



Libra Systems

manufacturers of cold rolled sections

Twin Wall Partition

At Libra we have developed twin frame separating partitions to meet your building requirements. They are capable of achieving up to 120 minutes fire resistance, and exceeding the acoustic requirements of ADE or TH5. It is also possible to achieve U-Values of 0.0 Wm²K by fully filling the cavity with Acoustic Partitioning insulation.

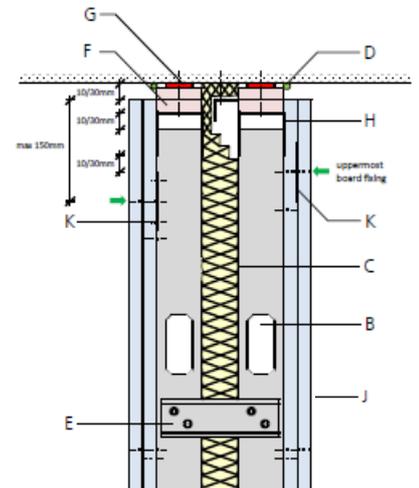
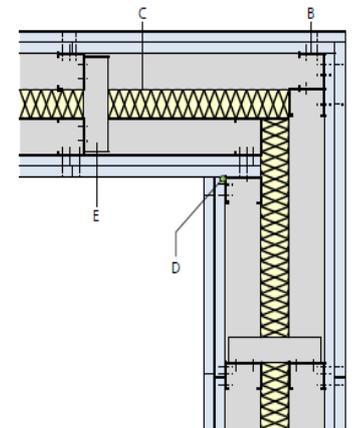
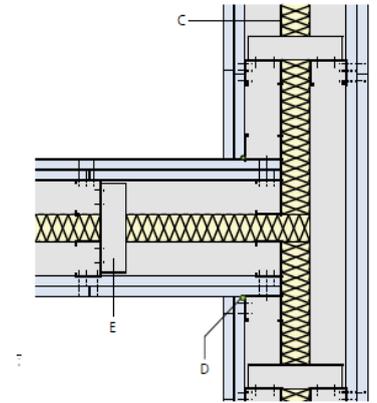
Installation

1. Install two rows of Libra Standard Tracks to the floor and soffit. Fix with suitable fasteners at maximum 600mm centres. Where deflection heads are required, install Libra Deep Tracks to the soffit with plasterboard strips and an intumescent mastic seal. Please note; minimum stud engagement to be 20mm.
2. Install Libra C Studs at abutments to the structure with suitable fasteners at maximum 600mm centres.
3. Seal the entire perimeter of the frame on both sides with beads of acoustic / intumescent mastic.
4. Form door openings.
5. Friction fit Libra C or I Studs as required at maximum 600mm centres (reduce to 400mm in tiled areas). Do not screw or crimp studs to deflection head channels.
6. Where Libra C studs are installed brace together (at maximum 1200mm centres) with offcuts of Libra stud and wafer head drywall screws (minimum 2 fixings per junction). Do not brace I studs.
7. Form service openings and frame out as required.
8. Install cavity insulation, fixed at the head as per manufacturers recommendations.
9. Install plasterboard linings as per specification with suitable drywall screws at maximum 300mm centres.
10. Boards to be fixed to their entire perimeter.

Notes

Stagger all board joints by minimum 300mm and stagger board layers at corners to form Z-joints. Install additional framing such as Libra FP70 Flat Fixing Plate to support horizontal board joints and below deflection heads. Ensure all service penetrations and any openings are suitably sealed to prevent hot gasses entering the partition cavity. All areas of the plasterboard linings to be minimum fire taped to maintain fire and acoustic performances (including above MF ceilings). Install baffle boxes or suitable putty pads to maintain the fire and acoustic performances. Avoid installing back-to-back sockets as this may downgrade the acoustic performance of the partition. Where plasterboards are lifted off the floor, ensure any gaps over 5mm are bulk filled with a gypsum based material. Deflection heads can reduce a partition's acoustic performance by 4-5 dB. To reduce this loss to 1-2 dB you should install angles either side of the head. These can be omitted where imperforate ceilings are being installed to that side of the partition.

All additional system components to be manufactured to the relevant BS EN standard.



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|---|---|
| B | Libra C or I Stud |
| C | APR insulation fixed at head |
| D | Mastic seals |
| E | Cross braces where C Studs installed |
| F | Plasterboard packers (EN 520 type F – Fire) |
| G | Intumescent mastic seal |
| H | Libra deep track |
| J | Plasterboard lining as per specification |
| K | Flat Plate to provide upmost fixing |