

**E2SDLA30** Double Steel Frame Load Bearing Two Way FRR

2 Layers: 1 Layer of Plasterboard to each side of frame Full Intertency Acoustic

| System Number | Lining Suffix | Fire Rating | Load Bearing Ability | Noise Control* |    | Lining Requirement   |
|---------------|---------------|-------------|----------------------|----------------|----|--|
|               |               |             |                      | STC            | Rw |  |
| E2SDLA30      | -M26          | 30/30/30    | LB                   | 55             | 54 | 1 x 13mm Elephant MultiSmart on One side<br>1 x 13mm Elephant MultiSmart to Other side |
|               | -F32          | 30/30/30    | LB                   | 56             | 54 | 1 x 16mm Elephant FireSmart on One side<br>1 x 16mm Elephant FireSmart to 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 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**

One layer of Elephant 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 Elephant Plasterboard Installation Guide.

