

MELTECA® FR

Fire Retardant Panels for Wall Linings

TECHNICAL INFORMATION

DESCRIPTION

Melteca® FR is manufactured by laminating melamine saturated paper to both faces of a specialty medium density fibreboard (MDF) substrate. The decorative surface provides the same robust finish as the suite of Melteca® low pressure decorative surfaces. Melteca FR is suited to vertical applications (wall linings) where fire performance is required.

APPEARANCE

Melteca® FR panels are available in the same colour options and surfaces finishes as the current Melteca offer. Please consult the Melteca Availability Guide at www.melteca.co.nz. The panels can be identified by the distinctive pink core of the MDF substrate.

APPLICATIONS

Melteca FR is designed for interior wall linings where fire performance as detailed in NZBC Clause C - Protection From Fire, is required. Please refer specifically to C/AS2 - AS6 - Table 4.1.

DECORATIVE SURFACE PROPERTIES AND SUBSTRATE DIMENSIONS

	Solid Colours	Patterns/Woodgrains
Resistance to Surface Abrasions	>400 cycles to substrate	>150 cycles to 50% pattern removal
Resistance to Steam	No cracks or blisters	
Resistance to Staining	No visible marks	
Resistance to Cracking	No cracking	
Formaldehyde Emission	E1 - ≤1 mg/L	
Dimensions		
Sheet size	2440 x 1220 (+/- 2mm)	
Thicknesses	12mm and 18mm (-0.0mm + 0.35mm)	
Weight/m2	12mm - 9.4kgs	18mm - 13.72 kgs

FIRE PERFORMANCE

The Group Number Classifications are generated from tests carried out and data reduced in accordance with the test procedure described in ISO 5660 2002 – Reaction to Fire test – Part 1: Heat Release and Part 2: Smoke Production Rate, for the purposes of determination of the Group Classification in accordance with the New Zealand Building Code Verification Method C/VM2 Appendix A

Melteca Fire Retardant Panels
Group Number Classification: I

LIMITATIONS

Melteca FR panels are
• intended for vertical surfaces where fire performance of the surface

is required

- not intended for exterior use
- not intended for use in high humidity or wet applications such as saunas or shower/wash down rooms
- not for use where the substrate could come in contact with water. Failure to keep dry will affect the performance of the panel
- must be handled and installed in a safe manner. Please refer to the Health and Safety section in this brochure.

Please note: There may be a greater propensity for splitting of the substrate when fixing into the edge of Melteca FR panels compared to standard Lakepine MDF. Please refer to Fixing Recommendations below.

HANDLING & STORAGE

- Melteca FR panels have a prefinished surface and must be handled accordingly
- Do not slide the panels over each other or across sharp or gritty surfaces
- Melteca FR panels must be stored away from moisture, heat and sunlight
- Sheets must be flat stacked on aligned bearers/gluts
- Bearers/gluts must be of uniform thickness and must extend across the full width of the stack
- Melteca FR panels must be protected from the weather, dampness and direct wetting and must be stored inside

DURABILITY

When stored, handled, used and maintained in accordance with this document, Melteca FR panels will meet the durability requirements of NZBC B2.3.1 (c) for 5 years.

Laminex New Zealand will not be liable to any person for any product failure if the conditions as to storage, handling, use and maintenance of Melteca FR panels as outlined in this document are not complied with.

FIXING RECOMMENDATIONS

There are many fixing options available when using Melteca FR as a prefinished wall lining. These include; direct fix to timber or steel framing, fixing over existing linings and combining Melteca FR panels with proprietary hidden fixing systems such as GIB ReadyLock. Jointing detail options include a minimum 2mm gap, an 8 – 10mm gap to create a negative detail, aluminium jointers, and timber mouldings covering the join.

When fixing directly to framing or over existing linings consider using mechanical fastenings in conjunction with adhesive. Mechanical fixings along the top and bottom edge with adhesive used to secure the general body of the panel will provide an easily installed solution.

When fixing through the face of the panel, mechanical fastenings shall be a minimum 30 x 6mm screw for 12mm panels and 40 x 6mm for 18mm panels at 300mm centres along the top and bottom edges. Holes through the Melteca FR panel shall be oversized to accommodate the screw fixing passing through the panel without chipping the surface.

Adhesives: pu adhesives such as Sika Nailbond Premium shall be used in continuous beads on the face of the supporting framework or at 400mm centres when fixing is over continuous lining.

Preparation of surfaces: Substrates (timber, steel or existing linings) must be free from dust and loose material. Any painted surface must be sanded to provide a key for the adhesive. Steel surfaces should be abraded with a Scotch-brite pad, followed by an application of Sika Cleaner 205 or similar.

The surface of the Melteca FR panel shall be cleaned using Sika Cleaner 205 in the areas where the adhesive will be applied (in line with the framing or at 400mm centres if fixing over existing linings).

If edge fixing is required, it is important not to fix edge screws closer than 25mm from the corner of the board. Do not over tighten screws as further turning after screws are tight will reduce the holding power.

Maximum screw gauge and minimum pilot holes when edge fixing into Melteca FR panels:

Board thickness	12mm	18mm
Maximum screw gauge	6	8
Recommended Pilot Hole	3.5mm	4mm

FRAMEWORK SETOUT

When fixing directly to a framed wall, allow for the stud, rafter, beams etc. to accommodate a minimum 2mm expansion gap at panel edges especially where large areas or long walls are to be covered. Where panels are abutting structural elements including beams and posts, or any concrete/masonry products, a minimum clearance of 10mm is recommended.

Nominal Framing Setout		
Panel Thickness (mm)	Stud Centres (mm)	Dwang Centres (mm)
12	400	1200
	600	800
18	400	
	600	1200

Please be aware of the sheet size (2440 x 1220) when setting out timber or steel framing.

CARE AND MAINTENANCE

Melteca FR panels have a hard wearing surface, but like all materials can be damaged if used without care and maintenance. The following information will assist in maintaining the surface of the panels with minimum time and effort.

Wipe off all food and drink spills immediately.

Never use abrasive pads, steel wool or abrasive cleaners (cream or powder) to clean the surface.

To avoid scratching or marking the surface make sure the cleaning cloth does not contain any hard or foreign particles.

General cleaning should be with a clean soft damp cloth. Soiled surfaces can be cleaned with warm soapy water.

If wipe marks are noticeable an initial clean down with acetone may

be required. Apply the acetone to a cloth and wipe over the entire surface. Then go over the area with a damp soft cloth to clean off the acetone residue.

An alternative for everyday cleaning is streak free glass cleaner which may be sprayed onto the surface and wiped off using a soft cloth.

Melteca decorated board products should not remain in contact with hypochlorite bleach. Caustic solutions, hydrogen peroxide solution in any concentration, mineral acid, sodium bisulphate, potassium permanganate in any concentration, berry juice, silver nitrate (1% concentration), gentian violet in any concentration, mild silver protein, laundry blue or iodine solution.

HEALTH AND SAFETY

Health and Safety precautions must be taken when working with wood panel products.

Exposure to wood dust and/or formaldehyde may cause irritation to the eyes, respiratory system and skin, and may cause sensitization resulting in asthma and/or in dermatitis.

Wood dust is classified as a known carcinogen. Repeated inhalation of wood dust over many years may cause nasal cancer.

Formaldehyde has been evaluated by the International Agency for Research on Cancer (IARC) as a Group 1, carcinogenic to humans. Storage areas containing large quantities of Melteca FR panels must be adequately ventilated.

Work areas must be well ventilated and kept clean. Sawing, sanding, and machining equipment must be fitted with dust extractors to ensure that dust levels are kept within standards laid down by Occupational Health and Safety New Zealand. If not, a dust mask conforming with AS/NZS 1715 and AS/NZS 1337 must be worn.

Offcuts, shavings and dust must be disposed of in a manner which avoids the generation of dust and in accordance with the requirements of local waste authorities.

In end use applications all raw substrate surfaces exposed to the occupied space must be sealed.

For further information and Safety Data information please phone Laminex New Zealand Customer Services – 0800 303 606

TECHNICAL SUPPORT

As not all product use options can be described herein, additional end use and specifying information is available as a complimentary service.

For further information please phone Customer Services 0800 303 606

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