

FRAMING GUIDELINES

ResCom^R flooring is able to be fixed to steel or timber joists at a maximum of 1200mm centres when using ResCom^R 50mm Structural Flooring (see loading graph).

Construction of timber framing must be in accordance with AS 1684 – Residential timber framed construction.

Construction of steel framing must be in accordance with AS 3623 – Domestic metal framing.

Square Edged ResCom^R Flooring must be supported by joists.

ShipLap and T&G ResCom^R Flooring maybe joined mid span.

It is always advised that the level of supporting framing be checked prior to installation for accuracy to remove unforeseen installation issues.

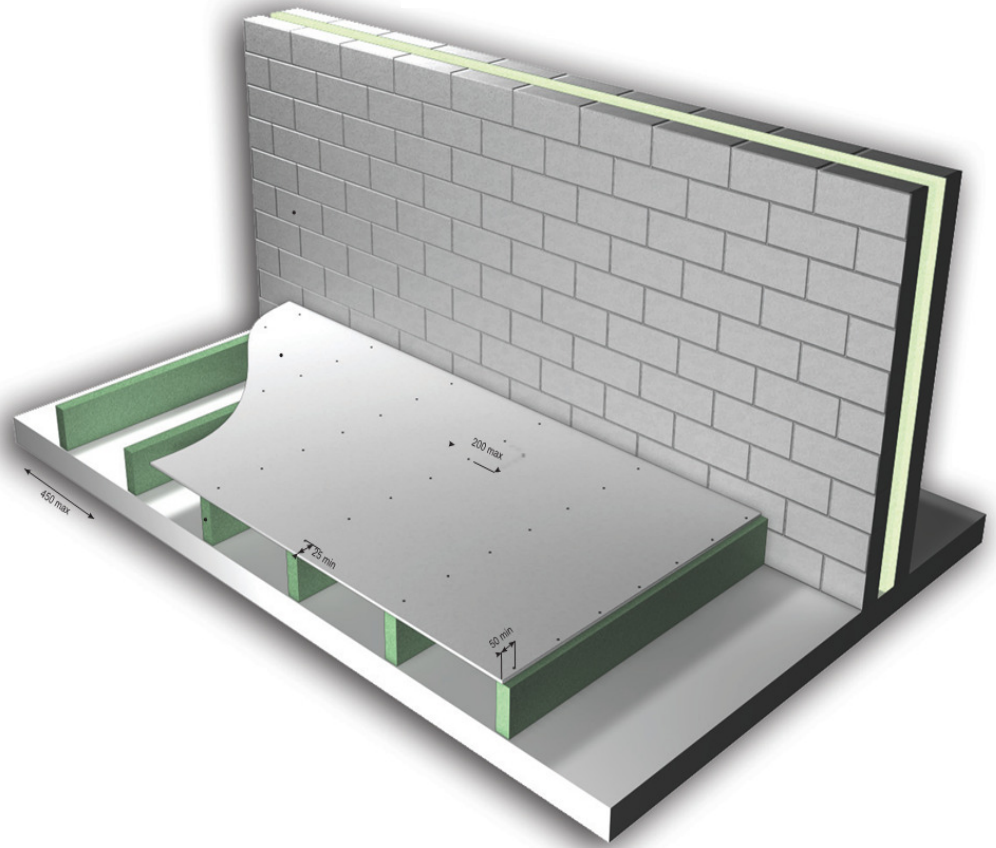


Figure 3.1 - Floor Installation Perspective View for 18mm MgO Corp Structural Flooring

SPAN & LOADING GUIDELINES

ResCom^R flooring is suitable for Categories A or B Class 5 conditions.

Tests undertaken in accordance with clause 8.2 of AS/NZS 2908.2:2000.

When tested in accordance with AS/NZS 2908.2 2000 Sections 8.2.1 'Bending Strength' and 8.2.2 'Soak Dry' **ResCom FLOORING** demonstrated no denotable decrease to its strength and performance.

Floor Joist Ceiling - Design Capacity

Description:

MgO Corp (CMA-CM40009) floor sheets are suitable for the following applications.

Thickness	Joist Centres	1.5kPa/1.8kN	2.0kPa/1.8kN	3.0kPa/2.7kN	5.0kPa/4.5kN
16mm	400mm	✓			
18mm	400mm	✓	✓		
18mm	450mm	✓	✓		
19mm	450mm	✓	✓		
20mm	450mm	✓	✓	✓	
20mm	600mm	✓	✓	✓	
25mm	450mm	✓	✓	✓	✓
25mm	600mm	✓	✓	✓	
40mm	900mm	✓	✓	✓	✓
50mm	1200mm	✓	✓	✓	✓

NOTE: At all times it is advised by Magnesium Oxide Board Corporation Pty Ltd that the elements of flooring design and construction must comply with the requirements of the Building Code of Australia (BCA) and or any other applicable local authorities building and construction regulations and standards. The design engineers and certifiers are responsible to ensure that the details in this document are appropriate for the intended application.

ASSEMBLY

ResCom[®] flooring can be fitted to a square or staggered layout, but must be staggered for tiled or vinyl finishes.

Where waterproofing is required ensure butt joints need to have a 2mm gap and be filled with a suitable sealant prior to application of waterproof membrane.

FIXINGS:

All ways use Class 3 to 5 fixing or higher (Non Corrosive) screws or nails

FIXING to TIMBER JOISTS:

Class 3 to 5 Non Corrosive Fixings (or higher) required

Screws: No 10 x 40mm self embedding countersunk head screws

FIXING to STEEL JOISTS:

Class 3 to 5 Non Corrosive Fixings (or higher) required

Screws: No 10 x 30mm self-drilling, self-embedding countersunk screws

Approved structural adhesives and fire acoustic base adhesives may be used in conjunction with Class 3 to 5 Non Corrosive screw or nail fixing. Full beads of adhesive to the face of the joist on beams prior to laying the boards.

Please refer to the head office of Magnesium Oxide Board Corporation Pty Ltd for further technical information.

Ensure all fixings are located:

- 12mm minimum from the edges
- 12mm minimum from all butt joints
- 20mm minimum from all tongue & grooves
- 50mm minimum from all corners
- 200mm centres along joists
- Ensure framing is level, clean and dry before fixing

Results Summary

Thickness	Joist Centres	Test Criteria	Pressure Result	Point Load Result	Point Load 1.0kN
16mm	400mm	1.5kPa	0.6036mm	0.73mm	<0.5mm
		1.8kN	SF>12	SF>3	SF>3
18mm	400mm	2.0kPa	0.058mm	0.76mm	<0.5mm
		1.8kN	SF>12	SF>3	SF>3
18mm	450mm	2.0kPa	0.084mm	0.84mm	<0.5mm
		1.8kN	SF>12	SF>3	SF>3
19mm	450mm	2.0kPa	0.078mm	0.78mm	<0.5mm
		1.8kN	SF>12	SF>3	SF>3
20mm	450mm	3.0kPa	0.10mm	1.08mm	<0.5mm
		2.7kN	SF>12	SF>3	SF>3
20mm	600mm	3.0kPa	0.330mm	1.9mm	<0.5mm
		2.7kN	SF>12	SF>3	SF>3
25mm	450mm	5.0kPa	0.09mm	1.0mm	<0.5mm
		4.5kN	SF>12	SF>3	SF>3
25mm	600mm	3.0kPa	0.004mm	1.0mm	<0.5mm
		2.7kN	SF>12	SF>3	SF>3
40mm	900mm	5.0kPa	0.017mm	1.0mm	<0.5mm
		4.5kN	SF>12	SF>3	SF>3
50mm	1200mm	5.0kPa	0.03mm	0.92mm	<0.5mm
		4.5kN	SF>12	SF>3	SF>3