



9MM MDF V-GROOVE INSTALLATION GUIDE

August 2024

General Information

The following installation instructions and guide are in addition to council regulations and the requirements of the NZBC.

Storage

Sheets should be fully protected from the weather when transported and stored.

Stack sheets horizontally in a flat area and off the floor using clean, dry bearers. Individual bearers should be placed at maximum 600mm centres and 300mm from the end. Ensure sheets are flush to minimise damage to edges or overhanging corners.

Storage areas should be well-ventilated with an average relative humidity of 50%. Never store MDF V-groove outdoors, in an open area (decking), in areas with newly poured concrete, or in rooms that have been recently plastered due to high moisture.

Maintenance

Regularly inspect the sheets for damage or wear. Avoid excessive moisture exposure. Touch up any scratches or dents with primer and paint.

Cutting and Working

MDF is easy to cut and shape with a normal hand or power saw. It is recommended to use a Tungsten carbide blade as it provides excellent resistance to wear and tear. Choose a blade with a high tooth count (80 to 100) to prevent tear-out.

Sand any rough edges after cutting with 120 grit paper followed by 240 or 320 grit paper.

Wear appropriate safety gear (eye protection and dust mask) during cutting and sanding. Storage and work areas must be adequately ventilated. It is recommended that sawing and sanding equipment be fitted with dust extractors.

Conditioning

It is recommended MDF is stored in the same environment where it will be installed a minimum of 48 hours before starting work.

Fixings and Fasteners

For best results when fixing MDF panels, use parallel thread screws such as particle board screws or chipboard screws. Conventional wood screws are not recommended. A 5g screw is recommended for a 9mm MDF sheet.

A pilot hole of 2.4mm for a 5g screw is recommended for edge fixings to avoid splitting. Pilot holes should be drilled 2-3mm longer than the expected length of the screws.

For best results when nailing, use 2.8 x 40mm annular grooved or helical (spiral) flat head nails. Nailing at a slight angle towards the stud will increase the holding power.

Stapling can be used effectively for joint fitting. Add an adhesive to the joint before assembly. Maintain good control of air pressure to avoid excessive penetration of staples.

For 9mm MDF, use a 20mm staple. Do not staple within 25mm of the edge of the sheet.

Adhesive and Sealants

Apply a flexible stud adhesive to the back of the sheet before fixing. Use a paintable caulk to seal gaps between sheets and edges.

Installation

V-Groove MDF must be supported by framework. See table below:

Framework Support Centres

Panel Thickness (mm)	Wall Lining	
	Stud Centres (mm)	Nogging Centres (mm)
9.0	400	1200
	450	1200
	600	800

Fixing to Frames and Existing Walls

- Allow a 9-10mm gap at the top and/or bottom of the wall.
- Apply a flexible stud adhesive at 300mm intervals on each stud and noggin behind the panels. Follow the adhesive manufacturer's recommendations for how much to use.
- Space fixings approximately 200-300mm apart when fixing the sheet.
- Leave a small gap (2-3mm) between each sheet to accommodate for movement. Do not hard-push panels together.
- Fixings must be no closer than 10mm from the sheet edge and no closer than 18mm from the top and bottom edges of the sheet. Screws or nails should be fixed at least 25mm away from the corners to prevent splitting.
- Fixings are driven until just flush with the sheet surface and must not be overdriven.
- To achieve a smooth surface without warping, MDF V-Groove should never be fixed to timber framing or substrates with a moisture content above 20%.

Painting

Fill all visible screw or nail holes with a flexible interior grade wood filler then lightly sand with a 320 grit paper before painting.

Brush paint into V-grooves first then use a roller for the surface. Two topcoats are recommended. Follow manufacturer's instructions for drying time. A light sand using 280 or 320 grit paper is recommended between coats.