



# FIRE RATED FLOOR/CEILING SYSTEMS

## STEEL JOISTS

| SPECIFICATION NUMBER | LOADBEARING CAPACITY | FIRE RESISTANCE RATING | LINING REQUIREMENTS        | STC | IIC | SYSTEM WEIGHT APPROX |
|----------------------|----------------------|------------------------|----------------------------|-----|-----|----------------------|
| GBSJ 30              | LB                   | 30/30/30               | 1 layer 13mm GIB Fyreline® | 34  | 30  | 38kg/m <sup>2</sup>  |

### FLOOR FRAMING

Steel floor joists shall be minimum 190mm deep C-section with 45mm flanges and a thickness of 1.55mm, spaced at no more than 600mm centres.

Framing is required at the perimeter of the ceiling lining and at longitudinal sheet joints. Suitable perimeter framing includes a minimum 35mm x 35mm x 0.55mm steel perimeter angle or steel nogs.

Longitudinal sheet joints are supported on 0.55mm thick C-section steel nogs connected to the joists. The nogs have a minimum width of 50mm with 25mm vertical legs.

### FLOORING

Flooring shall be nominal 20mm particle board or minimum 17mm structural plywood fixed to the joists in accordance with the manufacturers specifications.

Flooring sheet joints must have a tongue and groove jointer or be formed over framing.

### CEILING LINING

1 layer of 13mm GIB Fyreline® fixed at right angles to the underside of the floor joists.

All joints must occur on joists or nogs.

Sheets shall be touch fitted.

### FASTENING THE LINING

#### Fasteners

32mm x 6g GIB® Grabber® Scavenger Head Drill Point Drywall screws.

#### Fastener Centres

150mm centres around the perimeter of each sheet and at 200mm centres along each joist.

Place fasteners 12mm from bound sheet edges and 18mm from sheet ends.

### WALL/CEILING JUNCTIONS

The internal angle between the ceiling and walls must be protected by GIB-Cove® adhered with GIB-Cove® Bond, or boxed corners (square stopped) filled and taped in accordance with the publication entitled "GIB® Site Guide".

### JOINTING

All fastener heads stopped and all sheet joints tape reinforced and stopped in accordance with the publication entitled "GIB® Site Guide".

*In order for GIB® systems to perform as tested, all components must be installed exactly as prescribed. Substituting components produces an entirely different system and may seriously compromise performance. Follow system specifications.*

