60/60 | NLB | 61 | 60 | 2 x 10mm EPB MultiSmart each side | 52 |
| E2SDA75 | -F32 | -/75/75 | NLB | 56 | 55 | 1 x 16mm EPB FireSmart each side | 53 |
| E4SDA75 | -MS52 | -/75/75 | NLB | 63 | 62 | 1 x 13mm EPB Standard and 1x13mm EPB MultiSmart each side | 54 |
| E4SDA90 | -F52 | -/90/90 | NLB | 62 | 61 | 2 x 13mm EPB FireSmart each side | 55 |
| | -M46 | -/90/90 | NLB | 63 | 62 | 1 x 10mm EPB MultiSmart and 1 x 13mm EPB MultiSmart each side | 55 |
| | -M52 | -/90/90 | NLB | 65 | 64 | 2 x 13mm EPB MultiSmart each side | 55 |
| Steel Double Frame Walls - Load Bearing | | | | | | | |
| E2SDLA30 | -M26 | 30/30/30 | LB | 55 | 54 | 1 x 13mm EPB MultiSmart each side | 56 |
| | -F32 | 30/30/30 | LB | 56 | 55 | 1 x 16mm EPB FireSmart each side | 56 |
| E3SDLA30 | -MF33 | 30/30/30 | LB | 58 | 57 | 1 x 13mm EPB MultiSmart one side 2 x 10mm EPB FireSmart other side | 57 |
| | -M39 | 30/30/30 | LB | 61 | 60 | 1 x 13mm EPB MultiSmart one side 2 x 13mm EPB MultiSmart other side | 57 |
| E4SDLA30 | -F40 | 30/30/30 | LB | 59 | 58 | 2 x 10mm EPB FireSmart each side | 58 |
| E4SDLA45 | -S52 | 45/45/45 | LB | 61 | 60 | 2 x 13mm EPB Standard each side | 59 |
| | -M40 | 45/45/45 | LB | 61 | 60 | 2 x 10mm EPB MultiSmart each side | 59 |
| E4SDLA60 | -M52 | 60/60/60 | LB | 65 | 64 | 2 x 13mm EPB MultiSmart each side | 60 |
| E4SDLA90 | -F64 | 90/90/90 | LB | 66 | 65 | 1 x 16mm EPB FireSmart each side | 61 |



Full Intertency - Fire Rated Walls

| System Number | Lining Suffix | FRR | Load Bearing Ability | Noise Control | | Lining Requirements | Page |
|--|---------------|---------|----------------------|---------------|----|--|------|
| | | | | STC | Rw | | |
| Steel Double Frame Walls with FireSmart Central Liner - Non Load Bearing | | | | | | | |
| E4CSDA60 | -MS46 | -/60/60 | NLB | 56 | 56 | 1 x 13mm EPB FireSmart and 1 x 10mm EPB Standard each side | 62 |
| | -MS52 | -/60/60 | NLB | 57 | 58 | 1 x 13mm EPB FireSmart And 1 x 13mm EPB Standard each side | 62 |
| Steel Frame Walls with Resilient Mount - Non Load Bearing | | | | | | | |
| E3SMA30 | -M30 | -/30/30 | NLB | 55 | 54 | Frame Side: 1 x 10mm EPB MultiSmart Mount Side: 2 x 10mm EPB MultiSmart | 64 |
| E4SMA30 | -F40 | -/30/30 | NLB | 56 | 55 | Frame Side: 2 x 10mm EPB FireSmart Mount Side: 2 x 10mm EPB FireSmart | 65 |
| E3SMA60 | -MS39 | -/60/60 | NLB | 56 | 55 | Frame Side: 1 x 13mm EPB MultiSmart Mount Side: 2 x 13mm EPB Standard | 66 |
| | -M39 | -/60/60 | NLB | 57 | 56 | Frame Side: 1 x 13mm EPB MultiSmart Mount Side: 2 x 13mm EPB MultiSmart | 66 |
| E4SMA60 | -S52 | -/60/60 | NLB | 58 | 57 | Frame Side: 2 x 13mm EPB Standard Mount Side: 2 x 13mm EPB Standard | 67 |
| | -M40 | -/60/60 | NLB | 59 | 58 | Frame Side: 2 x 10mm EPB MultiSmart Mount Side: 2 x 10mm EPB MultiSmart | 67 |
| E4SMA90 | -M46 | -/90/90 | NLB | 60 | 59 | Frame Side: 1 x 13mm EPB MultiSmart and 1 x 10mm EPB MultiSmart Mount Side: 1 x 13mm EPB MultiSmart and 1 x 10mm EPB MultiSmart | 68 |
| | -M52 | -/90/90 | NLB | 62 | 61 | Frame Side: 2 x 13mm EPB MultiSmart Mount Side: 2 x 13mm EPB MultiSmart | 68 |
| Steel Frame Walls with Resilient Rail - Non Load Bearing | | | | | | | |
| E4SRA60 | -S52 | -/60/60 | NLB | 55 | 54 | Frame Side: 2 x 13mm EPB Standard Rail Side: 2 x 13mm EPB Standard | 69 |
| | -M40 | -/60/60 | NLB | 56 | 55 | Frame Side: 2 x 10mm EPB MultiSmart Rail Side: 2 x 10mm EPB MultiSmart | 69 |
| E4SRA90 | -M46 | -/90/90 | NLB | 57 | 56 | Frame Side: 1 x 13mm EPB MultiSmart and 1 x 10mm EPB MultiSmart Rail Side: 1 x 13mm EPB MultiSmart and 1 x 10mm EPB MultiSmart | 70 |
| | -F52 | -/90/90 | NLB | 57 | 56 | Frame Side: 2 x 13mm EPB FireSmart Rail Side: 2 x 13mm EPB FireSmart | 70 |
| | -M52 | -/90/90 | NLB | 59 | 58 | Frame Side: 2 x 13mm EPB MultiSmart Rail Side: 2 x 13mm EPB MultiSmart | 70 |
| Quiet Steel Frame Walls - Non Load Bearing | | | | | | | |
| E4SQA30 | -F40 | -/30/30 | NLB | 55 | 54 | 2 x 10mm EPB FireSmart each side | 72 |
| E4SQA45 | -S46 | -/45/45 | NLB | 56 | 55 | 1x 10mm EPB Standard and 1 x 13mm Standard each side | 73 |
| E3SQA60 | -M33 | -/60/60 | NLB | 55 | 54 | 1 x 13mm EPB MultiSmart one side 2 x 10mm EPB MultiSmart other side | 74 |
| | -M36 | -/60/60 | NLB | 55 | 54 | 1 x 13mm EPB MultiSmart one side 1 x 10mm EPB MultiSmart and 1 x 13mm EPB MultiSmart other side | 74 |
| | -M39 | -/60/60 | NLB | 57 | 56 | 1 x 13mm EPB MultiSmart one side 2 x 13mm EPB MultiSmart other side | 74 |
| E4SQA60 | -S52 | -/60/60 | NLB | 57 | 56 | 2 x 13mm EPB Standard each side | 75 |
| | -M40 | -/60/60 | NLB | 57 | 56 | 2 x 10mm EPB MultiSmart each side | 75 |
| E4SQA75 | -MS52 | -/75/75 | NLB | 59 | 58 | 1 x13mm EPB MultiSmart and 1x13mm EPB Standard each side | 76 |
| E4SQA90 | -M46 | -/90/90 | NLB | 59 | 58 | 1 x 10mm EPB MultiSmart and 1 x 13mm EPB MultiSmart each side | 77 |
| | -M52 | -/90/90 | NLB | 61 | 60 | 2 x 13mm EPB MultiSmart each side | 77 |



Full Intertency - Fire Rated Walls

| System Number | Lining Suffix | FRR | Load Bearing Ability | Noise Control | | Lining Requirements | Page |
|---|---------------|---------|----------------------|---------------|----|--|------|
| | | | | STC | Rw | | |
| Staggered Steel Stud Walls - Non Load Bearing | | | | | | | |
| E3SSA30 | -S39 | -/30/30 | NLB | 55 | 54 | 1 x 13mm EPB Standard on One side 2 x 13mm EPB Standard on Other side | 78 |
| E4SSA45 | -F40 | -/45/45 | NLB | 56 | 55 | 2 x 10mm EPB FireSmart each side | 79 |
| E3SSA60 | -MS39 | -/60/60 | NLB | 56 | 55 | 1 x 13mm EPB MultiSmart one side 2 x 13mm EPB Standard other side | 80 |
| | -M39 | -/60/60 | NLB | 57 | 56 | 1 x 13mm EPB MultiSmart one side 2 x 13mm EPB MultiSmart other side | 80 |
| E4SSA60 | -S52 | -/60/60 | NLB | 59 | 58 | 2 x 13mm EPB Standard each side | 81 |
| E4SSA90 | -M46 | -/90/90 | NLB | 59 | 58 | 1 x 10mm EPB MultiSmart and 1 x 13mm EPB MultiSmart each side | 82 |
| | -M52 | -/90/90 | NLB | 62 | 61 | 2 x 13mm EPB MultiSmart each side | 82 |



Full Intertenancy - Fire Rated Floor/Ceilings

| System Number | Lining Suffix | FRR | Load Bearing Ability | Noise Control | | | Lining Requirements | Page |
|---|---------------|----------|----------------------|---------------|----|-------|---|------|
| | | | | STC | Rw | IIC | | |
| Direct Fix Clip - Floating Floor/Ceiling - Timber Joist | | | | | | | | |
| EFJ2DFA60 | -FS26 | 60/60/60 | LB | 66 | 65 | 57-76 | 1 x 13mm EPB FireSmart and 1 x 13mm EPB Standard | 84 |
| | -F26 | 60/60/60 | LB | 67 | 66 | 57-76 | 2 x 13mm EPB FireSmart | 84 |
| | -M26 | 60/60/60 | LB | 68 | 67 | 57-77 | 2 x 13mm EPB MultiSmart | 84 |
| EFP2DFA60 | -FS26 | 60/60/60 | LB | 63 | 62 | 55-72 | 1 x 13mm EPB FireSmart and 1 x 13mm EPB Standard | 86 |
| | -F26 | 60/60/60 | LB | 64 | 63 | 55-72 | 2 x 13mm EPB FireSmart | 86 |
| | -M26 | 60/60/60 | LB | 65 | 64 | 56-72 | 2 x 13mm EPB MultiSmart | 86 |
| Direct Fix Clip - Floating Floor/Ceiling - Steel Joist | | | | | | | | |
| EFJ2DFsA45 | -F26 | 45/45/45 | LB | 66 | 65 | 56-76 | 2 x 13mm EPB FireSmart | 88 |
| | -M26 | 45/45/45 | LB | 67 | 66 | 56-76 | 2 x 13mm EPB MultiSmart | 88 |
| EFP2DFsA45 | -F26 | 45/45/45 | LB | 63 | 62 | 55-72 | 2 x 13mm EPB FireSmart | 90 |
| | -M26 | 45/45/45 | LB | 64 | 63 | 55-72 | 2 x 13mm EPB MultiSmart | 90 |
| EFJ2DFsA60 | -F29 | 60/60/60 | LB | 67 | 66 | 56-76 | 1 x 13mm EPB FireSmart and 1 x 16mm EPB FireSmart | 92 |
| EFP2DFsA60 | -F29 | 60/60/60 | LB | 64 | 63 | 56-72 | 1 x 13mm EPB FireSmart and 1 x 16mm EPB FireSmart | 94 |
| Direct Fix Clip - Floor/Ceiling - Timber Joist | | | | | | | | |
| E2DFA60 | -FS26 | 60/60/60 | LB | 56 | 55 | 46-73 | 1 x 13mm EPB FireSmart and 1 x 13mm EPB Standard | 96 |
| | -F26 | 60/60/60 | LB | 57 | 56 | 46-73 | 2 x 13mm EPB FireSmart | 96 |
| | -M26 | 60/60/60 | LB | 58 | 57 | 46-73 | 2 x 13mm EPB MultiSmart | 96 |
| E2DFA90 | -FM29 | 90/90/90 | LB | 57 | 56 | 47-73 | 1 x 16mm EPB FireSmart and 1 x 13mm EPB MultiSmart | 97 |
| | -F32 | 90/90/90 | LB | 58 | 57 | 47-73 | 2 x 16mm EPB FireSmart | 97 |
| Suspended Grid Floor/Ceiling - Timber Joist | | | | | | | | |
| E2SCA60 | -MS26 | 60/60/60 | LB | 56 | 55 | 40-72 | 1 x 13mm EPB MultiSmart and 1 x 13mm EPB Standard | 98 |
| | -F26 | 60/60/60 | LB | 56 | 55 | 40-72 | 2 x 13mm EPB FireSmart | 98 |
| | -M26 | 60/60/60 | LB | 56 | 55 | 40-72 | 2 x 13 EPB MultiSmart | 98 |
| E2SCA75 | -F29 | 75/75/75 | LB | 57 | 56 | 47-72 | 1 x 16mm EPB FireSmart and 1 x 13mm EPB FireSmart | 99 |
| E2SCA90 | -F32 | 90/90/90 | LB | 57 | 56 | 40-73 | 2 x 16mm EPB FireSmart | 100 |
| Direct Fix Clip - Floor/Ceiling - Steel Joist | | | | | | | | |
| E2DFsA45 | -F26 | 45/45/45 | LB | 56 | 55 | 47-74 | 2 x 13mm EPB FireSmart | 101 |
| | -M26 | 45/45/45 | LB | 57 | 56 | 47-74 | 2 x 13mm EPB MultiSmart | 101 |
| E2DFsA60 | -FM29 | 60/60/60 | LB | 57 | 56 | 47-75 | 1 x 16mm EPB FireSmart and 1 x 13mm EPB MultiSmart | 102 |
| | -F32 | 60/60/60 | LB | 57 | 56 | 47-75 | 2 x 16mm EPB FireSmart | 102 |



Sub Intertenancy - Walls

| System Number | Lining Suffix | FRR | Load Bearing Ability | Noise Control | | Lining Requirements | Page |
|--|---------------|----------|----------------------|---------------|----|--|------|
| | | | | STC | Rw | | |
| Single Timber Frame Walls - Load Bearing | | | | | | | |
| E2TLa30 | -S20 | 30/30/30 | LB | 39 | 38 | 1 x 10mm EPB Standard each side | 104 |
| | -S26 | 30/30/30 | LB | 40 | 39 | 1 x 13mm EPB Standard each side | 104 |
| | -M20 | 30/30/30 | LB | 41 | 40 | 1 x 10mm EPB MultiSmart each side | 104 |
| E3TLa30 | -S30 | 30/30/30 | LB | 42 | 41 | 1 x 10mm EPB Standard one side 2 x 10mm EPB Standard other side | 105 |
| | -S39 | 30/30/30 | LB | 43 | 42 | 1 x 13mm EPB Standard one side 2 x 13mm EPB Standard other side | 105 |
| | -M30 | 30/30/30 | LB | 44 | 43 | 1 x 10mm EPB MultiSmart on One side 2 x 10mm EPB MultiSmart on Other side | 105 |
| E4TLa45 | -S40 | 45/45/45 | LB | 44 | 43 | 2 x 10mm EPB Standard each side | 106 |
| E2TLa60 | -M26 | 60/60/60 | LB | 42 | 41 | 1 x 13mm EPB MultiSmart each side | 107 |
| E3TLa60 | -MS39 | 60/60/60 | LB | 45 | 44 | 1 x 13mm EPB MultiSmart one side 2 x 13mm EPB Standard other side | 108 |
| | -M33 | 60/60/60 | LB | 45 | 44 | 1 x 13mm EPB MultiSmart one side 2 x 10mm EPB MultiSmart other side | 108 |
| | -M39 | 60/60/60 | LB | 46 | 45 | 1 x 13mm EPB MultiSmart one side 2 x 13mm EPB MultiSmart other side | 108 |
| E4TLa60 | -S46 | 60/60/60 | LB | 45 | 44 | 1 x 10mm EPB Standard and 1 x 13mm EPB Standard each side | 109 |
| | -S52 | 60/60/60 | LB | 46 | 45 | 2 x 13mm EPB Standard each side | 109 |
| | -M40 | 60/60/60 | LB | 46 | 45 | 2 x 10mm EPB MultiSmart each side | 109 |
| E4TLa90 | -M52 | 90/90/90 | LB | 48 | 47 | 2 x 13mm EPB MultiSmart each side | 110 |
| Double Timber Frame Walls - Load Bearing | | | | | | | |
| E2TDLa30 | -S20 | 30/30/30 | LB | 50 | 49 | 1 x 10mm EPB Standard each side | 111 |
| | -S26 | 30/30/30 | LB | 52 | 51 | 1 x 13mm EPB Standard each side | 111 |
| | -M20 | 30/30/30 | LB | 52 | 51 | 1 x 10mm EPB MultiSmart each side | 111 |
| Single Timber Frame Walls with Resilient Mount- Load Bearing | | | | | | | |
| E3TMLa30 | -S30 | 30/30/30 | LB | 52 | 51 | Frame Side: 1 x 10mm EPB Standard Mount Side: 2 x 10mm EPB Standard | 112 |
| Single Timber Frame Walls with Resilient Rail- Load Bearing | | | | | | | |
| E3TRLa30 | -S30 | 30/30/30 | LB | 47 | 46 | Frame Side: 1 x 10mm EPB Standard Rail Side: 2 x 10mm EPB Standard | 113 |
| | -S39 | 30/30/30 | LB | 50 | 49 | Frame Side: 1 x 13mm EPB Standard Rail Side: 2 x 13mm EPB Standard | 113 |
| | -M30 | 30/30/30 | LB | 51 | 50 | Frame Side: 1 x 10mm EPB MultiSmart Rail Side: 2 x 10mm EPB MultiSmart | 113 |
| E3TRLa60 | -MS39 | 60/60/60 | LB | 52 | 50 | Frame Side: 1 x 13mm EPB MultiSmart Rail Side: 2 x 13mm EPB Standard | 114 |
| | -M39 | 60/60/60 | LB | 52 | 51 | Frame Side: 1 x 13mm EPB MultiSmart Rail Side: 2 x 13mm EPB MultiSmart | 114 |



Sub Intertenancy - Walls

| System Number | Lining Suffix | FRR | Load Bearing Ability | Noise Control | | Lining Requirements | Page |
|---|---------------|-----------|----------------------|---------------|----|--|------|
| | | | | STC | Rw | | |
| Single Steel Frame Walls - Non Load Bearing | | | | | | | |
| E2Sa15 | -S20 | -/15/15 | NLB | 40 | 39 | 1 x 10mm EPB Standard each side | 116 |
| E2Sa30 | -S26 | -/30/30 | NLB | 41 | 40 | 1 x 13mm EPB Standard each side | 117 |
| | -M20 | -/30/30 | NLB | 42 | 41 | 1 x 10mm EPB MultiSmart each side | 117 |
| E3Sa30 | -S33 | -/30/30 | NLB | 43 | 42 | 1 x 13mm EPB Standard one side 2 x 10mm EPB Standard other side | 118 |
| | -S39 | -/30/30 | NLB | 44 | 42 | 1 x 13mm EPB Standard one side 2 x 13mm EPB Standard other side | 118 |
| | -M30 | -/30/30 | NLB | 44 | 43 | 1 x 10mm EPB MultiSmart one side 2 x 10mm EPB MultiSmart other side | 118 |
| E4Sa45 | -S40 | -/45/45 | NLB | 45 | 44 | 2 x 10mm EPB Standard each side | 119 |
| E2Sa60 | -M26 | -/60/60 | NLB | 43 | 42 | 1 x 13mm EPB MultiSmart each side | 120 |
| E3Sa60 | -MS39 | -/60/60 | NLB | 44 | 43 | 1 x 13mm EPB MultiSmart one side 2 x 13mm EPB Standard other side | 121 |
| | -M39 | -/60/60 | NLB | 45 | 44 | 1 x 13mm EPB MultiSmart one side 2 x 13mm EPB MultiSmart other side | 121 |
| E4Sa60 | -S46 | -/60/60 | NLB | 46 | 45 | 1 x 10mm EPB Standard and 1 x 13mm EPB Standard each side | 122 |
| | -S52 | -/60/60 | NLB | 48 | 47 | 2 x 13mm EPB Standard each side | 122 |
| | -M40 | -/60/60 | NLB | 48 | 47 | 2 x 10mm EPB MultiSmart each side | 122 |
| E4Sa90 | -M46 | -/90/90 | NLB | 50 | 49 | 1 x 10mm EPB MultiSmart and 1 x 13mm EPB MultiSmart each side | 123 |
| E4Sa105 | -M52 | -/105/105 | NLB | 52 | 51 | 2 x 13mm EPB MultiSmart each side | 124 |
| Single Steel Frame Walls - Load Bearing | | | | | | | |
| E2SLa30 | -M26 | 30/30/30 | LB | 43 | 42 | 1 x 13mm EPB MultiSmart each side | 125 |
| E3SLa30 | -M39 | 30/30/30 | LB | 45 | 44 | 1 x 13mm EPB MultiSmart one side 2 x 13mm EPB MultiSmart other side | 126 |
| E4SLa30 | -S40 | 30/30/30 | LB | 45 | 44 | 2 x 10mm EPB Standard each side | 127 |
| E4SLa45 | -S52 | 45/45/45 | LB | 48 | 47 | 2 x 13mm EPB Standard each side | 128 |
| | -M40 | 45/45/45 | LB | 48 | 47 | 2 x 10mm EPB MultiSmart each side | 128 |
| E4SLa60 | -M52 | 60/60/60 | LB | 52 | 51 | 2 x 13mm EPB MultiSmart each side | 129 |
| E4SLa90 | -F64 | 90/90/90 | LB | 53 | 52 | 2 x 16mm EPB FireSmart each side | 130 |
| Double Steel Frame Walls - Non Load Bearing | | | | | | | |
| E2SDa30 | -S26 | -/30/30 | NLB | 52 | 51 | 1 x 13mm EPB Standard each side | 131 |
| | -M20 | -/30/30 | NLB | 52 | 51 | 1 x 10mm EPB MultiSmart each side | 131 |



Sub Intertenancy - Walls

| System Number | Lining Suffix | FRR | Load Bearing Ability | Noise Control | | Lining Requirements | Page |
|---|---------------|---------|----------------------|---------------|----|---|------|
| | | | | STC | Rw | | |
| Steel Frame Walls with Resilient Rail- Non Load Bearing | | | | | | | |
| E3SRa30 | -S39 | -/30/30 | NLB | 51 | 50 | Frame Side: 1 x 13mm EPB Standard Rail Side: 2 x 13mm EPB Standard | 132 |
| | -M30 | -/30/30 | NLB | 51 | 50 | Frame Side: 1 x 10mm EPB MultiSmart Rail Side: 2 x 10mm EPB MultiSmart | 132 |
| E3SRa60 | -MS39 | -/60/60 | NLB | 52 | 51 | Frame Side: 1 x 13mm EPB MultiSmart Rail Side: 2 x 13mm EPB Standard | 133 |
| | -M39 | -/60/60 | NLB | 53 | 52 | Frame Side: 1 x 13mm EPB MultiSmart Rail Side: 2 x 13mm EPB MultiSmart | 133 |
| Quiet Steel Frame Walls - Non Load Bearing | | | | | | | |
| E2SQa30 | -S26 | -/30/30 | NLB | 47 | 46 | 1 x 13mm EPB Standard each side | 134 |
| | -M20 | -/30/30 | NLB | 48 | 47 | 1 x 10mm EPB MultiSmart each side | 134 |
| E3SQa30 | -S39 | -/30/30 | NLB | 53 | 52 | 1 x 13mm EPB Standard one side 2 x 13mm EPB Standard other side | 135 |
| | -M30 | -/30/30 | NLB | 53 | 52 | 1 x 10mm EPB MultiSmart one side 2 x 10mm EPB MultiSmart other side | 135 |
| E3SQa45 | -MS33 | -/45/45 | NLB | 52 | 51 | 1 x 13mm EPB MultiSmart one side 2 x 10mm EPB Standard other side | 136 |
| E2SQa60 | -M26 | -/60/60 | NLB | 50 | 49 | 1 x 13mm EPB MultiSmart each side | 137 |
| Staggered Steel Stud Walls - Non Load Bearing | | | | | | | |
| E2SSa30 | -S26 | -/30/30 | NLB | 50 | 49 | 1 x 13mm EPB Standard each side | 138 |
| | -M20 | -/30/30 | NLB | 49 | 48 | 1 x 10mm EPB MultiSmart each side | 138 |
| E2SSa60 | -M26 | -/60/60 | NLB | 52 | 51 | 1 x 13mm EPB MultiSmart each side | 139 |
| | -F32 | -/60/60 | NLB | 54 | 53 | 1 x 16mm EPB FireSmart each side | 139 |

Sub Intertenancy - Floor/Ceilings

| System Number | Lining Suffix | FRR | Load Bearing Ability | Noise Control | | | Lining Requirements | Page |
|---------------------------------|---------------|----------|----------------------|---------------|----|-------|-------------------------|------|
| | | | | STC | Rw | IIC | | |
| Direct Fix Clip - Floor/Ceiling | | | | | | | | |
| E1DFa15 | -S13 | 15/15/15 | LB | 48 | 47 | 43-69 | 1 x 13mm EPB Standard | 141 |
| E2DFa30 | -S26 | 30/30/30 | LB | 53 | 52 | 43-69 | 2 x 13mm EPB Standard | 142 |
| E1DFa45 | -M13 | 45/45/45 | LB | 52 | 51 | 43-69 | 1 x 13mm EPB MultiSmart | 143 |
| E1DFa60 | -F16 | 60/60/60 | LB | 52 | 51 | 43-69 | 1 x 16mm EPB FireSmart | 144 |
| Suspended Grid Floor/Ceiling | | | | | | | | |
| E1SCa15 | -S13 | 15/15/15 | LB | 48 | 47 | 39-62 | 1 x 13mm EPB Standard | 145 |
| E2SCa30 | -S26 | 30/30/30 | LB | 53 | 52 | 42-67 | 2 x 13mm EPB Standard | 146 |
| E1SCa45 | -M13 | 45/45/45 | LB | 51 | 50 | 43-69 | 1 x 13mm EPB MultiSmart | 147 |
| E1SCa60 | -F16 | 60/60/60 | LB | 52 | 51 | 43-69 | 1 x 16mm EPB FireSmart | 148 |





For construction of Two way Fire Rated intertenancy walls using EPB Plasterboard in combination with 25mm thick shaftliner barrier, go to

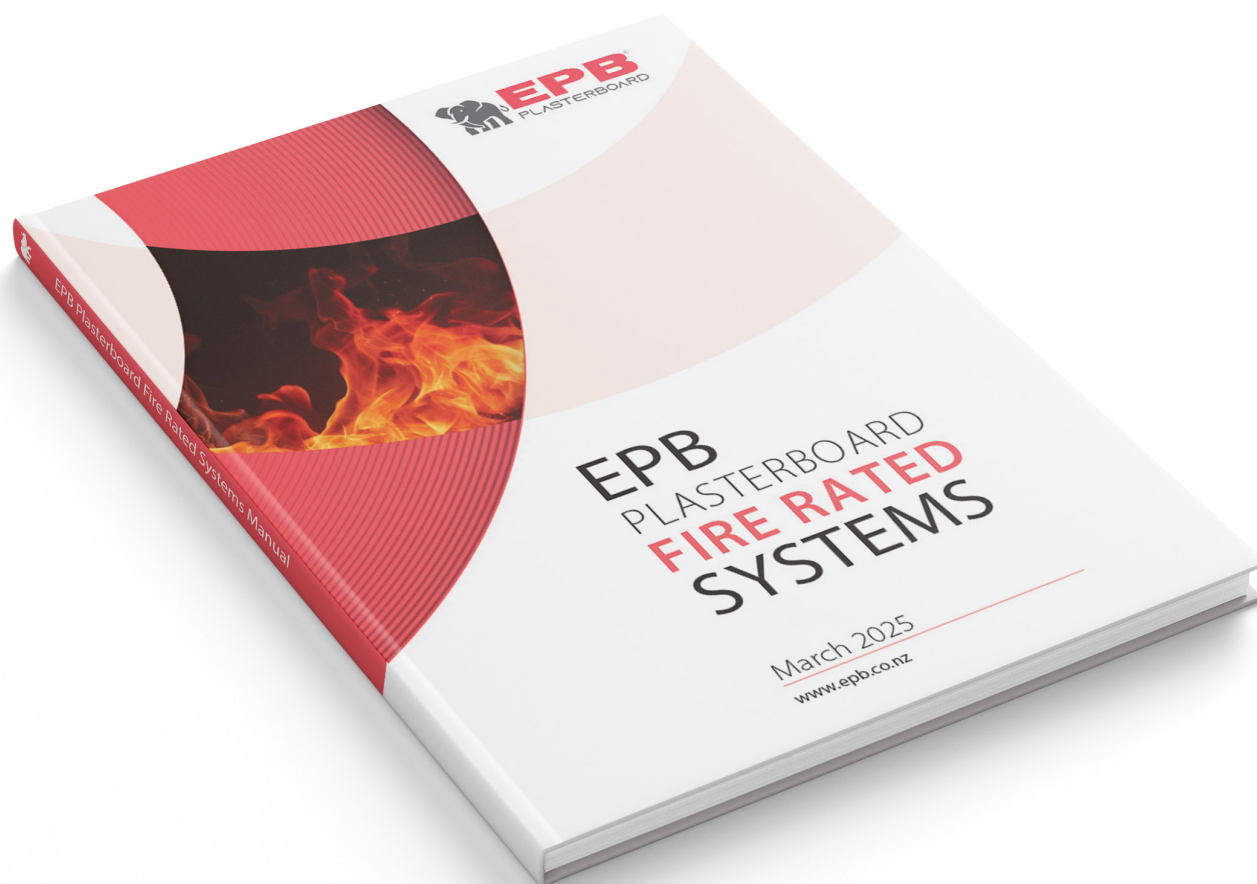
EPB Plasterboard & Shaftliner Barrier Systems for Terraced Homes

Full Intertency - Fire Rated Walls

| System Number | Lining Suffix | Fire Rating | Load Bearing Ability | Noise Control | | Lining Requirements | Page |
|---|---------------|-------------|----------------------|---------------|----|--|------|
| | | | | STC | Rw | | |
| Timber Double Frame Walls with 25mm GIB Barrierline® - Load Bearing | | | | | | | |
| EGB2TDLA60 | -S26 | 60/60/60 | LB | 62 | 61 | 1 x 13mm EPB Standard on One side 1 x 13mm EPB Standard to Other side | |
| | -M20 | 60/60/60 | LB | 64 | 63 | 1 x 10mm EPB MultiSmart on One side 1 x 10mm EPB MultiSmart on Other side | |
| | -M26 | 60/60/60 | LB | 67 | 66 | 1 x 13mm EPB MultiSmart on One Side 1 x 13mm EPB MultiSmart on Other Side | |
| EGB4TDLA60 | -S40 | 60/60/60 | LB | 69 | 68 | 2 x 10mm EPB Standard on One side 2 x 10mm EPB Standard on Other side | |
| Timber Double Frame Walls with 25mm USG Boral Shaftliner™ - Load Bearing | | | | | | | |
| EUL2TDLA60 | -S26 | 60/60/60 | LB | 62 | 61 | 1 x 13mm EPB Standard on One side 1 x 13mm EPB Standard to Other side | |
| | -M20 | 60/60/60 | LB | 64 | 63 | 1 x 10mm EPB MultiSmart on One side 1 x 10mm EPB MultiSmart on Other side | |
| | -M26 | 60/60/60 | LB | 67 | 66 | 1 x 13mm EPB MultiSmart on One Side 1 x 13mm EPB MultiSmart on Other Side | |
| EUL4TDLA60 | -S40 | 60/60/60 | LB | 69 | 68 | 2 x 10mm EPB Standard on One side 2 x 10mm EPB Standard on Other side | |
| Steel Double Frame Walls with 25mm GIB Barrierline® - Load Bearing | | | | | | | |
| EGB2SDLA60 | -S26 | 60/60/60 | LB | 61 | 60 | 1 x 13mm EPB Standard on One side 1 x 13mm EPB Standard to Other side | |
| | -M26 | 60/60/60 | LB | 67 | 66 | 1 x 13mm EPB MultiSmart on One Side 1 x 13mm EPB MultiSmart on Other Side | |
| EGB3SDLA60 | -S39 | 60/60/60 | LB | 67 | 66 | 1 x 13mm EPB Standard on One side 2 x 13mm EPB Standard to Other side | |
| | -M39 | 60/60/60 | LB | 69 | 68 | 1 x 13mm EPB MultiSmart on One side 2 x 13mm EPB MultiSmart to Other side | |
| Steel Double Frame Walls with 25mm USG Boral Shaftliner™ - Non Load Bearing | | | | | | | |
| EUL2SDA60 | -S26 | -/60/60 | NLB | 59 | 60 | 1 x 13mm EPB Standard on One side 1 x 13mm EPB Standard to Other side | |
| | -M26 | -/60/60 | NLB | 64 | 63 | 1 x 13mm EPB MultiSmart on One Side 1 x 13mm EPB MultiSmart on Other Side | |
| EUL3SDA60 | -S39 | -/60/60 | NLB | 64 | 63 | 1 x 13mm EPB Standard on One side 2 x 13mm EPB Standard to Other side | |
| | -M39 | -/60/60 | NLB | 66 | 65 | 1 x 13mm EPB MultiSmart on One Side 2 x 13mm EPB MultiSmart on Other Side | |

Please refer EPB Plasterboard & Shaftliner Barrier Systems Manual for these Systems





For Non-Acoustic Fire Rated system options, go to

EPB Plasterboard Fire Rated Systems Manual

Fire Rated Walls

| System Number | Lining Suffix | FRR | Load Bearing Ability | Noise Control | | Lining Requirements | Page |
|----------------------------------|---------------|-------------|----------------------|---------------|----|--|--|
| | | | | STC | Rw | | |
| Timber Frame Walls - Two Way FRR | | | | | | | |
| E2TL30 | -S20 | 30/30/30 | LB | 37 | 36 | 1 x 10mm EPB Standard each side | Please refer to the EPB Plasterboard Fire Rated Systems Manual for these System Specification sheets |
| | -F20 | 30/30/30 | LB | 37 | 36 | 1 x 10mm EPB FireSmart each side | |
| | -S26 | 30/30/30 | LB | 37 | 36 | 1 x 13mm EPB Standard each side | |
| E4TL45 | -S40 | 45/45/45 | LB | 42 | 41 | 2 x 10mm EPB Standard each side | |
| E4T60 | -S40 | -/60/60 | NLB | 42 | 41 | 2 x 10mm EPB Standard each side | |
| E2TL60 | -F26 | 60/60/60 | LB | 38 | 37 | 1 x 13mm EPB FireSmart each side | |
| E4TL60 | -F40 | 60/60/60 | LB | 42 | 41 | 2 x 10mm EPB FireSmart each side | |
| | -S46 | 60/60/60 | LB | 42 | 41 | 1 x 10mm EPB Standard and 1 x 13mm EPB Standard each side | |
| | -MS40 | 60/60/60 | LB | 42 | 41 | 1 x 10mm EPB Standard and 1 x 10mm EPB MultiSmart each side | |
| | -S52 | 60/60/60 | LB | 43 | 42 | 2 x 13mm EPB Standard each side | |
| E2TL75 | -F32 | 75/75/75 | LB | 38 | 37 | 1 x 16mm EPB FireSmart each side | |
| E4T90 | -FS52 | -/90/90 | NLB | 43 | 42 | 1 x 13mm EPB FireSmart and 1 x 13mm EPB Standard each side | |
| | -FM46 | -/90/90 | NLB | 43 | 42 | 1 x 13mm EPB FireSmart and 1 x 10mm EPB MultiSmart each side | |
| E4TL90 | -F52 | 90/90/90 | LB | 45 | 44 | 2 x 13mm EPB FireSmart each side | |
| E4T105 | -F52 | -/105/105 | NLB | 44 | 43 | 2 x 13mm EPB FireSmart each side | |
| E4T120 | -F58 | -/120/120 | NLB | 46 | 45 | 1 x 16mm EPB FireSmart and 1 x 13mm EPB FireSmart each side | |
| E6TL120 | -F78 | 120/120/120 | LB | 44 | 43 | 3 x 13mm EPB FireSmart each side | |
| EBV1TL30 | -F10 | 30/30/30 | LB | 46 | 45 | 1 x 10mm EPB FireSmart one side Brick Veneer other side | |
| | -S13 | 30/30/30 | LB | 46 | 45 | 1 x 13mm EPB Standard one side Brick Veneer other side | |
| EBV1TL60 | -F13 | 60/60/60 | LB | 46 | 45 | 1 x 13mm EPB FireSmart one side Brick Veneer other side | |
| Steel Frame Walls - Two Way FRR | | | | | | | |
| E2SL15 | -S26 | 15/15/15 | LB | 35 | 34 | 1 x 13mm EPB Standard each side | |
| E2S30 | -S26 | -/30/30 | NLB | 35 | 34 | 1 x 13mm EPB Standard each side | |
| | -M20 | -/30/30 | NLB | 36 | 35 | 1 x 10mm EPB MultiSmart each side | |
| E2SL30 | -M26 | 30/30/30 | LB | 37 | 36 | 1 x 13mm EPB MultiSmart each side | |
| | -F32 | 30/30/30 | LB | 37 | 36 | 1 x 16mm EPB FireSmart each side | |
| E4SL30 | -F40 | 30/30/30 | LB | 43 | 42 | 2 x 10mm EPB FireSmart each side | |
| | -S52 | 30/30/30 | LB | 43 | 42 | 2 x 13mm EPB Standard each side | |
| E2S60 | -M26 | -/60/60 | NLB | 37 | 36 | 1 x 13mm EPB MultiSmart each side (requires wall insulation) | |



Fire Rated Walls

| System Number | Lining Suffix | FRR | Load Bearing Ability | Noise Control | | Lining Requirements | Page |
|--|---------------|-----------|----------------------|---------------|----|---|--|
| | | | | STC | Rw | | |
| E4S60 | -S52 | -/60/60 | NLB | 45 | 44 | 2 x 13mm EPB Standard each side | Please refer to the EPB Plasterboard Fire Rated Systems Manual for these System Specification sheets |
| | -M40 | -/60/60 | NLB | 45 | 44 | 2 x 10mm EPB MultiSmart each side | |
| E4SL60 | -F52 | 60/60/60 | LB | 46 | 45 | 2 x 13mm EPB FireSmart each side | |
| E2S75 | -F32 | -/75/75 | NLB | 38 | 37 | 1 x 16mm EPB FireSmart each side | |
| E4S90 | -M46 | -/90/90 | NLB | 45 | 44 | 1 x 10mm EPB MultiSmart and 1 x 13mm EPB MultiSmart each side | |
| E4SL90 | -F64 | 90/90/90 | LB | 47 | 46 | 2 x 16mm EPB FireSmart each side | |
| E4S120 | -F52 | -/120/120 | NLB | 45 | 44 | 2 x 13mm EPB FireSmart each side | |
| E4S120 | -F58 | -/120/120 | NLB | 46 | 45 | 1 x 16mm EPB FireSmart and 1 x 13mm FireSmart each side | |
| Double Steel Frame Wall with FireSmart Central Liner - Two Way FRR | | | | | | | |
| E2CSD60 | -F26 | -/60/60 | NLB | 44 | 43 | 1 x 13mm EPB FireSmart each side (requires wall insulation) | |

Fire Rated Universal Walls

| System Number | Lining Suffix | FRR | Load Bearing Ability | Noise Control | | Lining Requirements |
|--|---------------|-------------|----------------------|---------------|----|---|
| | | | | STC | Rw | |
| Universal Timber or Steel Frame Wall - One Way FRR | | | | | | |
| E1UW15 | -S13 | 15/15/15 | LB | - | - | 1 x 13mm EPB Standard one side |
| E1UW30 | -F16a | 30/30/30 | LB | - | - | 1 x 16mm EPB FireSmart one side |
| E2UW30 | -F20 | 30/30/30 | LB | - | - | 2 x 10mm EPB FireSmart one side |
| E2UW45 | -F26 | 45/45/45 | LB | - | - | 2 x 13mm EPB FireSmart one side |
| E2UW60 | -F26a | 60/60/60 | LB | - | - | 2 x 13mm EPB FireSmart one side |
| | -F29 | 60/60/60 | LB | - | - | 1 x 16mm EPB FireSmart and 1 x 13mm EPB FireSmart one side |
| E3UW90 | -F39a | 90/90/90 | LB | - | - | 3 x 13mm EPB FireSmart one side |
| | -F42 | 90/90/90 | LB | - | - | 1 x 16mm EPB FireSmart and 2 x 13mm EPB FireSmart one side |
| E3UW120 | -F45a | 120/120/120 | LB | - | - | 1 x 13mm EPB FireSmart and 2 x 16mm EPB FireSmart one side |

Fire Rated Walls with simultaneous fire exposure on both sides

| System Number | Lining Suffix | FRR | Load Bearing Ability | Noise Control | | Lining Requirements |
|--|---------------|--------|----------------------|---------------|----|----------------------------------|
| | | | | STC | Rw | |
| Single Timber Frame Wall with Simultaneous Fire Exposure on Both sides - Two Way FRR | | | | | | |
| E2TL30S | -F26 | 30/-/- | LB | 38 | 37 | 1 x 13mm EPB FireSmart each side |
| E4TL60S | -F52 | 60/-/- | LB | 46 | 45 | 2 x 13mm EPB FireSmart each side |



Smoke Separation Walls

| System Number | Lining Suffix | FRR | Load Bearing Ability | Noise Control | | Lining Requirements | Page |
|---|---------------|----------|----------------------|---------------|----|---|------|
| | | | | STC | Rw | | |
| Smoke Separation - Timber or Steel Frame Wall - Two Way FRR | | | | | | | |
| E2sm10 | - | 10/10/10 | LB | - | - | 1 x Minimum 10mm EPB Plasterboard each side | |

Fire Rated Floor/Ceilings

| System Number | Lining Suffix | FRR | Load Bearing Ability | Noise Control | | | Lining Requirements |
|-------------------------------|---------------|-------------|----------------------|---------------|----|-----|--|
| | | | | STC | Rw | IIC | |
| Floor/Ceiling | | | | | | | |
| E1FC15 | -S13 | 15/15/15 | LB | 38 | 37 | 31 | 1 x 13mm EPB Standard |
| E1FC30 | -F13 | 30/30/30 | LB | 39 | 39 | 32 | 1 x 13mm EPB FireSmart |
| E2FC30 | -S26 | 30/30/30 | LB | 39 | 38 | 32 | 2 x 13mm EPB Standard |
| E1FC45 | -F13 | 45/45/45 | LB | 39 | 39 | 32 | 1 x 13mm EPB FireSmart |
| E1FC60 | -F16 | 60/60/60 | LB | 39 | 38 | 32 | 1 x 16mm EPB FireSmart |
| E2FC60 | -FS26 | 60/60/60 | LB | 40 | 39 | 33 | 1 x 13mm EPB FireSmart and 1 x 13mm EPB Standard |
| | -F26 | 60/60/60 | LB | 41 | 40 | 34 | 2 x 13mm EPB FireSmart |
| E2FC90 | -F29 | 90/90/90 | LB | 41 | 40 | 34 | 1 x 16mm EPB FireSmart and 1 x 13mm EPB FireSmart |
| E3FC120 | -F39 | 120/120/120 | LB | 43 | 42 | 35 | 3 x 13mm EPB FireSmart |
| Composite Joist Floor/Ceiling | | | | | | | |
| E1CJ30 | -F13 | 30/30/30 | LB | 39 | 38 | 32 | 1 x 13mm EPB FireSmart |
| E2CJ30 | -S26 | 30/30/30 | LB | 39 | 38 | 32 | 2 x 13mm EPB Standard |
| E1CJ45 | -F13 | 45/45/45 | LB | 39 | 38 | 32 | 1 x 13mm EPB FireSmart |
| E1CJ60 | -F16 | 60/60/60 | LB | 39 | 38 | 32 | 1 x 16mm EPB FireSmart |
| E2CJ60 | -FS26 | 60/60/60 | LB | 40 | 39 | 33 | 1 x 13mm EPB FireSmart and 1 x 13mm EPB Standard |
| Steel Joist Floor/Ceiling | | | | | | | |
| E1SJ30 | -F13 | 30/30/30 | LB | 35 | 34 | 31 | 1 x 13mm EPB FireSmart |
| E2SJ60 | -F26 | 60/60/60 | LB | 39 | 38 | 32 | 2 x 13mm EPB FireSmart |
| Battened Floor/Ceiling | | | | | | | |
| E1BC30 | -F13 | 30/30/30 | LB | 35 | 34 | 31 | 1 x 13mm EPB FireSmart |
| E1BC60 | -F16 | 60/60/60 | LB | 39 | 38 | 32 | 1 x 16mm EPB FireSmart |
| Direct Fix Clip Floor/Ceiling | | | | | | | |
| E1DF45 | -F13 | 45/45/45 | LB | 49 | 48 | 42 | 1 x 13mm EPB FireSmart |
| E1DF60 | -F16 | 60/60/60 | LB | 49 | 48 | 43 | 1 x 16mm EPB FireSmart |

Please refer to the EPB Plasterboard Fire Rated Systems Manual for these System Specification sheets



Fire Rated Floor/Ceilings

| System Number | Lining Suffix | FRR | Load Bearing Ability | Noise Control | | | Lining Requirements | Page |
|------------------------------|---------------|-------------|----------------------|---------------|----|-----|--|--|
| | | | | STC | Rw | IIC | | |
| E2DF60 | -FS26 | 60/60/60 | LB | 49 | 48 | 43 | 1 x 13mm EPB FireSmart and 1 x 13mm EPB Standard | Please refer to the EPB Plasterboard Fire Rated Systems Manual for these System Specification sheets |
| | -F26 | 60/60/60 | LB | 52 | 51 | 43 | 2 x 13mm EPB FireSmart | |
| E2DF90 | -F32 | 90/90/90 | NLB | 54 | 53 | 43 | 2 x 16mm EPB FireSmart | |
| E3DF120 | -F39 | 120/120/120 | LB | 54 | 53 | 43 | 3 x 13mm EPB FireSmart | |
| Suspended Grid Floor/Ceiling | | | | | | | | |
| E2SC30 | -S26 | 30/30/30 | LB | 50 | 49 | 42 | 2 x 13mm EPB Standard | |
| E1SC45 | -F13 | 45/45/45 | LB | 48 | 47 | 42 | 1 x 13mm EPB FireSmart | |
| E1SC60 | -F16 | 60/60/60 | LB | 48 | 47 | 43 | 1 x 16mm EPB FireSmart | |
| E1XC60 | -F16 | 60/60/60 | LB | 48 | 47 | 43 | 1 x 16mm EPB FireSmart | |
| E2SC60 | -FS26 | 60/60/60 | LB | 48 | 47 | 42 | 1 x 13mm EPB FireSmart and 1 x 13mm EPB Standard | |
| | -F26 | 60/60/60 | LB | 51 | 50 | 42 | 2 x 13mm EPB FireSmart | |
| E2SC90 | -F32 | 90/90/90 | LB | 53 | 52 | 43 | 2 x 16mm EPB FireSmart | |
| E2XC90 | -F29 | 90/90/90 | LB | 48 | 47 | 43 | 1 x 16mm EPB FireSmart and 1 x 13mm EPB FireSmart | |

Fire Rated Universal Ceilings

| System Number | Lining Suffix | FRR | Load Bearing Ability | Noise Control | | | Lining Requirements |
|---|---------------|----------|----------------------|---------------|----|-----|--|
| | | | | STC | Rw | IIC | |
| Universal Ceiling - Timber or Steel Frame | | | | | | | |
| E1UC15 | -F13 | 15/15/15 | LB | - | - | - | 1 x 13mm EPB FireSmart |
| E1UC30 | -F16a | 30/30/30 | LB | - | - | - | 1 x 16mm EPB FireSmart |
| E2UC60 | -F26a | 60/60/60 | LB | - | - | - | 2 x 13mm EPB FireSmart |
| | -F29 | 60/60/60 | LB | - | - | - | 1 x 16mm EPB FireSmart and 1 x 13mm EPB FireSmart |
| E3UC90 | -F39a | 90/90/90 | LB | - | - | - | 3 x 13mm EPB FireSmart |
| | -F42 | 90/90/90 | LB | - | - | - | 1 x 16mm EPB FireSmart and 2 x 13mm EPB FireSmart |

Please refer to the EPB Plasterboard Fire Rated Systems Manual for these System Specification sheets



Fire Rated Speciality Systems

| System Number | Lining Suffix | FRR | Load Bearing Ability | Noise Control | | | | Lining Requirements | Page |
|---------------|---------------|-----|----------------------|---------------|------|------------|------|---------------------|------|
| | | | | STC | | | | | |
| | | | | 64mm Stud | | 102mm Stud | | | |
| | | | | No Fill | Fill | No Fill | Fill | | |

Shaft Wall - Fire Rated from Shaft Side only

| | | | | | | | | |
|----------|------|-----------|-----|----|----|----|----|--|
| E1SWS60 | -F13 | -/60/60 | NLB | 39 | 45 | 42 | 46 | 1 x 13mm EPB FireSmart |
| E2SWS90 | -F26 | -/90/90 | NLB | 43 | 49 | 46 | 50 | 2 x 13mm EPB FireSmart |
| E2SWS120 | -F29 | -/120/120 | NLB | 44 | 50 | 46 | 51 | 1 x 16mm EPB FireSmart and 1 x 13mm EPB FireSmart |

Shaft Wall - Fire Rated from Either Side

| | | | | | | | | |
|----------|------|-----------|-----|----|----|----|----|--|
| E1SWE30 | -F13 | -/30/30 | NLB | 39 | 45 | 42 | 46 | 1 x 13mm EPB FireSmart |
| E2SWE60 | -F26 | -/60/60 | NLB | 43 | 49 | 46 | 50 | 2 x 13mm EPB FireSmart |
| E2SWE90 | -F29 | -/90/90 | NLB | 44 | 50 | 46 | 51 | 1 x 16mm EPB FireSmart and 1 x 13mm EPB FireSmart |
| E3SWE120 | -F42 | -/120/120 | NLB | 46 | 51 | 48 | 52 | 1 x 16mm EPB FireSmart and 2 x 13mm EPB FireSmart |

Elephant Shaft Panel

Elephant Shaft Panel

Fire Rated Columns & Beams

| System Number | Lining Suffix | FRR | Load Bearing Ability | Noise Control | | Lining Requirements |
|---------------|---------------|-----|----------------------|---------------|----|---------------------|
| | | | | STC | Rw | |

Steel Column & Beam - Timber Strapped

| | | | | | | |
|----------|------|---------|----|---|---|--|
| E1CBT15 | -S13 | 15/-/- | LB | - | - | 1 x 13mm EPB Standard |
| E1CBT30 | -F16 | 30/-/- | LB | - | - | 1 x 16mm EPB FireSmart |
| E2CBT30 | -F20 | 30/-/- | LB | - | - | 2 x 10mm EPB FireSmart |
| E2CBT60 | -F26 | 60/-/- | LB | - | - | 2 x 13mm EPB FireSmart |
| E2CBT90 | -F32 | 90/-/- | LB | - | - | 2 x 16mm EPB FireSmart |
| E3CBT120 | -F45 | 120/-/- | LB | - | - | 1 x 13mm EPB FireSmart and 2 x 16mm EPB FireSmart |

Steel Column & Beam - Steel Clip and Channel

| | | | | | | |
|----------|------|---------|----|---|---|--|
| E1CBS15 | -S13 | 15/-/- | LB | - | - | 1 x 13mm EPB Standard |
| E1CBS30 | -F16 | 30/-/- | LB | - | - | 1 x 16mm EPB FireSmart |
| E2CBS30 | -F20 | 30/-/- | LB | - | - | 2 x 10mm EPB FireSmart |
| E2CBS60 | -F26 | 60/-/- | LB | - | - | 2 x 13mm EPB FireSmart |
| E2CBS90 | -F32 | 90/-/- | LB | - | - | 2 x 16mm EPB FireSmart |
| E3CBS120 | -F45 | 120/-/- | LB | - | - | 1 x 13mm EPB FireSmart and 2 x 16mm EPB FireSmart |

Please refer to the EPB Plasterboard Fire Rated Systems Manual for these System Specification sheets





For Plasterboard & Fibre Cement combination Fire Rated system options, go to

EPB & Fibre Cement Fire Rated Systems Manual

External Fire Rated Walls - Timber Frame

| System Number | Lining Suffix | FRR | Insulation | Noise Control | Lining Requirements | Page |
|---|---------------|----------|-----------------|---------------|--|--|
| | | | | STC | | |
| EPB Plasterboard & James Hardie Linea™ Weatherboard | | | | | | |
| EJL1TL30 | -F10 | 30/30/30 | R2.2 glass wool | 46 | 1 x 10mm EPB FireSmart on Internal side James Hardie Linea™ Weatherboard to External side | Please refer EPB Plasterboard & Fibre Cement Fire Rated Systems Manual for these System Specification sheets |
| EJL1TL60 | -F13 | 60/60/60 | R2.2 glass wool | 47 | 1 x 13mm EPB FireSmart on Internal side James Hardie Linea™ Weatherboard to External side | |
| EPB Plasterboard & James Hardie Oblique™ Weatherboard | | | | | | |
| EJOh1TL30 | -F10 | 30/30/30 | R2.2 glass wool | 46 | 1 x 10mm EPB FireSmart on Internal side James Hardie Oblique™ Weatherboard horizontal to External side | |
| EJOv1TL30 | -F10 | 30/30/30 | R2.2 glass wool | 46 | 1 x 10mm EPB FireSmart on Internal side James Hardie Oblique™ Weatherboard vertical to External side | |
| EJOh1TL60 | -F13 | 60/60/60 | R2.2 glass wool | 47 | 1 x 13mm EPB FireSmart on Internal side James Hardie Oblique™ Weatherboard horizontal to External side | |
| EJOv1TL60 | -F13 | 60/60/60 | R2.2 glass wool | 47 | 1 x 13mm EPB FireSmart on Internal side James Hardie Oblique™ Weatherboard vertical to External side | |
| EPB Plasterboard & James Hardie™ Plank Weatherboard | | | | | | |
| EJW1TL30 | -F10 | 30/30/30 | R2.2 glass wool | 45 | 1 x 10mm EPB FireSmart on Internal side James Hardie™ Plank Weatherboard to External side | |
| EJW1TL60 | -F13 | 60/60/60 | Hardie™ Mineral | 46 | 1 x 13mm EPB FireSmart on Internal side James Hardie™ Plank Weatherboard to External side | |
| EPB Plasterboard & James Hardie Stria™ Cladding | | | | | | |
| EJSh1TL30 | -F10 | 30/30/30 | R2.2 glass wool | 46 | 1 x 10mm EPB FireSmart on Internal side James Hardie Stria™ Cladding horizontal to External side | |
| EJSv1TL30 | -F10 | 30/30/30 | R2.2 glass wool | 46 | 1 x 10mm EPB FireSmart on Internal side James Hardie Stria™ Cladding vertical to External side | |
| EJSh1TL60 | -F13 | 60/60/60 | R2.2 glass wool | 47 | 1 x 13mm EPB FireSmart on Internal side James Hardie Stria™ Cladding horizontal to External side | |
| EJSv1TL60 | -F13 | 60/60/60 | R2.2 glass wool | 47 | 1 x 13mm EPB FireSmart on Internal side James Hardie Stria™ Cladding vertical to External side | |
| EPB Plasterboard & James Hardie Stria™ Cladding & RAB™ Board with CLD Batts | | | | | | |
| EJRS1TL30 | -F10 | 30/30/30 | R2.2 glass wool | 46 | 1 x 10mm EPB FireSmart on Internal side James Hardie Stria™ Cladding and RAB™ Board with CLD™ Structural Cavity Batten to External side | |
| EJRS1TL60 | -F13 | 60/60/60 | Hardie™ Mineral | 47 | 1 x 13mm EPB FireSmart on Internal side James Hardie Stria™ Cladding and RAB™ Board with CLD™ Structural Cavity Batten to External side | |
| EPB Plasterboard & James Hardie Hardie™ Flex Sheet | | | | | | |
| EJF1TL30 | -F10 | 30/30/30 | R2.2 glass wool | 42 | 1 x 10mm EPB FireSmart on Internal side James Hardie Hardie™ Flex Sheet to External side | |
| EJF1TL60 | -F13 | 60/60/60 | Hardie™ Mineral | 43 | 1 x 13mm EPB FireSmart on Internal side James Hardie Hardie™ Flex Sheet to External side | |



External Fire Rated Walls - Timber Frame

| System Number | Lining Suffix | FRR | Insulation | Noise Control STC | Lining Requirements | Page | |
|---|---------------|----------|-----------------|----------------------|--|--|--|
| EPB Plasterboard & James Hardie Axon™ Panel | | | | | | | |
| EJA1TL30 | -F10 | 30/30/30 | R2.2 glass wool | 41 | 1 x 10mm EPB FireSmart on Internal side James Hardie Axon™ Panel to External side | Please refer EPB Plasterboard & Fibre Cement Fire Rated Systems Manual for these Systems | |
| EJA1TL60 | -F13 | 60/60/60 | Hardie™ Mineral | 42 | 1 x 13mm EPB FireSmart on Internal side James Hardie Axon™ Panel to External side | | |
| EPB Plasterboard & James Hardie Axon™ Panel & RAB™ Board with CLD Battens | | | | | | | |
| EJRA1TL30 | -F10 | 30/30/30 | R2.2 glass wool | 45 | 1 x 10mm EPB FireSmart on Internal side James Hardie Axon™ Panel and RAB™ Board with CLD™ Structural Cavity Batten to External side | | |
| EJRA1TL60 | -F13 | 60/60/60 | Hardie™ Mineral | 46 | 1 x 13mm EPB FireSmart on One side James Hardie Axon™ Panel and RAB™ Board with CLD™ Structural Cavity Batten to External side | | |
| EPB Plasterboard & James Hardie ExoTec™ Facade Panel & RAB™ Board | | | | | | | |
| EJRX1TL30 | -F10 | 30/30/30 | R2.2 glass wool | 47 | 1 x 10mm EPB FireSmart on Internal side James Hardie ExoTec™ Facade Panel and RAB™ Board with Top hat system to External side | | |
| EJRX1TL60 | -F13 | 60/60/60 | Hardie™ Mineral | 48 | 1 x 13mm EPB FireSmart on Internal side James Hardie ExoTec™ Facade Panel and RAB™ Board with Top hat system to External side | | |
| EPB Plasterboard & James Hardie RAB™ Board & a Weathertight Cladding | | | | | | | |
| EJRN1TL30 | -F10 | 30/30/30 | R2.2 glass wool | 42 | 1 x 10mm EPB FireSmart on Internal side James Hardie RAB™ Board with a Weathertight Cladding to External side | | |
| EJRN1TL60 | -F13 | 60/60/60 | Hardie™ Mineral | 42 | 1 x 13mm EPB FireSmart on Internal side James Hardie RAB™ Board with a Weathertight Cladding to External side | | |
| EJRN2TL60 | -F20 | 60/60/60 | Hardie™ Mineral | 46 | 2 x 10mm EPB FireSmart on Internal side James Hardie RAB™ Board with a Weathertight Cladding to External side | | |
| | -S26 | 60/60/60 | Hardie™ Mineral | 47 | 2 x 13mm EPB Standard on Internal side James Hardie RAB™ Board with a Weathertight Cladding to External side | | |
| | -M20 | 60/60/60 | Hardie™ Mineral | 47 | 2 x 10mm EPB MultiSmart on Internal side James Hardie RAB™ Board with a Weathertight Cladding to External side | | |

Please refer EPB Plasterboard & Fibre Cement Fire Rated Systems Manual for these System Specification sheets



External Fire Rated Walls - Steel Frame

| System Number | Lining Suffix | FRR | Insulation | Noise Control | Lining Requirements | Page |
|---------------|---------------|-----|------------|---------------|---------------------|------|
| | | | | STC | | |

EPB Plasterboard & RAB™ board with Selected James Hardie Fibre Cement Cladding

| | | | | | |
|-----------|------|----------|-----------------|---------|--|
| EJRH1SL30 | -F16 | 30/30/30 | Hardie™ Mineral | 42 - 47 | 1 x 16mm EPB FireSmart on Internal side James Hardie RAB™ Board with Selected James Hardie Fibre Cement cladding to External side |
| EJRH2SL30 | -F20 | 30/30/30 | Hardie™ Mineral | 47 - 53 | 2 x 10mm EPB FireSmart on Internal side James Hardie RAB™ Board with Selected James Hardie Fibre Cement cladding to External side |
| EJRH2SL60 | -F26 | 60/60/60 | Hardie™ Mineral | 51 - 54 | 2 x 13mm EPB FireSmart on Internal side James Hardie RAB™ Board with Selected James Hardie Fibre Cement cladding to External side |

EPB Plasterboard & James Hardie RAB™ Board & a Weathertight Cladding (See Note 1)

| | | | | | |
|-----------|------|----------|-----------------|----|--|
| EJRN1SL30 | -F16 | 30/30/30 | Hardie™ Mineral | 43 | 1 x 16mm EPB FireSmart on Internal side James Hardie RAB™ Board with a Weathertight Cladding to External side |
| EJRN2SL30 | -F20 | 30/30/30 | Hardie™ Mineral | 47 | 2 x 10mm EPB FireSmart on Internal side James Hardie RAB™ Board with a Weathertight Cladding to External side |
| EJRN2SL60 | -F26 | 60/60/60 | Hardie™ Mineral | 49 | 2 x 13mm EPB FireSmart on Internal side James Hardie RAB™ Board with a Weathertight Cladding to External side |

Internal Fire Rated Walls - Timber Frame

| System Number | Lining Suffix | FRR | Insulation | Noise Control | Lining Requirements |
|---------------|---------------|-----|------------|---------------|---------------------|
| | | | | STC | |

EPB Plasterboard & James Hardie Villaboard™ Lining

| | | | | | |
|----------|------|----------|-----------------|----|---|
| EJV1TL30 | -F10 | 30/30/30 | R2.2 glass wool | 42 | 1 x 10mm EPB FireSmart one side James Hardie Villaboard™ Lining other side |
| EJV1TL60 | -F13 | 60/60/60 | Hardie™ Mineral | 43 | 1 x 13mm EPB FireSmart one side James Hardie Villaboard™ Lining other side |

Floor/Ceilings - Timber Frame

| System Number | Lining Suffix | FRR | Insulation | Noise Control | | Lining Requirements to underside of Frame |
|---------------|---------------|-----|------------|---------------|-----|---|
| | | | | STC | IIC | |

EPB Plasterboard & James Hardie Secura™ Interior Flooring

| | | | | | | |
|----------|------|----------|-----------------|----|----|--|
| EJS1FC30 | -F13 | 30/30/30 | R1.8 glass wool | 45 | 33 | 1 x 13mm EPB FireSmart to underside of frame |
| EJS1FC60 | -F16 | 60/60/60 | n/a | 46 | 33 | 1 x 16mm EPB FireSmart to underside of frame |

Full Intertenancy - Floating Floor/Ceilings - Timber Frame

| System Number | Lining Suffix | FRR | Insulation | Noise Control | | Lining Requirements to underside of Frame |
|---------------|---------------|-----|------------|---------------|-----|---|
| | | | | STC | IIC | |

EPB Plasterboard & Floating James Hardie Secura™ Interior Flooring

| | | | | | | |
|-----------|-------|----------|-----------------|----|-------|---|
| EFJ2DFA60 | -FS26 | 60/60/60 | R1.8 glass wool | 67 | 57-76 | 1 x 13 EPB FireSmart And 1 x 13 EPB Standard under the battens |
| | -F26 | 60/60/60 | R1.8 glass wool | 68 | 57-77 | 2 x 13 EPB FireSmart under the battens |

Please refer EPB Plasterboard & Fibre Cement Fire Rated Systems Manual for these System Specification sheets



INTRODUCTION

The building code objective and functional requirements are concerned with prevention of undue noise transmission from the occupancies or common spaces to the habitable spaces of household units. This manual provides details for construction of Two way Fire Rated walls and floor/ceiling elements to provide sound isolation for airborne and impact noise to meet the NZBC Clause G6 performance requirements.

Elephant Plasterboard (NZ) Limited has many different combinations of wall and ceiling Noise Control Systems. It is the responsibility of the specifier to accommodate the required performance of the building they are considering. The specifier should take into consideration both external and internal noise control & fire rating for occupants intended use. Special consideration must be taken in the construction process.

All construction details that have been provided in this manual are generic only and it is important that expert advice is sought to determine suitability in each individual project

Limitations and Conditions of Use

- EPB Plasterboard is intended for normal conditions of dry internal use.
- EPB Plasterboard must not be used for bracing applications in or around baths and shower areas.
- EPB Plasterboard must not be exposed to liquid water or be installed in situations where extended exposures to humidity above 90% Relative Humidity are to be expected. Bathrooms, kitchens and laundries should have adequate ventilation or heating to avoid condensation build-up.
- A suitable surface finish (e.g. Vinyl wallpaper or gloss and semi-gloss alkyd paints) must be applied to EPB Plasterboard in all areas where liquid water or high humidity can be expected.
- EPB Plasterboard must not be installed over a vapour barrier.
- EPB Plasterboard must not be applied directly to masonry, concrete or solid plaster, unless timber strapping or steel furring channels are used.
- EPB Plasterboard must not be exposed to temperatures of 52°C or greater for prolonged periods.
- EPB Plasterboard may not be used as an external lining.

New Zealand Building Code (NZBC) Compliance

EPB Plasterboard is manufactured to AS/NZS 2588 and has been specifically formulated to meet New Zealand Building Code requirements. EPB Plasterboard has been marketed internationally since 1975 and the product has established an excellent history of performance for its use in buildings throughout New Zealand and the Asia/Pacific region. EPB Plasterboard meets the durability requirements of the NZBC and is subject to use, installation and maintenance in accordance with the instructions outlined in this manual. The Manufacturing plant is International Standard ISO 9001 and ISO 14001 registered.

- **NZBC Clause B1 Structure:**
Framing material specifications used with EPB Plasterboard Systems must be in accordance with the performance requirements of NZBC Clause B1. Timber framed walls and floors must be installed and meet the requirements of NZS 3604.
- **NZBC Clause B2 Durability:**
EPB Plasterboard Fire, Noise Control & Bracing Systems have a serviceable life of not less than 50 years and so is in accordance to NZBC B2.3.1.
- **NZBC Clause C1-C6 Protection from Fire:**
EPB Plasterboard Fire & Noise Control Systems can meet the requirements of providing passive fire protection as per NZBC Clause C1-C6.
- **NZBC Clause E3 Internal Moisture:**
EPB Plasterboard Wet Area Systems can meet the requirements of NZBC Acceptable Solution E3/AS1.
- **NZBC Clause F2 Hazardous Building Materials:**
EPB Plasterboard Systems meet this requirement of NZBC Clause F2 and will not present a health hazard to people.
- **NZBC Clause G6 -Airborne & Impact Sound:**
EPB Plasterboard Noise Control Systems entitled '**Full Intertency**' (STC 55 or greater) systems meet the requirements of NZBC Clause G6.

INTRODUCTION

Fire Resistance Ratings (FRR)

To prevent fire spread or structural collapse, the Acceptable Solutions require building elements to have fire resistance ratings (FRRs). The level of FRR required depends on the risk group of the building. The way to determine the FRR of building elements is by using the standard tests specified in Appendix C of the Acceptable Solutions.

FRR components

An FRR comprises three numbers: these give time values in minutes for structural adequacy, integrity and insulation. Primary and secondary elements required to have an FRR will, depending on their function, need to satisfy one or more of these three criteria as follows:

- a) **Structural Adequacy:** usually provided by primary elements within a fire cell. These include building elements which are part of the structure, and those providing support to other elements with an FRR within the same or adjacent fire cells. Examples are: columns, beams, floors and walls (which may also be fire separations). Paragraph 4.3 of the Acceptable Solutions describes special situations where primary elements need not have an FRR.
- b) **Integrity:** usually provided by secondary elements. Examples are fire separations, which are internal partitions and floors, areas of external walls not permitted to be an unprotected area, and some areas of roofs when close to another building or crossed by an exit way. Primary elements forming an integral part of a fire separation are also rated for integrity.
- c) **Insulation:** applies to fire separations and is required where the transmission of heat through the element may endanger occupants on the other side or cause fire to spread to other fire cells or adjacent buildings. For example, insulation is necessary for fire separations between sleeping spaces, where protecting a safe path or through external walls.

EPB Plasterboard Fire Rated Systems meet the requirements of the above clauses and definitions and have numerous systems combinations as outlined in this manual. All EPB Plasterboard Fire Rated systems have been tested or internally assessed or have opinions provided by independent accredited quality assurance organisations like "The Building Research Association of New Zealand (BRANZ)".

Internal Lining Surface Finish Properties

EPB Plasterboard has been tested at BRANZ in accordance with ISO 5660 Reaction to fire tests (Heat release, smoke production and mass loss rate) Part 1: Heat release rate (cone calorimeter method); and ISO 5660 Reaction to fire tests (Heat release, smoke production and mass loss rate) Part 2: Smoke production rate (dynamic measurement).

A Group Number Classification of 1-S was achieved in Fire test FH 5695-TT for all EPB Plasterboard paper faced sheet linings. This classification only applies to EPB Plasterboard paper faced sheet linings without paint or wallpaper finish. Contact the surface finish suppliers for group number information for their products.

'Group Number 1-S' is the highest performance expectation under 'Part 4. Control of Internal Fire and Smoke Spread' clause C/AS2 to C/AS7 of the NZBC. It means an EPB Plasterboard paper faced sheet lining can be specified for use in any risk group application.

New Zealand Building Code Clause G6 Airborne and Impact Sound

Building Code Clause G6 is about prevention of undue noise transmission and requires that 'buildings shall be provided with adequate noise control in common walls, floors and other elements between occupancies, habitable spaces and other occupancies or common spaces'.

The performance criteria shall be:

- Sound Transmission Class (STC) for Walls, floors and ceilings - no less than 55, and
- Impact Insulation Class (IIC) of floors to be no less than 55.

EPB Noise Control Systems have been designed to comply with the NZBC Clause G6 and these type of systems are classified as the 'Full Intertenancy' (STC 55 or greater). Systems classified as 'Sub Intertenancy' are below 55 STC and do not meet this requirement.

Sound Transmission Class (STC)

A single number rating derived from measured values of transmission loss in accordance with classification ASTM E 413, Determination of Sound Transmission Class. It provides an estimate of the performance of a partition in certain common sound insulation situations.

Impact Insulation Class (IIC)

A single number rating derived from measured values of normalized impact sound pressure levels in accordance with Method of ASTM E 492, Annex A1, Laboratory Measurement of Impact Sound Transmission Through Floor Ceiling Assemblies Using the Tapping Machine. It provides an estimate of the impact sound insulating performance of a floor-ceiling assembly.

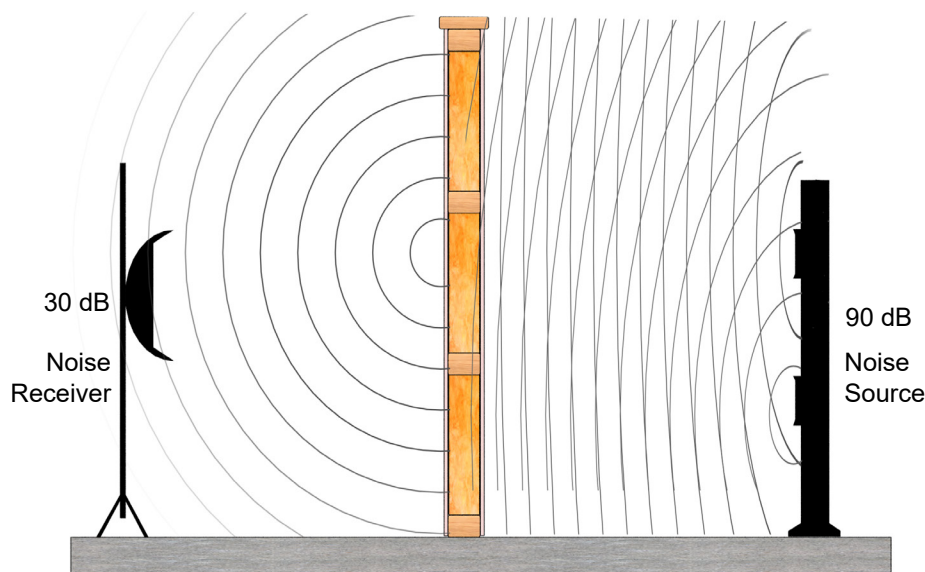


INTRODUCTION

Sound Transmission Class (STC)

The STC number is derived from sound attenuation values tested at sixteen standard frequencies from 125 Hz to 4000 Hz. These Transmission Loss values are then plotted on a sound pressure level graph and the resulting curve is compared to a standard reference contour. The Test method fit these values to the appropriate Transmission Loss Curve to determine an STC rating. A larger figure means more airborne sound insulation. The STC rating is appropriate for speech sounds, but much less so for amplified music, mechanical equipment noise, transportation noise, or any sound with substantial low-frequency energy below 125 Hz. Sometimes, acoustical labs will measure Transmission Loss at frequencies below 125 Hz, possibly down to 50 Hz or lower, thus giving additional valuable data to evaluate transmission loss at very low frequencies, such as a subwoofer-rich home theatre systems.

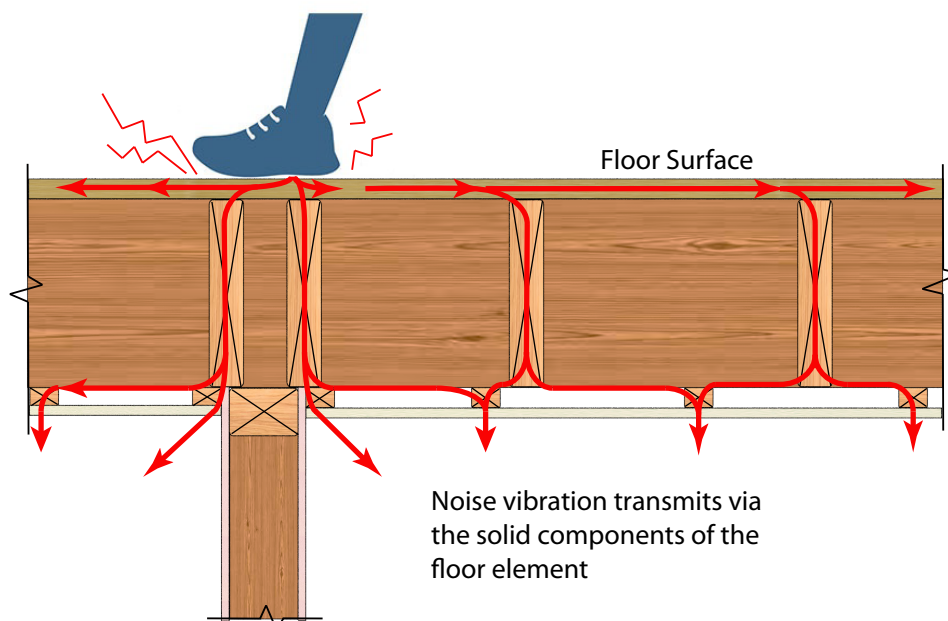
Sound Control Wall Elements
STC 60



Impact Insulation Class (IIC)

Impact insulation class (or IIC) is a rating of how well a floor element attenuates impact sounds, such as footsteps. A larger number means more impact sound insulation. The scale, like the decibel scale for sound, is logarithmic. The IIC is derived from ASTM method E989, which in turn uses a tapping machine specified in ASTM method E492.

The IIC number is derived from sound attenuation values tested at sixteen standard frequencies from 100 to 3150 Hz. "Real world" footstep noise is also generated at frequencies below 100 Hz, so the IIC value may not accurately describe the complete noise attenuation profile of a floor.



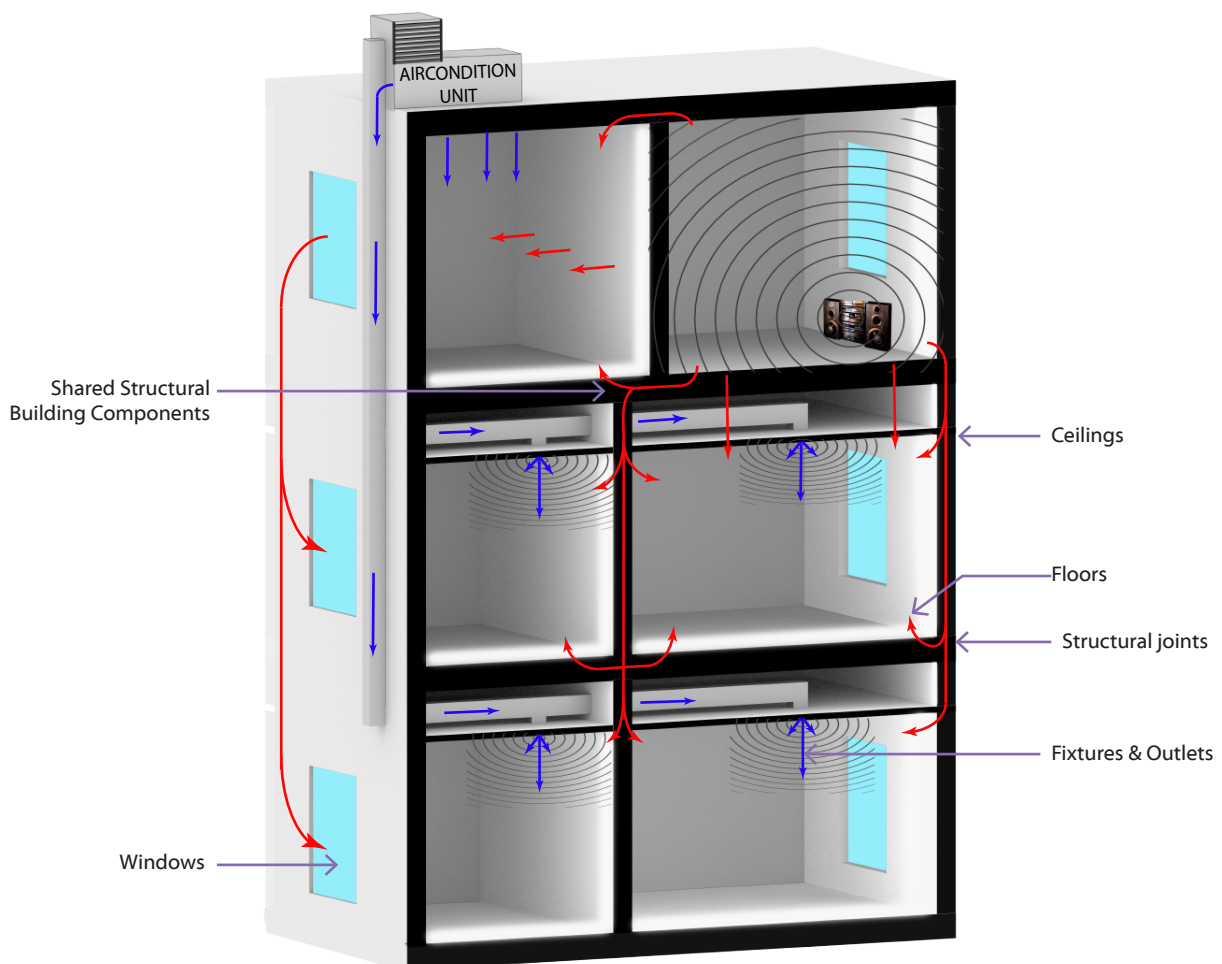
INTRODUCTION

Flanking Transmission Paths

Flanking transmission is a term used by acoustical engineers wherein the sound passes around the wall or floor elements. Flanking sound transmission can be especially bothersome in multi-unit residential buildings. The best time to guard against flanking transmission is in the design and construction phase of the dwelling. Simply specifying a high performance wall between adjacent dwelling spaces, is no guarantee to sound isolation and privacy upon occupancy. Sound will find the weakest links. Fire Rated Acoustic Sealants should be used to fill all the voids in walls, ceilings and floor assemblies.

Typical Flanking Sound Transmission Pathways can include:

- Ceilings
- Floors
- Windows
- Fixtures & Outlets – e.g. Light switches, Telephone outlets, and Recessed lighting fixtures
- Shared Structural Building Components – e.g. Floor joists, Drywall partitions, Continuous concrete floors, and concrete block walls
- Structural Joints – e.g. Perimeter joints at wall & floor junctures
- Plumbing Chases



Noise Control Walls

EPB Plasterboard Noise Control Systems have been tested on timber & steel frame walls, either as Load Bearing (LB) or Non Load Bearing.

Timber Frame

Stud heights, stud spacings, load and framing dimensions for Load Bearing (LB) or Non Load Bearing (NLB) Timber framed walls are determined by the NZBC, and NZS 3604. Heights greater than what is defined in NZS 3604 will need specific design by a structural engineer.

Steel Frame

Stud heights, stud spacings, load and framing dimensions for Load Bearing (LB) or Non Load Bearing (NLB) Steel framed walls need consultation with the framing supplier or fire engineer for fire design serviceability criteria.

General

Maximum spacing of studs 600mm centres. Wall linings must be mechanically fixed. Glue may not be substituted for mechanical fixing if used in a passive fire system. Screw lengths, spacings and type as defined by this manual must be used. Sheet edges must be fixed over studs when placed vertically or over solid blocking when placed horizontally. All outer layers must be stopped to a minimum level 3 stopping (refer to EPB Plasterboard Installation Guide). Ensure the outer wall sheet is staggered minimum 300mm centres from the first sheet and that it is placed behind an adjacent stud. If a fire rated sealant is used ensure that the sealant is of the same FRR as the specified system in use and that it has been independently tested.

EPB QuickBrace System

The bracing systems specified in the EPB QuickBrace Systems Manual can easily be combined with the EPB Noise Control Systems by adhering to the details outlined for the relevant Bracing system type and relevant Noise Control System requirements.

For Single layered Noise Control systems, use the QuickBrace fastening pattern and the required screw length of the Noise Control Systems.

For Double layered Noise Control systems, the bracing sheet can be either:

- The Inner sheet fixed directly to the framing. Use the QuickBrace fastening pattern and the required screw length of the Noise Control System. The inner layer can be left unstopped; or
- The Outer sheet. Use the QuickBrace fastening pattern and the required screw length of the Noise Control System.

For Resilient Rail or Resilient Mount systems, only single sided bracing systems can be used e.g. ER1, ES-N, ES-H and EM-H. The bracing sheet must be placed directly against the framing and not on the rail or mount side. Use the QuickBrace fastening pattern and the required screw length of the Noise Control System.

Noise Control Floor/Ceiling

EPB Plasterboard Noise Control Systems have been tested on Load bearing floor/ceiling systems. Refer to this manual for fixings and layer combinations. Ceiling linings must be mechanically fixed. Glue may not be substituted for mechanical fixing if used in a passive fire system. Screw lengths, spacings and type as defined by this manual must be used.

Timber & Composite Joists

Floor/ceiling system as defined in NZS 3604 for floor loadings (2.0 kPa or 3.0 kPa) may be used. Consult NZS 3604 latest edition for floor joist spans. Floor joists must have a minimum of 190mm depth x 45mm width and a maximum spacing of 600mm centres. Alternatively, proprietary composite joist systems may be used. Consult the appropriate supplier's technical information for design strength and serviceability.

Steel Joists

Steel floor joists shall be a minimum depth of 190mm C-section with 45mm flanges and a steel gauge of 1.6mm minimum. Joists to be spaced at no more than 600mm centres.

Flooring

Floor/Ceiling system must have a floor that is at least 20mm thick particle board complying with AS/NZS 1860 Part 1: 2017 or minimum 17mm thick structural ply complying with AS/NZS 2269 Part 0: 2012 fixed to the floor joists as per manufacturer's installation instructions.

Floating Floor

The floating floor systems must be either 19mm James Hardie Tongue & Groove Secura Floor or 20mm Tongue & Groove Particle Board complying to AS/NZS 1860.

Cavity Sound Absorber

Any brand of glass wool insulation which has a minimum density of 9.6kg/m³ may be used or any brand polyester insulation with a minimum density of 14.7kg/m³. Do not overfill the cavity as this may compromise and reduce the noise control performance of the system.

Acoustic Sealant

In order to achieve the published STC performances in this manual, a bead of acoustic sealant must be placed around the perimeter of the framing or the inner layer and the outer layer is bedded into the bead.

Load Bearing Steel Studs

The steel frame design shall meet the structural criteria for strength and serviceability under dead and live loads. Frame heights, stud spacings and stud type are determined by specific engineering design. Stud spacings shall be 600 centres maximum. Stud width shall be 35mm minimum.



Refer to the relevant sections of the EPB Fire Rated Systems Manual, in order to obtain the lining requirements to achieve the equivalent FRR of load bearing steel stud walls.

The Noise Control performance of Load bearing steel stud systems would be equivalent to the Non Load bearing steel stud systems of the same type, as detailed in this manual.

Non Load Bearing Steel Studs

Specific design for serviceability and fire design criteria is required for greater wall heights than the limit stated in the relevant EPB Noise Control System specification. Consult the framing manufacturer for the serviceability design criteria. Noggings in accordance with the framing supplier.

Product & Component Substitution

When a product specified in a system as per this manual is substituted, the performance of the system will be compromised. Therefore the materials specified in the system must not be substituted. Elephant Plasterboard (NZ) Limited does not take any liability if substitution of components are implemented in any EPB Plasterboard Systems without consultation.

Plasterboard Substitution Options

The table below indicates which products can substitute the original plasterboard type specified.

✓ indicates that the FRR performance will be maintained

X indicates that the FRR performance will be lower and so therefore the substitution is not allowed

| Original EPB Plasterboard specified | EPB Plasterboard Substitution Options - FRR performance | | | | | | | | |
|-------------------------------------|---|------|-----------|------|------|------------|------|----------------|----------------|
| | Standard | | FireSmart | | | MultiSmart | | AquaSmart | |
| | 10mm | 13mm | 10mm | 13mm | 16mm | 10mm | 13mm | 10mm | 13mm |
| 10mm Standard | - | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 13mm Standard | X | - | X | ✓ | ✓ | ✓ | ✓ | ✓ [↑] | ✓ |
| 10mm FireSmart | X | ✓ | - | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 13mm FireSmart | X | X | X | - | ✓ | X | ✓ | X | ✓ |
| 16mm FireSmart | X | X | X | X | - | X | X | X | X |
| 10mm MultiSmart | X | X | X | ✓ | ✓ | - | ✓ | ✓ [↑] | ✓ |
| 13mm MultiSmart | X | X | X | X | ✓ | X | - | X | ✓ [↑] |

Note 1 : See table below for STC reduction when substituting

The table below details the reduction in STC performance when substituting original specified plasterboard with AquaSmart

✓ indicates that the FRR & STC performance will be maintained

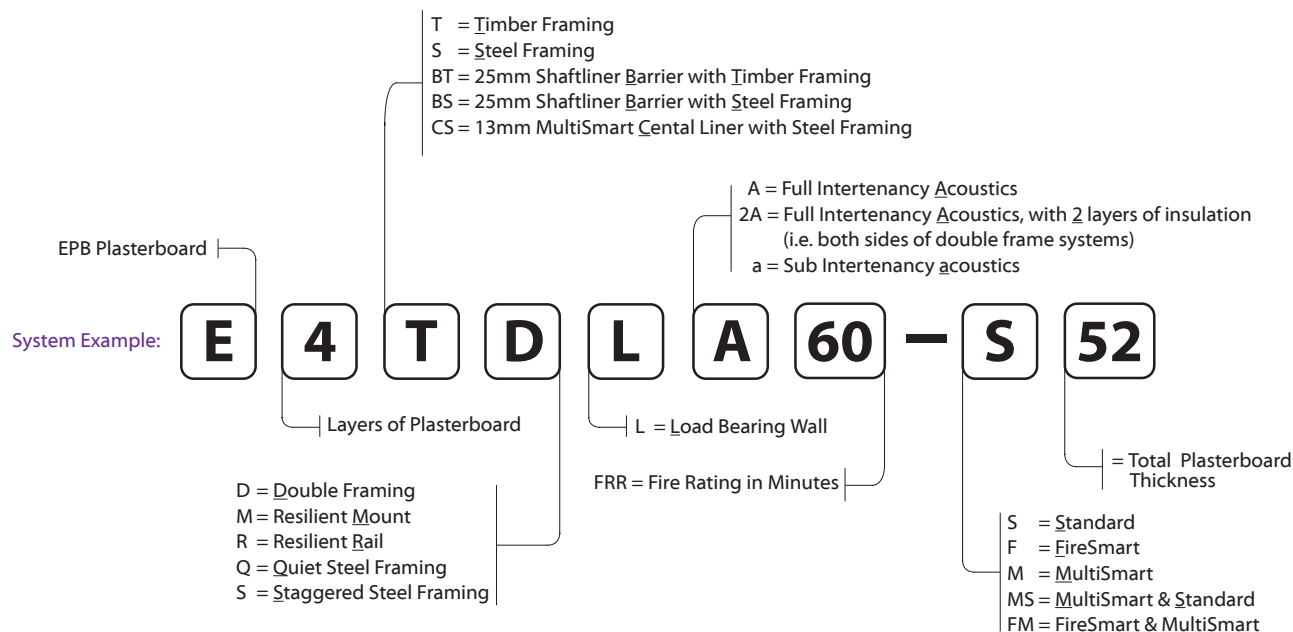
X indicates that the FRR performance will be lower and so therefore the substitution is not allowed

| Original EPB Plasterboard specified | | STC performance | | | |
|-------------------------------------|------------|-----------------------|-------------------------|-----------------------|-------------------------|
| | | 10mm AquaSmart | | 13mm AquaSmart | |
| | | Single layer One side | Single Layer Both sides | Single layer One side | Single Layer Both sides |
| 10mm | Standard | ✓ | ✓ | ✓ | ✓ |
| 13mm | Standard | Reduced by 1 STC | Reduced by 2 STC | ✓ | ✓ |
| 10mm | FireSmart | ✓ | ✓ | ✓ | ✓ |
| 13mm | FireSmart | X | X | ✓ | ✓ |
| 16mm | FireSmart | X | X | X | X |
| 10mm | MultiSmart | Reduced by 1 STC | Reduced by 2 STC | ✓ | ✓ |
| 13mm | MultiSmart | X | X | Reduced by 1 STC | Reduced by 2 STC |

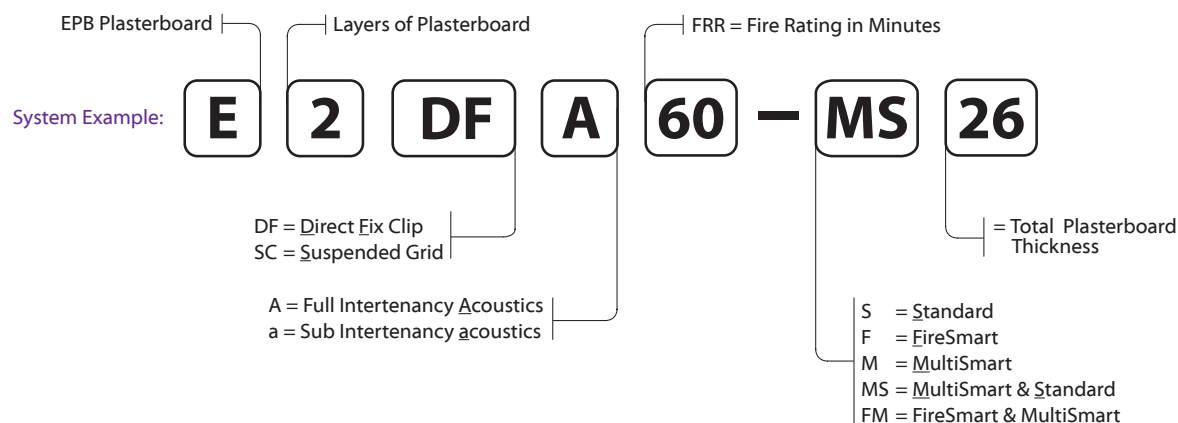


Nomenclature:

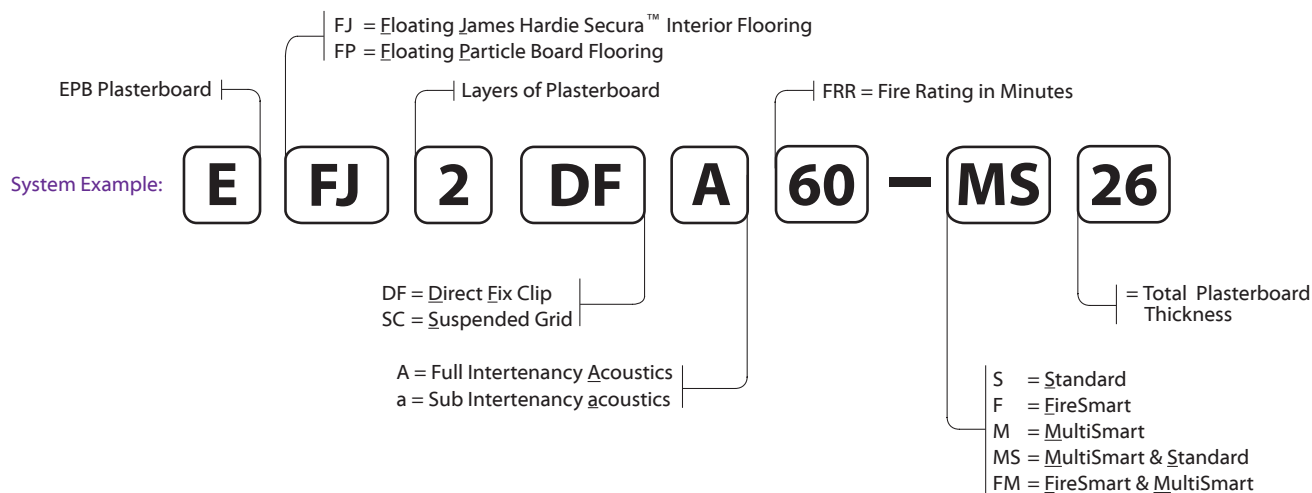
Specification Reference Walls



Specification Reference Ceilings



Specification Reference Ceilings - Floating Floor Systems



E3TDLA30**Double Timber Frame****Load Bearing****Two Way FRR**

3 Layers: 1 Layer of Plasterboard to one side of frame &
2 Layers of Plasterboard to other side of frame

Full Intertenancy **A**coustic

| System Number | Lining Suffix | FRR | Load Bearing Ability | Noise Control | | Lining Requirement |
|-----------------|---------------|----------|----------------------|---------------|----|--|
| | | | | STC | Rw | |
| E3TDLA30 | -F30 | 30/30/30 | LB | 55 | 54 | 1 x 10mm EPB FireSmart one side 2 x 10mm EPB FireSmart other side |
| | -S39 | 30/30/30 | LB | 57 | 56 | 1 x 13mm EPB Standard one side 2 x 13mm EPB Standard other side |
| | -M30 | 30/30/30 | LB | 58 | 57 | 1 x 10mm EPB MultiSmart one side 2 x 10mm EPB MultiSmart other side |

Framing

Framing to comply with relevant sections and clauses of NZBC B1: Structure and NZBC B2: Durability.

Studs at 600mm centres maximum.

Nogs at 1350mm centre maximum.

Wall Height, Load and Framing Dimension

These are determined by NZS3604 stud tables for load bearing or non-load bearing partitions. Minimum frame dimension is 90 x 45mm. Refer to Minimum Partition width below.

Minimum Partition Width

In order to achieve the STC ratings in the table above the partition width (excluding the board) shall be a minimum of 205mm. Increasing the partition width would increase STC performance as per the table below.

| Stud Depth | Space Between Frames | Partition Width (Excludes Board) | STC Rating |
|------------|----------------------|----------------------------------|------------|
| 90mm x 2 | 25mm Min | 205mm | +0 |
| 90mm x 2 | 75mm Min | 255mm | +2 |

Wall Sound Absorber

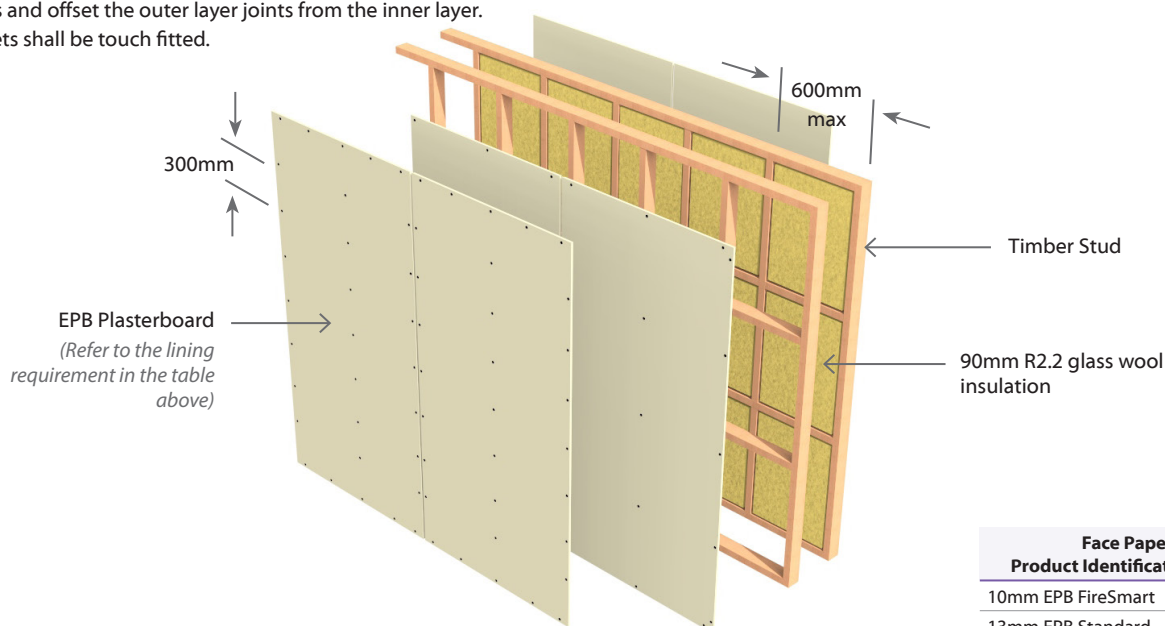
Install Sound Absorber between studs and nogs on one side of the double frame. Use 90mm thick R2.2 glass wool insulation.

Plasterboard Lining

NB: The installer must look for the Product Identification Code on the face paper to ensure the correct board type is installed. Refer to the Face Paper Product Identification Code table on this page.

One layer of EPB Plasterboard lining on one side of frame and Two layers on the other side of framing as per specified system above. First layer or inner layer on each side of framing to be fixed vertically. Vertical or Horizontal fixing permitted on outer layer only. Use full height sheets where possible when fixing vertical. Inner layer joints on opposite side of frame should be offset. All sheet joints must be fixed over solid timber framing. Sheet end butt joints must be formed over nogs and offset the outer layer joints from the inner layer.

Sheets shall be touch fitted.

**Fixing of Linings****Fasteners (As per Specified System Above)**

| System Number | Side One | | Side Two |
|----------------------------|-----------------------|-----------------------|--------------|
| | 1 st Layer | 2 nd Layer | Single Layer |
| High Thread Drywall Screws | | | |
| E3TDLA30-F30 | 10mm | 10mm | 10mm |
| E3TDLA30-M30 | 41 x 6g | 51 x 7g | 41 x 6g |
| E3TDLA30-S39 | 13mm | 13mm | 13mm |
| | 41 x 6g | 51 x 7g | 41 x 6g |

Fastener Centres

Inner Layer: Fix at 600 centres on vertical studs and 600mm centres horizontally on top and bottom plates.

Single or Outer Layer: Fix at 300mm centres at sheet perimeter and 300mm centres up each stud.

Place fasteners 50mm from sheet corners along the top and bottom plates. On end studs place additional fasteners 50-60mm vertically and no close than 10mm from plate to stud connections.

Place fasteners minimum 12mm from sheet edges and sheet ends.

Place fasteners at 200mm centres where sheet end butt joints occur.

Avoid outer layer screws from hitting inner layer screws.

Acoustic Sealant

A bead of acoustic sealant is required around the perimeter of the framing or the inner layer. Then the single or outer layer is bedded onto the bead. The perimeter junctions of the wall must be airtight.

Jointing

Inner Layer: Unstopped.

Outer or Single Layer: All fastener heads stopped and all sheet joints reinforced with paper jointing tape and stopped. Wall to ceiling junctions are to be reinforced with paper tape and square stopped or finished with Cornice. All in accordance with EPB Plasterboard Installation Guide.

| Face Paper Product Identification Code | |
|--|------------|
| 10mm EPB FireSmart | F10 |
| 13mm EPB Standard | S13 |
| 10mm EPB MultiSmart | M10 |



E4TDLA45**Double Timber Frame****Load Bearing****Two Way FRR****4 Layers: 2 Layers of Plasterboard to each side of frame****Full Intertency Acoustic**

| System Number | Lining Suffix | FRR | Load Bearing Ability | Noise Control | | Lining Requirement |
|-----------------|---------------|----------|----------------------|---------------|----|---------------------------------|
| | | | | STC | Rw | |
| E4TDLA45 | -S40 | 45/45/45 | LB | 58 | 57 | 2 x 10mm EPB Standard each side |

Framing

Framing to comply with relevant sections and clauses of NZBC B1: Structure and NZBC B2: Durability.

Studs at 600mm centres maximum.

Nogs at 1350mm centre maximum.

Wall Height, Load and Framing Dimension

These are determined by NZS3604 stud tables for load bearing or non-load bearing partitions. Refer to Minimum Partition width.

Minimum Partition Width

In order to achieve the STC ratings in the table above the partition width (excluding the board) shall be a minimum of 205mm. Increasing the partition width would increase STC performance as per the table below.

| Stud Depth | Space Between Frames | Partition Width (Excludes Board) | STC Rating |
|------------|----------------------|----------------------------------|------------|
| 90mm x 2 | 25mm Min | 205mm | +0 |
| 70mm x 2 | 65mm Min | 205mm | +0 |
| 90mm x 2 | 75mm Min | 255mm | +2 |
| 70mm x 2 | 115mm Min | 255mm | +2 |

Wall Sound Absorber

Install Sound Absorber between studs and nogs on one side of the double frame. Use 90mm thick R2.2 glass wool insulation.

Plasterboard Lining

NB: The installer must look for the Product Identification Code on the face paper to ensure the correct board type is installed. Refer to the Face Paper Product Identification Code table on this page.

Two layers of 10mm EPB Standard lining fixed on each side of timber framing.

First layer or inner layer on each side of framing to be fixed vertically. Vertical or Horizontal fixing permitted on outer layer only. Use full height sheets where possible. Inner layer joints on opposite side of frame should be offset.

All sheet joints must be fixed over solid timber framing. Vertical Joints of the outer layer should be offset 600mm from those of the inner layer. Sheet end butt joints must be formed over nogs and offset the outer layer joints from the inner layer. Sheets shall be touch fitted.

Fixing of Linings**Fasteners**

| System Number | Side One | | Side Two | |
|---------------------|----------------------------|-----------------------|-----------------------|-----------------------|
| | 1 st Layer | 2 nd Layer | 1 st Layer | 2 nd Layer |
| | High Thread Drywall Screws | | | |
| E4TDLA45-S40 | 10mm | 10mm | 10mm | 10mm |
| | 32 x 6g | 41 x 6g | 32 x 6g | 41 x 6g |

Fastener Centres

Inner Layer: Fix at 600mm centres at sheet perimeter and all studs.

Outer Layer: Fix at 300mm centres at sheet perimeter and all studs.

Place fasteners 50mm from sheet corners along the top and bottom plates. On end studs place additional fasteners 50-60mm vertically and no close than 10mm from plate to stud connections.

Place fasteners minimum 12mm from sheet edges and sheet ends.

Place fasteners at 200mm centres where sheet end butt joints occur.

Avoid outer layer screws from hitting inner layer screws.

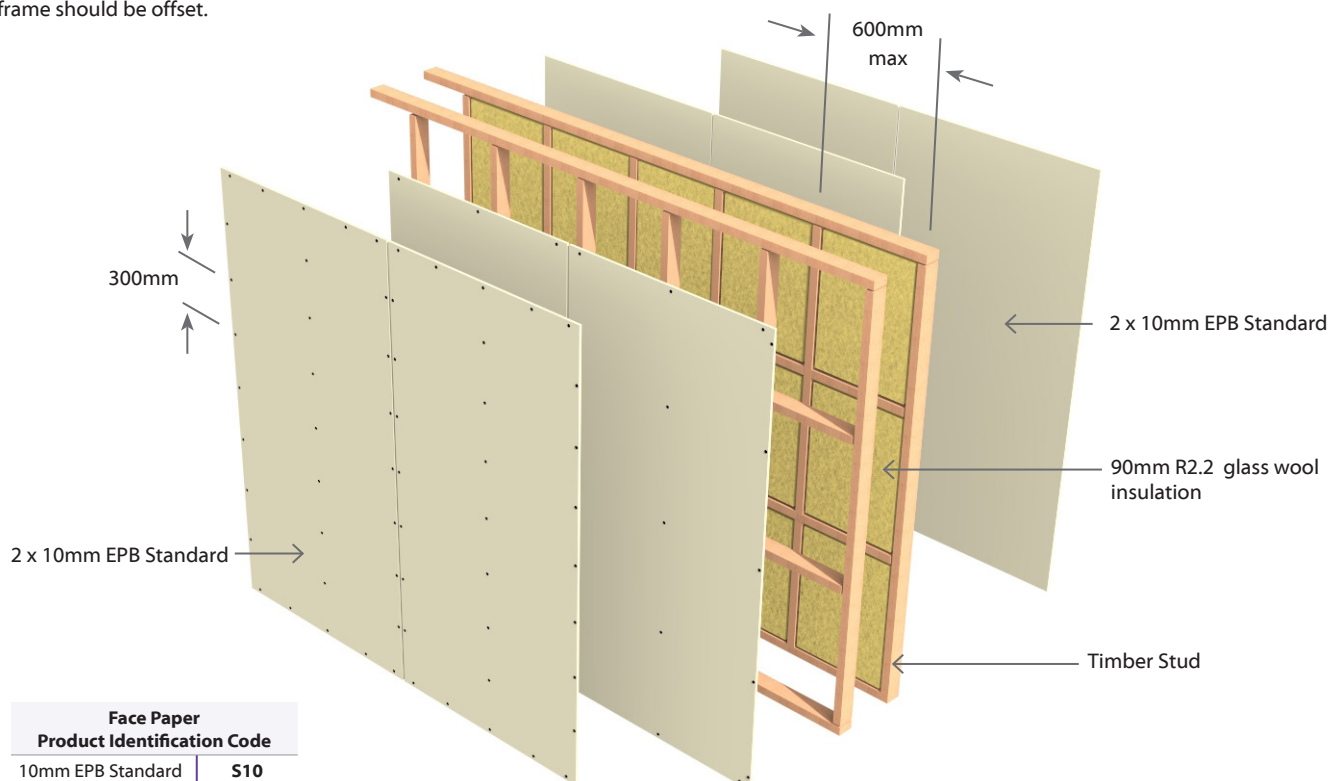
Acoustic Sealant

A bead of acoustical sealant is required around the perimeter of the inner layer and the outer layer is bedded onto the bead. The perimeter junctions of the wall must be airtight.

Jointing

Inner Layer: Unstopped.

Outer Layer: All fastener heads stopped and all sheet joints reinforced with paper jointing tape and stopped. Wall to ceiling junctions are to be reinforced with paper tape and square stopped or finished with Cornice. All in accordance with EPB Plasterboard Installation Guide.



E2TDLA60**Double Timber Frame****Load Bearing****Two Way FRR****2** Layers: 1 Layer of Plasterboard to each side of frameFull Intertency **A**coustic

| System Number | Lining Suffix | FRR | Load Bearing Ability | Noise Control | | Lining Requirement |
|-----------------|---------------|----------|----------------------|---------------|----|-----------------------------------|
| | | | | STC | Rw | |
| E2TDLA60 | -M26 | 60/60/60 | LB | 55* | 54 | 1 x 13mm EPB MultiSmart each side |

Framing

Framing to comply with relevant sections and clauses of NZBC B1: Structure and NZBC B2: Durability.

Studs at 600mm centres maximum.

Nogs at 800mm centre maximum.

Wall Height, Load and Framing Dimension

These are determined by NZS3604 stud tables for load bearing or non-load bearing partitions. Minimum frame dimension is 90 x 45mm. Refer to Minimum partition width.

Minimum Partition Width

In order to achieve the STC ratings in the table above the partition width (excluding the board) shall be a minimum of 205mm. Increasing the partition width would increase STC performance as per the table below.

| Stud Depth | Space Between Frames | Partition Width (Excludes Board) | STC Rating |
|------------|----------------------|----------------------------------|------------|
| 90mm x 2 | 25mm Min | 205mm | +0 |
| 90mm x 2 | 75mm Min | 255mm | +2 |

Wall Sound Absorber

Install Sound Absorber between studs and nogs on both sides of the double frame. Use 90mm thick R2.2 glass wool insulation.

Plasterboard Lining

NB: The installer must look for the Product Identification Code on the face paper to ensure the correct board type is installed. Refer to the Face Paper Product Identification Code table on this page.

One layer of 13mm EPB MultiSmart lining fixed on each side of timber framing.

Vertical fixing only permitted. Use full height sheets where possible. Sheet joints on opposite side of frame should be offset. All sheet joints must be fixed over solid timber framing. Sheet end butt joints must be formed over nogs. Sheets shall be touch fitted.

Fixing of Linings**Fasteners**

| System Number | Side One | Side Two |
|---------------------|----------------------------|----------|
| | High Thread Drywall Screws | |
| E2TDLA60-M26 | 13mm | 13mm |
| | 41 x 6g | 41 x 6g |

Fastener Centres

Fix at 300mm centres at sheet perimeter and up all other studs.

Place fasteners 50mm from sheet corners along the top and bottom plates. On end studs place additional fasteners 50-60mm vertically and no close than 10mm from plate to stud connections.

Place fasteners minimum 12mm from sheet edges and sheet ends.

Place fasteners at 200mm centres where sheet end butt joints occur.

Acoustic Sealant

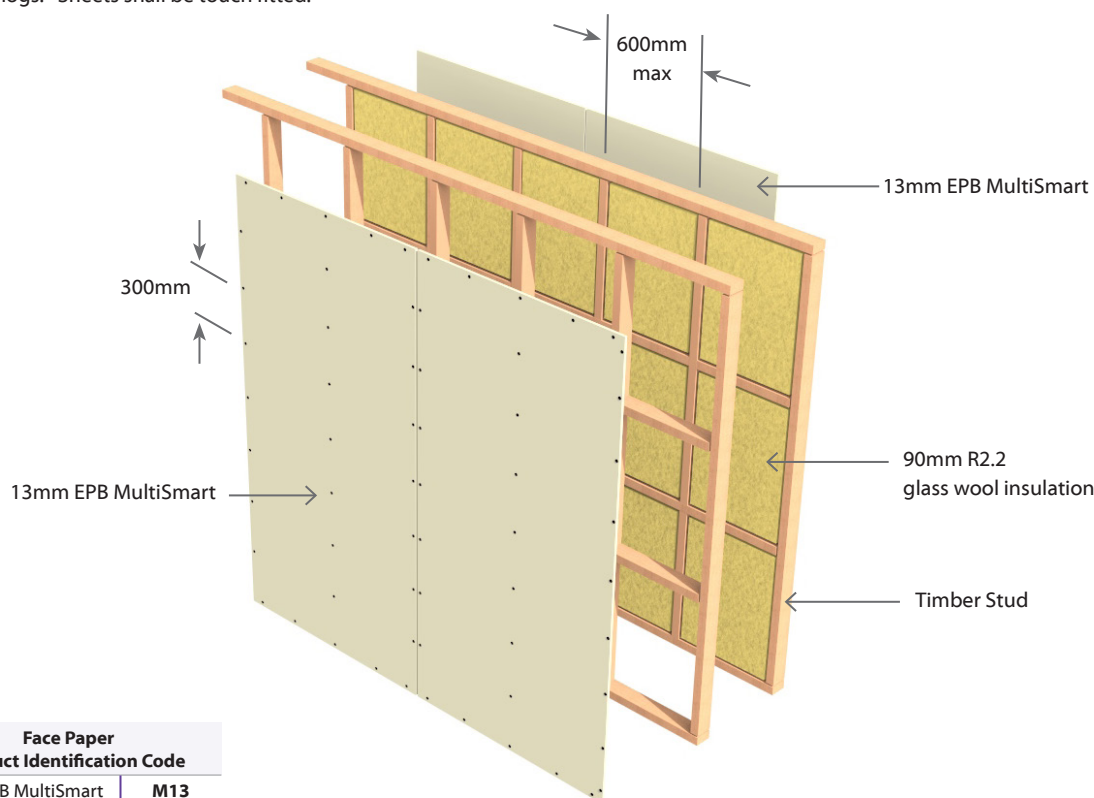
A bead of acoustic sealant is required around the perimeter of the framing and the single layer is bedded onto the bead. The perimeter junctions of the wall must be airtight.

Jointing

All fastener heads stopped and all sheet joints reinforced with paper jointing tape and stopped. Wall to ceiling junctions are to be reinforced with paper tape and square stopped or finished with Cornice. All in accordance with EPB Plasterboard Installation Guide.

STC Reduction Warning

Replacing one or some of the linings above with the equivalent thickness of EPB AquaSmart could result in the STC falling below full intertenancy requirements. Refer to table on page 17 intertenancy system.



| Face Paper Product Identification Code | |
|---|------------|
| 13mm EPB MultiSmart | M13 |



E3TDLA60**Double Timber Frame****Load Bearing****Two Way FRR**

3 Layers: 1 Layer of Plasterboard to one side of frame &
2 Layers of Plasterboard to other side of frame

Full Intertency **Acoustic**

| System Number | Lining Suffix | FRR | Load Bearing Ability | Noise Control | | Lining Requirement |
|-----------------|---------------|----------|----------------------|---------------|----|--|
| | | | | STC | Rw | |
| E3TDLA60 | -MS39 | 60/60/60 | LB | 58 | 57 | 1 x 13mm EPB MultiSmart one side 2 x 13mm EPB Standard other side |
| | -M33 | 60/60/60 | LB | 59 | 58 | 1 x 13mm EPB MultiSmart one side 2 x 10mm EPB MultiSmart other side |
| | -M39 | 60/60/60 | LB | 61 | 60 | 1 x 13mm EPB MultiSmart one side 2 x 13mm EPB MultiSmart other side |

Framing

Framing to comply with relevant sections and clauses of NZBC B1: Structure and NZBC B2: Durability.

Studs at 600mm centres maximum.

Nogs at 1350mm centre maximum.

Wall Height, Load and Framing Dimension

These are determined by NZS3604 stud tables for load bearing or non-load bearing partitions. Minimum frame dimension is 90 x 45mm. Refer to Minimum Partition width below.

Minimum Partition Width

In order to achieve the STC ratings in the table above the partition width (excluding the board) shall be a minimum of 205mm. Increasing the partition width would increase STC performance as per the table below.

| Stud Depth | Space Between Frames | Partition Width (Excludes Board) | STC Rating |
|------------|----------------------|----------------------------------|------------|
| 90mm x 2 | 25mm Min | 205mm | +0 |
| 90mm x 2 | 75mm Min | 255mm | +2 |

Wall Sound Absorber

Install Sound Absorber between studs and nogs on one side of the double frame. Use 90mm thick R2.2 glass wool insulation.

Plasterboard Lining

NB: The installer must look for the Product Identification Code on the face paper to ensure the correct board type is installed. Refer to the Face Paper Product Identification Code table on this page.

One layer of EPB Plasterboard lining on one side of frame and Two layers on the other side of framing as per specified system above. First layer or inner layer on each side of framing to be fixed vertically. Vertical or Horizontal fixing permitted on outer layer only. Use full height or full length sheets where possible. Inner layer joints on opposite side of frame should be offset. All sheet joints must be fixed over solid timber framing. Vertical Joints of the outer layer should be offset 600mm from those of the inner layer. Sheet end butt joints must be formed over nogs. Offset the outer layer joints from the inner layer. Sheets shall be touch fitted.

Fixing of Linings**Fasteners (As per Specified System Above)**

| System Number | Side One | | Side Two |
|----------------------------|-----------------------|-----------------------|--------------|
| | 1 st Layer | 2 nd Layer | Single Layer |
| High Thread Drywall Screws | | | |
| E3TDLA60-M33 | 10mm | 10mm | 13mm |
| | 41 x 6g | 51 x 7g | 41 x 6g |
| E3TDLA60-MS39 | 13mm | 13mm | 13mm |
| E3TDLA60-M39 | 41 x 6g | 51 x 7g | 41 x 6g |

Fastener Centres

Inner Layer: Fix at 600 centres on vertical studs and 600mm centres horizontally on top and bottom plates.

Single or Outer Layer: Fix at 300mm centres at sheet perimeter and 300mm centres up each stud.

Place fasteners 50mm from sheet corners along the top and bottom plates. On end studs place additional fasteners 50-60mm vertically and no close than 10mm from plate to stud connections.

Place fasteners minimum 12mm from sheet edges and sheet ends.

Place fasteners at 200mm centres where sheet end butt joints occur.

Avoid outer layer screws from hitting inner layer screws.

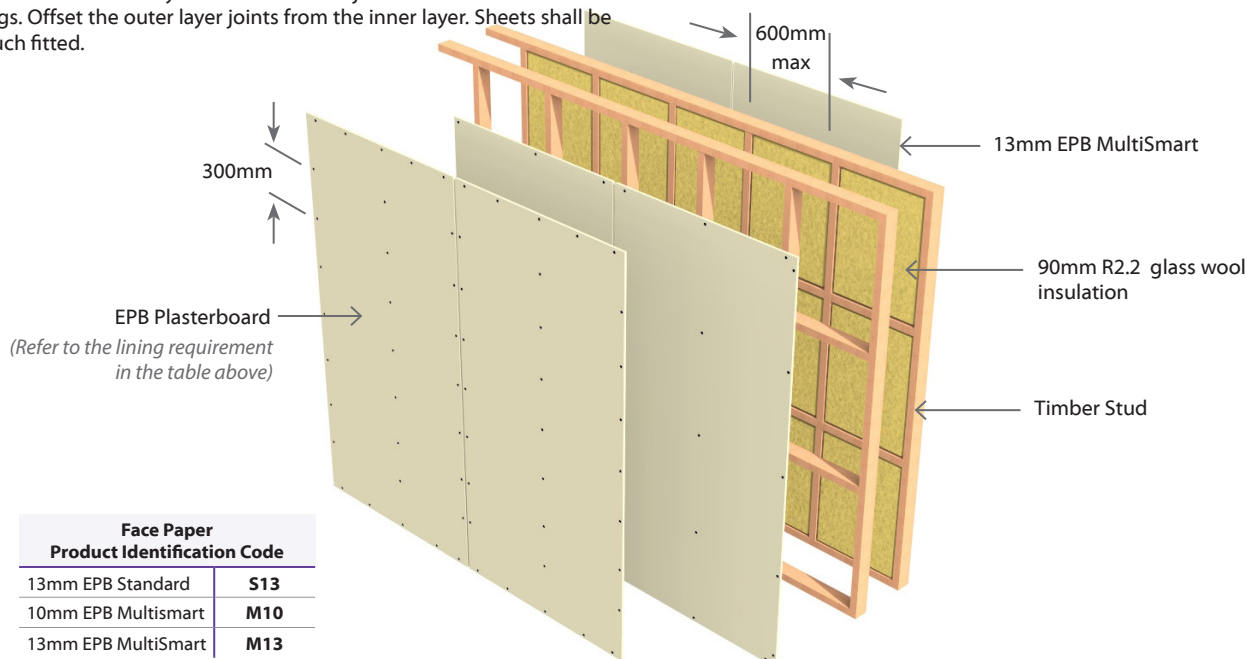
Acoustic Sealant

A bead of acoustic sealant is required around the perimeter of the framing or the inner layer. Then the single or outer layer is bedded onto the bead. The perimeter junctions of the wall must be airtight.

Jointing

Inner Layer: Unstopped.

Outer or Single Layer: All fastener heads stopped and all sheet joints reinforced with paper jointing tape and stopped. Wall to ceiling junctions are to be reinforced with paper tape and square stopped or finished with Cornice. All in accordance with EPB Plasterboard Installation Guide.



E4TDLA60**Double Timber Frame****Load Bearing****Two Way FRR****4** Layers: 2 Layers of Plasterboard to each side of frameFull Intertenancy **A**coustic

| System Number | Lining Suffix | FRR | Load Bearing Ability | Noise Control | | Lining Requirement |
|-----------------|---------------|----------|----------------------|---------------|----|---|
| | | | | STC | Rw | |
| E4TDLA60 | -S46 | 60/60/60 | LB | 59 | 58 | 1 x 10mm EPB Standard & 1 x 13mm Standard each side |
| | -F40 | 60/60/60 | LB | 60 | 59 | 2 x 10mm EPB FireSmart each side |
| | -S52 | 60/60/60 | LB | 61 | 60 | 2 x 13mm EPB Standard each side |
| | -M40 | 60/60/60 | LB | 62 | 61 | 2 x 10mm EPB MultiSmart each side |

Framing

Framing to comply with relevant sections and clauses of NZBC B1: Structure and NZBC B2: Durability.

Studs at 600mm centres maximum.

Nogs at 1350mm centre maximum.

Wall Height, Load and Framing Dimension

These are determined by NZS3604 stud tables for load bearing or non-load bearing partitions. Refer to Minimum Partition width.

Minimum Partition Width

In order to achieve the STC ratings in the table above the partition width (excluding the board) shall be a minimum of 205mm. Increasing the partition width would increase STC performance as per the table below.

| Stud Depth | Space Between Frames | Partition Width (Excludes Board) | STC Rating |
|------------|----------------------|----------------------------------|------------|
| 90mm x 2 | 25mm Min | 205mm | +0 |
| 90mm x 2 | 75mm Min | 255mm | +2 |

Wall Sound Absorber

Install Sound Absorber between studs and nogs on one side of the double frame. Use 90mm thick R2.2 glass wool insulation.

Plasterboard Lining

NB: The installer must look for the Product Identification Code on the face paper to ensure the correct board type is installed. Refer to the Face Paper Product Identification Code table on this page.

Two layers of EPB Plasterboard lining on one side of frame and Two layers on the other side of framing as per specified system above.

First layer or inner layer on each side of framing to be fixed vertically. Vertical or Horizontal fixing permitted on outer layer only. Use full height or full length sheets where possible. Inner layer joints on opposite side of frame should be offset. All sheet joints must be fixed over solid timber framing. Vertical Joints of the outer layer should be offset 600mm from those of the inner layer. Sheet end butt joints must be formed over nogs. Offset the outer layer joints from the inner layer. Sheets shall be touch fitted.

Fixing of Linings**Fasteners (As per Specified System Above)**

| System Number | Side One | | Side Two | |
|----------------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| | 1 st Layer | 2 nd Layer | 1 st Layer | 2 nd Layer |
| High Thread Drywall Screws | | | | |
| E4TDLA60-F40 | 10mm | 10mm | 10mm | 10mm |
| E4TDLA60-M40 | 41 x 6g | 51 x 7g | 41 x 6g | 51 x 7g |
| E4TDLA60-S46 | 10mm | 13mm | 10mm | 13mm |
| | 41 x 6g | 51 x 7g | 41 x 6g | 51 x 7g |
| E4TDLA60-S52 | 13mm | 13mm | 13mm | 13mm |
| | 41 x 6g | 51 x 7g | 41 x 6g | 51 x 7g |

Fastener Centres

Inner Layer: Fix at 600mm centres at sheet perimeter and all studs.

Outer Layer: Fix at 300mm centres at sheet perimeter and all studs.

Place fasteners 50mm from sheet corners along the top and bottom plates. On end studs place additional fasteners 50-60mm vertically and no close than 10mm from plate to stud connections.

Place fasteners minimum 12mm from sheet edges and sheet ends.

Place fasteners at 200mm centres where sheet end butt joints occur.

Avoid outer layer screws from hitting inner layer screws.

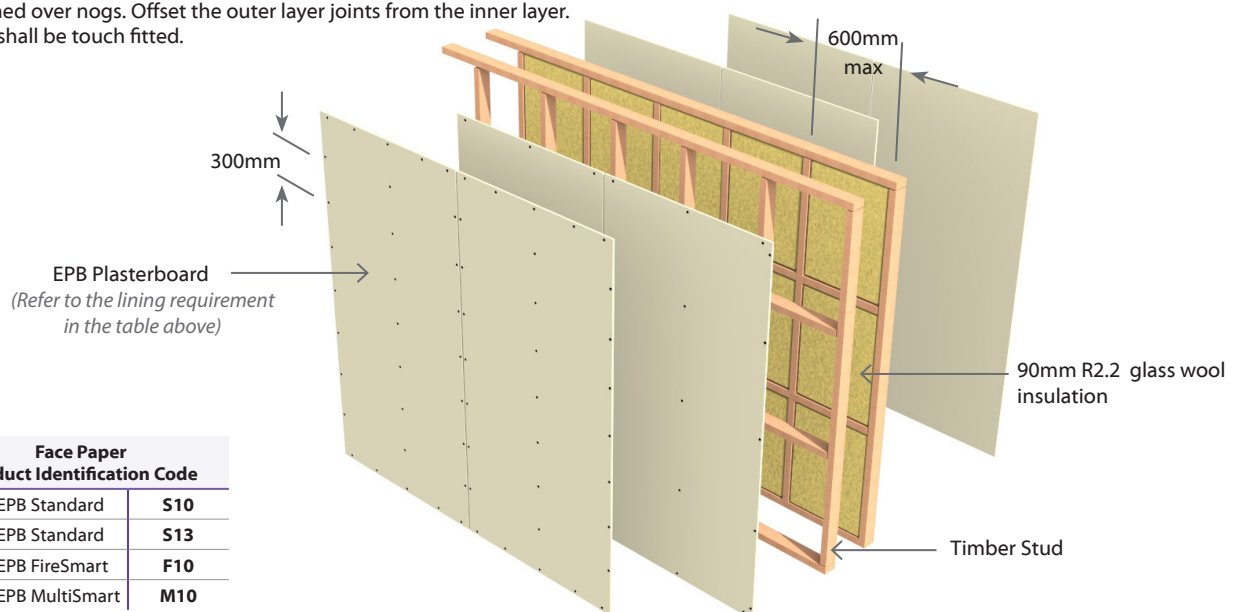
Acoustic Sealant

A bead of acoustical sealant is required around the perimeter of the inner layer and the outer layer is bedded onto the bead. The perimeter junctions of the wall must be airtight.

Jointing

Inner Layer: Unstopped.

Outer Layer: All fastener heads stopped and all sheet joints reinforced with paper jointing tape and stopped. Wall to ceiling junctions are to be reinforced with paper tape and square stopped or finished with Cornice. All in accordance with EPB Plasterboard Installation Guide.



| Face Paper Product Identification Code | |
|--|------------|
| 10mm EPB Standard | S10 |
| 13mm EPB Standard | S13 |
| 10mm EPB FireSmart | F10 |
| 10mm EPB MultiSmart | M10 |



E2TDLA75**Double Timber Frame****Load Bearing****Two Way FRR****2 Layers:** 1 Layer of Plasterboard to each side of frameFull Intertency **A**coustic

| System Number | Lining Suffix | FRR | Load Bearing Ability | Noise Control | | Lining Requirement |
|-----------------|---------------|----------|----------------------|---------------|----|----------------------------------|
| | | | | STC | Rw | |
| E2TDLA75 | -F32 | 75/75/75 | LB | 56 | 55 | 1 x 16mm EPB FireSmart each side |

Framing

Framing to comply with relevant sections and clauses of NZBC B1: Structure and NZBC B2: Durability.

Studs at 600mm centres maximum.

Nogs at 800mm centre maximum.

Wall Height, Load and Framing Dimension

These are determined by NZS3604 stud tables for load bearing or non-load bearing partitions. Refer to Minimum partition width.

Minimum Partition Width

In order to achieve the STC ratings in the table above the partition width (excluding the board) shall be a minimum of 205mm. Increasing the partition width would increase STC performance as per the table below.

| Stud Depth | Space Between Frames | Partition Width (Excludes Board) | STC Rating |
|------------|----------------------|----------------------------------|------------|
| 90mm x 2 | 25mm Min | 205mm | +0 |
| 90mm x 2 | 75mm Min | 255mm | +2 |

Wall Sound Absorber

Install Sound Absorber between studs and nogs on both sides of the double frame. Use 90mm thick R2.2 glass wool insulation.

Plasterboard Lining

NB: The installer must look for the Product Identification Code on the face paper to ensure the correct board type is installed. Refer to the Face Paper Product Identification Code table on this page.

One layer of 16mm EPB FireSmart lining fixed on each side of timber framing.

Vertical fixing only permitted. Use full height sheets where possible. All sheet joints must be fixed over solid timber framing. Sheet end butt joints must be formed over nogs. Sheets shall be touch fitted.

Fixing of Linings**Fasteners**

| System Number | Side One | Side Two |
|---------------------|-------------|----------------|
| | High Thread | Drywall Screws |
| E2TDLA75-F32 | 16mm | 16mm |
| | 51 x 7g | 51 x 7g |

Fastener Centres

Fix at 300mm centres at sheet perimeter and up all other studs.

Place fasteners 50mm from sheet corners along the top and bottom plates. On end studs place additional fasteners 50-60mm vertically and no close than 10mm from plate to stud connections.

Place fasteners minimum 12mm from sheet edges and sheet ends.

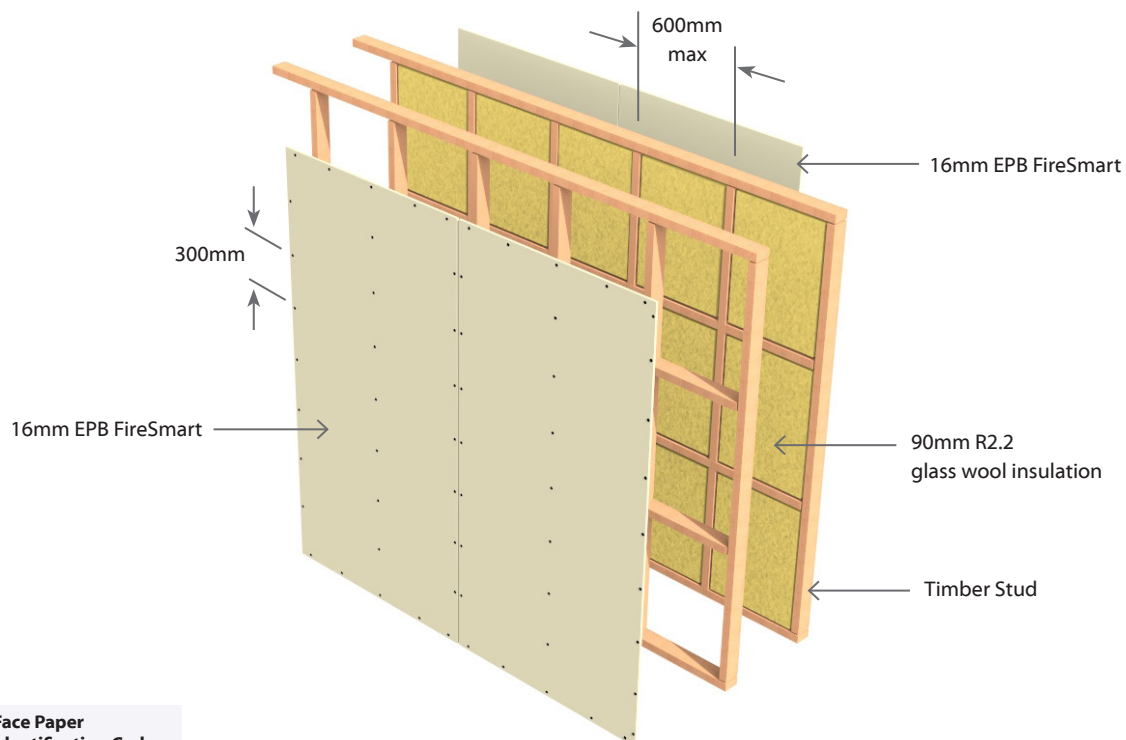
Place fasteners at 200mm centres where sheet end butt joints occur.

Acoustic Sealant

A bead of acoustic sealant is required around the perimeter of the framing and the single layer is bedded onto the bead. The perimeter junctions of the wall must be airtight.

Jointing

All fastener heads stopped and all sheet joints reinforced with paper jointing tape and stopped. Wall to ceiling junctions are to be reinforced with paper tape and square stopped or finished with Cornice. All in accordance with EPB Plasterboard Installation Guide.



| Face Paper Product Identification Code | |
|--|------------|
| 16mm EPB FireSmart | F16 |



E4TDLA90**Double Timber Frame****Load Bearing****Two Way FRR****4** Layers: 2 Layers of Plasterboard to each side of frameFull Intertency **A**coustic

| System Number | Lining Suffix | FRR | Load Bearing Ability | Noise Control | | Lining Requirement |
|-----------------|---------------|----------|----------------------|---------------|----|-----------------------------------|
| | | | | STC | Rw | |
| E4TDLA90 | -F52 | 90/90/90 | LB | 64 | 63 | 2 x 13mm EPB FireSmart each side |
| | -M52 | 90/90/90 | LB | 67 | 66 | 2 x 13mm EPB MultiSmart each side |

Framing

Framing to comply with relevant sections and clauses of NZBC B1: Structure and NZBC B2: Durability.

Studs at 600mm centres maximum.

Nogs at 1350mm centre maximum.

Wall Height, Load and Framing Dimension

These are determined by NZS3604 stud tables for load bearing or non-load bearing partitions. Refer to Minimum Partition width.

Minimum Partition Width

In order to achieve the STC ratings in the table above the partition width (excluding the board) shall be a minimum of 205mm. Increasing the partition width would increase STC performance as per the table below.

| Stud Depth | Space Between Frames | Partition Width (Excludes Board) | STC Rating |
|------------|----------------------|----------------------------------|------------|
| 90mm x 2 | 25mm Min | 205mm | +0 |
| 90mm x 2 | 75mm Min | 255mm | +2 |

Wall Sound Absorber

Install Sound Absorber between studs and nogs on one side of the double frame. Use 90mm thick R2.2 glass wool insulation.

Plasterboard Lining

NB: The installer must look for the Product Identification Code on the face paper to ensure the correct board type is installed. Refer to the Face Paper Product Identification Code table on this page.

Two layers of 13mm EPB MultiSmart lining fixed on each side of timber framing.

First layer or inner layer on each side of framing to be fixed vertically. Vertical or Horizontal fixing permitted on outer layer only. Use full height or full length sheets where possible. Inner layer joints on opposite side of frame should be offset.

All sheet joints must be fixed over solid timber framing. Vertical Joints of the outer layer should be offset 600mm from those of the inner layer. Sheet end butt joints must be formed over nogs and offset the outer layer joints from the inner layer. Sheets shall be touch fitted.

Fixing of Linings**Fasteners**

| System Number | 1 st Layer | 2 nd Layer |
|---------------------|----------------------------|-----------------------|
| | High Thread Drywall Screws | |
| E4TDLA90-F52 | 13mm | 13mm |
| E4TDLA90-M52 | 41 x 6g | 51 x 7g |

Fastener Centres

Inner Layer: Fix at 600mm centres at sheet perimeter and all studs.

Outer Layer: Fix at 300mm centres at sheet perimeter and all studs.

Place fasteners 50mm from sheet corners along the top and bottom plates. On end studs place additional fasteners 50-60mm vertically and no close than 10mm from plate to stud connections.

Place fasteners minimum 12mm from sheet edges and sheet ends.

Place fasteners at 200mm centres where sheet end butt joints occur.

Avoid outer layer screws from hitting inner layer screws.

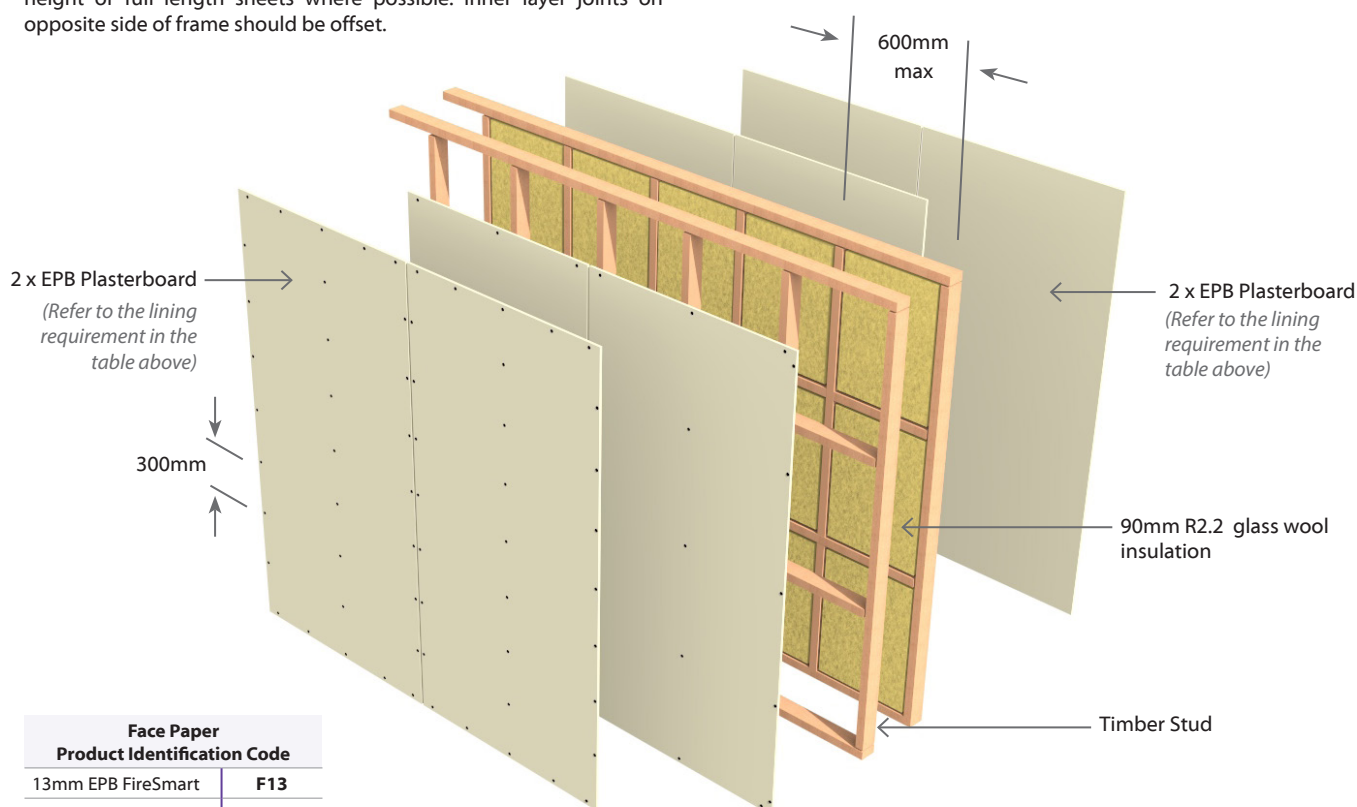
Acoustic Sealant

A bead of acoustical sealant is required around the perimeter of the inner layer and the outer layer is bedded onto the bead. The perimeter junctions of the wall must be airtight.

Jointing

Inner Layer: Unstopped.

Outer Layer: All fastener heads stopped and all sheet joints reinforced with paper jointing tape and stopped. Wall to ceiling junctions are to be reinforced with paper tape and square stopped or finished with Cornice. All in accordance with EPB Plasterboard Installation Guide.



E3TMLA30Single **T**imber Frame with Resilient **M**ount**L**oad Bearing**T**wo Way **FRR**

3 Layers: 1 Layer of Plasterboard on Framing side &
2 Layers of Plasterboard on Mount side

Full Intertency **A**coustic

| System Number | Lining Suffix | FRR | Load Bearing Ability | Noise Control | | Lining Requirement |
|-----------------|---------------|----------|----------------------|---------------|----|--|
| | | | | STC | Rw | |
| E3TMLA30 | -S39 | 30/30/30 | LB | 55 | 54 | Framing Side: 1 x 13mm EPB Standard Mount Side: 2 x 13mm EPB Standard |
| | -M30 | 30/30/30 | LB | 56 | 55 | Framing Side: 1 x 10mm EPB MultiSmart Mount Side: 2 x 10mm EPB MultiSmart |

Framing

Framing to comply with relevant sections and clauses of NZBC B1: Structure and NZBC B2: Durability.
Studs at 600mm centres maximum.
Nogs at 1350mm centre maximum.

Wall Height, Load and Framing Dimension

These are determined by NZS3604 stud tables for load bearing or non-load bearing partitions. Minimum 90 x 45mm frame dimension.

Minimum Partition Width

In order to achieve the STC ratings in the table above the partition width (excluding the board) shall be a minimum of 130mm.

| Stud Depth | Mount + Channel | Lining Suffix | Total Plasterboard thickness | Total Partition Width |
|------------|-----------------|---------------|------------------------------|-----------------------|
| 90mm | 40mm | M30 | 30mm | 160mm |
| | | S39 | 39mm | 169mm |

Wall Sound Absorber

Install Sound Absorber between studs and nogs of the frame.
Use 90mm thick R2.2 glass wool insulation.

Acoustic Resilient Mount

The Resilient Mount shall be fixed to the studs at 600mm centres vertically and on every alternative stud using 32mm x 8g wafer head screws. When adjusting the clip for depth, 3mm rubber must remain between the underside of the steel spacer head and the furring channel. The Furring channels are clipped horizontally into the Mounts. Joints must be made as close as possible to the clips.

Plasterboard Lining

NB: The installer must look for the Product Identification Code on the face paper to ensure the correct board type is installed. Refer to the Face Paper Product Identification Code table on this page.

One layer of EPB Plasterboard lining fixed vertically on framing side and Two layers fixed vertically on the furring channel on the other side as per specified system above.

Vertical fixing only permitted. Vertical joints of outer layer should be offset by 600mm from those of the inner layer. Use full height sheets where possible. All sheet joints on the framing side must be fixed over solid timber framing. Sheet end butt joints must be formed over nogs or furring channels and offset the outer layer joints from the inner layer. Sheets shall be touch fitted.

Fixing of Linings**Fasteners (As per Specified System Above)**

| System Number | Furring Channel Side | | Framing Side |
|---------------------|-----------------------------|-----------------------|----------------------------|
| | 1 st Layer | 2 nd Layer | Single Layer |
| | Self-Tapping Drywall Screws | | High Thread Drywall Screws |
| E3TMLA30-M30 | 10mm | 10mm | 13mm |
| | 41 x 6g | 51 x 7g | 41 x 6g |
| E3TMLA30-S39 | 13mm | 13mm | 13mm |
| | 41 x 6g | 51 x 7g | 41 x 6g |

Fastener Centres

Framing Side: Fix at 300mm centres at sheet perimeter and up each stud.

Resilient Mount Side: Fix 300mm centres along each furring channel. Place fasteners minimum 12mm from sheet edges and sheet ends. Place fasteners at 200mm centres where sheet end butt joints occur. Avoid outer layer screws from hitting inner layer screws.

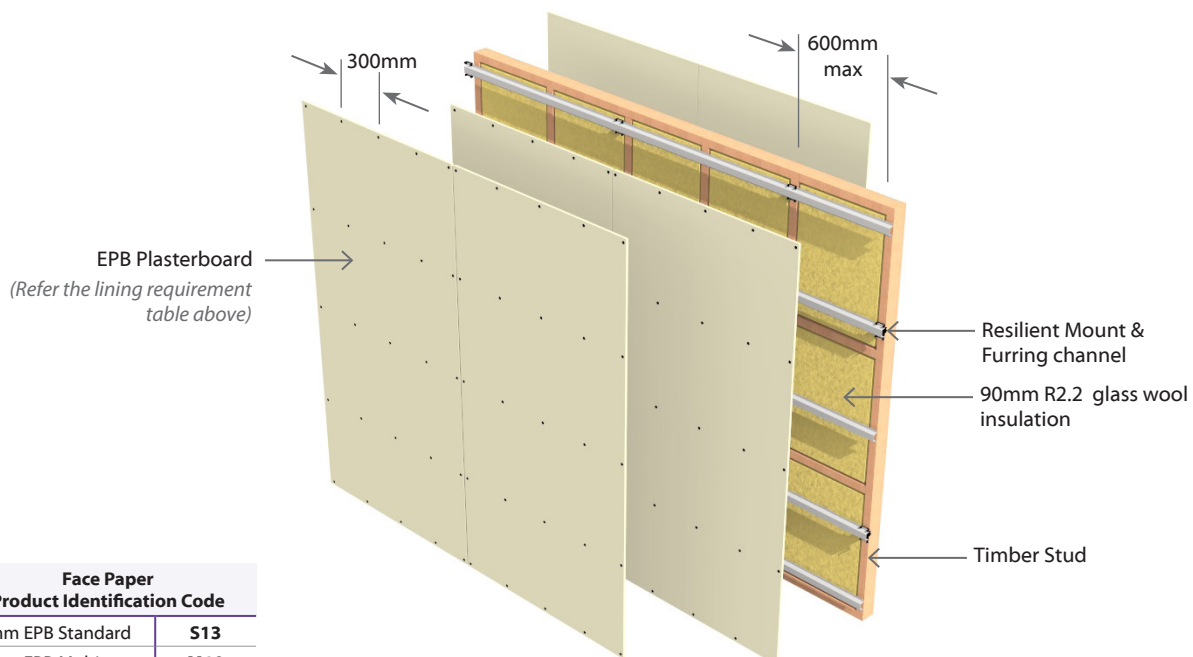
Acoustic Sealant

A bead of acoustic sealant is required around the perimeter of the framing or the inner layer. The single or outer layer is then bedded onto the bead. The perimeter junctions of the wall must be airtight.

Joining

Inner Layer: Unstopped.

Outer or Single Layer: All fastener heads stopped and all sheet joints reinforced and stopped. Wall to ceiling junctions are to be reinforced with paper tape and square stopped or finished with Cornice. All in accordance with EPB Plasterboard Installation Guide.



| Face Paper Product Identification Code | |
|---|------------|
| 13mm EPB Standard | S13 |
| 10mm EPB Multismart | M10 |



E4TMLA30Single Timber Frame with Resilient MountLoad Bearing

Two Way FRR

4 Layers: 2 Layers of Plasterboard to each side of frameFull Intertency Acoustic

| System Number | Lining Suffix | FRR | Load Bearing Ability | Noise Control | | Lining Requirement |
|-----------------|---------------|----------|----------------------|---------------|----|--|
| | | | | STC | Rw | |
| E4TMLA30 | -F40 | 30/30/30 | LB | 58 | 57 | Framing Side: 2 x 10mm EPB FireSmart Mount Side: 2 x 10mm EPB FireSmart |

Framing

Framing to comply with relevant sections and clauses of NZBC B1: Structure and NZBC B2: Durability.

Studs at 600mm centres maximum.

Nogs at 1350mm centre maximum.

Wall Height, Load and Framing Dimension

These are determined by NZS3604 stud tables for load bearing or non-load bearing partitions. Minimum frame dimension 90 x 45mm.

Minimum Partition Width

In order to achieve the STC ratings in the table above the partition width (excluding the board) shall be a minimum of 130mm.

| Stud Depth | Mount + Channel | Lining Suffix | Total Plasterboard thickness | Total Partition Width |
|------------|-----------------|---------------|------------------------------|-----------------------|
| 90mm | 40mm | S40 | 40mm | 170mm |

Wall Sound Absorber

Install Sound Absorber between studs and nogs of the frame.

Use 90mm thick R2.2 glass wool insulation.

Acoustic Resilient Mount

The Resilient Mount shall be fixed to the studs at 600mm centres vertically and on every alternative stud using 32mm x 8g wafer head screws. When adjusting the clip for depth, 3mm rubber must remain between the underside of the steel spacer head and the furring channel. The Furring channels are clipped horizontally into the Mounts. Joints must be made as close as possible to the clips.

Plasterboard Lining

NB: The installer must look for the Product Identification Code on the face paper to ensure the correct board type is installed. Refer to the Face Paper Product Identification Code table on this page.

Two layers of 10mm EPB FireSmart lining fixed vertically on each side of the timber framing.

Vertical fixing only permitted. Vertical joints of outer layer should be offset by 600mm from those of the inner layer. Use full height sheets where possible. All sheet joints on the framing side must be fixed over solid timber framing. Sheet end butt joints must be formed over nogs or furring channels and offset the outer layer joints from the inner layer. Sheets shall be touch fitted.

Fixing of Linings**Fasteners**

| System Number | Furring Channel Side | | Framing Side | |
|---------------------|-----------------------------|-----------------------|----------------------------|-----------------------|
| | 1 st Layer | 2 nd Layer | 1 st Layer | 2 nd Layer |
| | Self-Tapping Drywall Screws | | High Thread Drywall Screws | |
| E4TMLA30-F40 | 10mm | 10mm | 10mm | 10mm |
| | 25 x 6g | 32 x 6g | 41 x 6g | 51 x 7g |

Fastener Centres

Framing Side: Fix at 300mm centres at sheet perimeter and up each stud.

Resilient Mount Side: Fix 300mm centres along each furring channel. Place fasteners minimum 12mm from sheet edges and sheet ends.

Place fasteners at 200mm centres where sheet end butt joints occur.

Avoid outer layer screws from hitting inner layer screws.

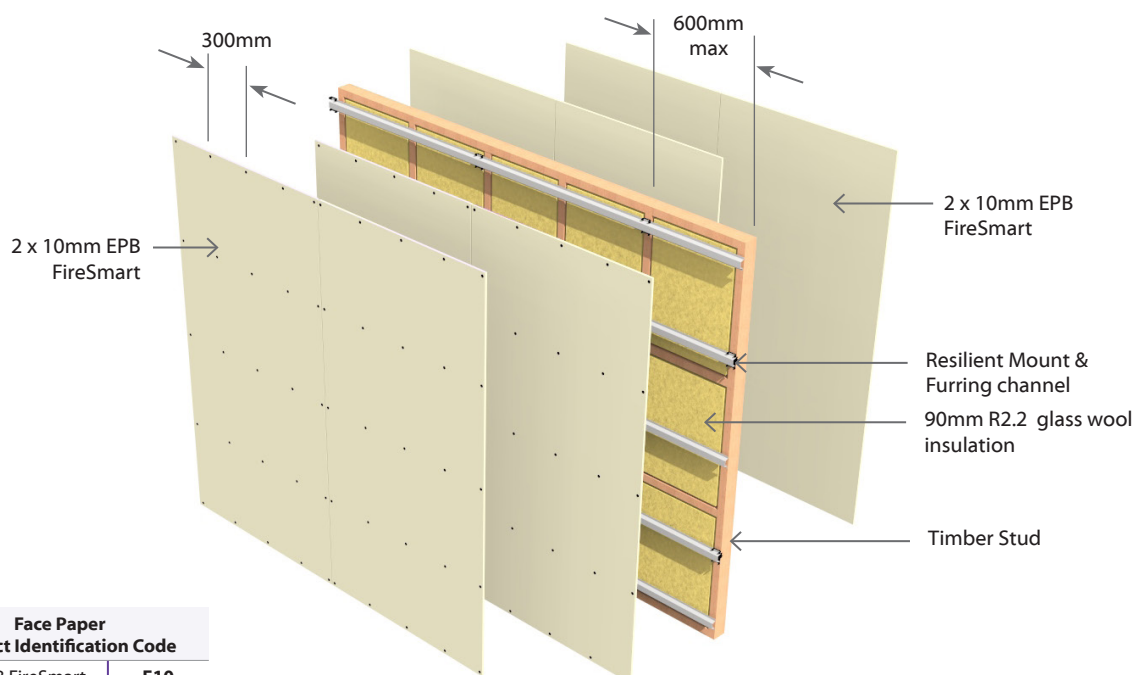
Acoustic Sealant

A bead of acoustical sealant is required around the perimeter of the inner layer and the outer layer is bedded onto the bead. The perimeter junctions of the wall must be airtight.

Jointing

Inner Layer: Unstopped.

Outer Layer: All fastener heads stopped and all sheet joints reinforced with paper jointing tape and stopped. Wall to ceiling junctions are to be reinforced with paper tape and square stopped or finished with Cornice. All in accordance with EPB Plasterboard Installation Guide.


**Face Paper
Product Identification Code**

| | |
|--------------------|------------|
| 10mm EPB FireSmart | F10 |
|--------------------|------------|



E4TMLA45Single Timber Frame with Resilient MountLoad Bearing

Two Way FRR

4 Layers: 2 Layers of Plasterboard to each side of frameFull Intertenancy Acoustic

| System Number | Lining Suffix | FRR | Load Bearing Ability | Noise Control | | Lining Requirement |
|-----------------|---------------|----------|----------------------|---------------|----|--|
| | | | | STC | Rw | |
| E4TMLA45 | -S52 | 45/45/45 | LB | 61 | 60 | Framing Side: 2 x 13mm EPB Standard Mount Side: 2 x 13mm EPB Standard |

Framing

Framing to comply with relevant sections and clauses of NZBC B1: Structure and NZBC B2: Durability.

Studs at 600mm centres maximum.

Nogs at 1350mm centre maximum.

Wall Height, Load and Framing Dimension

These are determined by NZS3604 stud tables for load bearing or non-load bearing partitions. Minimum frame dimension 90 x 45mm.

Minimum Partition Width

In order to achieve the STC ratings in the table above the partition width (excluding the board) shall be a minimum of 130mm.

| Stud Depth | Mount + Channel | Lining Suffix | Total Plasterboard thickness | Total Partition Width |
|------------|-----------------|---------------|------------------------------|-----------------------|
| 90mm | 40mm | S52 | 52mm | 182mm |

Wall Sound Absorber

Install Sound Absorber between studs and nogs of the frame.

Use 90mm thick R2.2 glass wool insulation.

Acoustic Resilient Mount

The Resilient Mount shall be fixed to the studs at 600mm centres vertically and on every alternative stud using 32mm x 8g wafer head screws. When adjusting the clip for depth, 3mm rubber must remain between the underside of the steel spacer head and the furring channel. The Furring channels are clipped horizontally into the Mounts. Joints must be made as close as possible to the clips.

Plasterboard Lining

NB: The installer must look for the Product Identification Code on the face paper to ensure the correct board type is installed. Refer to the Face Paper Product Identification Code table on this page.

Two layers of 13mm EPB Standard lining fixed vertically on each side of the timber framing.

Vertical fixing only permitted. Vertical joints of outer layer should be offset by 600mm from those of the inner layer. Use full height sheets where possible. All sheet joints on the framing side must be fixed over solid timber framing. Sheet end butt joints must be formed over nogs or furring channels and offset the outer layer joints from the inner layer. Sheets shall be touch fitted.

Fixing of Linings**Fasteners**

| System Number | Furring Channel Side | | Framing Side | |
|---------------------|-----------------------------|-----------------------|----------------------------|-----------------------|
| | 1 st Layer | 2 nd Layer | 1 st Layer | 2 nd Layer |
| | Self-Tapping Drywall Screws | | High Thread Drywall Screws | |
| E4TMLA45-S52 | 13mm | 13mm | 13mm | 13mm |
| | 25 x 6g | 41 x 6g | 41 x 6g | 51 x 7g |

Fastener Centres

Framing Side: Fix at 300mm centres at sheet perimeter and up each stud.

Resilient Mount Side: Fix 300mm centres along each furring channel.

Place fasteners minimum 12mm from sheet edges and sheet ends.

Place fasteners at 200mm centres where sheet end butt joints occur.

Avoid outer layer screws from hitting inner layer screws.

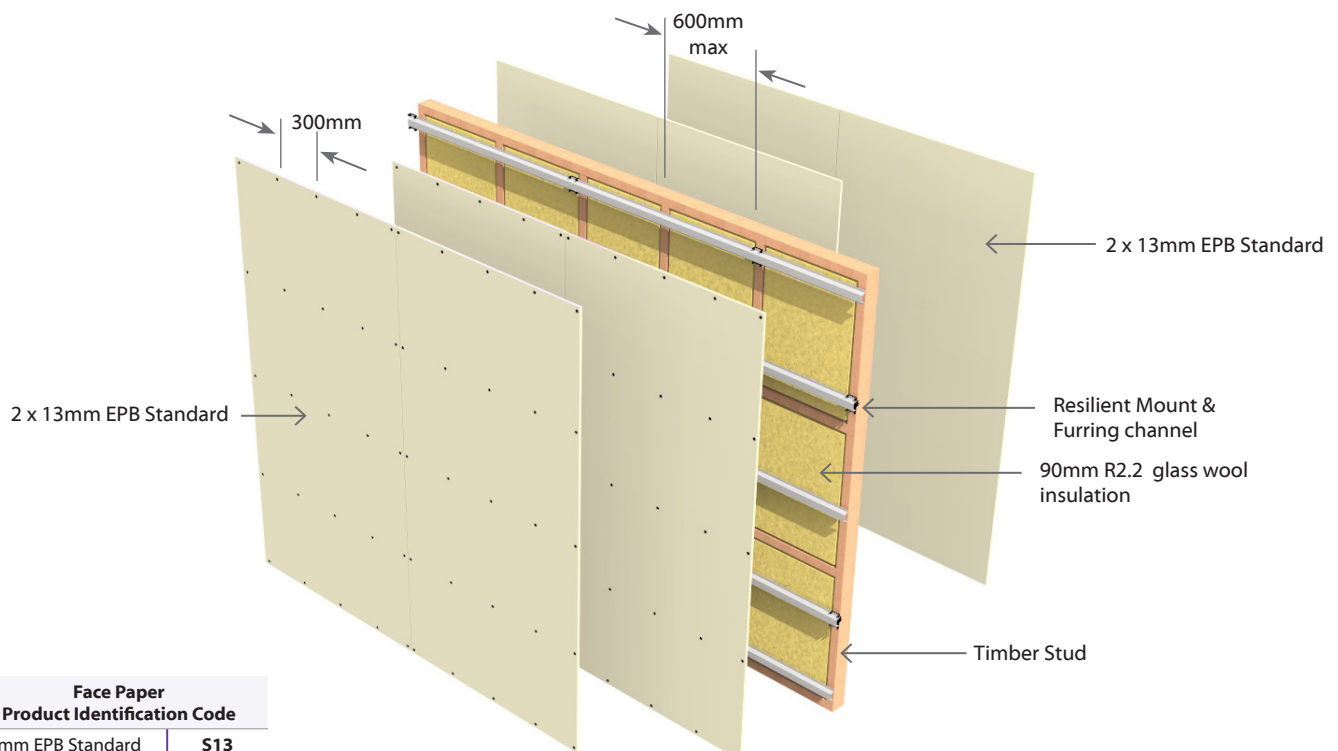
Acoustic Sealant

A bead of acoustical sealant is required around the perimeter of the inner layer and the outer layer is bedded onto the bead. The perimeter junctions of the wall must be airtight.

Jointing

Inner Layer: Unstopped.

Outer Layer: All fastener heads stopped and all sheet joints reinforced with paper jointing tape and stopped. Wall to ceiling junctions are to be reinforced with paper tape and square stopped or finished with Cornice. All in accordance with EPB Plasterboard Installation Guide.


Face Paper
Product Identification Code

 13mm EPB Standard | **S13**

E3TMLA60Single Timber Frame with Resilient MountLoad BearingTwo Way FRR

3 Layers: 1 Layer of Plasterboard on Framing side &
2 Layers of Plasterboard on Mount side

Full Intertency Acoustic

| System Number | Lining Suffix | FRR | Load Bearing Ability | Noise Control | | Lining Requirement |
|-----------------|---------------|----------|----------------------|---------------|----|--|
| | | | | STC | Rw | |
| E3TMLA60 | -M39 | 60/60/60 | LB | 58 | 57 | Framing Side: 1 x 13mm EPB MultiSmart Mount Side: 2 x 13mm EPB MultiSmart |

Framing

Framing to comply with relevant sections and clauses of NZBC B1: Structure and NZBC B2: Durability.

Studs at 600mm centres maximum.

Nogs at 1350mm centre maximum.

Wall Height, Load and Framing Dimension

These are determined by NZS3604 stud tables for load bearing or non-load bearing partitions. Minimum 90 x 45mm frame dimension.

Minimum Partition Width

In order to achieve the STC ratings in the table above the partition width (excluding the board) shall be a minimum of 130mm.

| Stud Depth | Mount + Channel | Lining Suffix | Total Plasterboard thickness | Total Partition Width |
|------------|-----------------|---------------|------------------------------|-----------------------|
| 90mm | 40mm | M39 | 39mm | 169mm |

Wall Sound Absorber

Install Sound Absorber between studs and nogs of the frame.

Use 90mm thick R2.2 glass wool insulation.

Acoustic Resilient Mount

The Resilient Mount shall be fixed to the studs at 600mm centres vertically and on every alternative stud using 32mm x 8g wafer head screws. When adjusting the clip for depth, 3mm rubber must remain between the underside of the steel spacer head and the furring channel. The Furring channels are clipped horizontally into the Mounts. Joints must be made as close as possible to the clips.

Plasterboard Lining

NB: The installer must look for the Product Identification Code on the face paper to ensure the correct board type is installed. Refer to the Face Paper Product Identification Code table on this page.

Two layer of 13mm EPB MultiSmart lining fixed vertically on the mount side and One layer of 13mm EPB MultiSmart fixed vertically to the framing side.

Vertical fixing only permitted. Vertical joints of outer layer should be offset by 600mm from those of the inner layer. Use full height sheets where possible. All sheet joints on the framing side must be fixed over solid timber framing. Sheet end butt joints must be formed over nogs or furring channels and offset the outer layer joints from the inner layer. Sheets shall be touch fitted.

Fixing of Linings**Fasteners**

| System Number | Furring Channel Side | | Framing Side |
|---------------------|-----------------------------|-----------------------|----------------------------|
| | 1 st Layer | 2 nd Layer | Single Layer |
| | Self-Tapping Drywall Screws | | High Thread Drywall Screws |
| E3TMLA60-M39 | 13mm | 13mm | 13mm |
| | 25 x 6g | 41 x 6g | 41 x 6g |

Fastener Centres

Framing Side: Fix at 300mm centres at sheet perimeter and up each stud.

Resilient Mount Side: Fix 300mm centres along each furring channel. Place fasteners minimum 12mm from sheet edges and sheet ends.

Place fasteners at 200mm centres where sheet end butt joints occur.

Avoid outer layer screws from hitting inner layer screws.

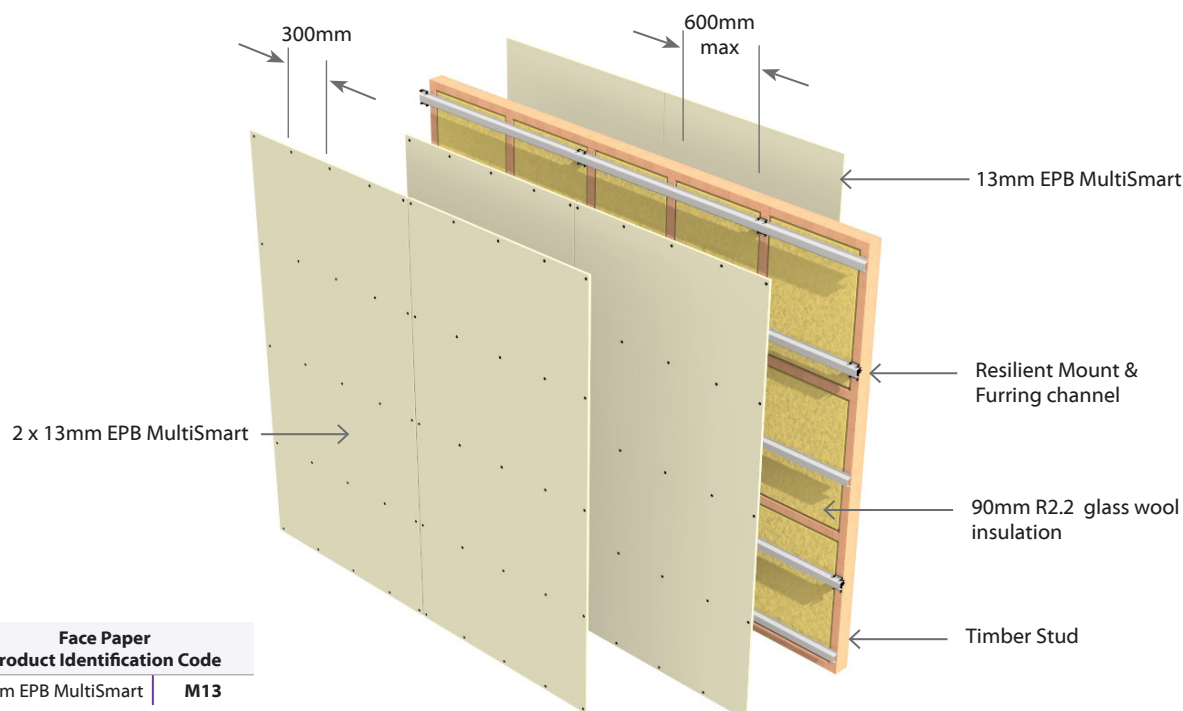
Acoustic Sealant

A bead of acoustic sealant is required around the perimeter of the framing or the inner layer. The single or outer layer is then bedded onto the bead. The perimeter junctions of the wall must be airtight.

Jointing

Inner Layer: Unstopped.

Outer or Single Layer: All fastener heads stopped and all sheet joints reinforced and stopped. Wall to ceiling junctions are to be reinforced with paper tape and square stopped or finished with Cornice. All in accordance with EPB Plasterboard Installation Guide.



E4TMLA60Single Timber Frame with Resilient MountLoad Bearing

Two Way FRR

4 Layers: 2 Layers of Plasterboard to each side of frameFull Intertency Acoustic

| System Number | Lining Suffix | FRR | Load Bearing Ability | Noise Control | | Lining Requirement |
|-----------------|---------------|----------|----------------------|---------------|----|--|
| | | | | STC | Rw | |
| E4TMLA60 | -M40 | 60/60/60 | LB | 62 | 61 | Framing Side: 2 x 10mm EPB MultiSmart Mount Side: 2 x 10mm EPB MultiSmart |

Framing

Framing to comply with relevant sections and clauses of NZBC B1: Structure and NZBC B2: Durability.

Studs at 600mm centres maximum.

Nogs at 1350mm centre maximum.

Wall Height, Load and Framing Dimension

These are determined by NZS3604 stud tables for load bearing or non-load bearing partitions. Minimum frame dimension 90 x 45mm.

Minimum Partition Width

In order to achieve the STC ratings in the table above the partition width (excluding the board) shall be a minimum of 130mm.

| Stud Depth | Mount + Channel | Lining Suffix | Total Plasterboard thickness | Total Partition Width |
|------------|-----------------|---------------|------------------------------|-----------------------|
| 90mm | 40mm | M40 | 40mm | 170mm |

Wall Sound Absorber

Install Sound Absorber between studs and nogs of the frame.

Use 90mm thick R2.2 glass wool insulation.

Acoustic Resilient Mount

The Resilient Mount shall be fixed to the studs at 600mm centres vertically and on every alternative stud using 32mm x 8g wafer head screws. When adjusting the clip for depth, 3mm rubber must remain between the underside of the steel spacer head and the furring channel. The Furring channels are clipped horizontally into the Mounts. Joints must be made as close as possible to the clips.

Plasterboard Lining

NB: The installer must look for the Product Identification Code on the face paper to ensure the correct board type is installed. Refer to the Face Paper Product Identification Code table on this page.

Two layers of 10mm EPB MultiSmart lining fixed vertically on each side of the timber framing.

Vertical fixing only permitted. Vertical joints of outer layer should be offset by 600mm from those of the inner layer. Use full height sheets where possible. All sheet joints on the framing side must be fixed over solid timber framing. Sheet end butt joints must be formed over nogs or furring channels and offset the outer layer joints from the inner layer. Sheets shall be touch fitted.

Fixing of Linings**Fasteners**

| System Number | Furring Channel Side | | Framing Side | |
|---------------------|-----------------------------|-----------------------|----------------------------|-----------------------|
| | 1 st Layer | 2 nd Layer | 1 st Layer | 2 nd Layer |
| | Self-Tapping Drywall Screws | | High Thread Drywall Screws | |
| E4TMLA60-M40 | 10mm | 10mm | 10mm | 10mm |
| | 25 x 6g | 32 x 6g | 41 x 6g | 51 x 7g |

Fastener Centres

Framing Side: Fix at 300mm centres at sheet perimeter and up each stud.

Resilient Mount Side: Fix 300mm centres along each furring channel. Place fasteners minimum 12mm from sheet edges and sheet ends.

Place fasteners at 200mm centres where sheet end butt joints occur.

Avoid outer layer screws from hitting inner layer screws.

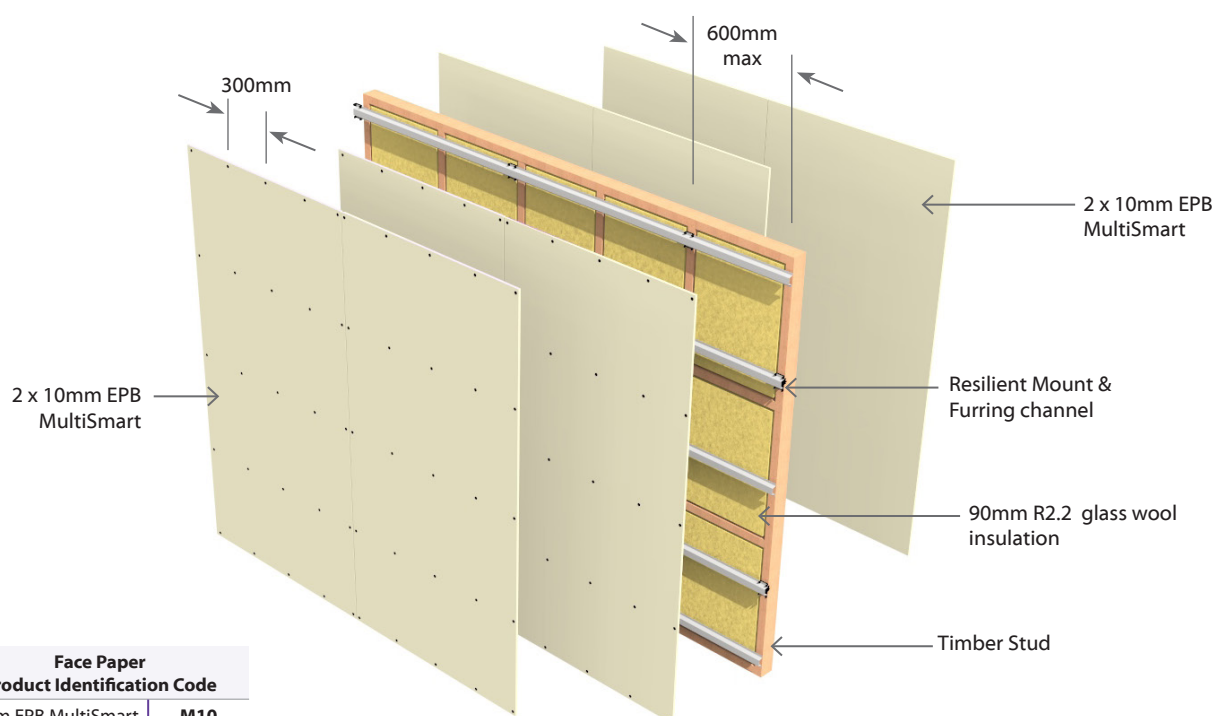
Acoustic Sealant

A bead of acoustical sealant is required around the perimeter of the inner layer and the outer layer is bedded onto the bead. The perimeter junctions of the wall must be airtight.

Jointing

Inner Layer: Unstopped.

Outer Layer: All fastener heads stopped and all sheet joints reinforced with paper jointing tape and stopped. Wall to ceiling junctions are to be reinforced with paper tape and square stopped or finished with Cornice. All in accordance with EPB Plasterboard Installation Guide.



E4TMLA90Single Timber Frame with Resilient MountLoad Bearing

Two Way FRR

4 Layers: 2 Layers of Plasterboard to each side of frameFull Intertenancy Acoustic

| System Number | Lining Suffix | FRR | Load Bearing Ability | Noise Control | | Lining Requirement |
|-----------------|---------------|----------|----------------------|---------------|----|--|
| | | | | STC | Rw | |
| E4TMLA90 | -M52 | 90/90/90 | LB | 63 | 62 | Framing Side: 2 x 13mm EPB MultiSmart Mount Side: 2 x 13mm EPB MultiSmart |

Framing

Framing to comply with relevant sections and clauses of NZBC B1: Structure and NZBC B2: Durability.

Studs at 600mm centres maximum.

Nogs at 1350mm centre maximum.

Wall Height, Load and Framing Dimension

These are determined by NZS3604 stud tables for load bearing or non-load bearing partitions. Minimum frame dimension 90 x 45mm.

Minimum Partition Width

In order to achieve the STC ratings in the table above the partition width (excluding the board) shall be a minimum of 130mm.

| Stud Depth | Mount + Channel | Lining Suffix | Total Plasterboard thickness | Total Partition Width |
|------------|-----------------|---------------|------------------------------|-----------------------|
| 90mm | 40mm | M52 | 52mm | 182mm |

Wall Sound Absorber

Install Sound Absorber between studs and nogs of the frame.

Use 90mm thick R2.2 glass wool insulation.

Acoustic Resilient Mount

The Resilient Mount shall be fixed to the studs at 600mm centres vertically and on every alternative stud using 32mm x 8g wafer head screws. When adjusting the clip for depth, 3mm rubber must remain between the underside of the steel spacer head and the furring channel. The Furring channels are clipped horizontally into the Mounts. Joints must be made as close as possible to the clips.

Plasterboard Lining

NB: The installer must look for the Product Identification Code on the face paper to ensure the correct board type is installed. Refer to the Face Paper Product Identification Code table on this page.

Two layers of 13mm EPB MultiSmart lining fixed vertically on each side of the timber framing.

Vertical fixing only permitted. Vertical joints of outer layer should be offset by 600mm from those of the inner layer. Use full height sheets where possible. All sheet joints on the framing side must be fixed over solid timber framing. Sheet end butt joints must be formed over nogs or furring channels and offset the outer layer joints from the inner layer. Sheets shall be touch fitted.

Fixing of Linings**Fasteners**

| System Number | Furring Channel Side | | Framing Side | |
|---------------------|-----------------------------|-----------------------|----------------------------|-----------------------|
| | 1 st Layer | 2 nd Layer | 1 st Layer | 2 nd Layer |
| | Self-Tapping Drywall Screws | | High Thread Drywall Screws | |
| E4TMLA90-M52 | 13mm | 13mm | 13mm | 13mm |
| | 25 x 6g | 41 x 6g | 41 x 6g | 51 x 7g |

Fastener Centres

Framing Side: Fix at 300mm centres at sheet perimeter and up each stud.

Resilient Mount Side: Fix 300mm centres along each furring channel.

Place fasteners minimum 12mm from sheet edges and sheet ends.

Place fasteners at 200mm centres where sheet end butt joints occur.

Avoid outer layer screws from hitting inner layer screws.

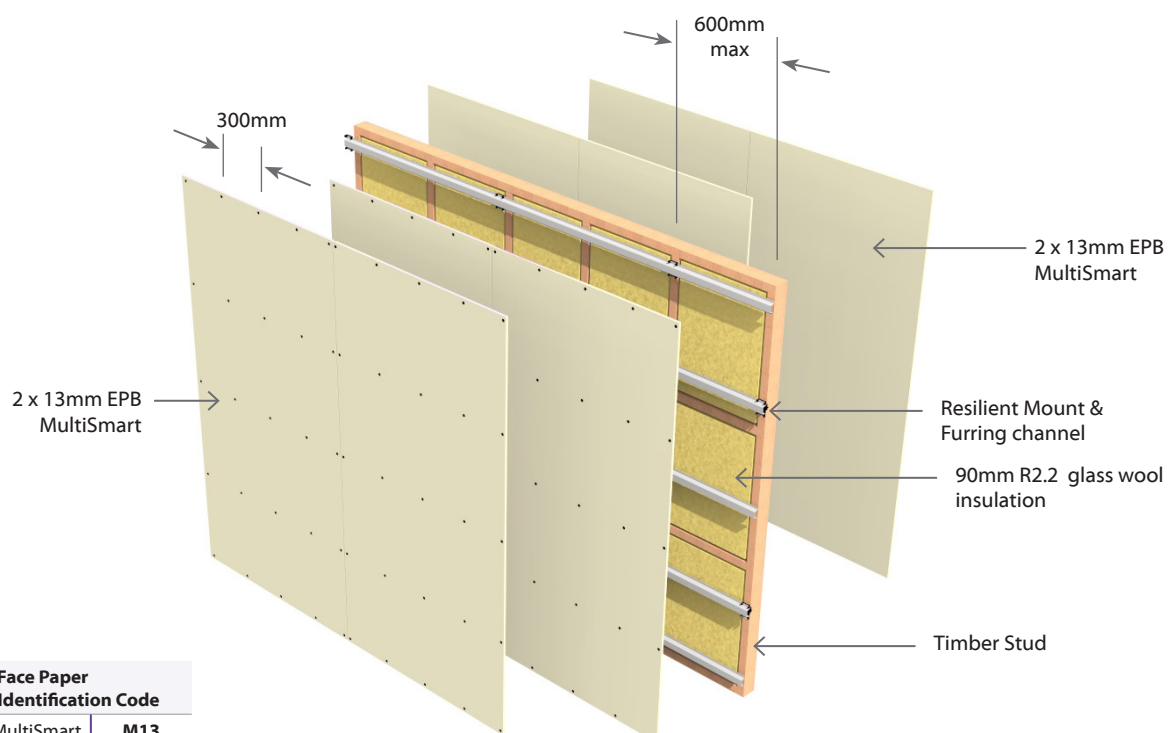
Acoustic Sealant

A bead of acoustical sealant is required around the perimeter of the inner layer and the outer layer is bedded onto the bead. The perimeter junctions of the wall must be airtight.

Jointing

Inner Layer: Unstopped.

Outer Layer: All fastener heads stopped and all sheet joints reinforced with paper jointing tape and stopped. Wall to ceiling junctions are to be reinforced with paper tape and square stopped or finished with Cornice. All in accordance with EPB Plasterboard Installation Guide.


**Face Paper
Product Identification Code**

13mm EPB MultiSmart | **M13**



E4TRLA45Single Timber Frame with Resilient RailLoad BearingTwo Way FRR**4** Layers: 2 Layers of Plasterboard to each side of frameFull Intertenancy Acoustic

| System Number | Lining Suffix | FRR | Load Bearing Ability | Noise Control | | Lining Requirement |
|-----------------|---------------|----------|----------------------|---------------|----|---|
| | | | | STC | Rw | |
| E4TRLA45 | -S52 | 45/45/45 | LB | 55 | 54 | Framing Side: 2 x 13mm EPB Standard Rail Side: 2 x 13mm EPB Standard |

Framing

Framing to comply with relevant sections and clauses of NZBC B1: Structure and NZBC B2: Durability.

Studs at 600mm centres maximum.

Nogs at 1350mm centre maximum.

Wall Height, Load and Framing Dimension

These are determined by NZS3604 stud tables for load bearing or non-load bearing partitions. Minimum frame dimension 90 x 45mm.

Minimum Partition Width

In order to achieve the STC ratings in the table above the partition width (excluding the board) shall be a minimum of 103mm.

| Stud Depth | Rail | Lining Suffix | Total Plasterboard thickness | Total Partition Width |
|------------|------|---------------|------------------------------|-----------------------|
| 90mm | 13mm | S52 | 52mm | 155mm |

Wall Sound Absorber

Install Sound Absorber between studs and nogs of the frame.

Use 90mm thick R2.2 glass wool insulation.

Acoustic Resilient Rail

The Resilient Rail shall be fixed to the studs at 600mm centres using 32mm x 8g wafer head self-tapping screws through the base flange and into each stud. The base flange to face downwards and resilient edge upwards. Channel may be joined by nesting together with no more than 20mm overlap. Fasten through both channels into stud. Highest resilient channel shall be fixed no more than 75mm from the ceiling line and the lowest channel, 50mm from the floor line.

Plasterboard Lining

NB: The installer must look for the Product Identification Code on the face paper to ensure the correct board type is installed. Refer to the Face Paper Product Identification Code table on this page.

Two layers of 13mm EPB Standard fixed vertically on each side of the timber framing.

Vertical fixing only permitted. Vertical joints of outer layer should be offset by 600mm from those of the inner layer. Use full height sheets where possible. All sheet joints on the framing side must be fixed over solid timber framing. Sheet end butt joints must be formed over nogs or rails and offset the outer layer joints from the inner layer.

Sheets shall be touch fitted.

Fixing of Linings**Fasteners**

| System Number | Resilient Rail Side | | Framing Side | |
|---------------------|-----------------------------|-----------------------|----------------------------|-----------------------|
| | 1 st Layer | 2 nd Layer | 1 st Layer | 2 nd Layer |
| | Self-Tapping Drywall Screws | | High Thread Drywall Screws | |
| E4TRLA45-S52 | 13mm | 13mm | 13mm | 13mm |
| | 25 x 6g | 41 x 6g | 41 x 6g | 51 x 7g |

Fastener Centres

Framing Side: Fix at 300mm centres at sheet perimeter and up each stud.

Resilient Rail Side: Fix 300mm centres along each resilient rail.

Place fasteners minimum 12mm from sheet edges and sheet ends.

Place fasteners at 200mm centres where sheet end butt joints occur.

Avoid outer layer screws from hitting inner layer screws.

Lining screws to be fastened to the side of the studs and nogs, to ensure that they don't penetrate or touch the framing.

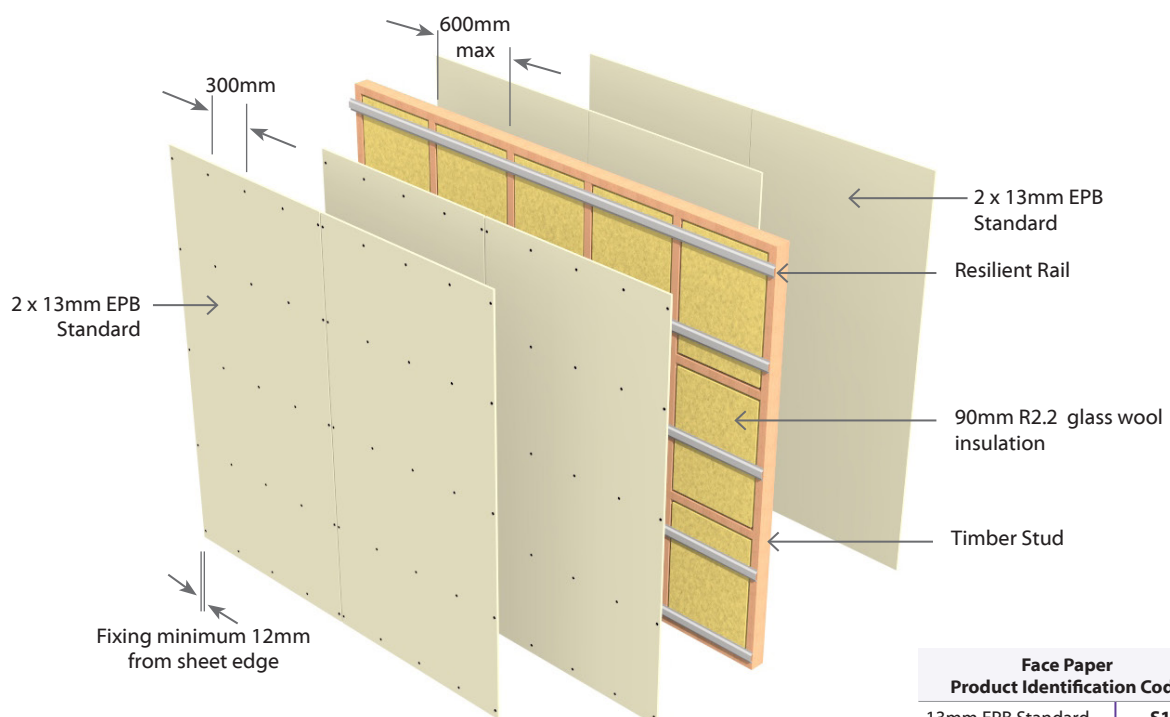
Acoustic Sealant

A bead of acoustical sealant is required around the perimeter of the inner layer and the outer layer is bedded onto the bead. The perimeter junctions of the wall must be airtight.

Jointing

Inner Layer: Unstopped

Outer Layer: All fastener heads stopped and all sheet joints reinforced and stopped. Wall to ceiling junctions are to be reinforced with paper tape and square stopped or finished with Cornice. All in accordance with EPB Plasterboard Installation Guide.



| Face Paper Product Identification Code | |
|--|------------|
| 13mm EPB Standard | S13 |



E4TRLA60Single Timber Frame with Resilient RailLoad BearingTwo Way FRR**4** Layers: 2 Layers of Plasterboard to each side of frameFull Intertency Acoustic

| System Number | Lining Suffix | FRR | Load Bearing Ability | Noise Control | | Lining Requirement |
|-----------------|---------------|----------|----------------------|---------------|----|---|
| | | | | STC | Rw | |
| E4TRLA60 | -M40 | 60/60/60 | LB | 56 | 55 | Framing Side: 2 x 10mm EPB MultiSmart Rail Side: 2 x 10mm EPB MultiSmart |

Framing

Framing to comply with relevant sections and clauses of NZBC B1: Structure and NZBC B2: Durability.

Studs at 600mm centres maximum.

Nogs at 1350mm centre maximum.

Wall Height, Load and Framing Dimension

These are determined by NZS3604 stud tables for load bearing or non-load bearing partitions. Minimum frame dimension 90 x 45mm.

Minimum Partition Width

In order to achieve the STC ratings in the table above the partition width (excluding the board) shall be a minimum of 103mm.

| Stud Depth | Rail | Lining Suffix | Total Plasterboard thickness | Total Partition Width |
|------------|------|---------------|------------------------------|-----------------------|
| 90mm | 13mm | M40 | 40mm | 143mm |

Wall Sound Absorber

Install Sound Absorber between studs and nogs of the frame.

Use 90mm thick R2.2 glass wool insulation.

Acoustic Resilient Rail

The Resilient Rail shall be fixed to the studs at 600mm centres using 32mm x 8g wafer head self-tapping screws through the base flange and into each stud. The base flange to face downwards and resilient edge upwards. Channel may be joined by nesting together with no more than 20mm overlap. Fasten through both channels into stud. Highest resilient channel shall be fixed no more than 75mm from the ceiling line and the lowest channel, 50mm from the floor line.

Plasterboard Lining

NB: The installer must look for the Product Identification Code on the face paper to ensure the correct board type is installed. Refer to the Face Paper Product Identification Code table on this page.

Two layers of 10mm EPB MultiSmart fixed vertically on each side of the timber framing.

Vertical fixing only permitted. Vertical joints of outer layer should be offset by 600mm from those of the inner layer. Use full height sheets where possible. All sheet joints on the framing side must be fixed over solid timber framing. Sheet end butt joints must be formed over nogs or rails and offset the outer layer joints from the inner layer.

Sheets shall be touch fitted.

Fixing of Linings**Fasteners**

| System Number | Resilient Rail Side | | Framing Side | |
|---------------------|-----------------------------|-----------------------|----------------------------|-----------------------|
| | 1 st Layer | 2 nd Layer | 1 st Layer | 2 nd Layer |
| | Self-Tapping Drywall Screws | | High Thread Drywall Screws | |
| E4TRLA60-M40 | 10mm | 10mm | 10mm | 10mm |
| | 25 x 6g | 32 x 6g | 41 x 6g | 51 x 7g |

Fastener Centres

Framing Side: Fix at 300mm centres at sheet perimeter and up each stud.

Resilient Rail Side: Fix 300mm centres along each resilient rail.

Place fasteners minimum 12mm from sheet edges and sheet ends.

Place fasteners at 200mm centres where sheet end butt joints occur.

Avoid outer layer screws from hitting inner layer screws.

Lining screws to be fastened to the side of the studs and nogs, to ensure that they don't penetrate or touch the framing.

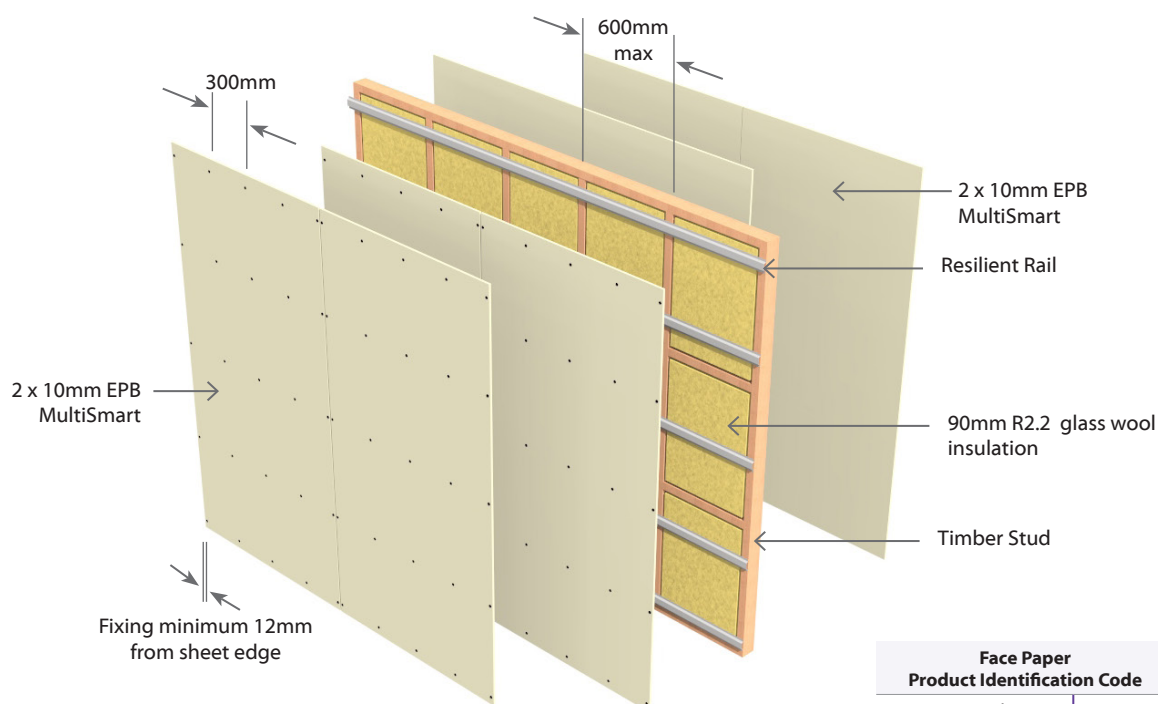
Acoustic Sealant

A bead of acoustical sealant is required around the perimeter of the inner layer and the outer layer is bedded onto the bead. The perimeter junctions of the wall must be airtight.

Joining

Inner Layer: Unstopped

Outer Layer: All fastener heads stopped and all sheet joints reinforced and stopped. Wall to ceiling junctions are to be reinforced with paper tape and square stopped or finished with Cornice. All in accordance with EPB Plasterboard Installation Guide.



E4TRLA90Single Timber Frame with Resilient RailLoad BearingTwo Way FRR**4** Layers: 2 Layers of Plasterboard to each side of frameFull Intertency Acoustic

| System Number | Lining Suffix | FRR | Load Bearing Ability | Noise Control | | Lining Requirement |
|-----------------|---------------|----------|----------------------|---------------|----|---|
| | | | | STC | Rw | |
| E4TRLA90 | -F52 | 90/90/90 | LB | 56 | 55 | Framing Side: 2 x 13mm EPB FireSmart Rail Side: 2 x 13mm EPB FireSmart |
| | -M52 | 90/90/90 | LB | 57 | 56 | Framing Side: 2 x 13mm EPB MultiSmart Rail Side: 2 x 13mm EPB MultiSmart |

Framing

Framing to comply with relevant sections and clauses of NZBC B1: Structure and NZBC B2: Durability.

Studs at 600mm centres maximum.

Nogs at 1350mm centre maximum.

Wall Height, Load and Framing Dimension

These are determined by NZS3604 stud tables for load bearing or non-load bearing partitions. Minimum frame dimension 90 x 45mm.

Minimum Partition Width

In order to achieve the STC ratings in the table above the partition width (excluding the board) shall be a minimum of 103mm.

| Stud Depth | Rail | Lining Suffix | Total Plasterboard thickness | Total Partition Width |
|------------|------|---------------|------------------------------|-----------------------|
| 90mm | 13mm | M52 | 52mm | 155mm |

Wall Sound Absorber

Install Sound Absorber between studs and nogs of the frame.

Use 90mm thick R2.2 glass wool insulation.

Acoustic Resilient Rail

The Resilient Rail shall be fixed to the studs at 600mm centres using 32mm x 8g wafer head self-tapping screws through the base flange and into each stud. The base flange to face downwards and resilient edge upwards. Channel may be joined by nesting together with no more than 20mm overlap. Fasten through both channels into stud. Highest resilient channel shall be fixed no more than 75mm from the ceiling line and the lowest channel, 50mm from the floor line.

Plasterboard Lining

NB: The installer must look for the Product Identification Code on the face paper to ensure the correct board type is installed. Refer to the Face Paper Product Identification Code table on this page.

Two layers of EPB Plasterboard as per specified system above, fixed vertically on each side of the timber framing.

Vertical fixing only permitted. Vertical joints of outer layer should be offset by 600mm from those of the inner layer. Use full height sheets where possible. All sheet joints on the framing side must be fixed over solid timber framing. Sheet end butt joints must be formed over nogs or rails and offset the outer layer joints from the inner layer.

Sheets shall be touch fitted.

Fixing of Linings**Fasteners**

| System Number | Resilient Rail Side | | Framing Side | |
|---------------------|-----------------------------|-----------------------|----------------------------|-----------------------|
| | 1 st Layer | 2 nd Layer | 1 st Layer | 2 nd Layer |
| | Self-Tapping Drywall Screws | | High Thread Drywall Screws | |
| E4TRLA90-F52 | 13mm | 13mm | 13mm | 13mm |
| E4TRLA90-M52 | 25 x 6g | 41 x 6g | 41 x 6g | 51 x 7g |

Fastener Centres

Framing Side: Fix at 300mm centres at sheet perimeter and up each stud.

Resilient Rail Side: Fix 300mm centres along each resilient rail.

Place fasteners minimum 12mm from sheet edges and sheet ends.

Place fasteners at 200mm centres where sheet end butt joints occur.

Avoid outer layer screws from hitting inner layer screws.

Lining screws to be fastened to the side of the studs and nogs, to ensure that they don't penetrate or touch the framing.

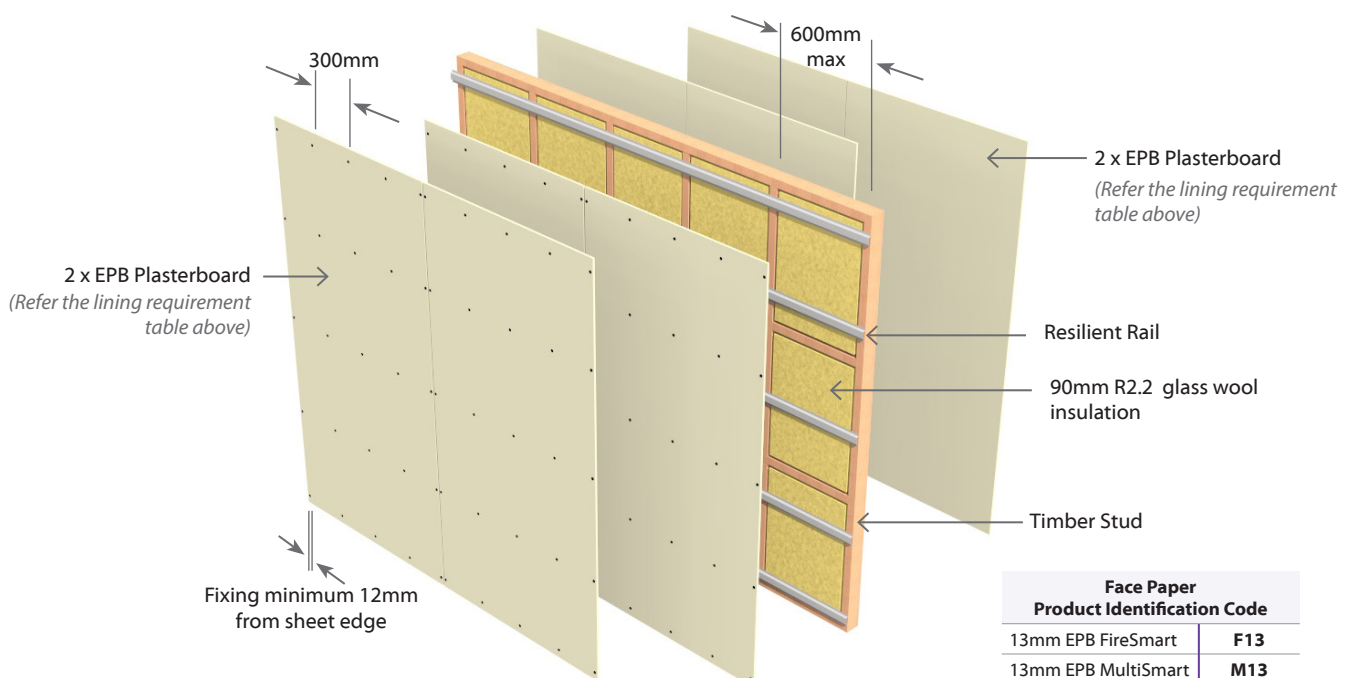
Acoustic Sealant

A bead of acoustical sealant is required around the perimeter of the inner layer and the outer layer is bedded onto the bead. The perimeter junctions of the wall must be airtight.

Jointing

Inner Layer: Unstopped

Outer Layer: All fastener heads stopped and all sheet joints reinforced and stopped. Wall to ceiling junctions are to be reinforced with paper tape and square stopped or finished with Cornice. All in accordance with EPB Plasterboard Installation Guide.





Steel Frame Walls

E3SDA30**Double Steel Frame**

Non Load Bearing

Two Way FRR

3 Layers: 1 Layer of Plasterboard on one side of frame &
2 Layers of Plasterboard on other side of frame

Full Intertency **A**coustic

| System Number | Lining Suffix | FRR | Load Bearing Ability | Noise Control* | | Lining Requirement |
|----------------|---------------|---------|----------------------|----------------|----|--|
| | | | | STC | Rw | |
| E3SDA30 | -S39 | -/30/30 | NLB | 55 | 54 | 1 x 13mm EPB Standard one side 2 x 13mm EPB Standard other side |
| | -M30 | -/30/30 | NLB | 56 | 55 | 1 x 10mm EPB MultiSmart one side 2 x 10mm EPB MultiSmart other side |

*Acoustic Performance improves with increase of Partition Width. See 'Minimum Partition Width' Table below.

Framing

Double Frame - Steel studs to be of minimum dimension 64mm x 34mm x 0.55 BMT with a 6mm return.

Tracks to be minimum dimension 64mm x 30mm x 0.55 BMT.

Top & bottom tracks are fixed to the floor and ceiling in true alignment.

Studs are placed at 600mm centres maximum. Studs aligned.

Place studs to allow the nominated expansion gap (minimum 15mm) at the top of frame. The studs are not directly fixed to the tracks. The studs are held in place by the grip of the track runners.

Wall Heights

Recommended maximum height is 2.7m. Higher walls may be subject to specific engineering design or consult the framing manufacturer.

Minimum Partition Width

Space between Frames shall be a minimum of 25mm.

In order to achieve the STC ratings in the table above the partition width (excluding the board) shall be a minimum of 153mm. Increasing the partition width would increase STC performance as per the table below.

| Stud Depth | Space Between Frames | Partition Width (Excludes Board) | STC Rating |
|------------|----------------------|----------------------------------|------------|
| 64mm x 2 | 25mm Min | 153mm | +0 |
| 64mm x 2 | 77mm Min | 205mm | +2 |

Wall Sound Absorber

Install Sound Absorber between studs on one side of the double frame. Use 75mm thick R1.8 glass wool blanket.

Plasterboard Lining

NB: The installer must look for the Product Identification Code on the face paper to ensure the correct board type is installed. Refer to the Face Paper Product Identification Code table on this page.

One layer of EPB Plasterboard to One side of the double steel framing and Two layers to the Other Side as per specified system above.

Vertical fixing only permitted. Use full height or full length sheets where possible. Inner layer joints on opposite side of frame should be

offset. All sheet joints must be fixed over steel framing. Vertical Joints of the outer layer should be offset 600mm from those of the inner layer. Sheet end butt joints must be formed over nogs and offset the outer layer joints from the inner layer. The inner layers are fixed hard to the floor. Sheets shall be touch fitted.

Fixing of Linings

Fasteners (As per Specified System Above)

| System Number | Side One | | Side Two |
|-----------------------------|-----------------------|-----------------------|--------------|
| | 1 st Layer | 2 nd Layer | Single Layer |
| Self-Tapping Drywall Screws | | | |
| E3SDA30-M30 | 10mm | 10mm | 10mm |
| | 25 x 6g | 41 x 6g | 25 x 6g |
| E3SDA30-S39 | 13mm | 13mm | 13mm |
| | 25 x 6g | 41 x 6g | 25 x 6g |

Fastener Centres

Inner Layer: Fix at 300mm centres up each stud with no fixings to top and bottom channel.

Outer or Single Layer: Fix at 300mm centres up each stud with no fixing to top and bottom channel sections.

Place fasteners minimum 12mm from sheet edge and 50mm from sheet ends.

Place fasteners at 200mm centres where sheet end butt joints occur.

Avoid outer layer screws from hitting inner layer screws.

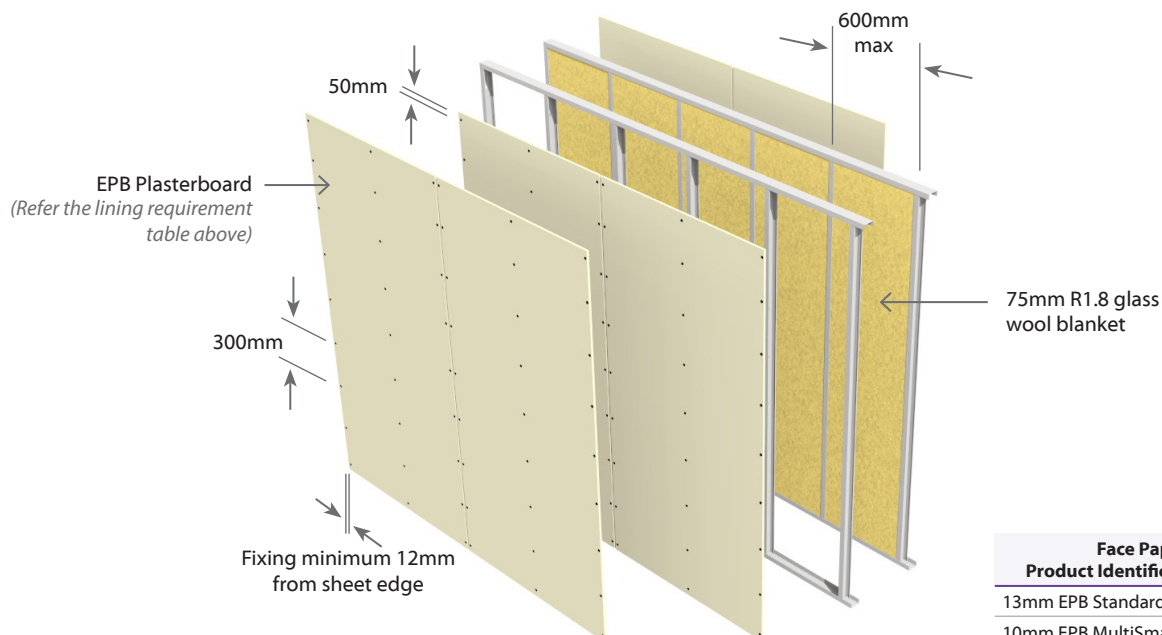
Acoustic Sealant

A bead of acoustic sealant is required around the perimeter of the framing or the inner layer. The single or outer layer is then bedded onto the bead. The perimeter junctions of the wall must be airtight.

Jointing

Inner Layer: Unstopped.

Outer or Single Layer: All fastener heads stopped and all sheet joints reinforced and stopped. Wall to ceiling junctions are to be reinforced with paper tape and square stopped or finished with Cornice. All in accordance with EPB Plasterboard Installation Guide.



| Face Paper Product Identification Code | |
|--|------------|
| 13mm EPB Standard | S13 |
| 10mm EPB MultiSmart | M10 |

E4SDA45**Double Steel Frame**

Non Load Bearing

Two Way FRR

4 Layers: 2 Layers of Plasterboard to each side of frame**Full Intertency Acoustic**

| System Number | Lining Suffix | FRR | Load Bearing Ability | Noise Control* | | Lining Requirement |
|----------------|---------------|---------|----------------------|----------------|----|----------------------------------|
| | | | | STC | Rw | |
| E4SDA45 | -F40 | -/45/45 | NLB | 58 | 57 | 2 x 10mm EPB FireSmart each side |

*Acoustic Performance improves with increase of Partition Width. See 'Minimum Partition Width' Table below.

Framing

Double Frame - Steel studs to be of minimum dimension 64mm x 34mm x 0.55 BMT with a 6mm return.

Tracks to be minimum dimension 64mm x 30mm x 0.55 BMT.

Top & bottom tracks are fixed to the floor and ceiling in true alignment. Studs are placed at 600mm centres maximum. Studs aligned.

Place studs to allow the nominated expansion gap (minimum 15mm) at the top of frame. The studs are not directly fixed to the tracks. The studs are held in place by the grip of the track runners.

Wall Heights

Recommended maximum height is 2.7m. Higher walls may be subject to specific engineering design or consult the framing manufacturer.

Minimum Partition Width

Space between Frames shall be a minimum of 25mm.

In order to achieve the STC ratings in the table above the partition width (excluding the board) shall be a minimum of 153mm. Increasing the partition width would increase STC performance as per the table below.

| Stud Depth | Space Between Frames | Partition Width (Excludes Board) | STC Rating |
|------------|----------------------|----------------------------------|------------|
| 64mm x 2 | 25mm Min | 153mm | +0 |
| 64mm x 2 | 77mm Min | 205mm | +2 |

Wall Sound Absorber

Install Sound Absorber between studs on one side of the double frame. Use 75mm thick R1.8 glass wool blanket.

Plasterboard Lining

NB: The installer must look for the Product Identification Code on the face paper to ensure the correct board type is installed. Refer to the Face Paper Product Identification Code table on this page.

Two layers of 10mm EPB FireSmart fixed to each side of the double steel framing.

Vertical fixing only permitted. Use full height or full length sheets where possible. Inner layer joints on opposite side of frame should be

offset. All sheet joints must be fixed over steel framing. Vertical Joints of the outer layer should be offset 600mm from those of the inner layer. Sheet end butt joints must be formed over nogs and offset the outer layer joints from the inner layer. The inner layers are fixed hard to the floor. Sheets shall be touch fitted.

Fixing of Linings**Fasteners**

| System Number | Side One | | Side Two | |
|-----------------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| | 1 st Layer | 2 nd Layer | 1 st Layer | 2 nd Layer |
| Self-Tapping Drywall Screws | | | | |
| E4SDA45-F40 | 10mm | 10mm | 10mm | 10mm |
| | 25 x 6g | 41 x 6g | 25 x 6g | 41 x 6g |

Fastener Centres

Inner Layer: Fix at 300mm centres up each stud with no fixings to top and bottom channel.

Outer Layer: Fix at 300mm centres up each stud with no fixing to top and bottom channel sections.

Place fasteners no closer than 12mm to sheet edge and 50mm from sheet ends.

Place fasteners at 200mm centres where sheet end butt joints occur.

Avoid outer layer screws from hitting inner layer screws.

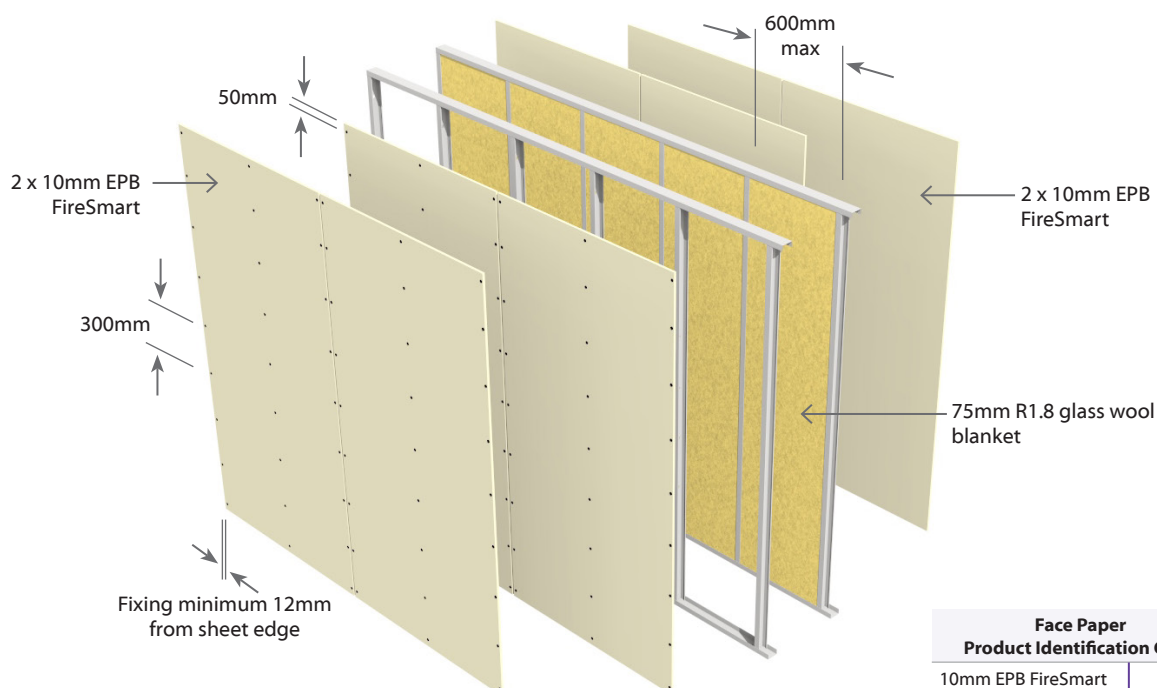
Acoustic Sealant

A bead of acoustical sealant is required around the perimeter of the inner layer and the outer layer is bedded onto the bead. The perimeter junctions of the wall must be airtight.

Jointing

Inner Layer: Unstopped.

Outer Layer: All fastener heads stopped and all sheet joints reinforced and stopped. Wall to ceiling junctions are to be reinforced with paper tape and square stopped or finished with Cornice. All in accordance with EPB Plasterboard Installation Guide.



| Face Paper Product Identification Code | |
|--|------------|
| 10mm EPB FireSmart | F10 |



E2SDA60**Double Steel Frame**

Non Load Bearing

Two Way FRR

2 Layers: 1 Layer of Plasterboard to each side of frameFull Intertency **A**coustic

| System Number | Lining Suffix | FRR | Load Bearing Ability | Noise Control* | | Lining Requirement |
|----------------|---------------|---------|----------------------|----------------|----|-----------------------------------|
| | | | | STC | Rw | |
| E2SDA60 | -M26 | -/60/60 | NLB | 55 | 54 | 1 x 13mm EPB MultiSmart each side |

*Acoustic Performance improves with increase of Partition Width. See 'Minimum Partition Width' Table below.

Framing

Double Frame - Steel studs to be of minimum dimension 64mm x 34mm x 0.55 BMT with a 6mm return.

Tracks to be minimum dimension 64mm x 30mm x 0.55 BMT.

Top & bottom tracks are fixed to the floor and ceiling in true alignment.

Studs are placed at 600mm centres maximum. Studs aligned.

Place studs to allow the nominated expansion gap (minimum 15mm) at the top of frame. The studs are not directly fixed to the tracks. The studs are held in place by the grip of the track runners.

Wall Heights

Recommended maximum height is 2.7m. Higher walls may be subject to specific engineering design or consult the framing manufacturer.

Minimum Partition Width

Space between Frames shall be a minimum of 25mm.

In order to achieve the STC ratings in the table above the partition width (excluding the board) shall be a minimum of 205mm. Increasing the partition width would increase STC performance as per the table below.

| Stud Depth | Space Between Frames | Partition Width (Excludes Board) | STC Rating |
|------------|----------------------|----------------------------------|------------|
| 64mm x 2 | 25mm Min | 153mm | +0 |
| 64mm x 2 | 77mm Min | 205mm | +2 |

Wall Sound Absorber

Install Sound Absorber between studs on both sides of the double frame. Use 75mm thick R1.8 glass wool blanket.

Plasterboard Lining

NB: The installer must look for the Product Identification Code on the face paper to ensure the correct board type is installed. Refer to the Face Paper Product Identification Code table on this page.

One layer of 13mm EPB MultiSmart fixed to each side of the double steel framing.

Vertical fixing only permitted. Use full height or full length sheets where possible. Sheet edge and butt joints on opposite side of frame should be offset. All sheet joints must be fixed over steel framing. Sheet end butt joints must be formed over nogs. Sheets are fixed hard to the floor. Sheets shall be touch fitted.

Fixing of Linings**Fasteners**

| System Number | Side One | Side Two |
|-----------------------------|--------------|--------------|
| | Single Layer | Single Layer |
| Self-Tapping Drywall Screws | | |
| E2SDA60-M26 | 13mm | 13mm |
| | 25 x 6g | 25 x 6g |

Fastener Centres

Fix at 300mm centres up each stud with no fixing to top and bottom channel sections.

Place fasteners no closer than 12mm to the sheet edge and 50mm from sheet ends.

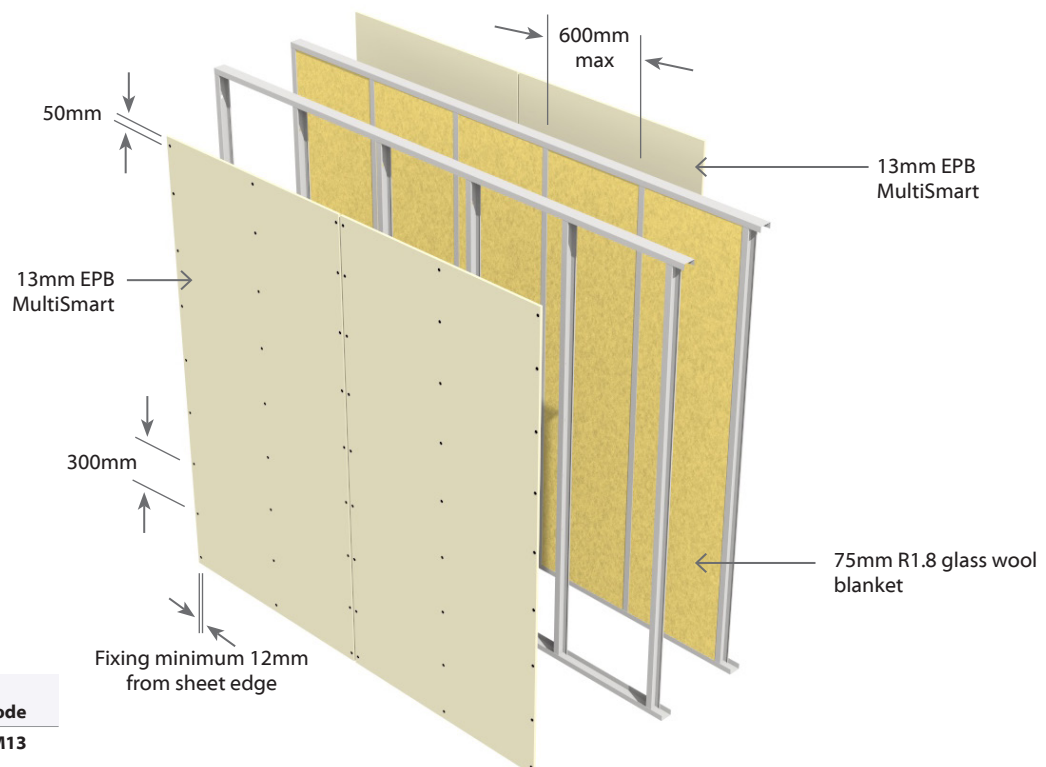
Place fasteners at 200mm centres where sheet end butt joints occur.

Acoustic Sealant

A bead of acoustic sealant is required around the perimeter of the framing and the single layer is bedded onto the bead. The perimeter junctions of the wall must be airtight.

Jointing

All fastener heads stopped and all sheet joints reinforced with paper jointing tape and stopped. Wall to ceiling junctions are to be reinforced with paper tape and square stopped or finished with Cornice. All in accordance with EPB Plasterboard Installation Guide.


**Face Paper
Product Identification Code**

13mm EPB MultiSmart | **M13**

E3SDA60**Double Steel Frame**

Non Load Bearing

Two Way FRR

3 Layers: 1 Layer of Plasterboard on one side of frame &
2 Layers of Plasterboard on other side of frame

Full Intertency **A**coustic

| System Number | Lining Suffix | FRR | Load Bearing Ability | Noise Control* | | Lining Requirement |
|----------------|---------------|---------|----------------------|----------------|----|--|
| | | | | STC | Rw | |
| E3SDA60 | -MS39 | -/60/60 | NLB | 57 | 56 | 1 x 13mm EPB MultiSmart one side 2 x 13mm EPB Standard other side |
| | -FM33 | -/60/60 | NLB | 58 | 57 | 1 x 13mm EPB FireSmart one side 2 x 10mm EPB MultiSmart other side |
| | -M33 | -/60/60 | NLB | 58 | 57 | 1 x 13mm EPB MultiSmart one side 2 x 10mm EPB MultiSmart other side |
| | -M39 | -/60/60 | NLB | 61 | 60 | 1 x 13mm EPB MultiSmart one side 2 x 13mm EPB MultiSmart other side |

*Acoustic Performance improves with increase of Partition Width. See 'Minimum Partition Width' Table below.

Framing

Double Frame - Steel studs to be of minimum dimension 64mm x 34mm x 0.55 BMT with a 6mm return.

Tracks to be minimum dimension 64mm x 30mm x 0.55 BMT.

Top & bottom tracks are fixed to the floor and ceiling in true alignment.

Studs are placed at 600mm centres maximum. Studs aligned.

Place studs to allow the nominated expansion gap (minimum 15mm) at the top of frame. The studs are not directly fixed to the tracks. The studs are held in place by the grip of the track runners.

Wall Heights

Recommended maximum height is 2.7m. Higher walls may be subject to specific engineering design or consult the framing manufacturer.

Minimum Partition Width

Space between Frames shall be a minimum of 25mm.

In order to achieve the STC ratings in the table above the partition width (excluding the board) shall be a minimum of 153mm. Increasing the partition width would increase STC performance as per the table below.

| Stud Depth | Space Between Frames | Partition Width (Excludes Board) | STC Rating |
|------------|----------------------|----------------------------------|------------|
| 64mm x 2 | 25mm Min | 153mm | +0 |
| 64mm x 2 | 77mm Min | 205mm | +2 |

Wall Sound Absorber

Install Sound Absorber between studs on one side of the double frame. Use 75mm thick R1.8 glass wool blanket.

Plasterboard Lining

NB: The installer must look for the Product Identification Code on the face paper to ensure the correct board type is installed. Refer to the Face Paper Product Identification Code table on this page.

One layer of EPB Plasterboard to One side of the double steel framing and Two layers to the Other Side as per specified system above.

Vertical fixing only permitted. Use full height sheets where possible. Inner layer joints on opposite side of frame should be offset. All sheet

joints must be fixed over steel framing. Vertical joints of the outer layer should be offset by 600mm to those of the inner layer. Sheet end butt joints must be formed over nogs and offset the outer layer joints from the inner layer. The inner layers are fixed hard to the floor. Sheets shall be touch fitted.

Fixing of Linings

Fasteners (As per Specified System Above)

| System Number | Side One | | Side Two |
|-----------------------------|-----------------------|-----------------------|--------------|
| | 1 st Layer | 2 nd Layer | Single Layer |
| Self-Tapping Drywall Screws | | | |
| E3SDA60-MS39 | 13mm | 13mm | 13mm |
| E3SDA60-M39 | 25 x 6g | 41 x 6g | 25 x 6g |
| E3SDA60-FM33 | 10mm | 10mm | 13mm |
| E3SDA60-M33 | 25 x 6g | 41 x 6g | 25 x 6g |

Fastener Centres

Inner Layer: Fix at 300mm centres up each stud with no fixings to top and bottom channel.

Outer or Single Layer: Fix at 300mm centres up each stud with no fixing to top and bottom channel sections.

Place fasteners minimum 12mm from sheet edge and 50mm from sheet ends. Place fasteners at 200mm centres where sheet end butt joints occur. Avoid outer layer screws from hitting inner layer screws.

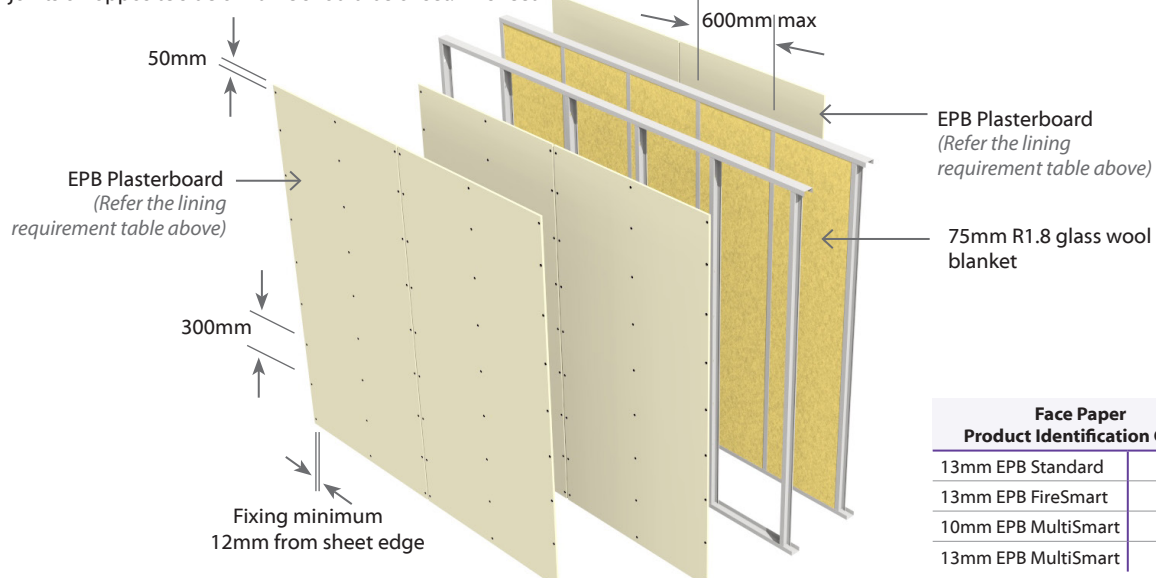
Acoustic Sealant

A bead of acoustic sealant is required around the perimeter of the framing or the inner layer. The single or outer layer is then bedded onto the bead. The perimeter junctions of the wall must be airtight.

Jointing

Inner Layer: Unstopped.

Outer or Single Layer: All fastener heads stopped and all sheet joints reinforced and stopped. Wall to ceiling junctions are to be reinforced with paper tape and square stopped or finished with Cornice. All in accordance with EPB Plasterboard Installation Guide.



| Face Paper Product Identification Code | |
|--|------------|
| 13mm EPB Standard | S13 |
| 13mm EPB FireSmart | F13 |
| 10mm EPB MultiSmart | M10 |
| 13mm EPB MultiSmart | M13 |



E4SDA60**Double Steel Frame**

Non Load Bearing

Two Way FRR

4 Layers: 2 Layers of Plasterboard to each side of frameFull Intertency **A**coustic

| System Number | Lining Suffix | FRR | Load Bearing Ability | Noise Control* | | Lining Requirement |
|----------------|---------------|---------|----------------------|----------------|----|-----------------------------------|
| | | | | STC | Rw | |
| E4SDA60 | -S52 | -/60/60 | NLB | 61 | 60 | 2 x 13mm EPB Standard each side |
| | -M40 | -/60/60 | NLB | 61 | 60 | 2 x 10mm EPB MultiSmart each side |

*Acoustic Performance improves with increase of Partition Width. See 'Minimum Partition Width' Table below.

Framing

Double Frame - Steel studs to be of minimum dimension 64mm x 34mm x 0.55 BMT with a 6mm return.

Tracks to be minimum dimension 64mm x 30mm x 0.55 BMT.

Top & bottom tracks are fixed to the floor and ceiling in true alignment. Studs are placed at 600mm centres maximum. Studs aligned.

Place studs to allow the nominated expansion gap (minimum 15mm) at the top of frame. The studs are not directly fixed to the tracks. The studs are held in place by the grip of the track runners.

Wall Heights

Recommended maximum height is 2.7m. Higher walls may be subject to specific engineering design or consult the framing manufacturer.

Minimum Partition Width

Space between Frames shall be a minimum of 25mm

In order to achieve the STC ratings in the table above the partition width (excluding the board) shall be a minimum of 153mm. Increasing the partition width would increase STC performance as per the table below.

| Stud Depth | Space Between Frames | Partition Width (Excludes Board) | STC Rating |
|------------|----------------------|----------------------------------|------------|
| 64mm | 25mm Min | 153mm | +0 |
| 64mm | 77mm Min | 205mm | +2 |

Wall Sound Absorber

Install Sound Absorber between studs on one side of the double frame. Use 75mm thick R1.8 glass wool blanket.

Plasterboard Lining

NB: The installer must look for the Product Identification Code on the face paper to ensure the correct board type is installed. Refer to the Face Paper Product Identification Code table on this page.

Two layers of EPB Plasterboard to One side of the double steel framing and Two layers to the Other Side as per specified system above.

Vertical fixing only permitted. Use full height sheets where possible.

Inner layer joints on opposite side of frame should be offset. All sheet joints must be fixed over steel framing. Vertical joints of the outer

layer should be offset by 600mm to those of the inner layer. Sheet end butt joints must be formed over nogs and offset the outer layer joints from the inner layer. The inner layers are fixed hard to the floor. Sheet shall be touch fitted.

Fixing of Linings

Fasteners (As per Specified System Above)

| System Number | Side One | | Side Two | |
|-----------------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| | 1 st Layer | 2 nd Layer | 1 st Layer | 2 nd Layer |
| Self-Tapping Drywall Screws | | | | |
| E4SDA60-S52 | 13mm | 13mm | 13mm | 13mm |
| | 25 x 6g | 41 x 6g | 25 x 6g | 41 x 6g |
| E4SDA60-M40 | 10mm | 10mm | 10mm | 10mm |
| | 25 x 6g | 41 x 6g | 25 x 6g | 41 x 6g |

Fastener Centres

Inner Layer: Fix at 300mm centres up each stud with no fixings to top and bottom channel.

Outer Layer: Fix at 300mm centres up each stud with no fixing to top and bottom channel sections.

Place fasteners no closer than 12mm to sheet edge and 50mm from sheet ends.

Place fasteners at 200mm centres where sheet end butt joints occur.

Avoid outer layer screws from hitting inner layer screws.

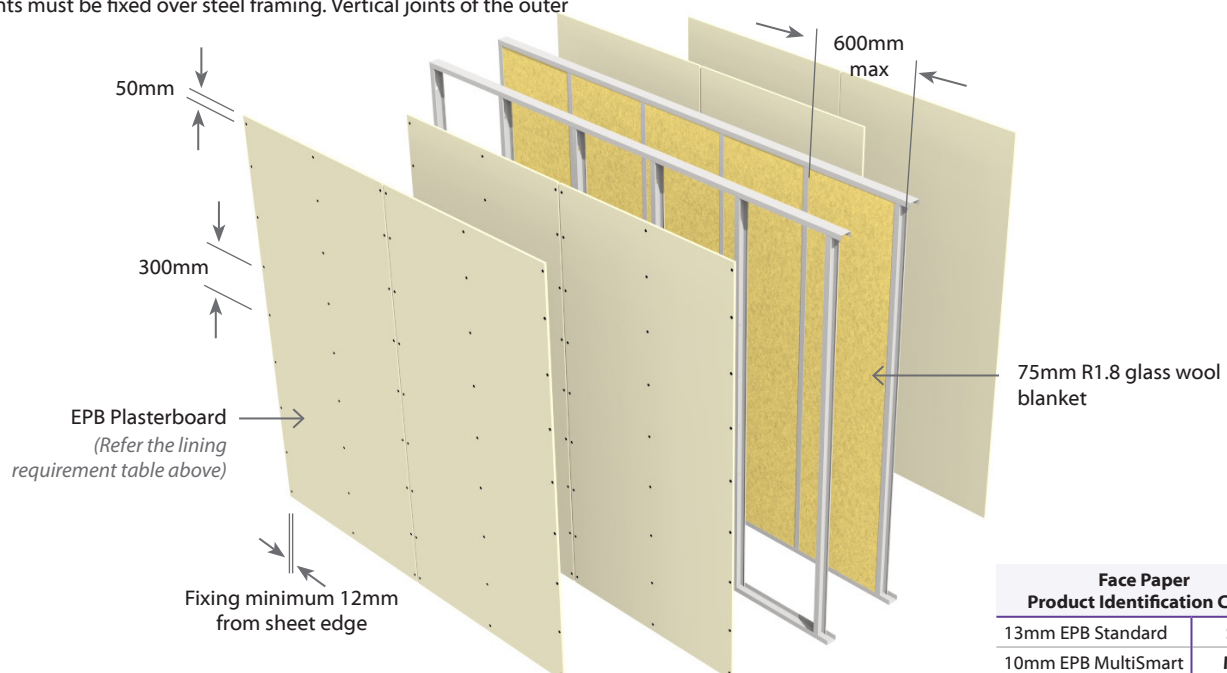
Acoustic Sealant

A bead of acoustical sealant is required around the perimeter of the inner layer and the outer layer is bedded onto the bead. The perimeter junctions of the wall must be airtight.

Jointing

Inner Layer: Unstopped.

Outer Layer: All fastener heads stopped and all sheet joints reinforced and stopped. Wall to ceiling junctions are to be reinforced with paper tape and square stopped or finished with Cornice. All in accordance with EPB Plasterboard Installation Guide.



| Face Paper Product Identification Code | |
|--|------------|
| 13mm EPB Standard | S13 |
| 10mm EPB MultiSmart | M10 |

E2SDA75**Double Steel Frame**

Non Load Bearing

Two Way FRR

2 Layers: 1 Layer of Plasterboard to each side of frameFull Intertency **A**coustic

| System Number | Lining Suffix | FRR | Load Bearing Ability | Noise Control* | | Lining Requirement |
|----------------|---------------|---------|----------------------|----------------|----|----------------------------------|
| | | | | STC | Rw | |
| E2SDA75 | -F32 | -/75/75 | NLB | 56 | 55 | 1 x 16mm EPB FireSmart each side |

*Acoustic Performance improves with increase of Partition Width. See 'Minimum Partition Width' Table below.

Framing

Double Frame - Steel studs to be of minimum dimension 64mm x 34mm x 0.55 BMT with a 6mm return.

Tracks to be minimum dimension 64mm x 30mm x 0.55 BMT.

Top & bottom tracks are fixed to the floor and ceiling in true alignment.

Studs are placed at 600mm centres maximum. Studs aligned.

Place studs to allow the nominated expansion gap (minimum 15mm) at the top of frame. The studs are not directly fixed to the tracks. The studs are held in place by the grip of the track runners.

Wall Heights

Recommended maximum height is 2.7m. Higher walls may be subject to specific engineering design or consult the framing manufacturer.

Minimum Partition Width

Space between Frames shall be a minimum of 25mm

In order to achieve the STC ratings in the table above the partition width (excluding the board) shall be a minimum of 205mm. Increasing the partition width would increase STC performance as per the table below.

| Stud Depth | Space Between Frames | Partition Width (Excludes Board) | STC Rating |
|------------|----------------------|----------------------------------|------------|
| 64mm x 2 | 25mm Min | 153mm | +0 |
| 64mm x 2 | 77mm Min | 205mm | +2 |

Wall Sound Absorber

Install Sound Absorber between studs on both sides of the double frame. Use 75mm thick R1.8 glass wool blanket.

Plasterboard Lining

NB: The installer must look for the Product Identification Code on the face paper to ensure the correct board type is installed. Refer to the Face Paper Product Identification Code table on this page.

One layer of 16mm EPB FireSmart lining fixed to each side of the double steel framing.

Vertical fixing only permitted. Use full height sheets where possible. Sheet edges and butt joints on opposite side of frame should be offset. All sheet joints must be fixed over steel framing. Sheet end butt joints must be formed over nogs. Sheets are fixed hard to the floor. Sheets shall be touch fitted.

Fixing of Linings**Fasteners**

| System Number | Side One | Side Two |
|--------------------|-----------------------------|--------------|
| | Single Layer | Single Layer |
| | Self-Tapping Drywall Screws | |
| E2SDA75-F32 | 16mm | 16mm |
| | 32 x 6g | 32 x 6g |

Fastener Centres

Fix at 150mm centres up sheet edges and 300mm centres up each intermediate stud with no fixing to top and bottom channel sections. Place fasteners no closer than 12mm to the sheet edge and 50mm from sheet ends.

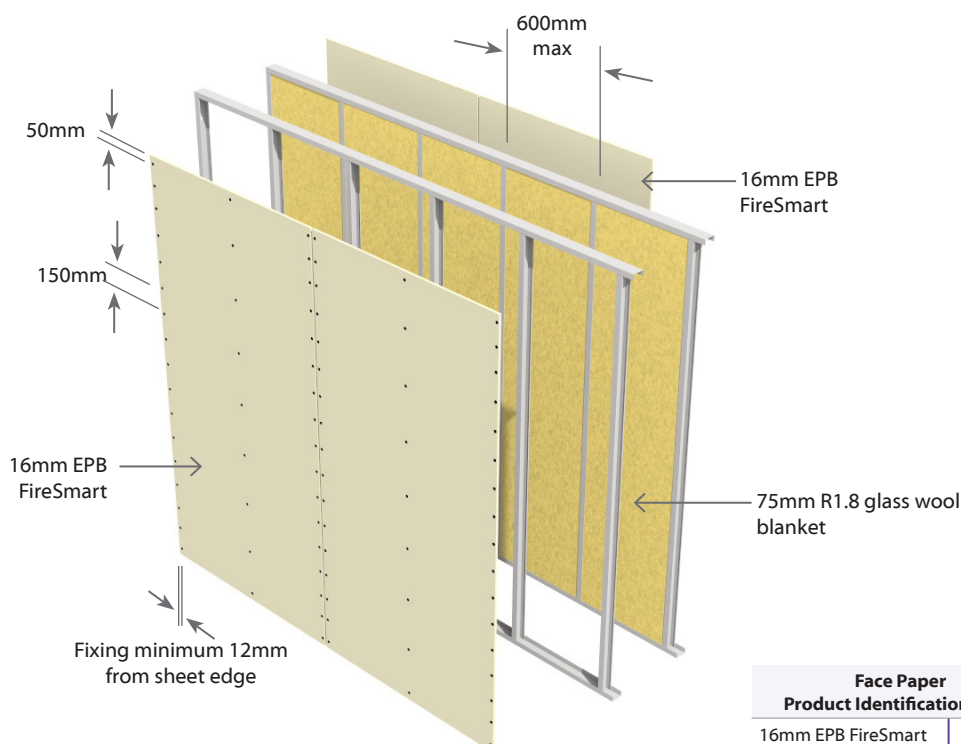
Place fasteners at 200mm centres where sheet end butt joints occur.

Acoustic Sealant

A bead of acoustic sealant is required around the perimeter of the framing and the single layer is bedded onto the bead. The perimeter junctions of the wall must be airtight.

Jointing

All fastener heads stopped and all sheet joints reinforced with paper jointing tape and stopped. Wall to ceiling junctions are to be reinforced with paper tape and square stopped or finished with Cornice. All in accordance with EPB Plasterboard Installation Guide.



| Face Paper Product Identification Code | |
|--|------------|
| 16mm EPB FireSmart | F16 |



E4SDA75**Double Steel Frame**

Non Load Bearing

Two Way FRR

4 Layers: 2 Layers of Plasterboard to each side of frameFull Intertency **A**coustic

| System Number | Lining Suffix | FRR | Load Bearing Ability | Noise Control* | | Lining Requirement |
|----------------|---------------|---------|----------------------|----------------|----|---|
| | | | | STC | Rw | |
| E4SDA75 | -MS52 | -/75/75 | NLB | 63 | 62 | 1 x 13mm EPB Standard & 1x13mm EPB MultiSmart each side |

*Acoustic Performance improves with increase of Partition Width. See 'Minimum Partition Width' Table below.

Framing

Double Frame - Steel studs to be of minimum dimension 64mm x 34mm x 0.55 BMT with a 6mm return.

Tracks to be minimum dimension 64mm x 30mm x 0.55 BMT.

Top & bottom tracks are fixed to the floor and ceiling in true alignment.

Studs are placed at 600mm centres maximum. Studs aligned.

Place studs to allow the nominated expansion gap (minimum 15mm) at the top of frame. The studs are not directly fixed to the tracks. The studs are held in place by the grip of the track runners.

Wall Heights

Recommended maximum height is 2.7m. Higher walls may be subject to specific engineering design or consult the framing manufacturer.

Minimum Partition Width

Space between Frames shall be a minimum of 25mm.

In order to achieve the STC ratings in the table above the partition width (excluding the board) shall be a minimum of 153mm. Increasing the partition width would increase STC performance as per the table below.

| Stud Depth | Space Between Frames | Partition Width (Excludes Board) | STC Rating |
|------------|----------------------|----------------------------------|------------|
| 64mm x 2 | 25mm Min | 153mm | +0 |
| 64mm x 2 | 77mm Min | 205mm | +2 |

Wall Sound Absorber

Install Sound Absorber between studs on one side of the double frame. Use 75mm thick R1.8 glass wool blanket.

Plasterboard Lining

NB: The installer must look for the Product Identification Code on the face paper to ensure the correct board type is installed. Refer to the Face Paper Product Identification Code table on this page.

One layer of 13mm EPB Standard and One layer of 13mm EPB MultiSmart fixed to each side of the double steel framing.

Vertical fixing only permitted. Use full height sheets where possible.

Inner layer joints on opposite side of frame should be offset. All sheet

joints must be fixed over steel framing. Vertical joints of the outer layer should be offset by 600mm to those of the inner layer. Sheet end butt joints must be formed over nogs and offset the outer layer joints from the inner layer. The inner layers are fixed hard to the floor. Sheets shall be touch fitted.

Fixing of Linings**Fasteners**

| System Number | Side One | | Side Two | |
|-----------------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| | 1 st Layer | 2 nd Layer | 1 st Layer | 2 nd Layer |
| Self-Tapping Drywall Screws | | | | |
| E4SDA75-MS52 | 13mm | 13mm | 13mm | 13mm |
| | 25 x 6g | 41 x 6g | 25 x 6g | 41 x 6g |

Fastener Centres

Inner Layer: Fix at 300mm centres up each stud with no fixings to top and bottom channel.

Outer Layer: Fix at 300mm centres up each stud with no fixing to top and bottom channel sections.

Place fasteners no closer than 12mm to sheet edge and 50mm from sheet ends.

Place fasteners at 200mm centres where sheet end butt joints occur.

Avoid outer layer screws from hitting inner layer screws.

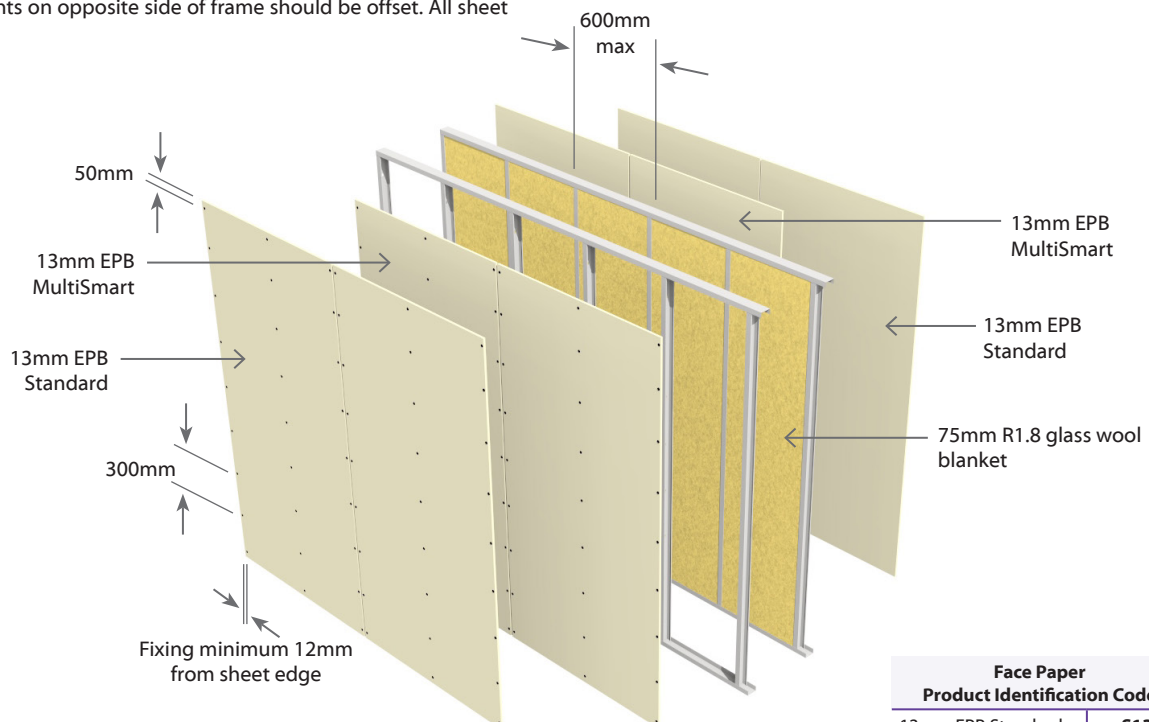
Acoustic Sealant

A bead of acoustical sealant is required around the perimeter of the inner layer and the outer layer is bedded onto the bead. The perimeter junctions of the wall must be airtight.

Jointing

Inner Layer: Unstopped.

Outer Layer: All fastener heads stopped and all sheet joints reinforced and stopped. Wall to ceiling junctions are to be reinforced with paper tape and square stopped or finished with Cornice. All in accordance with EPB Plasterboard Installation Guide.



| Face Paper Product Identification Code | |
|--|------------|
| 13mm EPB Standard | S13 |
| 13mm EPB MultiSmart | M13 |



E4SDA90**Double Steel Frame**

Non Load Bearing

Two Way FRR

4 Layers: 2 Layers of Plasterboard to each side of frameFull Intertency **A**coustic

| System Number | Lining Suffix | FRR | Load Bearing Ability | Noise Control* | | Lining Requirement |
|----------------|---------------|---------|----------------------|----------------|----|---|
| | | | | STC | Rw | |
| E4SDA90 | -F52 | -/90/90 | NLB | 62 | 61 | 2 x 13mm EPB FireSmart each side |
| | -M46 | -/90/90 | NLB | 63 | 62 | 1 x 10mm EPB MultiSmart & 1 x 13mm MultiSmart each side |
| | -M52 | -/90/90 | NLB | 65 | 64 | 2 x 13mm EPB MultiSmart each side |

*Acoustic Performance improves with increase of Partition Width. See 'Minimum Partition Width' Table below.

Framing**Double Frame** - Steel studs to be of minimum dimension 64mm x 34mm x 0.55 BMT with a 6mm return.

Tracks to be minimum dimension 64mm x 30mm x 0.55 BMT.

Top & bottom tracks are fixed to the floor and ceiling in true alignment.

Studs are placed at 600mm centres maximum. Studs aligned.

Place studs to allow the nominated expansion gap (minimum 15mm) at the top of frame. The studs are not directly fixed to the tracks. The studs are held in place by the grip of the track runners.

Wall Heights

Recommended maximum height is 2.7m. Higher walls may be subject to specific engineering design or consult the framing manufacturer.

Minimum Partition Width

Space between Frames shall be a minimum of 25mm.

In order to achieve the STC ratings in the table above the partition width (excluding the board) shall be a minimum of 153mm. Increasing the partition width would increase STC performance as per the table below.

| Stud Depth | Space Between Frames | Partition Width (Excludes Board) | STC Rating |
|------------|----------------------|----------------------------------|------------|
| 64mm x 2 | 25mm Min | 153mm | +0 |
| 64mm x 2 | 77mm Min | 205mm | +2 |

Wall Sound Absorber

Install Sound Absorber between studs on one side of the double frame. Use 75mm thick R1.8 glass wool blanket.

Plasterboard Lining**NB:** The installer must look for the Product Identification Code on the face paper to ensure the correct board type is installed. Refer to the Face Paper Product Identification Code table on this page.

Two layers of EPB Plasterboard lining as per specified system above, fixed to each side of the double steel framing.

Vertical fixing only permitted. Use full height sheets where possible. Inner layer joints on opposite side of frame should be offset.

All sheet joints must be fixed over steel framing. Vertical joints of the outer layer should be offset by 600mm to those of the inner layer. Sheet end butt joints must be formed over nogs and offset the outer layer joints from the inner layer. The inner layers are fixed hard to the floor. Sheets shall be touch fitted.

Fixing of Linings**Fasteners**

| System Number | Side One | | Side Two | |
|--|-----------------------|-----------------------|-----------------------|-----------------------|
| | 1 st Layer | 2 nd Layer | 1 st Layer | 2 nd Layer |
| Self-Tapping Drywall Screws | | | | |
| E4SDA90-M46 | 10mm | 13mm | 10mm | 13mm |
| | 25 x 6g | 41 x 6g | 25 x 6g | 41 x 6g |
| E4SDA90-F52 E4SDA90-M52 | 13mm | 13mm | 13mm | 13mm |
| | 25 x 6g | 41 x 6g | 25 x 6g | 41 x 6g |

Fastener Centres

Inner Layer: Fix at 300mm centres up each stud with no fixings to top and bottom channel.

Outer Layer: Fix at 300mm centres up each stud with no fixing to top and bottom channel sections.

Place fasteners no closer than 12mm to sheet edge and 50mm from sheet ends.

Place fasteners at 200mm centres where sheet end butt joints occur.

Avoid outer layer screws from hitting inner layer screws.

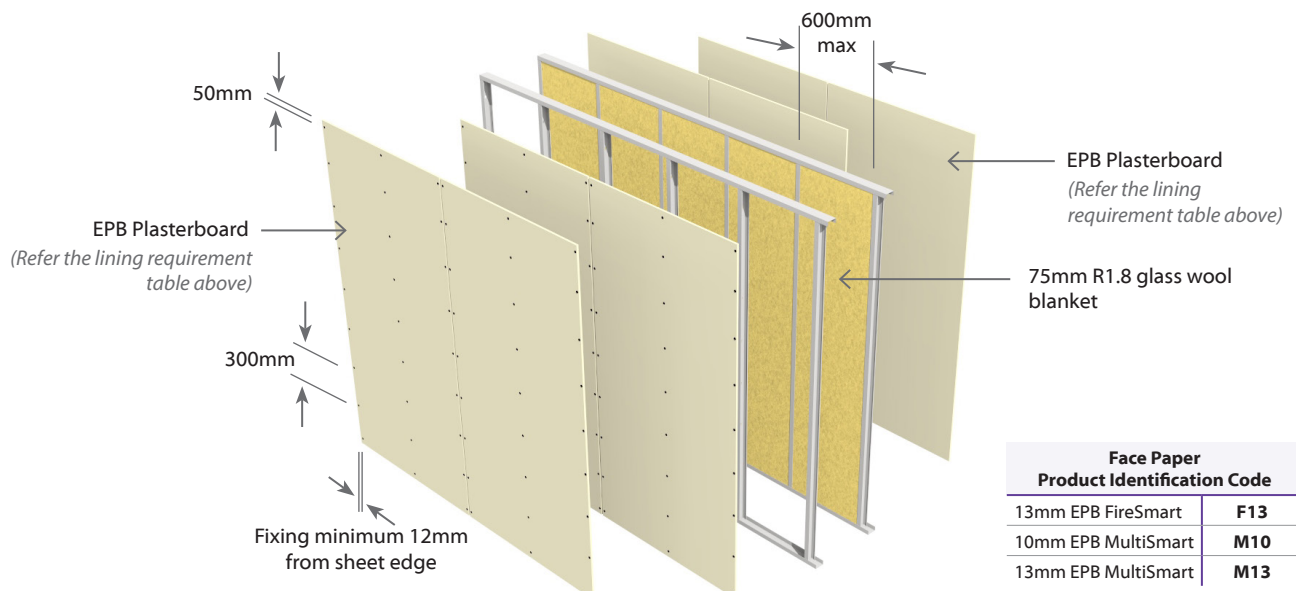
Acoustic Sealant

A bead of acoustical sealant is required around the perimeter of the inner layer and the outer layer is bedded onto the bead. The perimeter junctions of the wall must be airtight.

Jointing

Inner Layer: Unstopped.

Outer Layer: All fastener heads stopped and all sheet joints reinforced and stopped. Wall to ceiling junctions are to be reinforced with paper tape and square stopped or finished with Cornice. All in accordance with EPB Plasterboard Installation Guide.



E2SDLA30**Double Steel Frame****Load Bearing****Two Way FRR****2** Layers: 1 Layer of Plasterboard to each side of frameFull Intertency **A**coustic

| System Number | Lining Suffix | FRR | Load Bearing Ability | Noise Control* | | Lining Requirement |
|-----------------|---------------|----------|----------------------|----------------|----|-----------------------------------|
| | | | | STC | Rw | |
| E2SDLA30 | -M26 | 30/30/30 | LB | 55 | 54 | 1 x 13mm EPB MultiSmart each side |
| | -F32 | 30/30/30 | LB | 56 | 54 | 1 x 16mm EPB FireSmart each side |

*Acoustic Performance improves with increase of Partition Width. See 'Minimum Partition Width' Table below.

Framing

Double Frame - Any steel frame designed to meet structural criteria for strength and serviceability under dead and live loads.

Stud width shall be 35mm minimum.

Stud spacing's at 600 centres maximum. Studs aligned.

Frame heights as determined by specific design.

Minimum Partition Width

Space between Frames shall be a minimum of 25mm.

In order to achieve the STC ratings in the table above the partition width (excluding the board) shall be a minimum of 205mm. Increasing the partition width would increase STC performance as per the table below.

| Stud Depth | Space Between Frames | Partition Width (Excludes Board) | STC Rating |
|------------|----------------------|----------------------------------|------------|
| 90mm x 2 | 25mm Min | 205mm | +0 |
| 90mm x 2 | 75mm Min | 255mm | +2 |

Wall Sound Absorber

Install Sound Absorber between studs on both sides of the double frame. Use 75mm thick R1.8 glass wool blanket.

Plasterboard Lining

NB: The installer must look for the Product Identification Code on the face paper to ensure the correct board type is installed. Refer to the Face Paper Product Identification Code table on this page.

One layer of EPB Plasterboard lining as per specified system above on each side of the double steel framing.

Vertical fixing only permitted. Use full height sheets where possible. Sheet edges and butt joints on opposite side of frame should be offset. All sheet joints must be fixed over steel framing. Sheet end butt joints must be formed over nogs. Sheets are fixed hard to the floor. Sheets shall be touch fitted.

Fixing of Linings**Fasteners (As per Specified System Above)**

| System Number | Side One | Side Two |
|-----------------------------|--------------|--------------|
| | Single Layer | Single Layer |
| Self-Tapping Drywall Screws | | |
| E2SDLA30-M26 | 13mm | 13mm |
| | 25 x 6g | 25 x 6g |
| E2SDLA30-F32 | 16mm | 16mm |
| | 32 x 6g | 32 x 6g |

Fastener Centres

Fix at 300mm centres up each stud with no fixing to top and bottom channel sections.

Place fasteners no closer than 12mm to the sheet edge and 50mm from sheet ends.

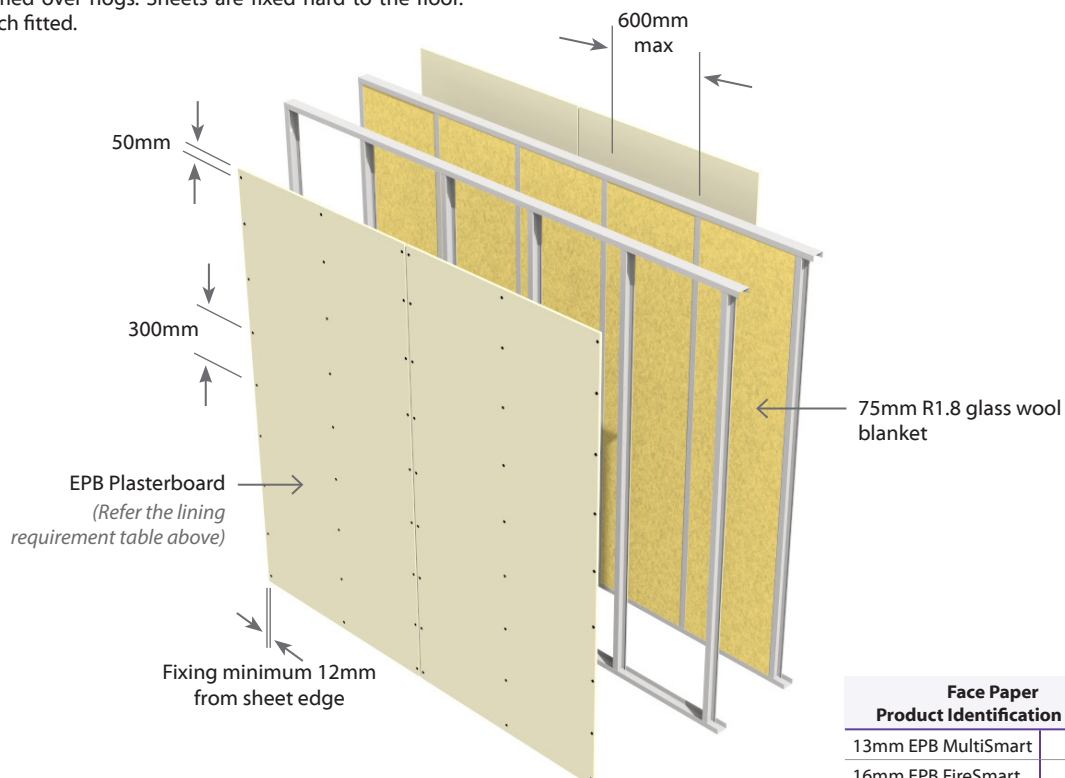
Place fasteners at 200mm centres where sheet end butt joints occur.

Acoustic Sealant

A bead of acoustic sealant is required around the perimeter of the framing and the single layer is bedded onto the bead. The perimeter junctions of the wall must be airtight.

Jointing

All fastener heads stopped and all sheet joints reinforced with paper jointing tape and stopped. Wall to ceiling junctions are to be reinforced with paper tape and square stopped or finished with Cornice. All in accordance with EPB Plasterboard Installation Guide.



| Face Paper Product Identification Code | |
|--|------------|
| 13mm EPB MultiSmart | M13 |
| 16mm EPB FireSmart | F16 |



E3SDLA30**Double Steel Frame****Load Bearing****Two Way FRR**

3 Layers: 1 Layer of Plasterboard on one side of frame &
2 Layers of Plasterboard on other side of frame

Full Intertency Acoustic

| System Number | Lining Suffix | FRR | Load Bearing Ability | Noise Control* | | Lining Requirement |
|-----------------|---------------|----------|----------------------|----------------|----|--|
| | | | | STC | Rw | |
| E3SDLA30 | -MF33 | 30/30/30 | LB | 58 | 57 | 1 x 13mm EPB MultiSmart one side 2 x 10mm EPB FireSmart other side |
| | -M39 | 30/30/30 | LB | 61 | 60 | 1 x 13mm EPB MultiSmart one side 2 x 13mm EPB MultiSmart other side |

*Acoustic Performance improves with increase of Partition Width. See 'Minimum Partition Width' Table below.

Framing

Double Frame - Any steel frame designed to meet structural criteria for strength and serviceability under dead and live loads.

Stud width shall be 35mm minimum.

Stud spacing's at 600 centres maximum. Studs aligned.

Frame heights as determined by specific design.

Minimum Partition Width

Space between Frames shall be a minimum of 25mm.

In order to achieve the STC ratings in the table above the partition width (excluding the board) shall be a minimum of 153mm. Increasing the partition width would increase STC performance as per the table below.

| Stud Depth | Space Between Frames | Partition Width (Excludes Board) | STC Rating |
|------------|----------------------|----------------------------------|------------|
| 90mm x 2 | 25mm Min | 205mm | +0 |
| 90mm x 2 | 75mm Min | 255mm | +2 |

Wall Sound Absorber

Install Sound Absorber between studs on one side of the double frame. Use 75mm thick R1.8 glass wool blanket.

Plasterboard Lining

NB: The installer must look for the Product Identification Code on the face paper to ensure the correct board type is installed. Refer to the Face Paper Product Identification Code table on this page.

One layer of EPB Plasterboard to One side of the double steel framing and Two layers to the Other Side as per specified system above.

Vertical fixing only permitted. Use full height sheets where possible. Inner layer joints on opposite side of frame should be offset. All sheet joints must be fixed over steel framing. Vertical joints of the outer layer should be offset by 600mm to those of the inner layer. Sheet end butt joints must be formed over nogs and offset the outer layer joints from the inner layer. The inner layers are fixed hard to the floor. Sheets shall be touch fitted.

Fixing of Linings**Fasteners (As per Specified System Above)**

| System Number | Side One | | Side Two |
|-----------------------------|-----------------------|-----------------------|--------------|
| | 1 st Layer | 2 nd Layer | Single Layer |
| Self-Tapping Drywall Screws | | | |
| E3SDLA30-MF33 | 10mm | 10mm | 13mm |
| | 25 x 6g | 41 x 6g | 25 x 6g |
| E3SDLA30-M39 | 13mm | 13mm | 13mm |
| | 25 x 6g | 41 x 6g | 25 x 6g |

Fastener Centres

Fix at 300mm centres up each stud with no fixing to top and bottom channel sections.

Place fasteners no closer than 12mm to the sheet edge and 50mm from sheet ends.

Place fasteners at 200mm centres where sheet end butt joints occur.

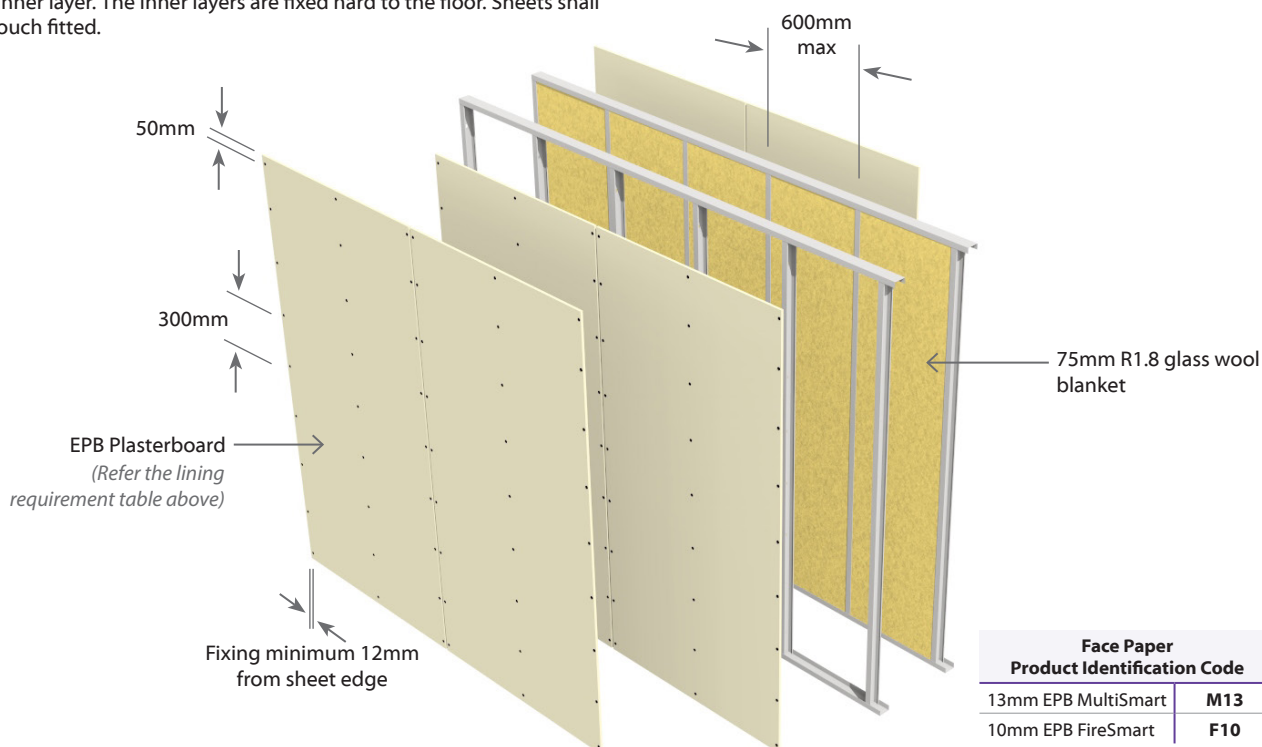
Avoid outer layer screws from hitting inner layer screws.

Acoustic Sealant

A bead of acoustic sealant is required around the perimeter of the framing or the inner layer. Then the single or outer layer is bedded onto the bead. The perimeter junctions of the wall must be airtight.

Jointing

All fastener heads stopped and all sheet joints reinforced with paper jointing tape and stopped. Wall to ceiling junctions are to be reinforced with paper tape and square stopped or finished with Cornice. All in accordance with EPB Plasterboard Installation Guide.



E4SDLA30**Double Steel Frame****Load Bearing****Two Way FRR****4 Layers:** 2 Layers of Plasterboard to each side of frameFull Intertency **A**coustic

| System Number | Lining Suffix | FRR | Load Bearing Ability | Noise Control* | | Lining Requirement |
|-----------------|---------------|----------|----------------------|----------------|----|----------------------------------|
| | | | | STC | Rw | |
| E4SDLA30 | -F40 | 30/30/30 | LB | 59 | 58 | 2 x 10mm EPB FireSmart each side |

*Acoustic Performance improves with increase of Partition Width. See 'Minimum Partition Width' Table below.

Framing

Double Frame - Any steel frame designed to meet structural criteria for strength and serviceability under dead and live loads.

Stud width shall be 35mm minimum.

Stud spacing's at 600 centres maximum. Studs aligned.

Frame heights as determined by specific design.

Minimum Partition Width

Space between Frames shall be a minimum of 25mm.

In order to achieve the STC ratings in the table above the partition width (excluding the board) shall be a minimum of 153mm. Increasing the partition width would increase STC performance as per the table below.

| Stud Depth | Space Between Frames | Partition Width (Excludes Board) | STC Rating |
|------------|----------------------|----------------------------------|------------|
| 90mm x 2 | 25mm Min | 205mm | +0 |
| 90mm x 2 | 75mm Min | 255mm | +2 |

Wall Sound Absorber

Install Sound Absorber between studs on one side of the double frame. Use 75mm thick R1.8 glass wool blanket.

Plasterboard Lining

NB: The installer must look for the Product Identification Code on the face paper to ensure the correct board type is installed. Refer to the Face Paper Product Identification Code table on this page.

Two layers of 10mm EPB FireSmart lining fixed vertically to each side of the double steel framing.

Vertical fixing only permitted. Use full height sheets where possible. Inner layer joints on opposite side of frame should be offset. All sheet joints must be fixed over steel framing. Vertical joints of the outer layer should be offset by 600mm to those of the inner layer. Sheet end butt joints must be formed over nogs and offset the outer layer joints from the inner layer. The inner layers are fixed hard to the floor. Sheets shall be touch fitted.

Fixing of Linings**Fasteners**

| System Number | Side One | | Side Two | |
|-----------------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| | 1 st Layer | 2 nd Layer | 1 st Layer | 2 nd Layer |
| Self-Tapping Drywall Screws | | | | |
| E4SDLA30-F40 | 10mm | 10mm | 10mm | 10mm |
| | 25 x 6g | 41 x 6g | 25 x 6g | 41 x 6g |

Fastener Centres

Inner Layer: Fix at 300mm centres up each stud with no fixings to top and bottom channel.

Outer Layer: Fix at 300mm centres up each stud with no fixing to top and bottom channel sections.

Place fasteners no closer than 12mm to sheet edge and 50mm from sheet ends.

Place fasteners at 200mm centres where sheet end butt joints occur.

Avoid outer layer screws from hitting inner layer screws.

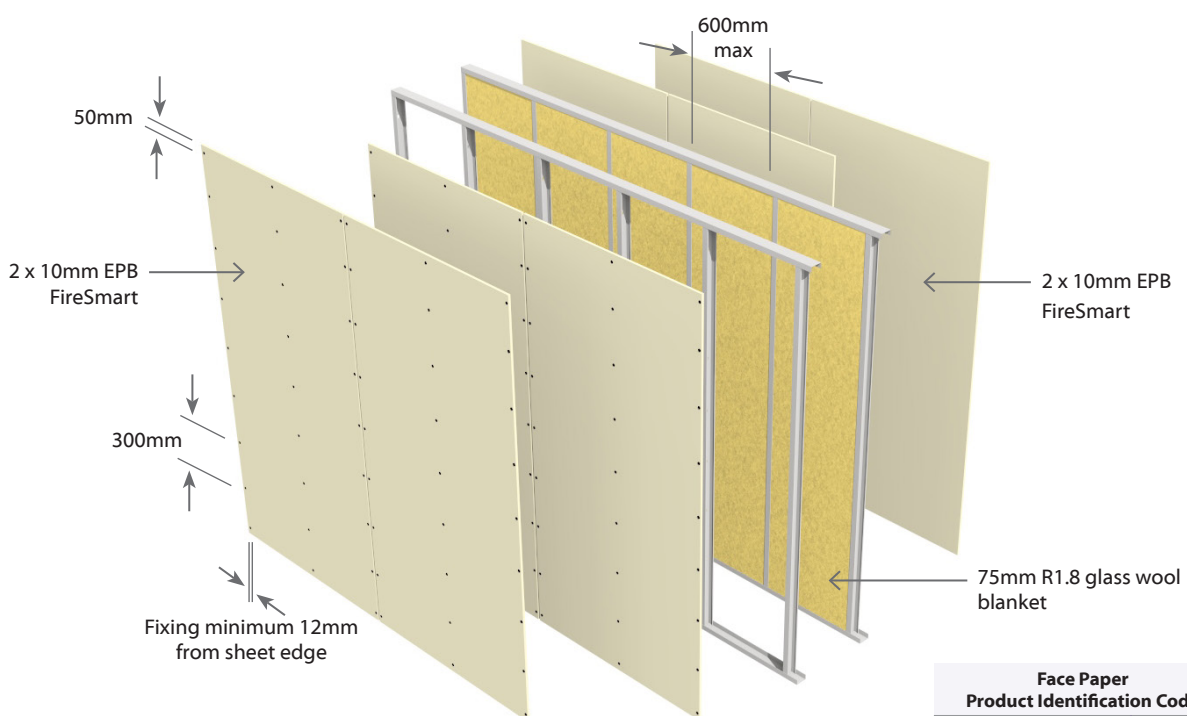
Acoustic Sealant

A bead of acoustical sealant is required around the perimeter of the inner layer and the outer layer is bedded onto the bead. The perimeter junctions of the wall must be airtight.

Jointing

Inner Layer: Unstopped.

Outer Layer: All fastener heads stopped and all sheet joints reinforced and stopped. Wall to ceiling junctions are to be reinforced with paper tape and square stopped or finished with Cornice. All in accordance with EPB Plasterboard Installation Guide.



E4SDLA45**Double Steel Frame****Load Bearing****Two Way FRR****4 Layers: 2 Layers of Plasterboard to each side of frame****Full Intertency Acoustic**

| System Number | Lining Suffix | FRR | Load Bearing Ability | Noise Control* | | Lining Requirement |
|-----------------|---------------|----------|----------------------|----------------|----|-----------------------------------|
| | | | | STC | Rw | |
| E4SDLA45 | -S52 | 45/45/45 | LB | 61 | 60 | 2 x 13mm EPB Standard each side |
| | -M40 | 45/45/45 | LB | 61 | 60 | 2 x 10mm EPB MultiSmart each side |
| | -F52 | 45/45/45 | LB | 63 | 62 | 2 x 13mm EPB FireSmart each side |

*Acoustic Performance improves with increase of Partition Width. See 'Minimum Partition Width' Table below.

Framing

Double Frame - Any steel frame designed to meet structural criteria for strength and serviceability under dead and live loads.

Stud width shall be 35mm minimum.

Stud spacing's at 600 centres maximum. Studs aligned.

Frame heights as determined by specific design.

Minimum Partition Width

Space between Frames shall be a minimum of 25mm.

In order to achieve the STC ratings in the table above the partition width (excluding the board) shall be a minimum of 153mm. Increasing the partition width would increase STC performance as per the table below.

| Stud Depth | Space Between Frames | Partition Width (Excludes Board) | STC Rating |
|------------|----------------------|----------------------------------|------------|
| 90mm x 2 | 25mm Min | 205mm | +0 |
| 90mm x 2 | 75mm Min | 255mm | +2 |

Wall Sound Absorber

Install Sound Absorber between studs on one side of the double frame. Use 75mm thick R1.8 glass wool blanket.

Plasterboard Lining

NB: The installer must look for the Product Identification Code on the face paper to ensure the correct board type is installed. Refer to the Face Paper Product Identification Code table on this page.

Two layers of EPB Plasterboard to One side of the double steel framing and Two layers to the Other Side as per specified system above.

Vertical fixing only permitted. Use full height sheets where possible. Inner layer joints on opposite side of frame should be offset. All sheet joints must be fixed over steel framing. Vertical joints of the outer layer should be offset by 600mm to those of the inner layer. Sheet end butt joints must be formed over nogs and offset the outer layer joints from the inner layer. The inner layers are fixed hard to the floor. Sheets shall be touch fitted.

Fixing of Linings**Fasteners (As per Specified System Above)**

| System Number | Side One | | Side Two | |
|--|-----------------------------|-----------------------|-----------------------|-----------------------|
| | 1 st Layer | 2 nd Layer | 1 st Layer | 2 nd Layer |
| E4SDLA45-S52 E4SDLA45-F52 | Self-Tapping Drywall Screws | | | |
| | 13mm | 13mm | 13mm | 13mm |
| E4SDLA45-M40 | 25 x 6g | 41 x 6g | 25 x 6g | 41 x 6g |
| | 10mm | 10mm | 10mm | 10mm |
| E4SDLA45-M40 | 25 x 6g | 41 x 6g | 25 x 6g | 41 x 6g |

Fastener Centres

Inner Layer: Fix at 300mm centres up each stud with no fixings to top and bottom channel.

Outer Layer: Fix at 300mm centres up each stud with no fixing to top and bottom channel sections.

Place fasteners no closer than 12mm to sheet edge and 50mm from sheet ends.

Place fasteners at 200mm centres where sheet end butt joints occur.

Avoid outer layer screws from hitting inner layer screws.

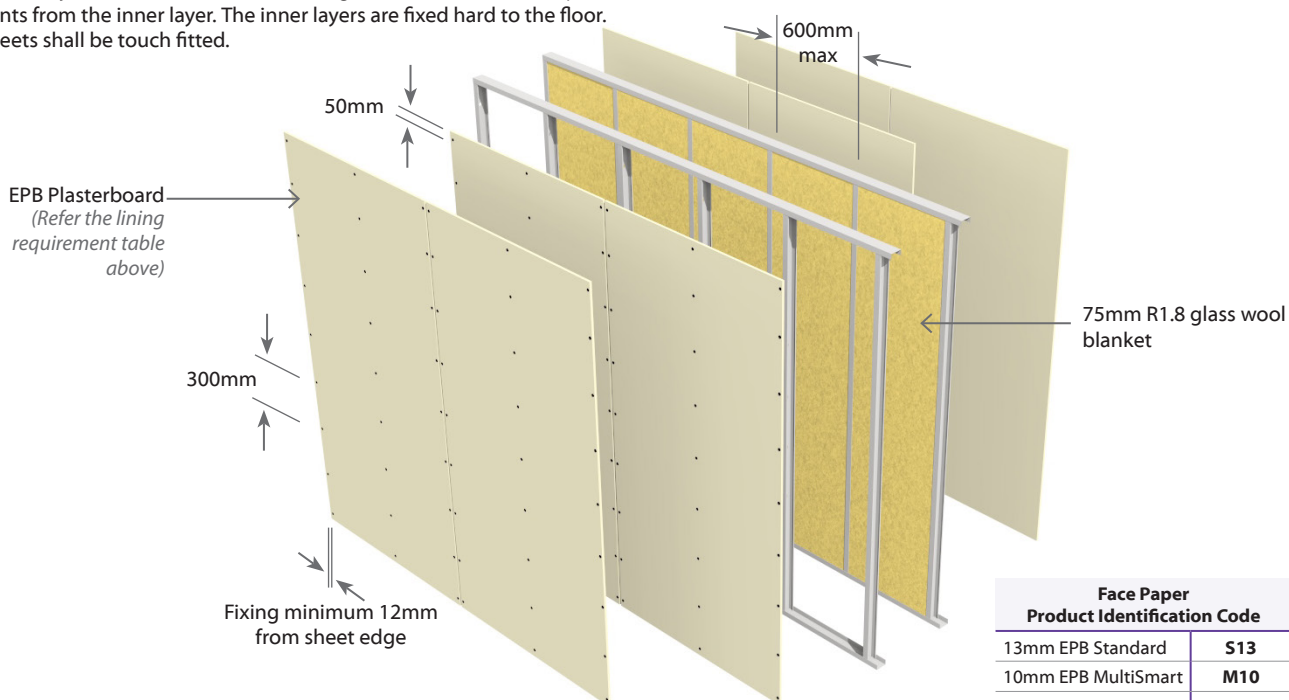
Acoustic Sealant

A bead of acoustical sealant is required around the perimeter of the inner layer and the outer layer is bedded onto the bead. The perimeter junctions of the wall must be airtight.

Jointing

Inner Layer: Unstopped.

Outer Layer: All fastener heads stopped and all sheet joints reinforced and stopped. Wall to ceiling junctions are to be reinforced with paper tape and square stopped or finished with Cornice. All in accordance with EPB Plasterboard Installation Guide.



E4SDLA60**Double Steel Frame****Load Bearing****Two Way FRR****4 Layers:** 2 Layers of Plasterboard to each side of frameFull Intertency **A**coustic

| System Number | Lining Suffix | FRR | Load Bearing Ability | Noise Control* | | Lining Requirement |
|-----------------|---------------|----------|----------------------|----------------|----|-----------------------------------|
| | | | | STC | Rw | |
| E4SDLA60 | -M52 | 60/60/60 | LB | 65 | 64 | 2 x 13mm EPB MultiSmart each side |

*Acoustic Performance improves with increase of Partition Width. See 'Minimum Partition Width' Table below.

Framing

Double Frame - Any steel frame designed to meet structural criteria for strength and serviceability under dead and live loads.

Stud width shall be 35mm minimum.

Stud spacing's at 600 centres maximum. Studs aligned.

Frame heights as determined by specific design.

Minimum Partition Width

Space between Frames shall be a minimum of 25mm.

In order to achieve the STC ratings in the table above the partition width (excluding the board) shall be a minimum of 153mm. Increasing the partition width would increase STC performance as per the table below.

| Stud Depth | Space Between Frames | Partition Width (Excludes Board) | STC Rating |
|------------|----------------------|----------------------------------|------------|
| 90mm x 2 | 25mm Min | 205mm | +0 |
| 90mm x 2 | 75mm Min | 255mm | +2 |

Wall Sound Absorber

Install Sound Absorber between studs on one side of the double frame. Use 75mm thick R1.8 glass wool blanket.

Plasterboard Lining

NB: The installer must look for the Product Identification Code on the face paper to ensure the correct board type is installed. Refer to the Face Paper Product Identification Code table on this page.

Two layers of 13mm EPB MultiSmart lining fixed vertically to each side of the double steel framing.

Vertical fixing only permitted. Use full height sheets where possible.

Inner layer joints on opposite side of frame should be offset.

Vertical joints of the outer layer should be offset to those of the inner layer. Sheet end butt joints do not need to be formed over solid framing however the inner layer butt joints must be offset from the outer layer. The inner layers are fixed hard to the floor. Sheets shall be touch fitted.

Fixing of Linings**Fasteners**

| System Number | Side One | | Side Two | |
|-----------------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| | 1 st Layer | 2 nd Layer | 1 st Layer | 2 nd Layer |
| Self-Tapping Drywall Screws | | | | |
| E4SDLA60-M52 | 13mm | 13mm | 13mm | 13mm |
| | 25 x 6g | 41 x 6g | 25 x 6g | 41 x 6g |

Fastener Centres

Inner Layer: Fix at 300mm centres up each stud with no fixings to top and bottom channel.

Outer Layer: Fix at 300mm centres up each stud with no fixing to top and bottom channel sections.

Place fasteners no closer than 12mm to sheet edge and 50mm from sheet ends.

Place fasteners at 200mm centres where sheet end butt joints occur over solid framing.

Avoid outer layer screws from hitting inner layer screws.

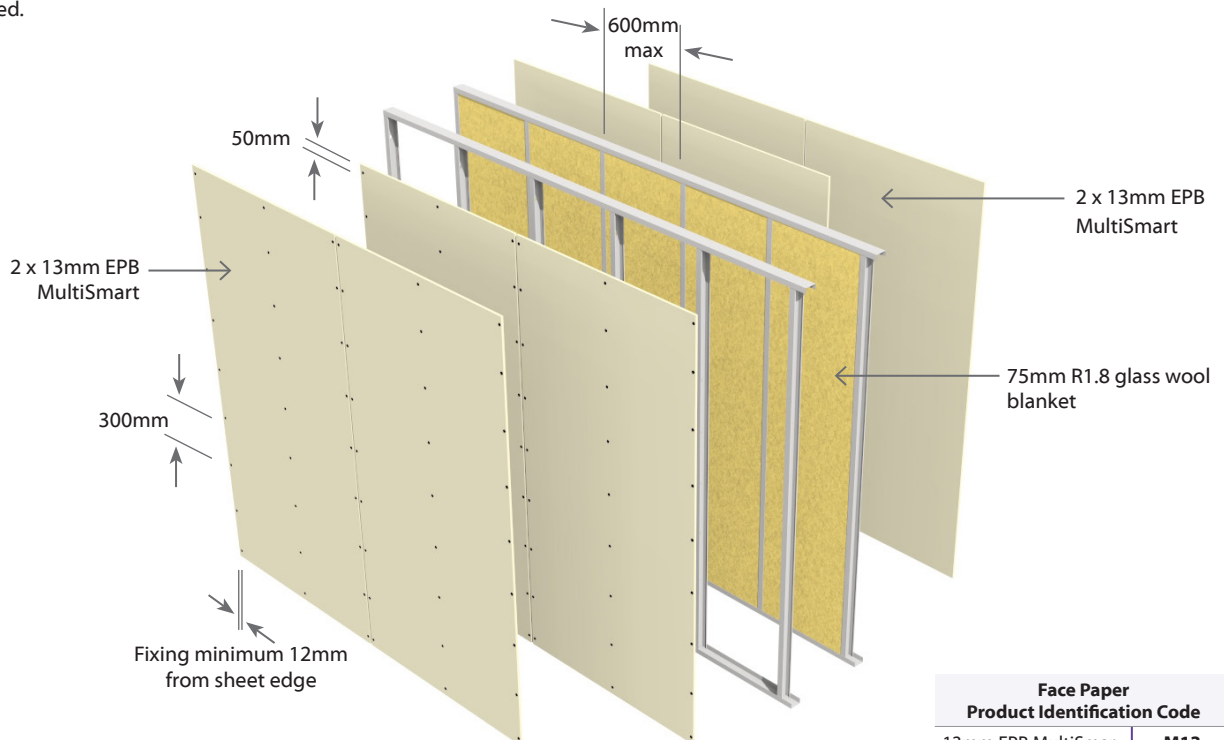
Acoustic Sealant

A bead of acoustical sealant is required around the perimeter of the inner layer and the outer layer is bedded onto the bead. The perimeter junctions of the wall must be airtight.

Jointing

Inner Layer: Unstopped.

Outer Layer: All fastener heads stopped and all sheet joints reinforced and stopped. Wall to ceiling junctions are to be reinforced with paper tape and square stopped or finished with Cornice. All in accordance with EPB Plasterboard Installation Guide.



E4SDLA90**Double Steel Frame****Load Bearing****Two Way FRR****4** Layers: 2 Layers of Plasterboard to each side of frameFull Intertency **A**coustic

| System Number | Lining Suffix | FRR | Load Bearing Ability | Noise Control* | | Lining Requirement |
|-----------------|---------------|----------|----------------------|----------------|----|----------------------------------|
| | | | | STC | Rw | |
| E4SDLA90 | -F64 | 90/90/90 | LB | 66 | 65 | 2 x 16mm EPB FireSmart each side |

*Acoustic Performance improves with increase of Partition Width. See 'Minimum Partition Width' Table below.

Framing

Double Frame - Any steel frame designed to meet structural criteria for strength and serviceability under dead and live loads.

Stud width shall be 35mm minimum.

Stud spacing's at 600 centres maximum. Studs aligned.

Frame heights as determined by specific design.

Minimum Partition Width

Space between Frames shall be a minimum of 25mm.

In order to achieve the STC ratings in the table above the partition width (excluding the board) shall be a minimum of 153mm. Increasing the partition width would increase STC performance as per the table below.

| Stud Depth | Space Between Frames | Partition Width (Excludes Board) | STC Rating |
|------------|----------------------|----------------------------------|------------|
| 90mm x 2 | 25mm Min | 205mm | +0 |
| 90mm x 2 | 75mm Min | 255mm | +2 |

Wall Sound Absorber

Install Sound Absorber between studs on one side of the double frame. Use 75mm thick R1.8 glass wool blanket.

Plasterboard Lining

NB: The installer must look for the Product Identification Code on the face paper to ensure the correct board type is installed. Refer to the Face Paper Product Identification Code table on this page.

Two layers of 16mm EPB FireSmart lining fixed vertically to each side of the double steel framing.

Vertical fixing only permitted. Use full height sheets where possible. Inner layer joints on opposite side of frame should be offset. All sheet joints must be fixed over steel framing. Vertical joints of the outer layer should be offset by 600mm to those of the inner layer. Sheet end butt joints must be formed over nogs and offset the outer layer joints from the inner layer. The inner layers are fixed hard to the floor. Sheets shall be touch fitted.

Fixing of Linings**Fasteners**

| System Number | Side One | | Side Two | |
|-----------------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| | 1 st Layer | 2 nd Layer | 1 st Layer | 2 nd Layer |
| Self-Tapping Drywall Screws | | | | |
| E4SDLA90-F64 | 16mm | 16mm | 16mm | 16mm |
| | 32 x 6g | 51 x 7g | 32 x 6g | 51 x 7g |

Fastener Centres

Inner Layer: Fix at 300mm centres up each stud with no fixings to top and bottom channel.

Outer Layer: Fix at 300mm centres up each stud with no fixing to top and bottom channel sections.

Place fasteners no closer than 12mm to sheet edge and 50mm from sheet ends.

Place fasteners at 200mm centres where sheet end butt joints occur.

Avoid outer layer screws from hitting inner layer screws.

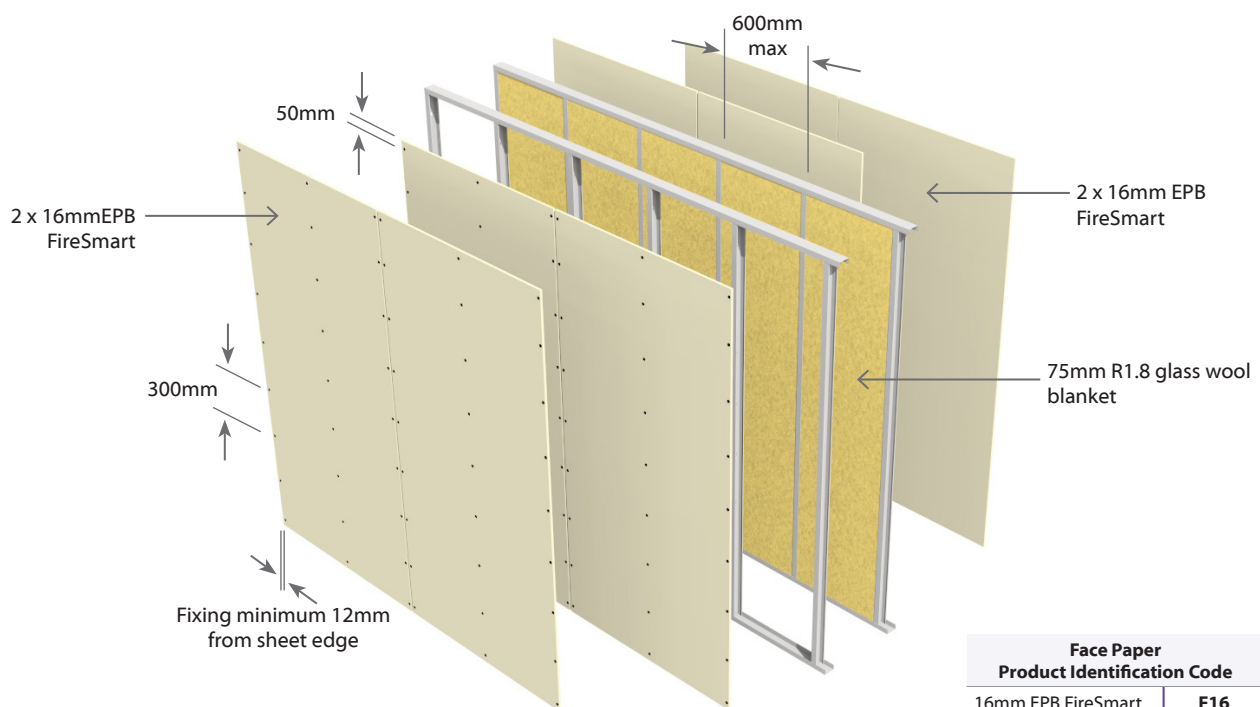
Acoustic Sealant

A bead of acoustical sealant is required around the perimeter of the inner layer and the outer layer is bedded onto the bead. The perimeter junctions of the wall must be airtight.

Jointing

Inner Layer: Unstopped.

Outer Layer: All fastener heads stopped and all sheet joints reinforced and stopped. Wall to ceiling junctions are to be reinforced with paper tape and square stopped or finished with Cornice. All in accordance with EPB Plasterboard Installation Guide.



| Face Paper Product Identification Code | |
|--|------------|
| 16mm EPB FireSmart | F16 |



E4CSDA60**Double Steel Frame - 13mm FireSmart Central Liner**

Non Load Bearing

Two Way
FRR**4 Layers:** 2 Layers of Plasterboard to each side of frameFull Intertency **A**coustic

| System Number | Lining Suffix | FRR | Load Bearing Ability | Noise Control* | | Lining Requirement |
|-----------------|---------------|---------|----------------------|----------------|----|--|
| | | | | STC | Rw | |
| E4CSDA60 | -FS46 | -/60/60 | NLB | 56 | 56 | 1 x 13mm EPB FireSmart and 1 x 10mm Standard each side |
| | -FS52 | -/60/60 | NLB | 57 | 58 | 1 x 13mm EPB FireSmart and 1 x 13mm Standard each side |

Framing

Steel studs with minimum dimensions 64mm x 34mm x 0.55 BMT with 6mm return. Tracks to be minimum size 64mm x 30mm x 0.55 BMT and are fixed to floor and ceiling. Studs are friction fitted at 600mm centres maximum with a 15mm expansion gap at top of frame. No other fixings to the track allowed.

Wall Height

Recommended maximum height is 4.0m. For Wall heights over 3.4m allow a 20mm expansion tolerance at top of studs and use a 50mm deflection head channel at top of the wall.

13mm FireSmart Central Liner

- Fix top and bottom channel runners to slab at 600mm centres and not more than 150mm from ends using steel fasteners. Install studs at 600mm centres.
- Install 13mm EPB FireSmart Central Liner vertically at 300mm to one side using 25mm x 6g Self Tapping Drywall screws. Fasteners to be placed at 12mm from sheet edges and 20mm clear of top and bottom channels. Sheet joints to be formed over framing.
- Second frame must be constructed against the Central Liner with channel runners fixed to top and bottom slabs and studs at 600mm centres. Offset this second frame by 300mm from the first frame.
- Fix the 13mm EPB FireSmart Central Liner to the second frame using 25mm x 6g Self tapping drywall screws at 300mm centres. Fasteners to be placed at 12mm from sheet edges and 20mm clear of top and bottom channels. Sheet joints to be formed over framing.

Wall Sound Absorber

Install Sound Absorber between studs on both sides of the double frame. Use 50mm thick R1.2 glass wool blanket.

Plasterboard Lining

NB: The installer must look for the Product Identification Code on the face paper to ensure the correct board type is installed. Refer to the Face Paper Product Identification Code table on this page.

Two layers of EPB Plasterboard fixed on each side of the frame as per specified system lining requirements table above.

Inner layer sheets to be fixed vertically to each open side of the double frame.

Outer layer sheets can be fixed horizontally or vertically.

Use full height or full length sheets where possible. All sheet joints must be fixed over steel framing.

Vertical joints of outer layer must be offset by 600mm from those of the inner layer if fixed vertically. Sheet end butt joints must be formed over nogs and offset the outer layer joints from the inner layer.

The inner layers are fixed hard to the floor. Sheets shall be touch fitted.

Acoustic Sealant

A bead of acoustical sealant is required around the perimeter of the inner layer and the outer layer is bedded onto the bead. The perimeter junctions of the wall must be airtight.

Fixing of Linings**Fasteners (As per Specified System Above)**

| System Number | 1 st Layer | 2 nd Layer |
|----------------------|-----------------------------|-----------------------|
| | Self Tapping Drywall Screws | |
| E4CSDA60-FS46 | 13mm | 10mm |
| | 25 x 6g | 41 x 6g |
| E4CSDA60-FS52 | 13mm | 13mm |
| | 25 x 6g | 41 x 6g |

Fastener Centres

Fix inner layer at 300mm centres on all studs and 20mm clear of top and bottom channels.

When fixing the outer layer vertically, the board should be offset from inner layer sheet joints.

Fix the outer layer at 300mm centres to all studs and 30mm clear of top and bottom channels.

In places where horizontal joint crosses, use pair of single fasteners.

Use Adhesive to replace screws in the field of sheet of outer layer sheets.

Screws at sheet edges must not be replaced with Adhesive. Adhesive to be used within 20mm of screw fixing.

Penetrations

Penetrations in cavities are permitted on either side of the Central liner for plumbing and electrical services.

Minimum 10mm clearance must be allowed between plumbing or electrical services and Central Liner for back-to-back services and penetrations.

Fire stopping for penetrations are not required for Metal and PVC Plumbing services up to 65mm diameter. 6mm max clearance gap around the plumbing services are required for penetrations through plasterboard linings. Gaps to be filled with flexible sealant.

Penetration of electrical services up to 90 x 50mm do not require to be fire-stopped. Flush boxes are limited to two per 600mm wide stud bay.

For larger penetrations and penetrations through 13mm EPB FireSmart Central Liner, suitable proprietary fire-stopping is required.

Penetrations through 13mm EPB FireSmart Central Liner may reduce the noise control performance of the system.

Plasterboard lining for Wet Area

If outer layer of 10mm EPB Standard board is replaced with 10mm EPB AquaSmart, the FRR and noise control ratings will be retained.

If outer layer of 13mm EPB Standard board is replaced with 13mm EPB AquaSmart, the FRR and noise control ratings will be retained.

Jointing

Central Liner: Unstopped

Inner Layer: Unstopped.

Outer Layer: All fastener heads stopped and all sheet joints reinforced and stopped. Wall to ceiling junctions are to be reinforced with paper tape and square stopped or finished with Cornice. All in accordance with EPB Plasterboard Installation Guide.



E4CSDA60

Double Steel Frame - 13mm FireSmart Central Liner

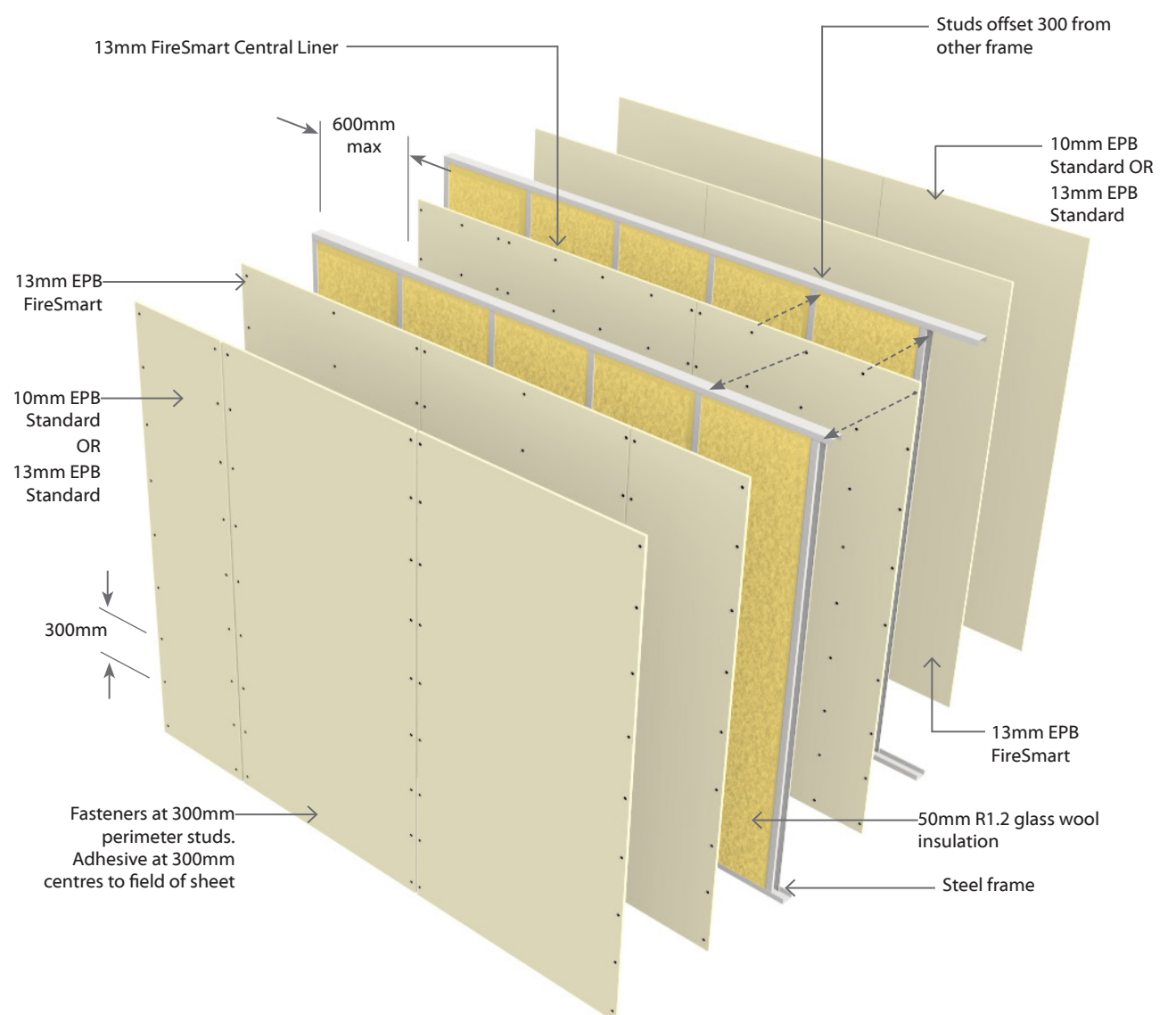
Non Load Bearing

Two Way FRR

4 Layers: 2 Layers of Plasterboard to each side of frame

Full Intertency Acoustic

| System Number | Lining Suffix | FRR | Load Bearing Ability | Noise Control* | | Lining Requirement |
|---------------|---------------|---------|----------------------|----------------|----|--|
| | | | | STC | Rw | |
| E4CSDA60 | -FS46 | -/60/60 | NLB | 56 | 56 | 1 x 13mm EPB FireSmart and 1 x 10mm Standard each side |
| | -FS52 | -/60/60 | NLB | 57 | 58 | 1 x 13mm EPB FireSmart and 1 x 13mm Standard each side |



| Face Paper Product Identification Code | |
|--|-----|
| 10mm EPB Standard | S10 |
| 13mm EPB Standard | S13 |
| 13mm EPB FireSmart | F13 |

E3SMA30**Steel Frame with Resilient Mount**

Non Load Bearing

Two Way FRR

- 3 Layers:** 1 Layer of Plasterboard to Framing side &
2 Layers of Plasterboard on Mount side

Full Intertency **A**coustic

| System Number | Lining Suffix | FRR | Load Bearing Ability | Noise Control* | | Lining Requirement |
|----------------|---------------|---------|----------------------|----------------|----|--|
| | | | | STC | Rw | |
| E3SMA30 | -M30 | -/30/30 | NLB | 55 | 54 | Frame Side: 1 x 10mm EPB MultiSmart Mount Side: 2 x 10mm EPB MultiSmart |

Framing

Steel studs with minimum dimensions 64mm x 34mm x 0.55 BMT with 6mm return. Tracks to be minimum size 64mm x 30mm x 0.55 BMT and are fixed to floor and ceiling in true alignment. Studs are placed at 600mm centres maximum.

Studs are placed with a 15mm expansion gap at top of frame. The studs are not directly fixed to tracks. The studs are held in place by the grip of the channel runners. No other fixing is to be used.

Wall Heights

Recommended maximum height is 2.7m. Higher walls may be subject to specific engineering design or consult the framing manufacturer.

Partition Width

In order to achieve the STC ratings in the table above the partition width (excluding the board) shall be a minimum of 104mm.

| Stud Depth | Mount + Channel | Lining Suffix | Plasterboard | Total Partition |
|------------|-----------------|---------------|--------------|-----------------|
| 64mm | 40mm | M30 | 30mm | 134mm |
| | | S39 | 39mm | 143mm |

Wall Sound Absorber

Install Sound Absorber between studs of the frame. Use 75mm thick R1.8 glass wool blanket.

Acoustic Resilient Mount

The Resilient Mount shall be fixed to the studs at 600mm centres vertically and on every alternative stud using 32mm x 8g wafer head screws. When adjusting the clip for depth, 3mm rubber must remain between the underside of the steel spacer head and the furring channel. The Furring channels shall have a minimum depth of 28mm (e.g Rondo 129) and are clipped horizontally into the Mounts. Joints must be made as close as possible to the clips.

Plasterboard Lining

NB: The installer must look for the Product Identification Code on the face paper to ensure the correct board type is installed. Refer to the Face Paper Product Identification Code table on this page.

Framing Side: One layer of 10mm EPB MultiSmart Plasterboard lining fixed vertically. All sheet joints must be fixed over steel framing.

Resilient Mount Side: Two layers of 10mm EPB MultiSmart fixed vertically on the furring channel. Vertical joints of outer layer should be offset by 600mm from those of the inner layer. Use full height sheets where possible. The inner layers are fixed hard to the floor.

Sheet end butt joints must be formed over nogs or furring channels and offset the outer layer joints from the inner layer. Sheets shall be touch fitted.

Fixing of Linings**Fasteners**

| System Number | Furring Channel Side | | Framing Side |
|--------------------|-----------------------------|-----------------------|--------------|
| | 1 st Layer | 2 nd Layer | Single Layer |
| E3SMA30-M30 | Self-Tapping Drywall Screws | | |
| | 10mm | 10mm | 10mm |
| | 25 x 6g | 32 x 6g | 25 x 6g |

Fastener Centres

Framing Side: Fix at 300mm centres up each stud with no fixing to top or bottom channel sections.

Place fasteners no closer than 12mm to the sheet edge and 50mm from sheet ends.

Resilient Mount Side: Fix 300mm centres along each furring channel. Place fasteners minimum 12mm from sheet edges and sheet ends.

Place fasteners at 200mm centres where sheet end butt joints occur. Avoid outer layer screws from hitting inner layer screws.

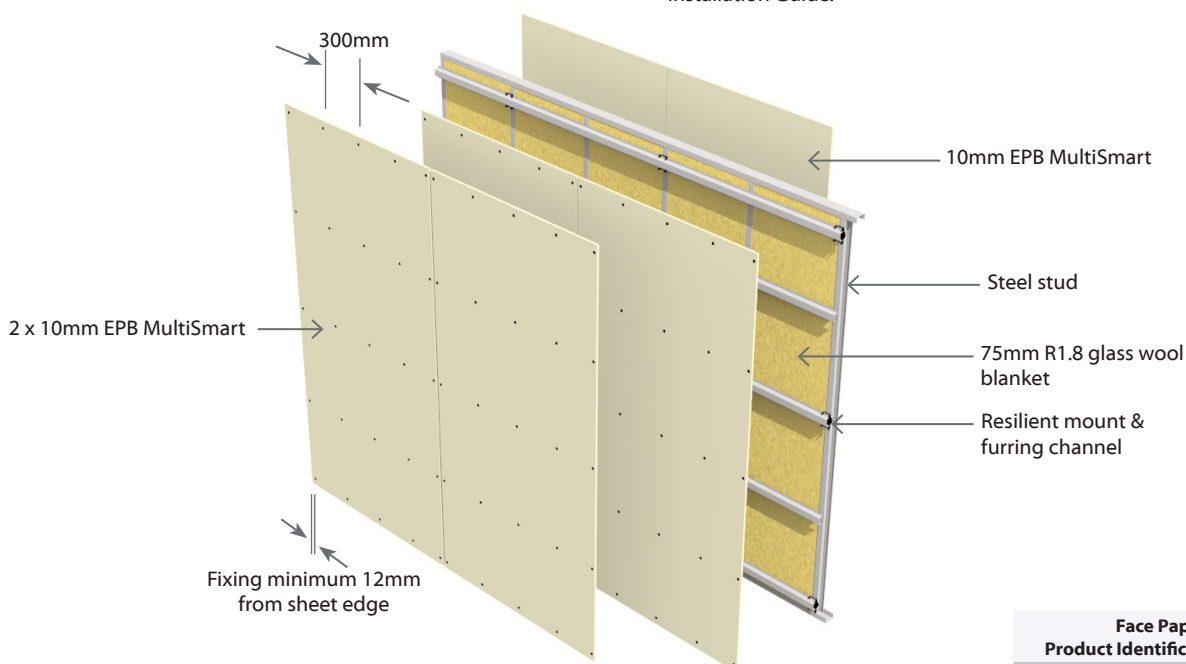
Acoustic Sealant

A bead of acoustic sealant is required around the perimeter of the framing or the inner layer. The single or outer layer is then bedded onto the bead. The perimeter junctions of the wall must be airtight.

Jointing

Inner Layer: Unstopped.

Outer or Single Layer: All fastener heads stopped and all sheet joints reinforced with paper jointing tape and stopped. Wall to ceiling junctions are to be reinforced with paper tape and square stopped or finished with Cornice. All in accordance with EPB Plasterboard Installation Guide.



| Face Paper Product Identification Code | |
|--|------------|
| 10mm EPB MultiSmart | M10 |



E4SMA30**Steel Frame with Resilient Mount**

Non Load Bearing

Two Way FRR

4 Layers: 2 Layers of Plasterboard to Framing side &
2 Layers of Plasterboard on Mount side

Full Intertency **A**coustic

| System Number | Lining Suffix | FRR | Load Bearing Ability | Noise Control* | | Lining Requirement |
|----------------|---------------|---------|----------------------|----------------|----|--|
| | | | | STC | Rw | |
| E4SMA30 | -F40 | -/30/30 | NLB | 56 | 55 | Frame Side: 2 x 10mm EPB FireSmart Mount Side: 2 x 10mm EPB FireSmart |

Framing

Steel studs with minimum dimensions 64mm x 34mm x 0.55 BMT with 6mm return. Tracks to be minimum size 64mm x 30mm x 0.55 BMT and are fixed to floor and ceiling in true alignment. Studs are placed at 600mm centres maximum.

Studs are placed with a 15mm expansion gap at top of frame. The studs are not directly fixed to tracks. The studs are held in place by the grip of the channel runners.

No other fixing is to be used.

Wall Heights

Recommended maximum height is 2.7m. Higher walls may be subject to specific engineering design or consult the framing manufacturer.

Partition Width

In order to achieve the STC ratings in the table above the partition width (excluding the board) shall be a minimum of 104mm.

| Stud Depth | Mount + Channel | Lining Suffix | Plaster-board | Total Partition |
|------------|-----------------|---------------|---------------|-----------------|
| 64mm | 40mm | S40 | 40mm | 144mm |

Wall Sound Absorber

Install Sound Absorber between studs of the frame. Use 75mm thick R1.8 glass wool blanket.

Acoustic Resilient Mount

The Resilient Mount shall be fixed to the studs at 600mm centres vertically and on every alternative stud using 32mm x 8g wafer head screws. When adjusting the clip for depth. 3mm rubber must remain between the underside of the steel spacer head and the furring channel. The Furring channels are clipped horizontally into the Mounts. Joints must be made as close as possible to the clips.

Plasterboard Lining

NB: The installer must look for the Product Identification Code on the face paper to ensure the correct board type is installed. Refer to the Face Paper Product Identification Code table on this page.

Framing Side: Two layer of 10mm EPB FireSmart lining fixed vertically. Vertical joints of outer layer should be offset by 600mm from those of the inner layer. All sheet joints must be fixed over steel framing.

Resilient Mount Side: Two Layers of 10mm EPB FireSmart lining fixed vertically on the furring channel. Vertical joints of outer layer should be offset by 600mm from those of the inner layer.

Use full height sheets where possible. The inner layers are fixed hard to the floor. Sheet end butt joints must be formed over nogs or furring channels and offset the outer layer joints from the inner layer.

Sheets shall be touch fitted.

Fixing of Linings**Fasteners**

| System Number | Furring Channel Side | | Framing Side | |
|-----------------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| | 1 st Layer | 2 nd Layer | 1 st Layer | 2 nd Layer |
| Self-Tapping Drywall Screws | | | | |
| E4SMA30-F40 | 10mm | 10mm | 10mm | 10mm |
| | 25 x 6g | 32 x 6g | 25 x 6g | 32 x 6g |

Fastener Centres

Framing Side: Fix at 300mm centres up each stud with no fixing to top or bottom channel sections.

Place fasteners no closer than 12mm to the sheet edge and 50mm from sheet ends.

Resilient Mount Side: Fix 300mm centres along each furring channel. Place fasteners minimum 12mm from sheet edges and sheet ends.

Place fasteners at 200mm centres where sheet end butt joints occur.

Avoid outer layer screws from hitting inner layer screws.

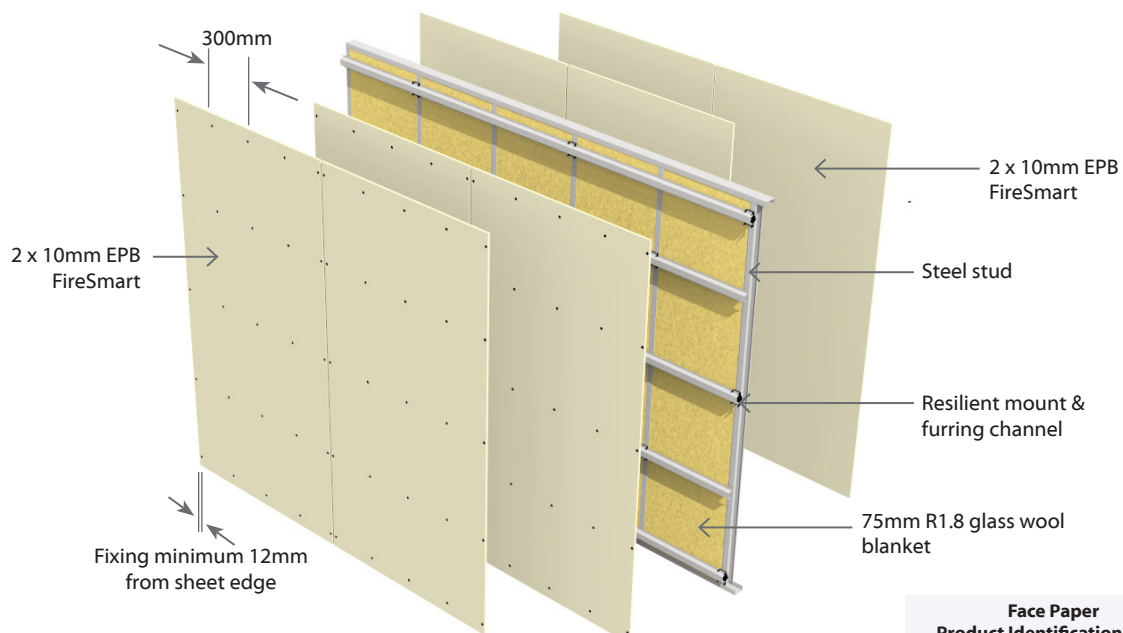
Acoustic Sealant

A bead of acoustical sealant is required around the perimeter of the inner layer and the outer layer is bedded onto the bead. The perimeter junctions of the wall must be airtight.

Jointing

Inner Layer: Unstopped

Outer Layer: All fastener heads stopped and all sheet joints reinforced with paper jointing tape and stopped. Wall to ceiling junctions are to be reinforced with paper tape and square stopped or finished with Cornice. All in accordance with EPB Plasterboard Installation Guide.



| Face Paper Product Identification Code | |
|--|------------|
| 10mm EPB FireSmart | F10 |



E3SMA60**Steel Frame with Resilient Mount**

Non Load Bearing

Two Way FRR

3 Layers: 1 Layer of Plasterboard to Framing side &
2 Layers of Plasterboard on Mount side

Full Intertency **A**coustic

| System Number | Lining Suffix | FRR | Load Bearing Ability | Noise Control | | Lining Requirement |
|----------------|---------------|---------|----------------------|---------------|----|--|
| | | | | STC | Rw | |
| E3SMA60 | -MS39 | -/60/60 | NLB | 56 | 55 | Frame Side: 1 x 13mm EPB MultiSmart Mount Side: 2 x 13mm EPB Standard |
| | -M39 | -/60/60 | NLB | 57 | 56 | Frame Side: 1 x 13mm EPB MultiSmart Mount Side: 2 x 13mm EPB MultiSmart |

Framing

Steel studs with minimum dimensions 64mm x 34mm x 0.55 BMT with 6mm return. Tracks to be minimum size 64mm x 30mm x 0.55 BMT and are fixed to floor and ceiling in true alignment. Studs are placed at 600mm centres maximum.

Studs are placed with a 15mm expansion gap at top of frame. The studs are not directly fixed to tracks. The studs are held in place by the grip of the channel runners. No other fixing is to be used.

Wall Heights

Recommended maximum height is 2.7m. Higher walls may be subject to specific engineering design or consult the framing manufacturer.

Partition Width

In order to achieve the STC ratings in the table above the partition width (excluding the board) shall be a minimum of 104mm.

| Stud Depth | Mount + Channel | Lining Suffix | Plasterboard | Total Partition |
|------------|-----------------|---------------|--------------|-----------------|
| 64mm | 40mm | MS39 | 39mm | 143mm |
| | | M39 | 39mm | 143mm |

Wall Sound Absorber

Install Sound Absorber between studs of the frame. Use 75mm thick R1.8 glass wool blanket.

Acoustic Resilient Mount

The Resilient Mount shall be fixed to the studs at 600mm centres vertically and on every alternative stud using 32mm x 8g wafer head screws. When adjusting the clip for depth, 3mm rubber must remain between the underside of the steel spacer head and the furring channel. The Furring channels are clipped horizontally into the Mounts. Joints must be made as close as possible to the clips.

Plasterboard Lining

NB: The installer must look for the Product Identification Code on the face paper to ensure the correct board type is installed. Refer to the Face Paper Product Identification Code table on this page.

Framing Side: One layer of EPB Plasterboard lining fixed vertically. All sheet joints must be fixed over steel framing.

Resilient Mount Side: Two layers fixed vertically on the furring channel. Vertical joints of outer layer should be offset by 600mm from those of the inner layer.

Use full height sheets where possible. The inner layers are fixed hard to the floor. Sheet end butt joints must be formed over nogs or furring channels and offset the outer layer joints from the inner layer. Sheets shall be touch fitted.

Fixing of Linings

Fasteners (As per Specified System Above)

| System Number | Furring Channel Side | | Framing Side |
|-----------------------------|-----------------------|-----------------------|--------------|
| | 1 st Layer | 2 nd Layer | Single Layer |
| Self-Tapping Drywall Screws | | | |
| E3SMA60-MS39 | 13mm | 13mm | 13mm |
| | 25 x 6g | 41 x 6g | 25 x 6g |
| E3SMA60-M39 | 13mm | 13mm | 13mm |
| | 25 x 6g | 41 x 6g | 25 x 6g |

Fastener Centres

Framing Side: Fix at 300mm centres up each stud with no fixing to top or bottom channel sections.

Place fasteners no closer than 12mm to the sheet edge and 50mm from sheet ends.

Resilient Mount Side: Fix 300mm centres along each furring channel. Place fasteners minimum 12mm from sheet edges and sheet ends.

Place fasteners at 200mm centres where sheet end butt joints occur.

Avoid outer layer screws from hitting inner layer screws.

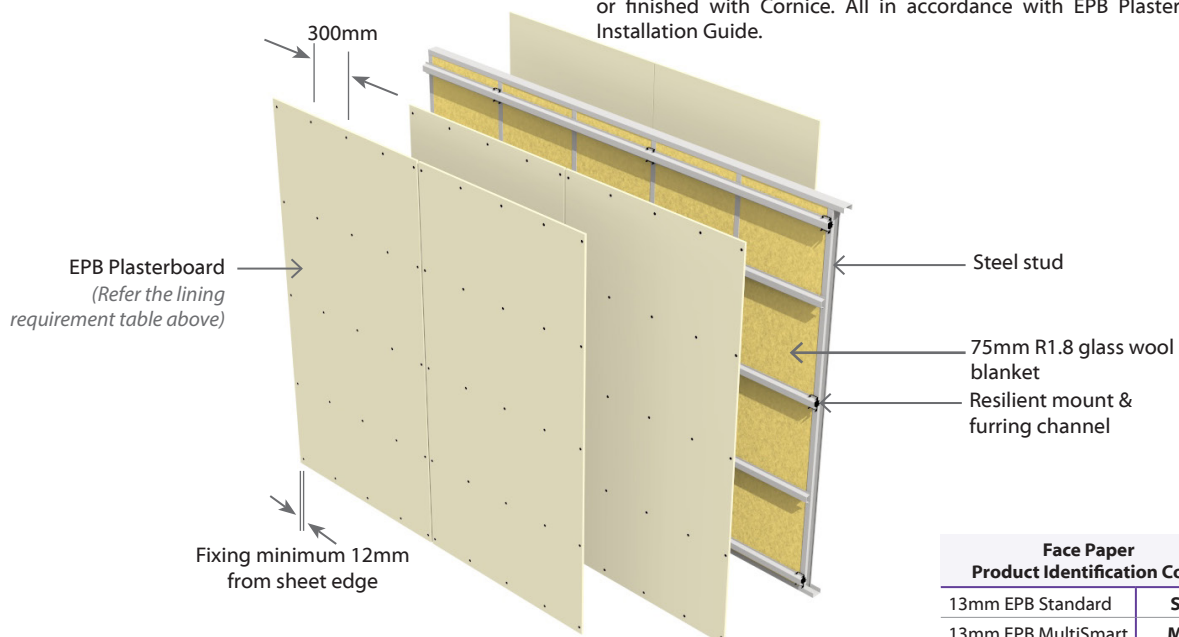
Acoustic Sealant

A bead of acoustic sealant is required around the perimeter of the framing or the inner layer. The single or outer layer is then bedded onto the bead. The perimeter junctions of the wall must be airtight.

Jointing

Inner Layer: Unstopped.

Outer or Single Layer: All fastener heads stopped and all sheet joints reinforced with paper jointing tape and stopped. Wall to ceiling junctions are to be reinforced with paper tape and square stopped or finished with Cornice. All in accordance with EPB Plasterboard Installation Guide.



| Face Paper Product Identification Code | |
|--|------------|
| 13mm EPB Standard | S13 |
| 13mm EPB MultiSmart | M13 |



E4SMA60**Steel Frame with Resilient Mount**

Non Load Bearing

Two Way FRR

4 Layers: 2 Layers of Plasterboard to Framing side &
2 Layers of Plasterboard on Mount side

Full Intertency **A**coustic

| System Number | Lining Suffix | FRR | Load Bearing Ability | Noise Control | | Lining Requirement |
|----------------|---------------|---------|----------------------|---------------|----|--|
| | | | | STC | Rw | |
| E4SMA60 | -S52 | -/60/60 | NLB | 58 | 57 | Frame Side: 2 x 13mm EPB Standard Mount Side: 2 x 13mm EPB Standard |
| | -M40 | -/60/60 | NLB | 59 | 58 | Frame Side: 2 x 10mm EPB MultiSmart Mount Side: 2 x 10mm EPB MultiSmart |

Framing

Steel studs with minimum dimensions 64mm x 34mm x 0.55 BMT with 6mm return. Tracks to be minimum size 64mm x 30mm x 0.55 BMT and are fixed to floor and ceiling in true alignment. Studs are placed at 600mm centres maximum.

Studs are placed with a 15mm expansion gap at top of frame. The studs are not directly fixed to tracks. The studs are held in place by the grip of the channel runners. No other fixing is to be used.

Wall Heights

Recommended maximum height is 2.7m. Higher walls may be subject to specific engineering design or consult the framing manufacturer.

Partition Width

In order to achieve the STC ratings in the table above the partition width (excluding the board) shall be a minimum of 104mm.

| Stud Depth | Mount + Channel | Lining Suffix | Plaster-board | Total Partition |
|------------|-----------------|---------------|---------------|-----------------|
| 64mm | 40mm | S52 | 52mm | 156mm |
| | | M40 | 40mm | 144mm |

Wall Sound Absorber

Install Sound Absorber between studs of the frame. Use 75mm thick R1.8 glass wool blanket.

Acoustic Resilient Mount

The Resilient Mount shall be fixed to the studs at 600mm centres vertically and on every alternative stud using 32mm x 8g wafer head screws. When adjusting the clip for depth, 3mm rubber must remain between the underside of the steel spacer head and the furring channel. The Furring channels are clipped horizontally into the Mounts. Joints must be made as close as possible to the clips.

Plasterboard Lining

NB: The installer must look for the Product Identification Code on the face paper to ensure the correct board type is installed. Refer to the Face Paper Product Identification Code table on this page.

Framing Side: Two layer of EPB Plasterboard lining fixed vertically. Vertical joints of outer layer should be offset by 600mm from those of the inner layer. All sheet joints must be fixed over steel framing.

Resilient Mount Side: Two Layers fixed vertically on the furring channel. Vertical joints of outer layer should be offset by 600mm from those of the inner layer.

Use full height sheets where possible. The inner layers are fixed hard to the floor. Sheet end butt joints must be formed over nogs or furring channels and offset the outer layer joints from the inner layer.

Sheets shall be touch fitted.

Fixing of Linings**Fasteners (As per Specified System Above)**

| System Number | Furring Channel Side | | Framing Side | |
|--------------------|-----------------------------|-----------------------|-----------------------|-----------------------|
| | 1 st Layer | 2 nd Layer | 1 st Layer | 2 nd Layer |
| E4SMA60-S52 | Self-Tapping Drywall Screws | | | |
| | 13mm | 13mm | 13mm | 13mm |
| E4SMA60-M40 | 25 x 6g | 41 x 6g | 25 x 6g | 41 x 6g |
| | 10mm | 10mm | 10mm | 10mm |
| E4SMA60-M40 | 25 x 6g | 32 x 6g | 25 x 6g | 32 x 6g |

Fastener Centres

Framing Side: Fix at 300mm centres up each stud with no fixing to top or bottom channel sections.

Place fasteners no closer than 12mm to the sheet edge and 50mm from sheet ends.

Resilient Mount Side: Fix 300mm centres along each furring channel. Place fasteners minimum 12mm from sheet edges and sheet ends.

Place fasteners at 200mm centres where sheet end butt joints occur.

Avoid outer layer screws from hitting inner layer screws.

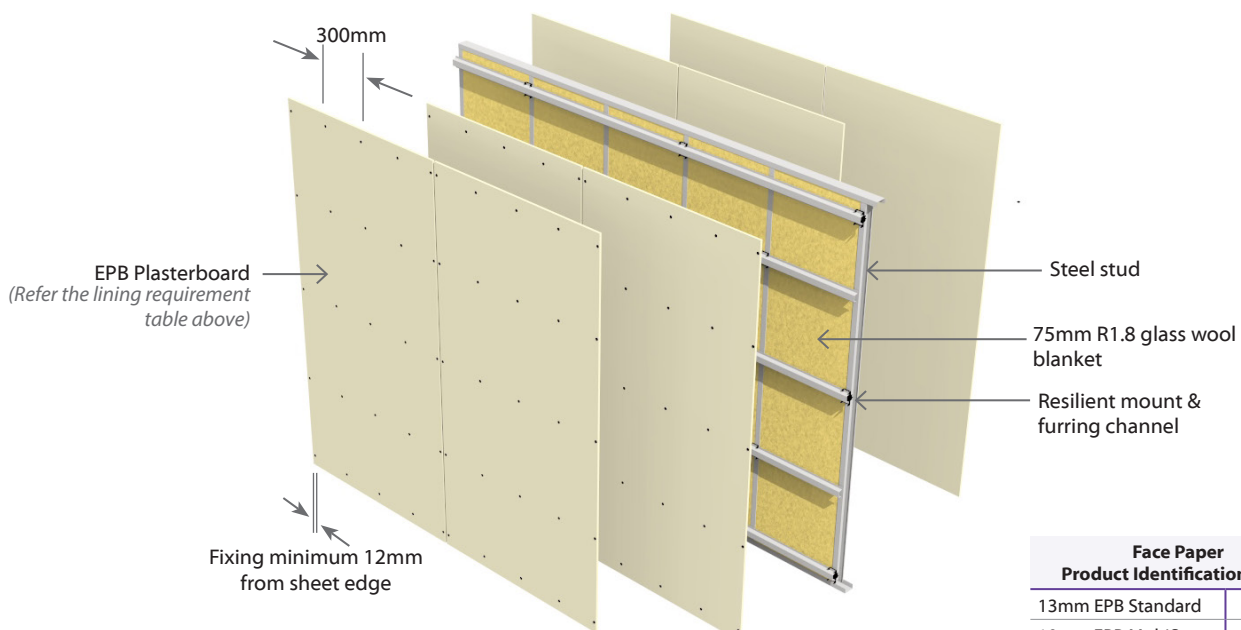
Acoustic Sealant

A bead of acoustical sealant is required around the perimeter of the inner layer and the outer layer is bedded onto the bead. The perimeter junctions of the wall must be airtight.

Jointing

Inner Layer: Unstopped

Outer Layer: All fastener heads stopped and all sheet joints reinforced with paper jointing tape and stopped. Wall to ceiling junctions are to be reinforced with paper tape and square stopped or finished with Cornice. All in accordance with EPB Plasterboard Installation Guide.



| Face Paper Product Identification Code | |
|--|------------|
| 13mm EPB Standard | S13 |
| 10mm EPB MultiSmart | M10 |



E4SMA90**Steel Frame with Resilient Mount**

Non Load Bearing

Two Way FRR

4 Layers: 2 Layers of Plasterboard to Framing side &
2 Layers of Plasterboard on Mount side

Full Intertency **A**coustic

| System Number | Lining Suffix | FRR | Load Bearing Ability | Noise Control | | Lining Requirement |
|----------------|---------------|---------|----------------------|---------------|----|--|
| | | | | STC | Rw | |
| E4SMA90 | -M46 | -/90/90 | NLB | 60 | 59 | Frame Side: 1 x 13mm EPB MultiSmart & 1 x 10mm EPB MultiSmart Mount Side: 1 x 13mm EPB MultiSmart & 1 x 10mm EPB MultiSmart |
| | -M52 | -/90/90 | NLB | 62 | 61 | Frame Side: 2 x 13mm EPB MultiSmart Mount Side: 2 x 13mm EPB MultiSmart |

Framing

Steel studs with minimum dimensions 64mm x 34mm x 0.55 BMT with 6mm return. Tracks to be minimum size 64mm x 30mm x 0.55 BMT and are fixed to floor and ceiling in true alignment. Studs are placed at 600mm centres maximum.

Studs are placed with a 15mm expansion gap at top of frame. The studs are not directly fixed to tracks. The studs are held in place by the grip of the channel runners.

No other fixing is to be used.

Wall Heights

Recommended maximum height is 2.7m. Higher walls may be subject to specific engineering design or consult the framing manufacturer.

Partition Width

In order to achieve the STC ratings in the table above the partition width (excluding the board) shall be a minimum of 104mm.

| Stud Depth | Mount + Channel | Lining Suffix | Plaster-board | Total Partition |
|------------|-----------------|---------------|---------------|-----------------|
| 64mm | 40mm | M46 | 46mm | 150mm |
| | | M52 | 52mm | 156mm |

Wall Sound Absorber

Install Sound Absorber between studs of the frame. Use 75mm thick R1.8 glass wool blanket.

Acoustic Resilient Mount

The Resilient Mount shall be fixed to the studs at 600mm centres vertically and on every alternative stud using 32mm x 8g wafer head screws. When adjusting the clip for depth, 3mm rubber must remain between the underside of the steel spacer head and the furring channel. The Furring channels are clipped horizontally into the Mounts. Joints must be made as close as possible to the clips.

Plasterboard Lining

NB: The installer must look for the Product Identification Code on the face paper to ensure the correct board type is installed. Refer to the Face Paper Product Identification Code table on this page.

Framing Side: Two layers of EPB Plasterboard as per specified system above, fixed vertically. Vertical joints of outer layer should be offset by 600mm from those of the inner layer. All sheet joints must be fixed over steel framing.

Resilient Mount Side: Two layers of EPB Plasterboard as per specified system above, fixed vertically on the furring channel. Vertical joints of outer layer should be offset by 600mm from those of the inner layer. Use full height sheets where possible. The inner layers are fixed hard to the floor. Sheet end butt joints must be formed over nogs or furring channels and offset the outer layer joints from the inner layer.

Sheets shall be touch fitted.

Fixing of Linings**Fasteners (As per Specified System Above)**

| System Number | Furring Channel Side | | Framing Side | |
|-----------------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| | 1 st Layer | 2 nd Layer | 1 st Layer | 2 nd Layer |
| Self-Tapping Drywall Screws | | | | |
| E4SMA90-M46 | 13mm | 10mm | 13mm | 10mm |
| | 25 x 6g | 41 x 6g | 25 x 6g | 41 x 6g |
| E4SMA90-M52 | 13mm | 13mm | 13mm | 13mm |
| | 25 x 6g | 41 x 6g | 25 x 6g | 41 x 6g |

Fastener Centres

Framing Side: Fix at 300mm centres up each stud with no fixing to top or bottom channel sections.

Place fasteners no closer than 12mm to the sheet edge and 50mm from sheet ends.

Resilient Mount Side: Fix 300mm centres along each furring channel. Place fasteners minimum 12mm from sheet edges and sheet ends.

Place fasteners at 200mm centres where sheet end butt joints occur.

Avoid outer layer screws from hitting inner layer screws.

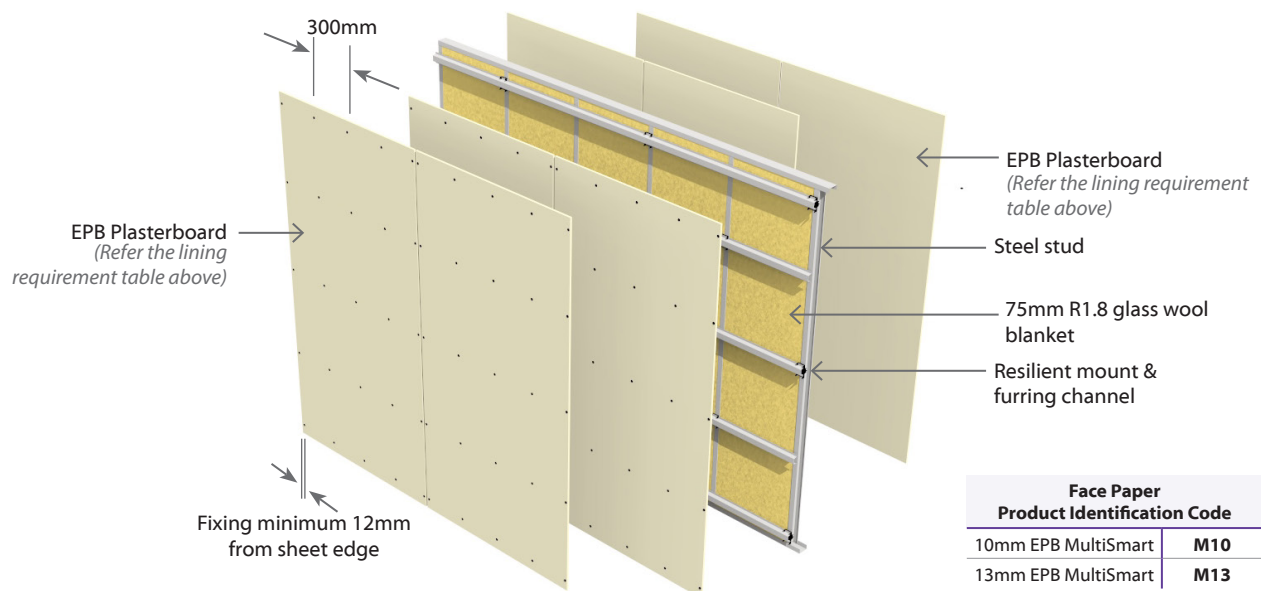
Acoustic Sealant

A bead of acoustical sealant is required around the perimeter of the inner layer and the outer layer is bedded onto the bead. The perimeter junctions of the wall must be airtight.

Jointing

Inner Layer: Unstopped

Outer Layer: All fastener heads stopped and all sheet joints reinforced with paper jointing tape and stopped. Wall to ceiling junctions are to be reinforced with paper tape and square stopped or finished with Cornice. All in accordance with EPB Plasterboard Installation Guide.



E4SRA60**Steel Frame with Resilient Rail**

Non Load Bearing

Two Way FRR

4 Layers: 2 Layers of Plasterboard to Framing side &
2 Layers of Plasterboard on Rail side

Full Intertency **A**coustic

| System Number | Lining Suffix | FRR | Load Bearing Ability | Noise Control | | Lining Requirement |
|----------------|---------------|---------|----------------------|---------------|----|---|
| | | | | STC | Rw | |
| E4SRA60 | -S52 | -/60/60 | NLB | 55 | 54 | Frame Side: 2 x 13mm EPB Standard Rail Side: 2 x 13mm EPB Standard |
| | -M40 | -/60/60 | NLB | 56 | 55 | Frame Side: 2 x 10mm EPB MultiSmart Rail Side: 2 x 10mm EPB MultiSmart |

Framing

Steel studs with minimum dimensions 64mm x 34mm x 0.55 BMT with 6mm return. Tracks to be minimum size 64mm x 30mm x 0.55 BMT and are fixed to floor and ceiling in true alignment. Studs are placed at 600mm centres maximum. Studs are placed with a 15mm expansion gap at top of frame. The studs are not directly fixed to the tracks. The studs are held in place by the grip of the channel runners.

No other fixing to the tracks is allowed.

Wall Heights

Recommended maximum height is 2.7m. Higher walls may be subject to specific engineering design or consult the framing manufacturer.

Partition Width

In order to achieve the STC ratings in the table above the partition width (excluding the board) shall be a minimum of 77mm.

| Stud Depth | Rail | Lining Suffix | Plasterboard | Total Partition |
|------------|------|---------------|--------------|-----------------|
| 64mm | 13mm | M40 | 40mm | 117mm |
| | | S52 | 52mm | 129mm |

Wall Sound Absorber

Install Sound Absorber between studs of the frame. Use 75mm thick R1.8 glass wool blanket.

Acoustic Resilient Rail

The resilient Rail shall be fixed to the studs at 600mm centres using 32mm x 8g wafer head self tapping screws through the base flange and into each stud. The base flange to face downwards and resilient edge upwards. Rails may be joined over the studs by nesting together with no more than 20mm overlap. Fasten through both channels into stud. Highest resilient channel shall be fixed no more than 75mm from the ceiling line and the lowest channel, 50mm from the floor line.

Plasterboard Lining

NB: The installer must look for the Product Identification Code on the face paper to ensure the correct board type is installed. Refer to the Face Paper Product Identification Code table on this page.

Framing Side: Two layers of EPB Plasterboard lining fixed vertically. Vertical joints of outer layer should be offset by 600mm from those of the inner layer. All sheet joints must be fixed over steel framing.

Resilient Rail Side: Two layers fixed vertically on the furring channel. Vertical joints of outer layer should be offset by 600mm from those of the inner layer.

Use full height sheets where possible. The inner layers are fixed hard to the floor. Sheet end butt joints must be formed over nogs or rails and offset the outer layer joints from the inner layer.

Sheets shall be touch fitted.

Fixing of Linings**Fasteners (As per Specified System Above)**

| System Number | Resilient Rail Side | | Framing Side | |
|--------------------|-----------------------------|-----------------------|-----------------------|-----------------------|
| | 1 st Layer | 2 nd Layer | 1 st Layer | 2 nd Layer |
| E4SRA60-M40 | Self-Tapping Drywall Screws | | | |
| | 10mm | 10mm | 10mm | 10mm |
| E4SRA60-S52 | 25 x 6g | 32 x 6g | 25 x 6g | 32 x 6g |
| | 13mm | 13mm | 13mm | 13mm |
| E4SRA60-S52 | 25 x 6g | 41 x 6g | 25 x 6g | 41 x 6g |

Fastener Centres

Framing Side: Fix at 300mm centres up each stud with no fixing to top or bottom track sections.

Place fasteners no closer than 12mm to the sheet edge and 50mm from sheet ends.

Resilient Rail Side: Fix 300mm centres along each resilient rail.

Place fasteners minimum 12mm from sheet edges and sheet ends.

Place fasteners at 200mm centres where sheet end butt joints occur.

Avoid outer layer screws from hitting inner layer screws.

Lining screws to be fastened to the side of the studs and to ensure that they don't penetrate or touch the framing.

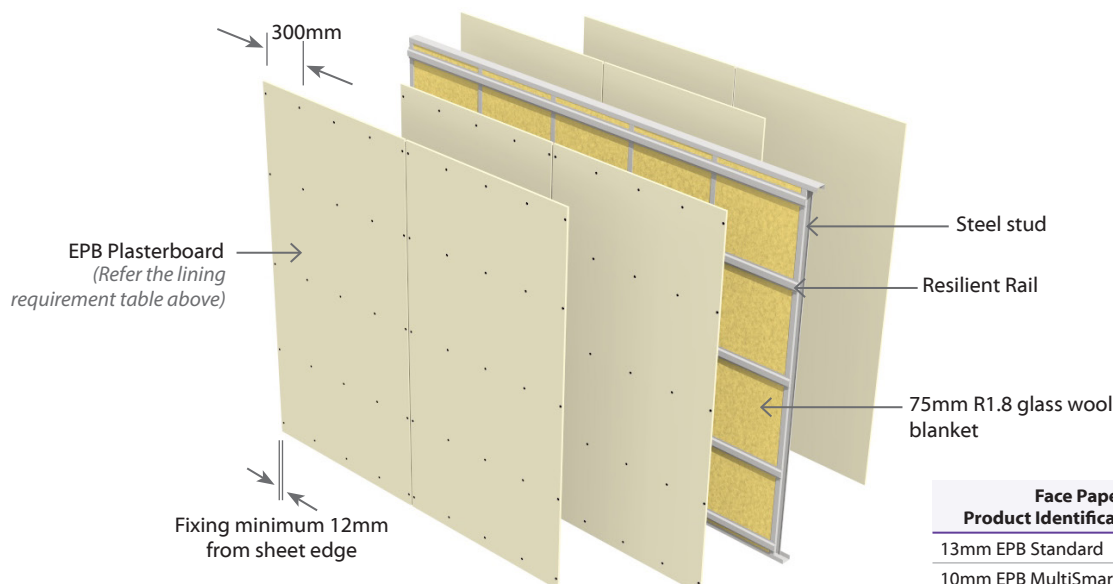
Acoustic Sealant

A bead of acoustical sealant is required around the perimeter of the inner layer and the outer layer is bedded onto the bead. The perimeter junctions of the wall must be airtight.

Jointing

Inner Layer: Unstopped

Outer Layer: All fastener heads stopped and all sheet joints reinforced with paper jointing tape and stopped. Wall to ceiling junctions are to be reinforced with paper tape and square stopped or finished with Cornice. All in accordance with the EPB Plasterboard Installation Guide.



| Face Paper Product Identification Code | |
|--|------------|
| 13mm EPB Standard | S13 |
| 10mm EPB MultiSmart | M10 |



E4SRA90**Steel Frame with Resilient Rail**

Non Load Bearing

Two Way FRR

4 Layers: 2 Layers of Plasterboard to Framing side &
2 Layers of Plasterboard on Rail side

Full Intertency **A**coustic

| System Number | Lining Suffix | FRR | Load Bearing Ability | Noise Control | | Lining Requirement |
|----------------|---------------|---------|----------------------|---------------|----|---|
| | | | | STC | Rw | |
| E4SRA90 | -M46 | -/90/90 | NLB | 57 | 56 | Frame Side: 1 x 10mm and 1 x 13mm EPB MultiSmart Rail Side: 1 x 10mm and 1 x 13mm EPB MultiSmart |
| | -F52 | -/90/90 | NLB | 57 | 56 | Frame Side: 2 x 13mm EPB FireSmart Rail Side: 2 x 13mm EPB FireSmart |
| | -M52 | -/90/90 | NLB | 59 | 58 | Frame Side: 2 x 13mm EPB MultiSmart Rail Side: 2 x 13mm EPB MultiSmart |

Framing

Steel studs with minimum dimensions 64mm x 34mm x 0.55 BMT with 6mm return. Tracks to be minimum size 64mm x 30mm x 0.55 BMT and are fixed to floor and ceiling in true alignment. Studs are placed at 600mm centres maximum. Studs are placed with a 15mm expansion gap at top of frame. The studs are not directly fixed to the tracks. The studs are held in place by the grip of the channel runners.

No other fixing to the tracks is allowed.

Wall Heights

Recommended maximum height is 2.7m. Higher walls may be subject to specific engineering design or consult the framing manufacturer.

Partition Width

In order to achieve the STC ratings in the table above the partition width (excluding the board) shall be a minimum of 77mm.

| Stud Depth | Rail | Lining Suffix | Plasterboard | Total Partition |
|------------|------|-----------------|--------------|-----------------|
| 64mm | 13mm | M46 | 46mm | 123mm |
| | | F52, M52 | 52mm | 129mm |
| | | | | |

Wall Sound Absorber

Install Sound Absorber between studs of the frame. Use 75mm thick R1.8 glass wool blanket.

Acoustic Resilient Rail

The resilient Rail shall be fixed to the studs at 600mm centres using 32mm x 8g wafer head self tapping screws through the base flange and into each stud. The base flange to face downwards and resilient edge upwards. Rails may be joined over the studs by nesting together with no more than 20mm overlap. Fasten through both channels into stud. Highest resilient channel shall be fixed no more than 75mm from the ceiling line and the lowest channel, 50mm from the floor line.

Plasterboard Lining

NB: The installer must look for the Product Identification Code on the face paper to ensure the correct board type is installed. Refer to the Face Paper Product Identification Code table on this page.

Framing Side: Two layers of EPB Plasterboard as per specified system above, fixed vertically. Vertical joints of outer layer should be offset by 600mm from those of the inner layer. All sheet joints must be fixed over steel framing.

Resilient Rail Side: Two layers of EPB Plasterboard as per specified system above, fixed vertically on the furring channel. Vertical joints of outer layer should be offset by 600mm from those of the inner layer.

Use full height sheets where possible. The inner layers are fixed hard to the floor. Sheet end butt joints must be formed over nogs or rails and offset the outer layer joints from the inner layer.

Sheets shall be touch fitted.

Fixing of Linings

Fasteners (As per Specified System Above)

| System Number | Resilient Rail Side | | Framing Side | |
|--|-----------------------------|-----------------------|-----------------------|-----------------------|
| | 1 st Layer | 2 nd Layer | 1 st Layer | 2 nd Layer |
| | Self-Tapping Drywall Screws | | | |
| E4SRA90-M46 | 10mm | 13mm | 10mm | 13mm |
| | 25 x 6g | 41 x 6g | 25 x 6g | 41 x 6g |
| E4SRA90-F52 E4SRA90-M52 | 13mm | 13mm | 13mm | 13mm |
| | 25 x 6g | 41 x 6g | 25 x 6g | 41 x 6g |

Fastener Centres

Framing Side: Fix at 300mm centres up each stud with no fixing to top or bottom track sections.

Place fasteners no closer than 12mm to the sheet edge and 50mm from sheet ends.

Resilient Rail Side: Fix 300mm centres along each resilient rail.

Place fasteners minimum 12mm from sheet edges and sheet ends.

Place fasteners at 200mm centres where sheet end butt joints occur.

Avoid outer layer screws from hitting inner layer screws.

Lining screws to be fastened to the side of the studs and to ensure that they don't penetrate or touch the framing.

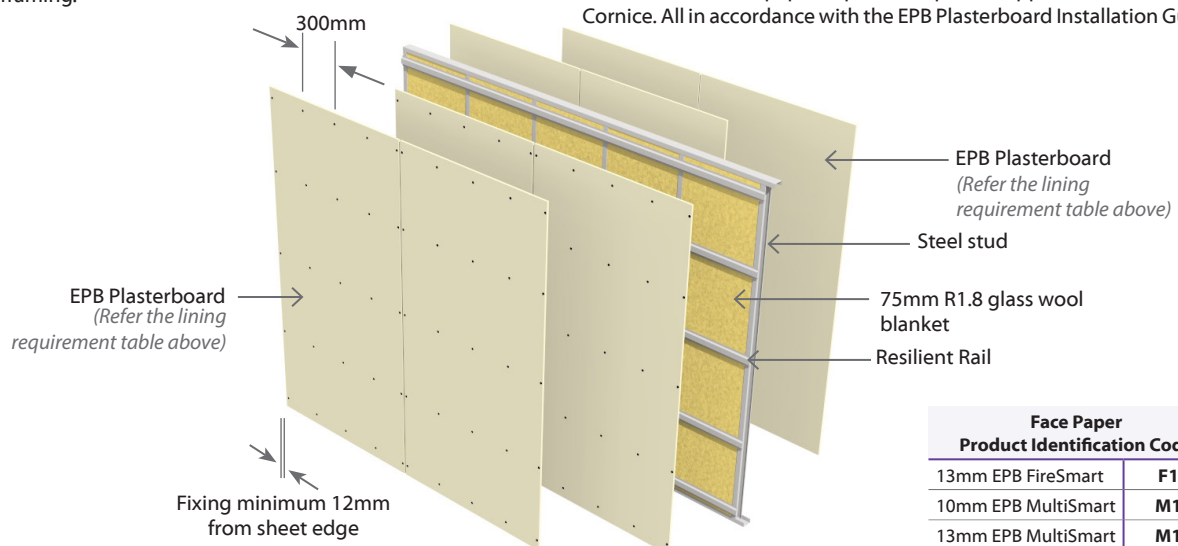
Acoustic Sealant

A bead of acoustical sealant is required around the perimeter of the inner layer and the outer layer is bedded onto the bead. The perimeter junctions of the wall must be airtight.

Jointing

Inner Layer: Unstopped

Outer Layer: All fastener heads stopped and all sheet joints reinforced with paper jointing tape and stopped. Wall to ceiling junctions are to be reinforced with paper tape and square stopped or finished with Cornice. All in accordance with the EPB Plasterboard Installation Guide.



| Face Paper Product Identification Code | |
|--|------------|
| 13mm EPB FireSmart | F13 |
| 10mm EPB MultiSmart | M10 |
| 13mm EPB MultiSmart | M13 |



E4SQA30**Quiet Steel Frame**

Non Load Bearing

Two Way FRR

4 Layers: 2 Layers of Plasterboard to each side of frameFull Intertency **A**coustic

| System Number | Lining Suffix | FRR | Load Bearing Ability | Noise Control | | Lining Requirement |
|----------------|---------------|---------|----------------------|---------------|----|----------------------------------|
| | | | | STC | Rw | |
| E4SQA30 | -F40 | -/30/30 | NLB | 55 | 54 | 2 x 10mm EPB FireSmart each side |

Framing

Quiet Steel Frame – Tracks to be 92mm x 30mm x 0.55 BMT and are fixed to floor and ceiling. Quiet Steel studs 92mm x 42mm x 0.55 BMT are friction fitted and placed at max 600mm centres with a minimum 15mm expansion gap at top of frame.

No fixings to the top track allowed.

Wall Heights

Recommended maximum height is 3.6m. Higher walls may be subject to specific engineering design or consult the framing manufacturer.

Partition Width

In order to achieve the STC ratings in the table above the partition width (excluding the board) shall be a minimum of 92mm.

| Stud Depth | Lining Suffix | Plasterboard | Total Partition |
|------------|---------------|--------------|-----------------|
| 92mm | S40 | 40mm | 132mm |

Wall Sound Absorber

Install Sound Absorber between studs of the frame. Use 90mm thick R2.2 glass wool blanket.

Plasterboard Lining

NB: The installer must look for the Product Identification Code on the face paper to ensure the correct board type is installed. Refer to the Face Paper Product Identification Code table on this page.

Two layers of 10mm EPB FireSmart lining fixed to each side of the Quiet steel framing.

Vertical fixing only permitted. Use full height sheets where possible. Inner layer joints on opposite side of frame are offset. All sheet joints must be fixed over steel framing. Vertical joints of the outer layer should be offset by 600mm from those of the inner layer. Sheet end butt joints must be formed over nogs and offset the outer layer joints from the inner layer. The inner layers are fixed hard to the floor. Sheets shall be touch fitted.

Acoustic Sealant

A bead of acoustical sealant is required around the perimeter of the inner layer and the outer layer is bedded onto the bead. The perimeter junctions of the wall must be airtight.

Fixing of Linings**Fasteners**

| System Number | Side One | | Side Two | |
|--------------------|-----------------------------|-----------------------|-----------------------|-----------------------|
| | 1 st Layer | 2 nd Layer | 1 st Layer | 2 nd Layer |
| | Self-Tapping Drywall Screws | | | |
| E4SQA30-F40 | 10mm | 10mm | 10mm | 10mm |
| | 25 x 6g | 32 x 6g | 25 x 6g | 32 x 6g |

Fastener Centres

Inner Layer: Fix at 300mm centres up all studs.

Outer Layer: Fix at 300mm centres up all studs.

Place fasteners no closer than 12mm to the sheet edge and 50mm from sheet ends.

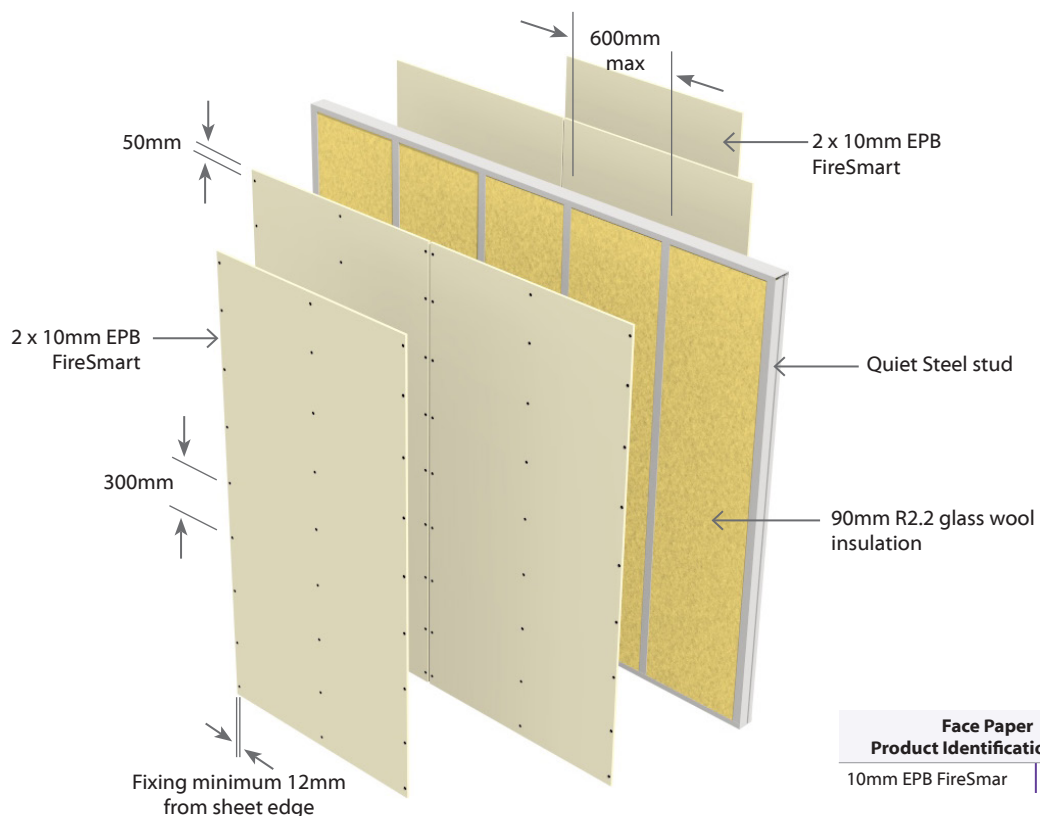
Place fasteners at 200mm centres where sheet end butt joints occur.

Avoid outer layer screws from hitting inner layer screws.

Jointing

Inner Layer: Unstopped

Outer Layer: All fastener heads stopped and all sheet joints reinforced with paper jointing tape and stopped. Wall to ceiling junctions are to be reinforced with paper tape and square stopped or finished with Cornice. All in accordance with EPB Plasterboard Installation Guide.



| Face Paper Product Identification Code | |
|--|------------|
| 10mm EPB FireSmart | F10 |



E4SQA45**Quiet Steel Frame**

Non Load Bearing

Two Way FRR

4 Layers: 2 Layers of Plasterboard to each side of frameFull Intertency **A**coustic

| System Number | Lining Suffix | FRR | Load Bearing Ability | Noise Control | | Lining Requirement |
|----------------|---------------|---------|----------------------|---------------|----|--|
| | | | | STC | Rw | |
| E4SQA45 | -S46 | -/45/45 | NLB | 56 | 55 | 1x 10mm EPB Standard & 1 x 13mm Standard each side |

Framing

Quiet Steel Frame – Tracks to be 92mm x 30mm x 0.55 BMT and are fixed to floor and ceiling. Quiet Steel studs 92mm x 42mm x 0.55 BMT are friction fitted and placed at max 600mm centres with a minimum 15mm expansion gap at top of frame.

No fixings to the top track allowed.

Wall Heights

Recommended maximum height is 3.6m. Higher walls may be subject to specific engineering design or consult the framing manufacturer.

Partition Width

In order to achieve the STC ratings in the table above the partition width (excluding the board) shall be a minimum of 92mm.

| Stud Depth | Lining Suffix | Plasterboard | Total Partition |
|------------|---------------|--------------|-----------------|
| 92mm | S46 | 46mm | 138mm |

Wall Sound Absorber

Install Sound Absorber between studs of the frame. Use 90mm thick R2.2 glass wool blanket.

Plasterboard Lining

NB: The installer must look for the Product Identification Code on the face paper to ensure the correct board type is installed. Refer to the Face Paper Product Identification Code table on this page.

One layer of 10mm EPB Standard and One layer of 13mm EPB Standard linings fixed to each side of the Quiet steel framing.

Vertical fixing only permitted. Use full height sheets where possible. Inner layer joints on opposite side of frame are offset. All sheet joints must be fixed over steel framing. Vertical joints of the outer layer should be offset by 600mm from those of the inner layer. Sheet end butt joints must be formed over nogs and offset the outer layer joints from the inner layer. The inner layers are fixed hard to the floor. Sheets shall be touch fitted.

Acoustic Sealant

A bead of acoustic sealant must be placed around the perimeter of the inner layer. The outer layer is then bedded onto the bead. The perimeter junctions of the wall must be airtight.

Fixing of Linings**Fasteners**

| System Number | Side One | | Side Two | |
|--------------------|-----------------------------|-----------------------|-----------------------|-----------------------|
| | 1 st Layer | 2 nd Layer | 1 st Layer | 2 nd Layer |
| | Self-Tapping Drywall Screws | | | |
| E4SQA45-S46 | 10mm | 13mm | 10mm | 13mm |
| | 25 x 6g | 41 x 6g | 25 x 6g | 41 x 6g |

Fastener Centres

Inner Layer: Fix at 300mm centres up all studs.

Outer Layer: Fix at 300mm centres up all studs.

Place fasteners no closer than 12mm to the sheet edge and 50mm from sheet ends.

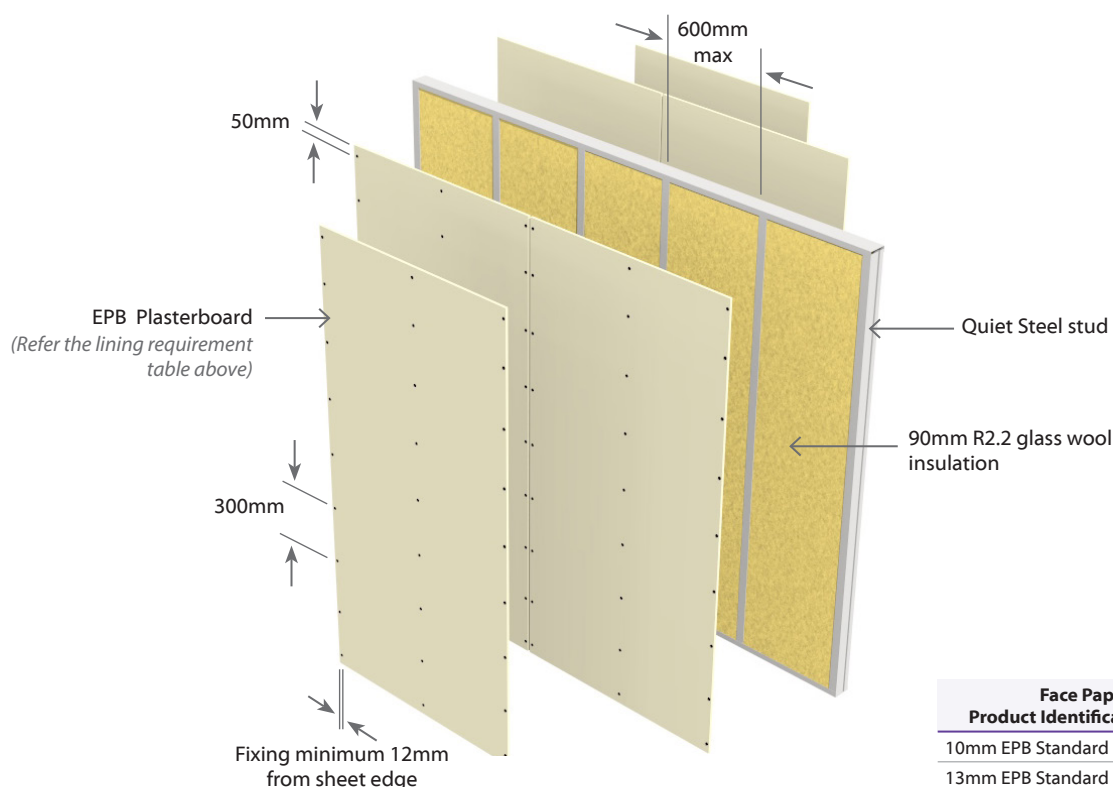
Place fasteners at 200mm centres where sheet end butt joints occur.

Avoid outer layer screws from hitting inner layer screws.

Jointing

Inner Layer: Unstopped

Outer Layer: All fastener heads stopped and all sheet joints reinforced with paper jointing tape and stopped. Wall to ceiling junctions are to be reinforced with paper tape and square stopped or finished with Cornice. All in accordance with EPB Plasterboard Installation Guide.



| Face Paper Product Identification Code | |
|--|------------|
| 10mm EPB Standard | S10 |
| 13mm EPB Standard | S13 |



E3SQA60**Quiet Steel Frame**

Non Load Bearing

Two Way FRR

3 Layers: 1 Layer of Plasterboard to one side of frame &
2 Layers of Plasterboard to other side of frame

Full Intertency **A**coustic

| System Number | Lining Suffix | FRR | Load Bearing Ability | Noise Control | | Lining Requirement |
|----------------|---------------|---------|----------------------|---------------|----|--|
| | | | | STC | Rw | |
| E3SQA60 | -M33 | -/60/60 | NLB | 55 | 54 | 1 x 13mm EPB MultiSmart one side 2 x 10mm EPB MultiSmart other side |
| | -M36 | -/60/60 | NLB | 55 | 54 | 1 x 13mm EPB MultiSmart one side 1 x 10mm EPB MultiSmart & 1 x 13mm EPB MultiSmart other side |
| | -M39 | -/60/60 | NLB | 57 | 56 | 1 x 13mm EPB MultiSmart one side 2 x 13mm EPB MultiSmart other side |

Framing

Quiet Steel Frame – Tracks to be 92mm x 30mm x 0.55 BMT and are fixed to floor and ceiling. Quiet Steel studs 92mm x 42mm x 0.55 BMT are friction fitted and placed at max 600mm centres with a minimum 15mm expansion gap at top of frame.

No fixings to the top tracks allowed.

Wall Heights

Recommended maximum height is 3.6m. Higher walls may be subject to specific engineering design or consult the framing manufacturer.

Partition Width

In order to achieve the STC ratings in the table above the partition width (excluding the board) shall be a minimum of 92mm.

| Stud Depth | Lining Suffix | Plasterboard | Total Partition |
|------------|---------------|--------------|-----------------|
| 92mm | M33 | 33mm | 125mm |
| | M36 | 36mm | 128mm |
| | M39 | 39mm | 131mm |

Wall Sound Absorber

Install Sound Absorber between studs of the frame. Use 90mm thick R2.2 glass wool blanket.

Plasterboard Lining

NB: The installer must look for the Product Identification Code on the face paper to ensure the correct board type is installed. Refer to the Face Paper Product Identification Code table on this page.

One layer of EPB Plasterboard lining on one side and Two layers on the other side as per specified system above.

Vertical fixing only permitted. Use full height sheets where possible. Inner layer joints on opposite side of frame should be offset. All sheet joints must be fixed over steel framing. Vertical joints of the outer layer should be offset by 600mm from those of the inner layer. Sheet end butt joints must be formed over nogs. The inner layers are fixed hard to the floor. Sheets shall be touch fitted.

Acoustic Sealant

A bead of acoustic sealant is required around the perimeter of the framing or the inner layer. The single or outer layer is then bedded onto the bead. The perimeter junctions of the wall must be airtight.

Fixing of Linings

Fasteners (As per Specified System Above)

| System Number | Side One | | Side Two |
|--------------------|-----------------------------|-----------------------|--------------|
| | 1 st Layer | 2 nd Layer | Single Layer |
| | Self-Tapping Drywall Screws | | |
| E3SQA60-M33 | 10mm | 10mm | 13mm |
| | 25 x 6g | 32 x 6g | 25 x 6g |
| E3SQA60-M36 | 13mm | 10mm | 13mm |
| | 25 x 6g | 41 x 6g | 25 x 6g |
| E3SQA60-M39 | 13mm | 13mm | 13mm |
| | 25 x 6g | 41 x 6g | 25 x 6g |

Fastener Centres

Inner layer: Fix at 300mm centres up all studs.

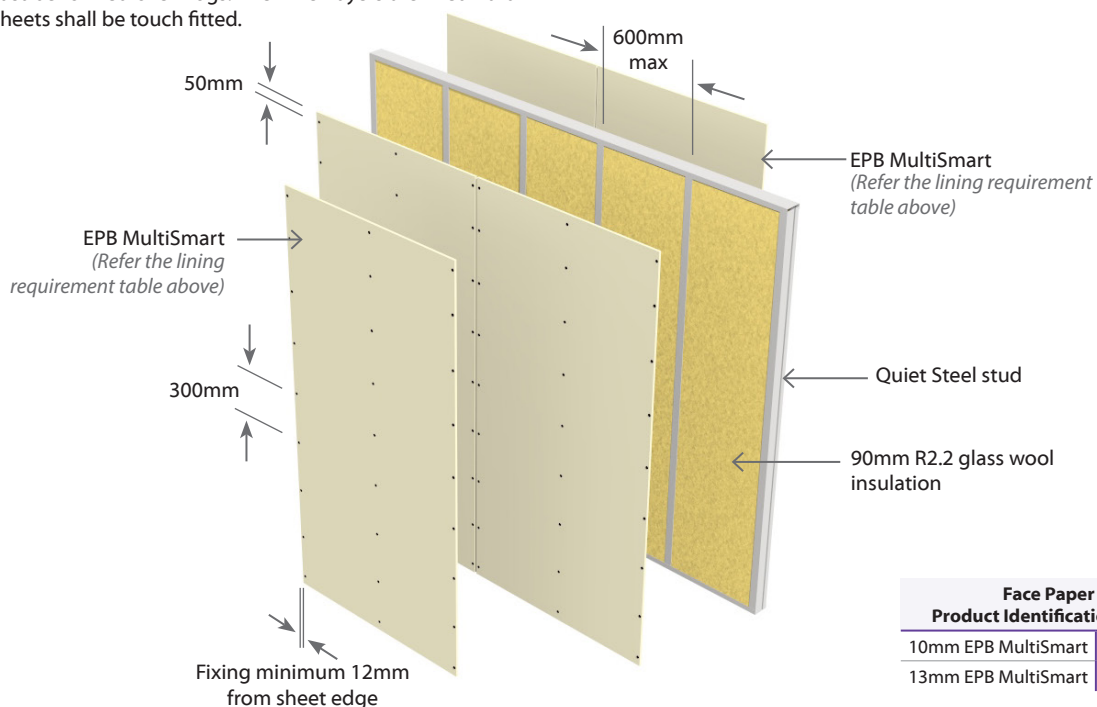
Single or Outer Layer: Fix at 300mm centres up all studs.

Place fasteners 12mm from the sheet edge and 50mm from sheet ends. Place fasteners at 200mm centres where sheet end butt joints occur. Avoid outer layer screws from hitting inner layer screws.

Jointing

Inner Layer: Unstopped.

Outer or Single Layer: All fastener heads stopped and all sheet joints reinforced with paper jointing tape and stopped. Wall to ceiling junctions are to be reinforced with paper tape and square stopped or finished with Cornice. All in accordance with EPB Plasterboard Installation Guide.



| Face Paper Product Identification Code | |
|--|------------|
| 10mm EPB MultiSmart | M10 |
| 13mm EPB MultiSmart | M13 |



E4SQA60**Quiet Steel Frame**

Non Load Bearing

Two Way FRR

4 Layers: 2 Layers of Plasterboard to each side of frameFull Intertenancy **A**coustic

| System Number | Lining Suffix | FRR | Load Bearing Ability | Noise Control | | Lining Requirement |
|----------------|---------------|---------|----------------------|---------------|----|-----------------------------------|
| | | | | STC | Rw | |
| E4SQA60 | -S52 | -/60/60 | NLB | 57 | 56 | 2 x 13mm EPB Standard each side |
| | -M40 | -/60/60 | NLB | 57 | 56 | 2 x 10mm EPB MultiSmart each side |

Framing

Quiet Steel Frame – Tracks to be 92mm x 30mm x 0.55 BMT and are fixed to floor and ceiling. Quiet Steel studs 92mm x 42mm x 0.55 BMT are friction fitted and placed at max 600mm centres with a minimum 15mm expansion gap at top of frame.

No fixings to the top tracks allowed.

Wall Heights

Recommended maximum height is 3.6m. Higher walls may be subject to specific engineering design or consult the framing manufacturer.

Partition Width

In order to achieve the STC ratings in the table above the partition width (excluding the board) shall be a minimum of 92mm.

| Stud Depth | Lining Suffix | Plasterboard | Total Partition |
|------------|---------------|--------------|-----------------|
| 92mm | S52 | 52mm | 144mm |
| | M40 | 40mm | 132mm |

Wall Sound Absorber

Install Sound Absorber between studs of the frame. Use 90mm thick R2.2 glass wool blanket.

Plasterboard Lining

NB: The installer must look for the Product Identification Code on the face paper to ensure the correct board type is installed. Refer to the Face Paper Product Identification Code table on this page.

Two layers of EPB Plasterboard lining on one side and Two Layers on the other side as per specified system above.

Vertical fixing only permitted. Use full height sheets where possible. Inner layer joints on opposite side of frame should be offset. All sheet joints must be fixed over steel framing. Vertical joints of the outer layer should be offset by 600mm from those of the inner layer.

Sheet end butt joints must be formed over nogs. The inner layers are fixed hard to the floor. Sheets shall be touch fitted.

Acoustic Sealant

A bead of acoustical sealant is required around the perimeter of the inner layer and the outer layer is bedded onto the bead. The perimeter junctions of the wall must be airtight.

Fixing of Linings

Fasteners (As per Specified System Above)

| System Number | Side One | | Side Two | |
|--------------------|-----------------------------|-----------------------|-----------------------|-----------------------|
| | 1 st Layer | 2 nd Layer | 1 st Layer | 2 nd Layer |
| | Self-Tapping Drywall Screws | | | |
| E4SQA60-S52 | 13mm | 13mm | 13mm | 13mm |
| | 25 x 6g | 41 x 6g | 25 x 6g | 41 x 6g |
| E4SQA60-M40 | 10mm | 10mm | 10mm | 10mm |
| | 25 x 6g | 32 x 6g | 25 x 6g | 32 x 6g |

Fastener Centres

Inner Layer: Fix at 300mm centres up all studs.

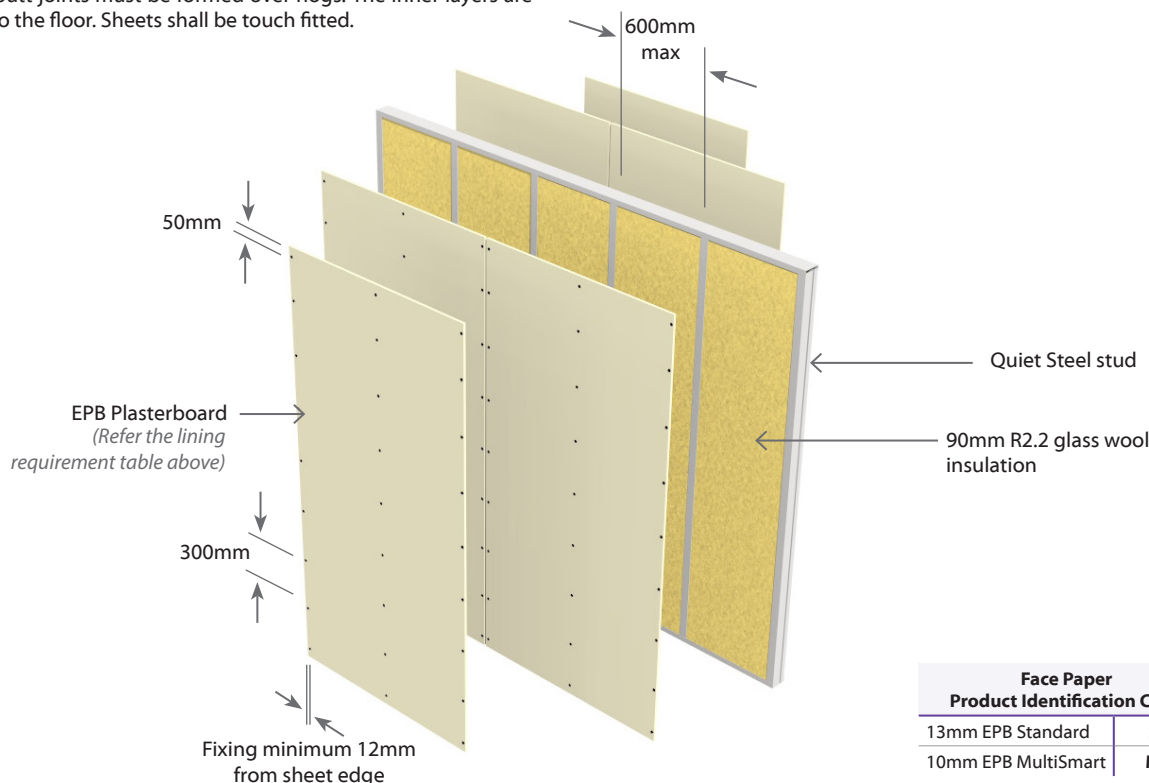
Outer Layer: Fix at 300mm centres up all studs.

Place fasteners no closer than 12mm to the sheet edge and 50mm from sheet ends. Place fasteners at 200mm centres where sheet end butt joints occur. Avoid outer layer screws from hitting inner layer screws.

Jointing

Inner Layer: Unstopped

Outer Layer: All fastener heads stopped and all sheet joints reinforced with paper jointing tape and stopped. Wall to ceiling junctions are to be reinforced with paper tape and square stopped or finished with Cornice. All in accordance with EPB Plasterboard Installation Guide.



| Face Paper Product Identification Code | |
|--|------------|
| 13mm EPB Standard | S13 |
| 10mm EPB MultiSmart | M10 |



E4SQA75**Quiet Steel Frame**

Non Load Bearing

Two Way FRR

4 Layers: 2 Layers of Plasterboard to each side of frameFull Intertency **A**coustic

| System Number | Lining Suffix | FRR | Load Bearing Ability | Noise Control | | Lining Requirement |
|----------------|---------------|---------|----------------------|---------------|----|---|
| | | | | STC | Rw | |
| E4SQA75 | -MS52 | -/75/75 | NLB | 59 | 58 | 1 x 13mm EPB MultiSmart And 1 x 13mm Standard each side |

Framing

Quiet Steel Frame – Tracks to be 92mm x 30mm x 0.55 BMT and are fixed to floor and ceiling. Quiet Steel studs 92mm x 42mm x 0.55 BMT are friction fitted and placed at max 600mm centres with a minimum 15mm expansion gap at top of frame.

No fixings to the top tracks allowed.

Wall Heights

Recommended maximum height is 3.6m. Higher walls may be subject to specific engineering design or consult the framing manufacturer.

Partition Width

In order to achieve the STC ratings in the table above the partition width (excluding the board) shall be a minimum of 92mm.

| Stud Depth | Lining Suffix | Plasterboard | Total Partition |
|------------|---------------|--------------|-----------------|
| 92mm | MS52 | 52mm | 144mm |

Wall Sound Absorber

Install Sound Absorber between studs of the frame. Use 90mm thick R2.2 glass wool blanket.

Plasterboard Lining

NB: The installer must look for the Product Identification Code on the face paper to ensure the correct board type is installed. Refer to the Face Paper Product Identification Code table on this page.

One layer of 13mm EPB MultiSmart and One layer of 13mm EPB Standard linings fixed to each side of the Quiet steel framing.

Vertical fixing only permitted. Use full height sheets where possible. Inner layer joints on opposite side of frame are offset. All sheet joints must be fixed over steel framing. Vertical joints of the outer layer should be offset by 600mm from those of the inner layer.

Sheet end butt joints must be formed over nogs and offset the outer layer joints from the inner layer. The inner layers are fixed hard to the floor. Sheets shall be touch fitted.

Acoustic Sealant

A bead of acoustical sealant is required around the perimeter of the inner layer and the outer layer is bedded onto the bead. The perimeter junctions of the wall must be airtight.

Fixing of Linings**Fasteners**

| System Number | Side One | | Side Two | |
|---------------------|-----------------------------|-----------------------|-----------------------|-----------------------|
| | 1 st Layer | 2 nd Layer | 1 st Layer | 2 nd Layer |
| E4SQA75-MS52 | Self-Tapping Drywall Screws | | | |
| | 13mm | 13mm | 13mm | 13mm |
| | 25 x 6g | 41 x 6g | 25 x 6g | 41 x 6g |

Fastener Centres

Inner Layer: Fix at 300mm centres up all studs.

Outer Layer: Fix at 300mm centres up all studs.

Place fasteners no closer than 12mm to the sheet edge and 50mm from sheet ends.

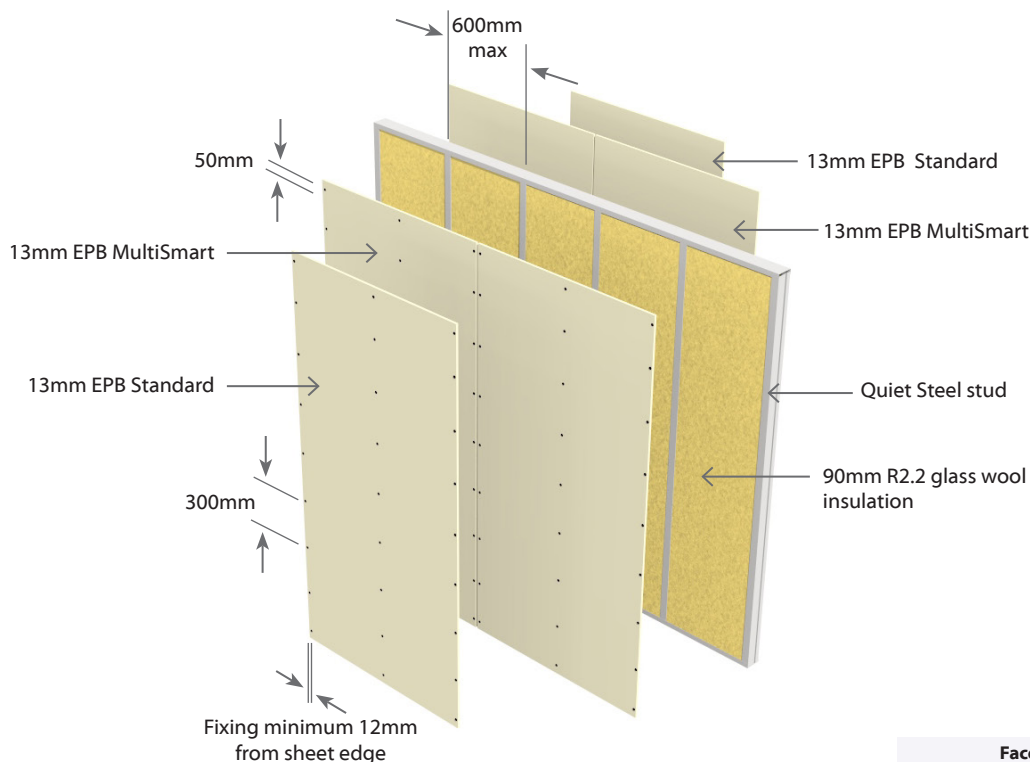
Place fasteners at 200mm centres where sheet end butt joints occur.

Avoid outer layer screws from hitting inner layer screws.

Jointing

Inner Layer: Unstopped

Outer Layer: All fastener heads stopped and all sheet joints reinforced with paper jointing tape and stopped. Wall to ceiling junctions are to be reinforced with paper tape and square stopped or finished with Cornice. All in accordance with EPB Plasterboard Installation Guide.



| Face Paper Product Identification Code | |
|--|------------|
| 13mm EPB Standard | S13 |
| 13mm EPB MultiSmart | M13 |



E4SQA90**Quiet Steel Frame**

Non Load Bearing

Two Way FRR

4 Layers: 2 Layers of Plasterboard to each side of frameFull Intertency **Acoustic**

| System Number | Lining Suffix | FRR | Load Bearing Ability | Noise Control | | Lining Requirement |
|----------------|---------------|--------|----------------------|---------------|----|---|
| | | | | STC | Rw | |
| E4SQA90 | -M46 | -90/90 | NLB | 59 | 58 | 1 x 10mm EPB MultiSmart And 1 x 13mm EPB MultiSmart each side |
| | -M52 | -90/90 | NLB | 61 | 60 | 2 x 13mm EPB MultiSmart each side |

Framing

Quiet Steel Frame – Tracks to be 92mm x 30mm x 0.55 BMT and are fixed to floor and ceiling. Quiet Steel studs 92mm x 42mm x 0.55 BMT are friction fitted and placed at max 600mm centres with a minimum 15mm expansion gap at top of frame.

No fixings to the top tracks allowed.

Wall Heights

Recommended maximum height is 3.6m. Higher walls may be subject to specific engineering design or consult the framing manufacturer.

Partition Width

In order to achieve the STC ratings in the table above the partition width (excluding the board) shall be a minimum of 92mm.

| Stud Depth | Lining Suffix | Plasterboard | Total Partition |
|------------|---------------|--------------|-----------------|
| 92mm | M46 | 46mm | 138mm |
| | M52 | 52mm | 144mm |

Wall Sound Absorber

Install Sound Absorber between studs of the frame. Use 90mm thick R2.2 glass wool blanket.

Plasterboard Lining

NB: The installer must look for the Product Identification Code on the face paper to ensure the correct board type is installed. Refer to the Face Paper Product Identification Code table on this page.

Two layers of EPB Plasterboard as per specified system above, fixed to each side of the Quiet steel framing.

Vertical fixing only permitted. Use full height sheets where possible. Inner layer joints on opposite side of frame are offset. All sheet joints must be fixed over steel framing. Vertical joints of the outer layer should be offset by 600mm from those of the inner layer.

Sheet end butt joints must be formed over nogs and offset the outer layer joints from the inner layer. The inner layers are fixed hard to the floor. Sheets shall be touch fitted.

Acoustic Sealant

A bead of acoustical sealant is required around the perimeter of the inner layer and the outer layer is bedded onto the bead. The perimeter junctions of the wall must be airtight.

Fixing of Linings

Fasteners (As per Specified System Above)

| System Number | Side One | | Side Two | |
|-----------------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| | 1 st Layer | 2 nd Layer | 1 st Layer | 2 nd Layer |
| Self-Tapping Drywall Screws | | | | |
| E4SQA90-M46 | 10mm | 13mm | 10mm | 13mm |
| | 25 x 6g | 41 x 6g | 25 x 6g | 41 x 6g |
| E4SQA90-M52 | 13mm | 13mm | 13mm | 13mm |
| | 25 x 6g | 41 x 6g | 25 x 6g | 41 x 6g |

Fastener Centres

Inner Layer: Fix at 300mm centres up all studs.

Outer Layer: Fix at 300mm centres up all studs.

Place fasteners no closer than 12mm to the sheet edge and 50mm from sheet ends.

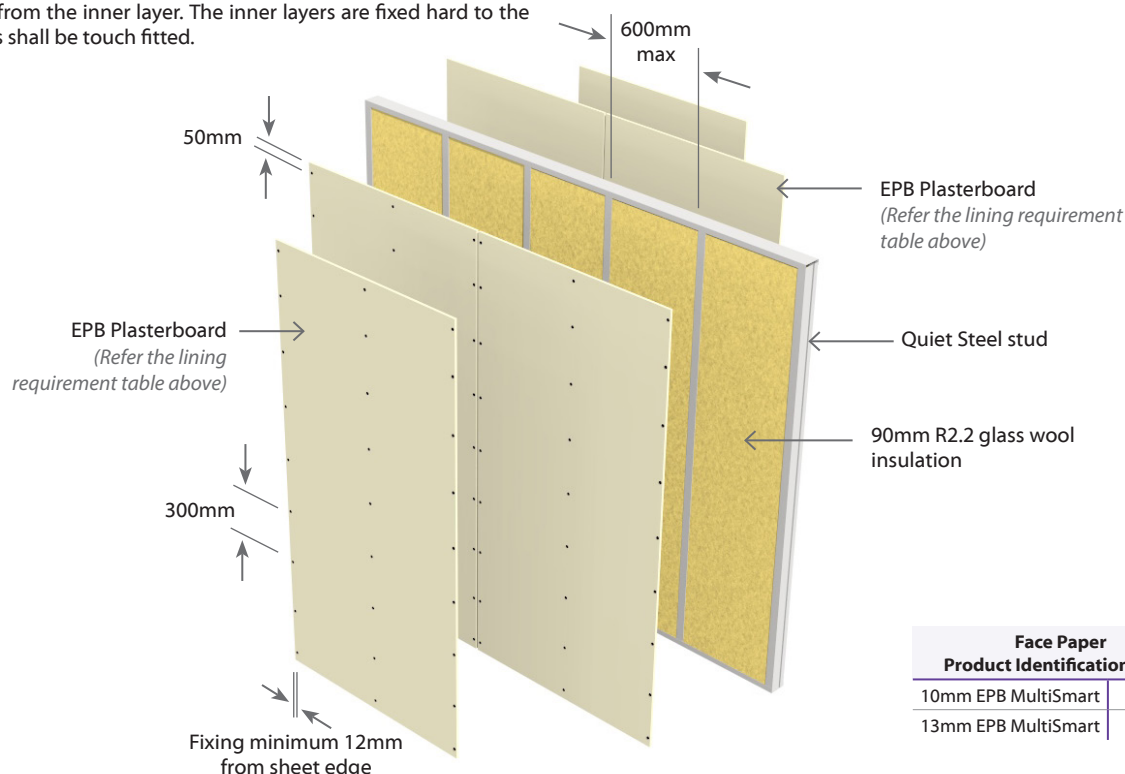
Place fasteners at 200mm centres where sheet end butt joints occur.

Avoid outer layer screws from hitting inner layer screws.

Jointing

Inner Layer: Unstopped

Outer Layer: All fastener heads stopped and all sheet joints reinforced with paper jointing tape and stopped. Wall to ceiling junctions are to be reinforced with paper tape and square stopped or finished with Cornice. All in accordance with EPB Plasterboard Installation Guide.



| Face Paper Product Identification Code | |
|--|------------|
| 10mm EPB MultiSmart | M10 |
| 13mm EPB MultiSmart | M13 |



E3SSA30**Staggered Steel Frame**

Non Load Bearing

Two Way FRR

- 3 Layers:** 1 Layer of Plasterboard to one side of frame &
2 Layers of Plasterboard to other side of frame

Full Intertency **A**coustic

| System Number | Lining Suffix | FRR | Load Bearing Ability | Noise Control | | Lining Requirement |
|----------------|---------------|---------|----------------------|---------------|----|--|
| | | | | STC | Rw | |
| E3SSA30 | -S39 | -/30/30 | NLB | 55 | 54 | 1 x 13mm EPB Standard one side 2 x 13mm EPB Standard other side |

Framing

Staggered Steel Frame – Track to be a minimum size of 92mm x 30mm x 0.55 BMT and are fixed to floor and ceiling. Steel studs with minimum dimensions 64 x 34 x 0.55 mm BMT with 6mm return.

Stud to be fixed to the tracks using Staggered Stud Clip and placed at 600mm centres with a 15mm expansion gap at top of frame. Studs to be offset 300mm centres.

No other fixings to the track allowed.

Wall Heights

Recommended maximum height is 2.4m. Higher walls may be subject to specific engineering design or consult the framing manufacturer.

Partition Width

In order to achieve the STC ratings in the table above the partition width (excluding the board) shall be a minimum of 92mm.

| Track Depth | Lining Suffix | Plasterboard | Total Partition |
|-------------|---------------|--------------|-----------------|
| 92mm | S39 | 39mm | 131mm |

Wall Sound Absorber

Install Sound Absorber between studs of the frame. Use 75mm thick R1.8 glass wool blanket. Split 600mm wide blankets into 300mm.

Plasterboard Lining

NB: The installer must look for the Product Identification Code on the face paper to ensure the correct board type is installed. Refer to the Face Paper Product Identification Code table on this page.

One layer of 13mm EPB Standard lining on one side and Two layers of 13mm EPB Standard linings fixed to the other side of the Staggered steel framing.

Vertical fixing only permitted. Use full height sheets where possible. All sheet joints must be fixed over steel framing. Vertical joints of the outer layer should be offset by 600mm from those of the inner layer. Sheet end butt joints must be formed over nogs and offset the outer layer joints from the inner layer. The inner layers are fixed hard to the floor. Sheets shall be touch fitted.

Fixing of Linings**Fasteners**

| System Number | Side One | | Side Two |
|--------------------|-----------------------------|-----------------------|--------------|
| | 1 st Layer | 2 nd Layer | Single Layer |
| | Self-Tapping Drywall Screws | | |
| E3SSA30-S39 | 13mm | 13mm | 13mm |
| | 25 x 6g | 41 x 6g | 25 x 6g |

Fastener Centres

Inner layer: Fix at 600mm centres up all studs.

Single or Outer Layer: Fix at 300mm centres up all studs.

Place fasteners minimum 12mm from the sheet edge and 50mm from sheet ends

Place fasteners at 200mm centres where sheet end butt joints occur.

Avoid outer layer screws from hitting inner layer screws.

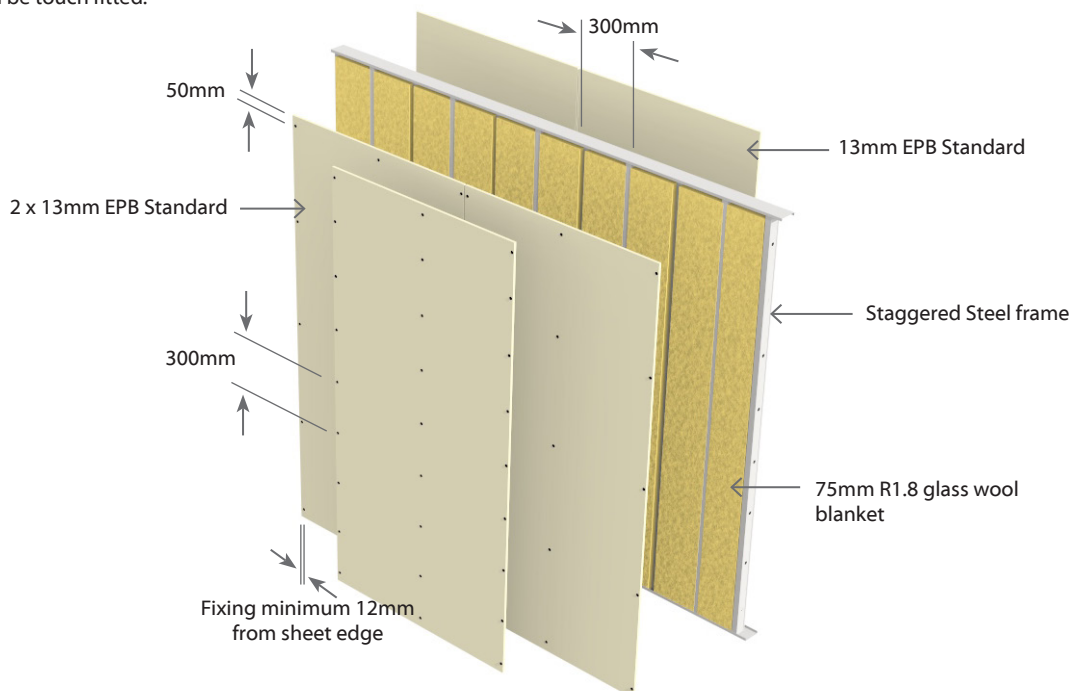
Acoustic Sealant

A bead of acoustic sealant is required around the perimeter of the framing or the inner layer. The single or outer layer is then bedded onto the bead. The perimeter junctions of the wall must be airtight.

Jointing

Inner Layer: Unstopped

Outer or Single Layer: All fastener heads stopped and all sheet joints reinforced with paper jointing tape and stopped. Wall to ceiling junctions are to be reinforced with paper tape and square stopped or finished with Cornice. All in accordance with EPB Plasterboard Installation Guide.



| Face Paper Product Identification Code | |
|--|------------|
| 13mm EPB Standard | S13 |



E4SSA45**Staggered Steel Frame**

Non Load Bearing

Two Way FRR

4 Layers: 2 Layers of Plasterboard to each side of frameFull Intertenancy **A**coustic

| System Number | Lining Suffix | FRR | Load Bearing Ability | Noise Control | | Lining Requirement |
|----------------|---------------|---------|----------------------|---------------|----|----------------------------------|
| | | | | STC | Rw | |
| E4SSA45 | -F40 | -/45/45 | NLB | 56 | 55 | 2 x 10mm EPB FireSmart each side |

Framing

Staggered Steel Frame – Tracks to be a minimum size of 92mm x 30mm x 0.55 BMT and are fixed to floor and ceiling. Steel studs with minimum dimensions 64 x 34 x 0.55 mm BMT with 6mm return.

Stud to be fixed to the tracks using Staggered Stud Clip and placed at 600mm centres with a 15mm expansion gap at top of frame.

Studs to be offset 300mm centres.

No other fixings to tracks are allowed.

Wall Heights

Recommended maximum height is 2.4m. Higher walls may be subject to specific engineering design or consult the framing manufacturer.

Partition Width

In order to achieve the STC ratings in the table above the partition width (excluding the board) shall be a minimum of 92mm.

| Track Depth | Lining Suffix | Plasterboard | Total Partition |
|-------------|---------------|--------------|-----------------|
| 92mm | S40 | 40mm | 132mm |

Wall Sound Absorber

Install Sound Absorber between studs of the frame. Use 75mm thick R1.8 glass wool blanket. Split 600mm wide blankets into 300mm.

Plasterboard Lining

NB: The installer must look for the Product Identification Code on the face paper to ensure the correct board type is installed. Refer to the Face Paper Product Identification Code table on this page.

Two layers of 10mm EPB FireSmart linings fixed to each side of the Staggered steel framing.

Vertical fixing only permitted. Use full height sheets where possible. All sheet joints must be fixed over steel framing. Vertical joints of the outer layer should be offset by 600mm from those of the inner layer. Sheet end butt joints must be formed over nogs and offset the outer layer joints from the inner layer. The inner layers are fixed hard to the floor. Sheets shall be touch fitted.

Fixing of Linings**Fasteners**

| System Number | Side One | | Side Two | |
|-----------------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| | 1 st Layer | 2 nd Layer | 1 st Layer | 2 nd Layer |
| Self-Tapping Drywall Screws | | | | |
| E4SSA45-F40 | 10mm | 10mm | 10mm | 10mm |
| | 25 x 6g | 32 x 6g | 25 x 6g | 32 x 6g |

Fastener Centres

Inner layer: Fix at 600mm centres up all studs.

Outer Layer: Fix at 300mm centres up all studs.

Place fasteners minimum 12mm from the sheet edge and 50mm from sheet ends

Place fasteners at 200mm centres where sheet end butt joints occur.

Avoid outer layer screws from hitting inner layer screws.

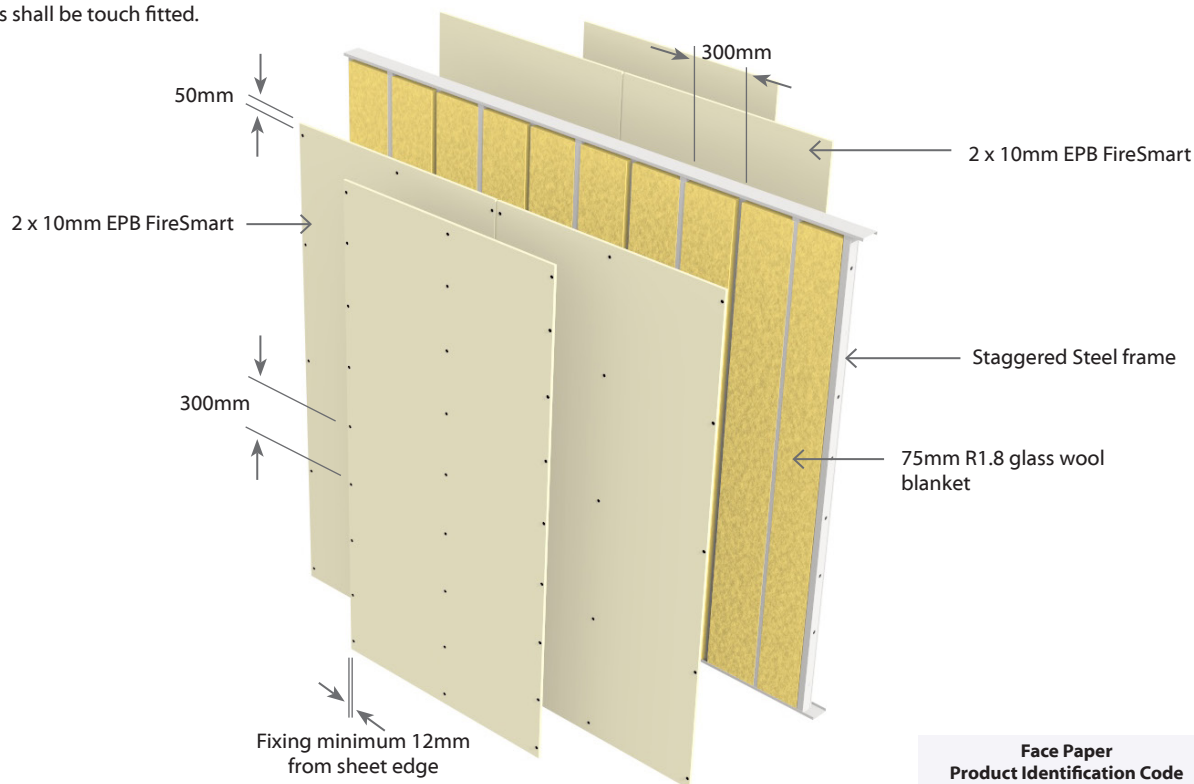
Acoustic Sealant

A bead of acoustical sealant is required around the perimeter of the inner layer and the outer layer is bedded onto the bead. The perimeter junctions of the wall must be airtight.

Jointing

Inner Layer: Unstopped

Outer Layer: All fastener heads stopped and all sheet joints reinforced with paper jointing tape and stopped. Wall to ceiling junctions are to be reinforced with paper tape and square stopped or finished with Cornice. All in accordance with EPB Plasterboard Installation Guide.



E3SSA60**Staggered Steel Frame**

Non Load Bearing

Two Way FRR

- 3 Layers:** 1 Layer of Plasterboard to one side of frame &
2 Layers of Plasterboard to other side of frame

Full Intertency **A**coustic

| System Number | Lining Suffix | FRR | Load Bearing Ability | Noise Control | | Lining Requirement |
|----------------|---------------|---------|----------------------|---------------|----|--|
| | | | | STC | Rw | |
| E3SSA60 | -MS39 | -/60/60 | NLB | 56 | 55 | 1 x 13mm EPB MultiSmart one side 2 x 13mm EPB Standard other side |
| | -M39 | -/60/60 | NLB | 57 | 56 | 1 x 13mm EPB MultiSmart one side 2 x 13mm EPB MultiSmart other side |

Framing

Staggered Steel Frame – Track to be a minimum size of 92mm x 30mm x 0.55 BMT and are fixed to floor and ceiling. Steel studs with minimum dimensions 64 x 34mm x 0.55 BMT with 6mm return. Stud to be fixed to the tracks using Staggered Stud Clip and placed at 600mm centres with a 15mm expansion gap at top of frame. Studs to be offset 300mm centres.

No other fixings to the track allowed.

Wall Heights

Recommended maximum height is 2.4m. Higher walls may be subject to specific engineering design or consult the framing manufacturer.

Partition Width

In order to achieve the STC ratings in the table above the partition width (excluding the board) shall be a minimum of 92mm.

| Track Depth | Lining Suffix | | Plasterboard | Total Partition |
|-------------|---------------|-------------|--------------|-----------------|
| 92mm | M39 | MS39 | 39mm | 131mm |

Wall Sound Absorber

Install Sound Absorber between studs of the frame. Use 75mm thick R1.8 glass wool blanket. Split 600mm wide blankets into 300mm.

Plasterboard Lining

NB: The installer must look for the Product Identification Code on the face paper to ensure the correct board type is installed. Refer to the Face Paper Product Identification Code table on this page.

One layer of EPB Plasterboard lining on one side and Two layers on the other side as per specified system above.

Vertical fixing only permitted. Use full height sheets where possible. All sheet joints must be fixed over steel framing. Vertical joints of the outer layer should be offset by 600mm from those of the inner layer. Sheet end butt joints must be formed over nogs and offset the outer layer joints from the inner layer. The inner layers are fixed hard to the floor. Sheets shall be touch fitted.

Fixing of Linings**Fasteners (As per Specified System Above)**

| System Number | Side One | | Side Two |
|---------------------|-----------------------------|-----------------------|--------------|
| | 1 st Layer | 2 nd Layer | Single Layer |
| | Self-Tapping Drywall Screws | | |
| E3SSA60-MS39 | 13mm | 13mm | 13mm |
| E3SSA60-M39 | 25 x 6g | 41 x 6g | 25 x 6g |

Fastener Centres

Inner layer: Fix at 600mm centres up all studs.

Single or Outer Layer: Fix at 300mm centres up all studs.

Place fasteners minimum 12mm from the sheet edge and 50mm from sheet ends

Place fasteners at 200mm centres where sheet end butt joints occur.

Avoid outer layer screws from hitting inner layer screws.

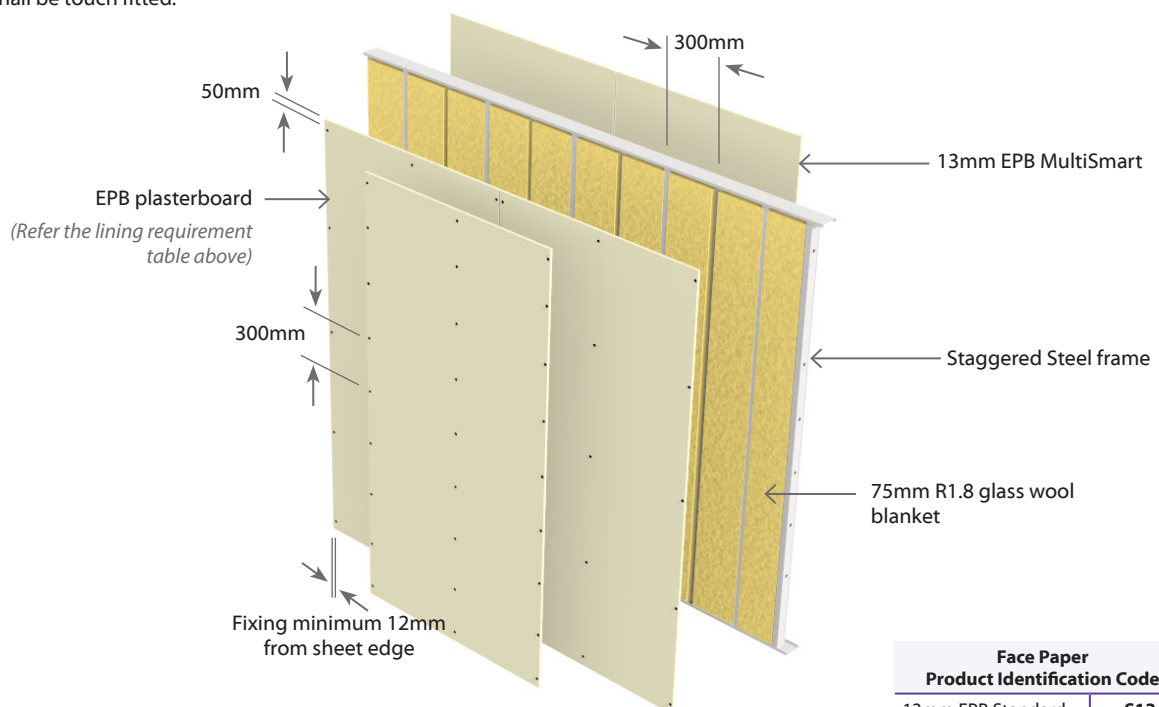
Acoustic Sealant

A bead of acoustic sealant is required around the perimeter of the framing or the inner layer. The single or outer layer is then bedded onto the bead. The perimeter junctions of the wall must be airtight.

Jointing

Inner Layer: Unstopped

Outer or Single Layer: All fastener heads stopped and all sheet joints reinforced with paper jointing tape and stopped. Wall to ceiling junctions are to be reinforced with paper tape and square stopped or finished with Cornice. All in accordance with EPB Plasterboard Installation Guide.



| Face Paper Product Identification Code | |
|--|------------|
| 13mm EPB Standard | S13 |
| 13mm EPB MultiSmart | M13 |



E4SSA60**Staggered Steel Frame**

Non Load Bearing

Two Way FRR

4 Layers: 2 Layers of Plasterboard to each side of frameFull Intertency **A**coustic

| System Number | Lining Suffix | FRR | Load Bearing Ability | Noise Control | | Lining Requirement |
|----------------|---------------|---------|----------------------|---------------|----|---------------------------------|
| | | | | STC | Rw | |
| E4SSA60 | -S52 | -/60/60 | NLB | 59 | 58 | 2 x 13mm EPB Standard each side |

Framing

Staggered Steel Frame – Tracks to be a minimum size of 92mm x 30mm x 0.55 BMT and are fixed to floor and ceiling. Steel studs with minimum dimensions 64 x 34mm x 0.55 BMT with 6mm return. Stud to be fixed to the tracks using Staggered Stud Clip and placed at 600mm centres with a 15mm expansion gap at top of frame.

Studs to be offset 300mm centres.

No other fixings to track are allowed.

Wall Heights

Recommended maximum height is 2.4m. Higher walls may be subject to specific engineering design or consult the framing manufacturer.

Partition Width

In order to achieve the STC ratings in the table above the partition width (excluding the board) shall be a minimum of 92mm.

| Track Depth | Lining Suffix | Plasterboard | Total Partition |
|-------------|---------------|--------------|-----------------|
| 92mm | S52 | 52mm | 144mm |

Wall Sound Absorber

Install Sound Absorber between studs of the frame. Use 75mm thick R1.8 glass wool blanket. Split 600mm wide blankets into 300mm.

Plasterboard Lining

NB: The installer must look for the Product Identification Code on the face paper to ensure the correct board type is installed. Refer to the Face Paper Product Identification Code table on this page.

Two layers of 13mm EPB Standard linings fixed to each side of the Staggered steel framing.

Vertical fixing only permitted. Use full height sheets where possible. All sheet joints must be fixed over steel framing. Vertical joints of the outer layer should be offset by 600mm from those of the inner layer. Sheet end butt joints must be formed over nogs and offset the outer layer joints from the inner layer. The inner layers are fixed hard to the floor. Sheets shall be touch fitted.

Fixing of Linings**Fasteners**

| System Number | Side One | | Side Two | |
|--------------------|-----------------------------|-----------------------|-----------------------|-----------------------|
| | 1 st Layer | 2 nd Layer | 1 st Layer | 2 nd Layer |
| | Self-Tapping Drywall Screws | | | |
| E4SSA60-S52 | 13mm | 13mm | 13mm | 13mm |
| | 25 x 6g | 41 x 6g | 25 x 6g | 41 x 6g |

Fastener Centres

Inner layer: Fix at 600mm centres up all studs.

Outer Layer: Fix at 300mm centres up all studs.

Place fasteners minimum 12mm from the sheet edge and 50mm from sheet ends

Place fasteners at 200mm centres where sheet end butt joints occur.

Avoid outer layer screws from hitting inner layer screws.

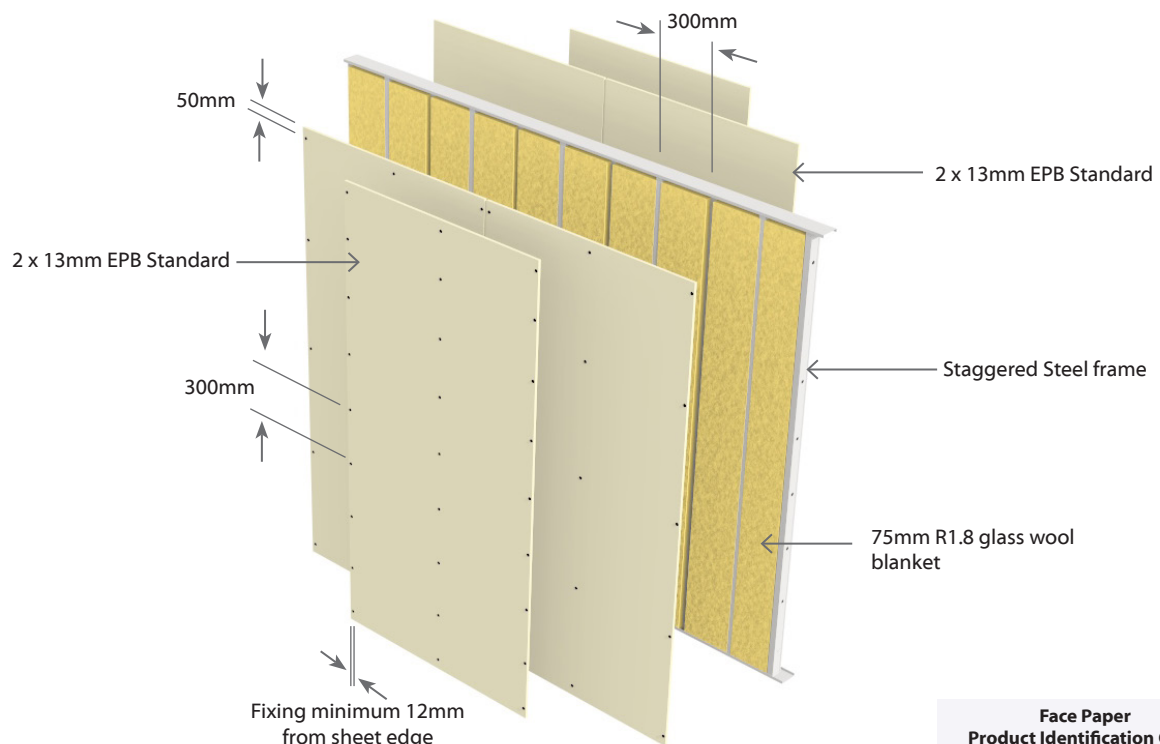
Acoustic Sealant

A bead of acoustical sealant is required around the perimeter of the inner layer and the outer layer is bedded onto the bead. The perimeter junctions of the wall must be airtight.

Jointing

Inner Layer: Unstopped

Outer Layer: All fastener heads stopped and all sheet joints reinforced with paper jointing tape and stopped. Wall to ceiling junctions are to be reinforced with paper tape and square stopped or finished with Cornice. All in accordance with EPB Plasterboard Installation Guide.



| Face Paper Product Identification Code | |
|--|------------|
| 13mm EPB Standard | S13 |



E4SSA90

Staggered Steel Frame

Non Load Bearing

Two Way FRR

4 Layers: 2 Layers of Plasterboard to each side of frame

Full Intertenancy Acoustic

| System Number | Lining Suffix | FRR | Load Bearing Ability | Noise Control | | Lining Requirement |
|---------------|---------------|---------|----------------------|---------------|----|--|
| | | | | STC | Rw | |
| E4SSA90 | -M46 | -/90/90 | NLB | 59 | 58 | 1 x 10mm And 1 x 13mm EPB MultiSmart each side |
| | -M52 | -/90/90 | NLB | 62 | 61 | 2 x 13mm EPB MultiSmart each side |

Framing

Staggered Steel Frame – Tracks to be a minimum size of 92mm x 30mm x 0.55 BMT and are fixed to floor and ceiling. Steel studs with minimum dimensions 64 x 34mm x 0.55 BMT with 6mm return. Stud to be fixed to the tracks using Staggered Steel Clip and placed at 600mm centres with a 15mm expansion gap at top of frame.

Studs to be offset 300mm centres.

No other fixings to track are allowed.

Wall Heights

Recommended maximum height is 2.4m. Higher walls may be subject to specific engineering design or consult the framing manufacturer.

Partition Width

In order to achieve the STC ratings in the table above the partition width (excluding the board) shall be a minimum of 92mm.

| Track Depth | Lining Suffix | Plasterboard | Total Partition |
|-------------|---------------|--------------|-----------------|
| 92mm | M46 | 46mm | 138mm |
| 92mm | M52 | 52mm | 144mm |

Wall Sound Absorber

Install Sound Absorber between studs of the frame. Use 75mm thick R1.8 glass wool blanket. Split 600mm wide blankets into 300mm.

Plasterboard Lining

NB: The installer must look for the Product Identification Code on the face paper to ensure the correct board type is installed. Refer to the Face Paper Product Identification Code table on this page.

Two layers of EPB Plasterboard lining on one side and Two Layers on the other side as per specified system above.

Vertical fixing only permitted. Use full height sheets where possible. All sheet joints must be fixed over steel framing. Vertical joints of the outer layer should be offset by 600mm from those of the inner layer. Sheet end butt joints must be formed over nogs and offset the outer layer joints from the inner layer. The inner layers are fixed hard to the floor. Sheets shall be touch fitted.

Fixing of Linings

Fasteners (As per Specified System Above)

| System Number | Side One | | Side Two | |
|--------------------|-----------------------------|-----------------------|-----------------------|-----------------------|
| | 1 st Layer | 2 nd Layer | 1 st Layer | 2 nd Layer |
| | Self-Tapping Drywall Screws | | | |
| E4SSA90-M46 | 10mm | 13mm | 10mm | 13mm |
| | 25 x 6g | 41 x 6g | 25 x 6g | 41 x 6g |
| E4SSA90-M52 | 13mm | 13mm | 13mm | 13mm |
| | 25 x 6g | 41 x 6g | 25 x 6g | 41 x 6g |

Fastener Centres

Inner layer: Fix at 600mm centres up all studs.

Outer Layer: Fix at 300mm centres up all studs.

Place fasteners minimum 12mm from the sheet edge and 50mm from sheet ends

Place fasteners at 200mm centres where sheet end butt joints occur.

Avoid outer layer screws from hitting inner layer screws.

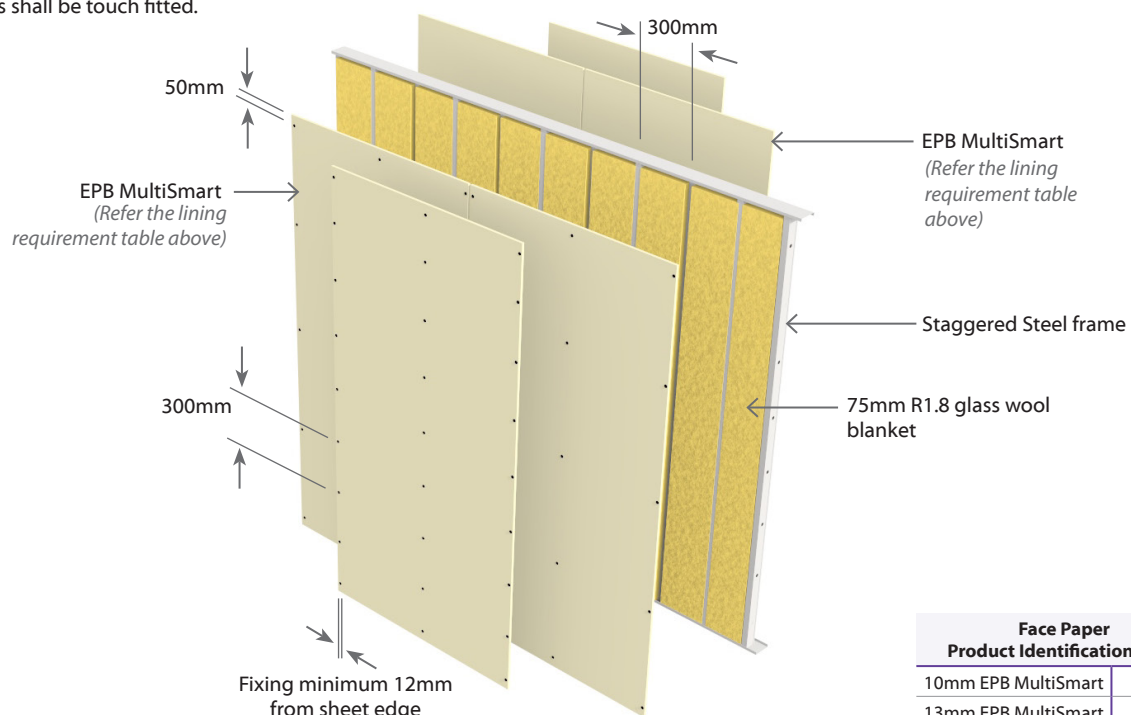
Acoustic Sealant

A bead of acoustical sealant is required around the perimeter of the inner layer and the outer layer is bedded onto the bead. The perimeter junctions of the wall must be airtight.

Jointing

Inner Layer: Unstopped

Outer Layer: All fastener heads stopped and all sheet joints reinforced with paper jointing tape and stopped. Wall to ceiling junctions are to be reinforced with paper tape and square stopped or finished with Cornice. All in accordance with EPB Plasterboard Installation Guide.



| Face Paper Product Identification Code | |
|---|------------|
| 10mm EPB MultiSmart | M10 |
| 13mm EPB MultiSmart | M13 |



Floor/Ceiling Systems

EFJ2DFA60**Direct Fixed Clip - Floating James Hardie Secura™ Floor - Timber Joists****Load Bearing****2 Layers: 2 Layers of Plasterboard to underside of frame****Full Intertency
Acoustic**

| System Number | Lining Suffix | FRR | Load Bearing Ability | Noise Control | | | Lining Requirement |
|---------------|---------------|----------|----------------------|---------------|----|-------|---|
| | | | | STC | Rw | IIC* | |
| EFJ2DFA60 | -FS26 | 60/60/60 | LB | 66 | 65 | 57-76 | 1 x 13mm EPB FireSmart 1 x 13mm EPB Standard |
| | -F26 | 60/60/60 | LB | 67 | 66 | 57-76 | 2 x 13mm EPB FireSmart |
| | -M26 | 60/60/60 | LB | 68 | 67 | 57-77 | 2 x 13mm EPB MultiSmart |

Framing

Timber floor joists shall comply with NZS3604 with a minimum depth of 190mm x 45mm and spaced at no more than 450mm centres. Nogs or framing is required at the perimeter of the Fire Rated ceiling.

Alternative Framing

Alternatively, a proprietary I-joist system with a minimum depth of 190mm and spaced at no more than 450mm centres may be used subject to specific structural design and approved by the normal building consent process. Consult the joist manufacturer regarding construction of the solid blocking contained in the floor/ceiling to wall junctions.

Initial Floor

19mm thick James Hardie Secura™ Interior Flooring laid at right angles to the timber joists in a staggered pattern in accordance to James Hardie Secura™ Interior Flooring Installation Manual. Flooring sheet joints must have a tongue and groove jointer or be formed over framing. When using the site cut sheet pieces, the minimum length of the cut sheet to be used must be 900mm or more.

Adhesive Requirement (Both flooring layers)

A continuous 6mm bead of Adhesive to be applied over the joists or channels before laying the flooring materials.

Suitable Adhesive options are:

- Bostik Seal n Flex-1 or
- Holdfast 220LM or
- Sikaflex 11FC

Fasteners**Initial Secura Floor Layer**

Fix Secura™ Interior Flooring across the joists using angular grooved galvanised or stainless steel 50 x 2.87mm gun nails or can be screw fixed using a 40mm x 10g timber thread self-embedding screw.

Floating Secura Floor Layer

Fix Secura™ Interior Flooring across the Acoustic Channels using 50mm x 10g self-tapping steel screws.

Fastening Centres (Both flooring layers)

Fix at 200mm centres along each joist or channel. Fasteners to be placed at 25mm min at long sheet edges and 12mm from transverse edges. Fastener edge distance of 50mm to be maintained at sheet corners.

Flooring Void

James Hardie Acoustic Cradles are to be positioned on the James Hardie Secura™ Interior Flooring at 450mm centres max starting from the edge of the room. The Acoustic Cradles need not be aligned with the timber floor joists and can be laid in either direction.

The Cradles are not to be fixed down to the bottom flooring layer.

James Hardie Acoustic Floor Channels to be placed inside the Acoustic Cradles. Acoustic Channels are spaced at 450mm centres maximum.

Flooring Void Sound Absorber

Install 50mm thick R1.2 sound absorber with a minimum density of 9.6kg/m³ between the James Hardie Acoustic Floor Channels.

Floating Floor

James Hardie Secura™ Interior Flooring to be laid at right angles to the Acoustic Channels and fixed at 200mm centres along the channel. Lay the sheets in a staggered pattern. Flooring edges other than tongue and groove must be supported by channels.

Allow 5-8mm gap where Secura™ Interior Flooring sheet edges butt into the external/ internal walls. Fill the gaps with an acoustic sealant.

Acoustic Clip and Battens

The Acoustic Clip shall be fastened to the joists at 1200mm centres maximum and no less than 900mm centres to support the metal ceiling battens which are spaced at 600mm centres maximum. Use 3 x 32mm x 8g Wafer Head screws. Insert first screw into the middle slot. Adjust clip to correct height. Then insert remaining two screws. A minimum 10mm gap is recommended between the flange of the ceiling batten and the underside of the joist.

Ceiling Void Sound Absorber

Install minimum 75mm thick R1.8 sound absorber with a minimum density of 9.6kg/m³ between the joists above the metal ceiling battens.

EPB Plasterboard Ceiling Lining

NB: The installer must look for the Product Identification Code on the face paper to ensure the correct board type is installed. Refer to the Face Paper Product Identification Code table on this page.

Two layers of EPB Plasterboard as per specified system above fixed at right angles to the metal ceiling battens. All sheet end butt joints shall occur on the battens. Offset the outer layer by 600mm from the inner layer. Sheet joints should be touched fitted.

Fixing of EPB Plasterboard Internal Linings**Fasteners (As per Specified System Above)**

| System Number | 1 st Layer | 2 nd Layer |
|----------------|-----------------------------|-----------------------|
| | Self-Tapping Drywall Screws | |
| EFJ2DFA60-FS26 | 13mm | 13mm |
| EFJ2DFA60-F26 | | |
| EFJ2DFA60-M26 | 32 x 6g | 41 x 6g |

Fastening Centres

Ceiling sheets shall be fixed at 200mm centres along each metal ceiling batten.

Fix butt ends at 100mm centres.

Fasteners to be placed no closer than 12mm from sheet edge.

Avoid outer layer screws from hitting inner layer screws.

Acoustic Sealant

A bead of fire retardant Acoustic Sealant must be applied around the perimeter of the first layer and the second layer bedded on the bead.

Wall/Ceiling Junction

The internal angle between the ceilings and walls must be protected by Cornice or square stopped corners taped and filled in accordance with EPB Plasterboard Installation Guide.

Jointing

Inner layer: Unstopped.

Outer Layer: All fastener heads stopped and all sheet joints reinforced with paper jointing tape and stopped in accordance with the publication entitled EPB Plasterboard Installation Guide.

Additional Reference Material

Refer to James Hardie Secura Interior Flooring Installation Manual and the James Hardie Fire and Acoustic Floor System Installation Manual for additional information about covering general and wet area installation and penetrations and control joints.

***Impact Insulation Class (IIC)**

IIC of 57 is achieved with a bare floor.

IIC of 58 is achieved with loose laid Vinyl.

IIC of 75 is achieved with 40oz loop pile carpet on 8mm foam chip underlay.

IIC of 76 is achieved with 40oz loop pile carpet on waffle underlay.

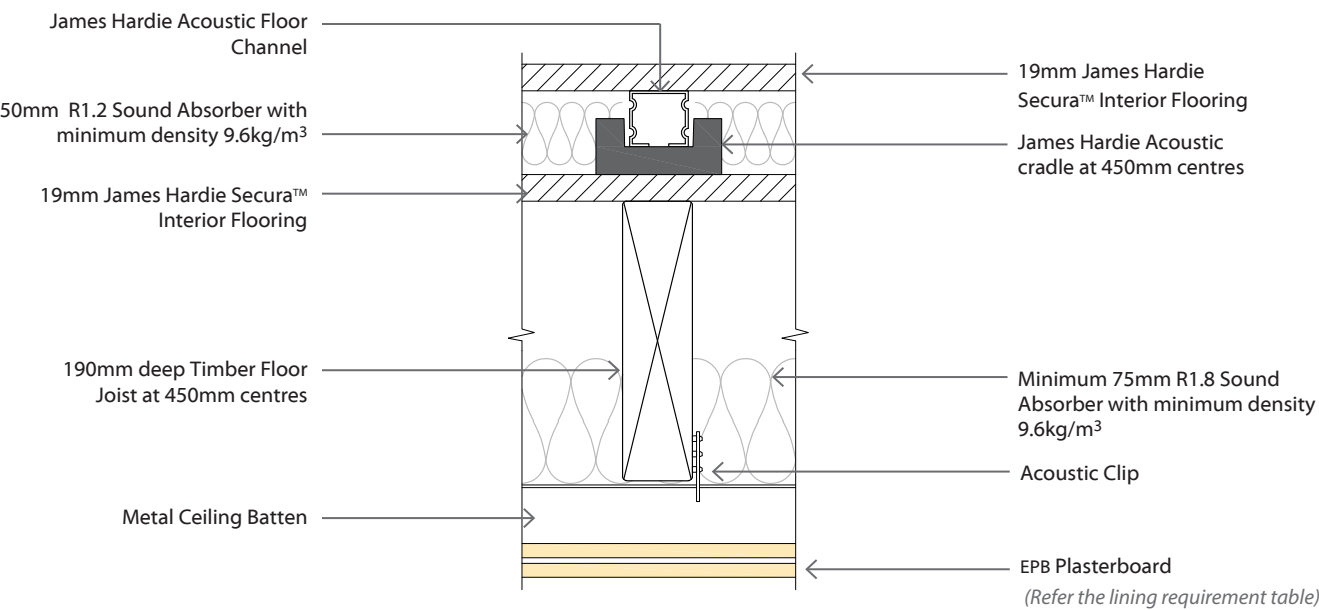


EFJ2DFA60

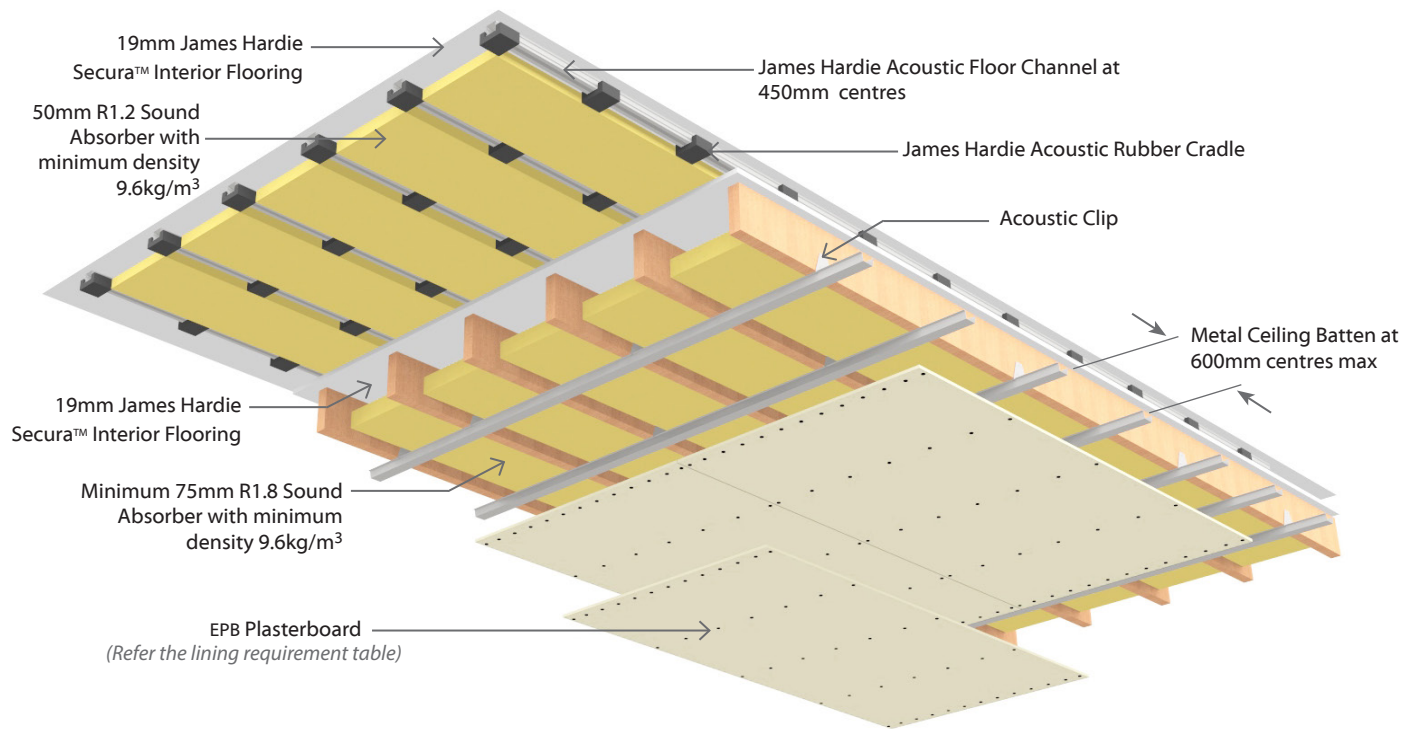
Direct Fixed Clip - Floating James Hardie Secura™ Floor - Timber Joists

Load Bearing

Full Intertency
Acoustic



ENS-312



| Face Paper Product Identification Code | |
|---|-----|
| 13mm EPB Standard | S13 |
| 13mm EPB FireSmart | F13 |
| 13mm EPB MultiSmart | M13 |

EFP2DFA60 Direct Fixed Clip - Floating Particle Board Floor - Timber Joists

Load Bearing

2 Layers: 2 Layers of Plasterboard to underside of frameFull Intertency
Acoustic

| System Number | Lining Suffix | FRR | Load Bearing Ability | Noise Control | | | Lining Requirement |
|------------------|---------------|----------|----------------------|---------------|----|-------|---|
| | | | | STC | Rw | IIC* | |
| EFP2DFA60 | -FS26 | 60/60/60 | LB | 63 | 62 | 55-72 | 1 x 13mm EPB FireSmart 1 x 13mm EPB Standard |
| | -F26 | 60/60/60 | LB | 64 | 63 | 55-72 | 2 x 13mm EPB FireSmart |
| | -M26 | 60/60/60 | LB | 65 | 64 | 56-72 | 2 x 13mm EPB MultiSmart |

Framing

Timber floor joists shall comply with NZS3604 with a minimum depth of 190mm x 45mm and spaced at no more than 600mm centres. Nogs or framing is required at the perimeter of the Fire Rated ceiling.

Alternative Framing

Alternatively, a proprietary I-joist system with a minimum depth of 190mm and spaced at no more than 600mm centres may be used subject to specific structural design and approved by the normal building consent process. Consult the joist manufacturer regarding construction of the solid blocking contained in the floor/ceiling to wall junctions.

Initial Floor

20mm Tongue & groove Particle board Flooring laid at right angles to the timber joists in a staggered pattern in accordance to the Particle board manufacturer's Technical Manuals. Flooring sheet joints must have a tongue and groove jointer or be formed over framing. No nogs required to support the edges of longitudinal sheets. When using the site cut sheet pieces, the minimum length of the cut sheet to be used must be 900mm or more.

Adhesive Requirement (Both flooring layers)

A continuous 6mm bead of Adhesive to be applied over the joists or channels before laying the flooring materials. Apply a 2mm bead along the tongue of the Tongue and Groove panels as they are laid. Suitable Adhesive options are:

- Bostik Seal n Flex-1 or Holdfast 220LM
- HB Fuller-Sturdi Bond Sikaflex 11FC
- Holdfast 220LM or
- Sikaflex 11FC

Fasteners**Initial 20mm Tongue & Groove Particle Board Flooring Layer**

Fix 20mm Tongue & groove Particle board Flooring across the joists using angular grooved galvanised or stainless steel 60 x 3.15mm gun nails or can be screw fixed using a 45mm x 8g timber thread self-drilling screw (corrosion resistant).

Floating 20mm Tongue & Groove Particle Board Flooring Layer

Fix 20mm Tongue & groove Particle board Flooring across the Acoustic Channels using 45mm x 8g timber thread self-drilling screws (corrosion resistant).

Fastening Centres (Both flooring layers)

Fix at 200mm centres along each joist or channel. Fasteners to be placed at 15mm min at long sheet edges and from transverse edges. Fastener edge distance of 50mm to be maintained at sheet corners.

Flooring Void

AcoustiFlor™ Acoustic Cradles are to be positioned on the tongue & groove particle board flooring at 450mm centres max starting from the edge of the room. The Acoustic Cradles need not be aligned with the timber floor joists and can be laid in either direction.

The Cradles are not to be fixed down to the bottom flooring layer.

AcoustiFlor™ Structural Battens to be placed inside the AcoustiFlor™ Acoustic Cradles at 400mm centres maximum.

Flooring Void Sound Absorber

Install 50mm thick R1.2 sound absorber with a minimum density of 9.6kg/m³ between the AcoustiFlor™ Structural Battens.

Floating Floor

The 20mm Tongue & groove Particle board Flooring is to be laid at right angles to AcoustiFlor™ Structural Batten and fixed at 200mm centres along the batten. Lay the sheets in a staggered pattern. Flooring edges other than Tongue and groove to be supported by battens.

When using the site cut sheet pieces, the minimum length of the cut sheet to be used must be 900mm or more.

Allow 5mm gap where Particle board flooring sheet edges butt into external/internal walls. Fill the gap with fire retardant acoustic sealant.

Acoustic Clip and Battens

The Acoustic Clip shall be fastened to the joists at 1200mm centres maximum and no less than 900mm centres to support the metal ceiling battens which are spaced at 600mm centres maximum. Use 3 x 32mm x 8g Wafer Head screws. Insert first screw into the middle slot. Adjust clip to correct height. Then insert remaining two screws. A minimum 10mm gap is recommended between the flange of the ceiling batten and the underside of the joist.

Ceiling Void Sound Absorber

Install minimum 75mm thick R1.8 sound absorber with a minimum density of 9.6kg/m³ between the joists above the metal ceiling battens.

EPB Plasterboard Ceiling Lining

NB: The installer must look for the Product Identification Code on the face paper to ensure the correct board type is installed. Refer to the Face Paper Product Identification Code table on this page.

Two layers of EPB Plasterboard as per specified system above fixed at right angles to the metal ceiling battens. All sheet end butt joints shall occur on the battens. Offset the outer layer by 600mm from the inner layer. Sheet joints should be touched fitted.

Fixing of EPB Plasterboard Internal Linings**Fasteners (As per Specified System Above)**

| System Number | 1 st Layer | 2 nd Layer |
|-----------------------|-----------------------------|-----------------------|
| | Self-Tapping Drywall Screws | |
| EFP2DFA60-MS26 | 13mm | 13mm |
| EFP2DFA60-M26 | 32mm x 6g | 41mm x 6g |

Fastening Centres

Ceiling sheets shall be fixed at 200mm centres along each metal ceiling batten.

Fix butt ends at 100mm centres.

Fasteners to be placed no closer than 12mm from sheet edge.

Avoid outer layer screws from hitting inner layer screws.

Acoustic Sealant

A bead of fire retardant Acoustic Sealant must be applied around the perimeter of the first layer and the second layer bedded on the bead.

Wall/Ceiling Junction

The internal angle between the ceilings and walls must be protected by Cornice or square stopped corners taped and filled in accordance with EPB Plasterboard Installation Guide.

Jointing

Inner layer: Unstopped.

Outer Layer: All fastener heads stopped and all sheet joints reinforced with paper jointing tape and stopped in accordance with the publication entitled EPB Plasterboard Installation Guide.



EFP2DFA60**Direct Fixed Clip - Floating Particle Board Floor - Timber Joists****Load Bearing****Full Intertency
Acoustic**

| System Number | Lining Suffix | FRR | Load Bearing Ability | Noise Control | | | Lining Requirement |
|------------------|---------------|----------|----------------------|---------------|----|-------|---|
| | | | | STC | Rw | IIC* | |
| EFP2DFA60 | -FS26 | 60/60/60 | LB | 63 | 62 | 55-72 | 1 x 13mm EPB FireSmart 1 x 13mm EPB Standard |
| | -F26 | 60/60/60 | LB | 64 | 63 | 55-72 | 2 x 13mm EPB FireSmart |
| | -M26 | 60/60/60 | LB | 65 | 64 | 56-72 | 2 x 13mm EPB MultiSmart |

Additional Reference Material

Refer to Particle board Manufacturer's Technical Manuals for additional information about covering general and wet area installation and penetrations.

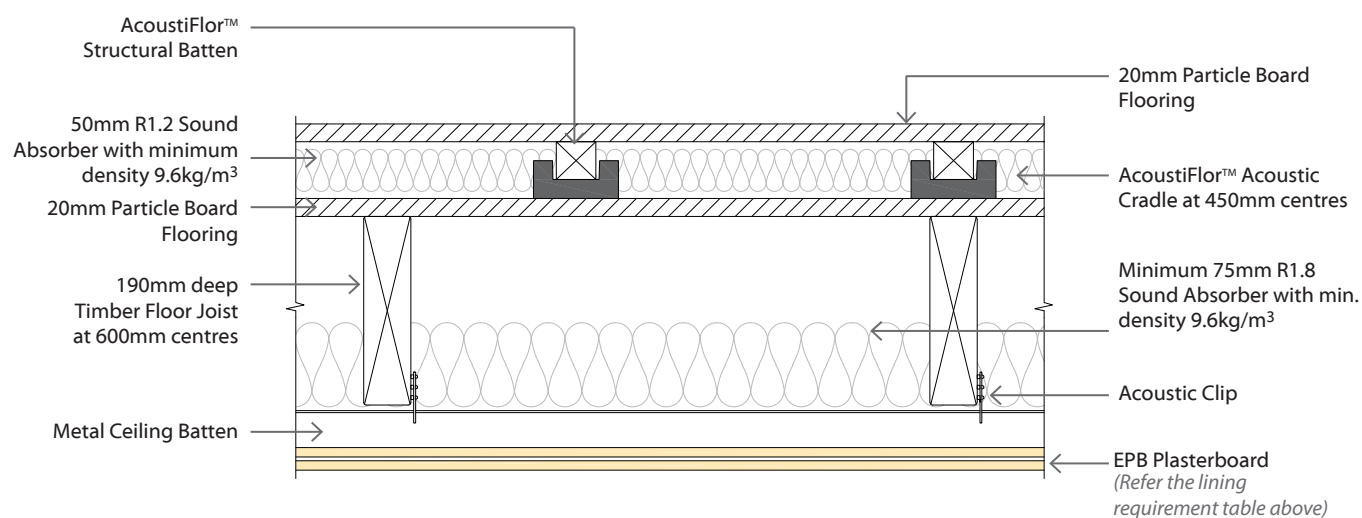
***Impact Insulation Class (IIC)**

IIC of 55 is achieved with a bare floor.

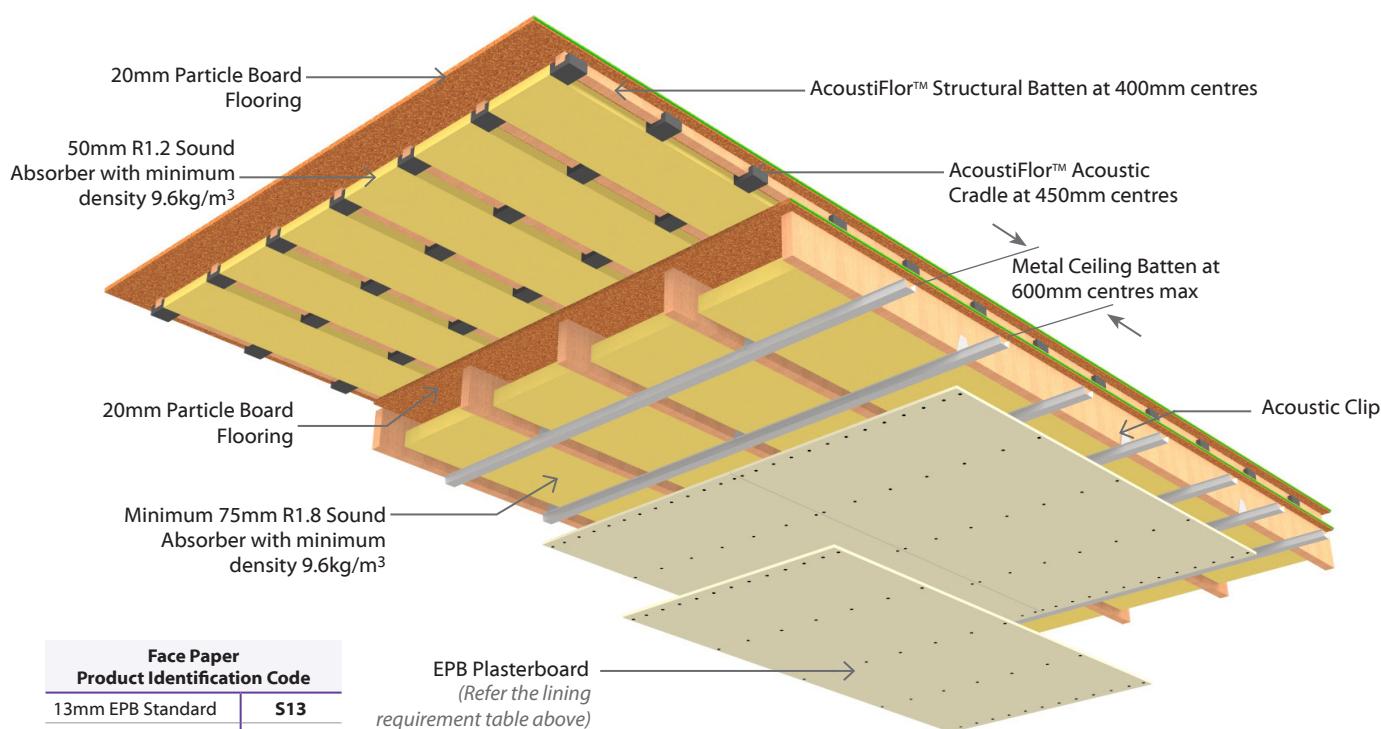
IIC of 56 is achieved with loose laid Vinyl.

IIC of 70 is achieved with 40oz loop pile carpet on 8mm foam chip underlay.

IIC of 72 is achieved with 40oz loop pile carpet on waffle underlay.



ENS-311



| Face Paper Product Identification Code | |
|---|------------|
| 13mm EPB Standard | S13 |
| 13mm EPB MultiSmart | M13 |



EFJ2DFsA45 Direct Fixed Clip - Floating James Hardie Secura™ Floor - Steel Joists

Load Bearing

2 Layers: 2 Layers of Plasterboard to underside of frameFull Intertency
Acoustic

| System Number | Lining Suffix | FRR | Load Bearing Ability | Noise Control | | | Lining Requirement |
|-------------------|---------------|----------|----------------------|---------------|----|-------|-------------------------|
| | | | | STC | Rw | IIC* | |
| EFJ2DFsA45 | -F26 | 45/45/45 | LB | 66 | 65 | 56-76 | 2 x 13mm EPB FireSmart |
| | -M26 | 45/45/45 | LB | 67 | 66 | 56-76 | 2 x 13mm EPB MultiSmart |

Floor Framing

A specifically designed steel floor structure with C-section steel floor joists of 190mm minimum depth and with 45mm flanges with a steel gauge of 1.55mm. Joist spacing's at no more than 600mm centres.

Initial Floor

19mm thick James Hardie Secura™ Interior Flooring laid at right angles to the steel joists in a staggered pattern in accordance to James Hardie Secura™ Interior Flooring Installation Manual. Flooring sheet joints must have a tongue and groove jointer or be formed over framing. When using the site cut sheet pieces, the minimum length of the cut sheet to be used must be 900mm or more.

Adhesive Requirement (Both flooring layers)

A continuous 6mm bead of Adhesive to be applied over the joists or channels before laying the flooring materials.

Suitable Adhesive options are:

- Bostik Seal n Flex-1 or
- Holdfast 220LM or
- Sikaflex 11FC

Fasteners**Initial Secura Floor Layer**

Fix Secura™ Interior Flooring across the joists using 8-10g x 40-45mm wing tek min. class 3 coating screws.

Floating Secura Floor Layer

Fix Secura™ Interior Flooring across the Acoustic Channels using 50mm x 10g self-tapping steel screws.

Fastening Centres (Both flooring layers)

Fix at 200mm centres along each joist or channel. Fasteners to be placed at 25mm min at long sheet edges and 12mm from transverse edges. Fastener edge distance of 50mm to be maintained at sheet corners.

Flooring Void

James Hardie Acoustic Cradles are to be positioned on the James Hardie Secura™ Interior Flooring at 450mm centres max starting from the edge of the room. The Acoustic Cradles need not be aligned with the steel floor joists and can be laid in either direction.

The Cradles are not to be fixed down to the bottom flooring layer.

James Hardie Acoustic Floor Channels to be placed inside the Acoustic Cradles. Acoustic Channels are spaced at 450mm centres maximum.

Flooring Void Sound Absorber

Install 50mm thick R1.2 sound absorber with a minimum density of 9.6kg/m³ between the James Hardie Acoustic Floor Channels.

Floating Floor

James Hardie Secura™ Interior Flooring to be laid at right angles to the Acoustic Channels and fixed at 200mm centres along the channel. Lay the sheets in a staggered pattern. Flooring edges other than tongue and groove must be supported by channels.

Allow 5-8mm gap where Secura™ Interior Flooring sheet edges butt into the external/ internal walls. Fill the gaps with an acoustic sealant.

Acoustic Clip and Battens

The Acoustic Clip shall be fastened to the joists at 1200mm centres maximum (and no less than 900mm centres) to support the metal ceiling battens which are spaced at 600mm centres maximum.

Use 3 x 30mm x 10g Drill-Point Wafer Head Screws. Insert first screw into the middle slot. Adjust clip to correct height. Then insert remaining two screws. A minimum 10mm gap is recommended between the flange of the ceiling batten and the underside of the joist.

Ceiling Void Sound Absorber

Install minimum 75mm thick R1.8 sound absorber with a minimum density of 9.6kg/m³ between the joists above the metal ceiling battens.

EPB Plasterboard Ceiling Lining

NB: The installer must look for the Product Identification Code on the face paper to ensure the correct board type is installed. Refer to the Face Paper Product Identification Code table on this page.

Two layers of EPB Plasterboard as per specified system above, fixed at right angles to the metal ceiling battens. All sheet end butt joints shall occur on the battens. Offset the outer layer by 600mm from the inner layer. Sheet joints should be touched fitted.

Fixing of EPB Plasterboard Internal Linings**Fasteners (As per Specified System Above)**

| System Number | 1 st Layer | 2 nd Layer |
|-----------------------|-----------------------------|-----------------------|
| | Self-Tapping Drywall Screws | |
| EFJ2DFsA45-F26 | 13mm | 13mm |
| EFJ2DFsA45-M26 | 32 x 6g | 41 x 6g |

Fastening Centres

Ceiling sheets shall be fixed at 200mm centres along each metal ceiling batten.

Fix butt ends at 100mm centres.

Fasteners to be placed no closer than 12mm from sheet edge.

Avoid outer layer screws from hitting inner layer screws.

Acoustic Sealant

A bead of fire retardant Acoustic Sealant must be applied around the perimeter of the first layer and the second layer bedded on the bead.

Wall/Ceiling Junction

The internal angle between the ceilings and walls must be protected by Cornice or square stopped corners taped and filled in accordance with EPB Plasterboard Installation Guide.

Jointing

Inner layer: Unstopped.

Outer Layer: All fastener heads stopped and all sheet joints reinforced with paper jointing tape and stopped in accordance with the publication entitled EPB Plasterboard Installation Guide.

Additional Reference Material

Refer to James Hardie Secura™ Interior Flooring Installation Manual and the James Hardie Fire and Acoustic Floor System Installation Manual for additional information about covering general and wet area installation and penetrations and control joints.

***Impact Insulation Class (IIC)**

IIC of 56 is achieved with a bare floor.

IIC of 58 is achieved with loose laid Vinyl.

IIC of 75 is achieved with 40oz loop pile carpet on 8mm foam chip underlay.

IIC of 76 is achieved with 40oz loop pile carpet on waffle underlay.



EFJ2DFsA45

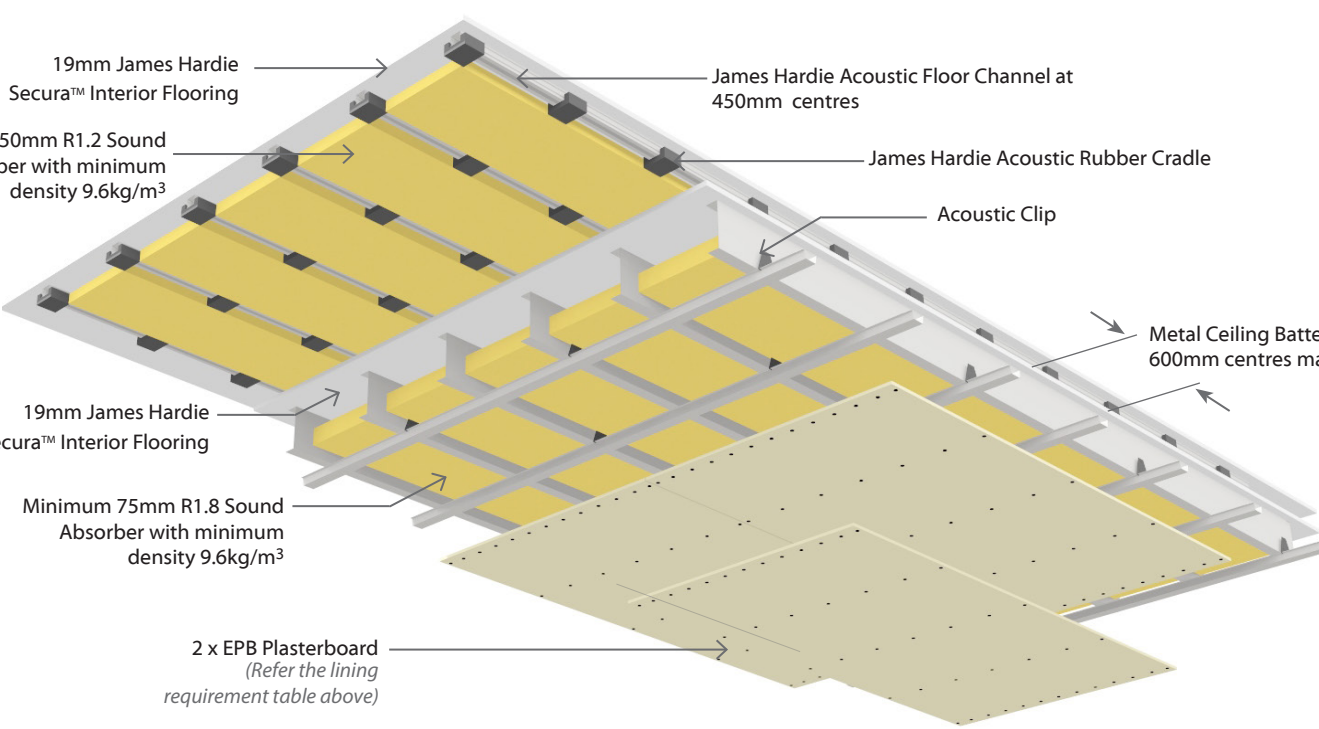
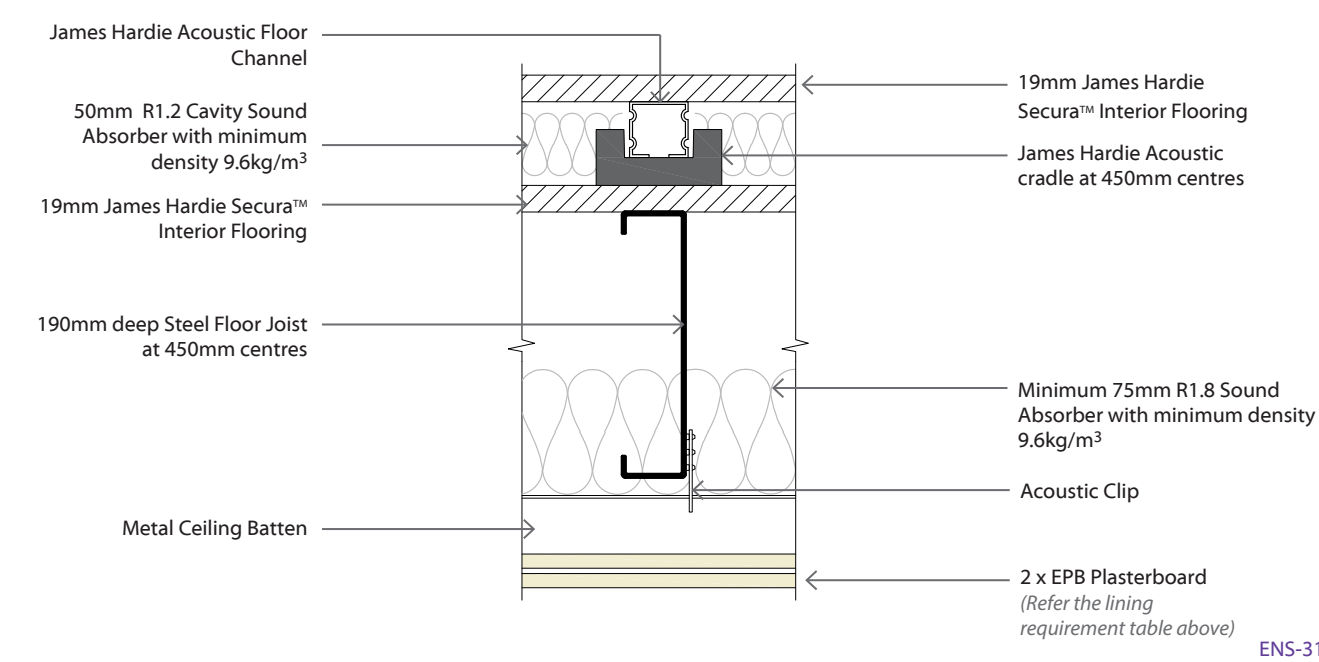
Direct Fixed Clip - Floating James Hardie Secura™ Floor - Steel Joists

Load Bearing

2 Layers: 2 Layers of Plasterboard to underside of frame

Full Intertency
Acoustic

| System Number | Lining Suffix | FRR | Load Bearing Ability | Noise Control | | | Lining Requirement |
|---------------|---------------|----------|----------------------|---------------|----|-------|-------------------------|
| | | | | STC | Rw | IIC* | |
| EFJ2DFsA45 | -F26 | 45/45/45 | LB | 66 | 65 | 56-76 | 2 x 13mm EPB FireSmart |
| | -M26 | 45/45/45 | LB | 67 | 66 | 56-76 | 2 x 13mm EPB MultiSmart |



| Face Paper Product Identification Code | |
|--|-----|
| 13mm EPB FireSmart | F13 |
| 13mm EPB MultiSmart | M13 |

EFP2DFsA45 Direct Fixed Clip - Floating Particle Board Floor - Steel Joists

Load Bearing

2 Layers: 2 Layers of Plasterboard to underside of frameFull Intertency
Acoustic

| System Number | Lining Suffix | FRR | Load Bearing Ability | Noise Control | | | Lining Requirement |
|-------------------|---------------|----------|----------------------|---------------|----|-------|-------------------------|
| | | | | STC | Rw | IIC* | |
| EFP2DFsA45 | -F26 | 45/45/45 | LB | 63 | 62 | 55-72 | 2 x 13mm EPB FireSmart |
| | -M26 | 45/45/45 | LB | 64 | 63 | 55-72 | 2 x 13mm EPB MultiSmart |

Framing

A specifically designed steel floor structure with C-section steel floor joists of 190mm minimum depth and with 45mm flanges with a steel gauge of 1.55mm. Joist spacing's at no more than 600mm centres.

Initial Floor

20mm Tongue & groove Particle board flooring laid at right angles to the steel joists in a staggered pattern in accordance to the Particle board manufacturer's Technical Manuals. Flooring sheet joints must have a tongue and groove jointer or be formed over framing. No nogs required to support the edges of longitudinal sheets. When using the site cut sheet pieces, the minimum length of the cut sheet to be used must be 900mm or more.

Adhesive Requirement (Both flooring layers)

A continuous 6mm bead of Adhesive to be applied over the joists or channels before laying the flooring materials. Apply a 2mm bead along the tongue of the Tongue and groove panels as they are laid. Suitable Adhesive options are:

- Bostik Seal n Flex-1 or
- HB Fuller-Sturdi Bond
- Holdfast 220LM or
- Sikaflex 11FC

Fasteners**Initial 20mm Tongue & Groove Particle Board Flooring Layer**

Fix 20mm Tongue & groove Particle board Flooring across the joists using 45mm x 10g Tek self drilling screw. (corrosion resistant)

Floating 20mm Tongue & Groove Particle Board Flooring Layer

Fix 20mm Tongue & groove Particle board Flooring across the Acoustic Channels using 45mm x 8g timber thread self-drilling screws (corrosion resistant).

Fastening Centres (Both flooring layers)

Fix at 200mm centres along each joist or channel. Fasteners to be placed at 15mm min at long sheet edges and from transverse edges. Fastener edge distance of 50mm to be maintained at sheet corners.

Flooring Void

AcoustiFlor™ Acoustic Cradles are to be positioned on the tongue & groove particle board flooring at 450mm centres max starting from the edge of the room. The Acoustic Cradles need not be aligned with the steel floor joists and can be laid in either direction.

The Cradles are not to be fixed down to the bottom flooring layer.

AcoustiFlor™ Structural Battens to be placed inside the AcoustiFlor™ Acoustic Cradles at 400mm centres maximum.

Flooring Void Sound Absorber

Install 50mm thick R1.2 sound absorber with a minimum density of 9.6kg/m³ between the AcoustiFlor™ Structural Battens.

Floating Floor

The 20mm Tongue & groove Particle board Flooring is to be laid at right angles to AcoustiFlor™ Structural Batten and fixed at 200mm centres along the batten. Lay the sheets in a staggered pattern. Flooring edges other than Tongue and groove to be supported by battens. When using the site cut sheet pieces, the minimum length of the cut sheet to be used must be 900mm or more.

Allow 5mm gap where 20mm Particle board flooring sheet edges butt into the external/internal walls. Fill the gap with fire retardant acoustic sealant.

Acoustic Clip and Battens

The Acoustic Clip shall be fastened to the joists at 1200mm centres maximum (and no less than 900mm centres) to support the metal ceiling battens which are spaced at 600mm centres maximum.

Use 3 x 30mm x 10g Drill-Point Wafer Head Screws. Insert first screw into the middle slot. Adjust clip to correct height. Then insert remaining two screws. A minimum 10mm gap is recommended between the flange of the ceiling batten and the underside of the joist.

Ceiling Void Sound Absorber

Install minimum 75mm thick R1.8 sound absorber with a minimum density of 9.6kg/m³ between the joists above the metal ceiling battens.

EPB Plasterboard Ceiling Lining

NB: The installer must look for the Product Identification Code on the face paper to ensure the correct board type is installed. Refer to the Face Paper Product Identification Code table on this page.

Two layers of EPB Plasterboard as per specified system above, fixed at right angles to the metal ceiling battens. All sheet end butt joints shall occur on the battens. Offset the outer layer by 600mm from the inner layer. Sheet joints should be touched fitted.

Fixing of EPB Plasterboard Internal Linings**Fasteners (As per Specified System Above)**

| System Number | 1 st Layer | 2 nd Layer |
|-----------------------|-----------------------------|-----------------------|
| | Self-Tapping Drywall Screws | |
| EFP2DFsA45-F26 | 13mm | 13mm |
| EFP2DFsA45-M26 | 32mm x 6g | 41mm x 6g |

Fastening Centres

Ceiling sheets shall be fixed at 200mm centres along each metal ceiling batten.

Fix butt ends at 100mm centres.

Fasteners to be placed no closer than 12mm from sheet edge.

Avoid outer layer screws from hitting inner layer screws.

Acoustic Sealant

A bead of fire retardant Acoustic Sealant must be applied around the perimeter of the first layer and the second layer bedded on the bead.

Wall/Ceiling Junction

The internal angle between the ceilings and walls must be protected by Cornice or square stopped corners taped and filled in accordance with EPB Plasterboard Installation Guide.

Jointing

Inner layer: Unstopped.

Outer Layer: All fastener heads stopped and all sheet joints reinforced with paper jointing tape and stopped in accordance with the publication entitled EPB Plasterboard Installation Guide.

Additional Reference Material

Refer to Particle board manufacturer's Technical Manuals for additional information about covering general and wet area installation and penetrations.

***Impact Insulation Class (IIC)**

IIC of 55 is achieved with a bare floor.

IIC of 56 is achieved with loose laid Vinyl.

IIC of 70 is achieved with 40oz loop pile carpet on 8mm foam chip underlay.

IIC of 72 is achieved with 40oz loop pile carpet on waffle underlay.



EFP2DFsA45

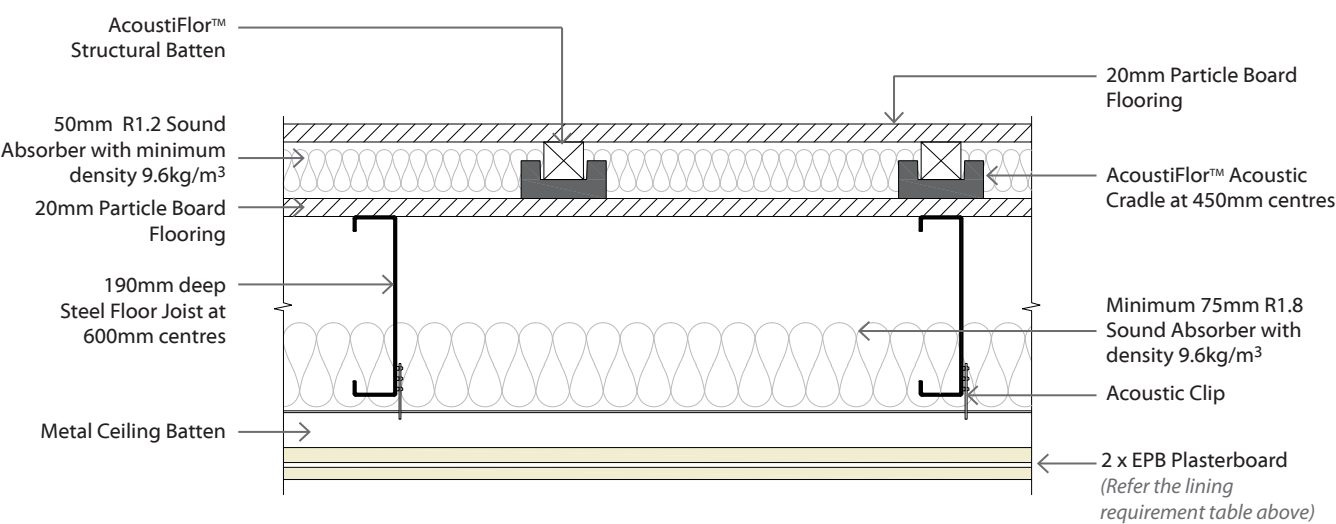
Direct Fixed Clip - Floating Particle Board Floor - Steel Joists

Load Bearing

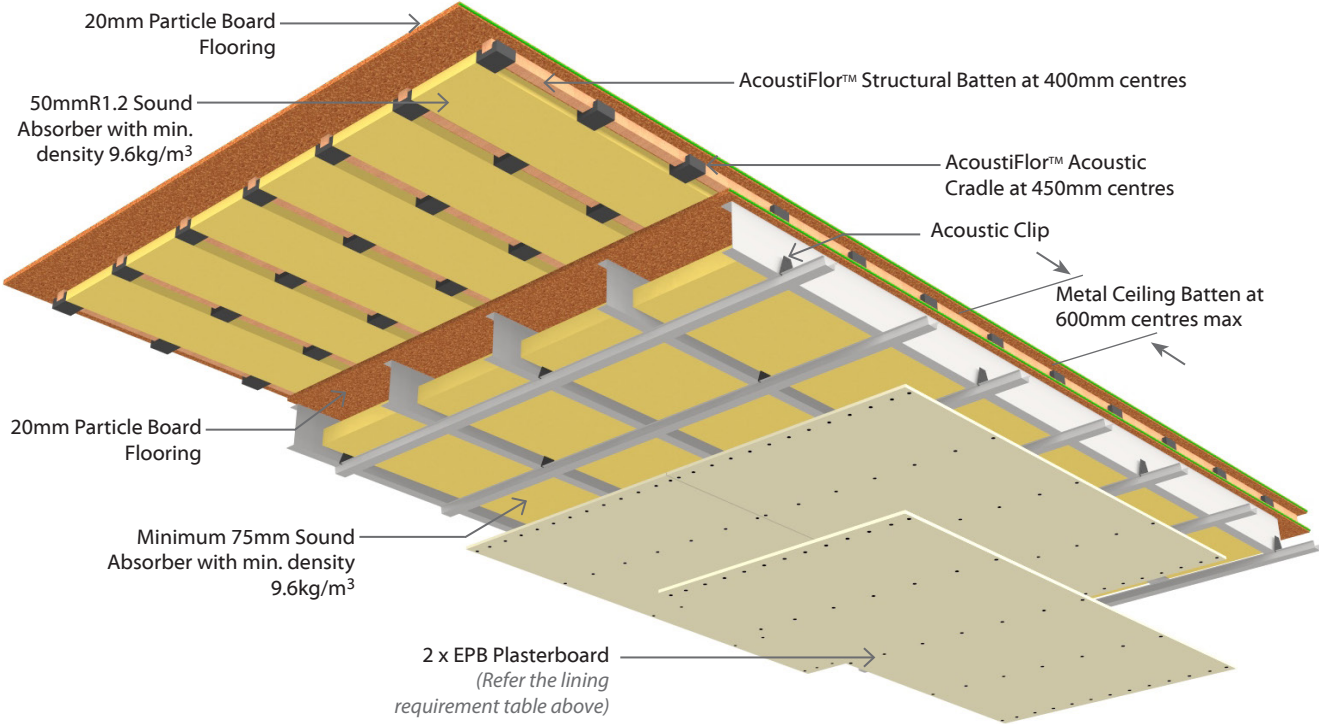
2 Layers: 2 Layers of Plasterboard to underside of frame

Full Intertency
Acoustic

| System Number | Lining Suffix | FRR | Load Bearing Ability | Noise Control | | | Lining Requirement |
|---------------|---------------|----------|----------------------|---------------|----|-------|-------------------------|
| | | | | STC | Rw | IIC* | |
| EFP2DFsA45 | -F26 | 45/45/45 | LB | 63 | 62 | 55-72 | 2 x 13mm EPB FireSmart |
| | -M26 | 45/45/45 | LB | 64 | 63 | 55-72 | 2 x 13mm EPB MultiSmart |



ENS-314



| Face Paper Product Identification Code | |
|---|-----|
| 13mm EPB FireSmart | F13 |
| 13mm EPB MultiSmart | M13 |

EFJ2DFsA60 Direct Fixed Clip - Floating James Hardie Secura™ Floor - Steel Joists

Load Bearing

2 Layers: 2 Layers of Plasterboard to underside of frameFull Intertency
Acoustic

| System Number | Lining Suffix | FRR | Load Bearing Ability | Noise Control | | | Lining Requirement |
|---------------|---------------|----------|----------------------|---------------|----|-------|--|
| | | | | STC | Rw | IIC* | |
| EFJ2DFsA60 | -F29 | 60/60/60 | LB | 67 | 66 | 56-76 | 1 x 16mm EPB FireSmart And 1 x 13mm EPB FireSmart |

Floor Framing

A specifically designed steel floor structure with C-section steel floor joists of 190mm minimum depth and with 45mm flanges with a steel gauge of 1.55mm. Joist spacing's at no more than 600mm centres.

Initial Floor

19mm thick James Hardie Secura™ Interior Flooring laid at right angles to the steel joists in a staggered pattern in accordance to James Hardie Secura™ Interior Flooring Installation Manual. Flooring sheet joints must have a tongue and groove jointer or be formed over framing. When using the site cut sheet pieces, the minimum length of the cut sheet to be used must be 900mm or more.

Adhesive Requirement (Both flooring layers)

A continuous 6mm bead of Adhesive to be applied over the joists or channels before laying the flooring materials.

Suitable Adhesive options are:

- Bostik Seal n Flex-1 or
- Holdfast 220LM or
- Sikaflex 11FC

Fasteners**Initial Secura Floor Layer**

Fix Secura™ Interior Flooring across the joists using 8-10g x 40-45mm wing tek min. class 3 coating screws.

Floating Secura Floor Layer

Fix Secura™ Interior Flooring across the Acoustic Channels using 50mm x 10g self-tapping steel screws.

Fastening Centres (Both flooring layers)

Fix at 200mm centres along each joist or channel. Fasteners to be placed at 25mm min at long sheet edges and 12mm from transverse edges. Fastener edge distance of 50mm to be maintained at sheet corners.

Flooring Void

James Hardie Acoustic Cradles are to be positioned on the James Hardie Secura™ Interior Flooring at 450mm centres max starting from the edge of the room. The Acoustic Cradles need not be aligned with the steel floor joists and can be laid in either direction.

The Cradles are not to be fixed down to the bottom flooring layer.

James Hardie Acoustic Floor Channels to be placed inside the Acoustic Cradles. Acoustic Channels are spaced at 450mm centres maximum.

Flooring Void Sound Absorber

Install 50mm thick R1.2 sound absorber with a minimum density of 9.6kg/m³ between the James Hardie Acoustic Floor Channels.

Floating Floor

James Hardie Secura™ Interior Flooring to be laid at right angles to the acoustic channels and fixed at 200mm centres along the channel. Lay the sheets in a staggered pattern. Flooring edges other than tongue and groove must be supported by channels.

Allow 5-8mm gap where Secura™ Interior Flooring edges butt into the external/ internal walls. Fill the gaps with an acoustic sealant.

Acoustic Clip and Battens

The Acoustic Clip shall be fastened to the joists at 1200mm centres maximum (and no less than 900mm centres) to support the metal ceiling battens which are spaced at 600mm centres maximum.

Use 3 x 30mm x 10g Drill-Point Wafer Head Screws. Insert first screw into the middle slot. Adjust clip to correct height. Then insert remaining two screws. A minimum 10mm gap is recommended between the flange of the ceiling batten and the underside of the joist.

Ceiling Void Sound Absorber

Install minimum 75mm thick R1.8 sound absorber with a minimum density of 9.6kg/m³ between the joists above the metal ceiling battens.

EPB Plasterboard Ceiling Lining

NB: The installer must look for the Product Identification Code on the face paper to ensure the correct board type is installed. Refer to the Face Paper Product Identification Code table on this page.

One layer of 16mm EPB FireSmart and One layer of 13mm EPB FireSmart fixed at right angles to the metal ceiling battens. All sheet end butt joints shall occur on the battens. Offset the outer layer by 600mm from the inner layer. Sheet joints should be touched fitted.

Fixing of EPB Plasterboard Internal Linings**Fasteners**

| System Number | 1 st Layer | 2 nd Layer |
|----------------|-----------------------------|-----------------------|
| | Self-Tapping Drywall Screws | |
| EFJ2DFsA60-F29 | 16mm | 13mm |
| | 32 x 6g | 41 x 6g |

Fastening Centres

Ceiling sheets shall be fixed at 200mm centres along each metal ceiling batten.

Fix butt ends at 100mm centres.

Fasteners to be placed no closer than 12mm from sheet edge.

Avoid outer layer screws from hitting inner layer screws.

Acoustic Sealant

A bead of fire retardant Acoustic Sealant must be applied around the perimeter of the first layer and the second layer bedded on the bead.

Wall/Ceiling Junction

The internal angle between the ceilings and walls must be protected by Cornice or square stopped corners taped and filled in accordance with EPB Plasterboard Installation Guide.

Jointing

Inner layer: Unstopped.

Outer Layer: All fastener heads stopped and all sheet joints reinforced with paper jointing tape and stopped in accordance with the publication entitled EPB Plasterboard Installation Guide.

Additional Reference Material

Refer to James Hardie Secura™ Interior Flooring Installation Manual and the James Hardie Fire and Acoustic Floor System Installation Manual for additional information about covering general and wet area installation and penetrations and control joints.

***Impact Insulation Class (IIC)**

IIC of 56 is achieved with a bare floor.

IIC of 57 is achieved with loose laid Vinyl.

IIC of 75 is achieved with 40oz loop pile carpet on 8mm foam chip underlay.

IIC of 76 is achieved with 40oz loop pile carpet on waffle underlay.



EFJ2DFsA60

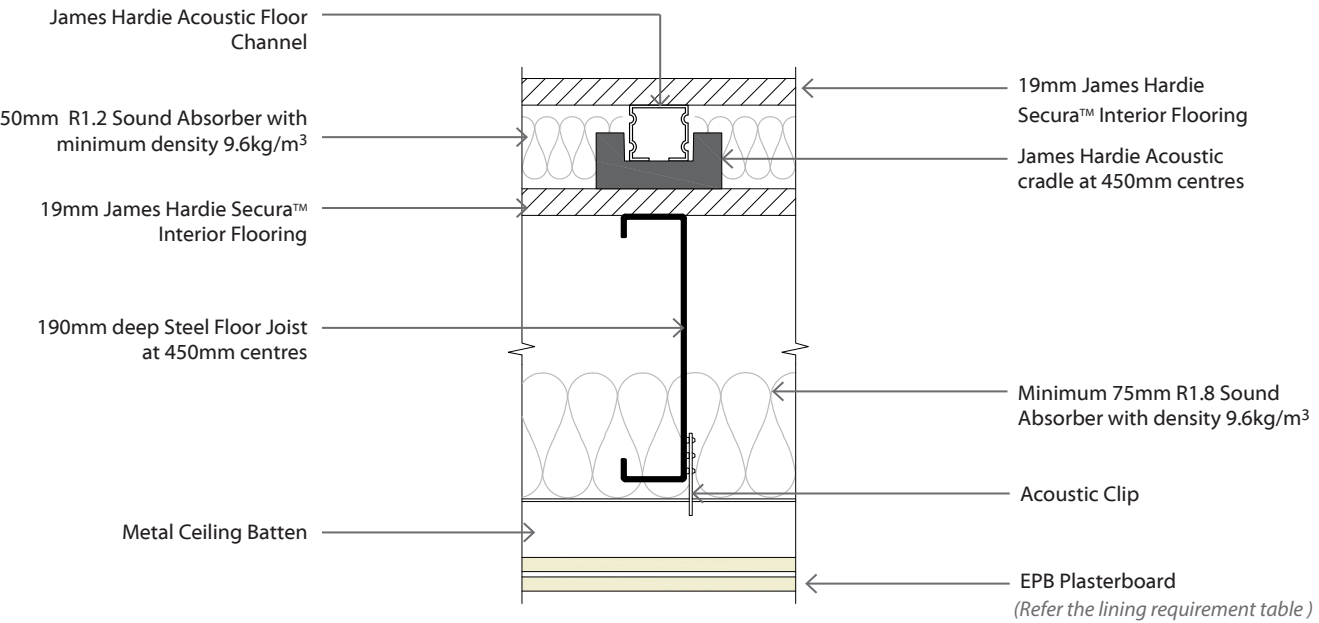
Direct Fixed Clip - Floating James Hardie Secura™ Floor - Steel Joists

Load Bearing

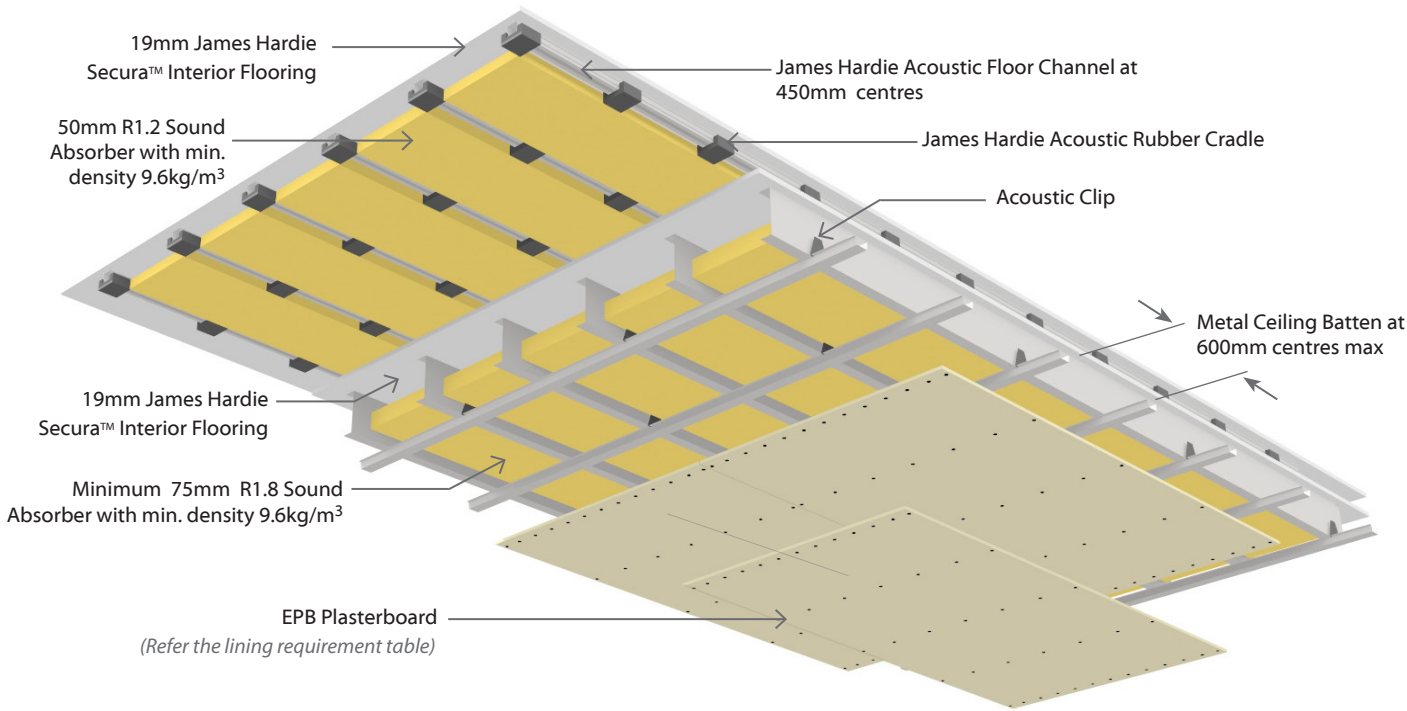
2 Layers: 2 Layers of Plasterboard to underside of frame

Full Intertency
Acoustic

| System Number | Lining Suffix | FRR | Load Bearing Ability | Noise Control | | | Lining Requirement |
|---------------|---------------|----------|----------------------|---------------|----|-------|--|
| | | | | STC | Rw | IIC* | |
| EFJ2DFsA60 | -F29 | 60/60/60 | LB | 67 | 66 | 56-76 | 1 x 16mm EPB FireSmart And 1 x 13mm EPB FireSmart |



ENS-313



| Face Paper Product Identification Code | |
|---|-----|
| 13mm EPB MultiSmart | M13 |
| 16mm EPB FireSmart | F16 |

EPF2DFsA60 Direct Fixed Clip - Floating Particle Board Floor - Steel Joists

Load Bearing

2 Layers: 2 Layers of Plasterboard to underside of frame**Full Intertency
Acoustic**

| System Number | Lining Suffix | FRR | Load Bearing Ability | Noise Control | | | Lining Requirement |
|-------------------|---------------|----------|----------------------|---------------|----|-------|--|
| | | | | STC | Rw | IIC* | |
| EPF2DFsA60 | -F29 | 60/60/60 | LB | 64 | 63 | 56-72 | 1 x 16mm EPB FireSmart And 1 x 13mm EPB FireSmart |

Framing

A specifically designed steel floor structure with C-section steel floor joists of 190mm minimum depth and with 45mm flanges with a steel gauge of 1.55mm. Joist spacing's at no more than 600mm centres.

Initial Floor

20mm Tongue & groove Particle board flooring laid at right angles to the steel joists in a staggered pattern in accordance to the Particle board manufacturer's Technical Manuals. Flooring sheet joints must have a tongue and groove jointer or be formed over framing. No nogs required to support the edges of longitudinal sheets. When using the site cut sheet pieces, the minimum length of the cut sheet to be used must be 900mm or more.

Adhesive Requirement (Both flooring layers)

A continuous 6mm bead of Adhesive to be applied over the joists or channels before laying the flooring materials. Apply a 2mm bead along the tongue of the Tongue and groove panels as they are laid. Suitable Adhesive options are:

- Bostik Seal n Flex-1 or
- HB Fuller-Sturdi Bond
- Holdfast 220LM or
- Sikaflex 11FC

Fasteners**Initial 20mm Tongue & Groove Particle Board Flooring Layer**

Fix 20mm Tongue & groove Particle board Flooring across the joists using 45mm x 10g Tek self drilling screw. (corrosion resistant)

Floating 20mm Tongue & Groove Particle Board Flooring Layer

Fix 20mm Tongue & groove Particle board Flooring across the Acoustic Channels using 45mm x 8g timber thread self-drilling screws (corrosion resistant).

Fastening Centres (Both flooring layers)

Fix at 200mm centres along each joist or channel. Fasteners to be placed at 15mm min at long sheet edges and from transverse edges. Fastener edge distance of 50mm to be maintained at sheet corners.

Flooring Void

AcoustiFlor™ Acoustic Cradles are to be positioned on the tongue & groove particle board flooring at 450mm centres max starting from the edge of the room. The Acoustic Cradles need not be aligned with the steel floor joists and can be laid in either direction.

The Cradles are not to be fixed down to the bottom flooring layer.

AcoustiFlor™ Structural Battens to be placed inside the AcoustiFlor™ Acoustic Cradles at 400mm centres maximum.

Flooring Void Sound Absorber

Install 50mm thick R1.2 sound absorber with a minimum density of 9.6kg/m³ between the AcoustiFlor™ Structural Battens.

Floating Floor

The 20mm Tongue & groove Particle board Flooring is to be laid at right angles to AcoustiFlor™ Structural Batten and fixed at 200mm centres along the batten. Lay the sheets in a staggered pattern. Flooring edges other than Tongue and groove to be supported by battens. When using the site cut sheet pieces, the minimum length of the cut sheet to be used must be 900mm or more.

Allow 5mm gap where 20mm Particle board Flooring sheet edges butt into external/internal walls. Fill the gap with fire retardant acoustic sealant.

Acoustic Clip and Battens

The Acoustic Clip shall be fastened to the joists at 1200mm centres maximum (and no less than 900mm centres) to support the metal ceiling battens which are spaced at 600mm centres maximum.

Use 3 x 30mm x 10g Drill-Point Wafer Head Screws. Insert first screw into the middle slot. Adjust clip to correct height. Then insert remaining two screws. A minimum 10mm gap is recommended between the flange of the ceiling batten and the underside of the joist.

Ceiling Void Sound Absorber

Install minimum 75mm thick R1.8 sound absorber with a minimum density of 9.6kg/m³ between the joists above the metal ceiling battens.

EPB Plasterboard Ceiling Lining

NB: The installer must look for the Product Identification Code on the face paper to ensure the correct board type is installed. Refer to the Face Paper Product Identification Code table on this page.

One layer of 16mm EPB FireSmart and One layer of 13mm EPB FireSmart fixed at right angles to the metal ceiling battens. All sheet end butt joints shall occur on the battens. Offset the outer layer by 600mm from the inner layer. Sheet joints should be touched fitted.

Fixing of EPB Plasterboard Internal Linings**Fasteners**

| System Number | 1 st Layer | 2 nd Layer |
|-----------------------|-----------------------------|-----------------------|
| | Self-Tapping Drywall Screws | |
| EPF2DFsA60-F29 | 16mm | 13mm |
| | 32mm x 6g | 41mm x 6g |

Fastening Centres

Ceiling sheets shall be fixed at 200mm centres along each metal ceiling batten.

Fix butt ends at 100mm centres.

Fasteners to be placed no closer than 12mm from sheet edge.

Avoid outer layer screws from hitting inner layer screws.

Acoustic Sealant

A bead of fire retardant Acoustic Sealant must be applied around the perimeter of the first layer and the second layer bedded on the bead.

Wall/Ceiling Junction

The internal angle between the ceilings and walls must be protected by Cornice or square stopped corners taped and filled in accordance with EPB Plasterboard Installation Guide.

Jointing

Inner layer: Unstopped.

Outer Layer: All fastener heads stopped and all sheet joints reinforced with paper jointing tape and stopped in accordance with the publication entitled EPB Plasterboard Installation Guide.

Additional Reference Material

Refer to Particle board manufacturer's Technical Manuals for additional information about covering general and wet area installation and penetrations.

***Impact Insulation Class (IIC)**

IIC of 56 is achieved with a bare floor.

IIC of 57 is achieved with loose laid Vinyl.

IIC of 70 is achieved with 40oz loop pile carpet on 8mm foam chip underlay.

IIC of 72 is achieved with 40oz loop pile carpet on waffle underlay.



EPF2DFsA60

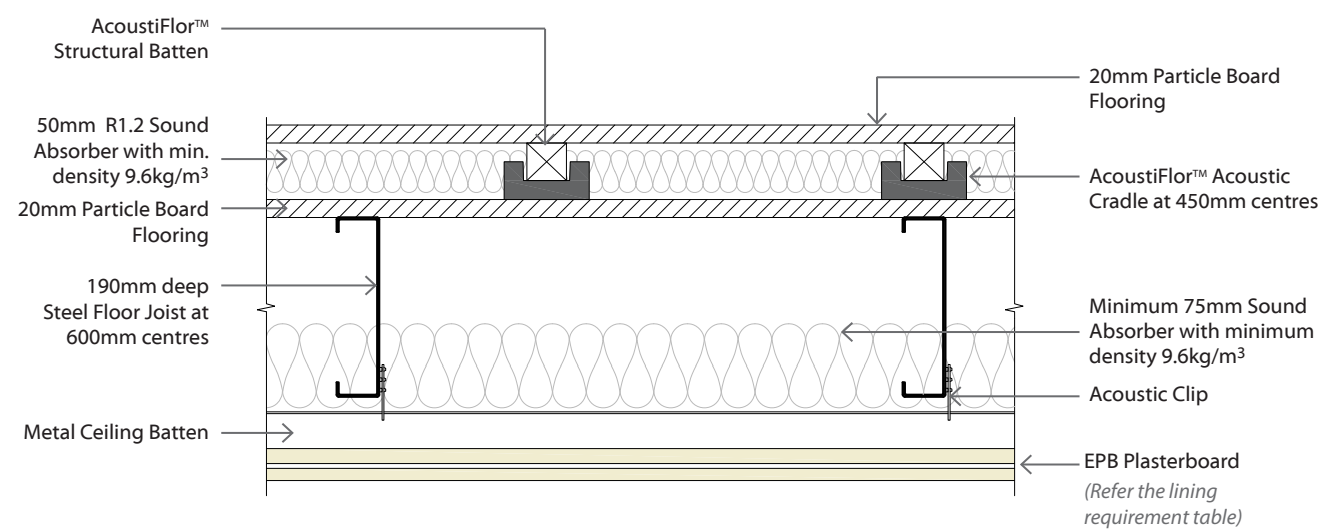
Direct Fixed Clip - Floating Particle Board Floor - Steel Joists

Load Bearing

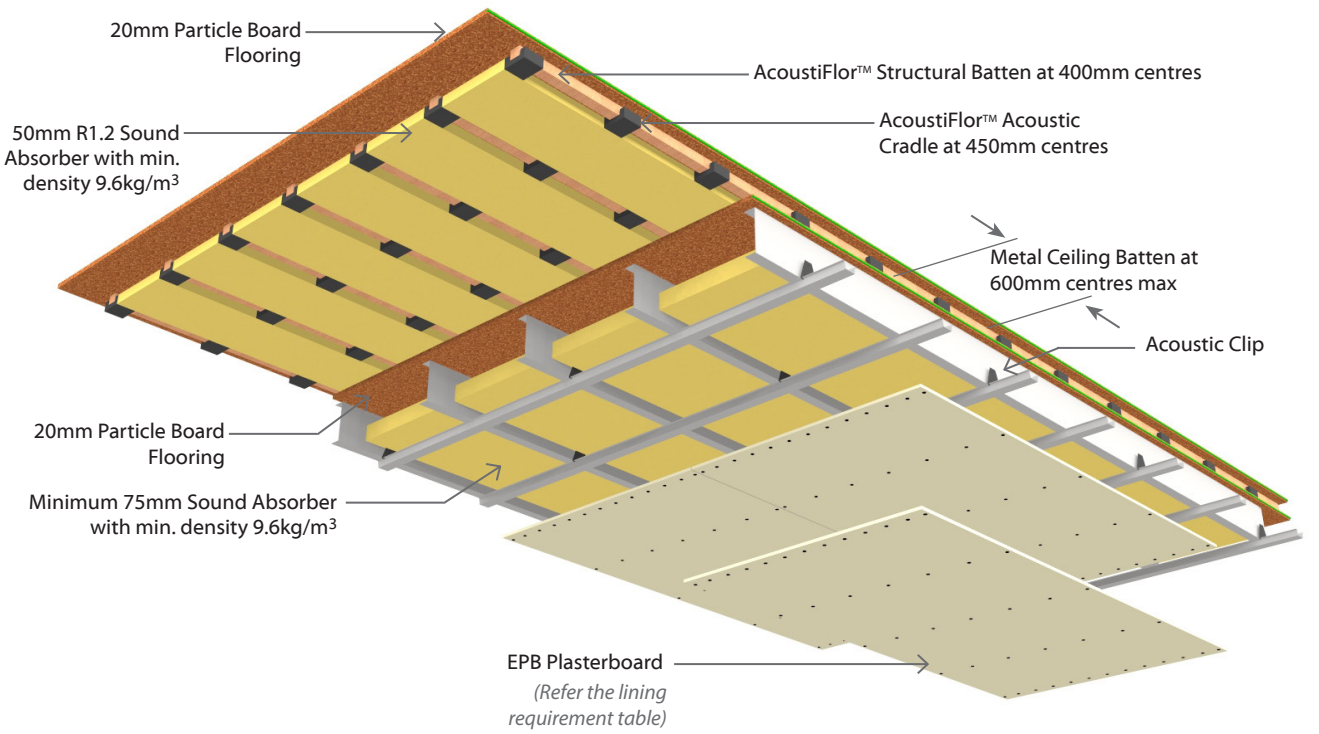
2 Layers: 2 Layers of Plasterboard to underside of frame

Full Intertency
Acoustic

| System Number | Lining Suffix | FRR | Load Bearing Ability | Noise Control | | | Lining Requirement |
|---------------|---------------|----------|----------------------|---------------|----|-------|--|
| | | | | STC | Rw | IIC* | |
| EPF2DFsA60 | -F29 | 60/60/60 | LB | 64 | 63 | 56-72 | 1 x 16mm EPB FireSmart And 1 x 13mm EPB FireSmart |



ENS-314



| Face Paper Product Identification Code | |
|---|-----|
| 13mm EPB FireSmart | F13 |
| 16mm EPB FireSmart | F16 |



E2DFA60**Direct Fixed Clip - Floor/Ceiling****Load Bearing****2 Layers: 2 Layers of Plasterboard to underside of frame****Full Intertency Acoustic**

| System Number | Lining Suffix | FRR | Load Bearing Ability | Noise Control | | | Lining Requirement |
|----------------|---------------|----------|----------------------|---------------|----|-------|---|
| | | | | STC | Rw | IIC* | |
| E2DFA60 | -FS26 | 60/60/60 | LB | 56 | 55 | 46-73 | 1 x 13mm EPB FireSmart And 1 x 13mm EPB Standard |
| | -F26 | 60/60/60 | LB | 57 | 56 | 46-73 | 2 x 13mm EPB FireSmart |
| | -M26 | 60/60/60 | LB | 58 | 57 | 46-73 | 2 x 13mm EPB MultiSmart |

Framing

Timber floor joists shall comply with NZS3604 with a minimum depth of 190 x 45mm and spaced at no more than 600mm centres. Alternatively, a proprietary I-joist system with a minimum depth of 190mm and spaced at no more than 600mm centres may be used subject to specific structural design and approved by the normal building consent process.

Consult the joist manufacturer regarding construction of the solid blocking contained in the floor/ceiling to wall junctions.

Flooring

Flooring shall be 20mm thick particle board of 17mm thick structural ply, fixed to the joists as per manufacturer's instructions. Flooring sheet joints must have a polypropylene tongue and groove jointer or be formed over framing.

Acoustic Clip and Battens

The Acoustic Clip shall be fastened to the joists at 1200mm centres maximum (and no less than 900mm centres) to support the metal ceiling battens which are spaced at 600mm centres maximum. Use 3 x 32mm x 8g Wafer Head screws. Insert first screw into the middle slot. Adjust clip to correct height. Then insert remaining two screws. A minimum 10mm gap is recommended between the flange of the ceiling batten and the underside of the joist.

Ceiling Sound Absorber

Install Sound Absorber between the joists above the metal ceiling battens. Use minimum 75mm thick R1.8 glass wool blanket.

N.B. Consider Minimum Thermal Requirements.

Plasterboard Lining

NB: The installer must look for the Product Identification Code on the face paper to ensure the correct board type is installed. Refer to the Face Paper Product Identification Code table on this page.

Two layers of EPB Plasterboard as per specified system above, fixed at right angles to the metal ceiling battens. All sheet end butt joints shall occur on the battens. Offset the outer layer by 600mm from the inner layer. Sheet joints should be touched fitted.

Fixing the Lining**Fasteners**

| System Number | 1 st Layer | 2 nd Layer |
|--|-----------------------------|-----------------------|
| | Self-Tapping Drywall Screws | |
| E2DFA60-FS26 | 13mm | 13mm |
| E2DFA60-F26 E2DFA60-M26 | 25 x 6g | 41 x 6g |

Fastening Centres

Ceiling sheets shall be fixed at 200mm centres along each metal ceiling batten.

Fix butt ends at 100mm centres.

Fasteners to be placed no closer than 12mm from sheet edge.

Avoid outer layer screws from hitting inner layer screws.

Acoustic Sealant

A bead of fire retardant Acoustic Sealant must be applied around the perimeter of the first layer and the second layer bedded on the bead.

Wall/Ceiling Junction

The internal angle between the ceilings and walls must be protected by Cornice or square stopped corners taped and filled in accordance with EPB Plasterboard Installation Guide.

Jointing

Inner layer: Unstopped.

Outer Layer: All fastener heads stopped and all sheet joints reinforced with paper jointing tape and stopped in accordance with the publication entitled EPB Plasterboard Installation Guide.

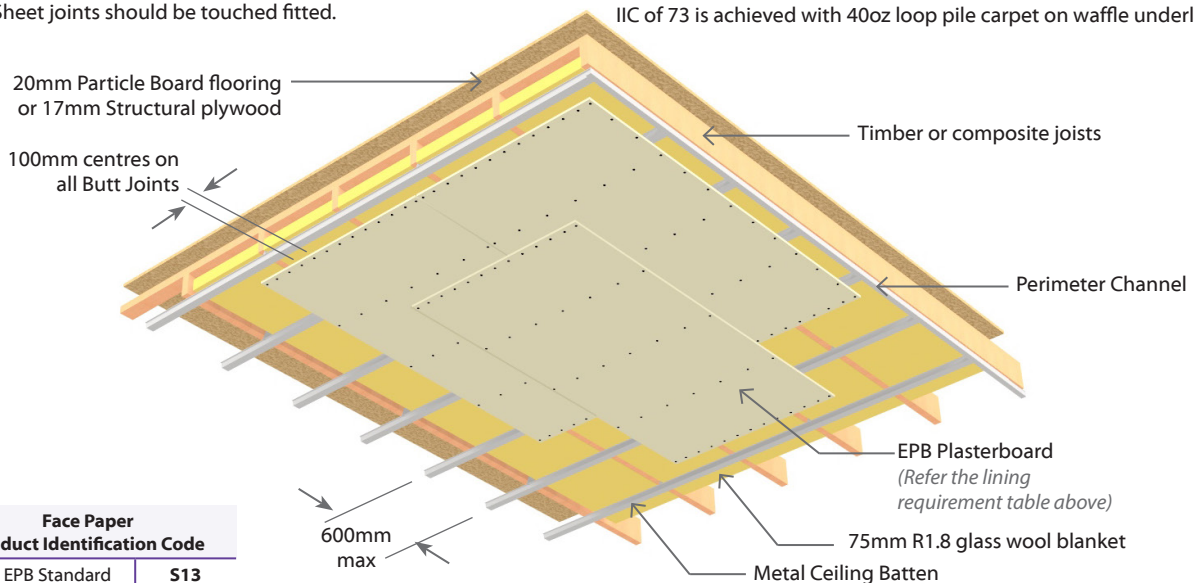
***Impact Insulation Class (IIC)**

IIC of 46 is achieved with a bare floor.

IIC of 47 is achieved with loose laid Vinyl.

IIC of 71 is achieved with 40oz cut pile carpet on 8mm foam chip underlay.

IIC of 73 is achieved with 40oz loop pile carpet on waffle underlay.



| Face Paper Product Identification Code | |
|---|------------|
| 13mm EPB Standard | S13 |
| 13mm EPB FireSmart | F13 |
| 13mm EPB MultiSmart | M13 |



E2DFA90**Direct Fixed Clip - Floor/Ceiling****Load Bearing****2** Layers: 2 Layers of Plasterboard to underside of frameFull Intertency **A**coustic

| System Number | Lining Suffix | FRR | Load Bearing Ability | Noise Control | | | Lining Requirement |
|----------------|---------------|----------|----------------------|---------------|----|-------|--|
| | | | | STC | Rw | IIC* | |
| E2DFA90 | -F29 | 90/90/90 | LB | 57 | 56 | 47-73 | 1 x 16mm EPB FireSmart and 1 x 13mm EPB FireSmart |
| | -F32 | 90/90/90 | LB | 58 | 57 | 47-73 | 2 x 16mm EPB FireSmart |

Framing

Timber floor joists shall comply with NZS3604 with a minimum depth of 190 x 45mm and spaced at no more than 600mm centres. Alternatively, a proprietary I-joist system with a minimum depth of 190mm and spaced at no more than 600mm centres may be used subject to specific structural design and approved by the normal building consent process.

Consult the joist manufacturer regarding construction of the solid blocking contained in the floor/ceiling to wall junctions.

Flooring

Flooring shall be 20mm thick particle board of 17mm thick structural ply, fixed to the joists as per manufacturer's instructions. Flooring sheet joints must have a polypropylene tongue and groove jointer or be formed over framing.

Acoustic Clip and Battens

The Acoustic Clip shall be fastened to the joists at 1200mm centres maximum (and no less than 900mm centres) to support the metal ceiling battens which are spaced at 600mm centres maximum. Use 3 x 32mm x 8g Wafer Head screws. Insert first screw into the middle slot. Adjust clip to correct height. Then insert remaining two screws. A minimum 10mm gap is recommended between the flange of the ceiling batten and the underside of the joist.

Ceiling Sound Absorber

Install Sound Absorber between the joists above the metal ceiling battens. Use minimum 75mm thick R1.8 glass wool blanket.

N.B. Consider Minimum Thermal Requirements.

Plasterboard Lining

NB: The installer must look for the Product Identification Code on the face paper to ensure the correct board type is installed. Refer to the Face Paper Product Identification Code table on this page.

Two layers of EPB Plasterboard as per specified system above fixed at right angles to the metal ceiling battens. All sheet end butt joints shall occur on the battens. Offset the outer layer by 600mm from the inner layer. Sheet joints should be touched fitted.

Fixing the Lining**Fasteners (As per Specified System Above)**

| System Number | 1 st Layer | 2 nd Layer |
|--------------------|-----------------------------|-----------------------|
| | Self-Tapping Drywall Screws | |
| E2DFA90-F29 | 16mm | 13mm |
| | 32 x 6g | 41 x 6g |
| E2DFA90-F32 | 16mm | 16mm |
| | 32 x 6g | 51 x 7g |

Fastening Centre

Ceiling sheets shall be fixed at 200mm centres along each metal ceiling batten.

Fix butt ends at 100mm centres.

Fasteners to be placed no closer than 12mm from sheet edge.

Avoid outer layer screws from hitting inner layer screws.

Acoustic Sealant

A bead of fire retardant Acoustic Sealant must be applied around the perimeter of the first layer and the second layer bedded on the bead.

Wall/Ceiling Junction

The internal angle between the ceilings and walls must be protected by Cornice or square stopped corners taped and filled in accordance with EPB Plasterboard Installation Guide.

Jointing

Inner layer: Unstopped.

Outer Layer: All fastener heads stopped and all sheet joints reinforced with paper jointing tape and stopped in accordance with the publication entitled EPB Plasterboard Installation Guide.

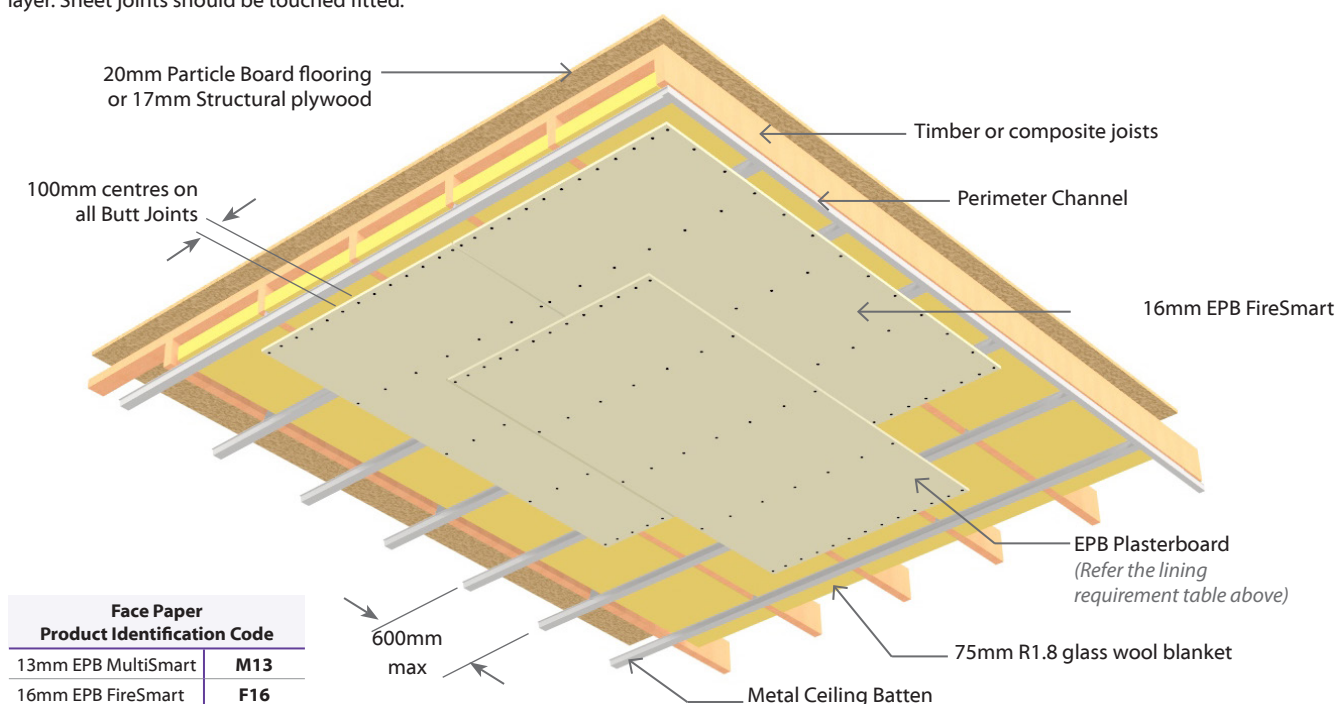
***Impact Insulation Class (IIC)**

IIC of 47 is achieved with a bare floor.

IIC of 48 is achieved with loose laid Vinyl.

IIC of 71 is achieved with 40oz loop pile carpet on 8mm foam chip underlay.

IIC of 73 is achieved with 40oz loop pile carpet on waffle underlay.



E2SCA60**Suspended Grid - Floor/Ceiling**

Load Bearing

2 Layers: 2 Layers of Plasterboard to underside of frameFull Intertency **A**coustic

| System Number | Lining Suffix | FRR | Load Bearing Ability | Noise Control | | | Lining Requirement |
|----------------|---------------|----------|----------------------|---------------|----|-------|--|
| | | | | STC | Rw | IIC* | |
| E2SCA60 | -MS26 | 60/60/60 | LB | 56 | 55 | 40-72 | 1 x 13mm EPB MultiSmart and 1 x 13mm EPB Standard |
| | -F26 | 60/60/60 | LB | 56 | 55 | 40-72 | 2 x 13mm EPB FireSmart |
| | -M26 | 60/60/60 | LB | 56 | 55 | 40-72 | 2 x 13mm EPB MultiSmart |

Framing

Timber floor joists shall comply with NZS3604 with a minimum depth of 190 x 45mm and spaced at no more than 600mm centres. Alternatively, a proprietary I-joist system with a minimum depth of 190mm and spaced at no more than 600mm centres may be used subject to specific structural design and approved by the normal building consent process.

Flooring

Flooring shall be 20mm thick particle board or 17mm thick structural ply, fixed to the joists as per manufacturer's instructions. Flooring sheet joints must have a polypropylene tongue and groove jointer or be formed over framing.

Minimum Cavity Depth

The system requires a minimum of 275mm cavity depth between the ceiling linings and the underside of the flooring.

Suspension System

Rondo ScrewFix® steel frame suspension system comprising of 2.5mm wire hangers at 1200mm centres supporting F38 strongback channels spaced at a maximum of 1200mm centres and F37 furring channels at 600mm centres.

Alternative suspension systems with equivalent performance characteristics and layout may be used.

Suspended Grid ceiling system to be installed as per manufacturer's specification.

Ceiling Sound Absorber

Install Sound Absorber over the suspension system. Use minimum 75mm thick R1.8 glass wool blanket.

N.B. Consider Minimum Thermal Requirements.

Plasterboard Lining

NB: The installer must look for the Product Identification Code on the face paper to ensure the correct board type is installed. Refer to the Face Paper Product Identification Code table on this page.

Two layers of EPB Plasterboard as per specified system above, fixed at right angles to metal furring channels. Offset the joints of the outer layer by 600mm from those of the inner layer.

All sheet butt joints should occur on the furring channel.

Sheet joints shall be touched fitted.

Fixing the Lining**Fasteners**

| System Number | 1 st Layer | 2 nd Layer |
|---------------------|-----------------------------|-----------------------|
| | Self-Tapping Drywall Screws | |
| E2SCA60-MS26 | 13mm | 13mm |
| E2SCA60-F26 | 25 x 6g | 41 x 6g |
| E2SCA60-M26 | | |

Fastening Centres

Ceiling sheets shall be fixed at 200mm centres along each furring channel and around the ceiling perimeter.

Fix at 100mm centres where end butt joints occur.

Fasteners to be placed no closer than 12mm from sheet edge.

Avoid outer layer screws from hitting inner layer screws.

Acoustic Sealant

A bead of Acoustic Sealant must be applied on the inner layer around the perimeter of the ceiling. The outer layer is then bedded into the bead.

Wall/Ceiling Junction

The internal angle between the ceilings and walls must be protected by Cornice or square stopped corners taped and filled in accordance with EPB Plasterboard Installation Guide.

Jointing

Inner layer: Unstopped.

Outer Layer: All fastener heads stopped and all sheet joints reinforced with paper jointing tape and stopped in accordance with the publication entitled EPB Plasterboard Installation Guide.

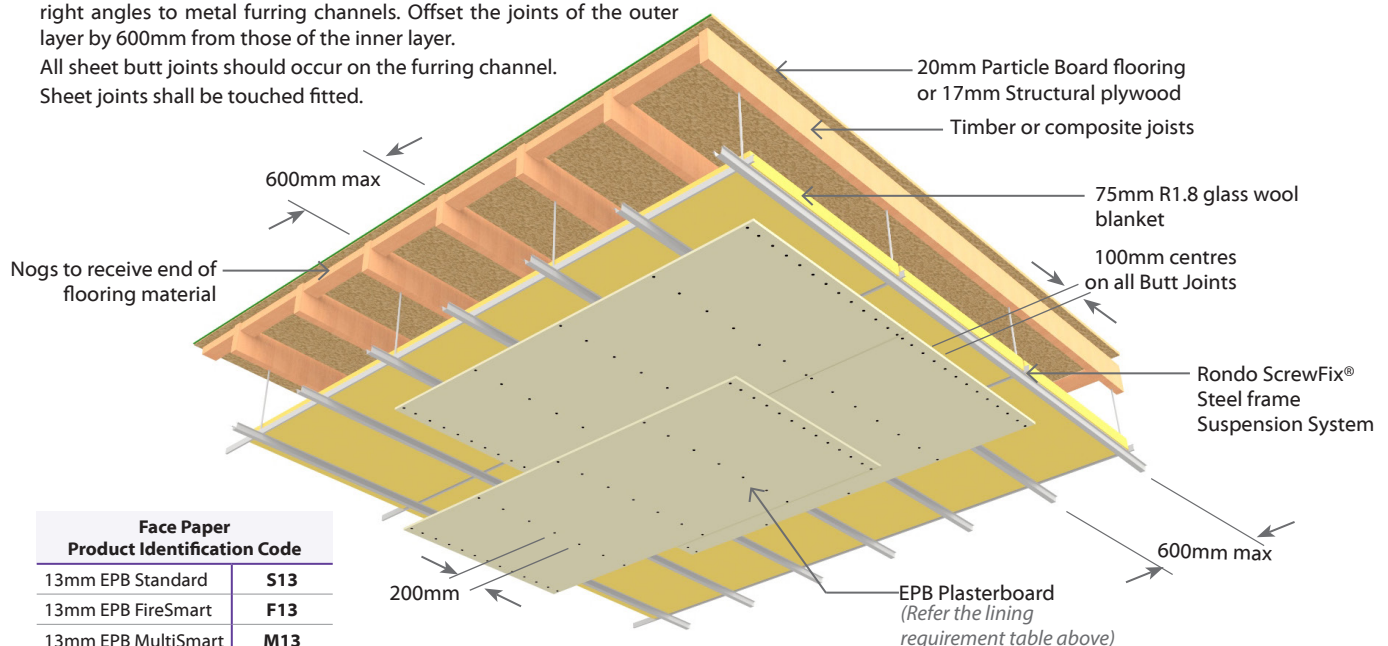
***Impact Insulation Class (IIC)**

IIC of 40 is achieved with a bare floor.

IIC of 42 is achieved with loose laid Vinyl.

IIC of 71 is achieved with 40oz loop pile carpet on 8mm foam chip underlay.

IIC of 72 is achieved with 40oz loop pile carpet on waffle underlay.



E2SCA75**Suspended Grid - Floor/Ceiling**

Load Bearing

2 Layers: 2 Layers of Plasterboard to underside of frameFull Intertency **A**coustic

| System Number | Lining Suffix | FRR | Load Bearing Ability | Noise Control | | | Lining Requirement |
|----------------|---------------|----------|----------------------|---------------|----|-------|--|
| | | | | STC | Rw | IIC* | |
| E2SCA75 | -F29 | 75/75/75 | LB | 56 | 55 | 40-72 | 1 x 16mm EPB FireSmart and 1 x 13mm EPB FireSmart |

Framing

Timber floor joists shall comply with NZS3604 with a minimum depth of 190 x 45mm and spaced at no more than 600mm centres. Alternatively, a proprietary I-joist system with a minimum depth of 190mm and spaced at no more than 600mm centres may be used subject to specific structural design and approved by the normal building consent process.

Flooring

Flooring shall be 20mm thick particle board or 17mm thick structural ply, fixed to the joists as per manufacturer's instructions. Flooring sheet joints must have a polypropylene tongue and groove jointer or be formed over framing.

Minimum Cavity Depth

The system requires a minimum of 275mm cavity depth between the ceiling linings and the underside of the flooring.

Suspension System

Rondo ScrewFix® steel frame suspension system comprising 2.5mm wire hangers at 1200mm centres supporting F38 strongback channels spaced at a maximum of 1200mm centres and F37 furring channels at 600mm centres.

Alternative suspension systems with equivalent performance characteristics and layout may be used.

Suspended Grid ceiling system to be installed as per manufacturer's specification.

Ceiling Sound Absorber

Install Sound Absorber over the suspension system. Use minimum 75mm thick R1.8 glass wool blanket.

N.B. Consider Minimum Thermal Requirements.

Plasterboard Lining

NB: The installer must look for the Product Identification Code on the face paper to ensure the correct board type is installed. Refer to the Face Paper Product Identification Code table on this page.

One layer of 16mm EPB FireSmart and One layer of 13mm EPB FireSmart fixed at right angles to metal furring channels. Offset the joints of the outer layer by 600mm from those of the inner layer. All sheet butt joints should occur on the furring channel. Sheet joints shall be touched fitted.

Fixing the Lining Fasteners

| System Number | 1 st Layer | 2 nd Layer |
|--------------------|-----------------------------|-----------------------|
| | Self-Tapping Drywall Screws | |
| E2SCA75-F29 | 16mm | 13mm |
| | 32 x 6g | 41 x 6g |

Fastening Centres

Ceiling sheets shall be fixed at 200mm centres along each furring channel and around the ceiling perimeter.

Fix at 100mm centres where end butt joints occur.

Fasteners to be placed no closer than 12mm from sheet edge.

Avoid outer layer screws from hitting inner layer screws.

Acoustic Sealant

A bead of Acoustic Sealant must be applied on the inner layer around the perimeter of the ceiling. The outer layer is then bedded into the bead.

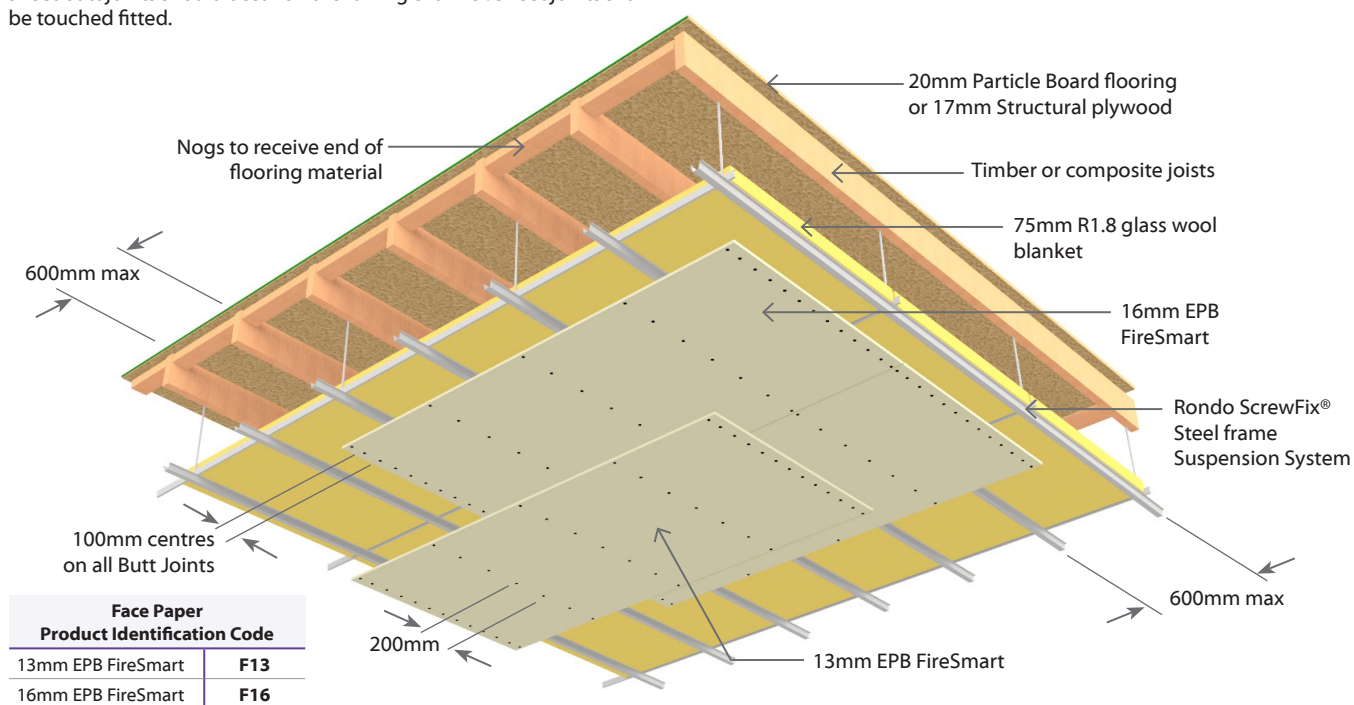
Wall/Ceiling Junction

The internal angle between the ceilings and walls must be protected by Cornice or square stopped corners taped and filled in accordance with EPB Plasterboard Installation Guide.

Jointing

Inner layer: Unstopped.

Outer Layer: All fastener heads stopped and all sheet joints reinforced with paper jointing tape and stopped in accordance with the publication entitled EPB Plasterboard Installation Guide.



E2SCA90**Suspended Grid - Floor/Ceiling**

Load Bearing

2 Layers: 2 Layers of Plasterboard to underside of frameFull Intertency **A**coustic

| System Number | Lining Suffix | FRR | Load Bearing Ability | Noise Control | | | Lining Requirement |
|----------------|---------------|----------|----------------------|---------------|----|-------|------------------------|
| | | | | STC | Rw | IIC* | |
| E2SCA90 | -F32 | 90/90/90 | LB | 57 | 56 | 40-73 | 2 x 16mm EPB FireSmart |

Framing

Timber floor joists shall comply with NZS3604 with a minimum depth of 190 x 45mm and spaced at no more than 600mm centres. Alternatively, a proprietary I-joist system with a minimum depth of 190mm and spaced at no more than 600mm centres may be used subject to specific structural design and approved by the normal building consent process.

Flooring

Flooring shall be 20mm thick particle board of 17mm thick structural ply, fixed to the joists as per manufacturer's instructions. Flooring sheet joints must have a polypropylene tongue and groove jointer or be formed over framing.

Minimum Cavity Depth

The system requires a minimum of 275mm cavity depth between the ceiling linings and the underside of the flooring.

Suspension System

Rondo ScrewFix® steel frame suspension system comprising 2.5mm wire hangers at 1200mm centres supporting F38 strongback channels spaced at a maximum of 1200mm centres and F37 furring channels at 600mm centres.

Alternative suspension systems with equivalent performance characteristics and layout may be used.

Suspended Grid ceiling system to be installed as per manufacturer's specification.

Ceiling Sound Absorber

Install Sound Absorber over the suspension system. Use minimum 75mm thick R1.8 glass wool blanket.

N.B. Consider Minimum Thermal Requirements.

Plasterboard Lining

NB: The installer must look for the Product Identification Code on the face paper to ensure the correct board type is installed. Refer to the Face Paper Product Identification Code table on this page.

Two layers of 16mm EPB FireSmart fixed at right angles to metal furring channels. Offset the joints of the outer layer by 600mm from those of the inner layer. All sheet butt joints should occur on the furring channel. Sheet joints shall be touched fitted.

Fixing the Lining**Fasteners (As per Specified System Above)**

| System Number | 1 st Layer | 2 nd Layer |
|--------------------|-----------------------------|-----------------------|
| | Self-Tapping Drywall Screws | |
| E2SCA90-F32 | 16mm | 16mm |
| | 32 x 6g | 41 x 6g |

Fastening Centres

Ceiling sheets shall be fixed at 200mm centres along each furring channel and around the ceiling perimeter.

Fix at 100mm centres where end butt joints occur.

Fasteners to be placed no closer than 12mm from sheet edge.

Avoid outer layer screws from hitting inner layer screws.

Acoustic Sealant

A bead of Acoustic Sealant must be applied on the inner layer around the perimeter of the ceiling. The outer layer is then bedded into the bead.

Wall/Ceiling Junction

The internal angle between the ceilings and walls must be protected by Cornice or square stopped corners taped and filled in accordance with EPB Plasterboard Installation Guide.

Jointing

Inner layer: Unstopped.

Outer Layer: All fastener heads stopped and all sheet joints reinforced with paper jointing tape and stopped in accordance with the publication entitled EPB Plasterboard Installation Guide.

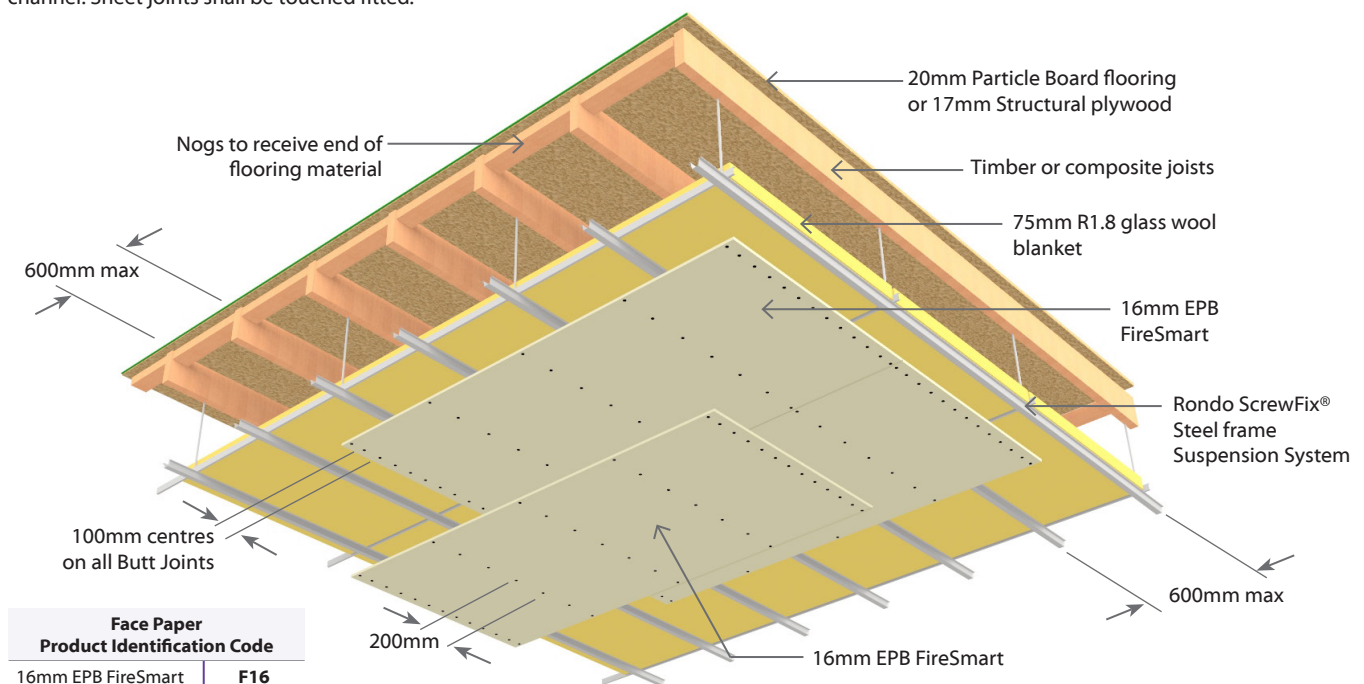
***Impact Insulation Class (IIC)**

IIC of 40 is achieved with a bare floor.

IIC of 42 is achieved with loose laid Vinyl.

IIC of 72 is achieved with 40oz loop pile carpet on 8mm foam chip underlay.

IIC of 73 is achieved with 40oz loop pile carpet on waffle underlay.



E2DFsA45**Direct Fixed Clip - Floor/Ceiling - steel joist****Load Bearing****2 Layers: 2 Layers of Plasterboard to underside of frame****Full Intertency Acoustic**

| System Number | Lining Suffix | FRR | Load Bearing Ability | Noise Control | | | Lining Requirement |
|-----------------|---------------|----------|----------------------|---------------|----|-------|-------------------------|
| | | | | STC | Rw | IIC* | |
| E2DFsA45 | -F26 | 45/45/45 | LB | 56 | 55 | 47-74 | 2 x 13mm EPB FireSmart |
| | -M26 | 45/45/45 | LB | 57 | 56 | 47-74 | 2 x 13mm EPB MultiSmart |

Framing

Steel floor joists shall be a minimum depth of 190mm C-section with 45mm flanges and a steel gauge of 1.55mm minimum. Joist spacing's at no more than 600mm centres.

Flooring

Flooring shall be 20mm thick particle board of 17mm thick structural ply, fixed to the joists as per manufacturer's instructions. Flooring sheet joints must have a polypropylene tongue and groove jointer or be formed over framing.

Acoustic Clip and Battens

The Acoustic Clip shall be fastened to the joists at 1200mm centres maximum (and no less than 900mm centres) to support the metal ceiling battens which are spaced at 600mm centres maximum.

Use 3 x 30mm x 10g Drill-Point Wafer Head Screws. Insert first screw into the middle slot. Adjust clip to correct height. Then insert remaining two screws. A minimum 10mm gap is recommended between the flange of the ceiling batten and the underside of the joist.

Ceiling Sound Absorber

Install Sound Absorber between the joists above the metal ceiling battens. Use minimum 75mm thick R1.8 glass wool blanket.

N.B. Consider Minimum Thermal Requirements.

Plasterboard Lining

NB: The installer must look for the Product Identification Code on the face paper to ensure the correct board type is installed. Refer to the Face Paper Product Identification Code table on this page.

Two layers of EPB Plasterboard as per specified system above, fixed at right angles to the metal ceiling battens. All sheet end butt joints shall occur on the battens. Offset the outer layer by 600mm from the inner layer. Sheet joints should be touched fitted.

Fixing the Lining**Fasteners**

| System Number | 1 st Layer | 2 nd Layer |
|---------------------|-----------------------------|-----------------------|
| | Self-Tapping Drywall Screws | |
| E2DFsA45-F26 | 13mm | 13mm |
| E2DFsA45-M26 | 32 x 6g | 41 x 6g |

Fastening Centres

Ceiling sheets shall be fixed at 200mm centres along each metal ceiling batten.

Fix butt ends at 100mm centres.

Fasteners to be placed no closer than 12mm from sheet edge.

Avoid outer layer screws from hitting inner layer screws.

Acoustic Sealant

A bead of fire retardant Acoustic Sealant must be applied around the perimeter of the first layer and the second layer bedded on the bead.

Wall/Ceiling Junction

The internal angle between the ceilings and walls must be protected by Cornice or square stopped corners taped and filled in accordance with EPB Plasterboard Installation Guide.

Jointing

Inner layer: Unstopped.

Outer Layer: All fastener heads stopped and all sheet joints reinforced with paper jointing tape and stopped in accordance with the publication entitled EPB Plasterboard Installation Guide.

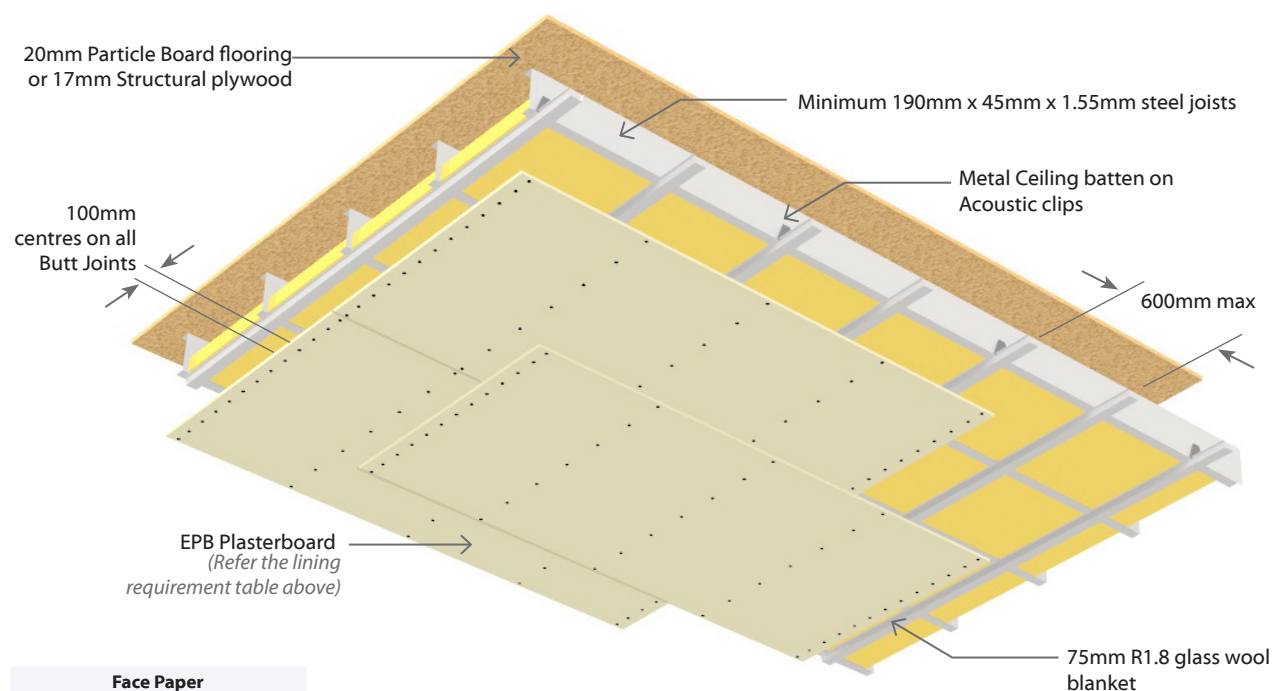
***Impact Insulation Class (IIC)**

IIC of 47 is achieved with a bare floor.

IIC of 48 is achieved with loose laid Vinyl.

IIC of 72 is achieved with 40oz loop pile carpet on 8mm foam chip underlay.

IIC of 74 is achieved with 40oz loop pile carpet on waffle underlay.


**Face Paper
Product Identification Code**

13mm EPB MultiSmart | **M13**



E2DFsA60**Direct Fixed Clip - Floor/Ceiling - steel joist****Load Bearing****2 Layers: 2 Layers of Plasterboard to underside of frame****Full Intertenancy Acoustic**

| System Number | Lining Suffix | FRR | Load Bearing Ability | Noise Control | | | Lining Requirement |
|-----------------|---------------|----------|----------------------|---------------|----|-------|---|
| | | | | STC | Rw | IIC* | |
| E2DFsA60 | -FM29 | 60/60/60 | LB | 57 | 56 | 47-75 | 1 x 16mm EPB FireSmart and 1 x 13mm EPB MultiSmart |
| | -F32 | 60/60/60 | LB | 57 | 56 | 47-75 | 2 x 16mm EPB FireSmart |

Framing

Steel floor joists shall be a minimum depth of 190mm C-section with 45mm flanges and a steel gauge of 1.55mm minimum. Joist spacing's at no more than 600mm centres.

Flooring

Minimum flooring shall be nominal 20mm thick particle board or minimum 17mm thick structural plywood, fixed to the joists as per manufacturers' instructions. Flooring sheet joints must have a polypropylene tongue and groove jointer or be formed over framing.

Acoustic Clip and Battens

The Acoustic Clip shall be fastened to the joists at 1200mm centres maximum (and no less than 900mm centres) to support the metal ceiling battens which are spaced at 600mm centres maximum.

Use 3 x 30mm x 10g Drill-Point Wafer Head Screws. Insert first screw into the middle slot. Adjust clip to correct height. Then insert remaining two screws. A minimum 10mm gap is recommended between the flange of the ceiling batten and the underside of the joist.

Ceiling Sound Absorber

Install Sound Absorber between the joists above the metal ceiling battens. Use minimum 75mm thick R1.8 glass wool blanket.

N.B. Consider Minimum Thermal Requirements.

Plasterboard Lining

NB: The installer must look for the Product Identification Code on the face paper to ensure the correct board type is installed. Refer to the Face Paper Product Identification Code table on this page.

Two layers of EPB Plasterboard as per specified system above fixed at right angles to the metal ceiling battens. All sheet end butt joints shall occur on the battens. Offset the outer layer by 600mm from the inner layer. Sheet joints should be touched fitted.

Fixing the Lining**Fasteners (As per Specified System Above)**

| System Number | 1 st Layer | 2 nd Layer |
|----------------------|-----------------------------|-----------------------|
| | Self-Tapping Drywall Screws | |
| E2DFsA60-FM29 | 16mm | 13mm |
| | 32 x 6g | 41 x 6g |
| E2DFsA60-F32 | 16mm | 16mm |
| | 32 x 6g | 51 x 7g |

Fastening Centres

Ceiling sheets shall be fixed at 200mm centres along each metal ceiling batten.

Fix butt ends at 100mm centres.

Fasteners to be placed no closer than 12mm from sheet edge.

Avoid outer layer screws from hitting inner layer screws.

Acoustic Sealant

A bead of fire retardant Acoustic Sealant must be applied around the perimeter of the first layer and the second layer bedded on the bead.

Wall/Ceiling Junction

The internal angle between the ceilings and walls must be protected by Cornice or square stopped corners taped and filled in accordance with EPB Plasterboard Installation Guide.

Jointing

Inner layer: Unstopped.

Outer Layer: All fastener heads stopped and all sheet joints reinforced with paper jointing tape and stopped in accordance with the publication entitled EPB Plasterboard Installation Guide.

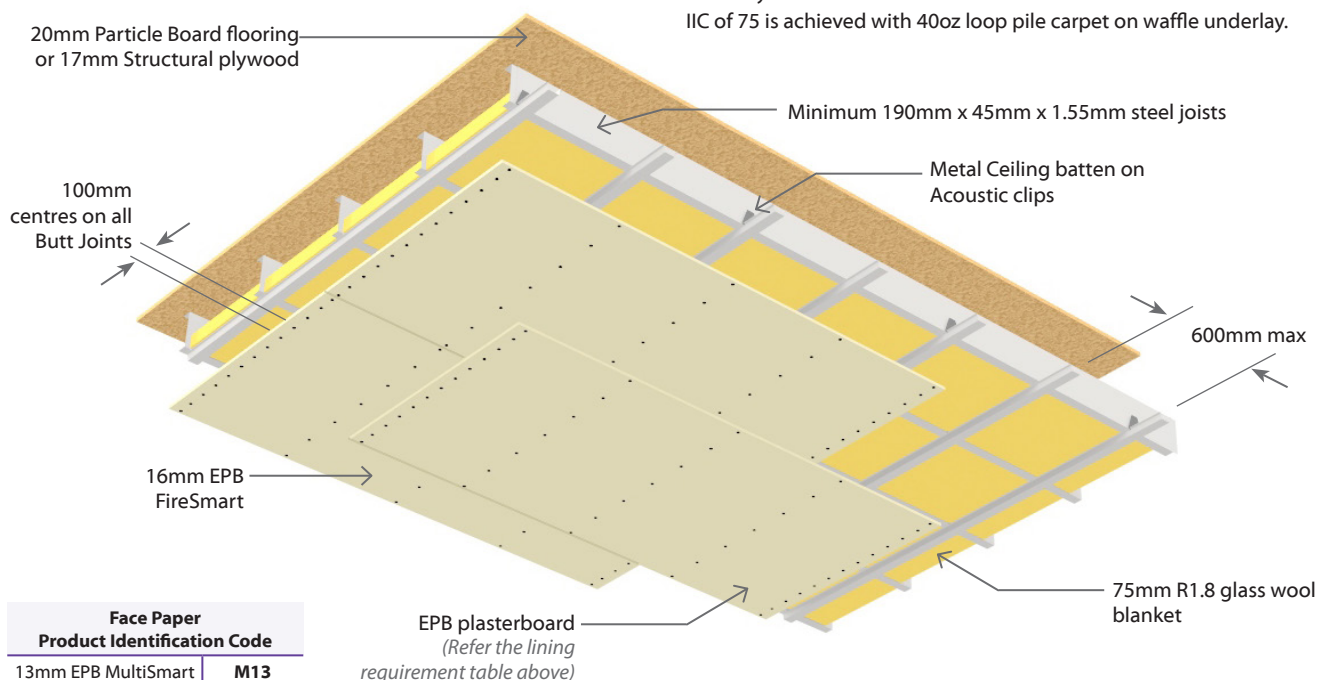
***Impact Insulation Class (IIC)**

IIC of 47 is achieved with a bare floor.

IIC of 49 is achieved with loose laid Vinyl.

IIC of 73 is achieved with 40oz loop pile carpet on 8mm foam chip underlay.

IIC of 75 is achieved with 40oz loop pile carpet on waffle underlay.





Sub Intertenancy Timber Frame Walls

E2TLa30Single Timber FrameLoad Bearing

Two Way FRR

2 Layers: 1 Layer of Plasterboard to each side of frameSub Intertenancy acoustic

| System Number | Lining Suffix | FRR | Load Bearing Ability | Noise Control | | Lining Requirement |
|----------------|---------------|----------|----------------------|---------------|----|-----------------------------------|
| | | | | STC | Rw | |
| E2TLa30 | -S20 | 30/30/30 | LB | 39 | 38 | 1 x 10mm EPB Standard each side |
| | -S26 | 30/30/30 | LB | 40 | 39 | 1 x 13mm EPB Standard each side |
| | -M20 | 30/30/30 | LB | 41 | 40 | 1 x 10mm EPB MultiSmart each side |

Framing

Framing to comply with relevant sections and clauses of NZBC B1: Structure and NZBC B2: Durability.

Studs at 600mm centres maximum.

Nogs at 1350mm centre maximum.

Wall Height, Load and Framing Dimension

These are determined by NZS3604 stud tables for load bearing or non-load bearing partitions. Minimum frame dimension 90 x 45mm in order to achieve the stated STC ratings above.

Wall Sound Absorber

Install Sound Absorber between studs and nogs of the frame. Use 90mm thick R2.2 glass wool insulation.

Plasterboard Lining

NB: The installer must look for the Product Identification Code on the face paper to ensure the correct board type is installed. Refer to the Face Paper Product Identification Code table on this page.

One layer of EPB Plasterboard lining as per specified system above on each side of the timber framing.

Vertical or Horizontal fixing permitted.

Use full height sheets where possible when fixing vertical.

Inner layer joints on opposite side of frame should be offset.

All sheet joints must be fixed over solid timber framing.

Sheet end butt joints must be formed over nogs.

Sheets shall be touch fitted.

Fixing of Linings (Non Fire Rated)

Fix the linings as per the EPB Plasterboard Installation Guide. If an FRR is required then follow the Fixing of Linings instruction in the following paragraph.

Fixing of Linings (to achieve Fire Rating)**Fasteners (As per Specified System Above)**

| System Number | Single Layer |
|--------------------|----------------------------|
| | High Thread Drywall Screws |
| E2TLa30-S20 | 10mm |
| E2TLa30-M20 | 41 x 6g |
| E2TLa30-S26 | 13mm |
| | 41 x 6g |

Fastener Centres

Fix at 300mm centres at sheet perimeter and up all other studs.

Place fasteners 50mm from sheet corners along the top and bottom plates. On end studs place additional fasteners 50-60mm vertically and no close than 10mm from plate to stud connections.

Place fasteners minimum 12mm from sheet edges and sheet ends.

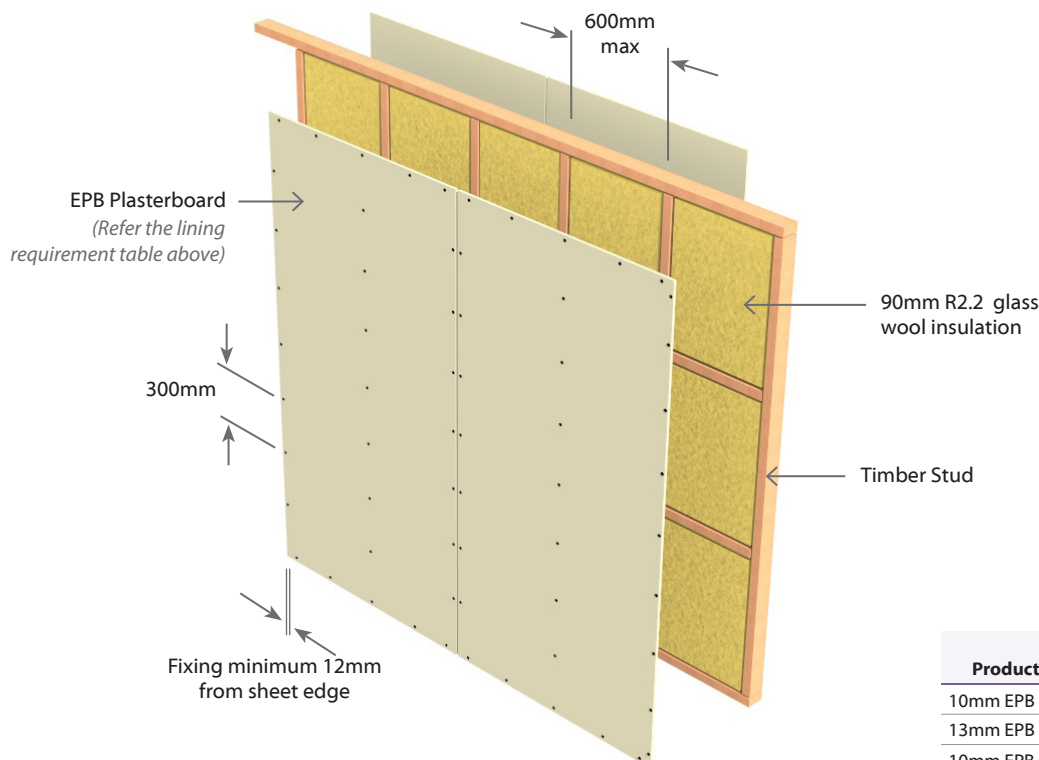
Place fasteners at 200mm centres where sheet end butt joints occur.

Acoustic Sealant

A bead of acoustic sealant is required around the perimeter of the framing and the single layer is bedded onto the bead. The perimeter junctions of the wall must be airtight.

Jointing

All fastener heads stopped and all sheet joints reinforced with paper jointing tape and stopped. Wall to ceiling junctions are to be reinforced with paper tape and square stopped or finished with Cornice. All in accordance with EPB Plasterboard Installation Guide.



| Face Paper Product Identification Code | |
|--|------------|
| 10mm EPB Standard | S10 |
| 13mm EPB Standard | S13 |
| 10mm EPB MultiSmart | M10 |



E3TLa30

Single Timber Frame

Load Bearing

Two Way FRR

3 Layers: 1 Layer of Plasterboard to one side of frame &
2 Layers of Plasterboard to other side of frame

Sub Intertenancy **acoustic**

| System Number | Lining Suffix | FRR | Load Bearing Ability | Noise Control | | Lining Requirement |
|----------------|---------------|----------|----------------------|---------------|----|--|
| | | | | STC | Rw | |
| E3TLa30 | -S30 | 30/30/30 | LB | 42 | 41 | 1 x 10mm EPB Standard one side 2 x 10mm EPB Standard other side |
| | -S39 | 30/30/30 | LB | 43 | 42 | 1 x 13mm EPB Standard one side 2 x 13mm EPB Standard other side |
| | -M30 | 30/30/30 | LB | 44 | 43 | 1 x 10mm EPB MultiSmart one side 2 x 10mm EPB MultiSmart other side |

Framing

Framing to comply with relevant sections and clauses of NZBC B1: Structure and NZBC B2: Durability.

Studs at 600mm centres maximum.

Nogs at 1350mm centre maximum.

Wall Height, Load and Framing Dimension

These are determined by NZS3604 stud tables for load bearing or non-load bearing partitions. Minimum frame dimension 90 x 45mm in order to achieve the stated STC ratings above.

Wall Sound Absorber

Install Sound Absorber between studs and nogs of the frame.

Use 90mm thick R2.2 glass wool insulation.

Plasterboard Lining

NB: The installer must look for the Product Identification Code on the face paper to ensure the correct board type is installed. Refer to the Face Paper Product Identification Code table on this page.

One layer of EPB Plasterboard lining on one side of frame and Two layers on the other side of framing as per specified system above.

First layer or inner layer on each side of framing to be fixed vertically.

Vertical or Horizontal fixing permitted on outer layer only.

Use full height sheets where possible when fixing vertical.

Inner layer joints on opposite side of frame should be offset.

All sheet joints must be fixed over solid timber framing.

Sheet end butt joints must be formed over nogs and offset the outer layer joints from the inner layer.

Sheets shall be touch fitted.

Fixing of Linings (Non Fire Rated)

Fix the linings as per the EPB Plasterboard Installation Guide. If an FRR is required then follow the Fixing of Linings instruction in the following paragraph.

Fixing of Linings (to achieve Fire Rating)**Fasteners (As per Specified System Above)**

| System Number | Side One | | Side Two |
|----------------------------|-----------------------|-----------------------|--------------|
| | 1 st Layer | 2 nd Layer | Single Layer |
| High Thread Drywall Screws | | | |
| E3TLa30-S30 | 10mm | 10mm | 10mm |
| E3TLa30-M30 | 41 x 6g | 51 x 7g | 41 x 6g |
| E3TLa30-S39 | 10mm | 10mm | 13mm |
| | 41 x 6g | 51 x 7g | 41 x 6g |

Fastener Centres

Inner Layer: Fix at 600 centres on vertical studs and 600mm centres horizontally on top and bottom plates.

Single or Outer Layer: Fix at 300mm centres at sheet perimeter and 300mm centres up each stud.

Place fasteners 50mm from sheet corners along the top and bottom plates. On end studs place additional fasteners 50-60mm vertically and no close than 10mm from plate to stud connections.

Place fasteners minimum 12mm from sheet edges and sheet ends.

Place fasteners at 200mm centres where sheet end butt joints occur.

Avoid outer layer screws from hitting inner layer screws.

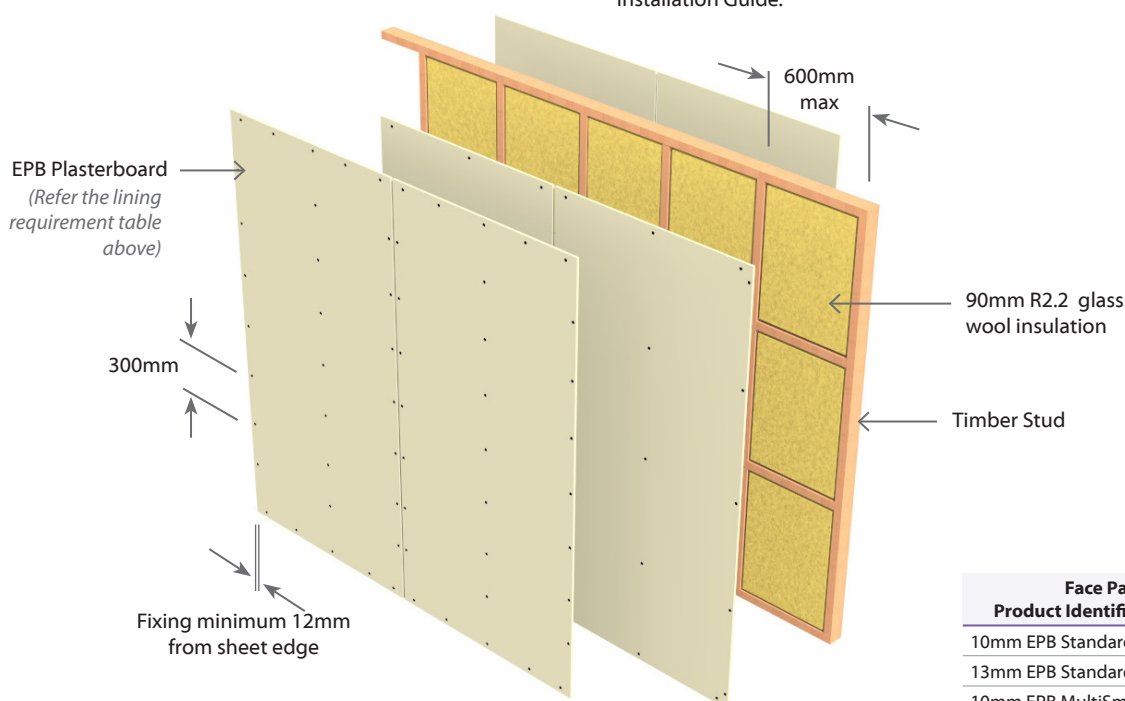
Acoustic Sealant

A bead of acoustic sealant is required around the perimeter of the framing or the inner layer. Then the single or outer layer is bedded onto the bead. The perimeter junctions of the wall must be airtight.

Jointing

Inner Layer: Unstopped.

Outer or Single Layer: All fastener heads stopped and all sheet joints reinforced with paper jointing tape and stopped. Wall to ceiling junctions are to be reinforced with paper tape and square stopped or finished with Cornice. All in accordance with EPB Plasterboard Installation Guide.



| Face Paper Product Identification Code | |
|--|------------|
| 10mm EPB Standard | S10 |
| 13mm EPB Standard | S13 |
| 10mm EPB MultiSmart | M10 |



E4TLa45Single Timber FrameLoad Bearing

Two Way FRR

4 Layers: 2 Layers of Plasterboard to each side of frameSub Intertenancy acoustic

| System Number | Lining Suffix | FRR | Load Bearing Ability | Noise Control | | Lining Requirement |
|----------------|---------------|----------|----------------------|---------------|----|---------------------------------|
| | | | | STC | Rw | |
| E4TLa45 | -S40 | 45/45/45 | LB | 44 | 43 | 2 x 10mm EPB Standard each side |

Framing

Framing to comply with relevant sections and clauses of NZBC B1: Structure and NZBC B2: Durability.

Studs at 600mm centres maximum.

Nogs at 1350mm centre maximum.

Wall Height, Load and Framing Dimension

These are determined by NZS3604 stud tables for load bearing or non-load bearing partitions. Minimum frame dimension 90 x 45mm in order to achieve the stated STC ratings above.

Wall Sound Absorber

Install Sound Absorber between studs and nogs of the frame.

Use 90mm thick R2.2 glass wool insulation.

Plasterboard Lining

NB: The installer must look for the Product Identification Code on the face paper to ensure the correct board type is installed. Refer to the Face Paper Product Identification Code table on this page.

Two layers of 10mm EPB Standard lining on each side of timber framing.

First layer or inner layer on each side of framing to be fixed vertically.

Vertical or Horizontal fixing permitted on outer layer only. Use full height sheets where possible. Inner layer joints on opposite side of frame should be offset. All sheet joints must be fixed over solid timber framing.

Vertical Joints of the outer layer should be offset 600mm from those of the inner layer. Sheet end butt joints must be formed over nogs and offset the outer layer joints from the inner layer.

Sheets shall be touch fitted.

Fixing of Linings (Non Fire Rated)

Fix the linings as per the Elephant Installation Guide. If an FRR is required then follow the Fixing of Linings instruction in the following paragraph.

Fixing of Linings (to achieve Fire Rating)**Fasteners**

| System Number | Side One | | Side Two | |
|----------------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| | 1 st Layer | 2 nd Layer | 1 st Layer | 2 nd Layer |
| High Thread Drywall Screws | | | | |
| E4TLa45-S40 | 10mm | 10mm | 10mm | 10mm |
| | 41 x 6g | 51 x 7g | 41 x 6g | 51 x 7g |

Fastener Centres

Inner Layer: Fix at 600 centres on vertical studs and 600mm centres horizontally on top and bottom plates.

Outer Layer: Fix at 300mm centres at sheet perimeter and 300mm centres up each stud.

Place fasteners 50mm from sheet corners along the top and bottom plates. On end studs place additional fasteners 50-60mm vertically and no close than 10mm from plate to stud connections.

Place fasteners minimum 12mm from sheet edges and sheet ends.

Place fasteners at 200mm centres where sheet end butt joints occur.

Avoid outer layer screws from hitting inner layer screws.

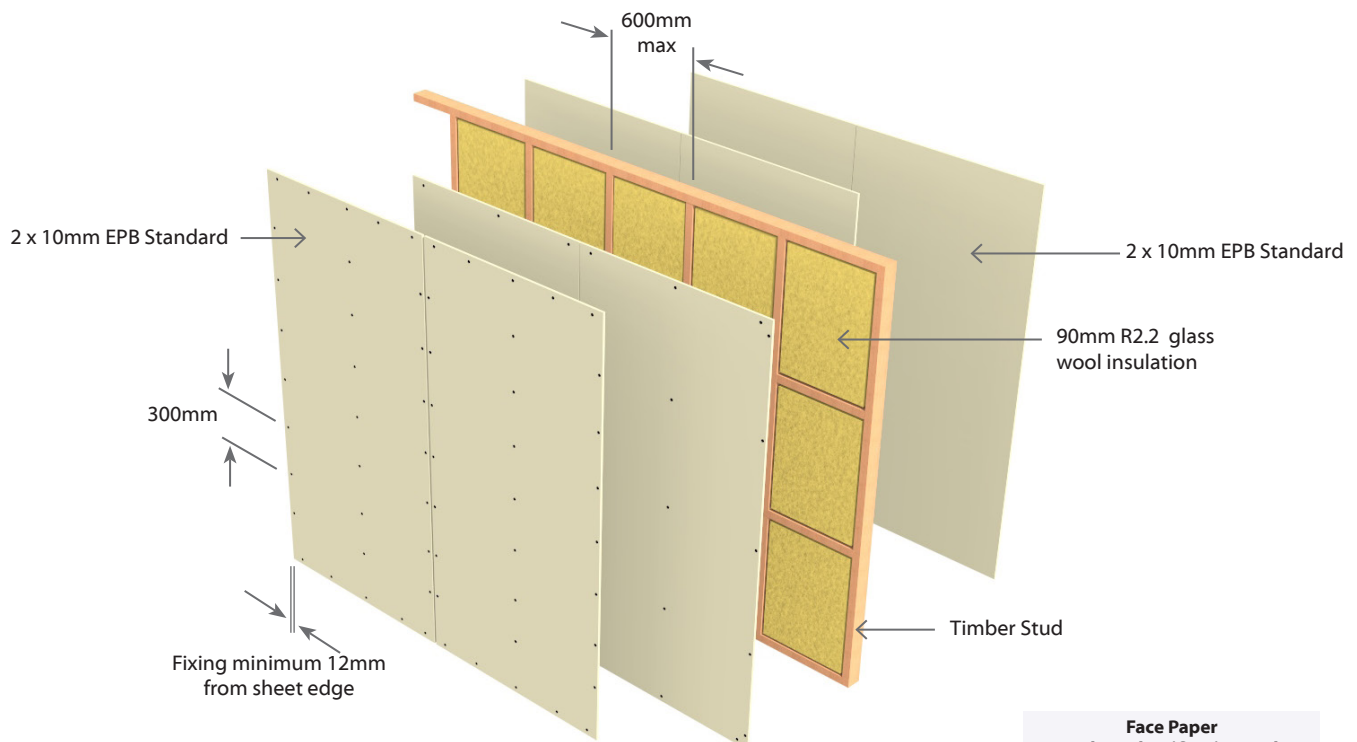
Acoustic Sealant

A bead of acoustical sealant is required around the perimeter of the inner layer and the outer layer is bedded onto the bead. The perimeter junctions of the wall must be airtight.

Jointing

Inner Layer: Unstopped.

Outer Layer: All fastener heads stopped and all sheet joints reinforced with paper jointing tape and stopped. Wall to ceiling junctions are to be reinforced with paper tape and square stopped or finished with Cornice. All in accordance with EPB Plasterboard Installation Guide.



| Face Paper Product Identification Code | |
|--|------------|
| 10mm EPB Standard | S10 |



E2TLa60Single Timber FrameLoad Bearing

Two Way FRR

2 Layers: 1 Layer of Plasterboard to each side of frameSub Intertency acoustic

| System Number | Lining Suffix | FRR | Load Bearing Ability | Noise Control | | Lining Requirement |
|----------------|---------------|----------|----------------------|---------------|----|-----------------------------------|
| | | | | STC | Rw | |
| E2TLa60 | -M26 | 60/60/60 | LB | 42 | 41 | 1 x 13mm EPB MultiSmart each side |

Framing

Framing to comply with relevant sections and clauses of NZBC B1: Structure and NZBC B2: Durability.

Studs at 600mm centres maximum.

Nogs at 800mm centre maximum.

Wall Height, Load and Framing Dimension

These are determined by NZS3604 stud tables for load bearing or non-load bearing partitions. Minimum frame dimension 90 x 45mm in order to achieve the stated STC ratings above.

Wall Sound Absorber

Install Sound Absorber between studs and nogs of the frame.

Use 90mm thick R2.2 glass wool insulation.

Plasterboard Lining

NB: The installer must look for the Product Identification Code on the face paper to ensure the correct board type is installed. Refer to the Face Paper Product Identification Code table on this page.

One layer of 13mm EPB MultiSmart lining on each side of the timber framing.

Vertical fixing only permitted. Use full height sheets where possible when fixing vertical. Sheet joints on opposite side of frame should be offset. All sheet joints must be fixed over solid timber framing. Sheet end butt joints must be formed over nogs. Sheets shall be touch fitted.

Fixing of Linings (Non Fire Rated)

Fix the linings as per the Elephant Installation Guide. If an FRR is required then follow the Fixing of Linings instruction in the following paragraph.

Fixing of Linings (to achieve Fire Rating)**Fasteners**

| System Number | Single Layer | |
|--------------------|----------------------------|---------|
| | High Thread Drywall Screws | |
| E2TLa60-M26 | 13mm | 13mm |
| | 41 x 6g | 41 x 6g |

Fastener Centres

Fix at 300mm centres at sheet perimeter and up all other studs.

Place fasteners 50mm from sheet corners along the top and bottom plates. On end studs place additional fasteners 50-60mm vertically and no close than 10mm from plate to stud connections.

Place fasteners minimum 12mm from sheet edges and sheet ends.

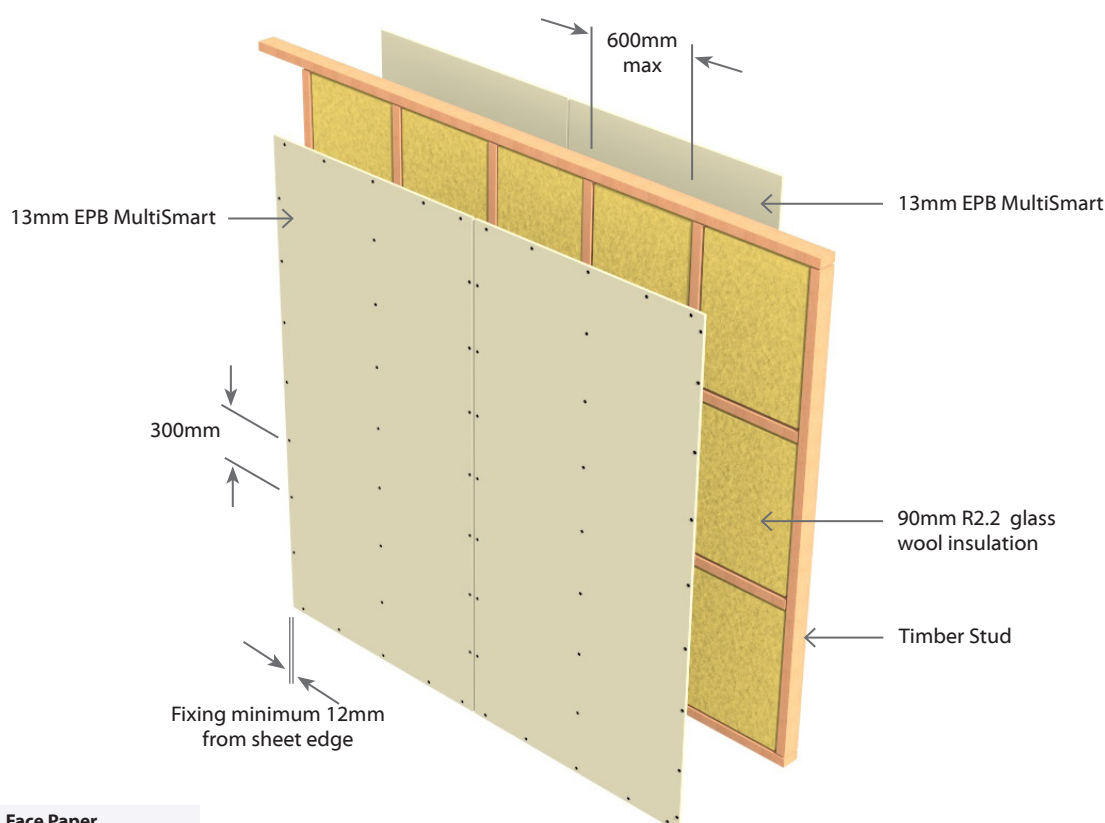
Place fasteners at 200mm centres where sheet end butt joints occur.

Acoustic Sealant

A bead of acoustic sealant is required around the perimeter of the framing and the single layer is bedded onto the bead. The perimeter junctions of the wall must be airtight.

Jointing

All fastener heads stopped and all sheet joints reinforced with paper jointing tape and stopped. Wall to ceiling junctions are to be reinforced with paper tape and square stopped or finished with Cornice. All in accordance with EPB Plasterboard Installation Guide.

**Face Paper****Product Identification Code**

13mm EPB MultiSmart | **M13**



E3TLa60

Single Timber Frame

Load Bearing

Two Way FRR

- 3 Layers:** 1 Layer of Plasterboard to one side of frame &
2 Layers of Plasterboard to other side of frame

Sub Intertency acoustic

| System Number | Lining Suffix | FRR | Load Bearing Ability | Noise Control | | Lining Requirement |
|----------------|---------------|----------|----------------------|---------------|----|--|
| | | | | STC | Rw | |
| E3TLa60 | -MS39 | 60/60/60 | LB | 45 | 44 | 1 x 13mm EPB MultiSmart one side 2 x 13mm EPB Standard other side |
| | -M33 | 60/60/60 | LB | 45 | 44 | 1 x 13mm EPB MultiSmart one side 2 x 10mm EPB MultiSmart other side |
| | -M39 | 60/60/60 | LB | 46 | 45 | 1 x 13mm EPB MultiSmart one side 2 x 13mm EPB MultiSmart other side |

Framing

Framing to comply with relevant sections and clauses of NZBC B1: Structure and NZBC B2: Durability.

Studs at 600mm centres maximum.

Nogs at 1350mm centre maximum.

Wall Height, Load and Framing Dimension

These are determined by NZS3604 stud tables for load bearing or non-load bearing partitions. Minimum frame dimension 90 x 45mm in order to achieve the stated STC ratings above.

Wall Sound Absorber

Install Sound Absorber between studs and nogs of the frame. Use 90mm thick R2.2 glass wool insulation.

Plasterboard Lining

NB: The installer must look for the Product Identification Code on the face paper to ensure the correct board type is installed. Refer to the Face Paper Product Identification Code table on this page.

One layer of EPB Plasterboard lining on one side of frame and Two layers on the other side of framing as per specified system above.

First layer or inner layer on each side of framing to be fixed vertically. Vertical or Horizontal fixing permitted on outer layer only. Use full height sheets where possible when fixing vertical.

Inner layer joints on opposite side of frame should be offset. All sheet joints must be fixed over solid timber framing.

Sheet end butt joints must be formed over nogs and offset the outer layer joints from the inner layer. Sheets shall be touch fitted.

Fixing of Linings (Non Fire Rated)

Fix the linings as per the EPB Installation Guide. If an FRR is required then follow the Fixing of Linings instruction in the following paragraph.

Fixing of Linings (to achieve Fire Rating)**Fasteners (As per Specified System Above)**

| System Number | Side One | | Side Two |
|---|-----------------------|-----------------------|--------------|
| | 1 st Layer | 2 nd Layer | Single Layer |
| High Thread Drywall Screws | | | |
| E3TLa60-M33 | 10mm | 10mm | 13mm |
| | 41 x 6g | 51 x 7g | 41 x 6g |
| E3TLa60-M39 E3TLa60-MS39 | 10mm | 10mm | 13mm |
| | 41 x 6g | 51 x 7g | 41 x 6g |

Fastener Centres

Inner Layer: Fix at 600 centres on vertical studs and 600mm centres horizontally on top and bottom plates.

Outer Layer: Fix at 300mm centres at sheet perimeter and 300mm centres up each stud.

Place fasteners 50mm from sheet corners along the top and bottom plates. On end studs place additional fasteners 50-60mm vertically and no close than 10mm from plate to stud connections.

Place fasteners minimum 12mm from sheet edges and sheet ends.

Place fasteners at 200mm centres where sheet end butt joints occur.

Avoid outer layer screws from hitting inner layer screws.

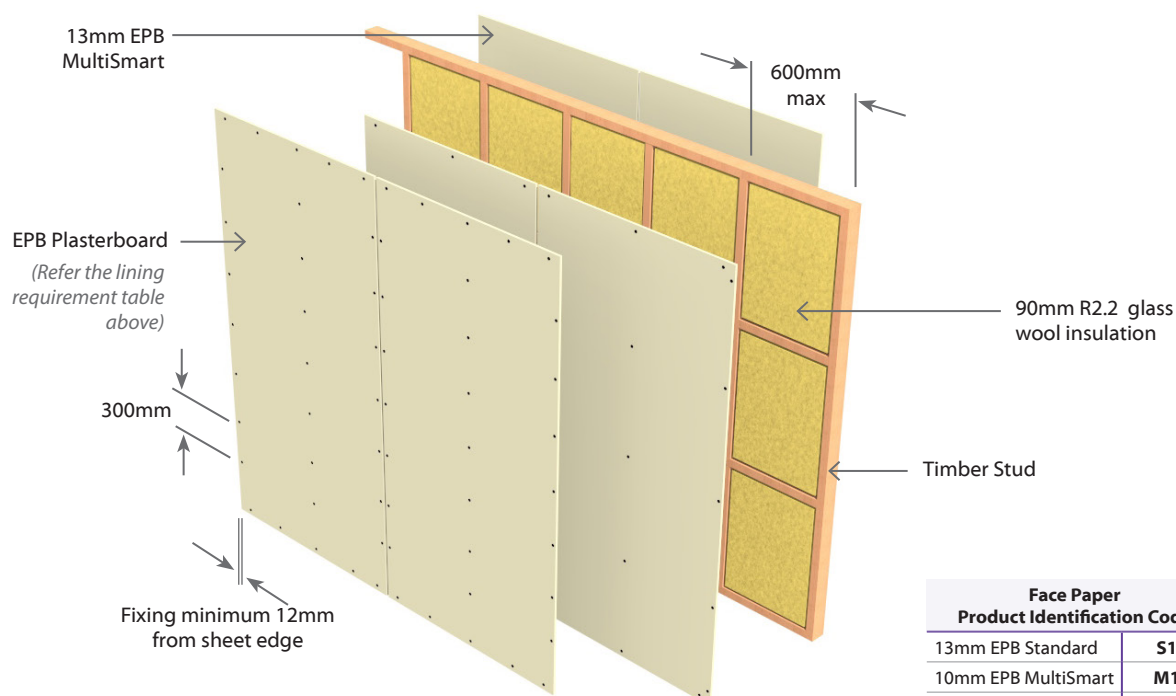
Acoustic Sealant

A bead of acoustic sealant is required around the perimeter of the framing or the inner layer. Then the single or outer layer is bedded onto the bead. The perimeter junctions of the wall must be airtight.

Jointing

Inner Layer: Unstopped.

Outer or Single Layer: All fastener heads stopped and all sheet joints reinforced with paper jointing tape and stopped. Wall to ceiling junctions are to be reinforced with paper tape and square stopped or finished with Cornice. All in accordance with EPB Plasterboard Installation Guide.



| Face Paper Product Identification Code | |
|--|------------|
| 13mm EPB Standard | S13 |
| 10mm EPB MultiSmart | M10 |
| 13mm EPB MultiSmart | M13 |

E4TLa60Single Timber FrameLoad BearingTwo Way FRR**4** Layers: 2 Layers of Plasterboard to each side of frameSub Intertenancy acoustic

| System Number | Lining Suffix | FRR | Load Bearing Ability | Noise Control | | Lining Requirement |
|----------------|---------------|----------|----------------------|---------------|----|---|
| | | | | STC | Rw | |
| E4TLa60 | -S46 | 60/60/60 | LB | 45 | 44 | 1 x 10mm EPB Standard & 1 x 13mm EPB Standard each side |
| | -S52 | 60/60/60 | LB | 46 | 45 | 2 x 13mm EPB Standard each side |
| | -M40 | 60/60/60 | LB | 46 | 45 | 2 x 10mm EPB MultiSmart each side |

Framing

Framing to comply with relevant sections and clauses of NZBC B1: Structure and NZBC B2: Durability.

Studs at 600mm centres maximum.

Nogs at 1350mm centre maximum.

Wall Height, Load and Framing Dimension

These are determined by NZS3604 stud tables for load bearing or non-load bearing partitions. Minimum frame dimension 90 x 45mm in order to achieve the stated STC ratings above.

Wall Sound Absorber

Install Sound Absorber between studs and nogs of the frame.

Use 90mm thick R2.2 glass wool insulation.

Plasterboard Lining

NB: The installer must look for the Product Identification Code on the face paper to ensure the correct board type is installed. Refer to the Face Paper Product Identification Code table on this page.

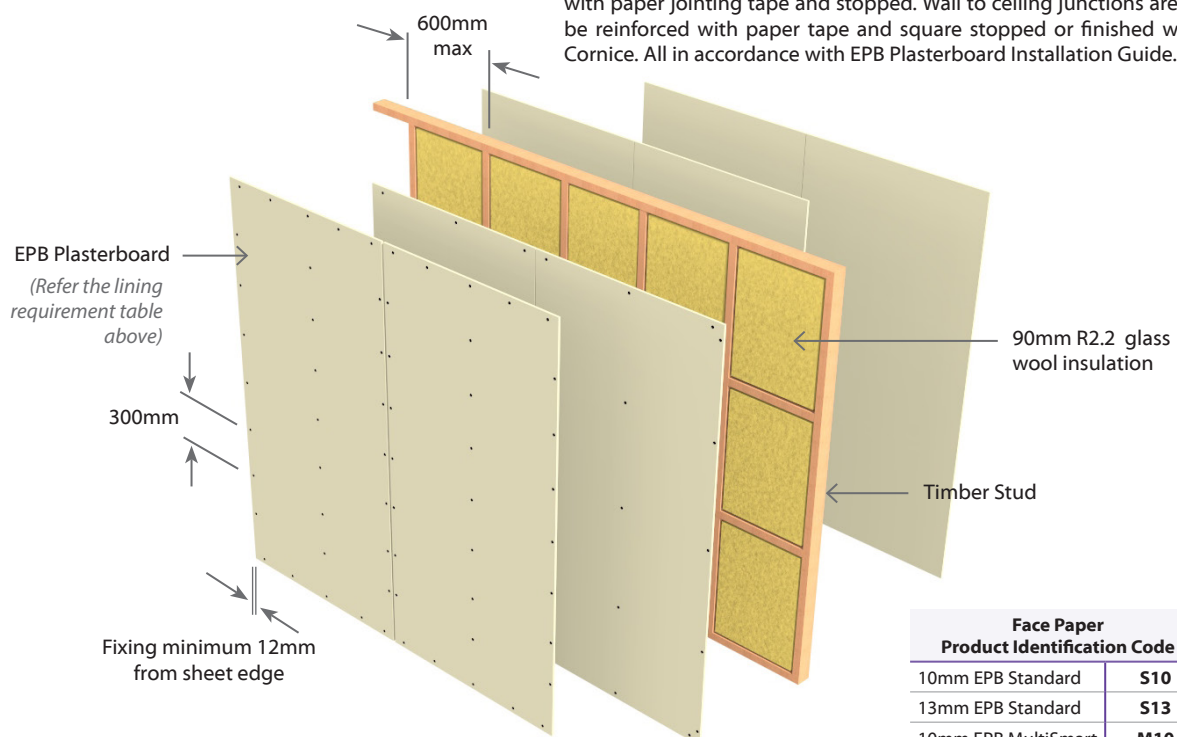
Two layers of EPB Plasterboard lining on one side of frame and Two layers on the other side of framing as per specified system above.

First layer or inner layer on each side of framing to be fixed vertically.

Vertical or Horizontal fixing permitted on outer layer only. Use full height sheets where possible. Inner layer joints on opposite side of frame should be offset. All sheet joints must be fixed over solid timber framing. Vertical Joints of the outer layer should be offset 600mm from those of the inner layer. Sheet end butt joints must be formed over nogs and offset the outer layer joints from the inner layer. Sheets shall be touch fitted.

Fixing of Linings (Non Fire Rated)

Fix the linings as per the Elephant Installation Guide. If an FRR is required then follow the Fixing of Linings instruction in the following paragraph.

**Fixing of Linings (to achieve Fire Rating)**

Fasteners (As per Specified System Above)

| System Number | Side One | | Side Two | |
|----------------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| | 1 st Layer | 2 nd Layer | 1 st Layer | 2 nd Layer |
| High Thread Drywall Screws | | | | |
| E4TLa60-S46 | 10mm | 13mm | 10mm | 13mm |
| | 41 x 6g | 51 x 7g | 41 x 6g | 51 x 7g |
| E4TLa60-S52 | 13mm | 13mm | 13mm | 13mm |
| | 41 x 6g | 51 x 7g | 41 x 6g | 51 x 7g |
| E4TLa60-M40 | 10mm | 10mm | 10mm | 10mm |
| | 41 x 6g | 51 x 7g | 41 x 6g | 51 x 7g |

Fastener Centres

Inner Layer: Fix at 600 centres on vertical studs and 600mm centres horizontally on top and bottom plates.

Outer Layer: Fix at 300mm centres at sheet perimeter and 300mm centres up each stud.

Place fasteners 50mm from sheet corners along the top and bottom plates. On end studs place additional fasteners 50-60mm vertically and no close than 10mm from plate to stud connections.

Place fasteners minimum 12mm from sheet edges and sheet ends.

Place fasteners at 200mm centres where sheet end butt joints occur.

Avoid outer layer screws from hitting inner layer screws.

Acoustic Sealant

A bead of acoustical sealant is required around the perimeter of the inner layer and the outer layer is bedded onto the bead. The perimeter junctions of the wall must be airtight.

Joining

Inner Layer: Unstopped.

Outer Layer: All fastener heads stopped and all sheet joints reinforced with paper jointing tape and stopped. Wall to ceiling junctions are to be reinforced with paper tape and square stopped or finished with Cornice. All in accordance with EPB Plasterboard Installation Guide.



E4TLa90Single Timber FrameLoad Bearing

Two Way FRR

4 Layers: 2 Layers of Plasterboard to each side of frameSub Intertenancy acoustic

| System Number | Lining Suffix | FRR | Load Bearing Ability | Noise Control | | Lining Requirement |
|----------------|---------------|----------|----------------------|---------------|----|--|
| | | | | STC | Rw | |
| E4TLa90 | -M52 | 90/90/90 | LB | 48 | 47 | 2 x 13mm EPB MultiSmart one side 2 x 13mm EPB MultiSmart other side |

Framing

Framing to comply with relevant sections and clauses of NZBC B1: Structure and NZBC B2: Durability.

Studs at 600mm centres maximum.

Nogs at 1350mm centre maximum.

Wall Height, Load and Framing Dimension

These are determined by NZS3604 stud tables for load bearing or non-load bearing partitions. Minimum frame dimension 90 x 45mm in order to achieve the stated STC ratings above.

Wall Sound Absorber

Install Sound Absorber between studs and nogs of the frame.

Use 90mm thick R2.2 glass wool insulation.

Plasterboard Lining

NB: The installer must look for the Product Identification Code on the face paper to ensure the correct board type is installed. Refer to the Face Paper Product Identification Code table on this page.

Two layers of 13mm EPB MultiSmart lining on each side of timber framing.

Vertical fixing only permitted. Use full height sheets where possible.

Inner layer joints on opposite side of frame should be offset.

All sheet joints must be fixed over solid timber framing.

Vertical Joints of the outer layer should be offset 600mm from those of the inner layer. Sheet end butt joints must be formed over nogs and offset the outer layer joints from the inner layer.

Sheets shall be touch fitted.

Fixing of Linings (Non Fire Rated)

Fix the linings as per the EPB Installation Guide. If an FRR is required then follow the Fixing of Linings instruction in the following paragraph.

Fixing of Linings (to achieve Fire Rating)**Fasteners**

| System Number | Side One | | Side Two | |
|----------------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| | 1 st Layer | 2 nd Layer | 1 st Layer | 2 nd Layer |
| High Thread Drywall Screws | | | | |
| E4TLa90-M52 | 13mm | 13mm | 13mm | 13mm |
| | 41 x 6g | 51 x 7g | 41 x 6g | 51 x 7g |

Fastener Centres

Inner Layer: Fix at 600 centres on vertical studs and 600mm centres horizontally on top and bottom plates.

Outer Layer: Fix at 300mm centres at sheet perimeter and 300mm centres up each stud.

Place fasteners 50mm from sheet corners along the top and bottom plates. On end studs place additional fasteners 50-60mm vertically and no close than 10mm from plate to stud connections.

Place fasteners minimum 12mm from sheet edges and sheet ends.

Place fasteners at 200mm centres where sheet end butt joints occur.

Avoid outer layer screws from hitting inner layer screws.

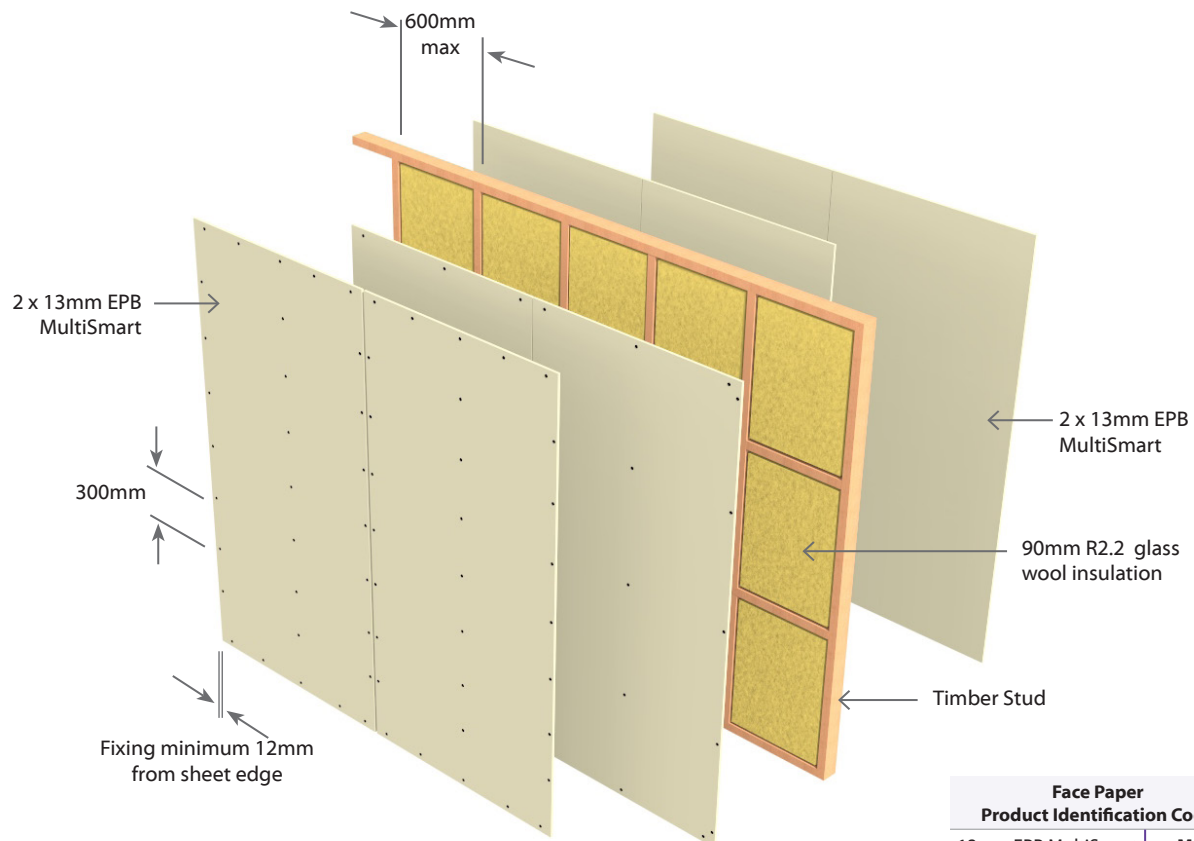
Acoustic Sealant

A bead of acoustical sealant is required around the perimeter of the inner layer and the outer layer is bedded onto the bead. The perimeter junctions of the wall must be airtight.

Jointing

Inner Layer: Unstopped.

Outer Layer: All fastener heads stopped and all sheet joints reinforced with paper jointing tape and stopped. Wall to ceiling junctions are to be reinforced with paper tape and square stopped or finished with Cornice. All in accordance with EPB Plasterboard Installation Guide.



E2TDLa30**Double Timber Frame****Load Bearing****Two Way FRR****2** Layers: 1 Layer of Plasterboard to each side of frameSub Intertenancy **a**coustic

| System Number | Lining Suffix | FRR | Load Bearing Ability | Noise Control | | Lining Requirement |
|-----------------|---------------|----------|----------------------|---------------|----|--|
| | | | | STC | Rw | |
| E2TDLa30 | -S20 | 30/30/30 | LB | 50 | 49 | 1 x 10mm EPB Standard one side 1 x 10mm EPB Standard other side |
| | -S26 | 30/30/30 | LB | 52 | 51 | 1 x 13mm EPB Standard one side 1 x 13mm EPB Standard other side |
| | -M20 | 30/30/30 | LB | 52 | 51 | 1 x 10mm EPB MultiSmart one side 1 x 10mm EPB MultiSmart other side |

Framing

Framing to comply with relevant sections and clauses of NZBC B1: Structure and NZBC B2: Durability.

Studs at 600mm centres maximum.

Nogs at 800mm centre maximum.

Wall Height, Load and Framing Dimension

These are determined by NZS3604 stud tables for load bearing or non-load bearing partitions. Minimum frame dimension 90 x 45mm in order to achieve the stated STC ratings above. Space between Frames shall be a minimum of 25mm

Minimum Partition Width

In order to achieve the STC ratings in the table above the partition width (excluding the board) shall be a minimum of 205mm. Increasing the partition width would increase STC performance as per the table below.

| Stud Size | Space Between Frames | Partition Width (Excludes Board) | STC Rating |
|-----------|----------------------|----------------------------------|------------|
| 90 x 45mm | 25mm Min | 205mm | +0 |
| 90 x 45mm | 75mm Min | 255mm | +2 |

Wall Sound Absorber

Install Sound Absorber between studs and nogs on one side of the double frame. Use 90mm thick R2.2 glass wool insulation.

Plasterboard Lining

NB: The installer must look for the Product Identification Code on the face paper to ensure the correct board type is installed. Refer to the Face Paper Product Identification Code table on this page.

One layer of EPB Plasterboard lining as per specified system above on each side of the timber framing.

Vertical or Horizontal fixing permitted. Use full height sheets where possible when fixing vertical. Sheet joints on opposite side of frame should be offset. All sheet joints must be fixed over solid timber framing. Sheet end butt joints must be formed over nogs. Sheets shall be touch fitted.

Fixing of Linings (Non Fire Rated)

Fix the linings as per the EPB Plasterboard Installation Guide. If an FRR is required then follow the Fixing of Linings instruction in the following paragraph.

Fixing of Linings (to achieve Fire Rating)**Fasteners (As per Specified System Above)**

| System Number | Single Layer |
|---------------------|----------------------------|
| | High Thread Drywall Screws |
| E2TDLa30-S20 | 10mm |
| E2TDLa30-M20 | 41 x 6g |
| E2TDLa30-S26 | 13mm |
| | 41 x 6g |

Fastener Centres

Fix at 300mm centres at sheet perimeter and up all other studs.

Place fasteners 50mm from sheet corners along the top and bottom plates. On end studs place additional fasteners 50-60mm vertically and no close than 10mm from plate to stud connections.

Place fasteners minimum 12mm from sheet edges and sheet ends.

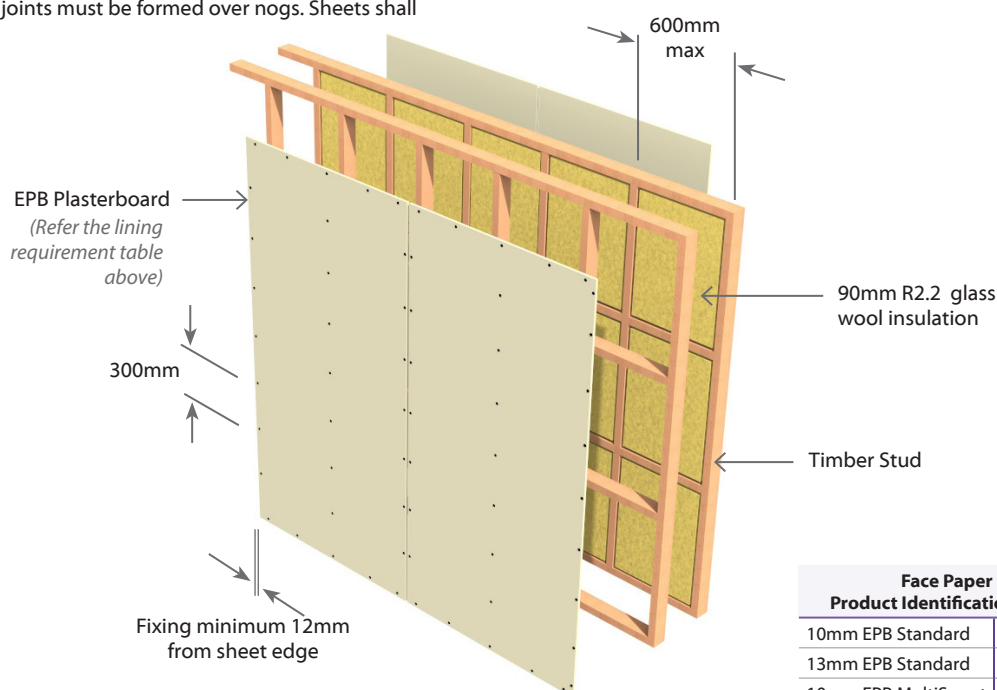
Place fasteners at 200mm centres where sheet end butt joints occur.

Acoustic Sealant

A bead of acoustic sealant is required around the perimeter of the framing and the single layer is bedded onto the bead. The perimeter junctions of the wall must be airtight.

Jointing

All fastener heads stopped and all sheet joints reinforced with paper jointing tape and stopped. Wall to ceiling junctions are to be reinforced with paper tape and square stopped or finished with Cornice. All in accordance with EPB Plasterboard Installation Guide.



| Face Paper Product Identification Code | |
|--|------------|
| 10mm EPB Standard | S10 |
| 13mm EPB Standard | S13 |
| 10mm EPB MultiSmart | M10 |



E3TMLa30Single **T**imber Frame with Resilient **M**ount**L**oad Bearing**T**wo Way FRR

3 Layers: 1 Layer of Plasterboard to Framing side &
2 Layers of Plasterboard to Mount side

Sub Intertency **a**coustic

| System Number | Lining Suffix | FRR | Load Bearing Ability | Noise Control | | Lining Requirement |
|-----------------|---------------|----------|----------------------|---------------|----|--|
| | | | | STC | Rw | |
| E3TMLa30 | -S30 | 30/30/30 | LB | 52 | 51 | Framing Side: 1 x 10mm EPB Standard Mount Side: 2 x 10mm EPB Standard |

Framing

Framing to comply with relevant sections and clauses of NZBC B1: Structure and NZBC B2: Durability.

Studs at 600mm centres maximum.

Nogs at 1350mm centre maximum.

Wall Height, Load and Framing Dimension

These are determined by NZS3604 stud tables for load bearing or non-load bearing partitions. Minimum 90 x 45mm frame dimension.

Minimum Partition Width

In order to achieve the STC ratings in the table above the partition width (excluding the board) shall be a minimum of 130mm.

| Stud Depth | Mount + Channel | Lining Suffix | Plasterboard | Total Partition |
|------------|-----------------|---------------|--------------|-----------------|
| 90mm | 40mm | S30 | 30mm | 160mm |

Wall Sound Absorber

Install Sound Absorber between studs and nogs of the frame. Use 90mm thick R2.2 glass wool insulation.

Acoustic Resilient Mount

The Resilient Mount shall be fixed to the studs at 600mm centres vertically and on every alternative stud using 32mm x 8g wafer head screws. When adjusting the clip for depth, 3mm rubber must remain between the underside of the steel spacer head and the furring channel. The Furring channels are clipped horizontally into the Mounts. Joints must be made as close as possible to the clips.

Plasterboard Lining

NB: The installer must look for the Product Identification Code on the face paper to ensure the correct board type is installed. Refer to the Face Paper Product Identification Code table on this page.

One layer of 10mm EPB Standard lining fixed vertically on framing side and Two layers of 10mm EPB Standard fixed vertically on the furring channel on the other side.

Vertical fixing only permitted. Vertical joints of outer layer should be offset by 600mm from those of the inner layer. Use full height sheets where possible.

All sheet joints on the framing side must be fixed over solid timber framing. Sheet end butt joints must be formed over nogs or furring channels and offset the outer layer joints from the inner layer. Sheets shall be touch fitted.

Fixing of Linings (Non Fire Rated)

Fix the linings as per the EPB Plasterboard Installation Guide. If an FRR is required then follow the Fixing of Linings instruction in the following paragraph.

Fixing of Linings (to achieve Fire Rating)**Fasteners**

| System Number | Furring Channel Side | | Framing Side |
|---------------------|-----------------------------|-----------------------|----------------------------|
| | 1 st Layer | 2 nd Layer | Single Layer |
| | Self-Tapping Drywall Screws | | High Thread Drywall Screws |
| E3TMLa30-S30 | 10mm | 10mm | 10mm |
| | 41 x 6g | 25 x 6g | 32 x 6g |

Fastener Centres

Framing Side: Fix at 300mm centres at sheet perimeter and up each stud.

Resilient Mount Side: Fix 300mm centres along each furring channel. Place fasteners minimum 12mm from sheet edges and sheet ends.

Place fasteners at 200mm centres where sheet end butt joints occur.

Avoid outer layer screws from hitting inner layer screws.

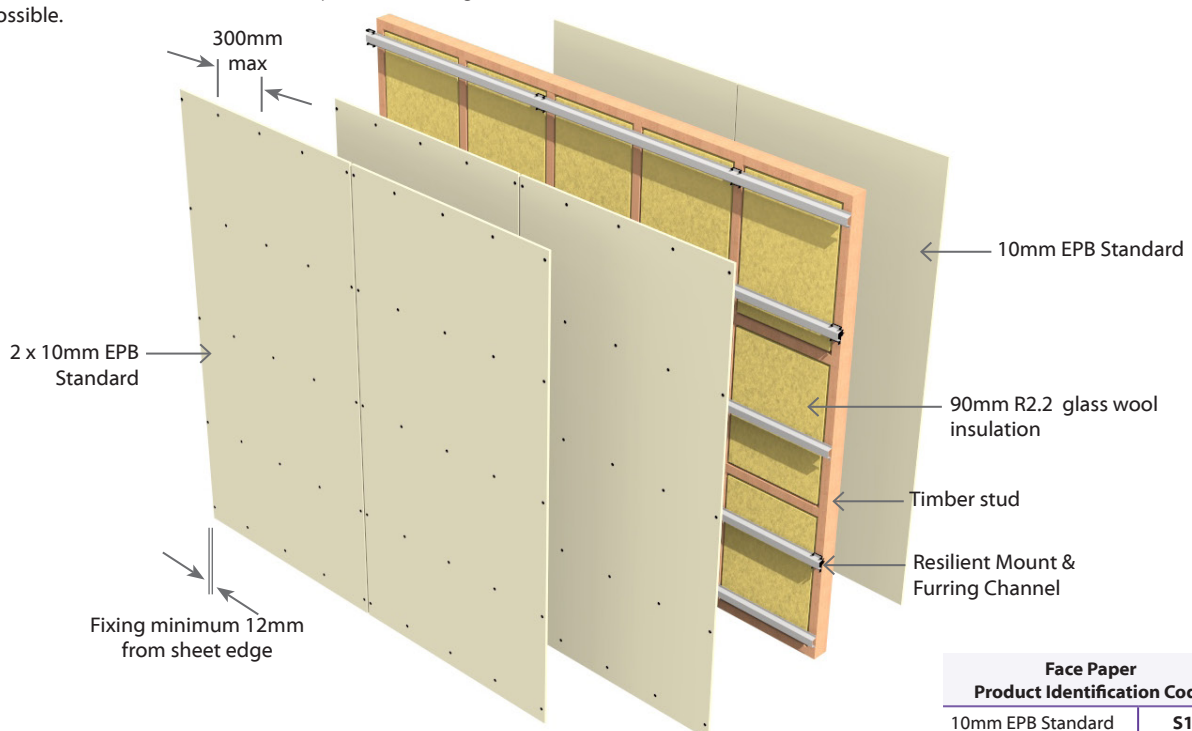
Acoustic Sealant

A bead of acoustic sealant is required around the perimeter of the framing or the inner layer. The single or outer layer is then bedded onto the bead. The perimeter junctions of the wall must be airtight.

Jointing

Inner Layer: Unstopped.

Outer or Single Layer: All fastener heads stopped and all sheet joints reinforced and stopped. Wall to ceiling junctions are to be reinforced with paper tape and square stopped or finished with Cornice. All in accordance with EPB Plasterboard Installation Guide.



| Face Paper Product Identification Code | |
|--|------------|
| 10mm EPB Standard | S10 |



E3TRLa30Single Timber Frame with Resilient Rail

Load Bearing

Two Way FRR

3 Layers: 1 Layer of Plasterboard to Framing side &
2 Layers of Plasterboard to Rail side

Sub Intertency acoustic

| System Number | Lining Suffix | FRR | Load Bearing Ability | Noise Control | | Lining Requirement |
|-----------------|---------------|----------|----------------------|---------------|----|---|
| | | | | STC | Rw | |
| E3TRLa30 | -S30 | 30/30/30 | LB | 47 | 46 | Framing Side: 1 x 10mm EPB Standard Rail Side: 2 x 10mm EPB Standard |
| | -S39 | 30/30/30 | LB | 50 | 49 | Framing Side: 1 x 13mm EPB Standard Rail Side: 2 x 13mm EPB Standard |
| | -M30 | 30/30/30 | LB | 51 | 50 | Framing Side: 1 x 10mm EPB MultiSmart Rail Side: 2 x 10mm EPB MultiSmart |

Framing

Framing to comply with relevant sections and clauses of NZBC B1: Structure and NZBC B2: Durability.

Studs at 600mm centres maximum.

Nogs at 1350mm centre maximum.

Wall Height, Load and Framing Dimension

These are determined by NZS3604 stud tables for load bearing or non-load bearing partitions. Minimum 90 x 45mm frame dimension.

Minimum Partition Width

In order to achieve the STC ratings in the table above the partition width (excluding the board) shall be a minimum of 130mm.

| Stud Depth | Rail | Lining Suffix | | Plasterboard | Total Partition |
|------------|------|---------------|------------|--------------|-----------------|
| 90mm | 13mm | S30 | M30 | 30mm | 133mm |
| | | S39 | | 39mm | 142mm |
| | | | | | |

Wall Sound Absorber

Install Sound Absorber between studs and nogs of the frame.

Use 90mm thick R2.2 glass wool insulation.

Acoustic Resilient Rail

The Resilient Rail shall be fixed to the studs at 600mm centres using 32mm x 8g wafer head self-tapping screws through the base flange and into each stud. The base flange to face downwards and resilient edge upwards. Channel may be joined by nesting together with no more than 20mm overlap. Fasten through both channels into stud. Highest resilient channel shall be fixed no more than 75mm from the ceiling line and the lowest channel, 50mm from the floor line.

Plasterboard Lining

NB: The installer must look for the Product Identification Code on the face paper to ensure the correct board type is installed. Refer to the Face Paper Product Identification Code table on this page.

One layer of EPB Plasterboard lining fixed vertically on framing side and Two layers fixed vertically on the furring channel on the other side as per specified system above. Vertical joints of outer layer should be offset by 600mm from those of the inner layer. Use full height sheets where possible. All sheet joints on the framing side must be fixed over solid timber framing. Sheet end butt joints must be formed over nogs or rails and offset the outer layer joints from the inner layer. Sheets shall be touch fitted.

Fixing of Linings (Non Fire Rated)

Fix the linings as per the EPB Plasterboard Installation Guide. If an FRR is required then follow the Fixing of Linings instruction in the following paragraph.

Fixing of Linings (to achieve Fire Rating)

Fasteners (As per Specified System Above)

| System Number | Resilient Rail Side | | Framing Side |
|--|-----------------------------|-----------------------|----------------------------|
| | 1 st Layer | 2 nd Layer | Single Layer |
| | Self-Tapping Drywall Screws | | High Thread Drywall Screws |
| E3TRLa30-S30 E3TRLa30-M30 | 10mm | 10mm | 10mm |
| | 25 x 6g | 32 x 6g | 41 x 6g |
| E3TRLa30-S39 | 13mm | 13mm | 13mm |
| | 25 x 6g | 41 x 6g | 41 x 6g |

Fastener Centres

Framing Side: Fix at 300mm centres at sheet perimeter and up each stud.

Resilient Rail Side: Fix 300mm centres along each resilient rail.

Place fasteners minimum 12mm from sheet edges and sheet ends.

Place fasteners at 200mm centres where sheet end butt joints occur.

Avoid outer layer screws from hitting inner layer screws.

Lining screws to be fastened to the side of the studs and nogs, to ensure that they don't penetrate or touch the framing.

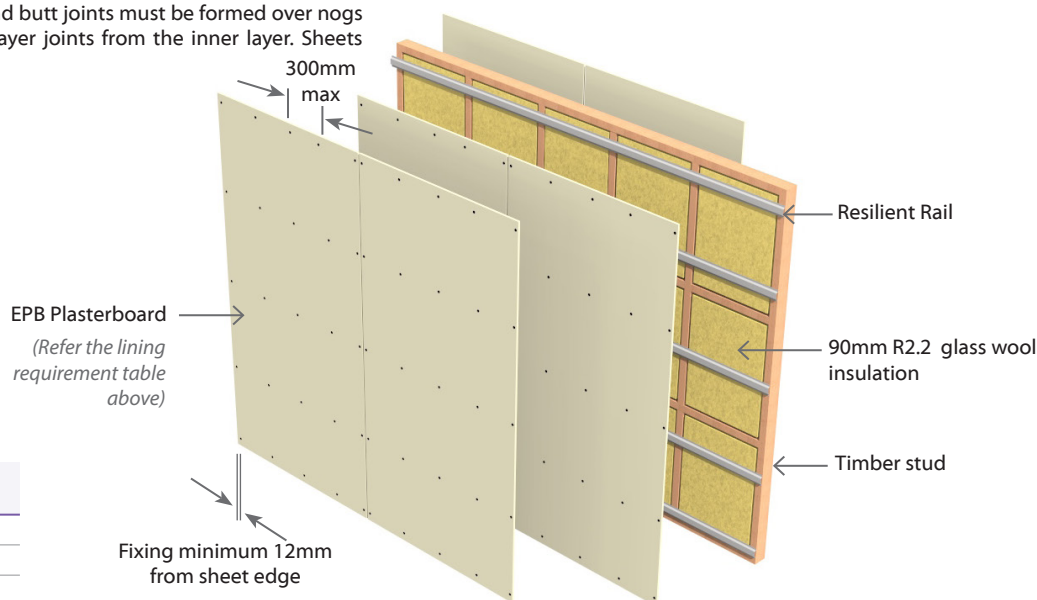
Acoustic Sealant

A bead of acoustic sealant is required around the perimeter of the framing or the inner layer. The single or outer layer is then bedded onto the bead. The perimeter junctions of the wall must be airtight.

Jointing

Inner Layer: Unstopped.

Outer or Single Layer: All fastener heads stopped and all sheet joints reinforced and stopped. Wall to ceiling junctions are to be reinforced with paper tape and square stopped or finished with Cornice. All in accordance with EPB Plasterboard Installation Guide.



| Face Paper Product Identification Code | |
|--|------------|
| 10mm EPB Standard | S10 |
| 13mm EPB Standard | S13 |
| 10mm EPB MultiSmart | M10 |



E3TRLa60Single Timber Frame with Resilient RailLoad BearingTwo Way FRR

3 Layers: 1 Layer of Plasterboard to Framing side &
2 Layers of Plasterboard to Rail side

Sub Intertency acoustic

| System Number | Lining Suffix | FRR | Load Bearing Ability | Noise Control | | Lining Requirement |
|-----------------|---------------|----------|----------------------|---------------|----|---|
| | | | | STC | Rw | |
| E3TRLa60 | -MS39 | 60/60/60 | LB | 52 | 50 | Framing Side: 1 x 13mm EPB MultiSmart Rail Side: 2 x 13mm EPB Standard |
| | -M39 | 60/60/60 | LB | 52 | 51 | Framing Side: 1 x 13mm EPB MultiSmart Rail Side: 2 x 13mm EPB MultiSmart |

Framing

Framing to comply with relevant sections and clauses of NZBC B1: Structure and NZBC B2: Durability.

Studs at 600mm centres maximum.

Nogs at 1350mm centre maximum.

Wall Height, Load and Framing Dimension

These are determined by NZS3604 stud tables for load bearing or non-load bearing partitions. Minimum 90 x 45mm frame dimension.

Minimum Partition Width

In order to achieve the STC ratings in the table above the partition width (excluding the board) shall be a minimum of 130mm.

| Stud Depth | Rail | Lining Suffix | | Plasterboard | Total Partition |
|------------|------|---------------|-------------|--------------|-----------------|
| 90mm | 13mm | S39 | MS39 | 39mm | 142mm |

Wall Sound Absorber

Install Sound Absorber between studs and nogs of the frame. Use 90mm thick R2.2 glass wool insulation.

Acoustic Resilient Rail

The Resilient Rail shall be fixed to the studs at 600mm centres using 32mm x 8g wafer head self-tapping screws through the base flange and into each stud. The base flange to face downwards and resilient edge upwards. Channel may be joined by nesting together with no more than 20mm overlap. Fasten through both channels into stud. Highest resilient channel shall be fixed no more than 75mm from the ceiling line and the lowest channel, 50mm from the floor line.

Plasterboard Lining

NB: The installer must look for the Product Identification Code on the face paper to ensure the correct board type is installed. Refer to the Face Paper Product Identification Code table on this page.

One layer of EPB Plasterboard lining fixed vertically on framing side and Two layers fixed vertically on the furring channel on the other side as per specified system above. Vertical joints of outer layer should be offset by 600mm from those of the inner layer. Use full height sheets

where possible. All sheet joints on the framing side must be fixed over solid timber framing. Sheet end butt joints must be formed over nogs or rails and offset the outer layer joints from the inner layer. Sheets shall be touch fitted.

Fixing of Linings (Non Fire Rated)

Fix the linings as per the EPB Installation Guide. If an FRR is required then follow the Fixing of Linings instruction in the following paragraph.

Fixing of Linings (to achieve Fire Rating)

Fasteners (As per Specified System Above)

| System Number | Resilient Rail Side | | Framing Side |
|----------------------|-----------------------------|-----------------------|----------------------------|
| | 1 st Layer | 2 nd Layer | Single Layer |
| | Self-Tapping Drywall Screws | | High Thread Drywall Screws |
| E3TRLa60-MS39 | 13mm | 13mm | 13mm |
| E3TRLa60-M39 | 25 x 6g | 41 x 6g | 41 x 6g |

Fastener Centres

Framing Side: Fix at 300mm centres at sheet perimeter and up each stud.

Resilient Rail Side: Fix 300mm centres along each resilient rail.

Place fasteners minimum 12mm from sheet edges and sheet ends.

Place fasteners at 200mm centres where sheet end butt joints occur.

Avoid outer layer screws from hitting inner layer screws.

Lining screws to be fastened to the side of the studs and nogs, to ensure that they don't penetrate or touch the framing.

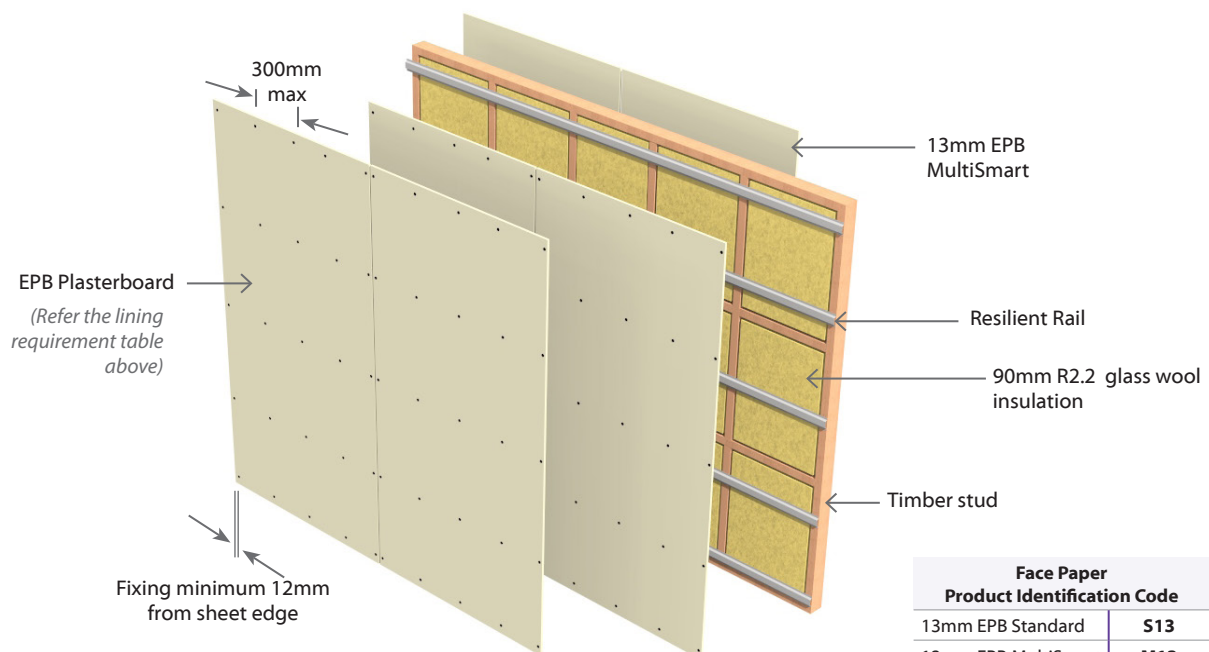
Acoustic Sealant

A bead of acoustic sealant is required around the perimeter of the framing or the inner layer. The single or outer layer is then bedded onto the bead. The perimeter junctions of the wall must be airtight.

Jointing

Inner Layer: Unstopped.

Outer or Single Layer: All fastener heads stopped and all sheet joints reinforced and stopped. Wall to ceiling junctions are to be reinforced with paper tape and square stopped or finished with Cornice. All in accordance with EPB Plasterboard Installation Guide.





Sub Intertenancy Steel Frame Walls

E2Sa15Single Steel Frame

Non Load Bearing

Two Way FRR

2 Layers: 1 Layer of Plasterboard to each side of frameSub Intertency acoustic

| System Number | Lining Suffix | FRR | Load Bearing Ability | Noise Control | | Lining Requirement |
|---------------|---------------|---------|----------------------|---------------|----|---------------------------------|
| | | | | STC | Rw | |
| E2Sa15 | -S20 | -/15/15 | NLB | 40 | 39 | 1 x 10mm EPB Standard each side |

Framing

Steel studs with minimum dimensions 64mm x 34mm x 0.55 BMT with 6mm return. Channels to be minimum size 64mm x 30mm x 0.55 BMT and are fixed to floor and ceiling. Studs are placed with a 15mm expansion gap at top of frame. Channel runners are fixed to the floor and ceiling in true alignment. The studs are not directly fixed to channel. The studs are held in place by the grip of the channel runners. No other fixing is to be used. Studs are placed at 600mm centres maximum.

Wall Heights

Recommended maximum height is 3.0m. Higher walls may be subject to specific engineering design or consult the framing manufacturer.

Wall Sound Absorber

Install Sound Absorber between studs of the frame.
Use 75mm thick R1.8 glass wool blanket.

Plasterboard Lining

NB: The installer must look for the Product Identification Code on the face paper to ensure the correct board type is installed. Refer to the Face Paper Product Identification Code table on this page.

One layer of 10mm EPB Standard lining on each side of the steel framing.

Vertical fixing only permitted. Use full height or full length sheets where possible. Sheet edge and butt joints on opposite side of frame should be offset. All sheet joints must be fixed over steel framing. Sheet end butt joints must be formed over nogs. Sheets are fixed hard to the floor. Sheets shall be touch fitted.

Fixing of Linings (Non Fire Rated)

Fix the linings as per the EPB Plasterboard Installation Guide. If an FRR is required then follow the Fixing of Linings instruction in the following paragraph.

Fixing of Linings (to achieve Fire Rating)**Fasteners**

| System Number | Side One | Side Two |
|-------------------|-----------------------------|----------|
| | Single Layer | |
| | Self-Tapping Drywall Screws | |
| E2Sa15-S20 | 10mm | 10mm |
| | 25 x 6g | 25 x 6g |

Fastener Centres

Fix at 300mm centres up each stud with no fixing to top and bottom channel sections.

Place fasteners no closer than 12mm to the sheet edge and 50mm from sheet ends.

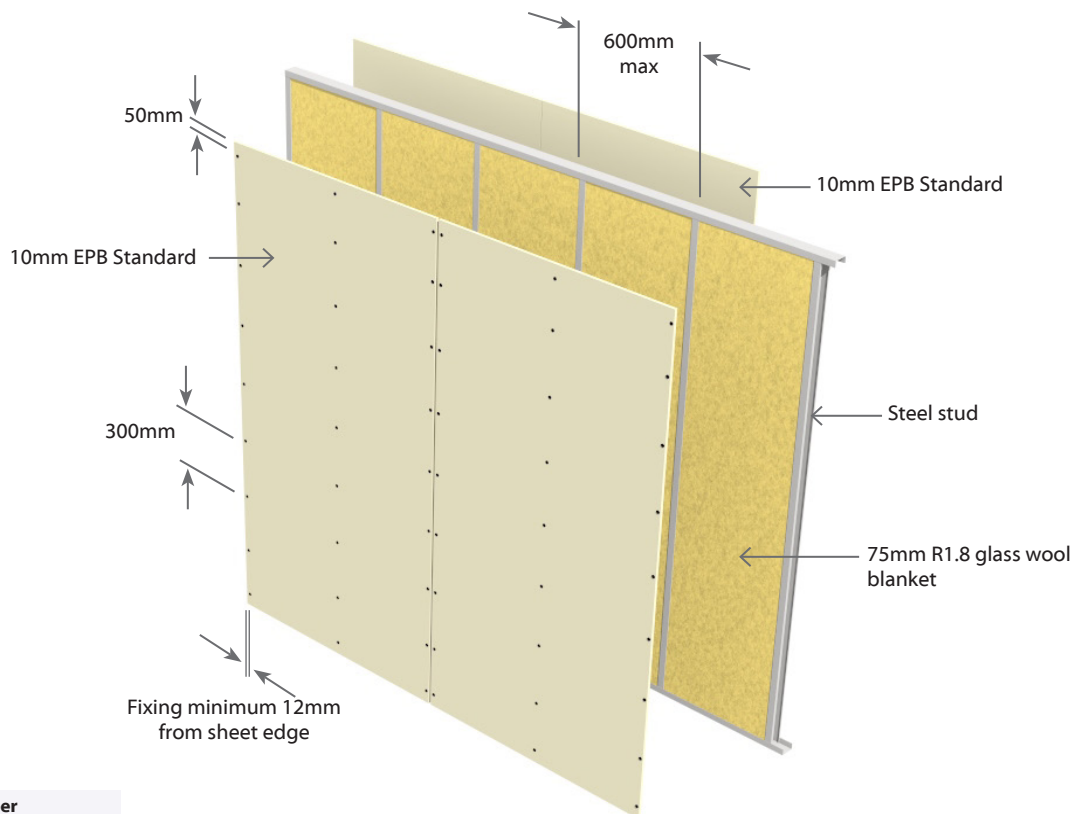
Place fasteners at 200mm centres where sheet end butt joints occur.

Acoustic Sealant

A bead of acoustic sealant is required around the perimeter of the framing and the single layer is bedded onto the bead. The perimeter junctions of the wall must be airtight.

Jointing

All fastener heads stopped and all sheet joints reinforced with paper jointing tape and stopped. Wall to ceiling junctions are to be reinforced with paper tape and square stopped or finished with Cornice. All in accordance with EPB Plasterboard Installation Guide.


Face Paper
Product Identification Code

10mm EPB Standard | **S10**

E2Sa30

Single Steel Frame

Non Load Bearing

Two Way FRR

2 Layers: 1 Layer of Plasterboard to each side of frameSub Intertency **a**coustic

| System Number | Lining Suffix | FRR | Load Bearing Ability | Noise Control | | Lining Requirement |
|---------------|---------------|---------|----------------------|---------------|----|-----------------------------------|
| | | | | STC | Rw | |
| E2Sa30 | -S26 | -/30/30 | NLB | 41 | 40 | 1 x 13mm EPB Standard each side |
| | -M20 | -/30/30 | NLB | 42 | 41 | 1 x 10mm EPB MultiSmart each side |

Framing

Steel studs with minimum dimensions 64mm x 34mm x 0.55 BMT with 6mm return. Channels to be minimum size 64mm x 30mm x 0.55 BMT and are fixed to floor and ceiling. Studs are placed with a 15mm expansion gap at top of frame. Channel runners are fixed to the floor and ceiling in true alignment. The studs are not directly fixed to channel. The studs are held in place by the grip of the channel runners. No other fixing is to be used. Studs are placed at 600mm centres maximum.

Wall Heights

Recommended maximum height is 3.0m. Higher walls may be subject to specific engineering design or consult the framing manufacturer.

Wall Sound Absorber

Install Sound Absorber between studs of the frame.

Use 75mm thick R1.8 glass wool blanket.

Plasterboard Lining

NB: The installer must look for the Product Identification Code on the face paper to ensure the correct board type is installed. Refer to the Face Paper Product Identification Code table on this page.

One layer of EPB Plasterboard lining as per specified system above on each side of the steel framing.

Vertical fixing only permitted. Use full height or full length sheets where possible. Sheet edge and butt joints on opposite side of frame should be offset. All sheet joints must be fixed over steel framing. Sheet end butt joints must be formed over nogs. Sheets are fixed hard to the floor. Sheets shall be touch fitted.

Fixing of Linings (Non Fire Rated)

Fix the linings as per the EPB Installation Guide. If an FRR is required then follow the Fixing of Linings instruction in the following paragraph.

Fixing of Linings (to achieve Fire Rating)**Fasteners (As per Specified System Above)**

| System Number | Side One | Side Two |
|-----------------------------|--------------|--------------|
| | Single Layer | Single Layer |
| Self-Tapping Drywall Screws | | |
| E2Sa30-M20 | 10mm | 10mm |
| | 25 x 6g | 25 x 6g |
| E2Sa30-S26 | 13mm | 13mm |
| | 25 x 6g | 25 x 6g |

Fastener Centres

Fix at 300mm centres up each stud with no fixing to top and bottom channel sections.

Place fasteners no closer than 12mm to the sheet edge and 50mm from sheet ends.

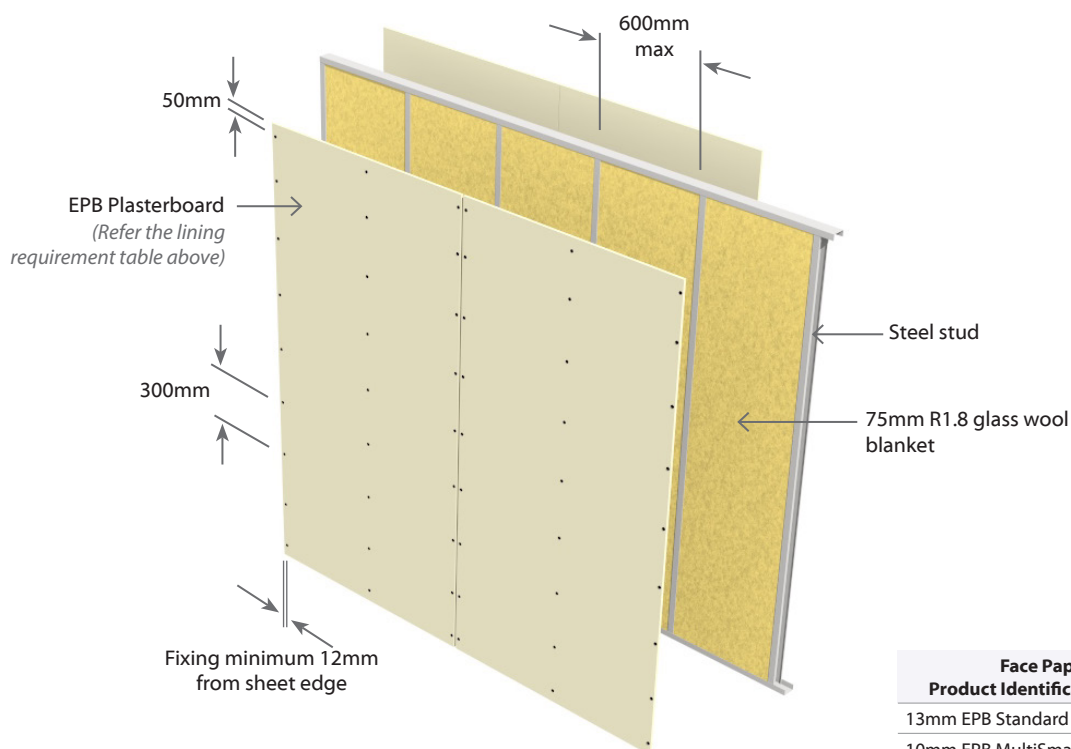
Place fasteners at 200mm centres where sheet end butt joints occur.

Acoustic Sealant

A bead of acoustic sealant is required around the perimeter of the framing and the single layer is bedded onto the bead. The perimeter junctions of the wall must be airtight.

Jointing

All fastener heads stopped and all sheet joints reinforced with paper jointing tape and stopped. Wall to ceiling junctions are to be reinforced with paper tape and square stopped or finished with Cornice. All in accordance with EPB Plasterboard Installation Guide.



| Face Paper Product Identification Code | |
|--|------------|
| 13mm EPB Standard | S13 |
| 10mm EPB MultiSmart | M10 |



E3Sa30Single Steel Frame

Non Load Bearing

Two Way FRR

- 3 Layers:** 1 Layer of Plasterboard to one side of frame &
2 Layers of Plasterboard to other side of frame

Sub Intertency acoustic

| System Number | Lining Suffix | FRR | Load Bearing Ability | Noise Control | | Lining Requirement |
|---------------|---------------|---------|----------------------|---------------|----|--|
| | | | | STC | Rw | |
| E3Sa30 | -S33 | -/30/30 | NLB | 43 | 42 | 1 x 13mm EPB Standard one side 2 x 10mm EPB Standard other side |
| | -S39 | -/30/30 | NLB | 44 | 42 | 1 x 13mm EPB Standard one side 2 x 13mm EPB Standard other side |
| | -M30 | -/30/30 | NLB | 44 | 43 | 1 x 10mm EPB MultiSmart one side 2 x 10mm EPB MultiSmart other side |

Framing Non Load Bearing Systems

Steel studs with minimum dimensions 64mm x 34mm x 0.55 BMT with 6mm return. Channels to be minimum size 64mm x 30mm x 0.55 BMT and are fixed to floor and ceiling. Studs are placed with a 15mm expansion gap at top of frame. Channel runners are fixed to the floor and ceiling in true alignment. The studs are not directly fixed to channel. The studs are held in place by the grip of the channel runners. No other fixing is to be used. Studs are placed at 600mm centres maximum.

Wall Heights

Recommended maximum height is 3.0m. Higher walls may be subject to specific engineering design or consult the framing manufacturer.

Wall Sound Absorber

Install Sound Absorber between studs of the frame.
Use 75mm thick R1.8 glass wool blanket.

Plasterboard Lining

NB: The installer must look for the Product Identification Code on the face paper to ensure the correct board type is installed. Refer to the Face Paper Product Identification Code table on this page.

One layer of EPB Plasterboard to one side and Two layers to the Other Side as per specified system above.

Vertical fixing only permitted. Use full height sheets where possible. Inner layer joints on opposite side of frame should be offset. All sheet joints must be fixed over steel framing. Vertical joints of the outer layer should be offset by 600mm to those of the inner layer. Sheet end butt joints must be formed over nogs and offset the outer layer joints from the inner layer. The inner layers are fixed hard to the floor. Sheets shall be touch fitted.

Fixing of Linings (Non Fire Rated)

Fix the linings as per the EPB Plasterboard Installation Guide. If an FRR is required then follow the Fixing of Linings instruction in the following paragraph.

Fixing of Linings (to achieve Fire Rating)**Fasteners (As per Specified System Above)**

| System Number | Side One | | Side Two |
|-----------------------------|-----------------------|-----------------------|--------------|
| | 1 st Layer | 2 nd Layer | Single Layer |
| Self-Tapping Drywall Screws | | | |
| E3Sa30-M30 | 10mm | 10mm | 10mm |
| | 25 x 6g | 32 x 6g | 25 x 6g |
| E3Sa30-S33 | 10mm | 10mm | 13mm |
| | 25 x 6g | 32 x 6g | 25 x 6g |
| E3Sa30-S39 | 13mm | 13mm | 13mm |
| | 25 x 6g | 41 x 6g | 25 x 6g |

Fastener Centres

Inner Layer: Fix at 600mm centres up each stud with no fixing to top or bottom channel sections.

Outer or Single Layer: Fix at 300mm centres up each stud with no fixing to top and bottom channel sections.

Place fasteners no closer than 12mm to the sheet edge and 50mm from sheet ends. Place fasteners at 200mm centres where sheet end butt joints occur. Avoid outer layer screws from hitting inner layer screws.

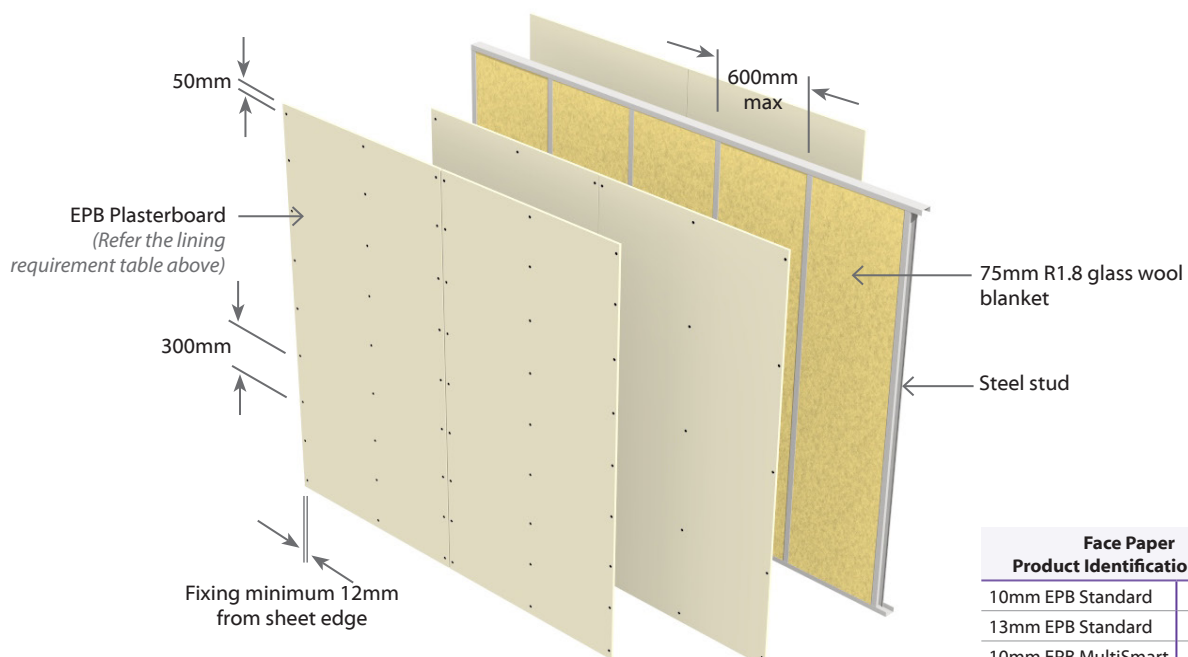
Acoustic Sealant

A bead of acoustic sealant must be placed on the perimeter of the framing or the inner layer. The single or outer layer is then bedded onto the bead. The perimeter junctions of the wall must be airtight.

Jointing

Inner Layer: Unstopped

Outer or Single Layer: All fastener heads stopped and all sheet joints reinforced with paper jointing tape and stopped. Wall to ceiling junctions are to be reinforced with paper tape and square stopped or finished with Cornice. All in accordance with EPB Plasterboard Installation Guide.



| Face Paper Product Identification Code | |
|--|------------|
| 10mm EPB Standard | S10 |
| 13mm EPB Standard | S13 |
| 10mm EPB MultiSmart | M10 |



E4Sa45Single Steel Frame

Non Load Bearing

Two Way FRR

4 Layers: 2 Layers of Plasterboard to each side of frameSub Intertency acoustic

| System Number | Lining Suffix | FRR | Load Bearing Ability | Noise Control | | Lining Requirement |
|---------------|---------------|---------|----------------------|---------------|----|---------------------------------|
| | | | | STC | Rw | |
| E4Sa45 | -S40 | -/45/45 | NLB | 45 | 44 | 2 x 10mm EPB Standard each side |

Framing Non Load Bearing Systems

Steel studs with minimum dimensions 64mm x 34mm x 0.55 BMT with 6mm return. Channels to be minimum size 64mm x 30mm x 0.55 BMT and are fixed to floor and ceiling. Studs are placed with a 15mm expansion gap at top of frame. Channel runners are fixed to the floor and ceiling in true alignment. The studs are not directly fixed to channel. The studs are held in place by the grip of the channel runners. No other fixing is to be used. Studs are placed at 600mm centres maximum.

Wall Heights

Recommended maximum height is 3.0m. Higher walls may be subject to specific engineering design or consult the framing manufacturer.

Wall Sound Absorber

Install Sound Absorber between studs of the frame.
Use 75mm thick R1.8 glass wool blanket.

Plasterboard Lining

NB: The installer must look for the Product Identification Code on the face paper to ensure the correct board type is installed. Refer to the Face Paper Product Identification Code table on this page.

Two layers of 10mm EPB Standard linings to each side of the steel framing.

Vertical fixing only permitted. Use full height sheets where possible. Inner layer joints on opposite side of frame should be offset. All sheet joints must be fixed over steel framing. Vertical joints of the outer layer should be offset by 600mm to those of the inner layer. Sheet end butt joints must be formed over nogs and offset the outer layer joints from the inner layer. The inner layers are fixed hard to the floor. Sheets shall be touch fitted.

Fixing of Linings (Non Fire Rated)

Fix the linings as per the EPB Plasterboard Installation Guide. If an FRR is required then follow the Fixing of Linings instruction in the following paragraph.

Fixing of Linings (to achieve Fire Rating)**Fasteners**

| System Number | Side One | | Side two | |
|-------------------|-----------------------------|-----------------------|-----------------------|-----------------------|
| | 1 st Layer | 2 nd Layer | 1 st Layer | 2 nd Layer |
| | Self-Tapping Drywall Screws | | | |
| E4Sa45-S40 | 10mm | 10mm | 10mm | 10mm |
| | 25 x 6g | 32 x 6g | 25 x 6g | 32 x 6g |

Fastener Centres

Inner Layer: Fix at 600mm centres up each stud with no fixing to top or bottom channel sections.

Outer Layer: Fix at 300mm centres up each stud with no fixing to top and bottom channel sections.

Place fasteners no closer than 12mm to the sheet edge and 50mm from sheet ends.

Place fasteners at 200mm centres where sheet end butt joints occur.

Avoid outer layer screws from hitting inner layer screws.

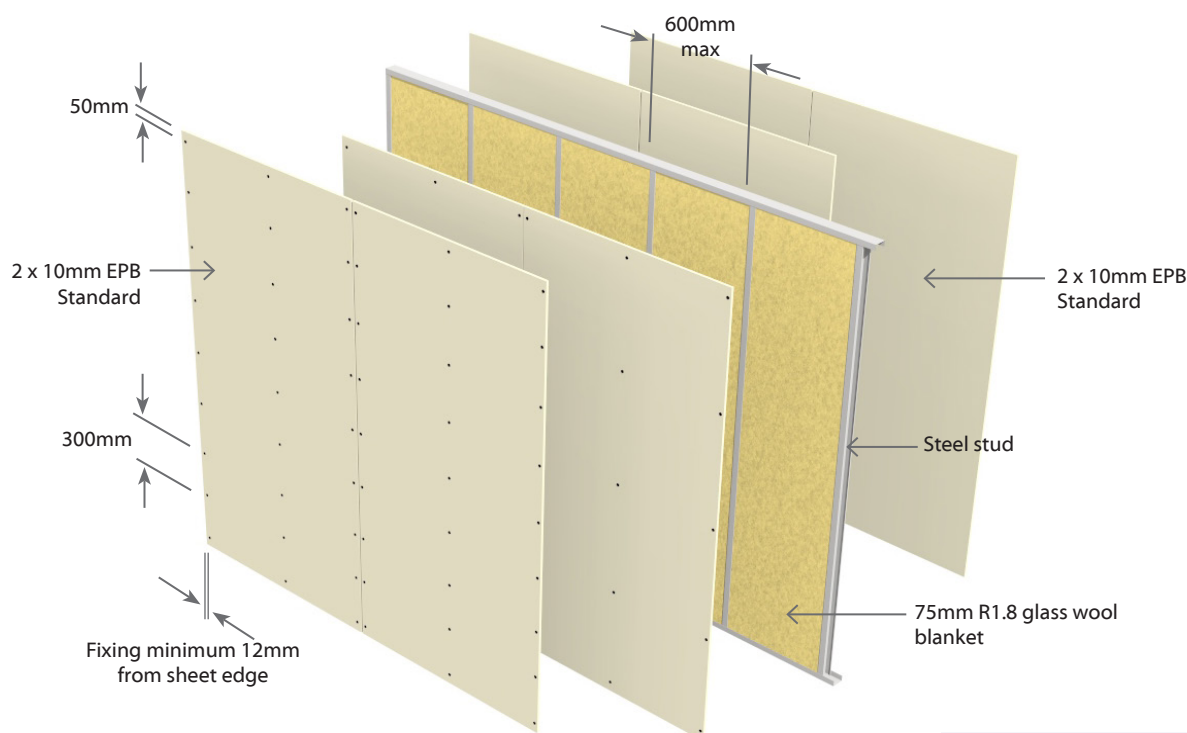
Acoustic Sealant

A bead of acoustical sealant is required around the perimeter of the inner layer and the outer layer is bedded onto the bead. The perimeter junctions of the wall must be airtight.

Jointing

Inner Layer: Unstopped.

Outer Layer: All fastener heads stopped and all sheet joints reinforced with paper jointing tape and stopped. Wall to ceiling junctions are to be reinforced with paper tape and square stopped or finished with Cornice. All in accordance with EPB Plasterboard Installation Guide.



| Face Paper Product Identification Code | |
|--|------------|
| 10mm EPB Standard | S10 |



E2Sa60Single Steel Frame

Non Load Bearing

Two Way FRR

2 Layers: 1 Layer of Plasterboard to each side of frameSub Intertency acoustic

| System Number | Lining Suffix | FRR | Load Bearing Ability | Noise Control | | Lining Requirement |
|---------------|---------------|---------|----------------------|---------------|----|-----------------------------------|
| | | | | STC | Rw | |
| E2Sa60 | -M26 | -/60/60 | NLB | 43 | 42 | 1 x 13mm EPB MultiSmart each side |

Framing

Steel studs with minimum dimensions 64mm x 34mm x 0.55 BMT with 6mm return. Channels to be minimum size 64mm x 30mm x 0.55 BMT and are fixed to floor and ceiling. Studs are placed with a 15mm expansion gap at top of frame. Channel runners are fixed to the floor and ceiling in true alignment. The studs are not directly fixed to channel. The studs are held in place by the grip of the channel runners. No other fixing is to be used. Studs are placed at 600mm centres maximum.

Wall Heights

Recommended maximum height is 3.0m. Higher walls may be subject to specific engineering design or consult the framing manufacturer.

Wall Sound Absorber

Install Sound Absorber between studs of the frame.
Use 75mm thick R1.8 glass wool blanket.

Plasterboard Lining

NB: The installer must look for the Product Identification Code on the face paper to ensure the correct board type is installed. Refer to the Face Paper Product Identification Code table on this page.

One layer of 13mm EPB MultiSmart lining to each side of the steel framing.

Vertical fixing only permitted. Use full height or full length sheets where possible. Sheet edge and butt joints on opposite side of frame should be offset. All sheet joints must be fixed over steel framing. Sheet end butt joints must be formed over nogs. Sheets are fixed hard to the floor. Sheets shall be touch fitted.

Fixing of Linings (Non Fire Rated)

Fix the linings as per the Elephant Installation Guide. If an FRR is required then follow the Fixing of Linings instruction in the following paragraph.

Fixing of Linings (to achieve Fire Rating)**Fasteners**

| System Number | Side One | Side Two |
|-------------------|-----------------------------|----------|
| | Single Layer | |
| | Self-Tapping Drywall Screws | |
| E2Sa60-M26 | 13mm | |
| | 25 x 6g | |

Fastener Centres

Fix at 300mm centres up each stud with no fixing to top and bottom channel sections.

Place fasteners no closer than 12mm to the sheet edge and 50mm from sheet ends.

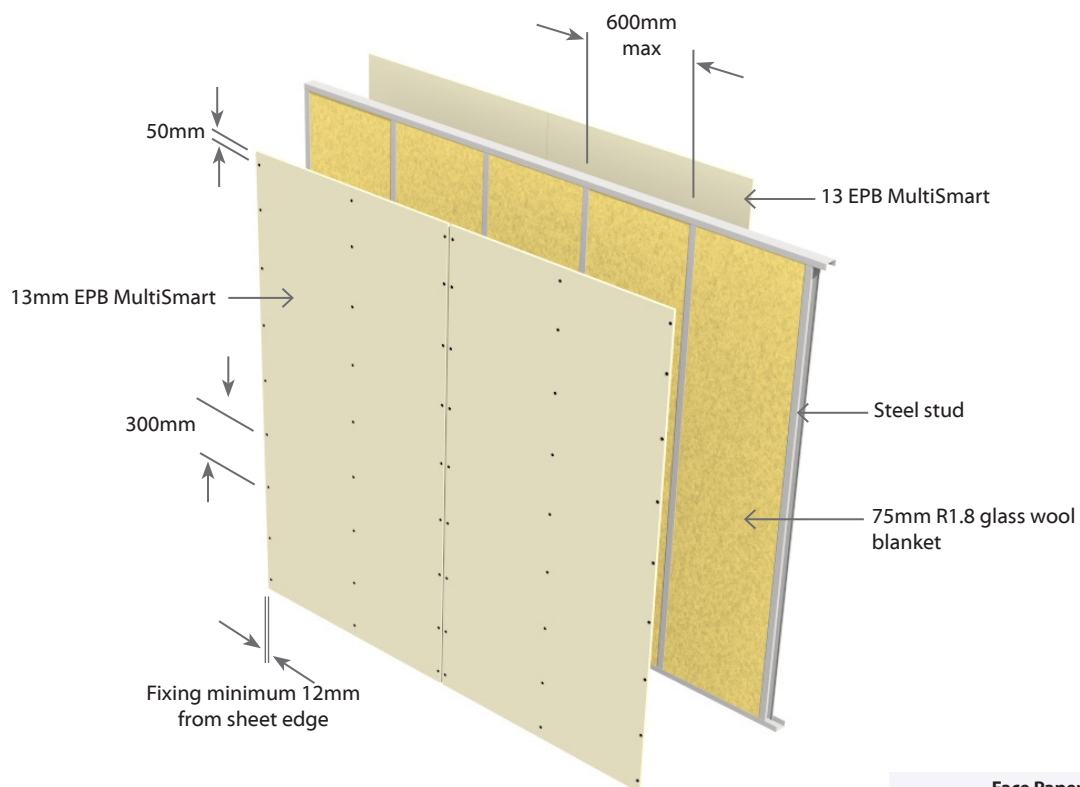
Place fasteners at 200mm centres where sheet end butt joints occur.

Acoustic Sealant

A bead of acoustic sealant is required around the perimeter of the framing and the single layer is bedded onto the bead. The perimeter junctions of the wall must be airtight.

Jointing

All fastener heads stopped and all sheet joints reinforced with paper jointing tape and stopped. Wall to ceiling junctions are to be reinforced with paper tape and square stopped or finished with Cornice. All in accordance with EPB Plasterboard Installation Guide.



| Face Paper Product Identification Code | |
|--|------------|
| 13mm EPB MultiSmart | M13 |



E3Sa60Single Steel Frame

Non Load Bearing

Two Way FRR

3 Layers: 1 Layer of Plasterboard to one side of the frame &
2 Layers of Plasterboard to other side of the frame

Sub Intertency acoustic

| System Number | Lining Suffix | FRR | Load Bearing Ability | Noise Control | | Lining Requirement |
|---------------|---------------|---------|----------------------|---------------|----|--|
| | | | | STC | Rw | |
| E3Sa60 | -MS39 | -/60/60 | NLB | 44 | 43 | 1 x 13mm EPB MultiSmart one side 2 x 13mm EPB Standard other side |
| | -M39 | -/60/60 | NLB | 45 | 44 | 1 x 13mm EPB MultiSmart one side 2 x 13mm EPB MultiSmart other side |

Framing Non Load Bearing Systems

Steel studs with minimum dimensions 64mm x 34mm x 0.55 BMT with 6mm return. Channels to be minimum size 64mm x 30mm x 0.55 BMT and are fixed to floor and ceiling. Studs are placed with a 15mm expansion gap at top of frame. Channel runners are fixed to the floor and ceiling in true alignment. The studs are not directly fixed to channel. The studs are held in place by the grip of the channel runners. No other fixing is to be used. Studs are placed at 600mm centres maximum.

Wall Heights

Recommended maximum height is 3.0m. Higher walls may be subject to specific engineering design or consult the framing manufacturer.

Wall Sound Absorber

Install Sound Absorber between studs of the frame.

Use 75mm thick R1.8 glass wool blanket.

Plasterboard Lining

NB: The installer must look for the Product Identification Code on the face paper to ensure the correct board type is installed. Refer to the Face Paper Product Identification Code table on this page.

One layer of EPB Plasterboard to one side and Two layers to the Other Side as per specified system above.

Vertical fixing only permitted. Use full height sheets where possible. Inner layer joints on opposite side of frame should be offset. All sheet joints must be fixed over steel framing. Vertical joints of the outer layer should be offset by 600mm to those of the inner layer. Sheet end butt joints must be formed over nogs and offset the outer layer joints from the inner layer. The inner layers are fixed hard to the floor. Sheets shall be touch fitted.

Fixing of Linings (Non Fire Rated)

Fix the linings as per the EPB Installation Guide. If an FRR is required then follow the Fixing of Linings instruction in the following paragraph.

Fixing of Linings (to achieve Fire Rating)**Fasteners**

| System Number | Side One | | Side Two |
|--------------------|-----------------------------|-----------------------|--------------|
| | 1 st Layer | 2 nd Layer | Single Layer |
| | Self-Tapping Drywall Screws | | |
| E3Sa60-MS39 | 13mm | 13mm | 13mm |
| E3Sa60-M39 | 25 x 6g | 41 x 6g | 25 x 6g |

Fastener Centres

Inner Layer: Fix at 600mm centres up each stud with no fixing to top or bottom channel sections.

Outer or Single Layer: Fix at 300mm centres up each stud with no fixing to top and bottom channel sections.

Place fasteners no closer than 12mm to the sheet edge and 50mm from sheet ends.

Place fasteners at 200mm centres where sheet end butt joints occur.

Avoid outer layer screws from hitting inner layer screws.

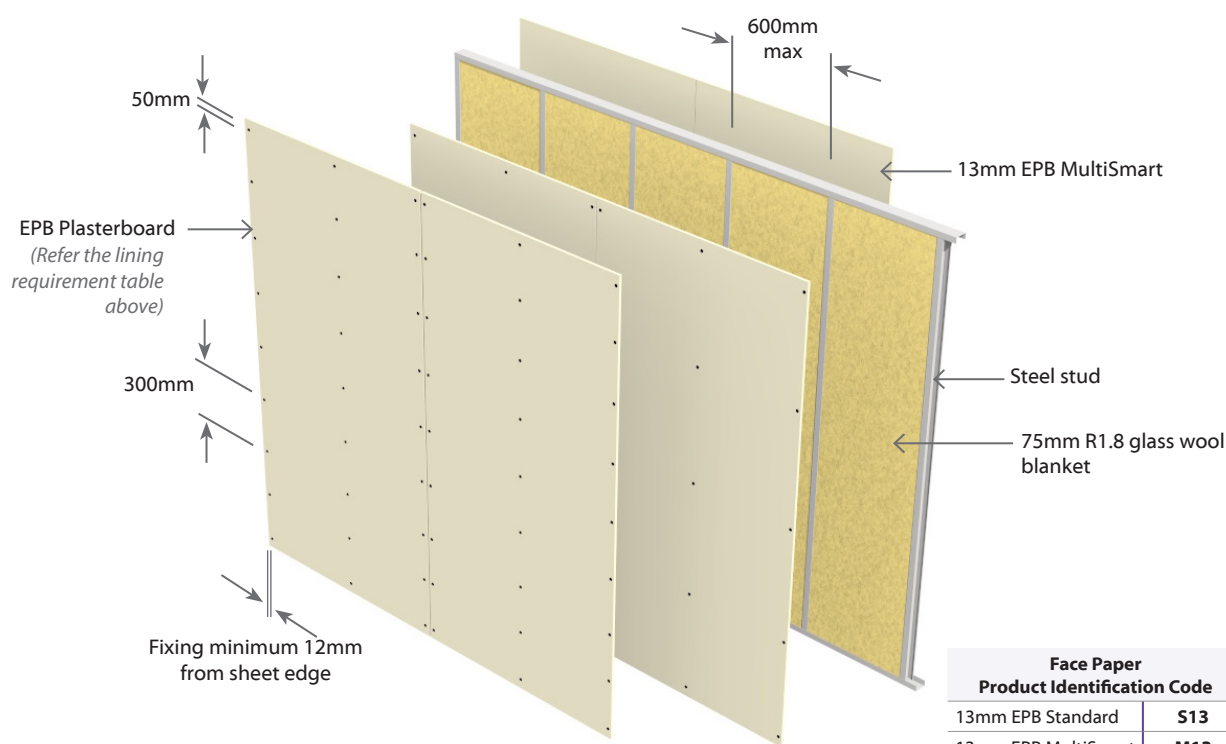
Acoustic Sealant

A bead of acoustic sealant must be placed on the perimeter of the framing or the inner layer. The single or outer layer is then bedded onto the bead. The perimeter junctions of the wall must be airtight.

Jointing

Inner Layer: Unstopped

Outer or Single Layer: All fastener heads stopped and all sheet joints reinforced with paper jointing tape and stopped. Wall to ceiling junctions are to be reinforced with paper tape and square stopped or finished with Cornice. All in accordance with EPB Plasterboard Installation Guide.



E4Sa60Single Steel Frame

Non Load Bearing

Two Way FRR

4 Layers: 2 Layers of Plasterboard to each side of frameSub Intertency acoustic

| System Number | Lining Suffix | FRR | Load Bearing Ability | Noise Control | | Lining Requirement |
|---------------|---------------|---------|----------------------|---------------|----|---|
| | | | | STC | Rw | |
| E4Sa60 | -S46 | -/60/60 | NLB | 46 | 45 | 1 x 10mm EPB Standard & 1 x 13mm EPB Standard each side |
| | -S52 | -/60/60 | NLB | 48 | 47 | 2 x 13mm EPB Standard each side |
| | -M40 | -/60/60 | NLB | 48 | 47 | 2 x 10mm EPB MultiSmart each side |

Framing Non Load Bearing Systems

Steel studs with minimum dimensions 64mm x 34mm x 0.55 BMT with 6mm return. Channels to be minimum size 64mm x 30mm x 0.55 BMT and are fixed to floor and ceiling. Studs are placed with a 15mm expansion gap at top of frame. Channel runners are fixed to the floor and ceiling in true alignment. The studs are not directly fixed to channel. The studs are held in place by the grip of the channel runners. No other fixing is to be used. Studs are placed at 600mm centres maximum.

Wall Heights

Recommended maximum height is 3.0m. Higher walls may be subject to specific engineering design or consult the framing manufacturer.

Wall Sound Absorber

Install Sound Absorber between studs of the frame.
Use 75mm thick R1.8 glass wool blanket.

Plasterboard Lining

NB: The installer must look for the Product Identification Code on the face paper to ensure the correct board type is installed. Refer to the Face Paper Product Identification Code table on this page.

Two layers of EPB Plasterboard to one side and Two layers to the Other side as per specified system above.

Vertical fixing only permitted. Use full height sheets where possible. Inner layer joints on opposite side of frame should be offset. All sheet joints must be fixed over steel framing. Vertical joints of the outer layer should be offset by 600mm to those of the inner layer. Sheet end butt joints must be formed over nogs and offset the outer layer joints from the inner layer. The inner layers are fixed hard to the floor. Sheets shall be touch fitted.

Fixing of Linings (Non Fire Rated)

Fix the linings as per the EPB Installation Guide. If an FRR is required then follow the Fixing of Linings instruction in the following paragraph.

Fixing of Linings (to achieve Fire Rating)**Fasteners (As per Specified System Above)**

| System Number | Side One | | Side two | |
|-----------------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| | 1 st Layer | 2 nd Layer | 1 st Layer | 2 nd Layer |
| Self-Tapping Drywall Screws | | | | |
| E4Sa60-M40 | 10mm | 10mm | 10mm | 10mm |
| | 25 x 6g | 32 x 6g | 25 x 6g | 32 x 6g |
| E4Sa60-S46 | 10mm | 13mm | 10mm | 13mm |
| | 25 x 6g | 41 x 6g | 25 x 6g | 41 x 6g |
| E4Sa60-S52 | 13mm | 13mm | 13mm | 13mm |
| | 25 x 6g | 41 x 6g | 25 x 6g | 41 x 6g |

Fastener Centres

Inner Layer: Fix at 600mm centres up each stud with no fixing to top or bottom channel sections.

Outer Layer: Fix at 300mm centres up each stud with no fixing to top and bottom channel sections.

Place fasteners no closer than 12mm to the sheet edge and 50mm from sheet ends.

Place fasteners at 200mm centres where sheet end butt joints occur.

Avoid outer layer screws from hitting inner layer screws.

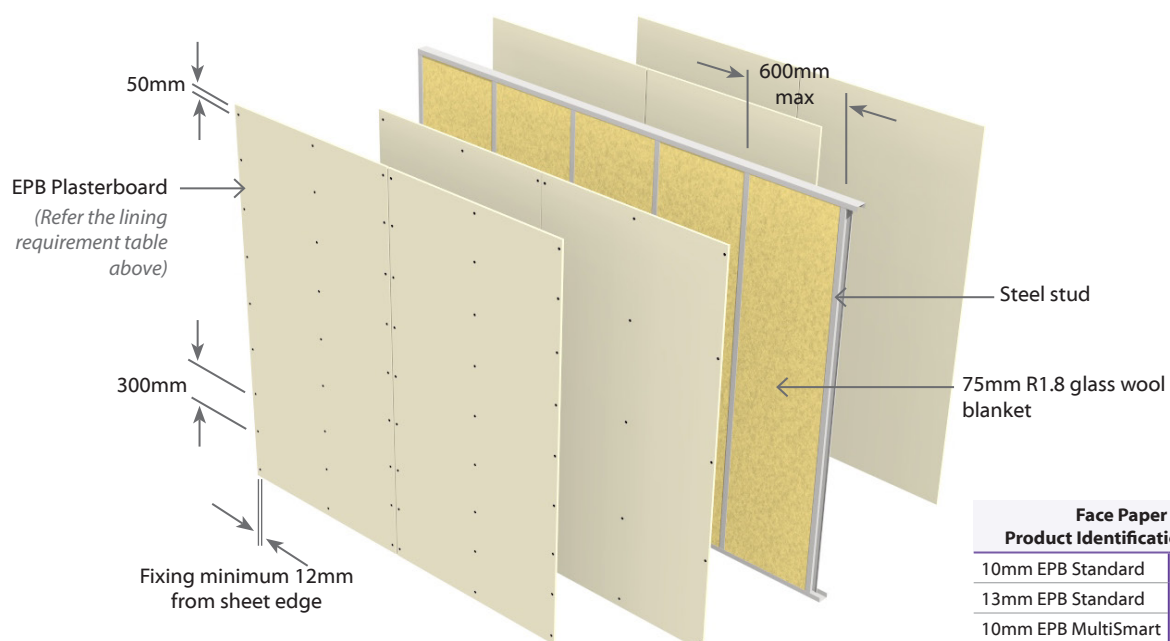
Acoustic Sealant

A bead of acoustic sealant must be placed on the perimeter of the framing or the inner layer. The outer layer is then bedded onto the bead. The perimeter junctions of the wall must be airtight.

Jointing

Inner Layer: Unstopped.

Outer Layer: All fastener heads stopped and all sheet joints reinforced with paper jointing tape and stopped. Wall to ceiling junctions are to be reinforced with paper tape and square stopped or finished with Cornice. All in accordance with EPB Plasterboard Installation Guide.



| Face Paper Product Identification Code | |
|--|------------|
| 10mm EPB Standard | S10 |
| 13mm EPB Standard | S13 |
| 10mm EPB MultiSmart | M10 |



E4Sa90Single Steel Frame

Non Load Bearing

Two Way FRR

4 Layers: 2 Layers of Plasterboard to each side of frameSub Intertency acoustic

| System Number | Lining Suffix | FRR | Load Bearing Ability | Noise Control | | Lining Requirement |
|---------------|---------------|---------|----------------------|---------------|----|---|
| | | | | STC | Rw | |
| E4Sa90 | -M46 | -/90/90 | NLB | 50 | 49 | 1 x 10mm EPB MultiSmart & 1 x 13mm EPB MultiSmart each side |

Framing Non Load Bearing Systems

Steel studs with minimum dimensions 64mm x 34mm x 0.55 BMT with 6mm return. Channels to be minimum size 64mm x 30mm x 0.55 BMT and are fixed to floor and ceiling. Studs are placed with a 15mm expansion gap at top of frame. Channel runners are fixed to the floor and ceiling in true alignment. The studs are not directly fixed to channel. The studs are held in place by the grip of the channel runners. No other fixing is to be used. Studs are placed at 600mm centres maximum.

Wall Heights

Recommended maximum height is 3.0m. Higher walls may be subject to specific engineering design or consult the framing manufacturer.

Wall Sound Absorber

Install Sound Absorber between studs of the frame.
Use 75mm thick R1.8 glass wool blanket.

Plasterboard Lining

NB: The installer must look for the Product Identification Code on the face paper to ensure the correct board type is installed. Refer to the Face Paper Product Identification Code table on this page.

One layer of 10mm EPB MultiSmart and One layer of 13mm EPB MultiSmart to each side of the steel framing.

Vertical fixing only permitted. Use full height sheets where possible. Inner layer joints on opposite side of frame should be offset. All sheet joints must be fixed over steel framing. Vertical joints of the outer layer should be offset by 600mm to those of the inner layer. Sheet end butt joints must be formed over nogs and offset the outer layer joints from the inner layer. The inner layers are fixed hard to the floor. Sheets shall be touch fitted.

Fixing of Linings (Non Fire Rated)

Fix the linings as per the EPB Installation Guide. If an FRR is required then follow the Fixing of Linings instruction in the following paragraph.

Fixing of Linings (to achieve Fire Rating)**Fasteners**

| System Number | Side One | | Side Two | |
|-------------------|-----------------------------|-----------------------|-----------------------|-----------------------|
| | 1 st Layer | 2 nd Layer | 1 st Layer | 2 nd Layer |
| | Self-Tapping Drywall Screws | | | |
| E4Sa90-M46 | 10mm | 13mm | 10mm | 13mm |
| | 25 x 6g | 41 x 6g | 25 x 6g | 41 x 6g |

Fastener Centres

Inner Layer: Fix at 600mm centres up each stud with no fixing to top or bottom channel sections.

Outer Layer: Fix at 300mm centres up each stud with no fixing to top and bottom channel sections.

Place fasteners no closer than 12mm to the sheet edge and 50mm from sheet ends.

Place fasteners at 200mm centres where sheet end butt joints occur.

Avoid outer layer screws from hitting inner layer screws.

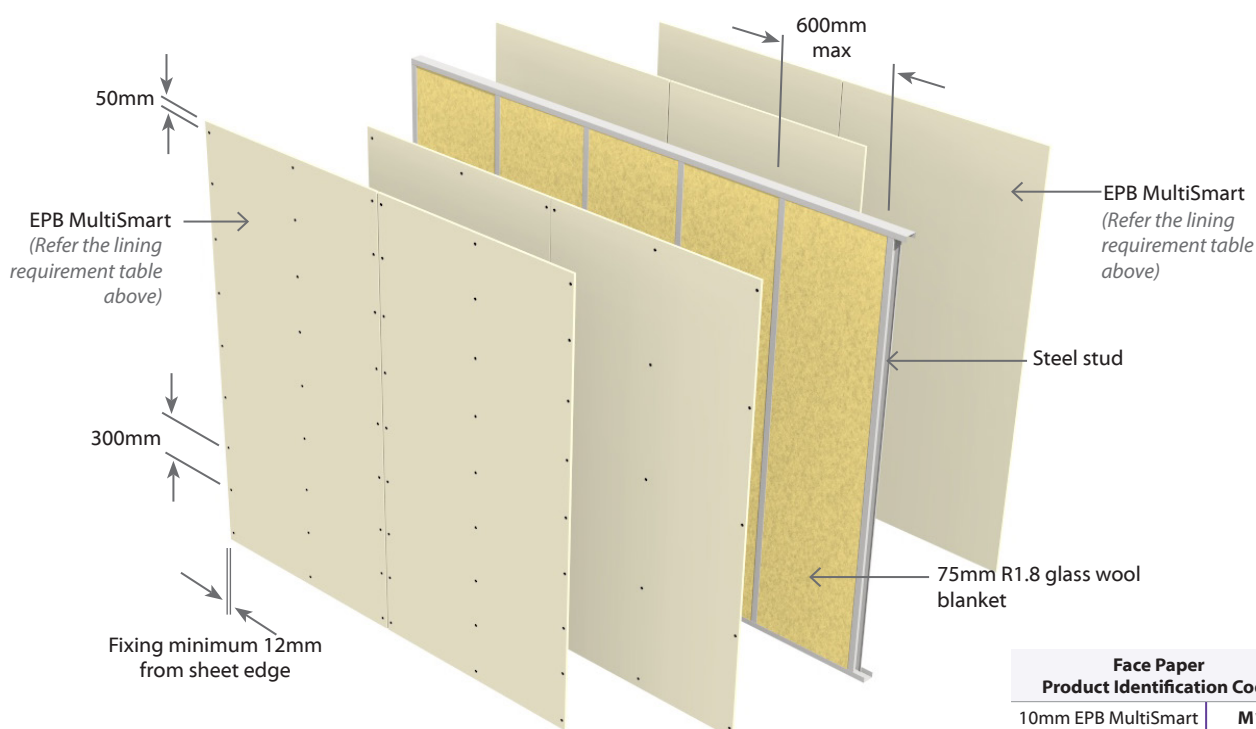
Acoustic Sealant

A bead of acoustic sealant must be placed on the perimeter of the framing or the inner layer. The outer layer is then bedded onto the bead. The perimeter junctions of the wall must be airtight.

Jointing

Inner Layer: Unstopped.

Outer Layer: All fastener heads stopped and all sheet joints reinforced with paper jointing tape and stopped. Wall to ceiling junctions are to be reinforced with paper tape and square stopped or finished with Cornice. All in accordance with EPB Plasterboard Installation Guide.



| Face Paper Product Identification Code | |
|--|------------|
| 10mm EPB MultiSmart | M10 |
| 13mm EPB MultiSmart | M13 |



E4Sa105Single Steel Frame

Non Load Bearing

Two Way FRR

4 Layers: 2 Layers of Plasterboard to each side of frameSub Intertency acoustic

| System Number | Lining Suffix | FRR | Load Bearing Ability | Noise Control | | Lining Requirement |
|----------------|---------------|-----------|----------------------|---------------|----|-----------------------------------|
| | | | | STC | Rw | |
| E4Sa105 | -M52 | -/105/105 | NLB | 52 | 51 | 2 x 13mm EPB MultiSmart each side |

Framing Non Load Bearing Systems

Steel studs with minimum dimensions 64mm x 34mm x 0.55 BMT with 6mm return. Channels to be minimum size 64mm x 30mm x 0.55 BMT and are fixed to floor and ceiling. Studs are placed with a 15mm expansion gap at top of frame. Channel runners are fixed to the floor and ceiling in true alignment. The studs are not directly fixed to channel. The studs are held in place by the grip of the channel runners. No other fixing is to be used. Studs are placed at 600mm centres maximum.

Wall Heights

Recommended maximum height is 3.0m. Higher walls may be subject to specific engineering design or consult the framing manufacturer.

Wall Sound Absorber

Install Sound Absorber between studs of the frame.
Use 75mm thick R1.8 glass wool blanket.

Plasterboard Lining

NB: The installer must look for the Product Identification Code on the face paper to ensure the correct board type is installed. Refer to the Face Paper Product Identification Code table on this page.

Two layers of 13mm EPB MultiSmart to each side of the steel framing. Vertical fixing only permitted. Use full height sheets where possible. Inner layer joints on opposite side of frame should be offset. All sheet joints must be fixed over steel framing. Vertical joints of the outer layer should be offset by 600mm to those of the inner layer. Sheet end butt joints must be formed over nogs and offset the outer layer joints from the inner layer. The inner layers are fixed hard to the floor. Sheets shall be touch fitted.

Fixing of Linings (Non Fire Rated)

Fix the linings as per the EPB Plasterboard Installation Guide. If an FRR is required then follow the Fixing of Linings instruction in the following paragraph.

Fixing of Linings (to achieve Fire Rating)**Fasteners**

| System Number | Side One | | Side Two | |
|--------------------|-----------------------------|-----------------------|-----------------------|-----------------------|
| | 1 st Layer | 2 nd Layer | 1 st Layer | 2 nd Layer |
| | Self-Tapping Drywall Screws | | | |
| E4Sa105-M52 | 13mm | 13mm | 13mm | 13mm |
| | 25 x 6g | 41 x 6g | 25 x 6g | 41 x 6g |

Fastener Centres

Inner Layer: Fix at 600mm centres up each stud with no fixing to top or bottom channel sections.

Outer Layer: Fix at 300mm centres up each stud with no fixing to top and bottom channel sections.

Place fasteners no closer than 12mm to the sheet edge and 50mm from sheet ends.

Place fasteners at 200mm centres where sheet end butt joints occur.

Avoid outer layer screws from hitting inner layer screws.

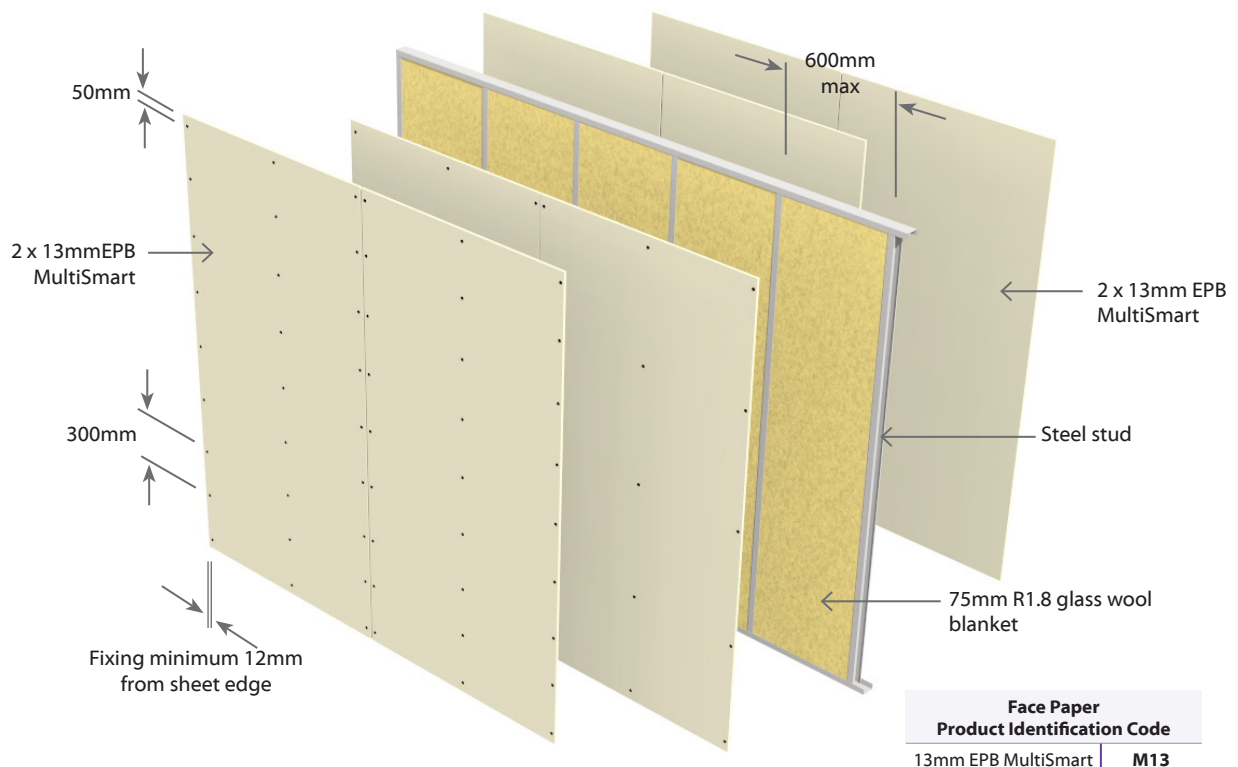
Acoustic Sealant

A bead of acoustic sealant must be placed on the perimeter of the framing or the inner layer. The outer layer is then bedded onto the bead. The perimeter junctions of the wall must be airtight.

Jointing

Inner Layer: Unstopped.

Outer Layer: All fastener heads stopped and all sheet joints reinforced with paper jointing tape and stopped. Wall to ceiling junctions are to be reinforced with paper tape and square stopped or finished with Cornice. All in accordance with EPB Plasterboard Installation Guide.



E2SLa30

Single Steel Frame

Load Bearing

Two Way FRR

2 Layers: 1 Layer of Plasterboard to each side of frameSub Intertency acoustic

| System Number | Lining Suffix | FRR | Load Bearing Ability | Noise Control | | Lining Requirement |
|----------------|---------------|----------|----------------------|---------------|----|-----------------------------------|
| | | | | STC | Rw | |
| E2SLa30 | -M26 | 30/30/30 | LB | 43 | 42 | 1 x 13mm EPB MultiSmart each side |

Framing

Any steel frame designed to meet structural criteria for strength and serviceability under dead and live loads.

Stud width shall be 35mm minimum.

Stud spacing's at 600 centres maximum.

Frame heights as determined by specific design.

Wall Sound Absorber

Install Sound Absorber between studs of the frame.

Use 75mm thick R1.8 glass wool blanket.

Plasterboard Lining

NB: The installer must look for the Product Identification Code on the face paper to ensure the correct board type is installed. Refer to the Face Paper Product Identification Code table on this page.

One layer of 13mm EPB MultiSmart lining on each side of the steel framing.

Vertical fixing only permitted. Use full height or full length sheets where possible. Sheet edge and butt joints on opposite side of frame should be offset. All sheet joints must be fixed over steel framing. Sheet end butt joints must be formed over nogs. Sheets are fixed hard to the floor. Sheets shall be touch fitted.

Fixing of Linings (Non Fire Rated)

Fix the linings as per the EPB Plasterboard Installation Guide. If an FRR is required then follow the Fixing of Linings instruction in the following paragraph.

Fixing of Linings (to achieve Fire Rating)**Fasteners**

| System Number | Side One | Side Two |
|--------------------|-----------------------------|--------------|
| | Single Layer | Single Layer |
| | Self-Tapping Drywall Screws | |
| E2SLa30-M26 | 13mm | 13mm |
| | 25 x 6g | 25 x 6g |

Fastener Centres

Fix at 300mm centres up each stud with no fixing to top and bottom channel sections.

Place fasteners no closer than 12mm to the sheet edge and 50mm from sheet ends.

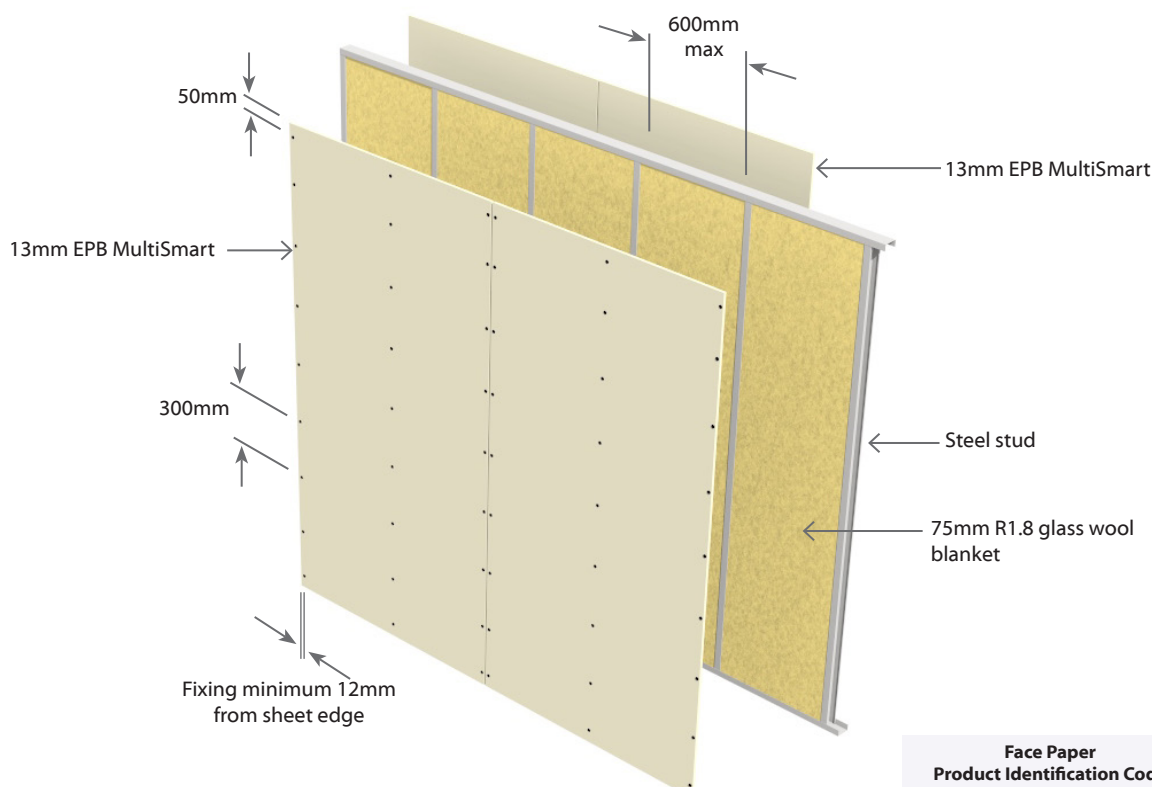
Place fasteners at 200mm centres where sheet end butt joints occur

Acoustic Sealant

A bead of acoustic sealant is required around the perimeter of the framing and the single layer is bedded into the bead. The perimeter junctions of the wall must be airtight.

Jointing

All fastener heads stopped and all sheet joints reinforced with paper jointing tape and stopped. Wall to ceiling junctions are to be reinforced with paper tape and square stopped or finished with Cornice. All in accordance with EPB Plasterboard Installation Guide.



| Face Paper Product Identification Code | |
|--|------------|
| 13mm EPB MultiSmart | M13 |



E3SLa30Single Steel FrameLoad Bearing

Two Way FRR

3 Layers: 1 Layer of Plasterboard to one side of frame &
2 Layers of Plasterboard to other side of frame

Sub Intertency acoustic

| System Number | Lining Suffix | FRR | Load Bearing Ability | Noise Control | | Lining Requirement |
|----------------|---------------|----------|----------------------|---------------|----|--|
| | | | | STC | Rw | |
| E3SLa30 | -M39 | 30/30/30 | LB | 45 | 44 | 1 x 13mm EPB MultiSmart one side 2 x 13mm EPB MultiSmart other side |

Framing

Any steel frame designed to meet structural criteria for strength and serviceability under dead and live loads.

Stud width shall be 35mm minimum.

Stud spacing's at 600 centres maximum.

Frame heights as determined by specific design.

Wall Sound Absorber

Install Sound Absorber between studs of the frame.

Use 75mm thick R1.8 glass wool blanket.

Plasterboard Lining

NB: The installer must look for the Product Identification Code on the face paper to ensure the correct board type is installed. Refer to the Face Paper Product Identification Code table on this page.

One layer of 13mm EPB MultiSmart lining on one side and Two layers of 13mm EPB MultiSmart on the other side of the steel framing.

Vertical fixing only permitted. Use full height sheets where possible. Inner layer joints on opposite side of frame should be offset. All sheet joints must be fixed over steel framing. Vertical joints of the outer layer should be offset by 600mm to those of the inner layer. Sheet end butt joints must be formed over nogs and offset the outer layer joints from the inner layer. The inner layers are fixed hard to the floor. Sheets shall be touch fitted.

Fixing of Linings (Non Fire Rated)

Fix the linings as per the EPB Plasterboard Installation Guide. If an FRR is required then follow the Fixing of Linings instruction in the following paragraph.

Fixing of Linings (to achieve Fire Rating)**Fasteners**

| System Number | Side One | | Side Two |
|--------------------|-----------------------------|-----------------------|--------------|
| | 1 st Layer | 2 nd Layer | Single Layer |
| | Self-Tapping Drywall Screws | | |
| E3SLa30-M39 | 13mm | 13mm | 13mm |
| | 25 x 6g | 41 x 6g | 25 x 6g |

Fastener Centres

Fix at 300mm centres up each stud with no fixing to top and bottom channel sections.

Place fasteners no closer than 12mm to the sheet edge and 50mm from sheet ends.

Place fasteners at 200mm centres where sheet end butt joints occur.

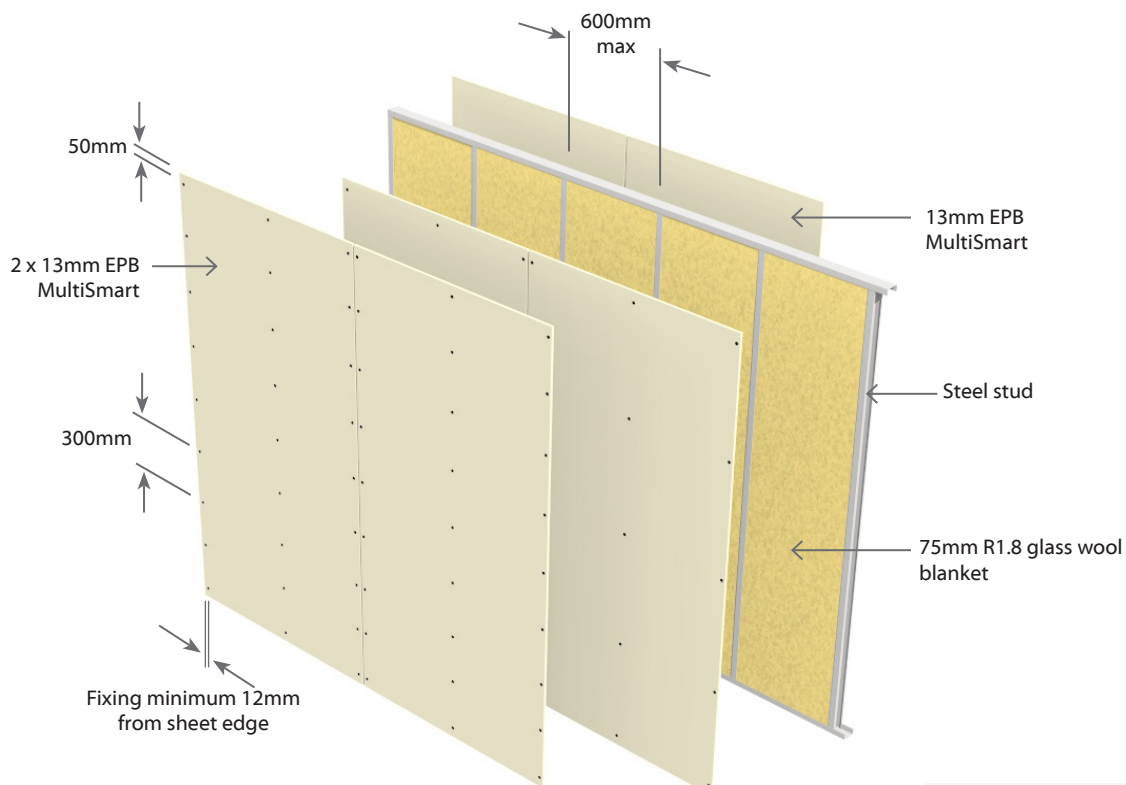
Avoid outer layer screws from hitting inner layer screws.

Acoustic Sealant

A bead of acoustic sealant is required around the perimeter of the framing and the single layer is bedded into the bead. The perimeter junctions of the wall must be airtight.

Jointing

All fastener heads stopped and all sheet joints reinforced with paper jointing tape and stopped. Wall to ceiling junctions are to be reinforced with paper tape and square stopped or finished with Cornice. All in accordance with EPB Plasterboard Installation Guide.



| Face Paper Product Identification Code | |
|--|------------|
| 13mm EPB MultiSmart | M13 |



E4SLa30Single Steel FrameLoad Bearing

Two Way FRR

4 Layers: 2 Layers of Plasterboard to each side of frameSub Intertency acoustic

| System Number | Lining Suffix | FRR | Load Bearing Ability | Noise Control | | Lining Requirement |
|----------------|---------------|----------|----------------------|---------------|----|---------------------------------|
| | | | | STC | Rw | |
| E4SLa30 | -S40 | 30/30/30 | LB | 45 | 44 | 2 x 10mm EPB Standard each side |

Framing

Any steel frame designed to meet structural criteria for strength and serviceability under dead and live loads.

Stud width shall be 35mm minimum.

Stud spacing's at 600 centres maximum.

Frame heights as determined by specific design.

Wall Sound Absorber

Install Sound Absorber between studs of the frame.

Use 75mm thick R1.8 glass wool blanket.

Plasterboard Lining

NB: The installer must look for the Product Identification Code on the face paper to ensure the correct board type is installed. Refer to the Face Paper Product Identification Code table on this page.

Two layers of 10mm EPB Standard to each side of the steel framing.

Vertical fixing only permitted. Use full height sheets where possible.

Inner layer joints on opposite side of frame should be offset. All sheet joints must be fixed over steel framing. Vertical joints of the outer layer should be offset by 600mm to those of the inner layer. Sheet end butt joints must be formed over nogs and offset the outer layer joints from the inner layer. The inner layers are fixed hard to the floor. Sheets shall be touch fitted.

Fixing of Linings (Non Fire Rated)

Fix the linings as per the EPB Plasterboard Installation Guide. If an FRR is required then follow the Fixing of Linings instruction in the following paragraph.

Fixing of Linings (to achieve Fire Rating)**Fasteners**

| System Number | Side One | | Side Two | |
|--------------------|-----------------------------|-----------------------|-----------------------|-----------------------|
| | 1 st Layer | 2 nd Layer | 1 st Layer | 2 nd Layer |
| | Self-Tapping Drywall Screws | | | |
| E4SLa30-S40 | 10mm | 10mm | 10mm | 10mm |
| | 25 x 6g | 32 x 6g | 25 x 6g | 32 x 6g |

Fastener Centres

Inner Layer: Fix at 600mm centres up each stud with no fixing to top or bottom channel sections.

Outer Layer: Fix at 300mm centres up each stud with no fixing to top and bottom channel sections.

Place fasteners no closer than 12mm to the sheet edge and 50mm from sheet ends.

Place fasteners at 200mm centres where sheet end butt joints occur.

Avoid outer layer screws from hitting inner layer screws.

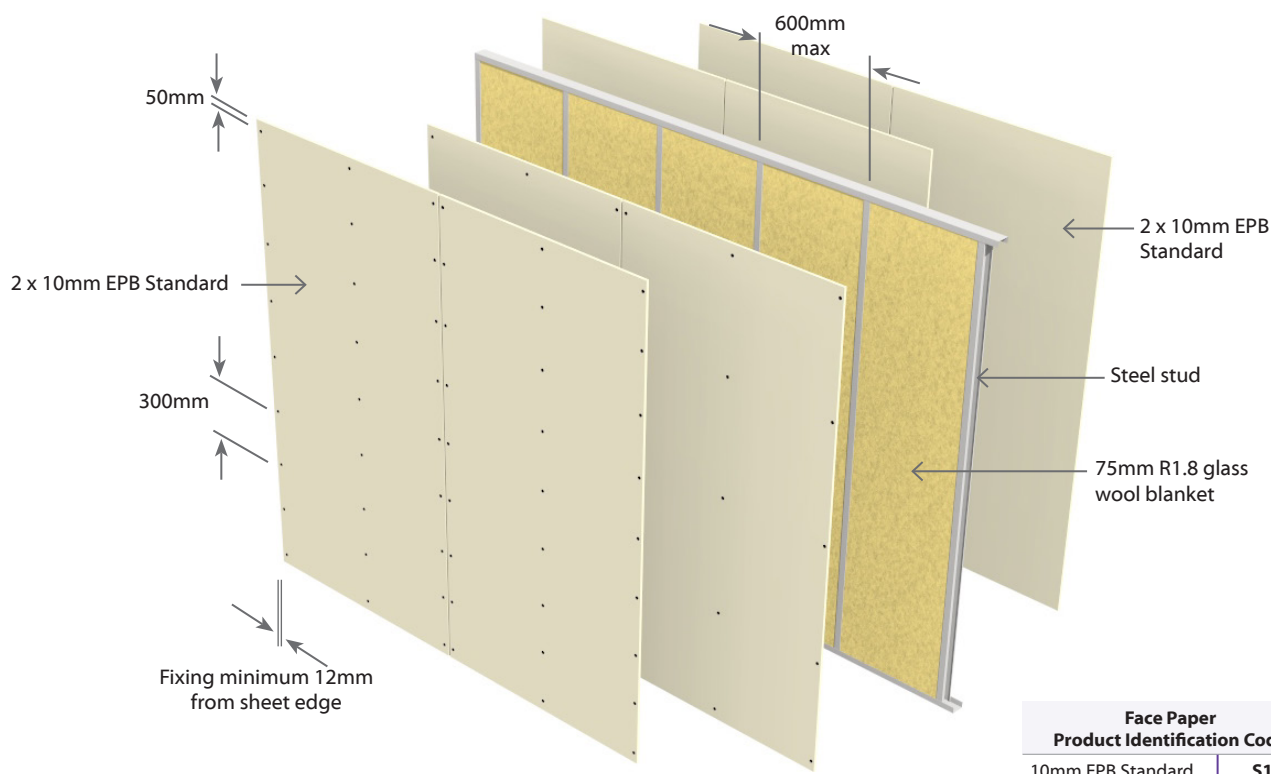
Acoustic Sealant

A bead of acoustic sealant is required around the perimeter of the framing and the single layer is bedded into the bead. The perimeter junctions of the wall must be airtight.

Jointing

Inner Layer: Unstopped

Outer Layer: All fastener heads stopped and all sheet joints reinforced with paper jointing tape and stopped. Wall to ceiling junctions are to be reinforced with paper tape and square stopped or finished with Cornice. All in accordance with EPB Plasterboard Installation Guide.



E4SLa45Single Steel FrameLoad Bearing

Two Way FRR

4 Layers: 2 Layers of Plasterboard to each side of frameSub Intertency acoustic

| System Number | Lining Suffix | FRR | Load Bearing Ability | Noise Control | | Lining Requirement |
|----------------|---------------|----------|----------------------|---------------|----|-----------------------------------|
| | | | | STC | Rw | |
| E4SLa45 | -S52 | 45/45/45 | LB | 48 | 47 | 2 x 13mm EPB Standard each side |
| | -M40 | 45/45/45 | LB | 48 | 47 | 2 x 10mm EPB MultiSmart each side |

Framing

Any steel frame designed to meet structural criteria for strength and serviceability under dead and live loads.
 Stud width shall be 35mm minimum.
 Stud spacing's at 600 centres maximum.
 Frame heights as determined by specific design.

Wall Sound Absorber

Install Sound Absorber between studs of the frame.
 Use 75mm thick R1.8 glass wool blanket.

Plasterboard Lining

NB: The installer must look for the Product Identification Code on the face paper to ensure the correct board type is installed. Refer to the Face Paper Product Identification Code table on this page.

Two layers of EPB Plasterboard to one side and Two layers to the Other side as per specified system above.

Vertical fixing only permitted. Use full height sheets where possible. Inner layer joints on opposite side of frame should be offset. All sheet joints must be fixed over steel framing. Vertical joints of the outer layer should be offset by 600mm to those of the inner layer. Sheet end butt joints must be formed over nogs and offset the outer layer joints from the inner layer. The inner layers are fixed hard to the floor. Sheets shall be touch fitted.

Fixing of Linings (Non Fire Rated)

Fix the linings as per the EPB Plasterboard Installation Guide. If an FRR is required then follow the Fixing of Linings instruction in the following paragraph.

Fixing of Linings (to achieve Fire Rating)**Fasteners (As per Specified System Above)**

| System Number | Side One | | Side Two | |
|-----------------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| | 1 st Layer | 2 nd Layer | 1 st Layer | 2 nd Layer |
| Self-Tapping Drywall Screws | | | | |
| E4SLa45-S52 | 13mm | 13mm | 13mm | 13mm |
| | 25 x 6g | 41 x 6g | 25 x 6g | 41 x 6g |
| E4SLa45-M40 | 10mm | 10mm | 10mm | 10mm |
| | 25 x 6g | 32 x 6g | 25 x 6g | 32 x 6g |

Fastener Centres

Inner Layer: Fix at 600mm centres up each stud with no fixing to top or bottom channel sections.

Outer Layer: Fix at 300mm centres up each stud with no fixing to top and bottom channel sections.

Place fasteners no closer than 12mm to the sheet edge and 50mm from sheet ends.

Place fasteners at 200mm centres where sheet end butt joints occur.

Avoid outer layer screws from hitting inner layer screws.

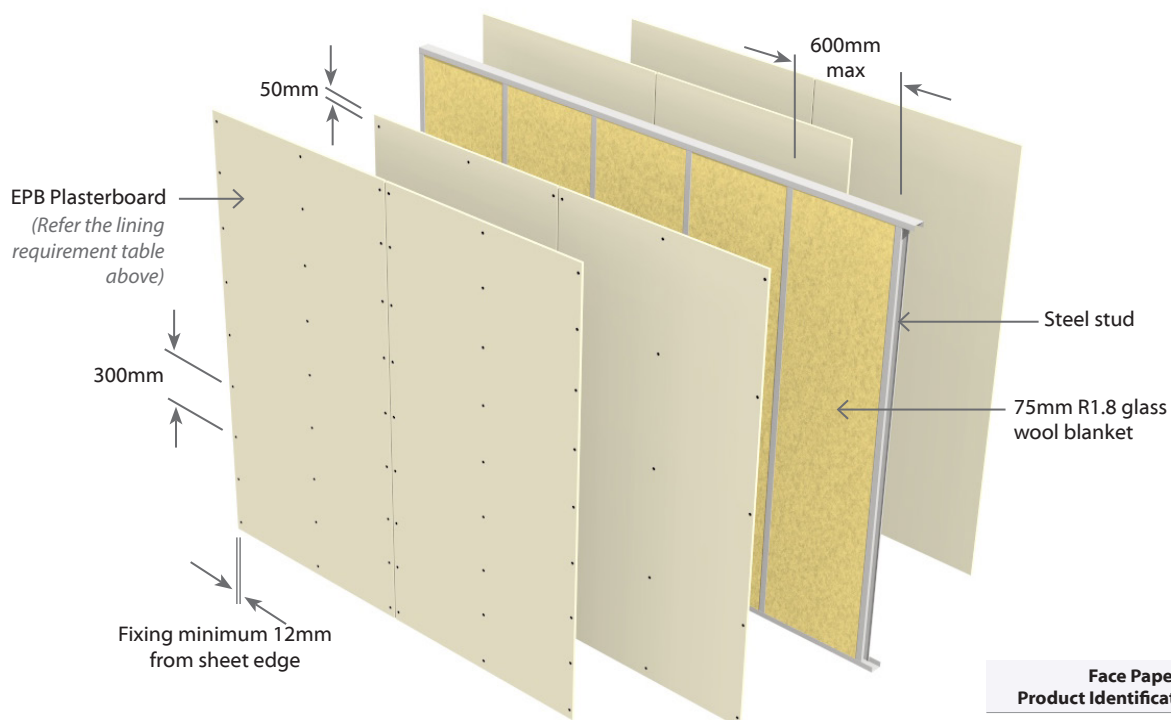
Acoustic Sealant

A bead of acoustic sealant is required around the perimeter of the framing and the single layer is bedded into the bead. The perimeter junctions of the wall must be airtight.

Jointing

Inner Layer: Unstopped

Outer Layer: All fastener heads stopped and all sheet joints reinforced with paper jointing tape and stopped. Wall to ceiling junctions are to be reinforced with paper tape and square stopped or finished with Cornice. All in accordance with EPB Plasterboard Installation Guide.



| Face Paper Product Identification Code | |
|--|------------|
| 13mm EPB Standard | S13 |
| 10mm EPB MultiSmart | M10 |



E4SLa60

Single Steel Frame

Load Bearing

Two Way FRR

4 Layers: 2 Layers of Plasterboard to each side of frameSub Intertency acoustic

| System Number | Lining Suffix | FRR | Load Bearing Ability | Noise Control | | Lining Requirement |
|----------------|---------------|----------|----------------------|---------------|----|-----------------------------------|
| | | | | STC | Rw | |
| E4SLa60 | -M52 | 60/60/60 | LB | 52 | 51 | 2 x 13mm EPB MultiSmart each side |

Framing

Any steel frame designed to meet structural criteria for strength and serviceability under dead and live loads.

Stud width shall be 35mm minimum.

Stud spacing's at 600 centres maximum.

Frame heights as determined by specific design.

Wall Sound Absorber

Install Sound Absorber between studs of the frame.

Use 75mm thick R1.8 glass wool blanket.

Plasterboard Lining

NB: The installer must look for the Product Identification Code on the face paper to ensure the correct board type is installed. Refer to the Face Paper Product Identification Code table on this page.

Two layers of 13mm EPB MultiSmart linings fixed to each side of the steel framing.

Vertical fixing only permitted. Use full height sheets where possible. Inner layer joints on opposite side of frame should be offset. All sheet joints must be fixed over steel framing. Vertical joints of the outer layer should be offset by 600mm to those of the inner layer. Sheet end butt joints must be formed over nogs and offset the outer layer joints from the inner layer. The inner layers are fixed hard to the floor. Sheets shall be touch fitted.

Fixing of Linings (Non Fire Rated)

Fix the linings as per the EPB Plasterboard Installation Guide. If an FRR is required then follow the Fixing of Linings instruction in the following paragraph.

Fixing of Linings (to achieve Fire Rating)**Fasteners**

| System Number | Side One | | Side Two | |
|--------------------|-----------------------------|-----------------------|-----------------------|-----------------------|
| | 1 st Layer | 2 nd Layer | 1 st Layer | 2 nd Layer |
| | Self-Tapping Drywall Screws | | | |
| E4SLa60-M52 | 13mm | 13mm | 13mm | 13mm |
| | 25 x 6g | 41 x 6g | 25 x 6g | 41 x 6g |

Fastener Centres

Inner Layer: Fix at 600mm centres up each stud with no fixing to top or bottom channel sections.

Outer Layer: Fix at 300mm centres up each stud with no fixing to top and bottom channel sections.

Place fasteners no closer than 12mm to the sheet edge and 50mm from sheet ends.

Place fasteners at 200mm centres where sheet end butt joints occur.

Avoid outer layer screws from hitting inner layer screws.

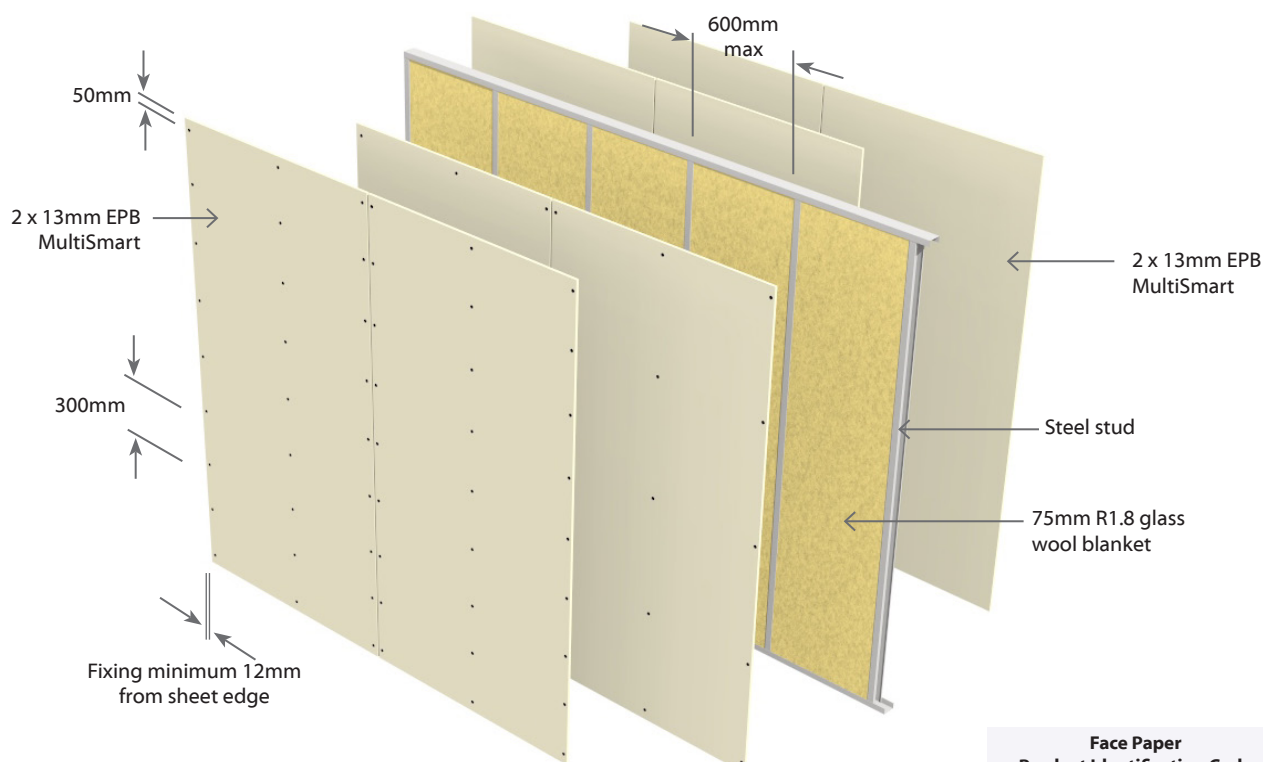
Acoustic Sealant

A bead of acoustic sealant is required around the perimeter of the framing and the single layer is bedded into the bead. The perimeter junctions of the wall must be airtight.

Jointing

Inner Layer: Unstopped

Outer Layer: All fastener heads stopped and all sheet joints reinforced with paper jointing tape and stopped. Wall to ceiling junctions are to be reinforced with paper tape and square stopped or finished with Cornice. All in accordance with EPB Plasterboard Installation Guide.



| Face Paper Product Identification Code | |
|--|------------|
| 13mm EPB MultiSmart | M13 |



E4SLa90Single Steel FrameLoad Bearing

Two Way FRR

4 Layers: 2 Layers of Plasterboard to each side of frameSub Intertency acoustic

| System Number | Lining Suffix | FRR | Load Bearing Ability | Noise Control | | Lining Requirement |
|----------------|---------------|----------|----------------------|---------------|----|----------------------------------|
| | | | | STC | Rw | |
| E4SLa90 | -F64 | 90/90/90 | LB | 53 | 52 | 2 x 16mm EPB FireSmart each side |

Framing

Any steel frame designed to meet structural criteria for strength and serviceability under dead and live loads.

Stud width shall be 35mm minimum.

Stud spacing's at 600 centres maximum.

Frame heights as determined by specific design.

Wall Sound Absorber

Install Sound Absorber between studs of the frame.

Use 75mm thick R1.8 glass wool blanket.

Plasterboard Lining

NB: The installer must look for the Product Identification Code on the face paper to ensure the correct board type is installed. Refer to the Face Paper Product Identification Code table on this page.

Two layers of 16mm EPB FireSmart linings fixed to each side of the steel framing.

Vertical fixing only permitted. Use full height sheets where possible. Inner layer joints on opposite side of frame should be offset. All sheet joints must be fixed over steel framing. Vertical joints of the outer layer should be offset by 600mm to those of the inner layer. Sheet end butt joints must be formed over nogs and offset the outer layer joints from the inner layer. The inner layers are fixed hard to the floor. Sheets shall be touch fitted.

Fixing of Linings (Non Fire Rated)

Fix the linings as per the EPB Plasterboard Installation Guide. If an FRR is required then follow the Fixing of Linings instruction in the following paragraph.

Fixing of Linings (to achieve Fire Rating)**Fasteners**

| System Number | Side One | | Side Two | |
|-----------------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| | 1 st Layer | 2 nd Layer | 1 st Layer | 2 nd Layer |
| Self-Tapping Drywall Screws | | | | |
| E4SLa90-F64 | 16mm | 16mm | 16mm | 16mm |
| | 32 x 6g | 51 x 7g | 32 x 6g | 51 x 7g |

Fastener Centres

Inner Layer: Fix at 600mm centres up each stud with no fixing to top or bottom channel sections.

Outer Layer: Fix at 300mm centres up each stud with no fixing to top and bottom channel sections.

Place fasteners no closer than 12mm to the sheet edge and 50mm from sheet ends.

Place fasteners at 200mm centres where sheet end butt joints occur.

Avoid outer layer screws from hitting inner layer screws.

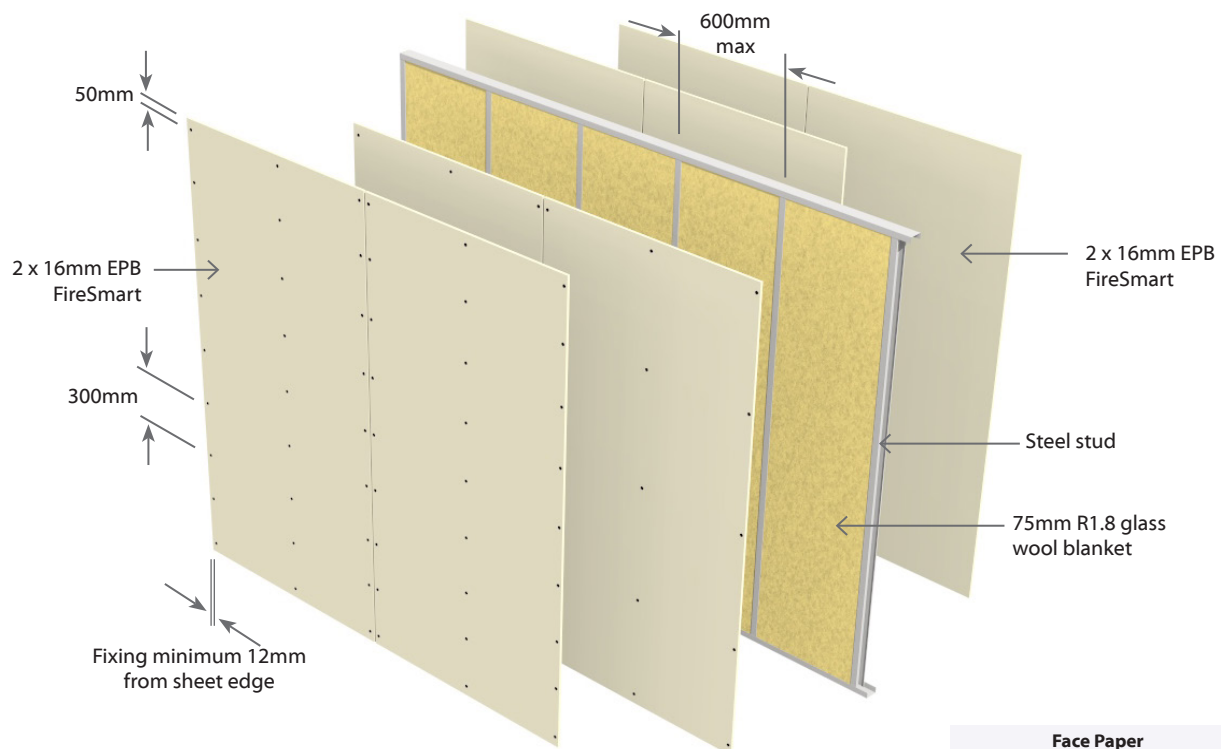
Acoustic Sealant

A bead of acoustic sealant is required around the perimeter of the framing and the single layer is bedded into the bead. The perimeter junctions of the wall must be airtight.

Jointing

Inner Layer: Unstopped

Outer Layer: All fastener heads stopped and all sheet joints reinforced with paper jointing tape and stopped. Wall to ceiling junctions are to be reinforced with paper tape and square stopped or finished with Cornice. All in accordance with EPB Plasterboard Installation Guide.



| Face Paper Product Identification Code | |
|---|------------|
| 16mm EPB FireSmart | F16 |



E2SDa30**Double Steel Frame**

Non Load Bearing

Two Way FRR

2 Layers: 1 Layer of Plasterboard to each side of frameSub Intertency **a**coustic

| System Number | Lining Suffix | FRR | Load Bearing Ability | Noise Control | | Lining Requirement |
|----------------|---------------|---------|----------------------|---------------|----|-----------------------------------|
| | | | | STC | Rw | |
| E2SDa30 | -S26 | -/30/30 | NLB | 52 | 51 | 1 x 13mm EPB Standard each side |
| | -M20 | -/30/30 | NLB | 52 | 51 | 1 x 10mm EPB MultiSmart each side |

Framing

Double Frame - Steel studs to be of minimum dimension 64mm x 34mm x 0.55 BMT with a 6mm return.

Tracks to be minimum dimension 64mm x 30mm x 0.55 BMT.

Top & bottom tracks are fixed to the floor and ceiling in true alignment. Studs are placed at 600mm centres maximum. Studs aligned.

Place studs to allow the nominated expansion gap (minimum 15mm) at the top of frame. The studs are not directly fixed to the tracks. The studs are held in place by the grip of the track runners.

Wall Heights

Recommended maximum height is 2.7m. Higher walls may be subject to specific engineering design or consult the framing manufacturer.

Minimum Partition Width

Space between Frames shall be a minimum of 25mm in order to achieve the STC ratings in the table above the partition width (excluding the board) shall be a minimum of 153mm. Increasing the partition width would increase STC performance as per the table below.

| Stud Size | Spaces Between Frames | Partition Width (Excludes Board) | STC Rating |
|-----------|-----------------------|----------------------------------|------------|
| 64mm | 25mm Min | 153mm | +0 |
| 64mm | 77mm Min | 205mm | +2 |

Wall Sound Absorber

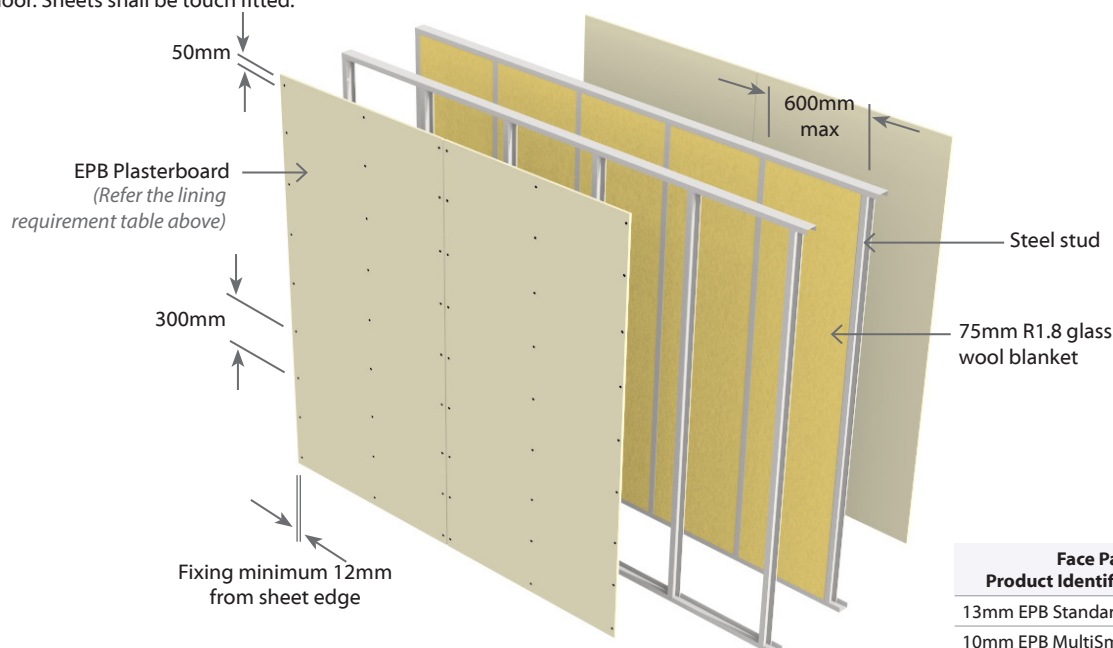
Install Sound Absorber between studs on one side of the double frame. Use 75mm thick R1.8 glass wool blanket.

Plasterboard Lining

NB: The installer must look for the Product Identification Code on the face paper to ensure the correct board type is installed. Refer to the Face Paper Product Identification Code table on this page.

One layer of EPB Plasterboard lining as per specified system above on each side of the double steel framing.

Vertical fixing only permitted. Use full height or full length sheets where possible. Sheet edge and butt joints on opposite side of frame should be offset. All sheet joints must be fixed over steel framing. Sheet end butt joints must be formed over nogs. Sheets are fixed hard to the floor. Sheets shall be touch fitted.

**Fixing of Linings (Non Fire Rated)**

Fix the linings as per the EPB Plasterboard Installation Guide. If an FRR is required then follow the Fixing of Linings instruction in the following paragraph.

Fixing of Linings (to achieve Fire Rating)

Fasteners (As per Specified System Above)

| System Number | Side One | Side Two |
|--------------------|-----------------------------|----------|
| | Single | |
| | Self-Tapping Drywall Screws | |
| E2SDa30-M20 | 10mm | 10mm |
| | 25 x 6g | 25 x 6g |
| E2SDa30-S26 | 13mm | 13mm |
| | 25 x 6g | 25 x 6g |

Fastener Centres

Fix at 300mm centres up each stud with no fixing to top and bottom channel sections. Place fasteners no closer than 12mm to the sheet edge and 50mm from sheet ends. Place fasteners at 200mm centres where sheet end butt joints occur. Avoid outer layer screws from hitting inner layer screws.

Acoustic Sealant

A bead of acoustic sealant is required around the perimeter of the framing and the single layer is bedded into the bead. The perimeter junctions of the wall must be airtight.

Jointing

All fastener heads stopped and all sheet joints reinforced with paper jointing tape and stopped. Wall to ceiling junctions are to be reinforced with paper tape and square stopped or finished with Cornice. All in accordance with EPB Plasterboard Installation Guide.

| Face Paper Product Identification Code | |
|--|------------|
| 13mm EPB Standard | S13 |
| 10mm EPB MultiSmart | M10 |



E3SRa30**Steel Frame with Resilient Rail**

Non Load Bearing

Two Way FRR

3 Layers: 1 Layer of Plasterboard to Framing side &
2 Layers of Plasterboard to Rail side

Sub Intertency **a**coustic

| System Number | Lining Suffix | FRR | Load Bearing Ability | Noise Control | | Lining Requirement |
|----------------|---------------|---------|----------------------|---------------|----|---|
| | | | | STC | Rw | |
| E3SRa30 | -S39 | -/30/30 | NLB | 51 | 50 | Framing Side: 1 x 13mm EPB Standard Rail Side: 2 x 13mm EPB Standard |
| | -M30 | -/30/30 | NLB | 51 | 50 | Framing Side: 1 x 10mm EPB MultiSmart Rail Side: 2 x 10mm EPB MultiSmart |

Framing

Steel studs with minimum dimensions 64mm x 34mm x 0.55 BMT with 6mm return. Tracks to be minimum size 64mm x 30mm x 0.55 BMT and are fixed to floor and ceiling in true alignment. Studs are placed at 600mm centres maximum. Studs are placed with a 15mm expansion gap at top of frame. The studs are not directly fixed to the tracks. The studs are held in place by the grip of the channel runners. No other fixing is to be used.

Wall Heights

Recommended maximum height is 2.7m. Higher walls may be subject to specific engineering design or consult the framing manufacturer.

Partition Width

In order to achieve the STC ratings in the table above the partition width (excluding the board) shall be a minimum of 77mm.

| Stud Depth | Rail | Lining Suffix | Plasterboard | Total Partition |
|------------|------|---------------|--------------|-----------------|
| 64mm | 13mm | M30 | 30mm | 107mm |
| | | S39 | 39mm | 116mm |

Wall Sound Absorber

Install Sound Absorber between studs of the frame.
Use 75mm thick R1.8 glass wool blanket.

Acoustic Resilient Rail

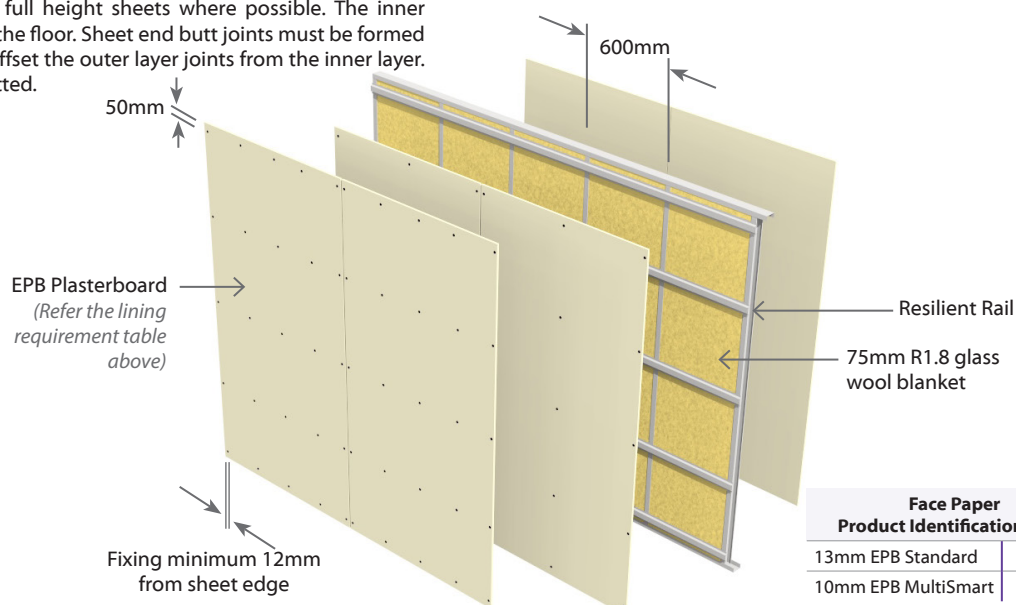
The resilient rail shall be fixed to the studs at 600mm centres using 32mm x 8g wafer head self tapping screws through the base flange and into each stud. The base flange to face downwards and resilient edge upwards. Channel may be joined by nesting together with no more than 20mm overlap. Fasten through both channels into stud. Highest resilient channel shall be fixed no more than 75mm from the ceiling line and the lowest channel, 50mm from the floor line.

Plasterboard Lining

NB: The installer must look for the Product Identification Code on the face paper to ensure the correct board type is installed. Refer to the Face Paper Product Identification Code table on this page.

Framing Side: One layer of EPB Plasterboard lining fixed vertically. All sheet joints must be fixed over steel framing.

Resilient Rail Side: Two layers fixed vertically on the furring channel. Vertical joints of outer layer should be offset by 600mm from those of the inner layer. Use full height sheets where possible. The inner layers are fixed hard to the floor. Sheet end butt joints must be formed over nogs or rails and offset the outer layer joints from the inner layer. Sheets shall be touch fitted.

**Fixing of Linings (Non Fire Rated)**

Fix the linings as per the EPB Plasterboard Installation Guide. If an FRR is required then follow the Fixing of Linings instruction in the following paragraph.

Fixing of Linings (to achieve Fire Rating) Fasteners (As per Specified System Above)

| System Number | Resilient Rail Side | | Framing Side |
|--------------------|-----------------------------|-----------------------|--------------|
| | 1 st Layer | 2 nd Layer | Single Layer |
| E3SRa30-M30 | Self-Tapping Drywall Screws | | |
| | 10mm | 10mm | 10mm |
| E3SRa30-S39 | 25 x 6g | 32 x 6g | 25 x 6g |
| | 13mm | 13mm | 13mm |
| E3SRa30-S39 | 25 x 6g | 32 x 6g | 25 x 6g |

Fastener Centres

Framing Side: Fix at 300mm centres up each stud with no fixing to top or bottom channel sections.

Place fasteners no closer than 12mm to the sheet edge and 50mm from sheet ends.

Resilient Rail Side: Fix 300mm centres on all furring channels on other side.

Place fasteners minimum 12mm from sheet edges and sheet ends. Place fasteners at 200mm centres where sheet end butt joints occur. Avoid outer layer screws from hitting inner layer screws.

Acoustic Sealant

A bead of acoustic sealant must be placed on the perimeter of the framing or the inner layer. The single or outer layer is then bedded onto the bead. The perimeter junctions of the wall must be airtight.

Jointing

Inner Layer: Unstopped

Outer or Single Layer: All fastener heads stopped and all sheet joints reinforced with paper jointing tape and stopped. Wall to ceiling junctions are to be reinforced with paper tape and square stopped or finished with Cornice. All in accordance with EPB Plasterboard Installation Guide.

E3SRa60**Steel Frame with Resilient Rail**

Non Load Bearing

Two Way FRR

3 Layers: 1 Layer of Plasterboard to Framing side &
2 Layers of Plasterboard to Rail side

Sub Intertenancy **acoustic**

| System Number | Lining Suffix | FRR | Load Bearing Ability | Noise Control | | Lining Requirement |
|----------------|---------------|---------|----------------------|---------------|----|---|
| | | | | STC | Rw | |
| E3SRa60 | -MS39 | -/60/60 | NLB | 52 | 51 | Framing Side: 1 x 13mm EPB MultiSmart Rail Side: 2 x 13mm EPB Standard |
| | -M39 | -/60/60 | NLB | 53 | 52 | Framing Side: 1 x 13mm EPB MultiSmart Rail Side: 2 x 13mm EPB MultiSmart |

Framing

Steel studs with minimum dimensions 64mm x 34mm x 0.55 BMT with 6mm return. Tracks to be minimum size 64mm x 30mm x 0.55 BMT and are fixed to floor and ceiling in true alignment. Studs are placed at 600mm centres maximum. Studs are placed with a 15mm expansion gap at top of frame. The studs are not directly fixed to the tracks. The studs are held in place by the grip of the channel runners. No other fixing is to be used.

Wall Heights

Recommended maximum height is 2.7m. Higher walls may be subject to specific engineering design or consult the framing manufacturer.

Partition Width

In order to achieve the STC ratings in the table above the partition width (excluding the board) shall be a minimum of 77mm.

| Stud Depth | Rail | Lining Suffix | Plasterboard | Total Partition |
|------------|------|---------------|--------------|-----------------|
| 64mm | 13mm | MS30 | 39mm | 116mm |
| | | M39 | | |

Wall Sound Absorber

Install Sound Absorber between studs of the frame.

Use 75mm thick R1.8 glass wool blanket.

Acoustic Resilient Rail

The resilient Rail shall be fixed to the studs at 600mm centres using 32mm x 8g wafer head self tapping screws through the base flange and into each stud. The base flange to face downwards and resilient edge upwards. Channel may be joined by nesting together with no more than 20mm overlap. Fasten through both channels into stud. Highest resilient channel shall be fixed no more than 75mm from the ceiling line and the lowest channel, 50mm from the floor line.

Plasterboard Lining

NB: The installer must look for the Product Identification Code on the face paper to ensure the correct board type is installed. Refer to the Face Paper Product Identification Code table on this page.

Framing Side: One layer of EPB Plasterboard lining fixed vertically. All sheet joints must be fixed over steel framing.

Resilient Rail Side: Two layers fixed vertically on the furring channel. Vertical joints of outer layer should be offset by 600mm from those of the inner layer. Use full height sheets where possible. The inner layers are fixed hard to the floor.

Sheet end butt joints must be formed over nogs or rails and offset the outer layer joints from the inner layer. Sheets shall be touch fitted.

Fixing of Linings (Non Fire Rated)

Fix the linings as per the EPB Plasterboard Installation Guide. If an FRR is required then follow the Fixing of Linings instruction in the following paragraph.

Fixing of Linings (to achieve Fire Rating)**Fasteners**

| System Number | Resilient Rail Side | | Framing Side |
|---------------------|-----------------------------|-----------------------|--------------|
| | 1 st Layer | 2 nd Layer | Single Layer |
| | Self-Tapping Drywall Screws | | |
| E3SRa60-MS39 | 13mm | 13mm | 13mm |
| E3SRa60-M39 | 25 x 6g | 41 x 6g | 25 x 6g |

Fastener Centres

Framing Side: Fix at 300mm centres up each stud with no fixing to top or bottom channel sections. Place fasteners no closer than 12mm to the sheet edge and 50mm from sheet ends.

Resilient Rail Side: Fix 300mm centres on all furring channels on other side.

Place fasteners minimum 12mm from sheet edges and sheet ends.

Place fasteners at 200mm centres where sheet end butt joints occur.

Avoid outer layer screws from hitting inner layer screws.

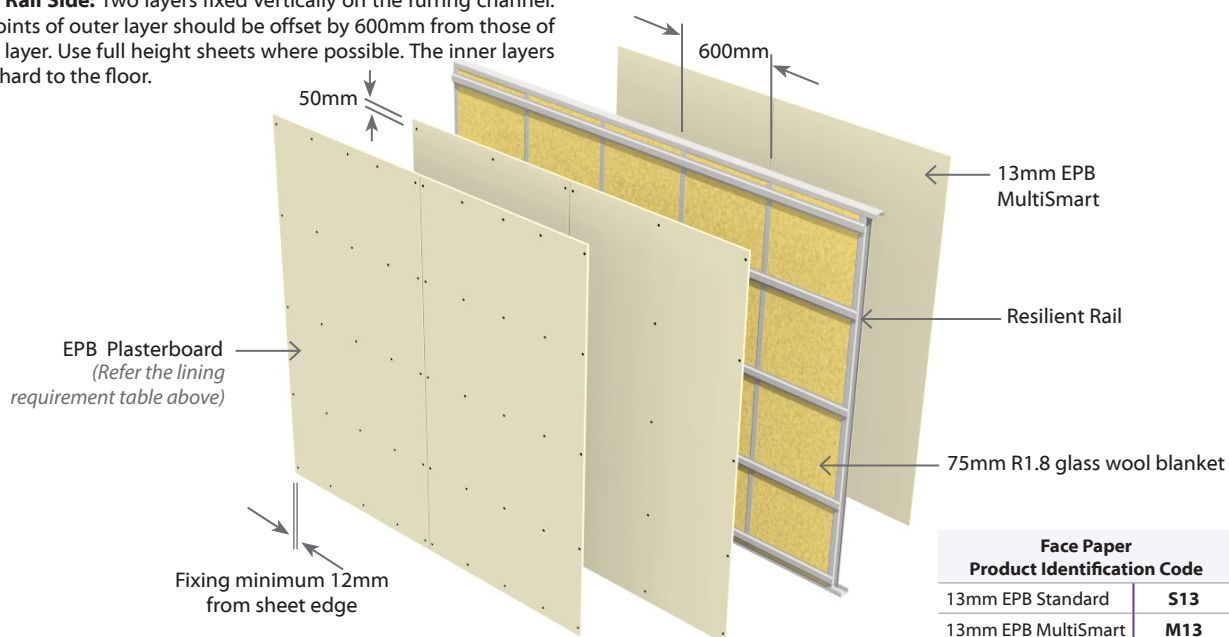
Acoustic Sealant

A bead of acoustic sealant must be placed on the perimeter of the framing or the inner layer. The single or outer layer is then bedded onto the bead. The perimeter junctions of the wall must be airtight.

Jointing

Inner Layer: Unstopped

Outer or Single Layer: All fastener heads stopped and all sheet joints reinforced with paper jointing tape and stopped. Wall to ceiling junctions are to be reinforced with paper tape and square stopped or finished with Cornice. All in accordance with EPB Plasterboard Installation Guide.



E2SQa30**Quiet Steel Frame**

Non Load Bearing

Two Way FRR

2 Layers: 1 Layer of Plasterboard to each side of frameSub Intertency **a**coustic

| System Number | Lining Suffix | FRR | Load Bearing Ability | Noise Control | | Lining Requirement |
|----------------|---------------|---------|----------------------|---------------|----|-----------------------------------|
| | | | | STC | Rw | |
| E2SQa30 | -S26 | -/30/30 | NLB | 47 | 46 | 1 x 13mm EPB Standard each side |
| | -M20 | -/30/30 | NLB | 48 | 47 | 1 x 10mm EPB MultiSmart each side |

Framing

Quiet Steel Frame – Channels to be 92mm x 30mm x 0.55 BMT and are fixed to floor and ceiling. Quiet Steel studs 92mm x 45mm x 0.55 BMT are friction fitted and placed at 600mm centres with a 15mm expansion gap at top of frame.

No fixings to the top channel allowed.

Wall Heights

Recommended maximum height is 3.6m. Higher walls may be subject to specific engineering design or consult the framing manufacturer.

Partition Width

In order to achieve the STC ratings in the table above the partition width (excluding the board) shall be a minimum of 92mm.

| Stud Size | Lining Suffix | Plasterboard | Total Partition |
|-----------|---------------|--------------|-----------------|
| 92mm | M20 | 20mm | 112mm |
| | S26 | 26mm | 118mm |

Wall Sound Absorber

Install Sound Absorber between studs of the frame.

Use 90mm thick R2.2 glass wool blanket.

Plasterboard Lining

NB: The installer must look for the Product Identification Code on the face paper to ensure the correct board type is installed. Refer to the Face Paper Product Identification Code table on this page.

One layer of EPB Plasterboard lining as per table above on each side of the Quiet steel framing.

Vertical fixing only permitted. Use full height or full length sheets where possible. Sheet edge and butt joints on opposite side of frame should be offset. All sheet joints must be fixed over steel framing. Sheet end butt joints must be formed over nogs. Sheets are fixed hard to the floor. Sheets shall be touch fitted.

Fixing of Linings (Non Fire Rated)

Fix the linings as per the EPB Plasterboard Installation Guide. If an FRR is required then follow the Fixing of Linings instruction in the following paragraph.

Fixing of Linings (to achieve Fire Rating)

Fasteners (As per Specified System Above)

| System Number | Side One | Side Two |
|-----------------------------|--------------|--------------|
| | Single Layer | Single Layer |
| Self-Tapping Drywall Screws | | |
| E2SQa30-M20 | 10mm | 10mm |
| | 25 x 6g | 25 x 6g |
| E2SQa30-S26 | 13mm | 13mm |
| | 25 x 6g | 25 x 6g |

Fastener Centres

Fix at 300mm centres up each stud with no fixing to top and bottom channel sections.

Place fasteners no closer than 12mm to the sheet edge and 50mm from sheet ends.

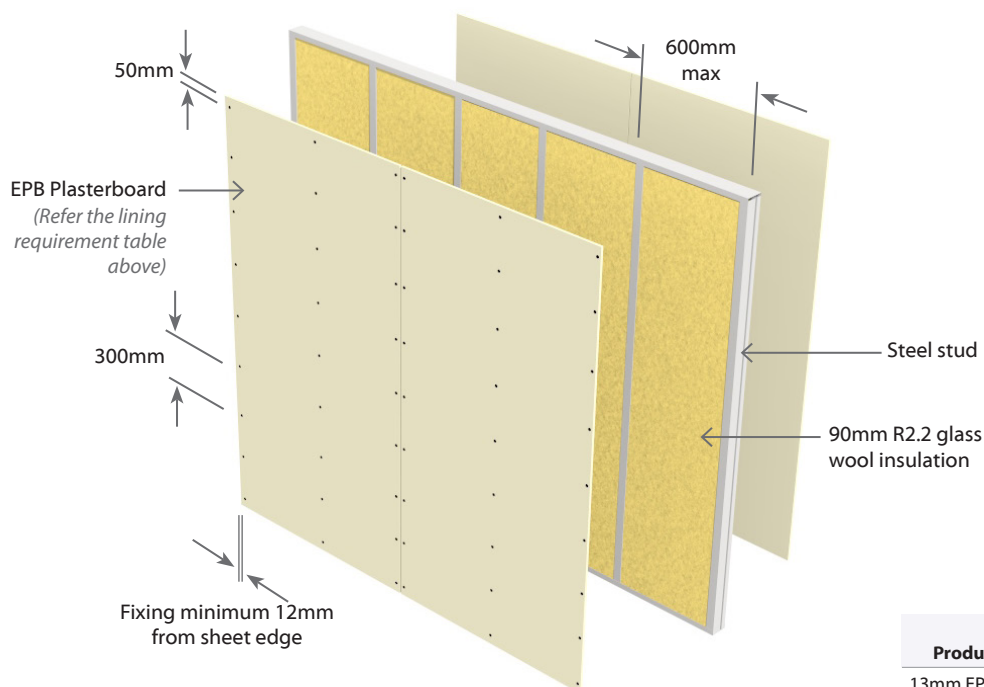
Place fasteners at 200mm centres where sheet end butt joints occur

Acoustic Sealant

A bead of acoustic sealant is required around the perimeter of the steel framing and the single layer is bedded into the bead. The perimeter junctions of the wall must be airtight.

Jointing

All fastener heads stopped and all sheet joints reinforced with paper jointing tape and stopped. Wall to ceiling junctions are to be reinforced with paper tape and square stopped or finished with Cornice. All in accordance with EPB Plasterboard Installation Guide.



| Face Paper Product Identification Code | |
|--|------------|
| 13mm EPB Standard | S13 |
| 10mm EPB MultiSmart | M10 |



E3SQa30**Quiet Steel Frame**

Non Load Bearing

Two Way FRR

- 3 Layers:** 1 Layer of Plasterboard to one side of the frame &
2 Layers of Plasterboard to other side of the frame

Sub Intertency **acoustic**

| System Number | Lining Suffix | FRR | Load Bearing Ability | Noise Control | | Lining Requirement |
|----------------|---------------|---------|----------------------|---------------|----|--|
| | | | | STC | Rw | |
| E3SQa30 | -S39 | -/30/30 | NLB | 53 | 52 | 1 x 13mm EPB Standard one side 2 x 13mm EPB Standard other side |
| | -M30 | -/30/30 | NLB | 53 | 52 | 1 x 10mm EPB MultiSmart one side 2 x 10mm EPB MultiSmart other side |

Framing

Quiet Steel Frame – Channels to be 92mm x 30mm x 0.55 BMT and are fixed to floor and ceiling. Quiet Steel studs 92mm x 45mm x 0.55 BMT are friction fitted and placed at 600mm centres with a 15mm expansion gap at top of frame.

No fixings to the top channel allowed.

Wall Heights

Recommended maximum height is 3.6m. Higher walls may be subject to specific engineering design or consult the framing manufacturer.

Partition Width

In order to achieve the STC ratings in the table above the partition width (excluding the board) shall be a minimum of 92mm.

| Stud Size | Lining Suffix | Plasterboard | Total Partition |
|-----------|---------------|--------------|-----------------|
| 92mm | M30 | 30mm | 122mm |
| | S39 | 39mm | 131mm |

Wall Sound Absorber

Install Sound Absorber between studs of the frame.

Use 90mm thick R2.2 glass wool blanket.

Plasterboard Lining

NB: The installer must look for the Product Identification Code on the face paper to ensure the correct board type is installed. Refer to the Face Paper Product Identification Code table on this page.

One layer of EPB Plasterboard lining on one side and Two layers on the other side as per specified system above.

Vertical fixing only permitted. Vertical joints of the outer layer should be offset by 600mm from those of the inner layer. Use full height sheets where possible. The inner layers are fixed hard to the floor. All sheet joints must be fixed over steel framing. Sheet end butt joints must be formed over nogs and offset the outer layer joints from the inner layer. Sheets shall be touch fitted.

Fixing of Linings (Non Fire Rated)

Fix the linings as per the Elephant Installation Guide. If an FRR is required then follow the Fixing of Linings instruction in the following paragraph.

Fixing of Linings (to achieve Fire Rating)**Fasteners (As per Specified System Above)**

| System Number | Side One | | Side Two |
|-----------------------------|-----------------------|-----------------------|--------------|
| | 1 st Layer | 2 nd Layer | Single Layer |
| Self-Tapping Drywall Screws | | | |
| E3SQa30-M30 | 10mm | 10mm | 10mm |
| | 25 x 6g | 32 x 6g | 25 x 6g |
| E3SQa30-S39 | 13mm | 13mm | 13mm |
| | 25 x 6g | 41 x 6g | 25 x 6g |

Fastener Centres

Inner layer: Fix at 600mm centres up all studs.

Single or Outer Layer: Fix at 300mm centres up all studs.

Place fasteners 12mm from the sheet edge and 50mm from sheet ends.

Place fasteners at 200mm centres where sheet end butt joints occur.

Avoid outer layer screws from hitting inner layer screws.

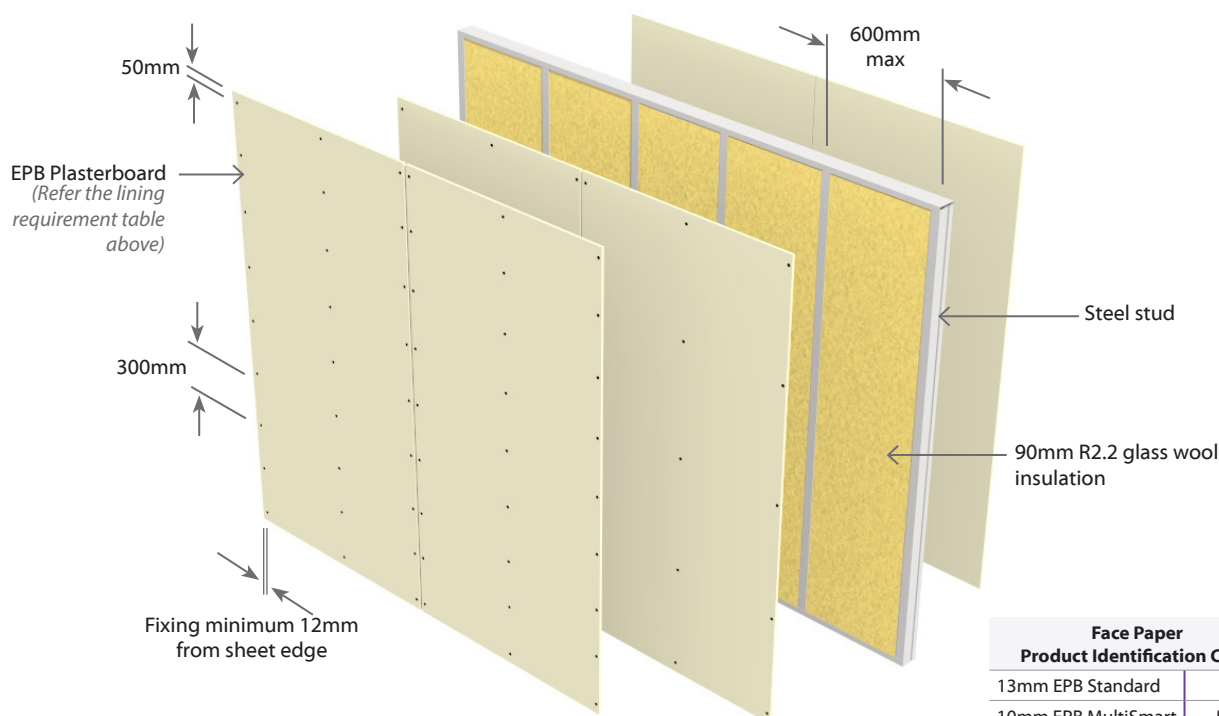
Acoustic Sealant

A bead of acoustic sealant is required around the perimeter of the steel framing and the single layer is bedded into the bead. The perimeter junctions of the wall must be airtight.

Jointing

Inner Layer: Unstopped

Outer or Single Layer: All fastener heads stopped and all sheet joints reinforced with paper jointing tape and stopped. Wall to ceiling junctions are to be reinforced with paper tape and square stopped or finished with Cornice. All in accordance with EPB Plasterboard Installation Guide.



E3SQa45**Quiet Steel Frame**

Non Load Bearing

Two Way FRR

- 3 Layers:** 1 Layer of Plasterboard to one side of the frame &
2 Layers of Plasterboard to other side of the frame

Sub Intertency acoustic

| System Number | Lining Suffix | FRR | Load Bearing Ability | Noise Control | | Lining Requirement |
|----------------|---------------|---------|----------------------|---------------|----|--|
| | | | | STC | Rw | |
| E3SQa45 | -MS33 | -/45/45 | NLB | 52 | 51 | 1 x 13mm EPB MultiSmart one side 2 x 10mm EPB Standard other side |

Framing

Quiet Steel Frame – Channels to be 92mm x 30mm x 0.55 BMT and are fixed to floor and ceiling. Quiet Steel studs 92mm x 45mm x 0.55 BMT are friction fitted and placed at 600mm centres with a 15mm expansion gap at top of frame.

No fixings to the top channel allowed.

Wall Heights

Recommended maximum height is 3.6m. Higher walls may be subject to specific engineering design or consult the framing manufacturer.

Partition Width

In order to achieve the STC ratings in the table above the partition width (excluding the board) shall be a minimum of 92mm.

| Stud Size | Lining Suffix | Plasterboard | Total Partition |
|-----------|---------------|--------------|-----------------|
| 92mm | MS33 | 33mm | 125mm |

Wall Sound Absorber

Install Sound Absorber between studs of the frame.

Use 90mm thick R2.2 glass wool blanket.

Plasterboard Lining

NB: The installer must look for the Product Identification Code on the face paper to ensure the correct board type is installed. Refer to the Face Paper Product Identification Code table on this page.

One layer of 13mm EPB MultiSmart lining fixed on one side and Two layers of 10mm EPB Standard linings fixed on the other side of the quiet steel framing.

Vertical fixing only permitted. Vertical joints of the outer layer should be offset by 600mm from those of the inner layer. Use full height sheets where possible. The inner layers are fixed hard to the floor. All sheet joints must be fixed over steel framing. Sheet end butt joints must be formed over nogs and offset the outer layer joints from the inner layer. Sheets shall be touch fitted.

Fixing of Linings (Non Fire Rated)

Fix the linings as per the EPB Plasterboard Installation Guide. If an FRR is required then follow the Fixing of Linings instruction in the following paragraph.

Fixing of Linings (to achieve Fire Rating)**Fasteners**

| System Number | Side One | | Side Two |
|----------------------|-----------------------------|-----------------------|--------------|
| | 1 st Layer | 2 nd Layer | Single Layer |
| | Self-Tapping Drywall Screws | | |
| E3SQa45-MS330 | 10mm | 10mm | 13mm |
| | 25 x 6g | 32 x 6g | 25 x 6g |

Fastener Centres

Inner layer: Fix at 600mm centres up all studs.

Single or Outer Layer: Fix at 300mm centres up all studs.

Place fasteners 12mm from the sheet edge and 50mm from sheet ends.

Place fasteners at 200mm centres where sheet end butt joints occur.

Avoid outer layer screws from hitting inner layer screws.

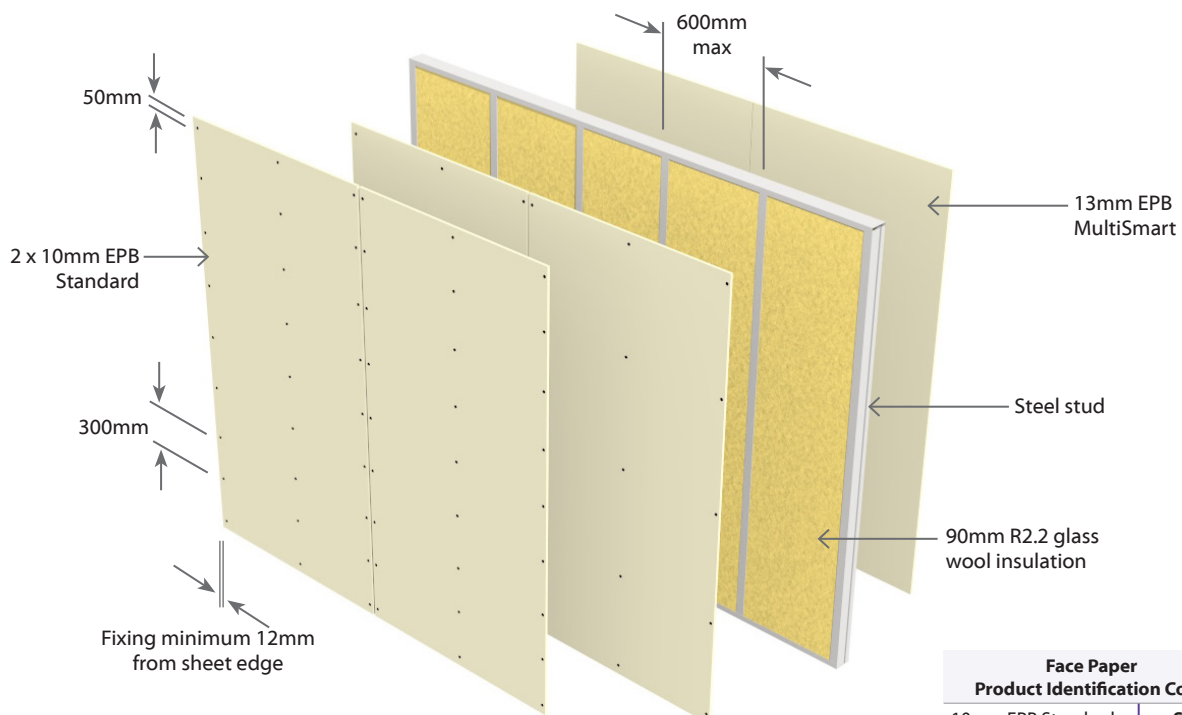
Acoustic Sealant

A bead of acoustic sealant is required around the perimeter of the steel framing and the single layer is bedded into the bead. The perimeter junctions of the wall must be airtight.

Jointing

Inner Layer: Unstopped

Outer or Single Layer: All fastener heads stopped and all sheet joints reinforced with paper jointing tape and stopped. Wall to ceiling junctions are to be reinforced with paper tape and square stopped or finished with Cornice. All in accordance with EPB Plasterboard Installation Guide.



| Face Paper Product Identification Code | |
|--|------------|
| 10mm EPB Standard | S10 |
| 13mm EPB MultiSmart | M13 |



E2SQA60**Quiet Steel Frame**

Non Load Bearing

Two Way FRR

2 Layers: 1 Layer of Plasterboard to each side of frameSub Intertency **a**coustic

| System Number | Lining Suffix | FRR | Load Bearing Ability | Noise Control | | Lining Requirement |
|----------------|---------------|---------|----------------------|---------------|----|-----------------------------------|
| | | | | STC | Rw | |
| E2SQA60 | -M26 | -/60/60 | NLB | 50 | 49 | 1 x 13mm EPB MultiSmart each side |

Framing

Quiet Steel Frame – Channels to be 92mm x 30mm x 0.55 BMT and are fixed to floor and ceiling. Quiet Steel studs 92mm x 45mm x 0.55 BMT are friction fitted and placed at 600mm centres with a 15mm expansion gap at top of frame.

No fixings to the top channel allowed.

Wall Heights

Recommended maximum height is 3.6m. Higher walls may be subject to specific engineering design or consult the framing manufacturer.

Partition Width

In order to achieve the STC ratings in the table above the partition width (excluding the board) shall be a minimum of 92mm.

| Stud Size | Lining Suffix | Plasterboard | Total Partition |
|-----------|---------------|--------------|-----------------|
| 92mm | M26 | 26mm | 118mm |

Wall Sound Absorber

Install Sound Absorber between studs of the frame.

Use 90mm thick R2.2 glass wool blanket.

Plasterboard Lining

NB: The installer must look for the Product Identification Code on the face paper to ensure the correct board type is installed. Refer to the Face Paper Product Identification Code table on this page.

One layer of 13mm EPB MultiSmart lining fixed on each side of the Quiet steel framing.

Vertical fixing only permitted. Use full height sheets where possible. Sheets are fixed hard to the floor. All sheet joints must be fixed over steel framing. Sheet end butt joints must be formed over nogs. Sheets shall be touch fitted.

Fixing of Linings (Non Fire Rated)

Fix the linings as per the EPB Plasterboard Installation Guide. If an FRR is required then follow the Fixing of Linings instruction in the following paragraph.

Fixing of Linings (to achieve Fire Rating)**Fasteners**

| System Number | Side One | Side Two |
|--------------------|-----------------------------|--------------|
| | Single Layer | Single Layer |
| | Self-Tapping Drywall Screws | |
| E2SQA60-M26 | 13mm | 13mm |
| | 25 x 6g | 25x 6g |

Fastener Centres

Fix at 300mm centres up each stud with no fixing to top and bottom channel sections.

Place fasteners no closer than 12mm to the sheet edge and 50mm from sheet ends.

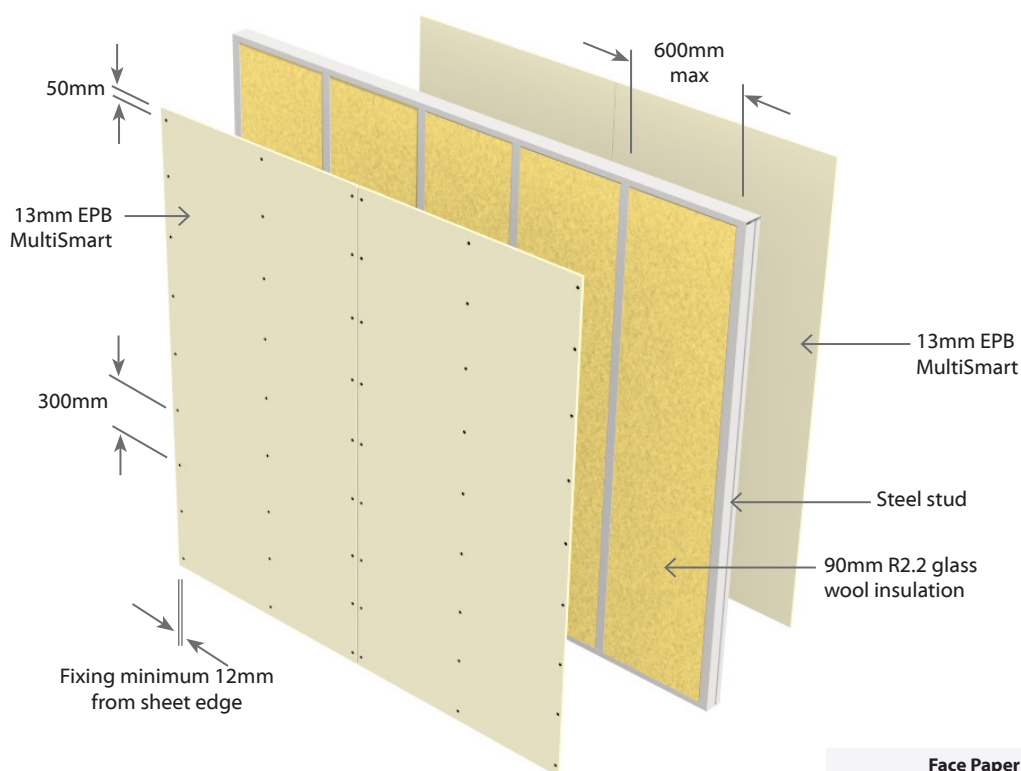
Place fasteners at 200mm centres where sheet end butt joints occur.

Acoustic Sealant

A bead of acoustic sealant is required around the perimeter of the steel framing and the single layer is bedded into the bead. The perimeter junctions of the wall must be airtight.

Jointing

All fastener heads stopped and all sheet joints reinforced with paper jointing tape and stopped. Wall to ceiling junctions are to be reinforced with paper tape and square stopped or finished with Cornice. All in accordance with EPB Plasterboard Installation Guide.



| Face Paper Product Identification Code | |
|--|------------|
| 13mm EPB MultiSmart | M13 |



E2SSa30**Staggered Steel Frame**

Non Load Bearing

Two Way FRR

2 Layers: 1 Layer of Plasterboard to each side of frameSub Intertency **a**coustic

| System Number | Lining Suffix | FRR | Load Bearing Ability | Noise Control | | Lining Requirement |
|----------------|---------------|---------|----------------------|---------------|----|-----------------------------------|
| | | | | STC | Rw | |
| E2SSa30 | -S26 | -/30/30 | NLB | 50 | 49 | 1 x 13mm EPB Standard each side |
| | -M20 | -/30/30 | NLB | 49 | 48 | 1 x 10mm EPB MultiSmart each side |

Framing

Staggered Steel Frame – Tracks to be a minimum size of 92mm x 30mm x 0.55 BMT and are fixed to floor and ceiling. Steel studs with minimum dimensions 64 x 34mm x 0.55 BMT with 6mm return. Stud to be fixed to the tracks using Staggered Stud Clip and placed at 600mm centres with a 15mm expansion gap at top of frame. No other fixings to track are allowed. Studs to be offset 300mm centres.

Wall Heights

Recommended maximum height is 2.4m. Higher walls may be subject to specific engineering design or consult the framing manufacturer.

Partition Width

In order to achieve the STC ratings in the table above the partition width (excluding the board) shall be a minimum of 92mm.

| Track Depth | Lining Suffix | Plasterboard | Total Partition |
|-------------|---------------|--------------|-----------------|
| 92mm | M20 | 20mm | 112mm |
| | S26 | 26mm | 118mm |

Wall Sound Absorber

Install Sound Absorber between studs of the frame. Use 75mm thick R1.8 glass wool blanket. Split 600mm wide blankets into 300mm.

Plasterboard Lining

NB: The installer must look for the Product Identification Code on the face paper to ensure the correct board type is installed. Refer to the Face Paper Product Identification Code table on this page.

One layer of EPB Plasterboard lining to each side of Staggered Steel frame as per specified system above.

Vertical fixing only permitted. Use full height sheets where possible. All sheet joints must be fixed over steel framing.

Sheet end butt joints must be formed over nogs. Sheets are fixed hard to the floor. Sheets shall be touch fitted.

Fixing of Linings (Non Fire Rated)

Fix the linings as per the EPB Plasterboard Installation Guide. If an FRR is required then follow the Fixing of Linings instruction in the following paragraph.

Fixing of Linings (to achieve Fire Rating)

Fasteners (As per Specified System Above)

| System Number | Side One | Side Two |
|-----------------------------|--------------|--------------|
| | Single Layer | Single Layer |
| Self-Tapping Drywall Screws | | |
| E2SSa30-M20 | 10mm | 10mm |
| | 25 x 6g | 25 x 6g |
| E2SSa30-S26 | 13mm | 13mm |
| | 25 x 6g | 25 x 6g |

Fastener Centres

Fix at 300mm centres up each stud with no fixing to top and bottom tracks.

Place fasteners no closer than 12mm to the sheet edge and 50mm from sheet ends.

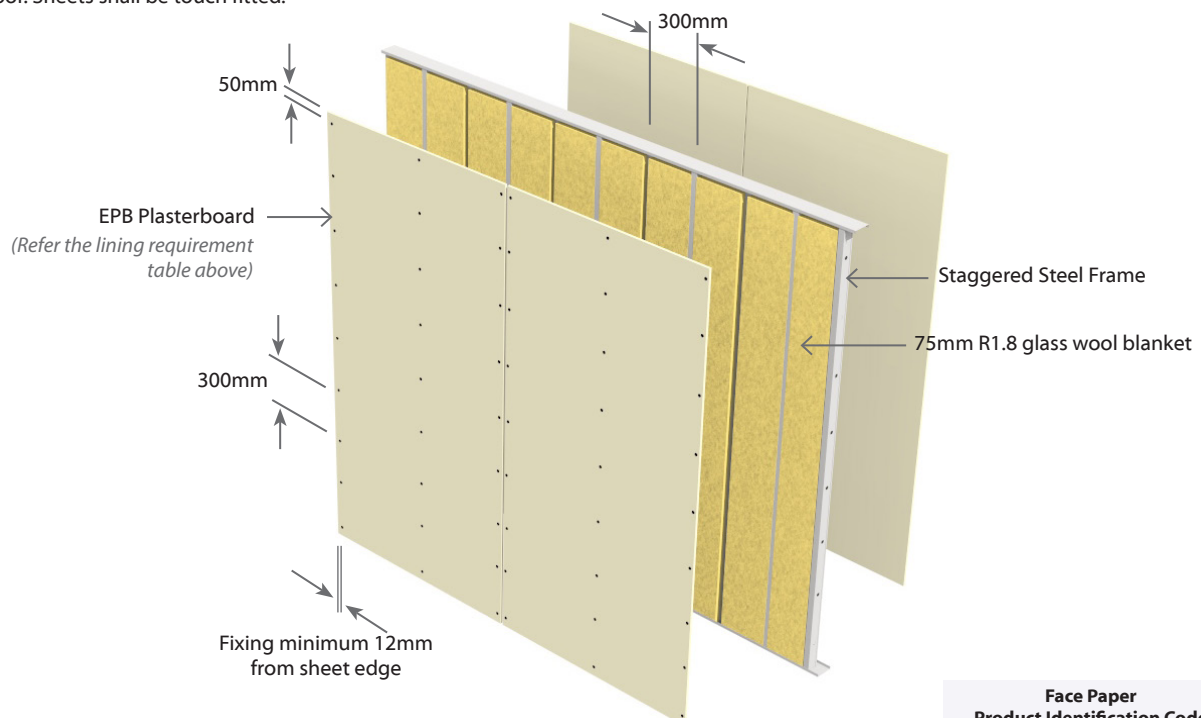
Place fasteners at 200mm centres where sheet end butt joints occur.

Acoustic Sealant

A bead of acoustic sealant must be placed on the perimeter of the framing. The single or outer layer is then bedded onto the bead. The perimeter junctions of the wall must be airtight.

Jointing

All fastener heads stopped and all sheet joints reinforced with paper jointing tape and stopped. Wall to ceiling junctions are to be reinforced with paper tape and square stopped or finished with Cornice. All in accordance with EPB Plasterboard Installation Guide.



| Face Paper Product Identification Code | |
|--|------------|
| 13mm EPB Standard | S13 |
| 10mm EPB MultiSmart | M10 |



E2SSa60**Staggered Steel Frame**

Non Load Bearing

Two Way FRR

2 Layers: 1 Layer of Plasterboard to each side of frameSub Intertency **a**coustic

| System Number | Lining Suffix | FRR | Load Bearing Ability | Noise Control | | Lining Requirement |
|----------------|---------------|---------|----------------------|---------------|----|-----------------------------------|
| | | | | STC | Rw | |
| E2SSa60 | -M26 | -/60/60 | NLB | 52 | 51 | 1 x 13mm EPB MultiSmart each side |
| | -F32 | -/60/60 | NLB | 54 | 53 | 1 x 16mm EPB FireSmart each side |

Framing

Staggered Steel Frame – Tracks to be a minimum size of 92mm x 30mm x 0.55 BMT and are fixed to floor and ceiling. Steel studs with minimum dimensions 64 x 34mm x 0.55 BMT with 6mm return. Stud to be fixed to the tracks using Staggered Stud Clip and placed at 600mm centres with a 15mm expansion gap at top of frame. No other fixings to track are allowed. Studs to be offset 300mm centres.

Wall Heights

Recommended maximum height is 2.4m. Higher walls may be subject to specific engineering design or consult the framing manufacturer.

Partition Width

In order to achieve the STC ratings in the table above the partition width (excluding the board) shall be a minimum of 92mm.

| Track Depth | Lining Suffix | Plasterboard | Total Partition |
|-------------|---------------|--------------|-----------------|
| 92mm | M26 | 26mm | 118mm |
| 92mm | F32 | 32mm | 124mm |

Wall Sound Absorber

Install Sound Absorber between studs of the frame. Use 75mm thick R1.8 glass wool blanket. Split 600mm wide blankets into 300mm.

Plasterboard Lining

NB: The installer must look for the Product Identification Code on the face paper to ensure the correct board type is installed. Refer to the Face Paper Product Identification Code table on this page.

One layer of EPB Plasterboard lining to each side of Staggered Steel frame as per specified system above.

Vertical fixing only permitted. Use full height sheets where possible. All sheet joints must be fixed over steel framing.

Sheet end butt joints must be formed over nogs. Sheets are fixed hard to the floor. Sheets shall be touch fitted.

Fixing of Linings (Non Fire Rated)

Fix the linings as per the EPB Plasterboard Installation Guide. If an FRR is required then follow the Fixing of Linings instruction in the following paragraph.

Fixing of Linings (to achieve Fire Rating)

Fasteners (As per Specified System Above)

| System Number | Side One | Side Two |
|--------------------|--------------|--------------|
| | Single Layer | Single Layer |
| E2SSa60-M26 | 13mm | 13mm |
| | 25 x 6g | 25 x 6g |
| E2SSa60-F32 | 16mm | 16mm |
| | 32 x 6g | 32 x 6g |

Fastener Centres

Fix at 300mm centres up each stud with no fixing to top and bottom tracks.

Place fasteners no closer than 12mm to the sheet edge and 50mm from sheet ends.

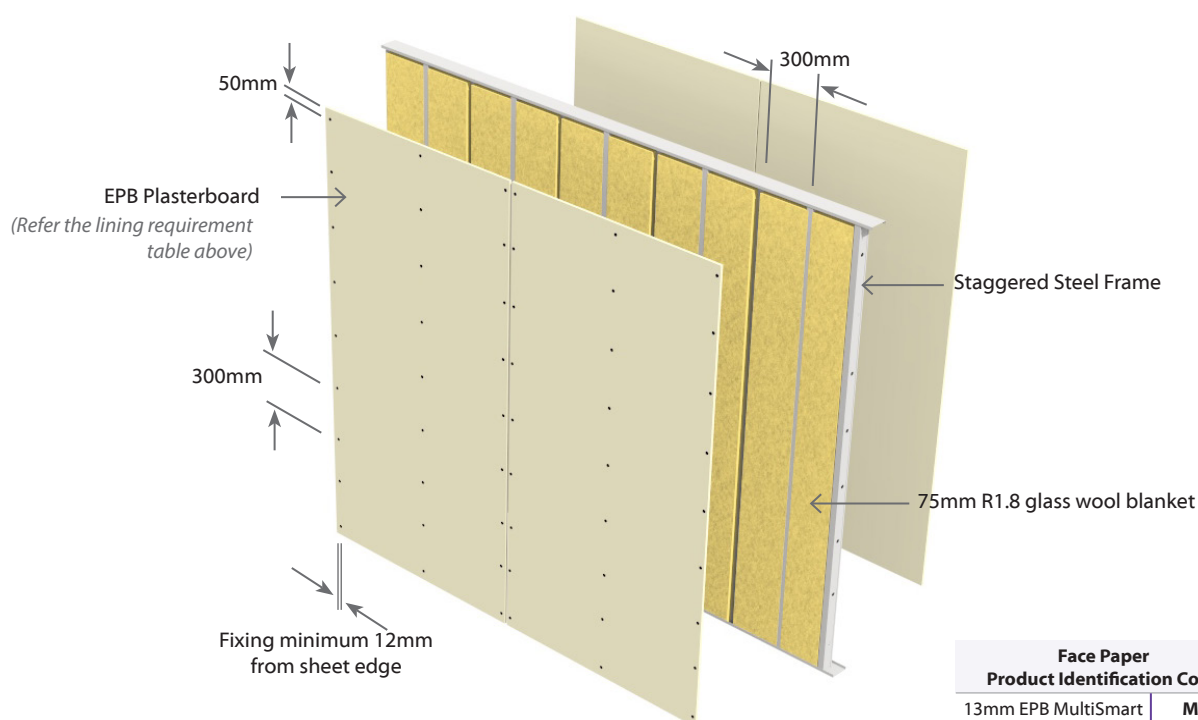
Place fasteners at 200mm centres where sheet end butt joints occur.

Acoustic Sealant

A bead of acoustic sealant must be placed on the perimeter of the framing. The single or outer layer is then bedded onto the bead. The perimeter junctions of the wall must be airtight.


Jointing

All fastener heads stopped and all sheet joints reinforced with paper jointing tape and stopped. Wall to ceiling junctions are to be reinforced with paper tape and square stopped or finished with Cornice. All in accordance with EPB Plasterboard Installation Guide.



| Face Paper Product Identification Code | |
|--|------------|
| 13mm EPB MultiSmart | M13 |
| 16mm EPB FireSmart | F16 |





Sub Intertency Floor/Ceiling Systems

E1DFa15**Direct Fix Clip - Floor/Ceiling****Load Bearing****1 Layer: 1 Layer of Plasterboard to underside of framing****Sub Intertenancy acoustic**

| System Number | Lining Suffix | FRR | Load Bearing Ability | Noise Control | | | Lining Requirement |
|----------------|---------------|----------|----------------------|---------------|----|-------|--------------------------------------|
| | | | | STC | Rw | IIC* | |
| E1DFa15 | -S13 | 15/15/15 | LB | 48 | 47 | 43-69 | 1 x 13mm EPB Standard (back blocked) |

Framing

Timber floor joists shall comply with NZS3604 with a minimum depth of 190 x 45mm and spaced at no more than 600mm centres. Alternatively, a proprietary I-joist system may be used subject to specific structural design and approved by the normal building consent process.

Consult the joist manufacturer regarding construction of the solid blocking contained in the floor/ceiling to wall junctions.

Flooring

Flooring shall be 20mm thick particle board of 17mm thick structural ply, fixed to the joists as per manufacturer's instructions. Flooring sheet joints must have a polypropylene tongue and groove jointer or be formed over framing.

Acoustic Clip and Battens

The Acoustic Clip shall be fastened to the joists at 1200mm centres maximum (and no less than 900mm centres) to support the metal ceiling battens. They are spaced at 600mm centres maximum. Use 3 x 32mm x 8g Wafer Head screws. Insert first screw into the middle rubber grommet. Adjust clip to correct height. Then insert remaining two screws. Do not over tighten.

A minimum 10mm gap is recommended between the flange of the ceiling batten and the underside of the joist.

Ceiling Sound Absorber

Install Sound Absorber between joists above the metal ceiling battens. Use minimum 90mm thick R2.2 glass wool Acoustic insulation.

Plasterboard Lining

NB: The installer must look for the Product Identification Code on the face paper to ensure the correct board type is installed. Refer to the Face Paper Product Identification Code table on this page.

One layer of 13mm EPB Standard fixed at right angles to the metal ceiling battens. All sheet end butt joints shall occur on the battens. For fire rated systems, joints formed by sheet edges shall be back blocked between furring channels with strips of plasterboard equivalent to the lining thickness used and with a minimum width 300mm. They shall be adhered with a cove or cornice bond adhesive. Sheets shall be touched fitted.

Fixing of Linings (Non Fire Rated)

Fix the linings as per the EPB Plasterboard Installation Guide. If an FRR is required then follow the Fixing of Linings instruction in the following paragraph.

Fixing the Lining (to achieve Fire Rating)**Fasteners**

| System Number | Single Layer |
|--------------------|-----------------------------|
| | Self-Tapping Drywall Screws |
| E1DFa15-S13 | 13mm |
| | 25 x 6g |

Fastening Centres

Ceiling sheets shall be fixed at 200mm centres along each metal ceiling batten.

Fix butt ends at 100mm centres. Fasteners to be placed no closer than 12mm from sheet edge.

Acoustic Sealant

A bead of fire retardant acoustic sealant is required around the ceiling perimeter.

Wall/Ceiling Junction

The internal angle between the ceilings and walls must be protected by Cornice or square stopped corners taped and filled in accordance with EPB Plasterboard Installation Guide.

Jointing

All fastener heads stopped and all sheet joints reinforced with paper jointing tape and stopped in accordance with the publication entitled EPB Plasterboard Installation Guide.

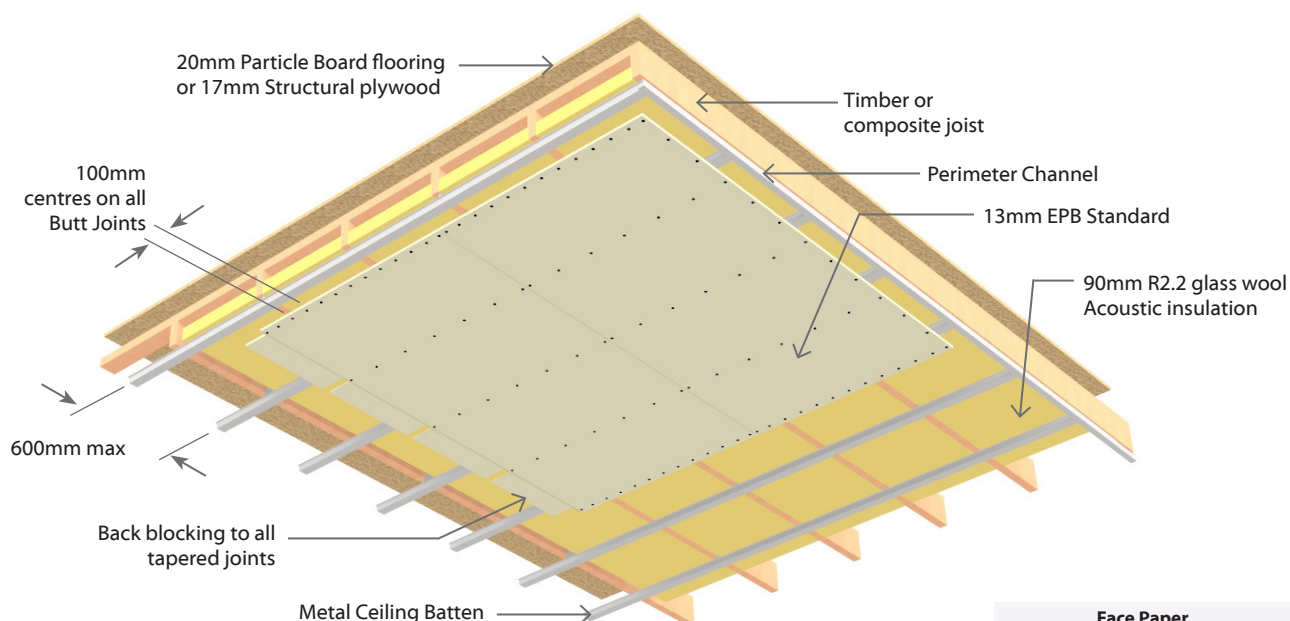
***Impact Insulation Class (IIC)**

IIC of 43 is achieved with a bare floor.

IIC of 44 is achieved with loose laid Vinyl.

IIC of 68 is achieved with 40oz loop pile carpet on 8mm foam chip underlay.

IIC of 69 is achieved with 40oz loop pile carpet on waffle underlay.



| Face Paper Product Identification Code | |
|--|------------|
| 13mm EPB Standard | S13 |



E2DFa30**Direct Fix Clip - Floor/Ceiling****Load Bearing****2** Layers: 2 Layers of Plasterboard to underside of framingSub Intertency **a**coustic

| System Number | Lining Suffix | FRR | Load Bearing Ability | Noise Control | | | Lining Requirement |
|----------------|---------------|----------|----------------------|---------------|----|-------|-----------------------|
| | | | | STC | Rw | IIC* | |
| E2DFa30 | -S26 | 30/30/30 | LB | 53 | 52 | 43-69 | 2 x 13mm EPB Standard |

Framing

Timber floor joists shall comply with NZS3604 with a minimum depth of 190 x 45mm and spaced at no more than 600mm centres. Alternatively, a proprietary I-joist system may be used subject to specific structural design and approved by the normal building consent process.

Consult the joist manufacturer regarding construction of the solid blocking contained in the floor/ceiling to wall junctions.

Flooring

Flooring shall be 20mm thick particle board or 17mm thick structural ply, fixed to the joists as per manufacturer's instructions. Flooring sheet joints must have a polypropylene tongue and groove jointer or be formed over framing.

Acoustic Clip and Battens

The Acoustic Clip shall be fastened to the joists at 1200mm centres maximum (and no less than 900mm centres) to support the metal ceiling battens. They are spaced at 600mm centres maximum. Use 3 x 32mm x 8g Wafer Head screws. Insert first screw into the middle rubber grommet. Adjust clip to correct height. Then insert remaining two screws. Do not over tighten.

A minimum 10mm gap is recommended between the flange of the ceiling batten and the underside of the joist.

Ceiling Sound Absorber

Install Sound Absorber between joists above the metal ceiling battens. Use minimum 90mm thick R2.2 glass wool Acoustic insulation.

Plasterboard Lining

NB: The installer must look for the Product Identification Code on the face paper to ensure the correct board type is installed. Refer to the Face Paper Product Identification Code table on this page.

Two layers of 13mm EPB Standard fixed at right angles to the metal ceiling battens. All sheet end butt joints shall occur on the battens. Offset the outer layer by 600mm from that of the inner layer.

Sheet joints should be touched fitted.

Fixing of Linings (Non Fire Rated)

Fix the linings as per the EPB Installation Guide. If an FRR is required then follow the Fixing of Linings instruction in the following paragraph.

Fixing the Lining (to achieve Fire Rating)**Fasteners**

| System Number | 1 st Layer | 2 nd Layer |
|--------------------|-----------------------------|-----------------------|
| | Self-Tapping Drywall Screws | |
| E2DFa30-S26 | 13mm | 13mm |
| | 25 x 6g | 41 x 6g |

Fastening Centres

Ceiling sheets shall be fixed at 200mm centres along each metal ceiling batten.

Fix butt ends at 100mm centres.

Fasteners to be placed no closer than 12mm from sheet edge.

Acoustic Sealant

A bead of fire retardant Acoustic Sealant must be applied around the perimeter of the first layer and the second layer bedded on the bead

Wall/Ceiling Junction

The internal angle between the ceilings and walls must be protected by Cornice or square stopped corners taped and filled in accordance with EPB Plasterboard Installation Guide

Jointing

Inner layer: Unstopped.

Outer Layer: All fastener heads stopped and all sheet joints reinforced with paper jointing tape and stopped in accordance with the publication entitled EPB Plasterboard Installation Guide.

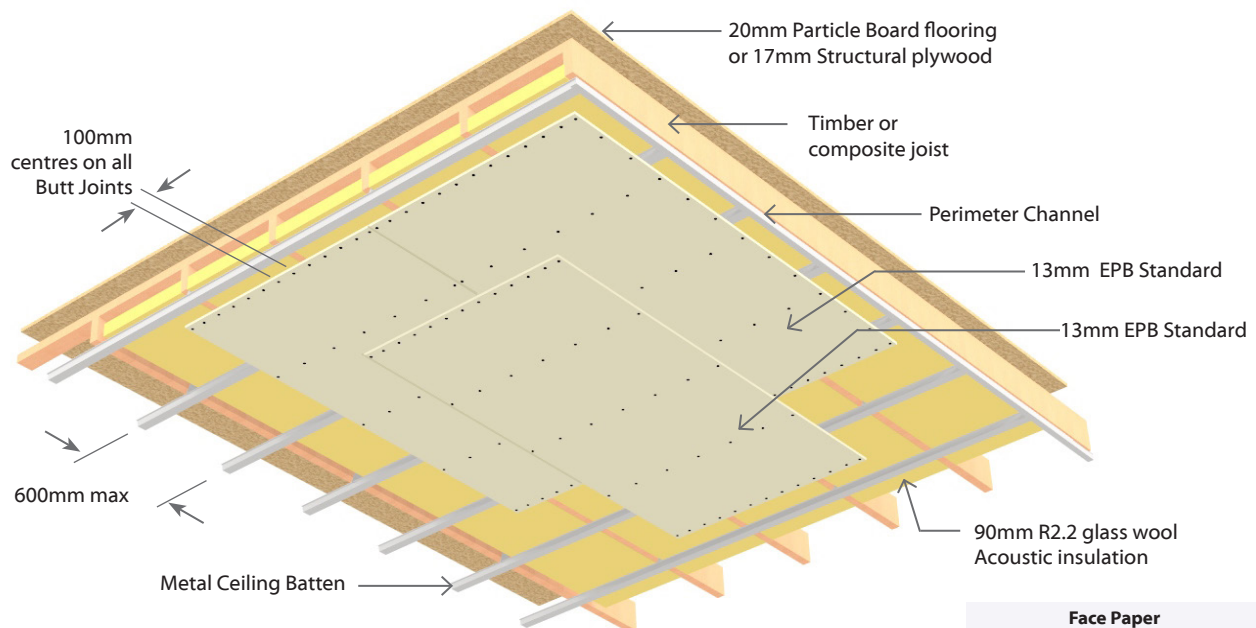
***Impact Insulation Class (IIC)**

IIC of 43 is achieved with a bare floor.

IIC of 44 is achieved with loose laid Vinyl.

IIC of 68 is achieved with 40oz loop pile carpet on 8mm foam chip underlay.

IIC of 69 is achieved with 40oz loop pile carpet on waffle underlay.



| Face Paper Product Identification Code | |
|--|------------|
| 13mm EPB Standard | S13 |



E1DFa45**Direct Fix Clip - Floor/Ceiling****Load Bearing****1 Layer: 1 Layer of Plasterboard to underside of framing****Sub Intertency acoustic**

| System Number | Lining Suffix | FRR | Load Bearing Ability | Noise Control | | | Lining Requirement |
|----------------|---------------|----------|----------------------|---------------|----|-------|--|
| | | | | STC | Rw | IIC* | |
| E1DFa45 | -M13 | 45/45/45 | LB | 52 | 51 | 43-69 | 1 x 13mm EPB MultiSmart (back blocked) |

Framing

Timber floor joists shall comply with NZS3604 with a minimum depth of 190 x 45mm and spaced at no more than 600mm centres. Alternatively, a proprietary I-joist system may be used subject to specific structural design and approved by the normal building consent process.

Consult the joist manufacturer regarding construction of the solid blocking contained in the floor/ceiling to wall junctions.

Flooring

Flooring shall be 20mm thick particle board of 17mm thick structural ply, fixed to the joists as per manufacturer's instructions. Flooring sheet joints must have a polypropylene tongue and groove jointer or be formed over framing.

Acoustic Clip and Batts

The Acoustic Clip shall be fastened to the joists at 1200mm centres maximum (and no less than 900mm centres) to support the metal ceiling battens. They are spaced at 600mm centres maximum. Use 3 x 32mm x 8g Wafer Head screws. Insert first screw into the middle rubber grommet. Adjust clip to correct height. Then insert remaining two screws. Do not over tighten.

A minimum 10mm gap is recommended between the flange of the ceiling batten and the underside of the joist.

Ceiling Sound Absorber

Install Sound Absorber between joists above the metal ceiling battens. Use minimum 90mm thick R2.2 glass wool Acoustic insulation.

Plasterboard Lining

NB: The installer must look for the Product Identification Code on the face paper to ensure the correct board type is installed. Refer to the Face Paper Product Identification Code table on this page.

One layer of 13mm EPB MultiSmart fixed at right angles to the metal ceiling battens. All sheet end butt joints shall occur on the battens. For fire rated systems, joints formed by sheet edges shall be back blocked between furring channels with strips of plasterboard equivalent to the lining thickness used and with a minimum width 300mm. They shall be adhered with a cove or cornice bond adhesive. Sheets shall be touched fitted.

Fixing of Linings (Non Fire Rated)

Fix the linings as per the EPB Plasterboard Installation Guide. If an FRR is required then follow the Fixing of Linings instruction in the following paragraph.

Fixing the Lining (to achieve Fire Rating)**Fasteners**

| System Number | Single Layer |
|--------------------|-----------------------------|
| | Self-Tapping Drywall Screws |
| E1DFa45-M13 | 13mm |
| | 25 x 6g |

Fastening Centres

Ceiling sheets shall be fixed at 200mm centres along each metal ceiling batten and around ceiling perimeter.

Fix butt ends at 100mm centres.

Fasteners to be placed no closer than 12mm from sheet edge.

Acoustic Sealant

A bead of fire retardant acoustic sealant is required around the ceiling perimeter.

Wall/Ceiling Junction

The internal angle between the ceilings and walls must be protected by Cornice or square stopped corners taped and filled in accordance with EPB Plasterboard Installation Guide.

Jointing

All fastener heads stopped and all sheet joints reinforced with paper jointing tape and stopped in accordance with the publication entitled EPB Plasterboard Installation Guide.

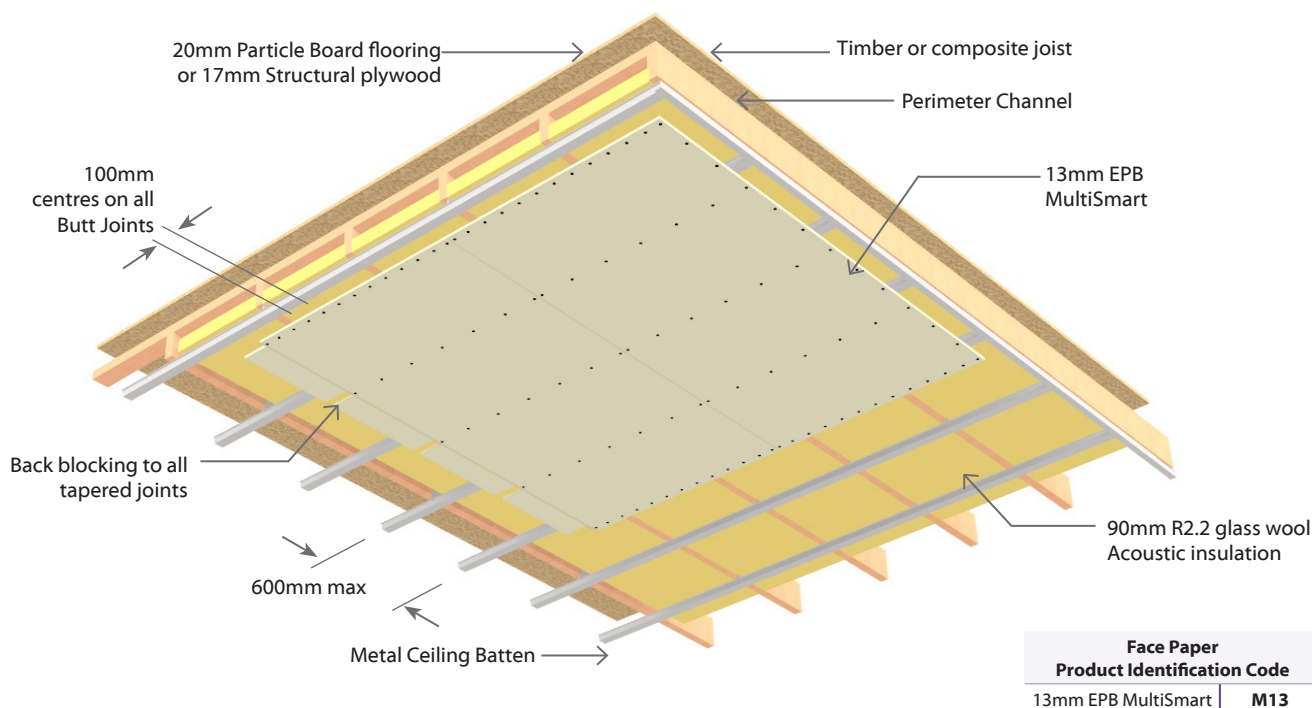
***Impact Insulation Class (IIC)**

IIC of 43 is achieved with a bare floor.

IIC of 44 is achieved with loose laid Vinyl.

IIC of 68 is achieved with 40oz loop pile carpet on 8mm foam chip underlay.

IIC of 69 is achieved with 40oz loop pile carpet on waffle underlay.



E1DFa60**Direct Fix Clip - Floor/Ceiling****Load Bearing****1 Layer: 1 Layer of Plasterboard to underside of framing****Sub Intertency acoustic**

| System Number | Lining Suffix | FRR | Load Bearing Ability | Noise Control | | | Lining Requirement |
|----------------|---------------|----------|----------------------|---------------|----|-------|---------------------------------------|
| | | | | STC | Rw | IIC* | |
| E1DFa60 | -F16 | 60/60/60 | LB | 52 | 51 | 43-69 | 1 x 16mm EPB FireSmart (back blocked) |

Framing

Timber floor joists shall comply with NZS3604 with a minimum depth of 190 x 45mm and spaced at no more than 600mm centres. Alternatively, a proprietary I-joist system may be used subject to specific structural design and approved by the normal building consent process.

Consult the joist manufacturer regarding construction of the solid blocking contained in the floor/ceiling to wall junctions.

Flooring

Flooring shall be 20mm thick particle board of 17mm thick structural ply, fixed to the joists as per manufacturer's instructions. Flooring sheet joints must have a polypropylene tongue and groove jointer or be formed over framing.

Acoustic Clip and Battens

The Acoustic Clip shall be fastened to the joists at 1200mm centres maximum (and no less than 900mm centres) to support the metal ceiling battens. They are spaced at 600mm centres maximum. Use 3 x 32mm x 8g Wafer Head screws. Insert first screw into the middle rubber grommet. Adjust clip to correct height. Then insert remaining two screws. Do not over tighten.

A minimum 10mm gap is recommended between the flange of the ceiling batten and the underside of the joist.

Ceiling Sound Absorber

Install Sound Absorber between joists above the metal ceiling battens. Use minimum 90mm thick R2.2 glass wool Acoustic insulation.

Plasterboard Lining

NB: The installer must look for the Product Identification Code on the face paper to ensure the correct board type is installed. Refer to the Face Paper Product Identification Code table on this page.

One layer of 16mm EPB FireSmart fixed at right angles to the metal ceiling battens. All sheet end butt joints shall occur on the battens. For fire rated systems, joints formed by sheet edges shall be back blocked between furring channels with strips of plasterboard equivalent to the lining thickness used and with a minimum width 300mm. They shall be adhered with a cove or cornice bond adhesive. Sheets shall be touched fitted.

Fixing of Linings (Non Fire Rated)

Fix the linings as per the EPB Plasterboard Installation Guide. If an FRR is required then follow the Fixing of Linings instruction in the following paragraph.

Fixing the Lining (to achieve Fire Rating)**Fasteners**

| System Number | Single Layer |
|--------------------|-----------------------------|
| | Self-Tapping Drywall Screws |
| E1DFa60-F16 | 16mm |
| | 32 x 6g |

Fastening Centres

Ceiling sheets shall be fixed at 200mm centres along each metal ceiling batten and around ceiling perimeter.

Fix butt ends at 100mm centres.

Fasteners to be placed no closer than 12mm from sheet edge.

Acoustic Sealant

A bead of fire retardant acoustic sealant is required around the ceiling perimeter.

Wall/Ceiling Junction

The internal angle between the ceilings and walls must be protected by Cornice or square stopped corners taped and filled in accordance with EPB Plasterboard Installation Guide.

Jointing

All fastener heads stopped and all sheet joints reinforced with paper jointing tape and stopped in accordance with the publication entitled EPB Plasterboard Installation Guide.

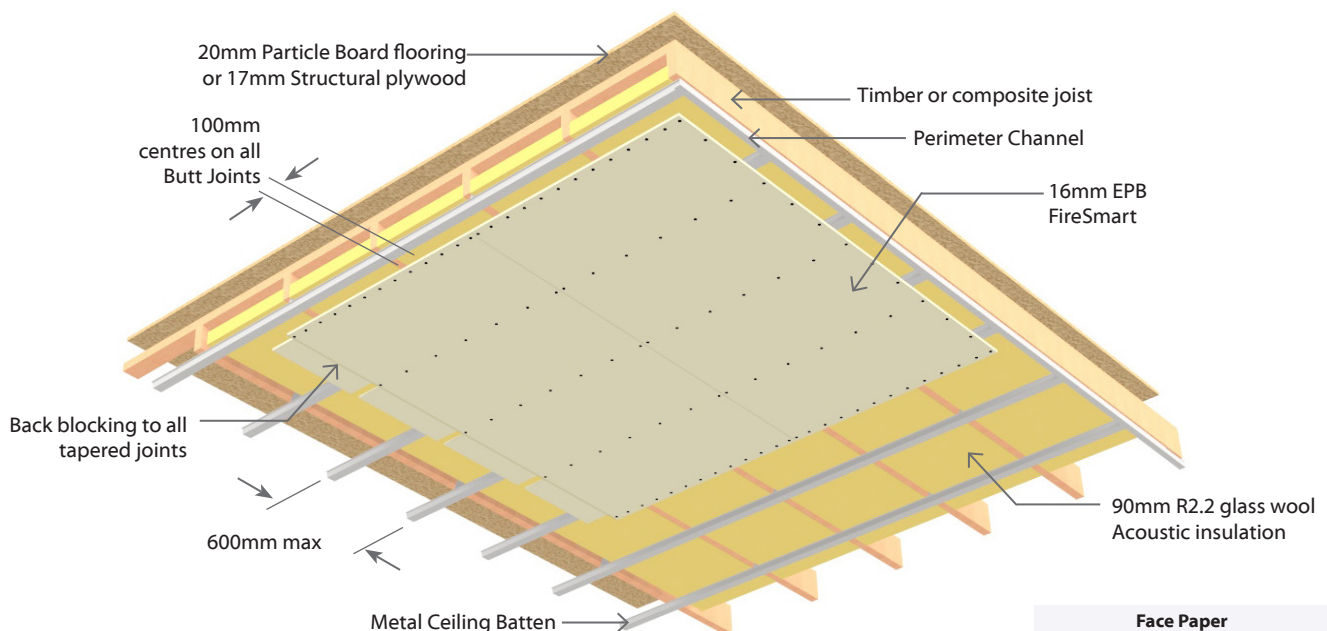
***Impact Insulation Class (IIC)**

IIC of 43 is achieved with a bare floor.

IIC of 44 is achieved with loose laid Vinyl.

IIC of 68 is achieved with 40oz loop pile carpet on 8mm foam chip underlay.

IIC of 69 is achieved with 40oz loop pile carpet on waffle underlay.



E1SCa15**Suspended Grid - Floor/Ceiling****Load Bearing****1 Layer: 1 Layer of Plasterboard to underside of framing****Sub Intertency acoustic**

| System Number | Lining Suffix | FRR | Load Bearing Ability | Noise Control | | | Lining Requirement |
|----------------|---------------|----------|----------------------|---------------|----|-------|--------------------------------------|
| | | | | STC | Rw | IIC* | |
| E1SCa15 | -S13 | 15/15/15 | LB | 48 | 47 | 39-62 | 1 x 13mm EPB Standard (back blocked) |

Framing

Timber floor joists shall comply with NZS3604 with a minimum depth of 190 x 45mm and spaced at no more than 600mm centres. Alternatively, a proprietary I-joist system may be used subject to specific structural design and approved by the normal building consent process.

Flooring

Flooring shall be 20mm thick particle board of 17mm thick structural ply, fixed to the joists as per manufacturer's instructions. Flooring sheet joints must have a polypropylene tongue and groove jointer or be formed over framing.

Minimum Cavity Depth

Acoustic Systems require a minimum of 275mm cavity depth

Suspension System

Rondo ScrewFix® steel frame suspension system comprising 2.5mm wire hangers at 1200mm centres supporting F38 strong back channels spaced at a maximum of 1200mm centres and F37 furring channels at 600mm centres.

Alternative suspension systems with equivalent performance characteristics and layout may be used.

Suspended Grid ceiling system to be installed as per manufacturer's specification.

Ceiling Sound Absorber

Install Sound Absorber over the suspension system. Use minimum 90mm thick R2.2 glass wool blanket.

Plasterboard Lining

NB: The installer must look for the Product Identification Code on the face paper to ensure the correct board type is installed. Refer to the Face Paper Product Identification Code table on this page.

One layer of 13mm EPB Standard fixed at right angles to the metal furring channels. All sheet butt joints should occur on the furring channel. For fire rated systems, joints formed by sheet edges shall be back blocked between furring channels with strips plasterboard equivalent to the lining thickness used and with a minimum width 300mm. They shall be adhered with a cove or cornice bond adhesive. Sheet joints shall be touched fitted.

Fixing of Linings (Non Fire Rated)

Fix the linings as per the EPB Plasterboard Installation Guide. If an FRR is required then follow the Fixing of Linings instruction in the following paragraph.

Fixing the Lining (to achieve Fire Rating)**Fasteners**

| System Number | Single Layer |
|--------------------|-----------------------------|
| | Self-Tapping Drywall Screws |
| E1SCa15-S13 | 13mm |
| | 25 x 6g |

Fastening Centres

Ceiling sheets shall be fixed at 200mm centres along each furring channel and around the ceiling perimeter.

Fix at 100mm centres where butt joints occur.

Fasteners to be placed no closer than 12mm from sheet edge.

Acoustic Sealant

A bead of fire retardant acoustic sealant is required around the ceiling perimeter.

Wall/Ceiling Junction

The internal angle between the ceilings and walls must be protected by Cornice or square stopped corners taped and filled in accordance with EPB Plasterboard Installation Guide.

Jointing

All fastener heads stopped and all sheet joints reinforced with paper jointing tape and stopped in accordance with the publication entitled EPB Plasterboard Installation Guide.

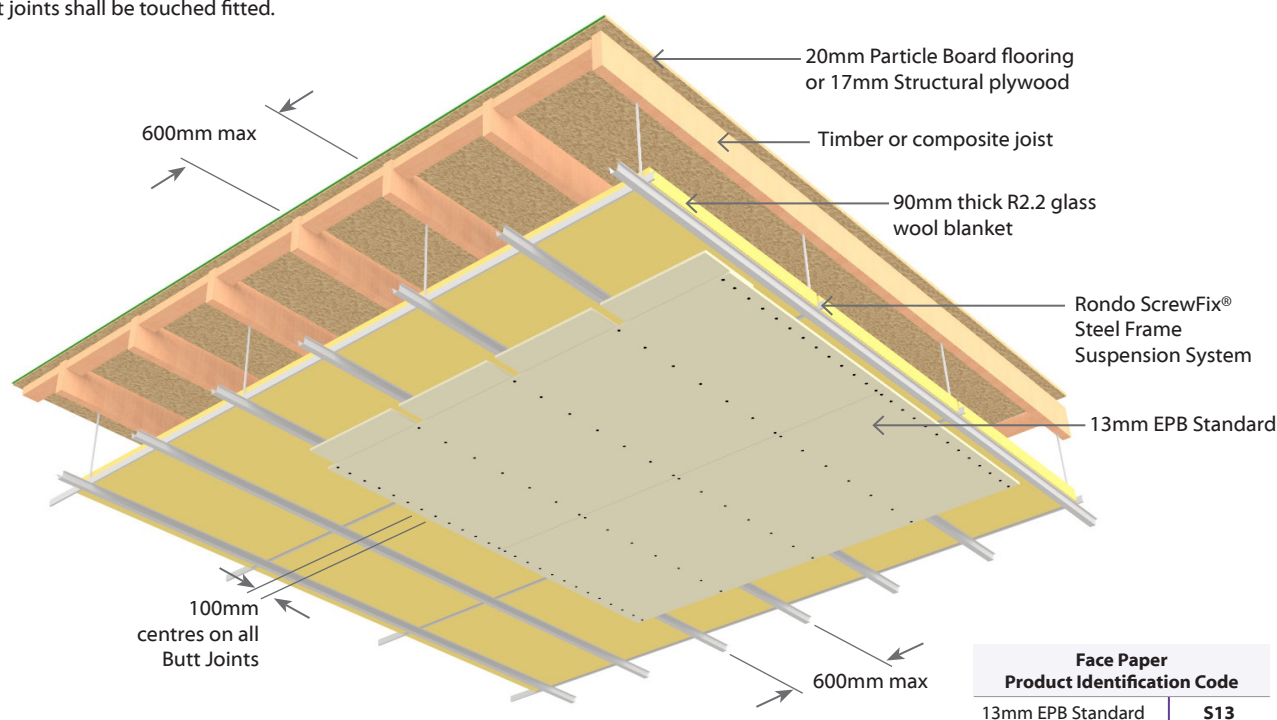
***Impact Insulation Class (IIC)**

IIC of 39 is achieved with a bare floor.

IIC of 40 is achieved with loose laid Vinyl.

IIC of 60 is achieved with 40oz loop pile carpet on 8mm foam chip underlay.

IIC of 62 is achieved with 40oz loop pile carpet on waffle underlay.



E2SCa30**Suspended Grid - Floor/Ceiling****Load Bearing****2** Layers: 2 Layers of Plasterboard to underside of framingSub Intertency **a**coustic

| System Number | Lining Suffix | FRR | Load Bearing Ability | Noise Control | | | Lining Requirement |
|----------------|---------------|----------|----------------------|---------------|----|-------|--------------------------------------|
| | | | | STC | Rw | IIC* | |
| E2SCa30 | -S26 | 30/30/30 | LB | 53 | 52 | 42-67 | 2 x 13mm EPB Standard (back blocked) |

Framing

Timber floor joists shall comply with NZS3604 with a minimum depth of 190 x 45mm and spaced at no more than 600mm centres. Alternatively, a proprietary I-joist system may be used subject to specific structural design and approved by the normal building consent process.

Flooring

Flooring shall be 20mm thick particle board of 17mm thick structural ply, fixed to the joists as per manufacturer's instructions. Flooring sheet joints must have a polypropylene tongue and groove jointer or be formed over framing.

Minimum Cavity Depth

Acoustic Systems require a minimum of 275mm cavity depth

Suspension System

Rondo ScrewFix® steel frame suspension system comprising 2.5mm wire hangers at 1200mm centres supporting F38 strongback channels spaced at a maximum of 1200mm centres and F37 furring channels at 600mm centres.

Alternative suspension systems with equivalent performance characteristics and layout may be used.

Suspended Grid ceiling system to be installed as per manufacturer's specification.

Ceiling Sound Absorber

Install Sound Absorber over the suspension system. Use minimum 90mm thick R2.2 glass wool blanket.

Plasterboard Lining

NB: The installer must look for the Product Identification Code on the face paper to ensure the correct board type is installed. Refer to the Face Paper Product Identification Code table on this page.

Two layers of 13mm EPB Standard fixed at right angles to metal furring channels. Offset the joints of the outer layer by 600mm from those of the inner layer. All sheet butt joints should occur on the furring channel. Sheet joints shall be touched fitted.

Fixing of Linings (Non Fire Rated)

Fix the linings as per the EPB Plasterboard Installation Guide. If an FRR is required then follow the Fixing of Linings instruction in the following paragraph.

Fixing the Lining (to achieve Fire Rating)**Fasteners**

| System Number | 1 st Layer | 2 nd Layer |
|--------------------|-----------------------------|-----------------------|
| | Self-Tapping Drywall Screws | |
| E2SCa30-S26 | 13mm | 13mm |
| | 25 x 6g | 41 x 6g |

Fastening Centres

Ceiling sheets shall be fixed at 200mm centres along each furring channel and around the ceiling perimeter.

Fix at 100mm centres where butt joints occur. Fasteners to be placed no closer than 12mm from sheet edge.

Acoustic Sealant

A bead of Acoustic Sealant must be applied on the inner layer around the perimeter of the ceiling. The outer layer is then bedded into the bead.

Wall/Ceiling Junction

The internal angle between the ceilings and walls must be protected by Cornice or square stopped corners taped and filled in accordance with EPB Plasterboard Installation Guide.

Jointing

Inner layer: Unstopped.

Outer Layer: All fastener heads stopped and all sheet joints reinforced with paper jointing tape and stopped in accordance with the publication entitled EPB Plasterboard Installation Guide.

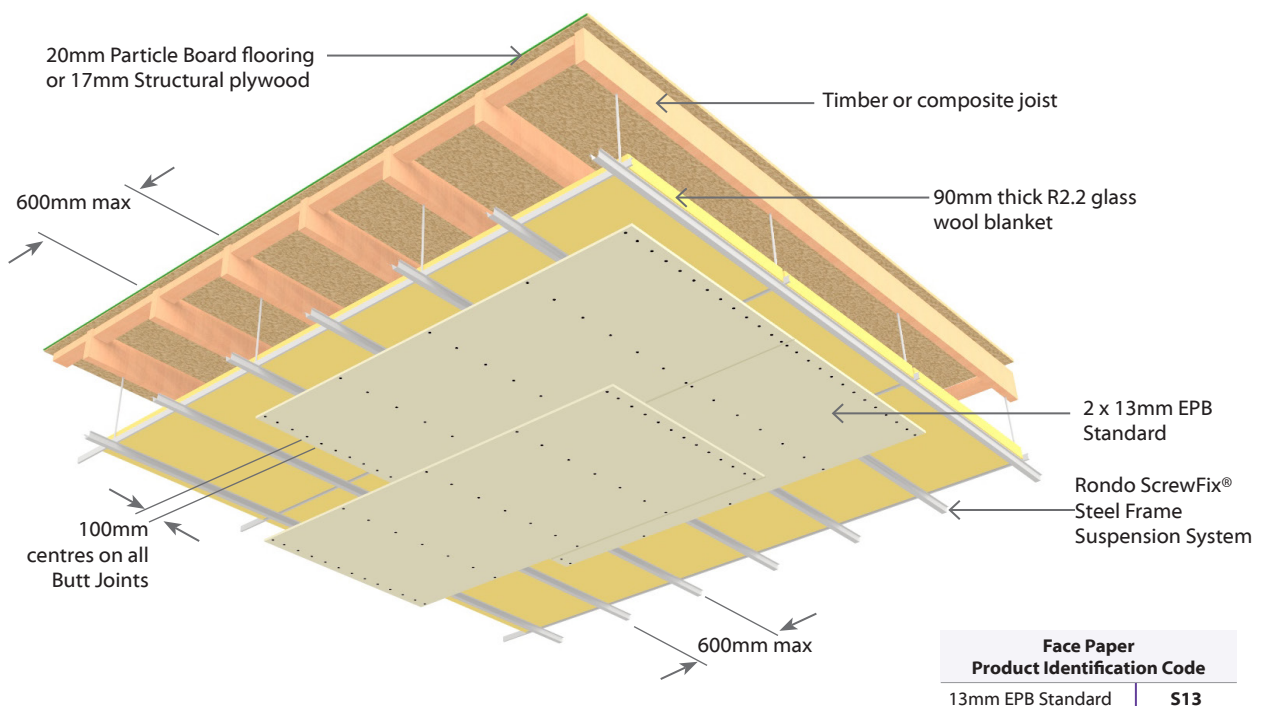
***Impact Insulation Class (IIC)**

IIC of 42 is achieved with a bare floor.

IIC of 43 is achieved with loose laid Vinyl.

IIC of 66 is achieved with 40oz loop pile carpet on 8mm foam chip underlay.

IIC of 67 is achieved with 40oz loop pile carpet on waffle underlay.



E1SCa45**Suspended Grid - Floor/Ceiling****Load Bearing****1 Layer: 1 Layer of Plasterboard to underside of framing****Sub Intertency acoustic**

| System Number | Lining Suffix | FRR | Load Bearing Ability | Noise Control | | | Lining Requirement |
|----------------|---------------|----------|----------------------|---------------|----|-------|--|
| | | | | STC | Rw | IIC* | |
| E1SCa45 | -M13 | 45/45/45 | LB | 51 | 50 | 43-69 | 1 x 13mm EPB MultiSmart (back blocked) |

Framing

Timber floor joists shall comply with NZS3604 with a minimum depth of 190 x 45mm and spaced at no more than 600mm centres. Alternatively, a proprietary I-joist system may be used subject to specific structural design and approved by the normal building consent process.

Flooring

Flooring shall be 20mm thick particle board of 17mm thick structural ply, fixed to the joists as per manufacturer's instructions. Flooring sheet joints must have a polypropylene tongue and groove jointer or be formed over framing.

Minimum Cavity Depth

Acoustic Systems require a minimum of 275mm cavity depth

Suspension System

Rondo ScrewFix® steel frame suspension system comprising 2.5mm wire hangers at 1200mm centres supporting F38 strongback channels spaced at a maximum of 1200mm centres and F37 furring channels at 600mm centres.

Alternative suspension systems with equivalent performance characteristics and layout may be used.

Suspended Grid ceiling system to be installed as per manufacturer's specification.

Ceiling Sound Absorber

Install Sound Absorber over the suspension system. Use minimum 90mm thick R2.2 glass wool blanket.

Plasterboard Lining

One layer of 13mm EPB MultiSmart fixed at right angles to the metal furring channels. All sheet butt joints should occur on the furring channel. For fire rated systems, joints formed by sheet edges shall be back blocked between furring channels with strips plasterboard equivalent to the lining thickness used and with a minimum width 300mm. They shall be adhered with a cove or cornice bond adhesive. Sheet joints shall be touched fitted.

Fixing of Linings (Non Fire Rated)

Fix the linings as per the EPB Plasterboard Installation Guide. If an FRR is required then follow the Fixing of Linings instruction in the following paragraph.

Fixing the Lining (to achieve Fire Rating)**Fasteners**

| System Number | Single Layer |
|--------------------|-----------------------------|
| | Self-Tapping Drywall Screws |
| E1SCa45-M13 | 13mm |
| | 25 x 6g |

Fastening Centres

Ceiling sheets shall be fixed at 200mm centres along each furring channel and around the ceiling perimeter.

Fix at 100mm centres where butt joints occur. Fasteners to be placed no closer than 12mm from sheet edge.

Acoustic Sealant

A bead of fire retardant acoustic sealant is required around the ceiling perimeter.

Wall/Ceiling Junction

The internal angle between the ceilings and walls must be protected by Cornice or square stopped corners taped and filled in accordance with EPB Plasterboard Installation Guide.

Jointing

All fastener heads stopped and all sheet joints reinforced with paper jointing tape and stopped in accordance with the publication entitled EPB Plasterboard Installation Guide.

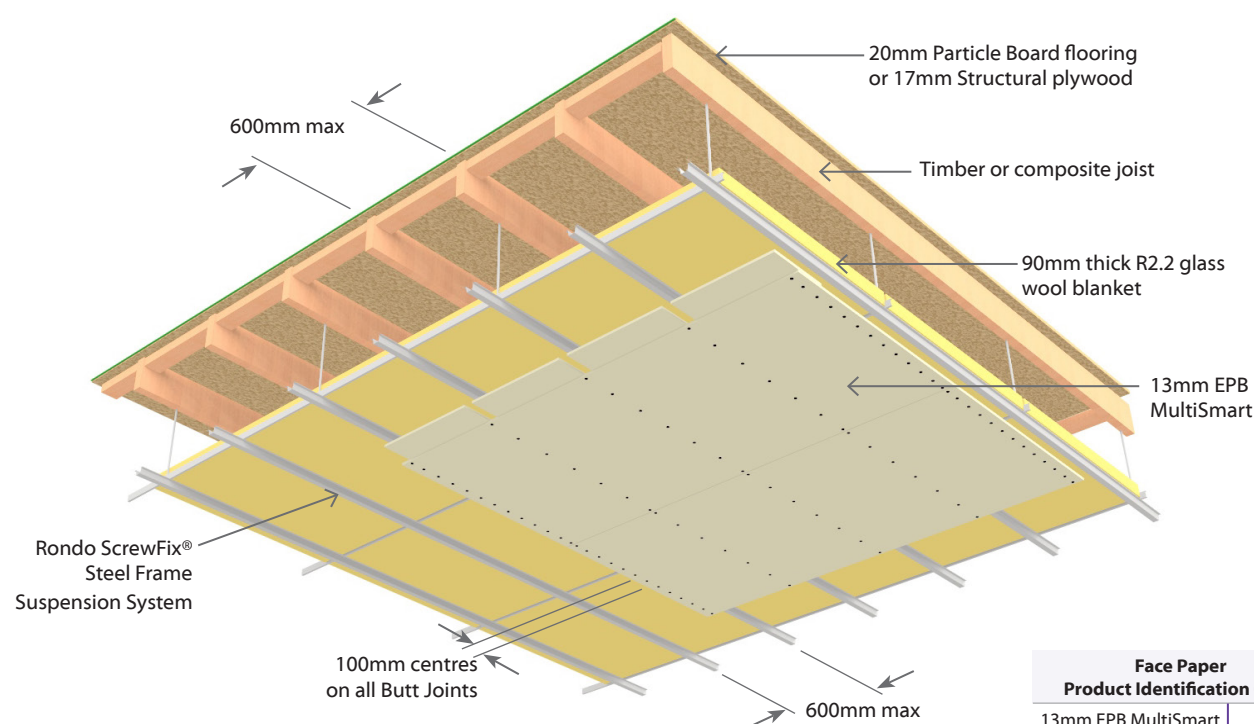
***Impact Insulation Class (IIC)**

IIC of 43 is achieved with a bare floor.

IIC of 44 is achieved with loose laid Vinyl.

IIC of 68 is achieved with 40oz loop pile carpet on 8mm foam chip underlay.

IIC of 69 is achieved with 40oz loop pile carpet on waffle underlay.



E1SCa60**Suspended Grid - Floor/Ceiling****Load Bearing****1 Layer: 1 Layer of Plasterboard to underside of framing****Sub Intertency acoustic**

| System Number | Lining Suffix | FRR | Load Bearing Ability | Noise Control | | | Lining Requirement |
|----------------|---------------|----------|----------------------|---------------|----|-------|---------------------------------------|
| | | | | STC | Rw | IIC* | |
| E1SCa60 | -F16 | 60/60/60 | LB | 52 | 51 | 43-69 | 1 x 16mm EPB FireSmart (back blocked) |

Framing

Timber floor joists shall comply with NZS3604 with a minimum depth of 190 x 45mm and spaced at no more than 600mm centres. Alternatively, a proprietary I-joist system may be used subject to specific structural design and approved by the normal building consent process.

Flooring

Flooring shall be 20mm thick particle board of 17mm thick structural ply, fixed to the joists as per manufacturer's instructions. Flooring sheet joints must have a polypropylene tongue and groove jointer or be formed over framing.

Minimum Cavity Depth

Acoustic Systems require a minimum of 275mm cavity depth

Suspension System

Rondo ScrewFix® steel frame suspension system comprising 2.5mm wire hangers at 1200mm centres supporting F38 strongback channels spaced at a maximum of 1200mm centres and F37 furring channels at 600mm centres.

Alternative suspension systems with equivalent performance characteristics and layout may be used.

Suspended Grid ceiling system to be installed as per manufacturer's specification.

Ceiling Sound Absorber

Install Sound Absorber over the suspension system. Use minimum 90mm thick R2.2 glass wool blanket.

Plasterboard Lining

One layer of 16mm EPB FireSmart fixed at right angles to the metal furring channels. All sheet butt joints should occur on the furring channel. For fire rated systems, joints formed by sheet edges shall be back blocked between furring channels with strips plasterboard equivalent to the lining thickness used and with a minimum width 300mm. They shall be adhered with a cove or cornice bond adhesive. Sheet joints shall be touched fitted.

Fixing of Linings (Non Fire Rated)

Fix the linings as per the EPB Plasterboard Installation Guide. If an FRR is required then follow the Fixing of Linings instruction in the following paragraph.

Fixing the Lining (to achieve Fire Rating)**Fasteners**

| System Number | Single Layer |
|--------------------|-----------------------------|
| | Self-Tapping Drywall Screws |
| E1SCa60-F16 | 16mm |
| | 32 x 6g |

Fastening Centres

Ceiling sheets shall be fixed at 200mm centres along each furring channel and around the ceiling perimeter.

Fix at 100mm centres where butt joints occur. Fasteners to be placed no closer than 12mm from sheet edge.

Acoustic Sealant

A bead of fire retardant acoustic sealant is required around the ceiling perimeter.

Wall/Ceiling Junction

The internal angle between the ceilings and walls must be protected by Cornice or square stopped corners taped and filled in accordance with EPB Plasterboard Installation Guide.

Jointing

All fastener heads stopped and all sheet joints reinforced with paper jointing tape and stopped in accordance with the publication entitled EPB Plasterboard Installation Guide.

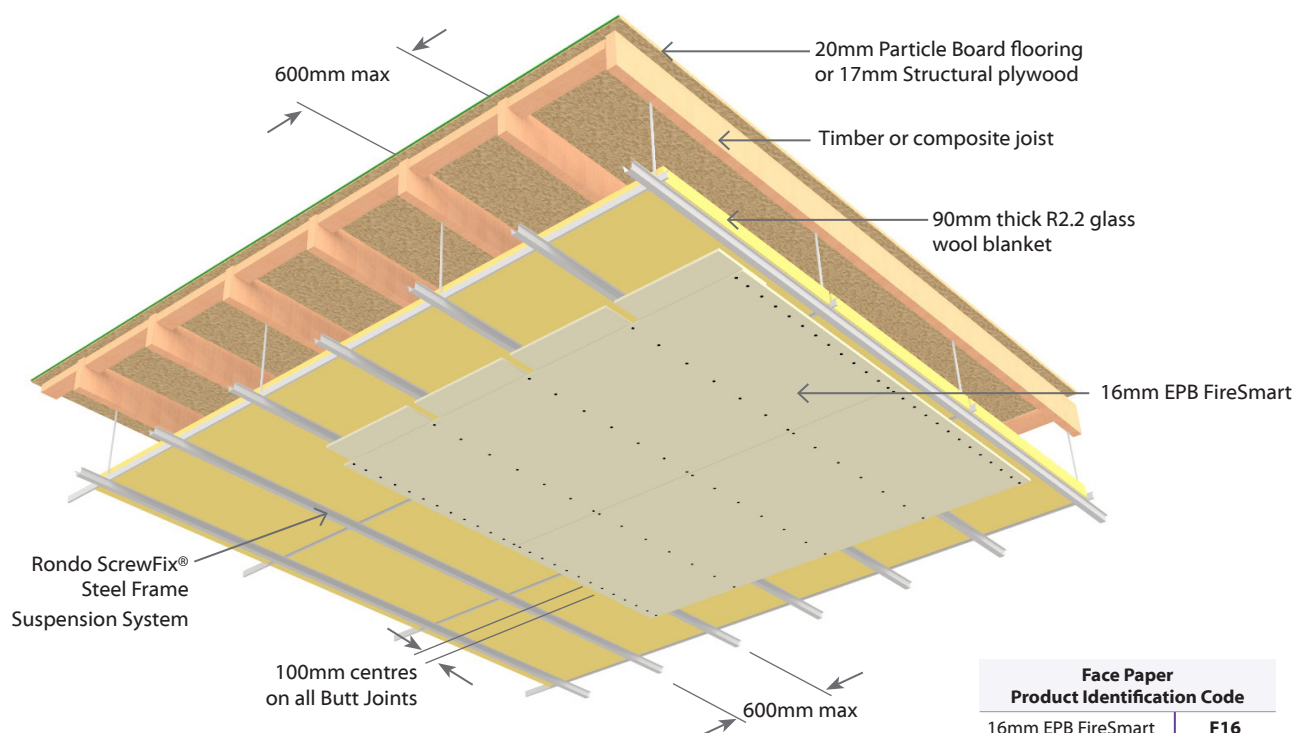
***Impact Insulation Class (IIC)**

IIC of 43 is achieved with a bare floor.

IIC of 44 is achieved with loose laid Vinyl.

IIC of 68 is achieved with 40oz loop pile carpet on 8mm foam chip underlay.

IIC of 69 is achieved with 40oz loop pile carpet on waffle underlay.





Construction Details

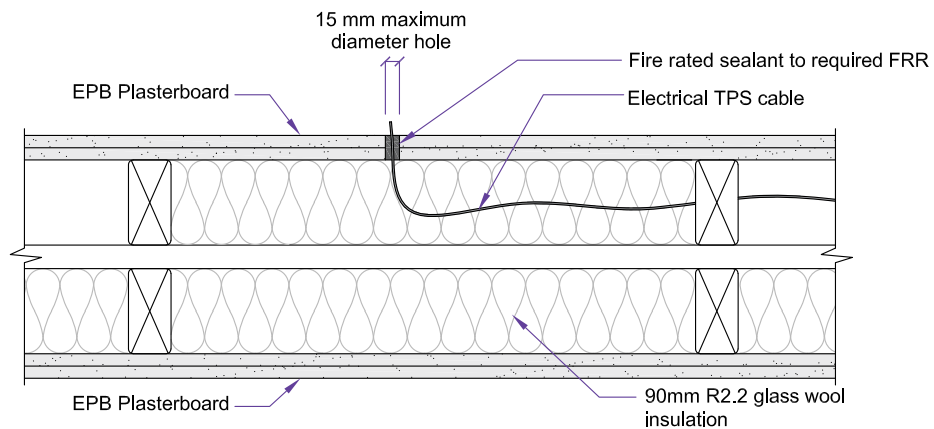
Penetration Detail

ENS-351

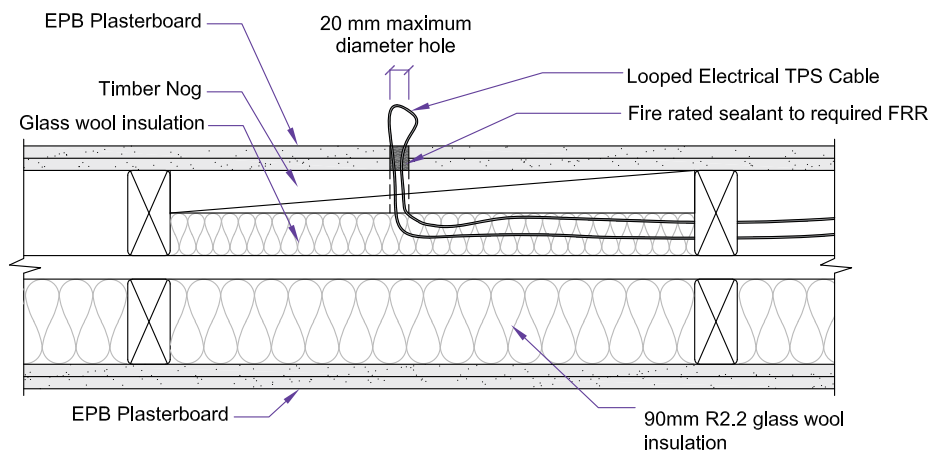
Cable Penetrations for Surface mounted electrical fixtures

Plan View

Single Cable



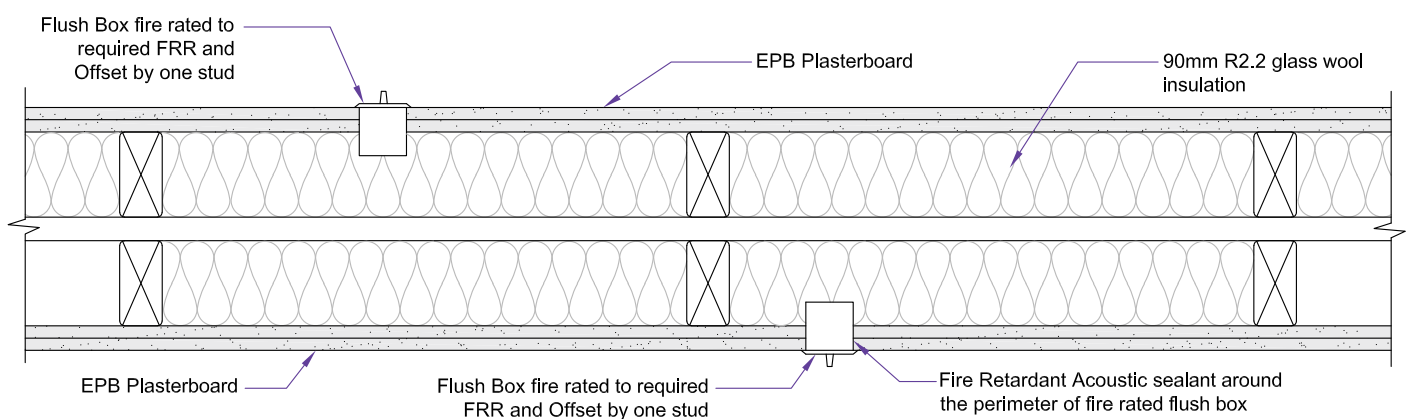
Looped Cable



Note: Refer proprietary products & penetration seal manufacturer's specifications & limitations for larger holes

ENS-352

Flush Box Offset

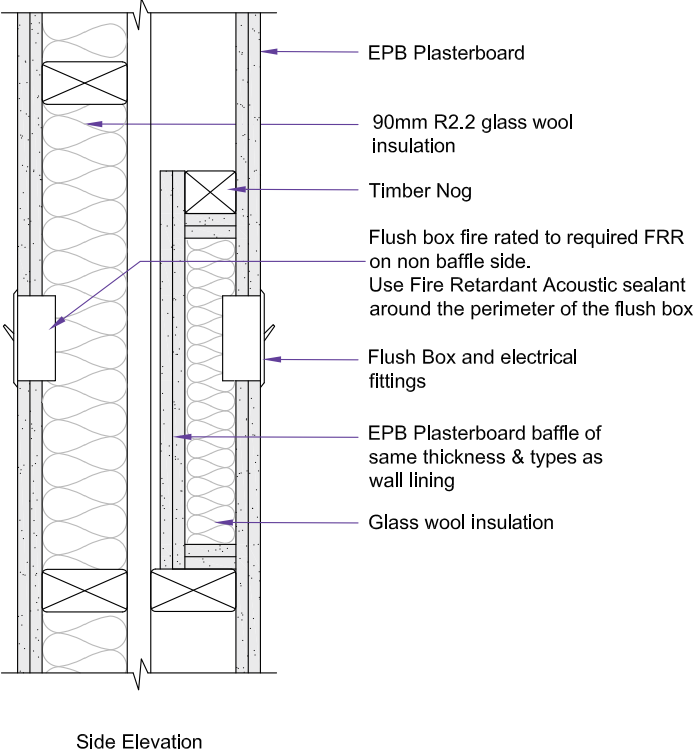
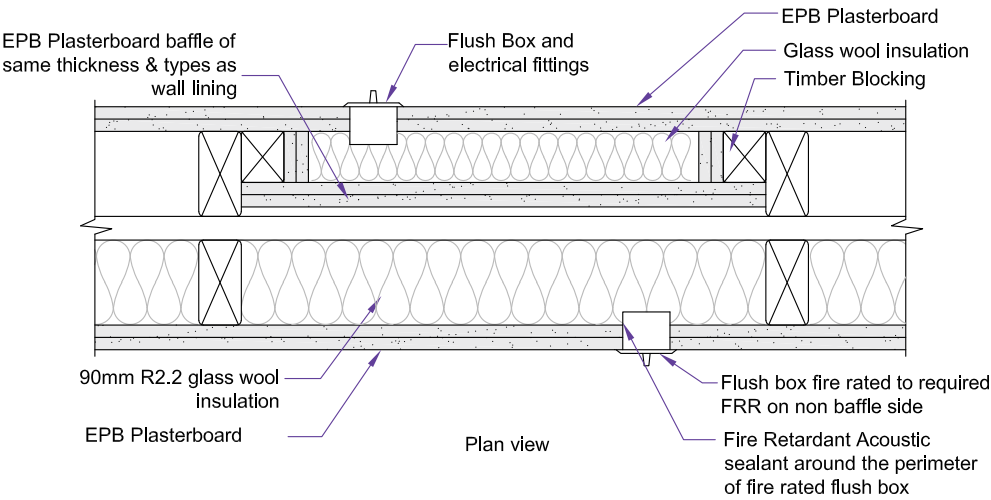


Note: Insulate both double timber stud bays where there are electrical cables and/or flush boxes

Penetration Detail

ENS-353

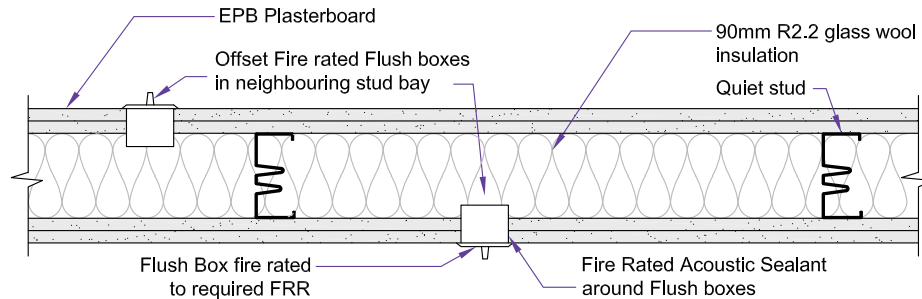
Flush Box Back to Back



Penetration Detail

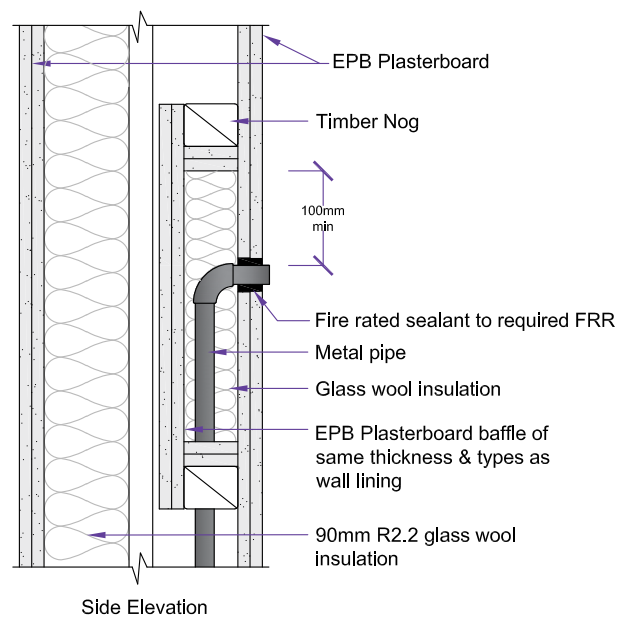
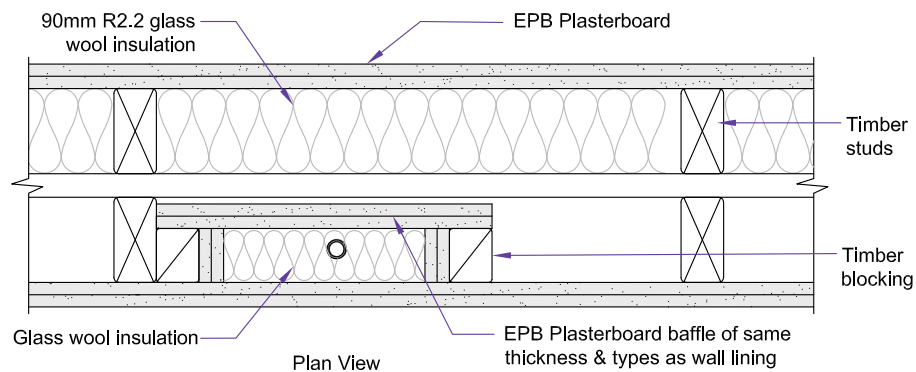
ENS-354

Flush Box Offset with Quiet Stud



ENS-355

Metal Pipe on Double Timber Frame

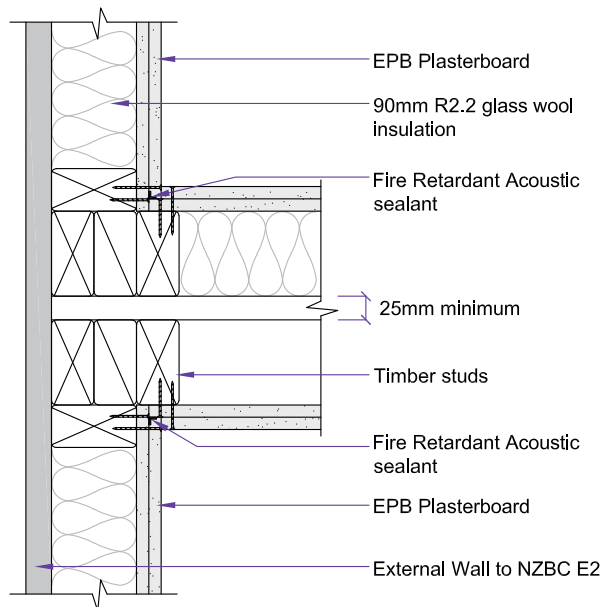
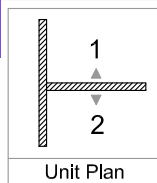


Note: Minimum 10mm gap between pipe and the baffle required

Double Timber Frame Wall Junction

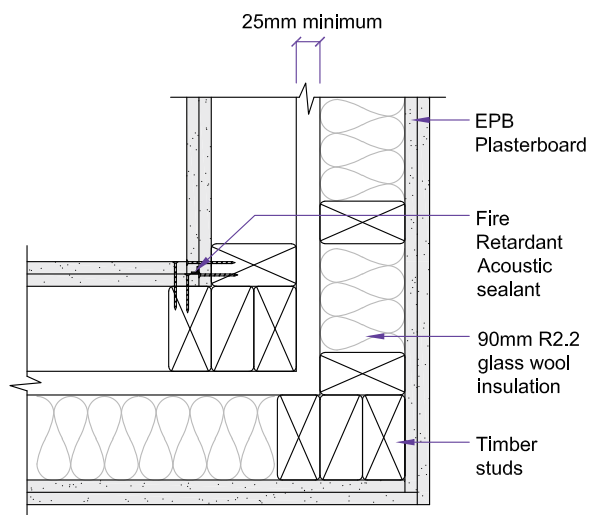
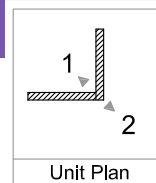
ENS-005

Double Timber Frame Wall to External Wall



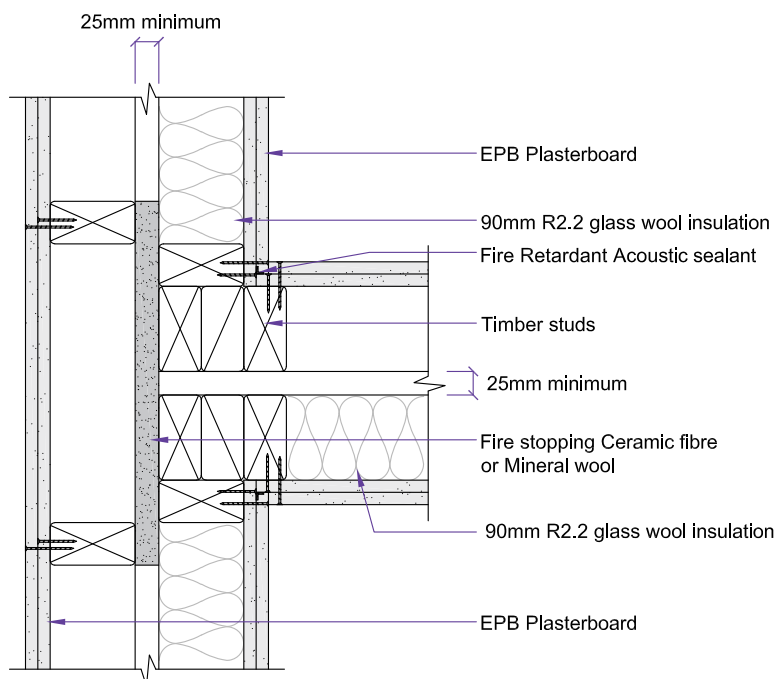
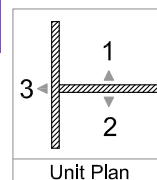
ENS-004

Double Timber Frame Wall Internal/External Corner



ENS-001

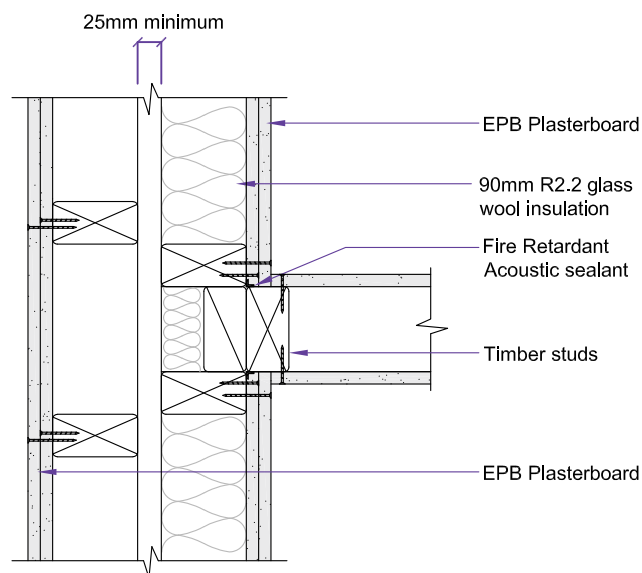
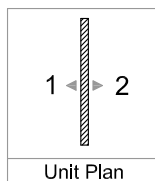
Double Timber Frame Wall to Double Timber Frame Wall



Single Timber Frame Wall to Double Timber Frame Wall Junction

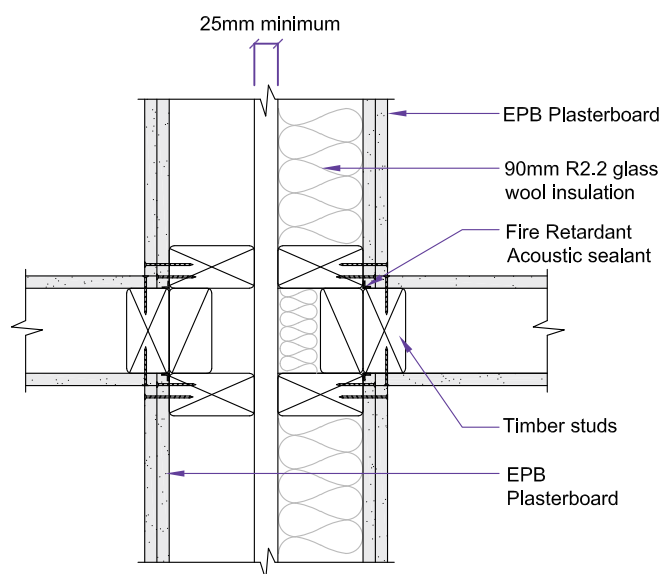
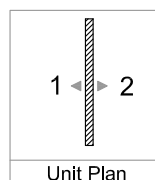
ENS-002

Single Timber Frame Wall to Double Timber Frame Wall



ENS-003

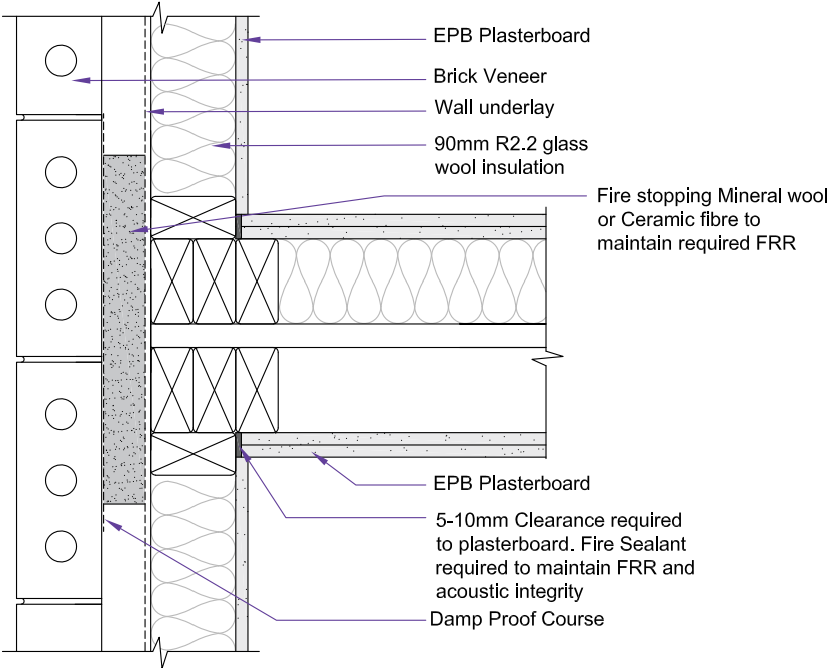
Single to Double Timber Frame-Double Junction



Timber Frame to External Wall Junction Detail

ENS-006

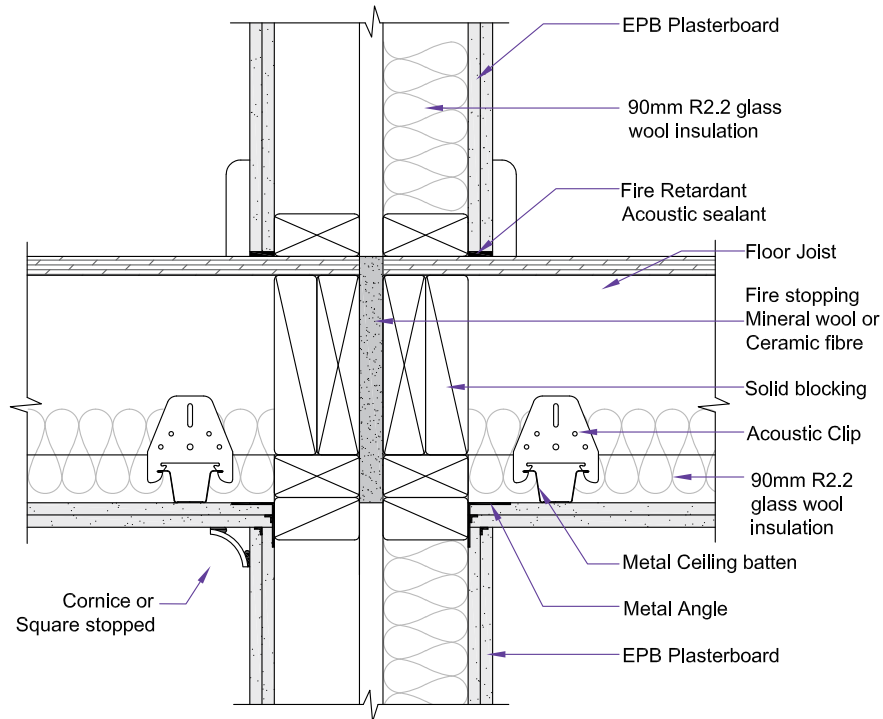
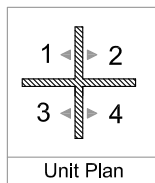
External Brick Veneer Wall Detail - Option 1



Double Timber Frame Floor/Ceiling Junction

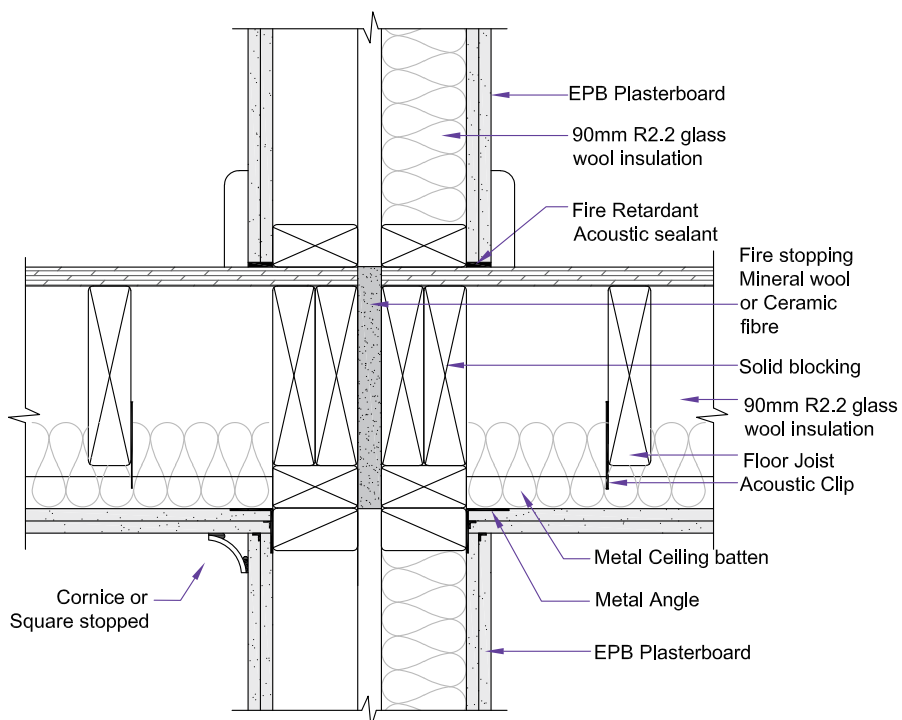
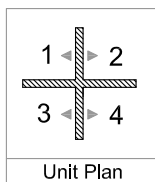
ENS-301

Floor/Ceiling to Double Timber Frame Wall - Joists Perpendicular



ENS-302

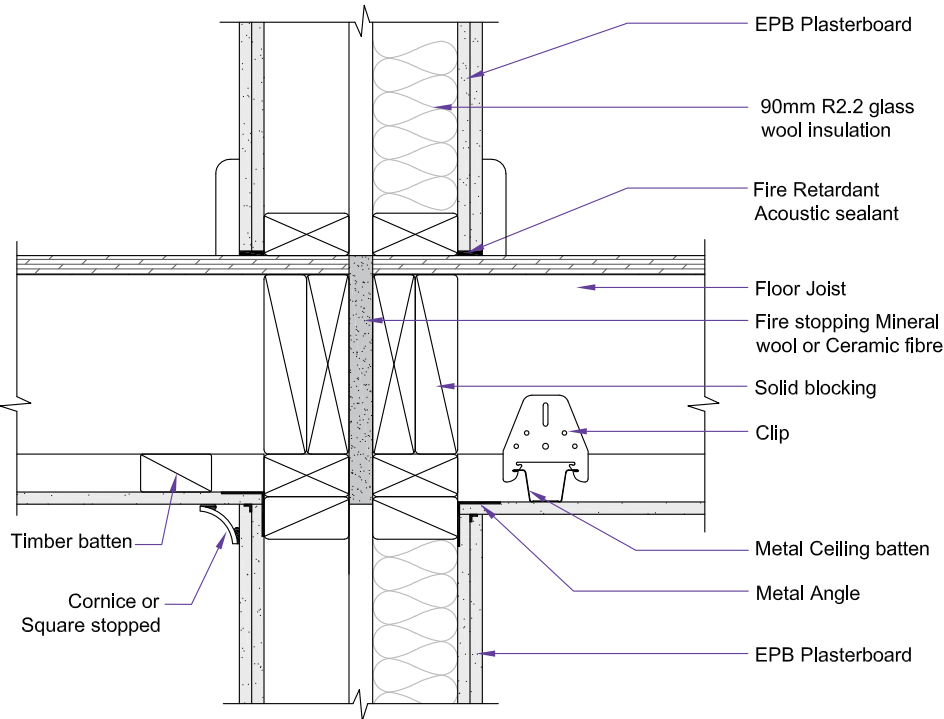
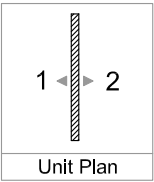
Floor/Ceiling to Double Timber Frame Wall - Joists Parallel to Wall over Double Frames



Double Timber Frame Floor/Ceiling Junction

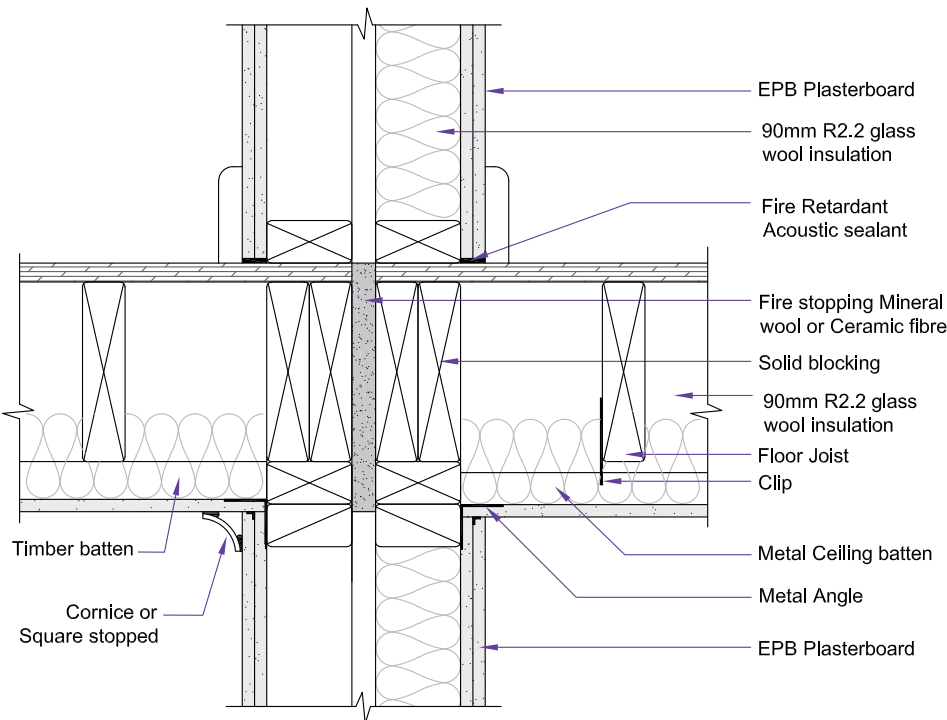
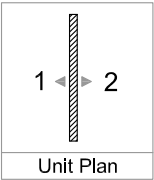
ENS-303

Floor/Ceiling to Double Timber Frame Wall - Joists Perpendicular



ENS-304

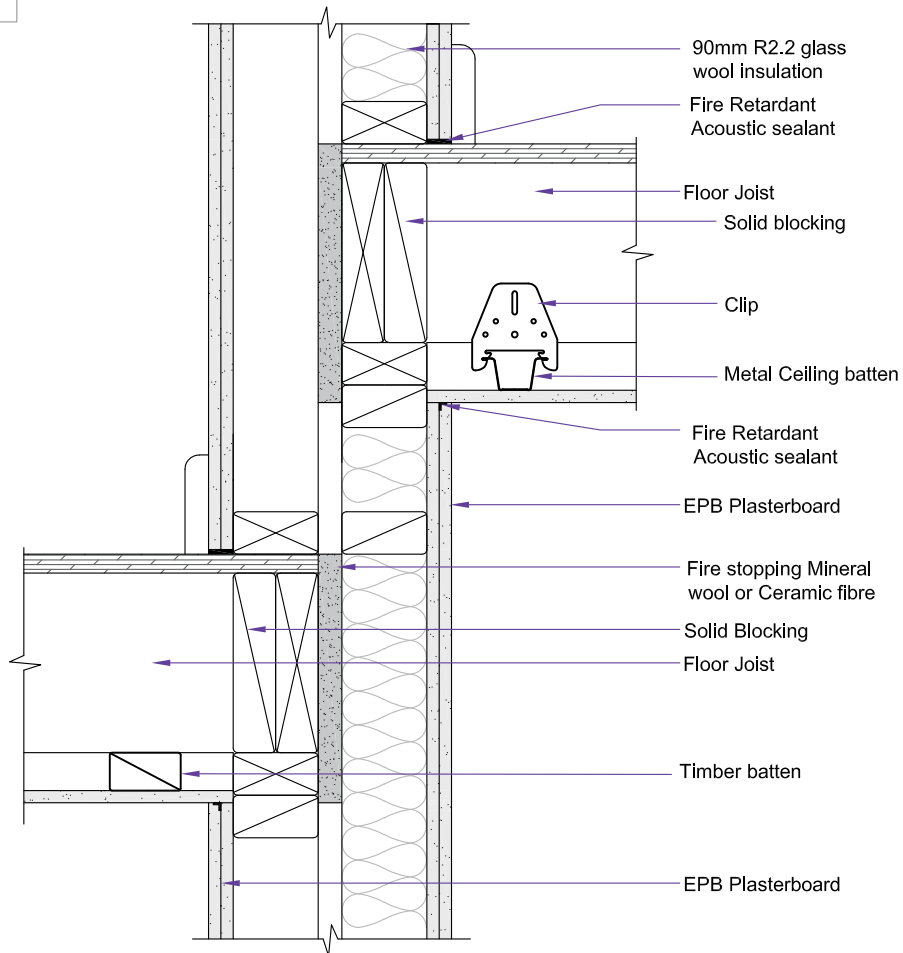
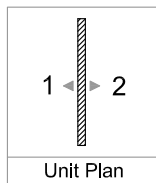
Floor/Ceiling to Double Timber Frame Wall - Joists Parallel



Double Timber Frame Floor/Ceiling Junction

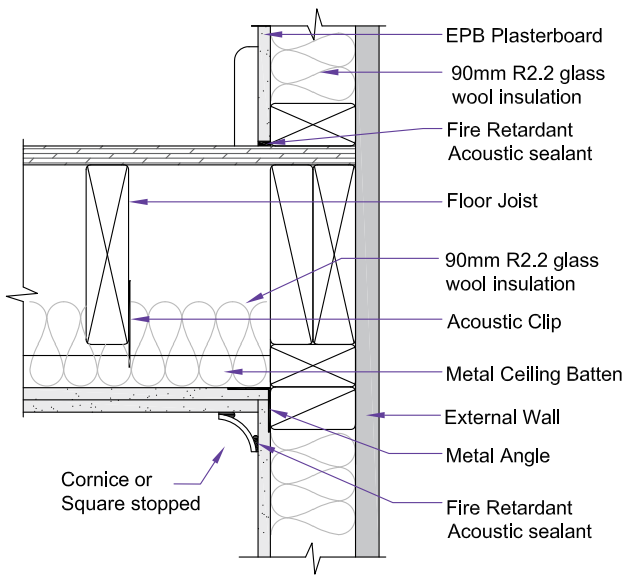
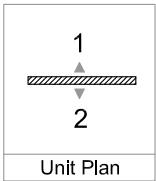
ENS-305

Split Level Floor/Ceiling to Double Timber Frame Wall

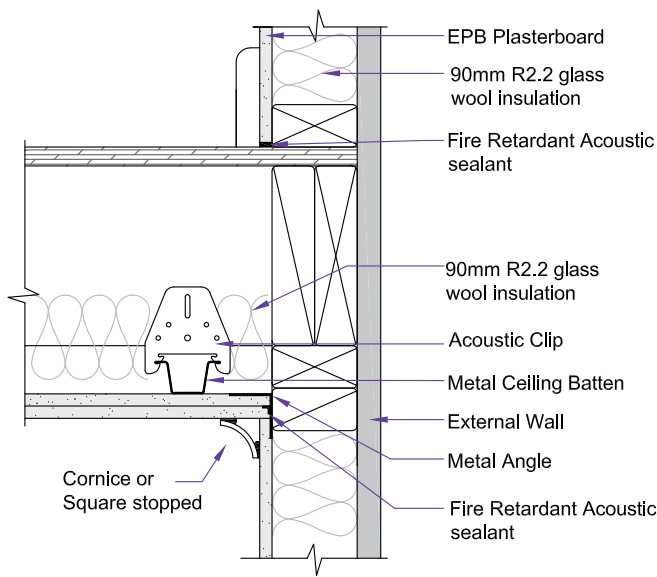
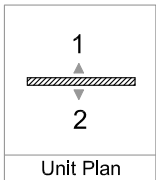


Timber Frame Floor/Ceiling Junction

ENS-306 Floor/Ceiling to External Wall-Joists parallel



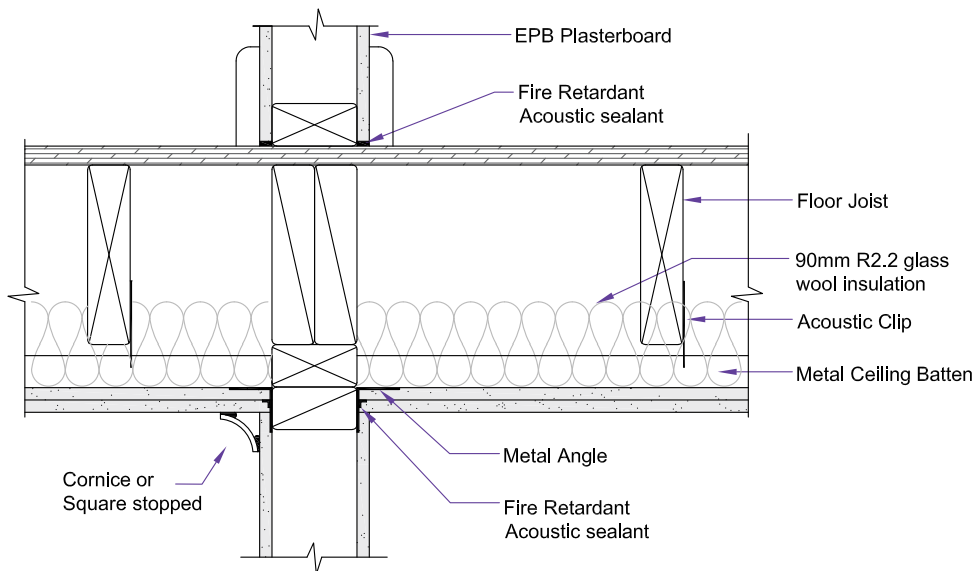
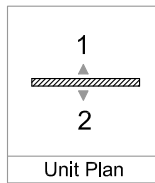
ENS-307 Floor/Ceiling to External Wall-Joists perpendicular



Timber Frame Floor/Ceiling Junction

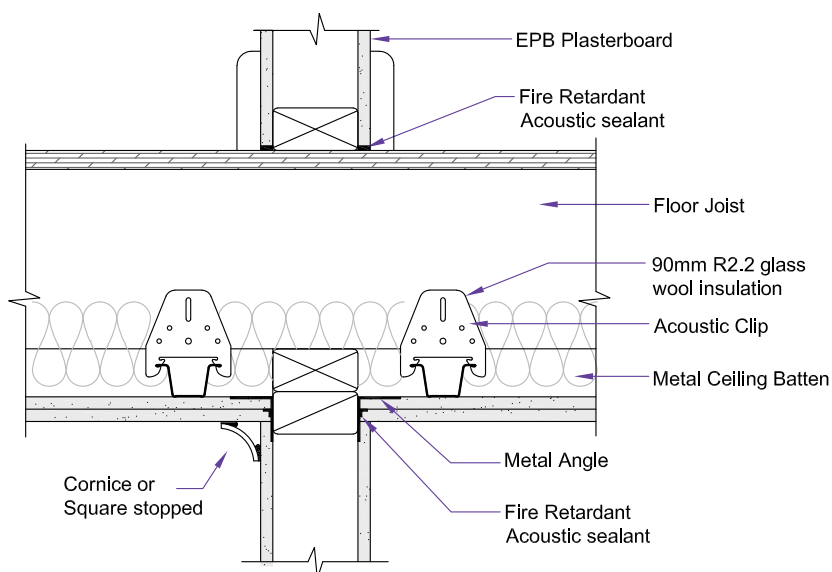
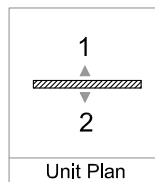
ENS-308

Floor/Ceiling to Timber Frame Wall - Joists Parallel



ENS-309

Floor/Ceiling to Timber Frame Wall - Joists Perpendicular

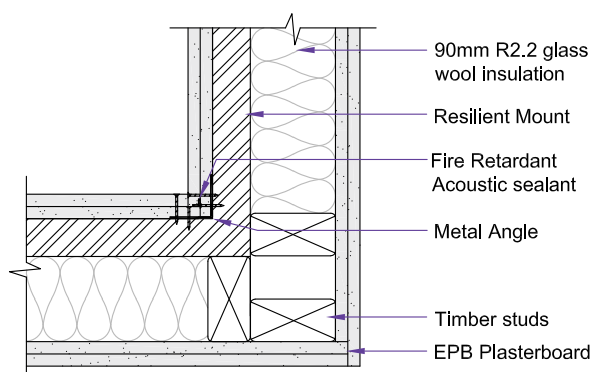
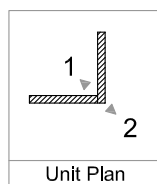


Note: In case of simultaneous fire exposure on both sides, E2TL30S, E4TL60S or Universal wall one-way FRR systems to both sides can be used unless specific design is needed in order to maintain structural adequacy.

Timber Frame with Resilient Mount

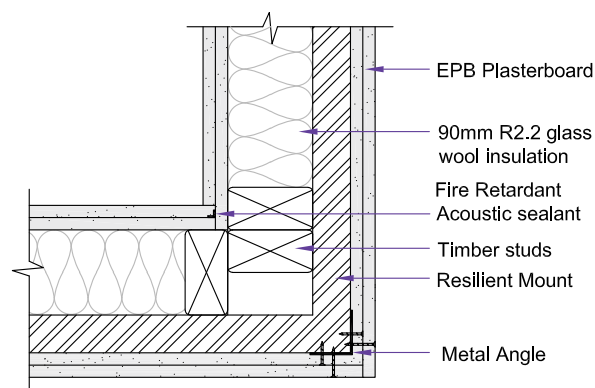
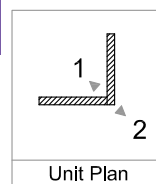
ENS-151

Single Timber Resilient Mount Wall Internal Corner



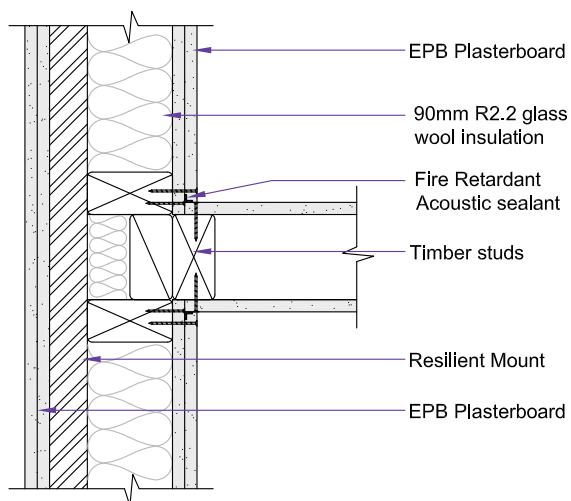
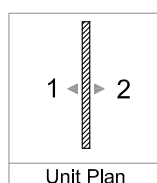
ENS-152

Single Timber Resilient Mount Wall External Corner



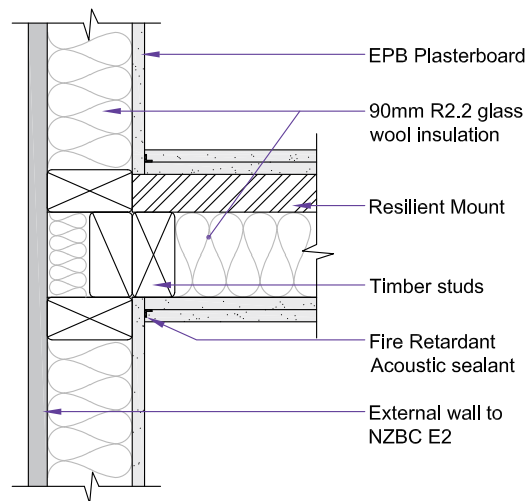
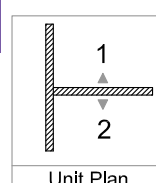
ENS-153

Single Timber Frame to Single Timber Resilient Mount



ENS-154

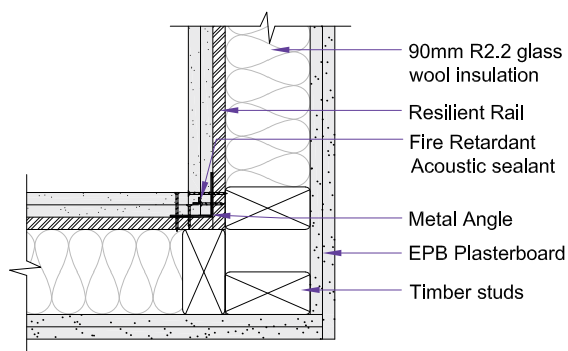
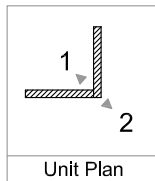
Single Timber Resilient Mount Wall to External Wall



Timber Frame with Resilient Rail

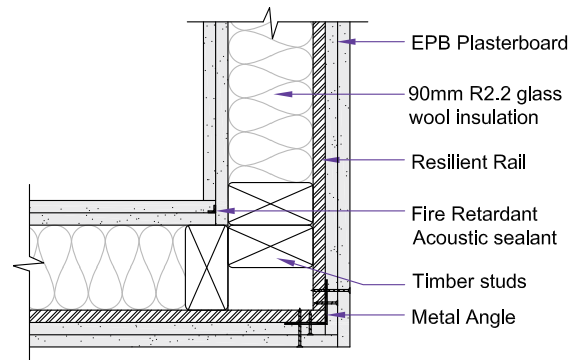
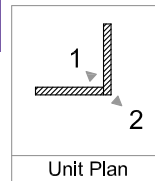
ENS101

Single Timber Resilient Rail Wall Internal Corner



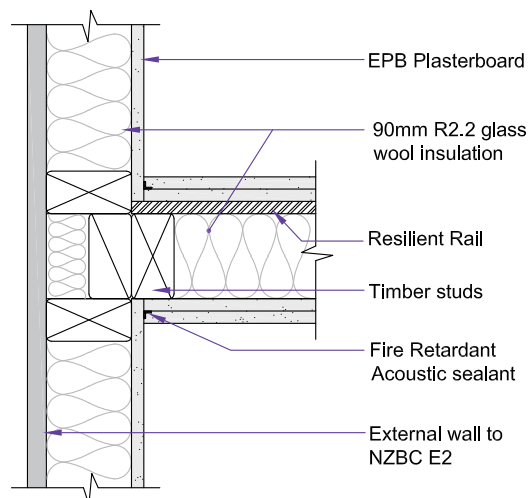
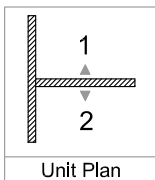
ENS-102

Single Timber Resilient Rail Wall External Corner



ENS-104

Single Timber Resilient Rail Wall to External Wall



Timber Frame with Resilient Rail

ENS-103

Single Timber Frame to Single Timber Resilient Rail Wall

1

2

Unit Plan

Wall A

Wall B

EPB Plasterboard

90mm R2.2 glass wool insulation

Fire Retardant Acoustic sealant

Timber studs

Resilient Rail

EPB Plasterboard

Wall A

Wall B

EPB Plasterboard

90mm R2.2 glass wool insulation

Timber studs

Resilient Rail

EPB Plasterboard

Note: The double linings of wall A must continue through if the FRR of the wall A is more than 30 minutes greater than the FRR of the wall B as shown here

ENS-105

Double Junction: Single Timber Frame Wall to Single Timber Resilient Rail Wall

1

2

Unit Plan

EPB Plasterboard

90mm R2.2 glass wool insulation

Resilient Rail

Fire Retardant Acoustic sealant

Timber Stud

Resilient Rail

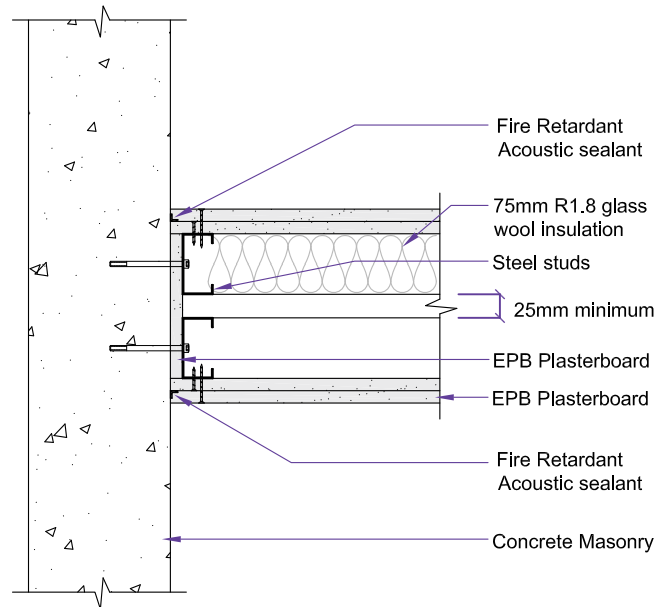
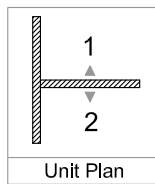
Note: Resilient Rail must be installed or alternate sides of the wall to reduce flanking of structure borne sound passing through the wall



Double Steel Frame Wall Junction

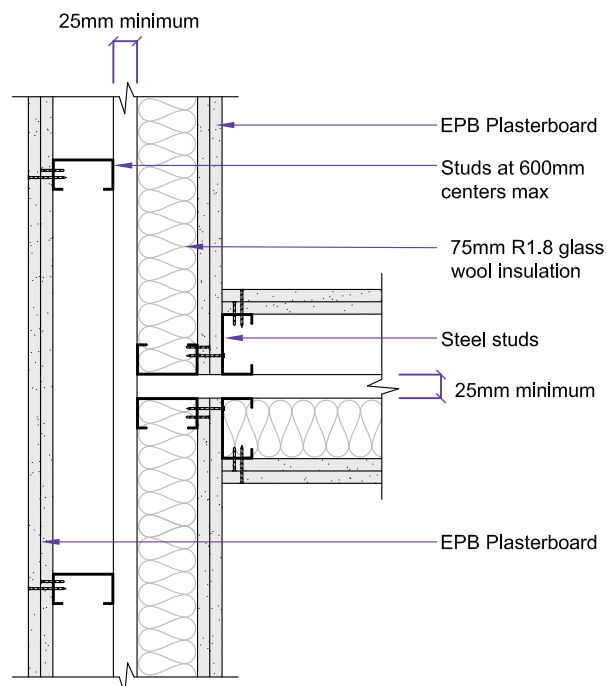
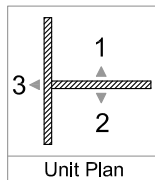
ENS-053

Double Steel Frame Wall to Concrete Masonry



ENS-051

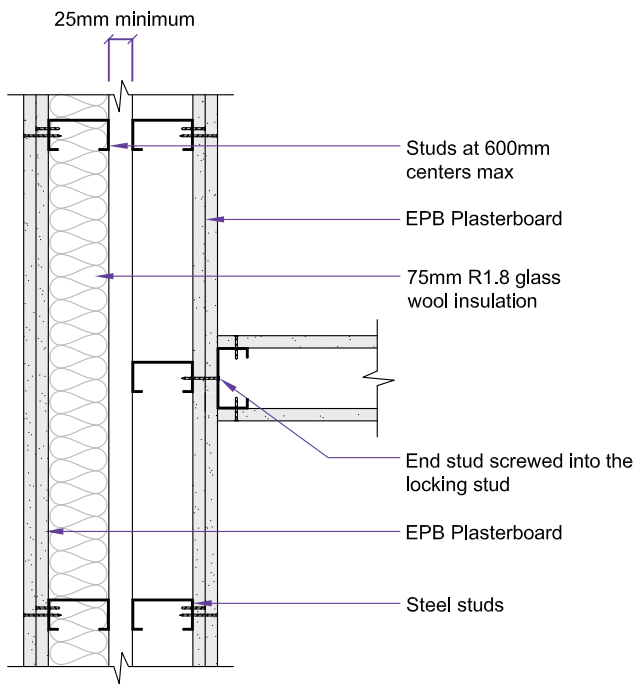
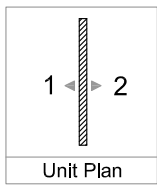
Double Steel Frame Wall to Double Steel Frame Wall



Single Steel Frame Wall

ENS-052

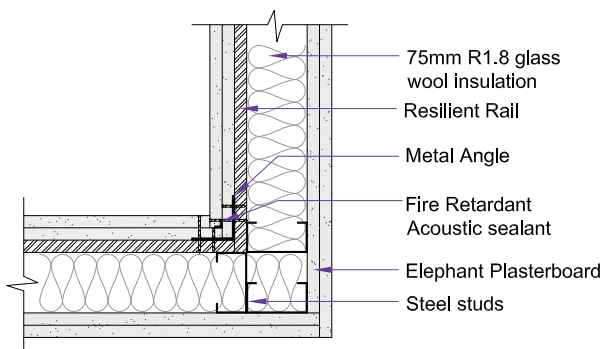
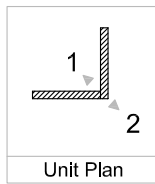
Single Steel Frame Wall to Double Steel Frame Wall



Steel Frame with Resilient Rail

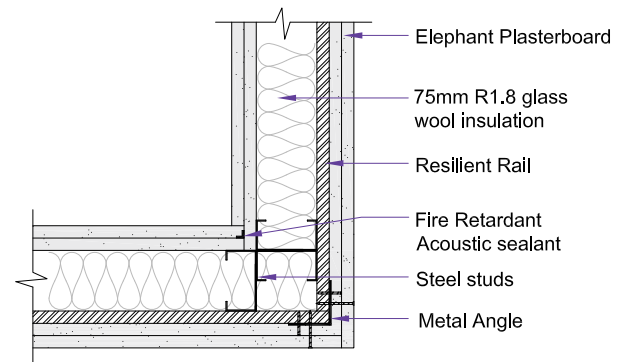
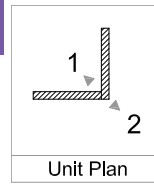
ENS-121

Single Steel Resilient Rail Wall Internal Corner



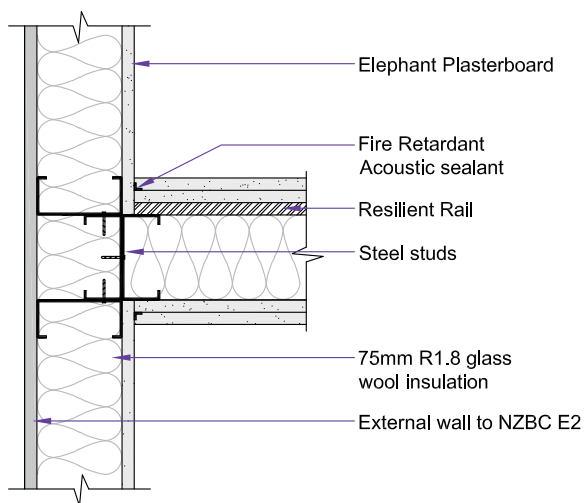
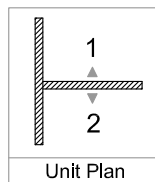
ENS-122

Single Steel Resilient Rail Wall External Corner



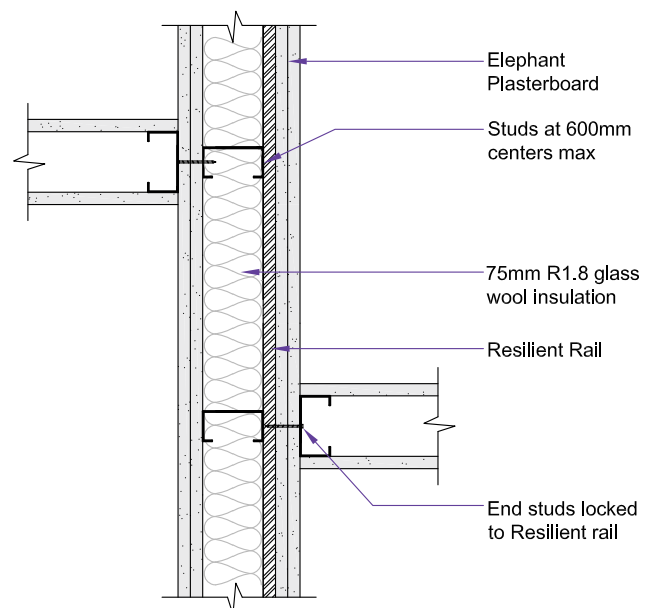
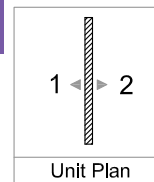
ENS-123

Single Steel Resilient Rail to External Wall



ENS-120

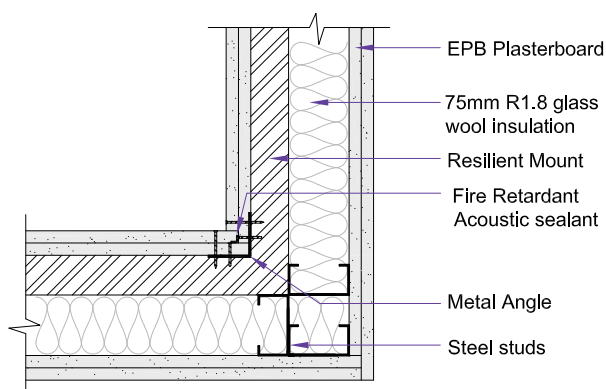
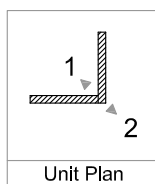
Single Steel Frame Wall to Single Steel Resilient Rail Wall



Steel Frame with Resilient Mount

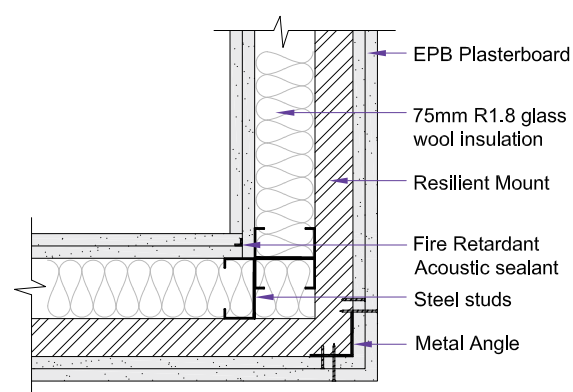
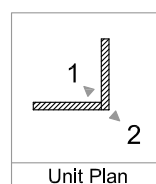
ENS-171

Single Steel Resilient Mount Wall Internal Corner



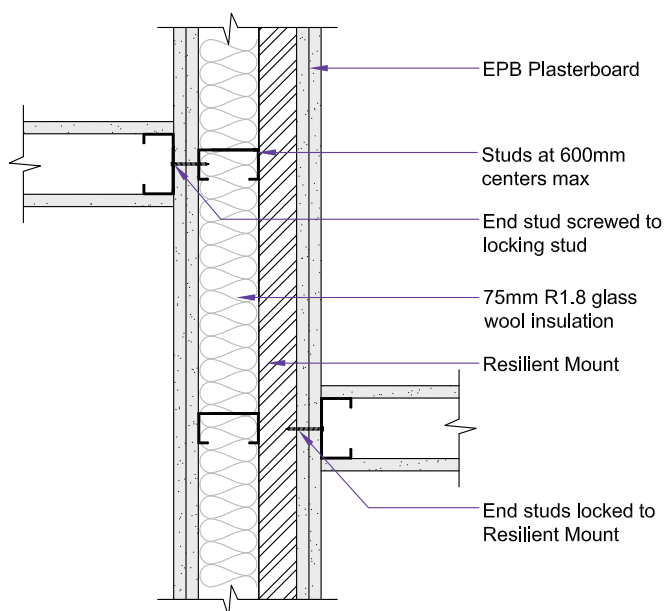
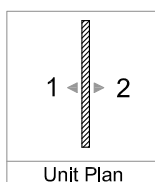
ENS-172

Single Steel Resilient Mount Wall External Corner



ENS-170

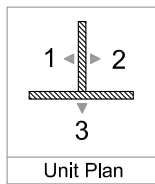
Single Steel Frame Wall to Single Steel Resilient Mount



Quiet Stud

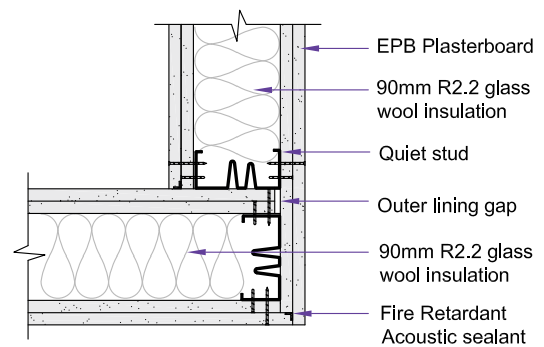
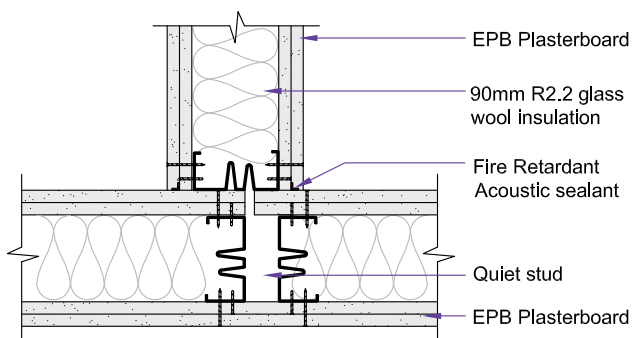
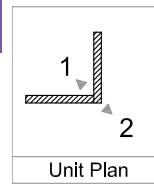
ENS-201

Quiet Stud-T intersection



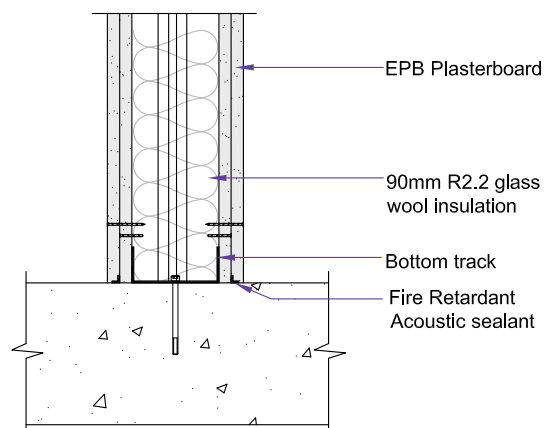
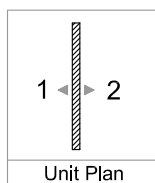
ENS-202

Quiet Stud Corner Detail



ENS-203

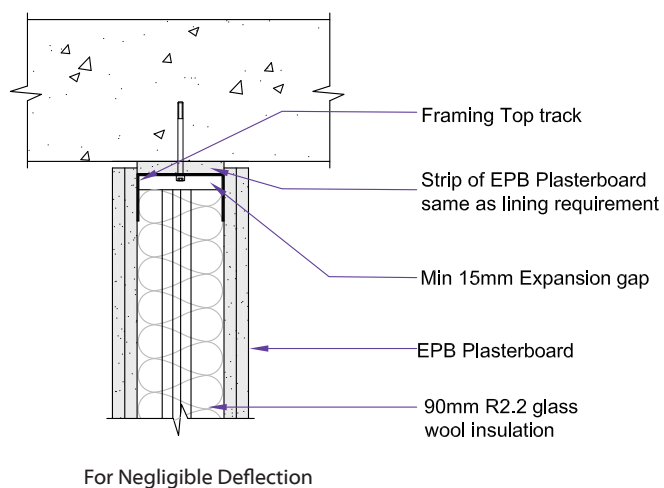
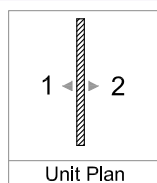
Quiet Stud-Bottom Track Detail



Quiet stud

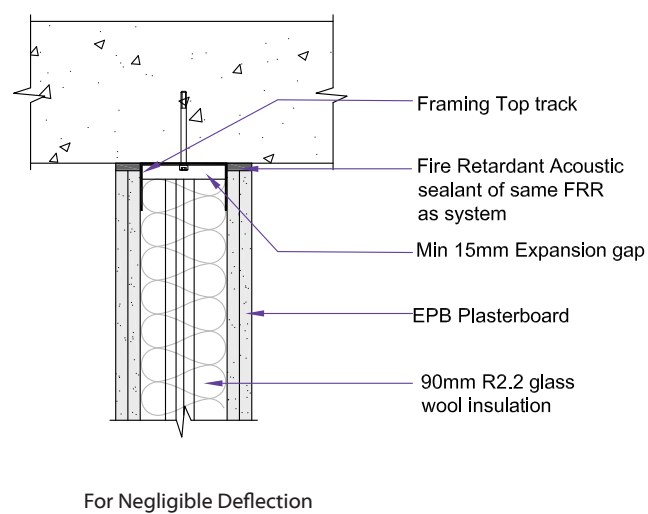
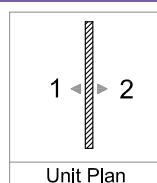
ENS-205

Quiet Stud - Head Detail - Type 1



ENS-206

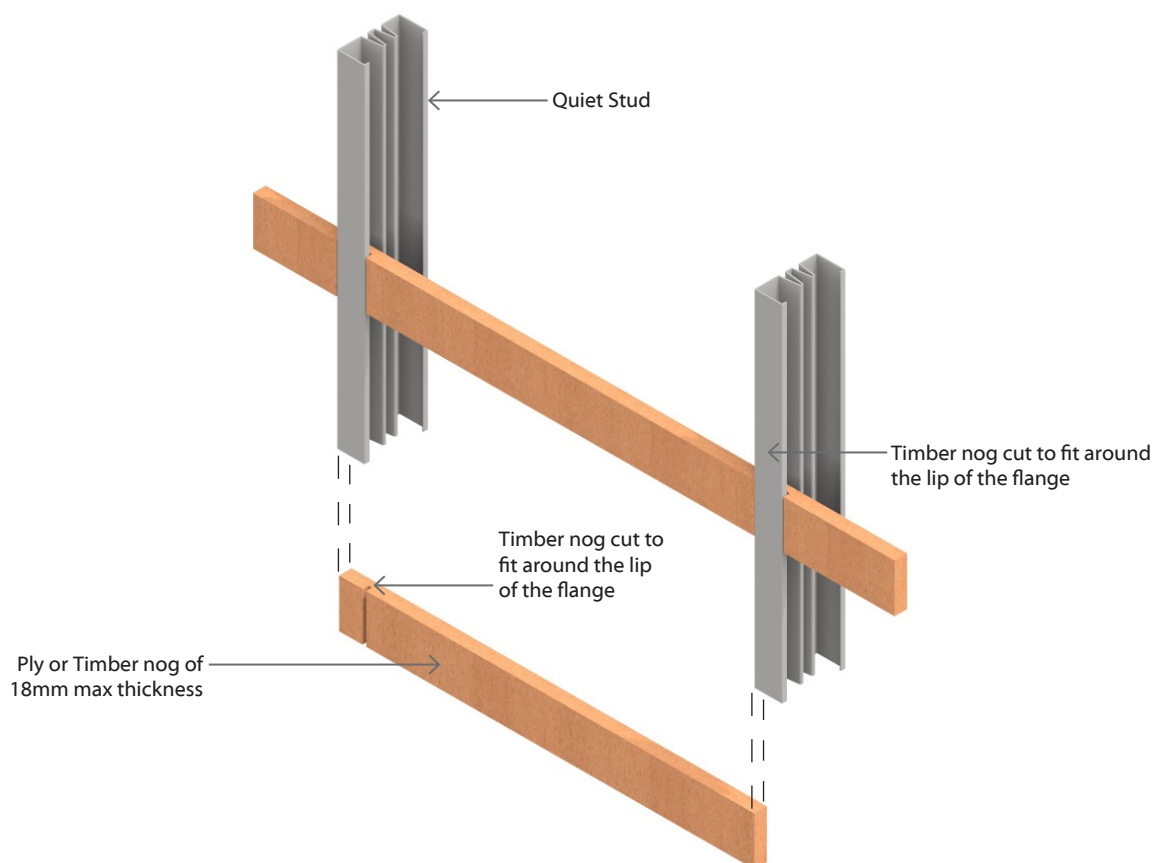
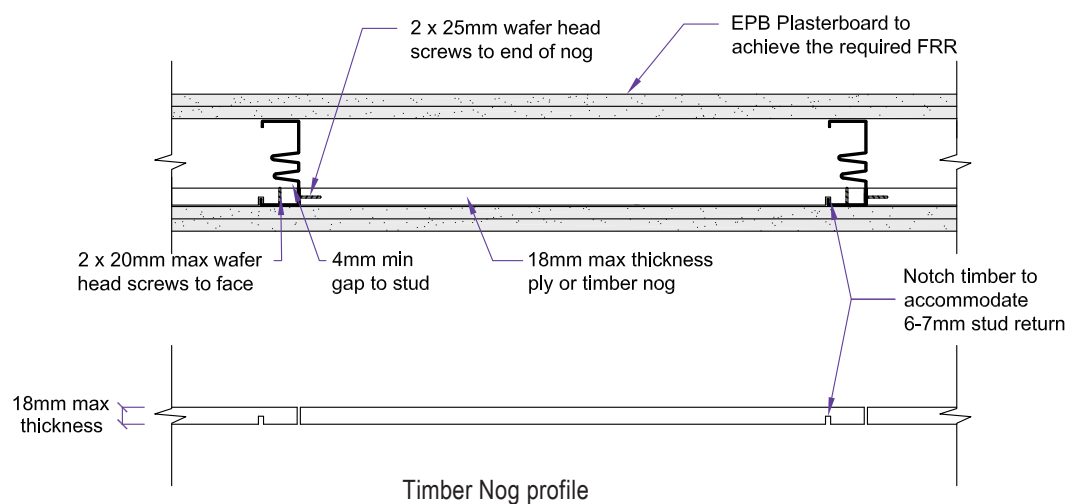
Quiet Stud - Head Detail - Type 2



Quiet stud with Timber Nog Detail

ENS-208

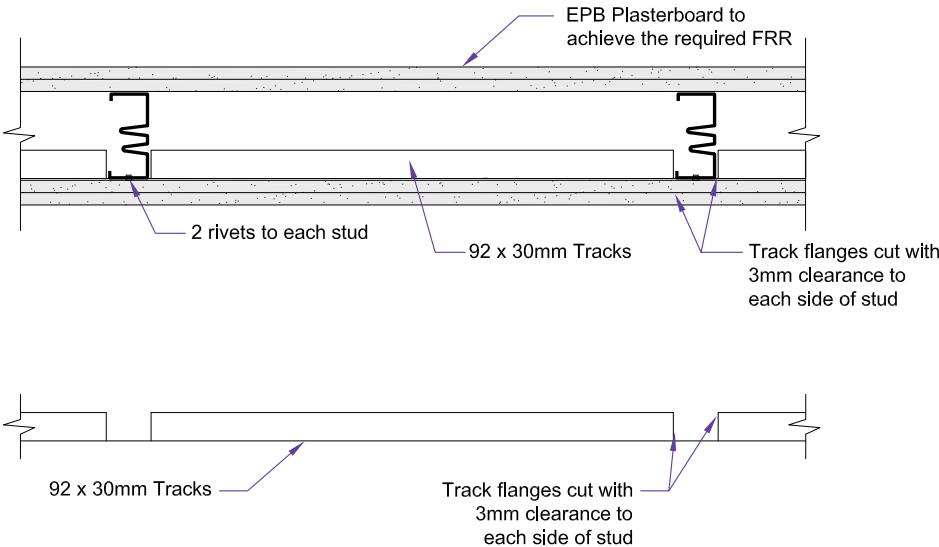
Plan view



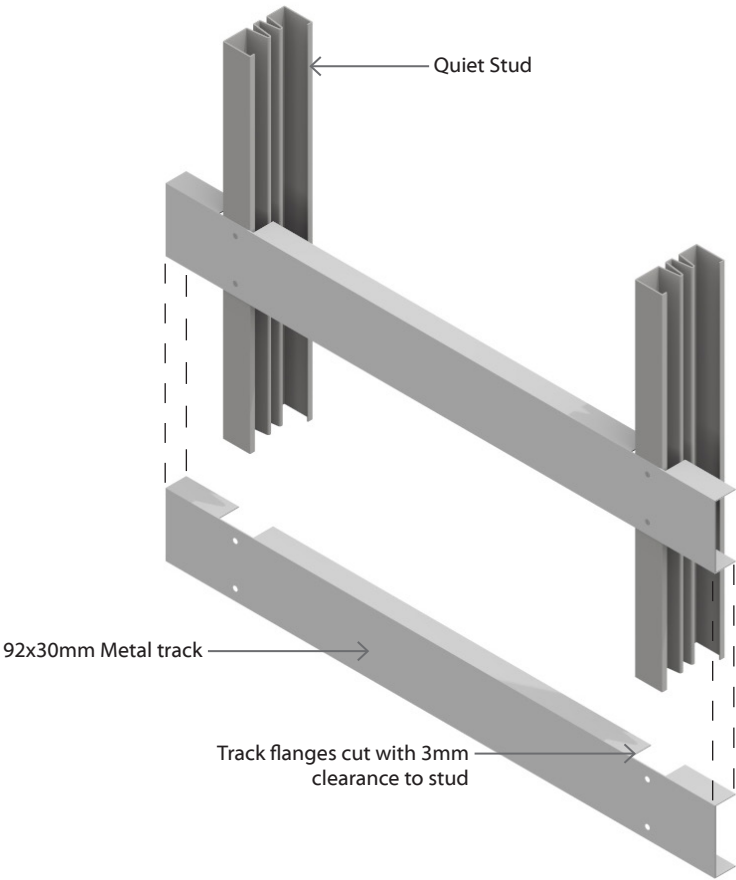
Quiet stud with Steel Nog Detail

ENS-207

Plan view



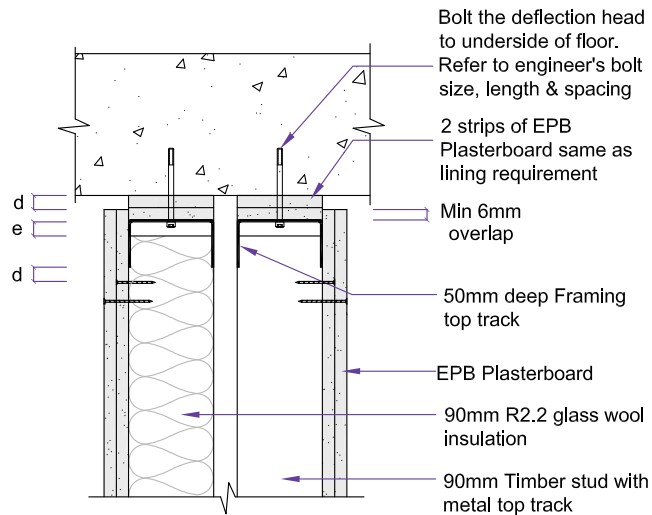
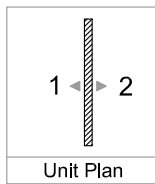
Metal track profile



Deflection Head Detail

ENS-008

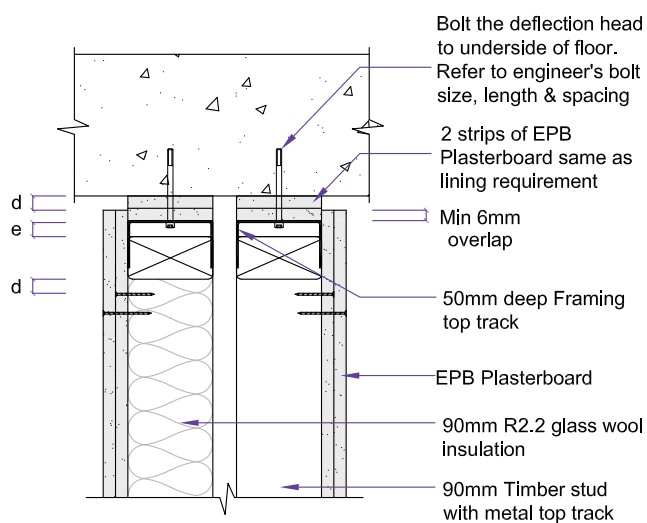
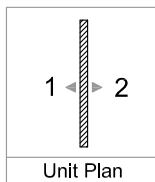
Double Timber Frame Wall Deflection Head Detail



d = deflection
e = expansion gap is the greater of 15mm or d

ENS-009

Double Timber Frame Wall Deflection Head - Type 2

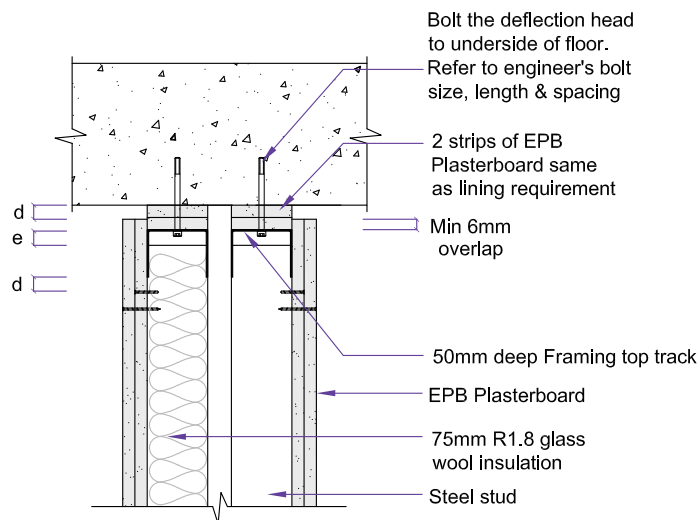
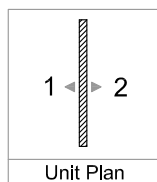


d = deflection
e = expansion gap is the greater of 15mm or d

Deflection Head Detail

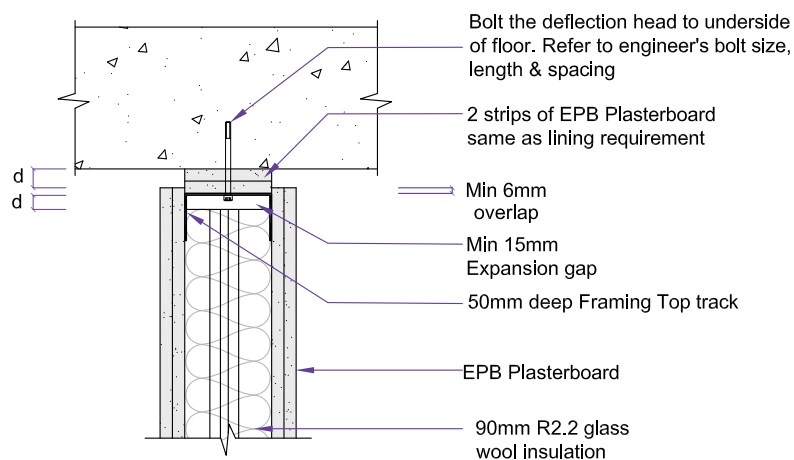
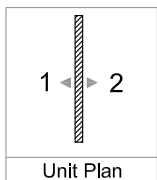
ENS-054

Double Steel Frame Wall Deflection Head Detail



ENS-204

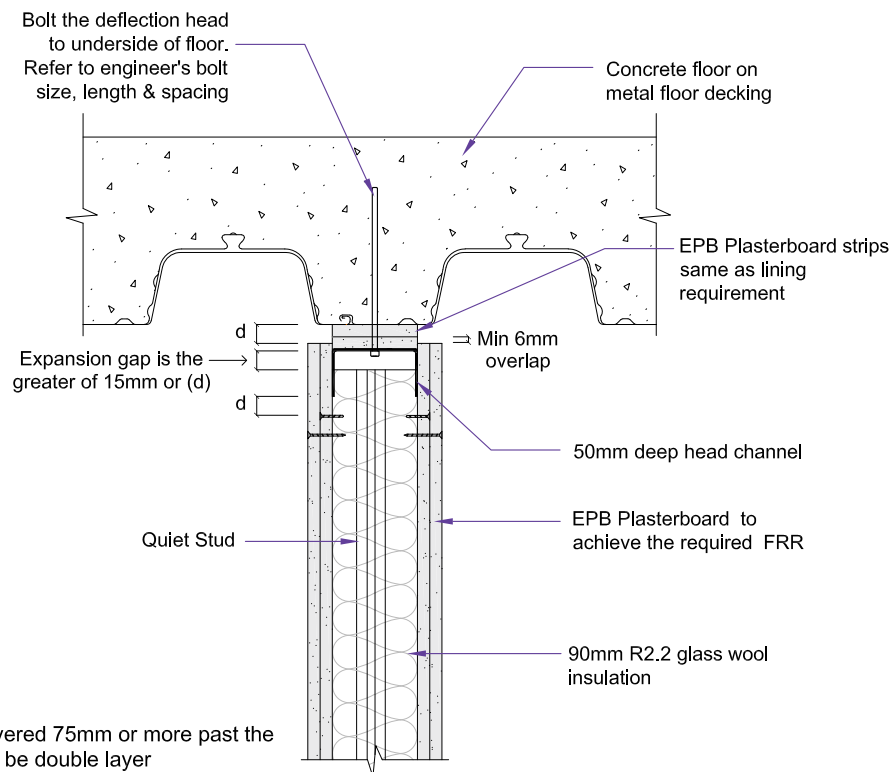
Quiet Stud-Deflection Head Detail



Composite Floor Deflection Head Detail

ENS-401

Wall to Profile Junction - Option 1



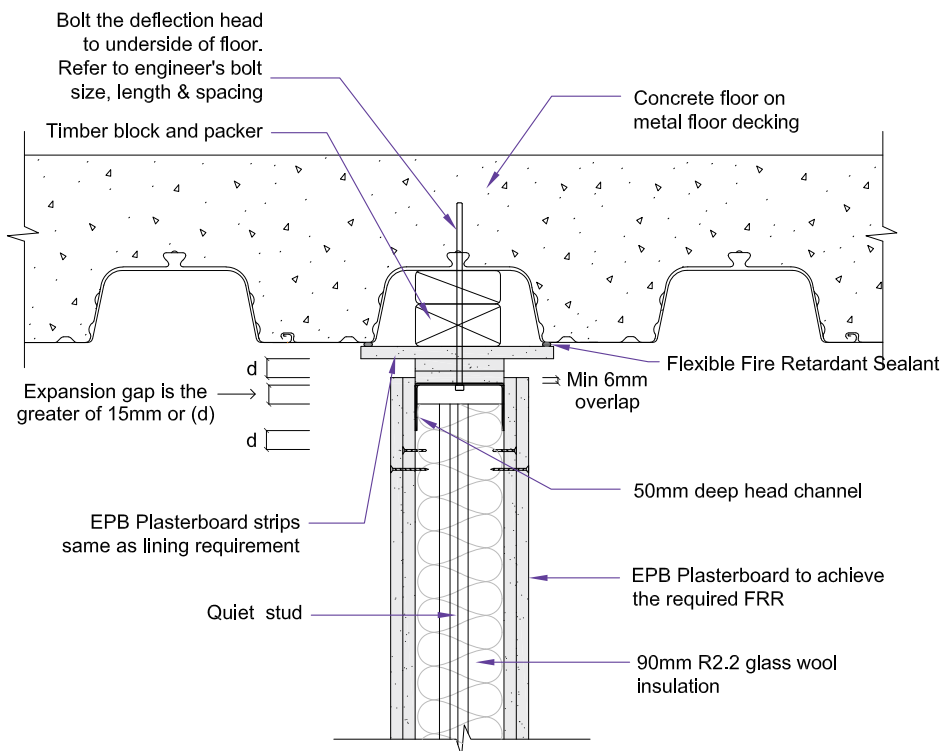
d = Deflection

Note: If Plasterboard is cantilevered 75mm or more past the top screw then wall lining must be double layer

NOTE: Maximum 60 mins Fire system only. For higher fire rating requirements, contact Elephant Plasterboard at 0800 353 742

ENS-402

Wall to Profile Junction - Option 2



d = Deflection

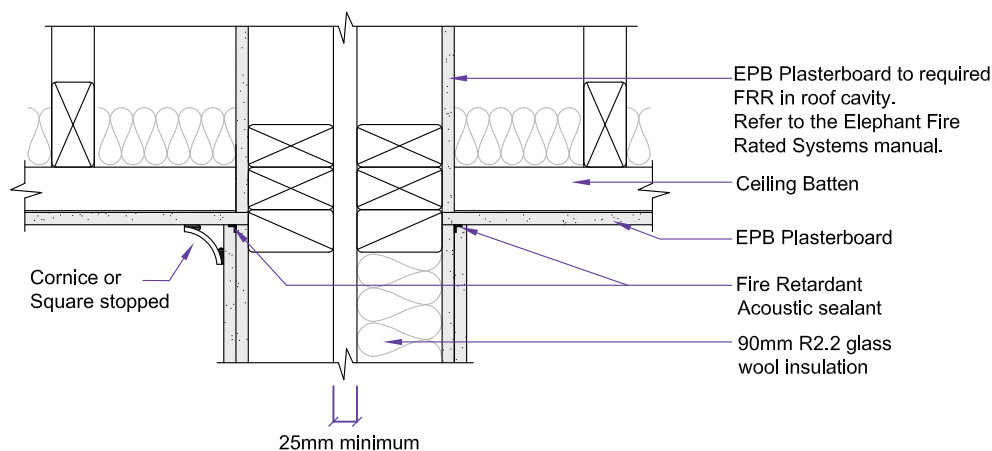
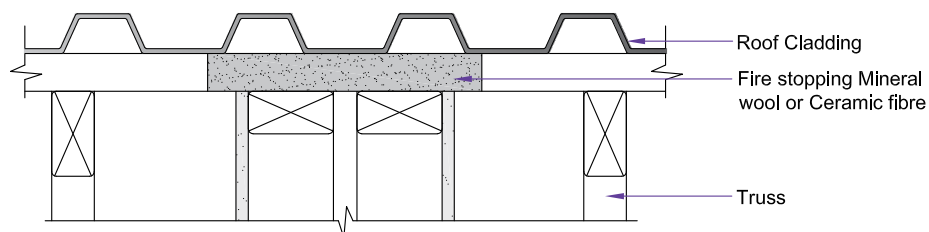
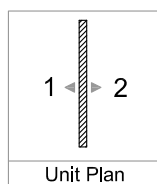
Note: If Plasterboard is cantilevered 75mm or more past the top screw then wall lining must be double layer

NOTE: Maximum 60 mins Fire system only. For higher fire rating requirements, contact Elephant Plasterboard at 0800 353 742

Roof Cavity Detail

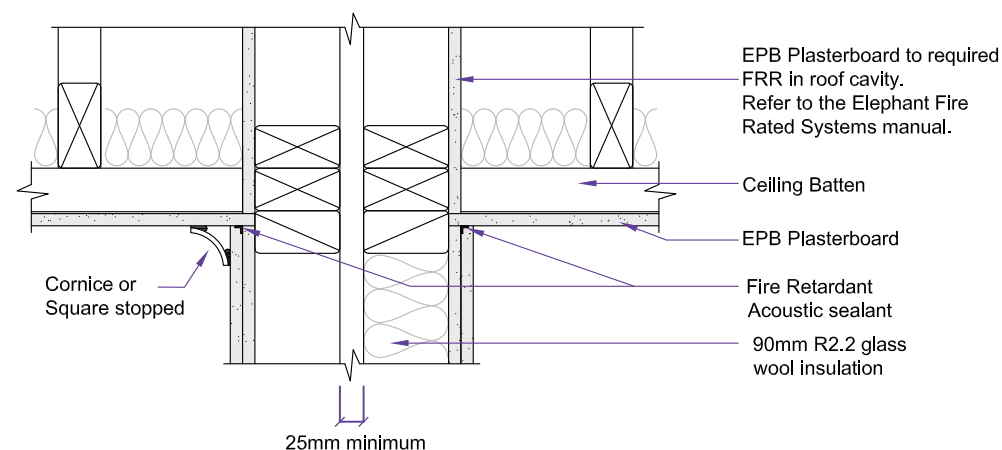
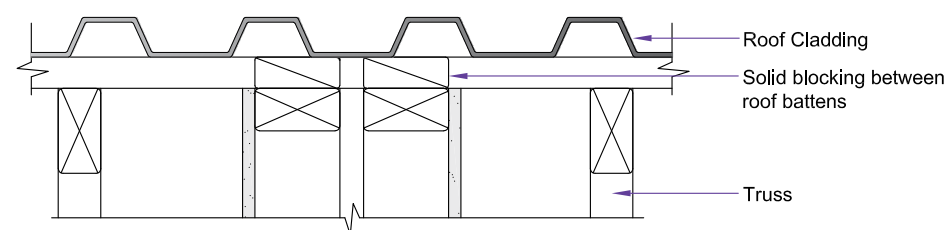
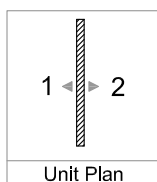
ENS-316

Fire Rated Wall to Roof Cavity Detail-Double Frame - Option 1



ENS-317

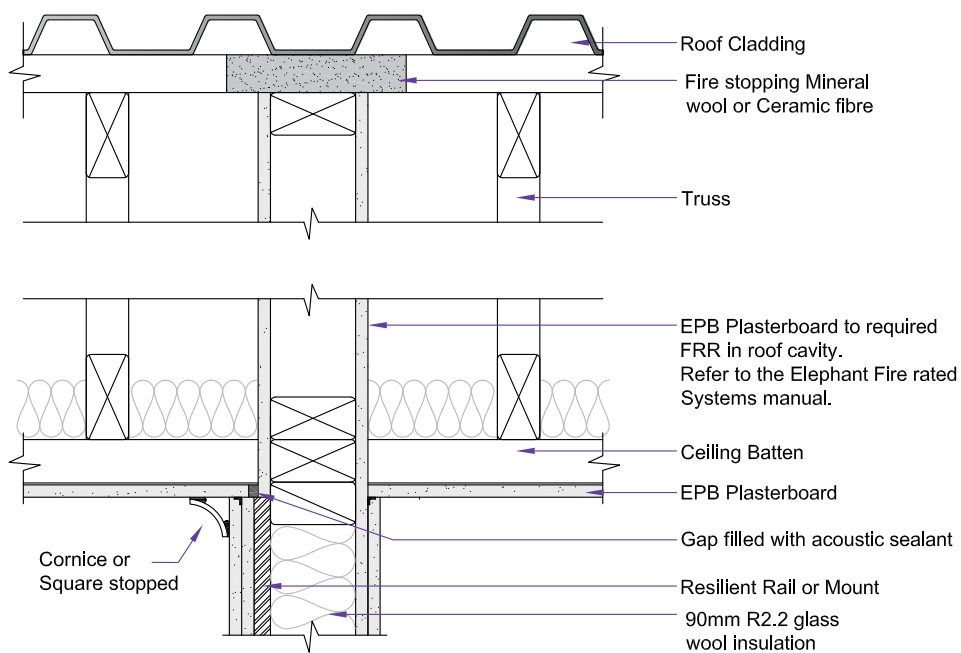
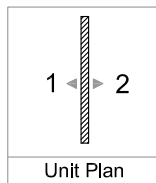
Fire Rated Wall to Roof Cavity Detail-Double Frame - Option 2



Roof Cavity Detail

ENS-315

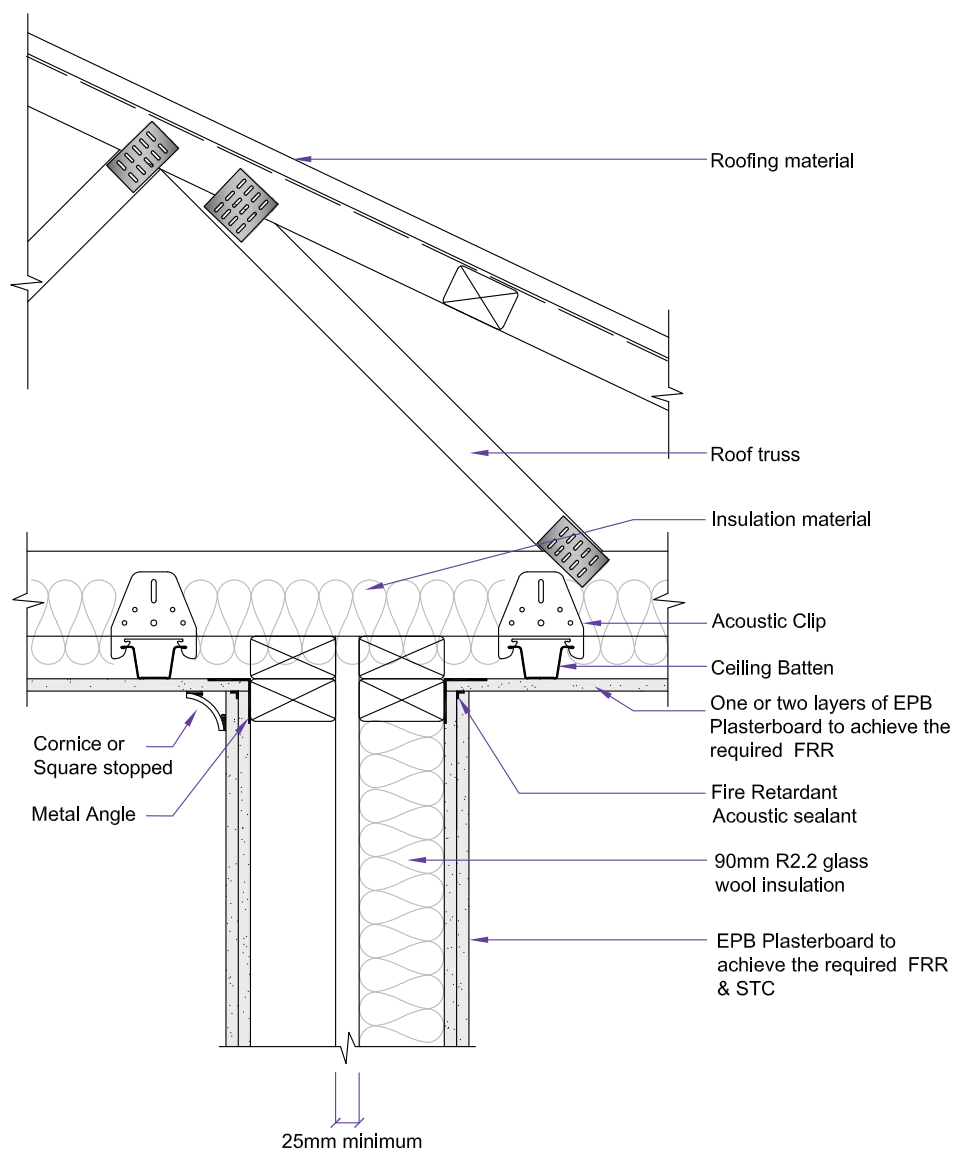
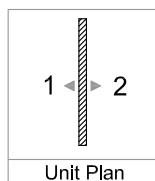
Fire Rated Wall to Roof Cavity Detail-Single Frame



Roof Cavity Detail

ENS-318

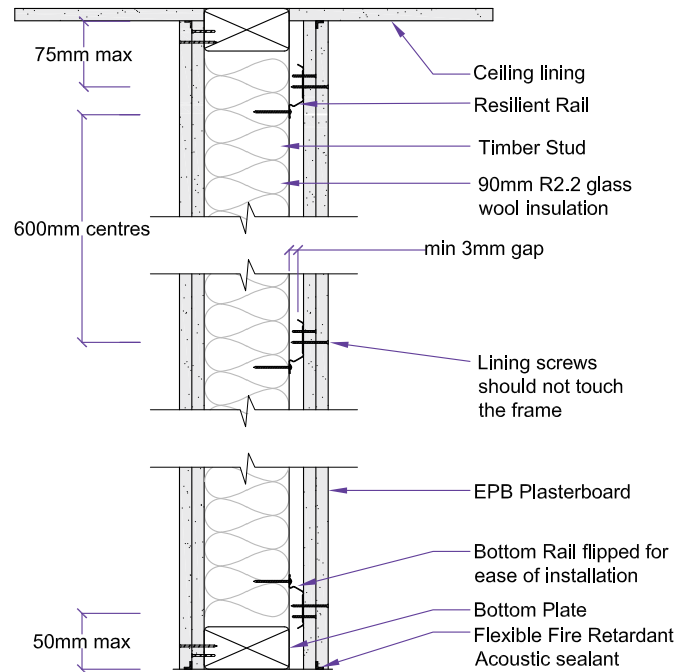
Fire Rated Wall to Roof Cavity Detail-Double Frame - Truss perpendicular to wall



Rail and Mount Installation Details

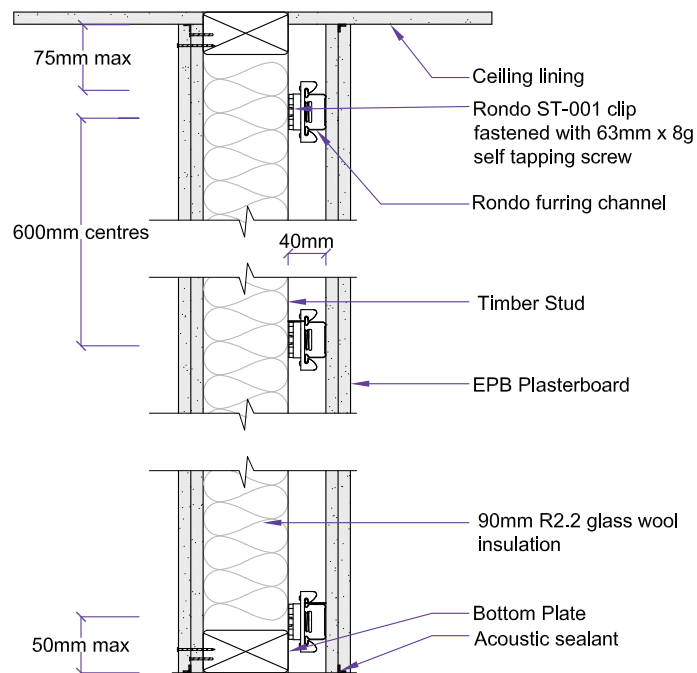
ENS-124

Stud and Resilient Rail Installation Details



ENS-173

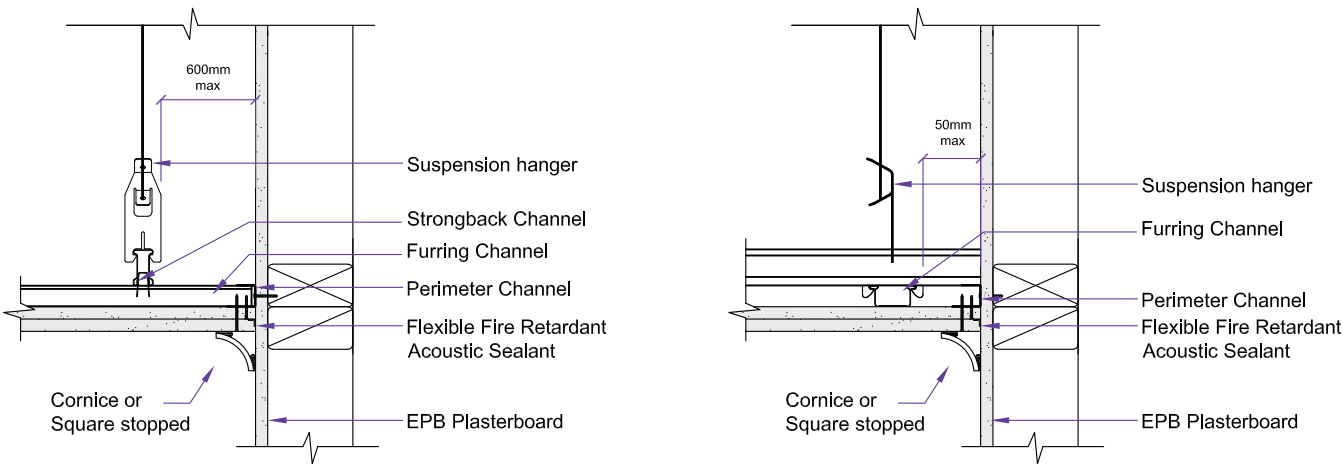
Stud and Resilient Mount Installation Detail



Ceiling Perimeter Details

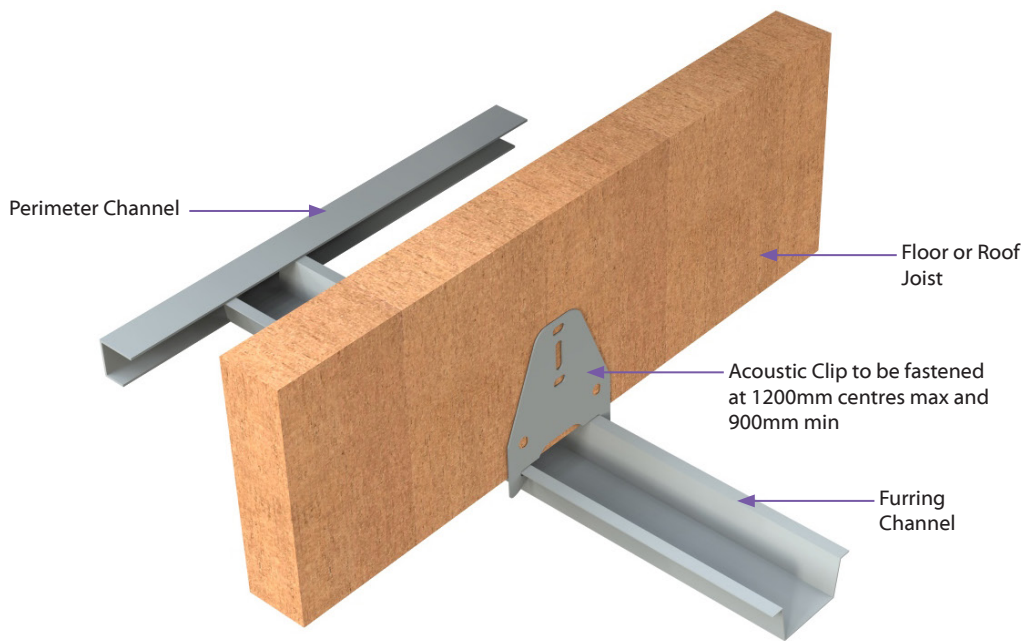
ENS-310

Suspended Ceiling Detail



ENS-112

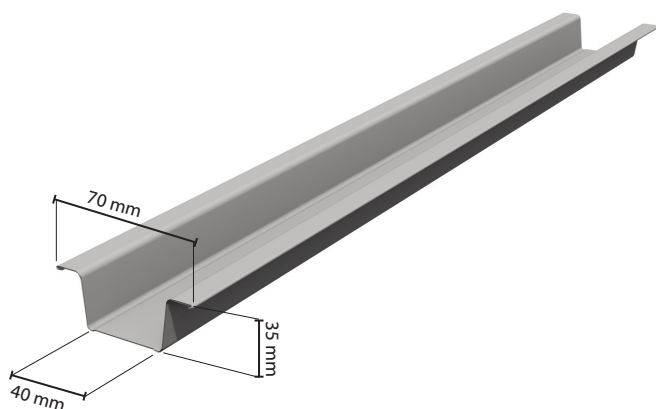
Direct Fix Clip Ceiling



System Components

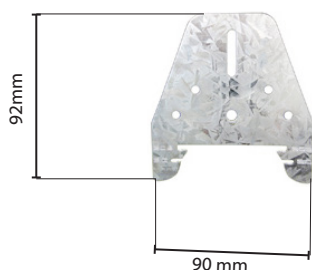
Ceiling Batten

Rondo® 310 ceiling batten provides a more stable substrate for fixing ceiling lining which is also compatible with the Acoustic Clip



Acoustic Clip*

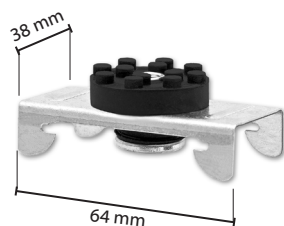
Rondo® 311D optimises acoustic performance of EPB Noise Control systems. It is compatible with Rondo® 310 ceiling batten.



*The allowable alternatives for the Rondo® 311D Acoustic clips for EPB Noise Control Systems are Rondo® 313, Rondo® 226, Rondo® 394 and GIB Quiet Clip®

Acoustic Resilient Mount

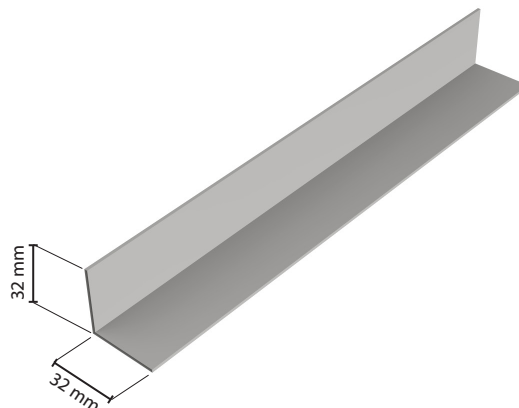
Rondo® STWC for use with wall & ceiling construction assemblies to prevent sound & vibration transmission to improve STC and IIC ratings of single framed timber or steel EPB Noise Control systems. It is compatible with Rondo® 308 & Rondo® 129.



*The allowable alternatives for the Rondo® STWC Acoustic Resilient Mount for EPB Noise Control Systems is ST-001

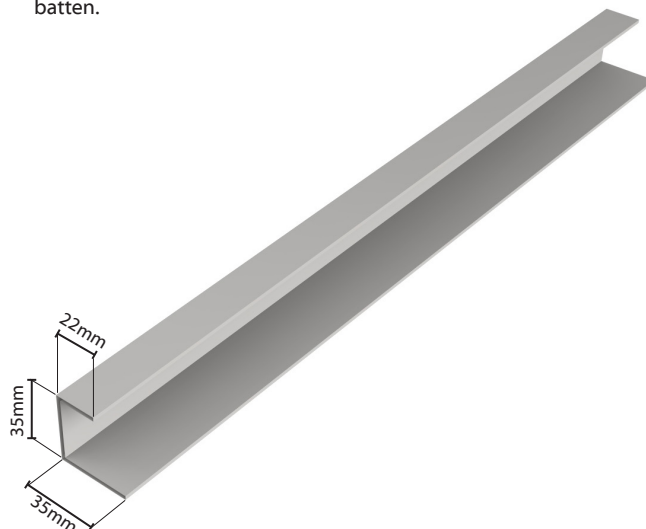
Perimeter Angle

Rondo®18 Perimeter angle is a componentary part of the EPB Noise Control ceiling system.



Perimeter Channel*

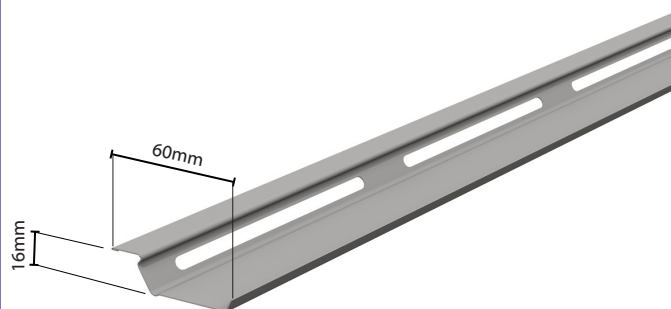
Rondo® 340 is designed to provide seamless support at wall ends of suspended ceiling systems. It is compatible with Rondo® 310 Ceiling batten.



*Use Rondo142 channel to suit Rondo308 ceiling batten.

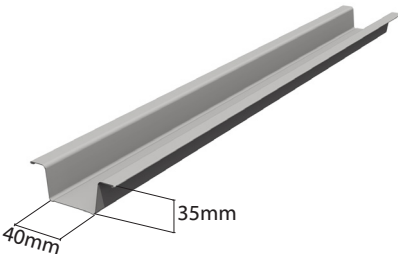
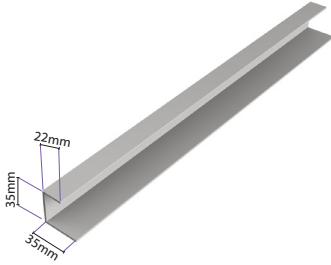
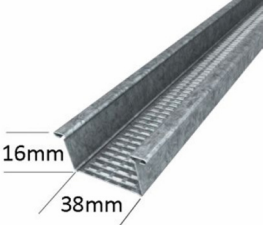
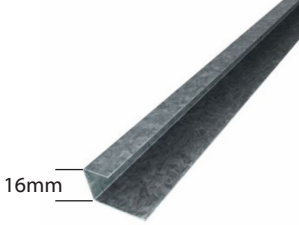
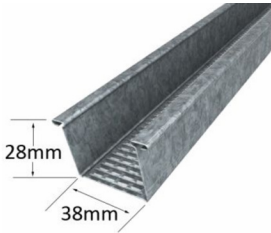
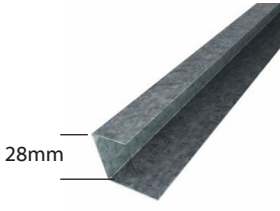
Resilient Rail

Rondo® 581 Resilient Channel provides sound isolation of linings from the framing. It improves the STC of timber or steel single frame walls.



*The allowable alternatives for the Rondo® 581 Resilient Channel for EPB Noise Control Systems is GIB Rail®

System Components Compatibility Chart

| Ceiling Batten | Acoustic Clip | Perimeter Channel |
|---|--|---|
| <div>RONDO® 310</div> <div></div> | <div>RONDO® 311D</div> <div>RONDO® 313</div> <div>GIB® Quiet Clip®</div> | <div>RONDO® 340</div> <div></div> |
| <div>RONDO® 308</div> <div></div> | <div>RONDO® 226</div> <div>RONDO® 394</div> | <div>RONDO® 142</div> <div></div> |
| <div>RONDO® 129</div> <div></div> | <div>RONDO® 226</div> <div>RONDO® 394</div> | <div>RONDO® 140</div> <div></div> |

Horizontally aligned components are compatible



EPB Plasterboard Product Range

Product Weights and available Lengths

| THICK- NESS | EPB PLASTERBOARD PRODUCT RANGE | EDGE TYPE | WIDTH | AVG WEIGHT | LENGTH | | | | | | | |
|----------------|--------------------------------|--------------|-------|-------------------|--------|------|------|------|------|------|------|------|
| mm | | | mm | Kg/m ² | 2.4m | 2.7m | 3.0m | 3.3m | 3.6m | 4.2m | 4.8m | 6.0m |
| 10 | EPB® Standard | TE/TE | 1200 | 6.9 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 10 | EPB® Standard | TE/SE | 1200 | 6.9 | ✓ | | ✓ | | ✓ | ✓ | ✓ | ✓ |
| 10 | EPB® Standard - Wide | TE/SE | 1350 | 6.9 | | | | | ✓ | | ✓ | ✓ |
| 13 | EPB® Standard | TE/TE | 1200 | 8.8 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 10 | EPB CeilingSmart® | TE/TE | 1200 | 7.4 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 10 | EPB FireSmart® | TE/TE | 1200 | 7.4 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 13 | EPB FireSmart® | TE/TE | 1200 | 11.7 | ✓ | ✓ | ✓ | ✓ | ✓ | | | |
| 16 | EPB FireSmart® | TE/TE | 1200 | 14.7 | ✓ | ✓ | ✓ | | | | | |
| 10 | EPB MultiSmart® | TE/TE | 1200 | 8.9 | ✓ | ✓ | ✓ | | ✓ | | ✓ | |
| 10 | EPB MultiSmart® | TE/SE | 1200 | 8.9 | ✓ | | | | | | ✓ | |
| 13 | EPB MultiSmart® | TE/TE | 1200 | 12.2 | ✓ | ✓ | ✓ | ✓ | ✓ | | | |
| 10 | EPB AquaSmart® | TE/TE | 1200 | 8.3 | ✓ | ✓ | ✓ | | ✓ | | | |
| 10 | EPB AquaSmart® | TE/SE | 1200 | 8.3 | ✓ | | | | | | ✓ | |
| 13 | EPB AquaSmart® | TE/TE | 1200 | 11.7 | ✓ | ✓ | ✓ | | ✓ | | | |

TE/TE = Tapered Both Edges

TE/SE = Tapered One Edge, Square the Other

Product Primary Functions*

| THICK- NESS | EPB PLASTERBOARD PRODUCT RANGE | EDGE TYPE | WIDTH | Horizontal Fixing | Span 600 Centres on Ceilings | Bracing | Fire Resistance | Noise Control | Impact Resistant | Moisture Resistant |
|----------------|-----------------------------------|--------------|-------|-------------------|---------------------------------|---------|-----------------|---------------|------------------|--------------------|
| mm | | | mm | | | | | | | |
| 10 | EPB® Standard | TE/TE | 1200 | | | ✓ | ✓ | | | |
| 10 | EPB® Standard | TE/SE | 1200 | ✓ | | ✓ | | | | |
| 10 | EPB® Standard -Wide | TE/SE | 1350 | ✓ | | ✓ | | | | |
| 13 | EPB® Standard | TE/TE | 1200 | | ✓ | | ✓ | | | |
| 10 | EPB CeilingSmart® | TE/TE | 1200 | | ✓ | ✓ | ✓ | | | |
| 10 | EPB FireSmart® | TE/TE | 1200 | | ✓ | ✓ | ✓ | | | |
| 13 | EPB FireSmart® | TE/TE | 1200 | | ✓ | | ✓ | | | |
| 16 | EPB FireSmart® | TE/TE | 1200 | | | | ✓ | ✓ | ✓ | |
| 10 | EPB MultiSmart® | TE/TE | 1200 | | ✓ | ✓ | ✓ | ✓ | | |
| 10 | EPB MultiSmart® | TE/SE | 1200 | ✓ | | ✓ | | ✓ | | |
| 13 | EPB MultiSmart® | TE/TE | 1200 | | ✓ | ✓ | ✓ | ✓ | ✓ | |
| 10 | EPB AquaSmart® | TE/TE | 1200 | | | | ✓ | ✓ | | ✓ |
| 10 | EPB AquaSmart® | TE/SE | 1200 | ✓ | | | | | | ✓ |
| 13 | EPB AquaSmart® | TE/TE | 1200 | | ✓ | | ✓ | ✓ | | ✓ |

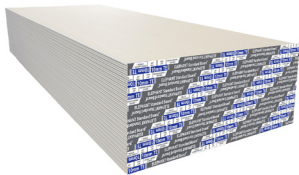
* The above table details the product's Primary functions.

Some products may perform more than the functions indicated



EPB Plasterboard Product Range

10mm EPB Standard



10mm EPB Horizontal Standard



13mm EPB Standard



10mm EPB FireSmart/CeilingSmart



13mm EPB FireSmart



16mm EPB FireSmart



10mm EPB MultiSmart



10mm EPB Horizontal MultiSmart



13mm EPB MultiSmart



10mm EPB AquaSmart



10mm EPB Horizontal AquaSmart



13mm EPB AquaSmart





FOR MORE INFORMATION

EMAIL info@epb.co.nz

CALL 0800 353 742