FIRE RATED FLOOR/CEILING SYSTEMS

STEEL JOISTS

SPECIFICATION NUMBER	LOADBEARING CAPACITY	FIRE RESISTANCE RATING	LINING REQUIREMENTS	STC	IIC	SYSTEM WEIGHT APPROX
GBSJ 60	LB	60/60/60	1 layer 16mm GIB Fyreline®	39	32	40kg/m²

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 $35\text{mm} \times 35\text{mm} \times 0.55\text{mm}$ 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. Joints without a jointer must have a bead of fire rated sealant applied before sheets are locked together. Where tongue and groove jointers or sealant are not used, the fire rating will reduce to 60/60/45.

CEILING LINING

1 layer of 16mm GIB Fyreline® fixed at right angles to the underside of the floor joists.

All joists must occur on joists or nogs.

Sheets shall be touch fitted.

FASTENING THE LINING

Fasteners

 $32 \text{mm} \times 6 \text{g GIB}^{\oplus} \text{ Grabber}^{\oplus} \text{ Scavenger Head Drill Point Drywall screws.}$

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.

