

**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 | Fire Rating | Load Bearing Ability | Noise Control* |    | Lining Requirement   |
|----------------|---------------|-------------|----------------------|----------------|----|--|
|                |               |             |                      | STC            | Rw |  |
| <b>E3SMA30</b> | <b>-S39</b>   | --/30/30    | NLB                  | 55             | 54 | Frame Side: 1 x 13mm Elephant Standard<br>Mount Side: 2 x 13mm Elephant Standard     |
|                | <b>-M30</b>   | --/30/30    | NLB                  | 55             | 54 | Frame Side: 1 x 10mm Elephant MultiSmart<br>Mount Side: 2 x 10mm Elephant 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            | <b>M30</b>    | 30mm         | 134mm           |
|            |                 | <b>S39</b>    | 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**

**Framing Side:** One layer of Elephant 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 <sup>st</sup> Layer       | 2 <sup>nd</sup> Layer | Single Layer |
|                    | Self-Tapping Drywall Screws |                       |              |
| <b>E3SMA30-M30</b> | 10mm                        | 10mm                  | 10mm         |
|                    | 25 x 6g                     | 32 x 6g               | 25 x 6g      |
| <b>E3SMA30-S39</b> | 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 Elephant Plasterboard Installation Guide.

