

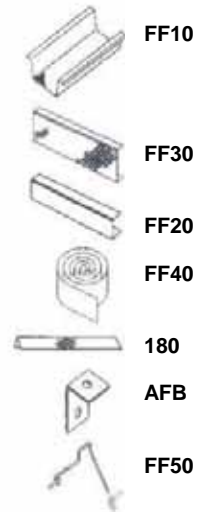
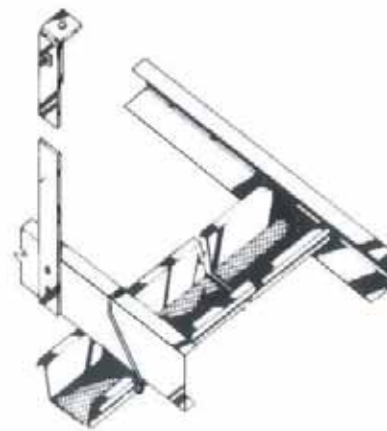
# Metal Furring Runner

## Concealed Metal Ceiling System

### For Direct Fix of Plasterboards.



Furring Runner  
SUSPENDED CEILING APPLICATION



**Libra Metal Furring** is a concealed metal system which is designed to create a ceiling that has a conventional plaster appearance where no joints are required.

Combining the **Libra Metal Furring** system with both tapered edge plasterboards and taped and filled joints allows a wide variety of decorations to be applied to the surface of the wall.

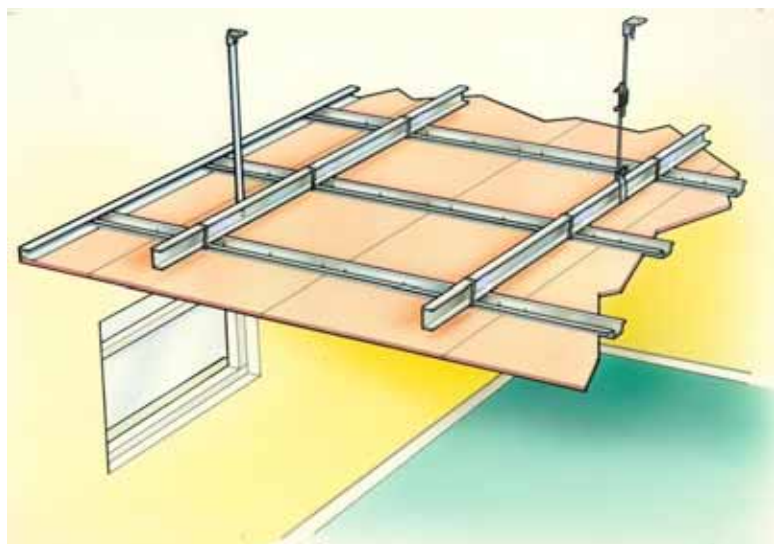
For applications where hygiene is of prime importance, particularly in the medical field, surfaces can be left smooth. Items such as light fitting, access panels and ventilation units are easily accommodated within the ceiling system.

**Libra Metal Furring** system consists of **FF10** Furring Runner to which the plasterboard is fixed, the face of which is knurled to assist drywall screw penetration, **FF30** which is the Primary Channel to which the FF10 is fixed using the **FF50** Wire Clip. **FF20** which is the Perimeter Trim. The System is suspended using either **FF40** Strap Hanger or **180** Hanger Angle where greater lateral stability is required and the **AFB** Angle Bracket can be used to fix the top of the suspension to the soffit.

**Libra Metal Furring** are manufactured using pre-galvanised mild steel to BS EN 10346 2009.

**Libra Metal Furring** system has been Fire Resistance Tested in accordance with BS 476: Part 23.

# Metal Furring Runner Concealed Metal Ceiling System For Direct Fix of Plasterboards.



**Gypsum Board** – 900mm wide x 12.5mm thick.

## Single Layer

Tapered edge board is fixed with bound edges at right angles to the **Libra Systems** furring runner section and adjoining edges are lightly butted. End joints must occur at the centre of a **Libra Systems** furring runner section. End joints should be staggered by half a board length leaving a 3mm gap between board ends.

The boards are screw fixed to the **Libra Systems** furring runner section with 32mm drywall screws at 230mm centres and no closer than 25mm from bound edges.

The end boards are screw fixed with 32mm drywall screws at 150mm maximum centres to the **Libra**

**Systems** furring runner section and **Libra Systems** perimeter trim as far from ends as possible. The long edges of the board, whether bound or cut on site, are screwed to the **Libra Systems** perimeter trim only where it is joined by a **Libra Systems** furring runner section.

## Double Layer

When using two layers of board, the first layer of board is fixed exactly as a single layer boarding. The second layer, using tapered edge board, should be fixed with all joints staggered in relation to the first layer and screwed to the **Libra Systems** furring runner sections and **Libra Systems** perimeter trim using 38mm drywall screws.

## Joint and Screw Finishing

This should be carried out as recommended by the board manufacturer.

## Performance and Design Consideration

Where **Libra Systems** Primary Channels have to be joined, they should be overlapped back to back by 150mm minimum and fixed by two bolts and nuts. See Fig.1

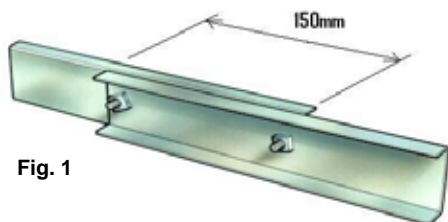


Fig. 1

Details showing method of joining channel sections

Where **Libra Systems** Furring Runner sections have to be joined, the ends are nested together by 150mm minimum and crimped twice each side of overlapped sections using a crimping tool, or, alternatively, two Tek screws could be used on each side of the overlap. See Fig.2

Fig. 2



Detail showing method of joining furring runner sections.

Maximum Recommended Loads on Libra Systems Furring Runner System		
Layout of Primary Channel with Furring Runner Sections set at 450mm centres.		Maximum Load Including Board.
Suspension Centres.	Primary Channel Centres	
1200mm	600mm	60Kg/m <sup>2</sup>
1200mm	900mm	40Kg/m <sup>2</sup>
1200mm	1200mm	30Kg/m <sup>2</sup>

Where light fittings and access panels are incorporated as part of the design requirements, it is important that the integrity of the ceiling is maintained when fire resistance and sound insulation are specified.

Fixing to the system should always be made into the metal section and not directly into the plasterboard. Where heavy loads are installed, the primary grid layout should be adjusted in accordance with the above table.

Where heavier loads than stated are being installed, these should be suspended independently from the structure.