

MEDITE[®] **EXTERIOR**

STORAGE, HANDLING and USER INSTRUCTIONS

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MEDITE EXTERIOR PACKS

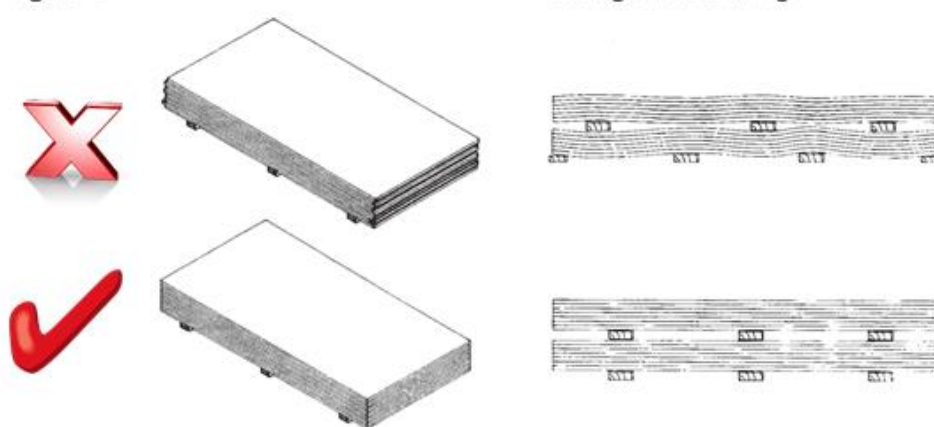
MEDITE EXTERIOR is strapped with binding tape into standard labeled packs supported underneath by bolsters. Each pack is covered with a plastic shroud to protect it from wetting. MEDITE EXTERIOR Usage Guidelines document is attached to the top board of every pack.

STORAGE AND HANDLING

The following procedures must be followed for the storage and handling of MEDITE EXTERIOR:

1. The storage area must be dry with adequate ventilation to prevent dampness. An average relative humidity of 65-70% should maintain board moisture content below 10%
2. Boards should be stored horizontally and elevated off the ground using dry bearers as supports
3. Storage on site should be a minimum of 100mm above concrete flooring and 300mm above ground
4. Individual bearers should be of equal thickness and have a minimum length equal to the width of the board
5. Board thickness of 15mm or higher should have a maximum bearer spacing of 800mm centers, subject to a minimum of three bearers
6. Board thickness of 12mm or lower should have a reduced bearer spacing
7. Ensure all bearers are vertically aligned
8. Care should be taken when stacking boards to ensure flush sides to minimise damage to protruding edges or over-hanging corners
9. One or two scrap boards can be placed on top of stacked panels to reduce the effect of short-term changes in environmental conditions
10. Incorrect storage and handling may cause boards to develop a permanent set under their own weight.

Figure 1:



Traceability: A pack consists of MEDITE EXTERIOR and MEDITE packaging. Each pack has two labels which identify panel dimensions, quantity, production order number and container number. A 5cm wide blue identifying stripe is marked on the long side of the pack. The label will indicate product, thickness and the production order number (P.O.). The production order number is used by MEDITE to trace any product and is needed for any queries, issues or warranty claims. The production order number is also needed if a customer intends to offer products with certified sustainable wood certifications. All relevant documents should be retained, and each pack tracked through any processes.

Information Transfer: This document should be communicated to any party that is using MEDITE EXTERIOR. Any further queries should be directed to MEDITE.

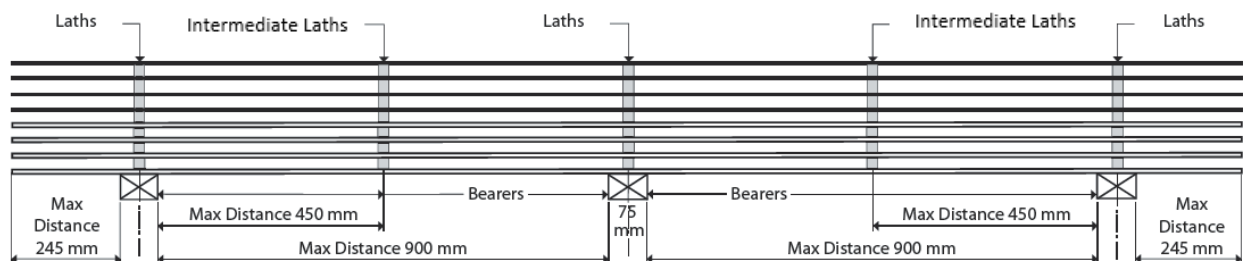
CONDITIONING

MEDITE EXTERIOR should be properly conditioned before use. The following procedures are recommended:

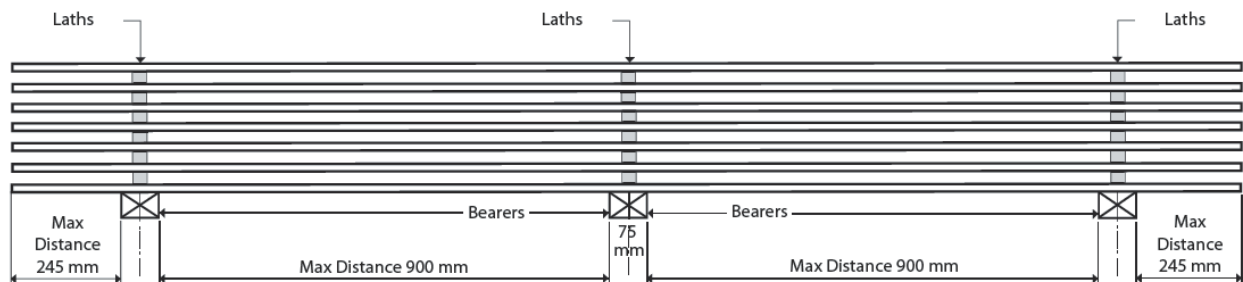
- 1) Remove strapping and plastic wrap from all units
- 2) Set out new bearers, ensuring that all are of equal thickness
- 3) The distance between the bearers is critical. Place the bearers at 800-900mm centers for boards of 15mm thickness and upwards with a bearer near each end (Figure 1). Closer spacing is recommended for thinner boards
- 4) A minimum of 2 – 3 days conditioning is recommended to allow MEDITE EXTERIOR to reach equilibrium moisture content with its surroundings
- 5) This can only be achieved if air can move freely over both surfaces to reduce the risk of the boards warping
- 6) This can be accomplished by “sticking” each panel while in a stack with suitable wood laths or spacers (Figure 2) or if only a few boards are involved, they can be individually leant in a near vertical position against a wall provided that they are well supported.
- 7) The conditioning area must be dry with adequate ventilation to prevent dampness. An average relative humidity of 65-70% should maintain board moisture content below 10%

Figure 2: Board Conditioning

Board Conditioning
6 mm To 12 mm



Board Conditioning
15 mm To 25 mm



USAGE

MEDITE EXTERIOR can be used in exterior or wet/damp interior applications. MEDITE EXTERIOR is used as a substitute for softwood, hardwood, plywood, plastic and metal in non-stressed applications. It can be used for a wide range of external applications including external signs, shop fronts and external woodwork including facades, exterior moldings, door parts - raised and fielded panels, garden furniture components, exterior display stands, marine craft interiors and sports score boards. MEDITE EXTERIOR is suitable for conditions in accordance with MDF.H (Option 2) as defined in EN 622 part 5. Boards of this type are suitable

for use in Hazard Classes 1, 2 and 3 environments of EN 335-3 provided an appropriate coating system is used.

APPEARANCE

MEDITE EXTERIOR is distinguishable from other MEDITE MDF products by its grey identification colour.

BOARD MOISTURE CONTENT

The moisture content of MEDITE EXTERIOR is in the range of 5-9% at the time of manufacture. Changes in dimensions of wood and wood-based sheet materials occur due to changes in relative humidity. Moisture measurement results of 10% or higher may indicate the presence of “free water”. Moisture content of the panel should be below 10% before processing and coating application. See conditioning guidelines to ensure correct moisture content.

PROCESSING

MEDITE EXTERIOR can easily be cut, routed and bored with conventional woodworking equipment. When cutting any wood-based panels, it is important to follow normal woodworking best practice. MEDITE recommend the use of Tungsten Carbide Tipped (TCT) tools. Diamond tipped tools may provide a superior finish.

Sawing: Saw blades developed for particleboards will cut MEDITE EXTERIOR with reasonable success. All types of MDF saw blades require higher clearance and increased tooth angles (Consult tool suppliers for further guidance).

Machining: To minimise sanding after machining, the cutter should produce at least 10 cutter marks per cm. This may need to be increased depending on required surface finish. Cutter marks per cm is a function of feed speed, the number of cutters and the RPM of the cutter (Consult tool suppliers for further guidance). It is recommended to sand the surface after machining.

Sanding: Carbide-based or modified “closed coat” abrasives are recommended for sanding.

Face Sanding: MEDITE EXTERIOR is shipped with a 120 or 150 grit finish depending on panel thickness. This provides a suitable surface for direct application of most veneers, plastic foils, HPL’s and painting. Further sanding may be required depending on required surface finish. Sanding to reduce thickness and heavy one-side sanding is not recommended.

Edge Sanding: Cut edges may require sanding with a 180-grit paper. Sanding will also help seal the edges of the panel.

Dust Extraction: Minimum air velocity of 23-30 m/sec is recommended for dust extraction. Appropriate PPE should be worn during sanding.

FASTENERS

MEDITE only recommend stainless steel fasteners with A2 or A4 (EN 10088-1) quality or AISI type 304 or 316.

The same practice for drilling timber and wood-based timber panels should be used when drilling MEDITE EXETRIOR. Pilot holes should be half the diameter and depth of the screw being used. This may need to be increased depending on screw type.

Screws should not be located too close to the corners or edges of the board. On the face of a board a screw should be at least 25mm from the edge. On the edge of the board a screw should be at least 75mm from corners. Small diameter stainless steel nails can be used provided the same practice for screws is followed. The nails should be spaced at least 150mm spacing to reduce the risk of core delamination.

When stainless steel is not available, metals and/or the MEDITE EXETRIOR should be coated or otherwise separated to avoid the two coming into direct contact. Indirect contact issues can occur in non-ventilated areas where condensation related corrosion is possible for example lock rebates (Consult fixing suppliers for further guidance).

Panels should be fitted with spacers and not fitted flush to any masonry, brickwork or timber frame. Expansion gaps must be fully filled with an elastic sealant at the time of fixing.

Fixing Distance: MEDITE EXETERIOR is a non-structural material. All forces should be directed to a structurally sound support. An allowance for a small degree of movement should be provided (see Technical Specification Sheet). Maximum recommended fixing distances in non-wind exposed areas are shown in table below. Professional advice should be sought when fixing MEDITE EXETRIOR in wind exposed areas.

RECOMMENDED FIXING CENTRES (non-wind exposed)	
Thickness (mm)	Maximum Distance (mm)
6 – 9	300
12	450
15	600
18	750

ADHESIVES

D4 class or equivalent adhesives must be used with MEDITE EXETRIOR. This is due to the applications that MEDITE EXETRIOR will be exposed to. PVA, PU, RPF, or EPI wood adhesive systems have been successfully used and are all available in D4 classification.

A small-scale trial should always be performed before full application to determine the adhesive performance (Consult adhesive suppliers for further guidance).

COATING

MEDITE EXETRIOR can be coated in the same way as timber or other wood-based products. Coating can be performed in a factory setting or by hand. A factory finish system is recommended to ensure the finish is applied in optimum conditions and to the correct specifications. MEDITE EXETERIOR Usage Guidelines must be followed during processing and coating application. MEDITE EXETERIOR must be fully coated to a high-quality standard for any exterior or damp interior application. All edges and machined surfaces must be effectively sealed to help prevent moisture ingress. Moisture content should be below 10% before processing and coating application. The edges and corners must be slightly rounded (3mm radius minimum) by light sanding or machining to improve paint retention in these areas. For coating guidelines and recommended coating systems – see download section for MEDITE EXETERIOR.

It is the customer's decision on what coating system to use on MEDITE EXETRIOR. MEDITE recommend that customers seek guidance from the coating manufacturer to ensure the product will perform appropriately with MEDITE EXETRIOR and proper application guidelines are established.

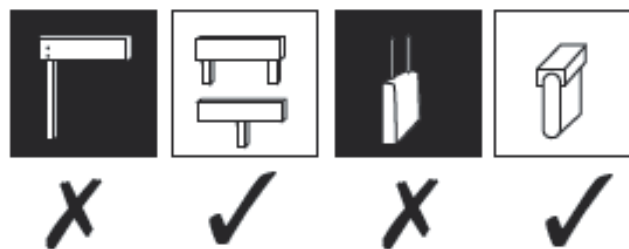
Maintenance: All coating systems will require regularly cleaning, maintenance and eventual recoating. Coating manufacturers will have detailed guidelines for the maintenance of their coating systems. General maintenance recommendations available in MEDITE EXTERIOR Usage Guidelines.

OUTDOOR USE

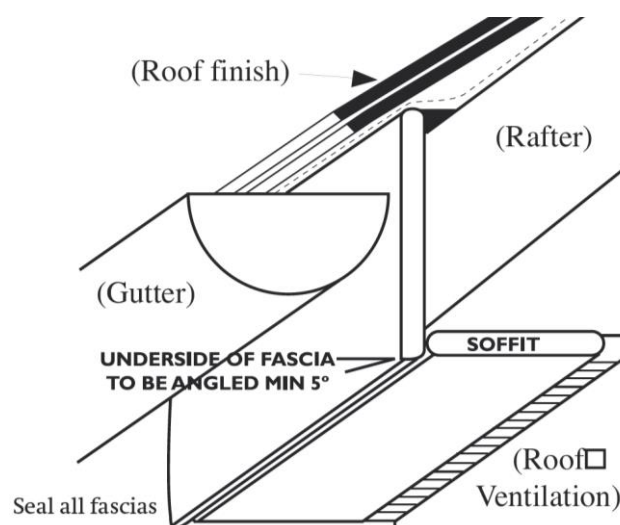
All timber and timber-based products are susceptible to weathering during exterior applications. Discolouration can occur around metal fasteners or through exposure to aggressive cleaning agents' and other substances. MEDITE EXTERIOR should not be placed in continuous contact with the ground, soil or water. It is recommended that MEDITE EXTERIOR be installed at least 100mm above ground level.

MOUNTING

MEDITE EXTERIOR should not be mounted directly to any wall, masonry, brickwork or timber frame. Signs and other applications, exceeding 1500mm in any direction should be mounted with oversized mounting holes / slots for fixings to accommodate expansion and contraction. These holes must be filled with a silicone, or other elastic sealant for long term protection. When mounting two or more panels together, either horizontally or vertically, it is important to apply a bead of caulking (e.g. silicone) so that on placing the two edges together, there is a squeeze out on the front and back surfaces. Allow the squeeze out to dry prior to trimming. Where caulking is not used, enough spacing must be provided between the panel edges, to allow maintenance of the coatings. As a rule of thumb allow an expansion gap of 5 mm/2440 length of board for ease of maintenance and any combined system expansion that may take place. Signs should not be mounted with cantilevered (one end only) attachments, or with fasteners which penetrate through the sign edge. Hanging signs should only be attached securely through the sign face using a clevis and pin arrangement, see image below.



When using MEDITE EXTERIOR in a fascia or soffit application best practice for design and construction must be followed, see image below.



MOULD

Mould and algal growths can occur on any timber or wood-based panels. Their presence is related to temperature, humidity, wetting and the presence of atmospheric mould spores.

Moulds and algal may grow on the surface of coated MEDITE EXTERIOR. Most mould can be easily removed with regular cleaning. Coating manufacturers will have set guidelines for cleaning and the removal of mould growth.

Customers should review the location of a site to determine if it would classify as high risk for biological growth and would necessitate a biocide additive in the paint formulation. Biocides help prevent the growth of mould and algae of the surface of painted timber.

WOOD WASTE AND END OF LIFE CONSIDERATION

MEDITE EXTERIOR waste can be handled in the same way as standard MDF. MEDITE EXETIOR is non- toxic and does not require any special disposal considerations.

Disclaimer: The information contained in this document is provided as guidance by MEDITE SMARTPLY. It is the responsibility of the customer and/or end-user of MEDITE EXTERIOR to ensure that the final use of the panel is checked by the proper authorities on conformity with local circumstances, building codes, regulations and standards and checked by a licensed engineer. As we continually update our technical literature, please check on www.mdfofb.com that you have the latest version.