MEDITE®
DEFINING THE STANDARD OF MDF

Medite Exterior

TECHNICAL RECOMMENDATIONS FOR SPECIFIERS AND END USERS

MEDITE®
SMARTPLY®
INNOVATIVE TIMBER PRODUCTS

CONTENTS

1. CARING FOR THE ENVIRONMENT

At Medite Europe we fully recognise our responsibilities towards the environment. In producing Medite Europe's Medite MDF products we use sustainable supplies of softwood from FSC certified managed forests. These include recovered wood residues and by-products from forestry and the saw-milling industry.

It is our policy to comply with all regulatory legislation and standards and to provide our employees with any environmental training necessary to achieve this aim. We promote the open exchange of environmental information with the community, customers and suppliers. We also accept responsibility for monitoring and reviewing company policies in the pursuit of a safer, cleaner environment for all.

Wood products bearing the FSC logo are guaranteed to come from managed forests. The "chain of custody" verification process audits the timber's journey from its forest of origin, right through the manufacturing process, to the final point of purchase.

Registration Certificate

TRADA TRAK

FSC Accredited

Certificate Number TT-COC-2097

19 May 2005	22 December 2006	18 May 2010
Date of Initial Registration	**Date of Issue**	**Date of Expiry**

This is to certify that

Medite Europe Ltd
Redmondstown
Clonmel
Co Tipperary
Ireland

meets the requirements for FSC Chain of Custody within the BM TRADA Certification Limited scheme for TRADA-Trak chain of custody

The scope of the approval in respect of processes and products which are eligible to carry the FSC logo are as shown in the Schedule

Signed on behalf of BM TRADA Certification Ltd
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For verification of this certificate please visit www.bmtrada.com.

1/14/1 issue September 2000. This certificate remains the property of BM TRADA Certification Ltd. to whom it must be returned on request.

The use of the accreditation mark indicates accreditation in respect of those activities covered by the accreditation certificate 012.

2. NOTABLE POINTS - LIMITATIONS OF USE

This Medite Exterior technical publication is dedicated to minimise the influences of moisture, stress and panel imbalance, and to assist with continued and improved performance of your fabrication from Medite Exterior.

Please note:

1. Medite Exterior is a moisture resistant MDF designed for use in exterior conditions (See Limitations of Use). For external use, Medite Exterior MDF must be fully coated in accordance with the recommendations in this document.

2. The recommendations for the correct use of Medite Exterior MDF are specifically designed to ensure both longevity and performance of this product in service. It is therefore essential that these recommendations are strictly followed. Medite Europe Ltd cannot be held responsible for damages arising from non-adherence to these recommendations, or misuse of this product.

3. The information and recommendations in respect of products and processes not manufactured or supplied by Medite Europe Ltd., included in this manual are given in good faith on the basis of current knowledge, with no expressed or implied warranty offered regarding their accuracy or sufficiency. As applications and conditions are outside our control, we make no guarantee in respect of the final performance of third party products.

4. As a vital part of Medite Europe's customer service programme, product specifications are periodically updated. Please contact your distributor or nearest Medite Europe sales office to receive current information on this product.

Limitations of Use

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 & 3 environments of EN 335-3, provided an appropriate coating system is used. To ensure durability, Medite Exterior must be sealed on all surfaces and edges with an exterior grade coating system. For further limitations of use please refer to Special Notes, page 17 of this booklet.

Service

Free copies of "Medite Exterior Technical recommendations for Specifiers and End Users" are available by request. For further specific information about Medite Exterior, or any other Medite products, please contact the Medite Europe Technical Support Personnel through any of the following offices:

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3. INTRODUCTION TO MEDITE EXTERIOR

Medite Exterior is a revolutionary product which was introduced to the European market in January 1989. Medite Exterior is manufactured from softwood chips, which have been refined under steam pressure into small, relatively uniform bundles of softwood fibre. This fibre is then coated with an exterior grade resin and formed into a mat which is hot pressed to near final thickness. The finished panel is then sanded to the desired thickness.

As applications and markets for Medite Exterior continue to increase, many specifiers and end-users have developed the skills and knowledge necessary to optimize the properties of this versatile product. This publication highlights the experience gained from markets and applications where Medite Exterior is being used today.

Medite Europe Ltd. technical department and sales representatives participate in assisting distributors and end-users gain sufficient confidence and knowledge necessary to market and use Medite Exterior successfully.

HOW EXTERIOR IS MEDITE EXTERIOR?
All wood and wood-based products react to moisture and Medite Exterior is no exception. Wood cells expand and shrink slightly in width and length as they absorb or lose moisture. This phenomenon is not fully reversible, as relieved stresses do not completely recover. Moisture changes in wood may arise from sustained changes in relative humidity, immersion or lodgement of water, any or all of which lead to absorption by capillary action. If the moisture change is not uniformly distributed in the wood, relatively strong stresses can develop which will affect the wood's physical properties. For example, these stress imbalances can twist construction lumber and warp panel products such as plywood and Medite Exterior.

The specially formulated polyurethane resin, together with the patented manufacturing process used in the production of Medite Exterior, increases the physical properties of MDF to create a premium composite panel for demanding conditions. Medite Exterior has undergone accelerated weathering tests as per British Standard 3900 F3.

D4 Classification
Medite Exterior meets the requirements of class D4, durability category, of BS 4965, making it suitable as a substrate for decorative laminating plastics and veneers in areas of frequent prolonged exposure to running or condensed water.

Medite Exterior, as with all wood products in external applications, must be coated on all surfaces and edges to control both moisture uptake and moisture loss. (Refer to page 13 Sealing & Painting of Medite Exterior)

4. RECOMMENDATIONS FOR STORING AND CONDITIONING MEDITE EXTERIOR

General recommendations

The method of manufacturing MDF ensures a balanced construction resulting from the uniform distribution of fibres throughout the panel thickness. The maintenance of this inherent flatness is dependent upon the use of correct storage and handling procedures. Without these, boards may develop a permanent set under their own weight, particularly if not adequately supported on a flat pallet or by insufficient bearers during any storage period.

The following procedures are recommended:

1. MDF sheets should be stored horizontally and lifted clear of the floor using dry bearers as supports.

2. Where individual bearers are used, they should be of equal thickness and placed at not more than 800mm centres for boards of 15mm thickness and upwards, subject to a minimum of three bearers. Closer spacing is required for thinner boards.

3. The bearers supporting successive layers should be in vertical alignment.

4. Stacks of boards should have flush sides to minimise damage to protruding edges or over-hanging corners.

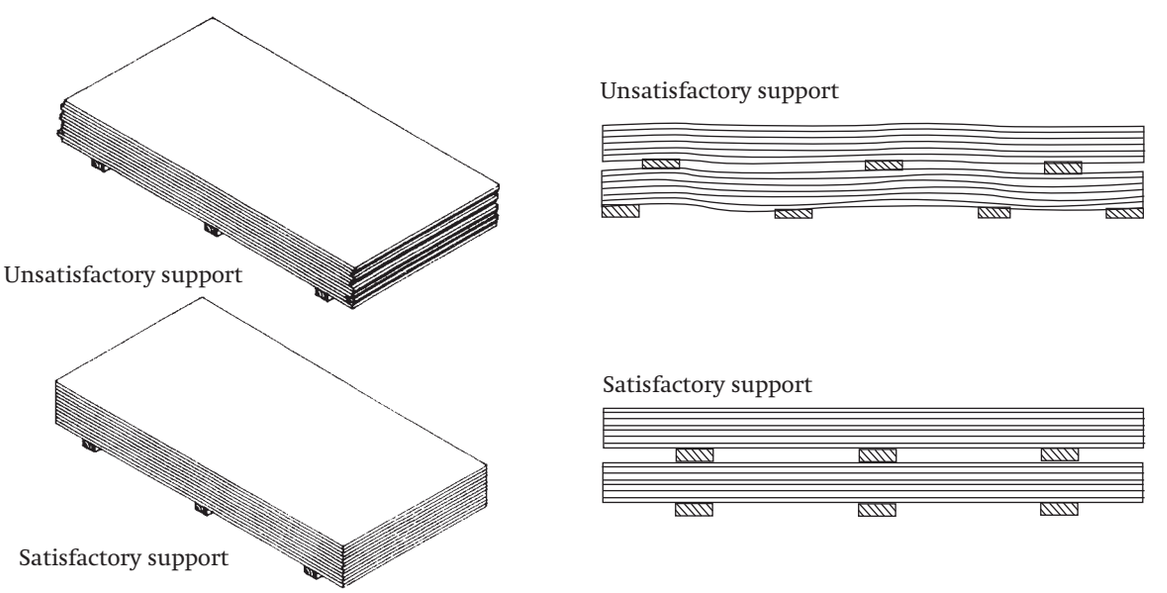
5. The storage area should be well ventilated and the conditions should be reasonably dry. An average relative humidity of 65-70% will maintain board moisture content in the range 8-10%.

6. If extreme damp or moist storage conditions are expected, stacked boards should be covered by plastic sheeting.

7. Boards should be fully protected from the weather during transportation.

8. One or two scrap boards should be placed on top of stacked boards and panels to reduce the effect of short term changes in environmental conditions.

Figure 1: Stacking & Supporting



Recommendations for the end user

The following procedures are recommended prior to use:

1. Remove strapping and plastic wrap from all units.

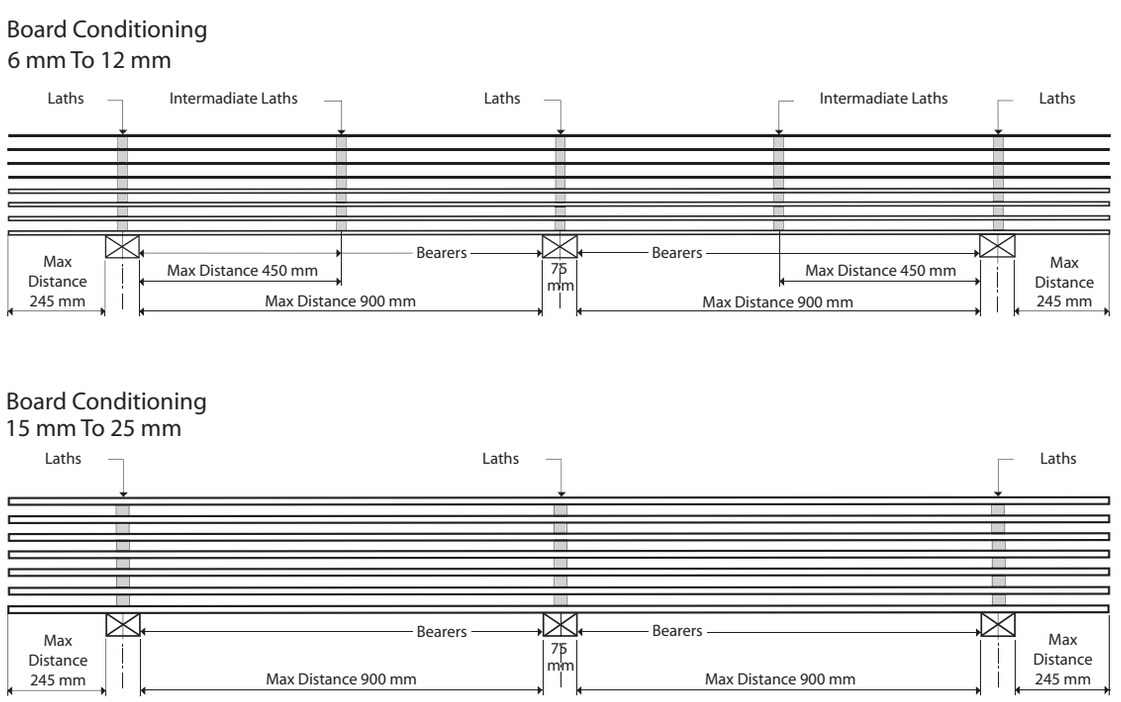
2. Set out NEW BEARERS, ensuring that all are of equal thickness. The distance between the bearers is critical. Place the bearers at 800-900mm centres for boards of 15mm thickness and upwards with a bearer near each end (Figure 1). Closer spacing is recommended for thinner boards.

   A minimum of 3-4 days conditioning is recommended to allow Medite Exterior to reach equilibrium moisture content with its surroundings but this can only be achieved if air is allowed to move freely over both surfaces to reduce the risk of the boards warping.

   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.

   The storage area should be well ventilated and the conditions should be reasonably dry. An average relative humidity of 65-70% will maintain board moisture content in the range 8-10%

Figure 2: Board Conditioning



5. GLUING & LAMINATING

Adhesives

Adhesives for Medite Exterior must compliment the exterior properties of the Medite product, e.g. they must also be of exterior quality.

1. Phenol/resorcinol adhesives are 2-pack water-based systems that are excellent all-round exterior thermosetting adhesives, which have a long storage life. They are expensive and are not suitable for gap filling applications and may cause staining at the glue line.

2. Epoxy resins are 2-pack crosslinking adhesives and although expensive, are useful for a large range of applications. They are not solvent or water based, and consequently do not shrink when cured and therefore have good gap filling properties. Epoxy resins can also be used for sealing and remedial work; e.g. filling holes or scratches. They can be obtained as fast or slow cold curing.

3. Polyurethane adhesives have excellent exterior properties and are single pack, solvent-free, moisture-curing glues that are easy to use for a wide range of applications. These adhesives are expensive and must be stored in sealed containers away from moisture.

4. Exterior PVA (polyvinyl acetate) adhesives are 2-pack water-based adhesives suitable for wood to wood gluing. They are inexpensive and easy to use and clean off after use.

5. Exterior grade contact cements are single pack solvent-based adhesives useful for gluing small items i.e. letters to signs.

6. Exterior grade formulations of phenol or resorcinol are recommended for laminating Medite Exterior to Medite Exterior particularly in full or matching-sized sheets. It is important that the two panels are of equal thickness and if laminating three panels together the two outer panels must be of equal thickness to maintain a balanced system.

Table 1 summarises adhesives and applications for Medite Exterior.

SUMMARY OF ADHESIVES AND APPLICATIONS FOR MEDITE EXTERIOR

Table 1

Adhesives	Laminating MDF to MDF	Wood Veneering	Plastic Laminate	Edge Lipping	Metal Laminate	Assembly Jointing	Comments
Phenol/Resorcinol	✔	✔		✔	✔	✔	Water-based 2-pack adhesive. Excellent all-round thermosetting glue.
Epoxide	✔		✔	✔	✔	✔	2-pack crosslinking adhesive with wide uses and good gap-filling properties.
Polyurethane	✔			✔	✔	✔	1-pack, moisture curing, easy to use adhesive for wide range of applications.
Exterior PVA	✔	✔		✔		✔	2-pack, water-based adhesive for wood to wood gluing.
Exterior contact	✔		✔	✔	✔	✔	1-pack solvent based adhesive useful for gluing small items.

Note:
- Laminating Medite Exterior to itself should be cold pressed.
- Wood veneering to Medite Exterior can be hot or cold pressed.
- Metal laminates should be cold pressed.

Laminating Medite Exterior

Medite Exterior is an excellent laminating substrate because of its flatness, adherence to close tolerances, dent resistance and lower glue usage due to its smooth surface.

Medite Exterior may be laminated to itself, provided that sheets are of the same thickness, or serve as the substrate for a wide variety of overlay materials. These materials include reflective sheeting, veneer, vinyl, polyester high pressure laminates, melamine papers, thinner metal films and a host of others depending upon the end product required.

Successful lamination begins with proper conditioning of both the Medite Exterior and the overlay. Medite Exterior should be allowed to fully equilibrate to its environment before use. A minimum of 4 days of conditioning is recommended for Medite Exterior to achieve this equilibrium. The user is recommended to check for potential moisture related imbalances during the conditioning sequence.

Laminating Medite Exterior to itself should be cold pressed, as MDF is a poor heat conductor and the boards may lose moisture and will need to be reconditioned.

Wood veneering to Medite Exterior can be hot or cold pressed while metal laminates should be cold pressed to avoid possible stresses in the finished product due to heat shrinkage.

Many applications for laminated products have unique requirements. If required, advice on the application of laminates should be sought from the manufacturers of these products.

6. CUTTING & MACHINING

Introduction

Medite Exterior can easily be cut, shaped, routed, moulded and bored with conventional wood working equipment and tools.

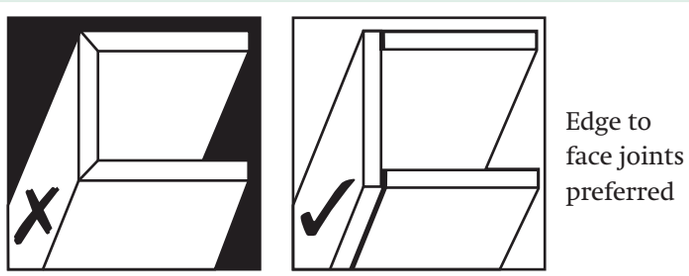
Tool wear rates on Medite Exterior are similar to wear rates on interior Medite and lower than wear rates on particleboard. In general, Medite Exterior is denser and slightly more abrasive than common hardwoods. As steel-tipped tools dull quickly, carbide-tipped tools are recommended for normal work on any scale. Diamond-tipped tools may be best for very high volume operations. The greater cost of these cutters is offset by less re-sharpening and more consistent cut edges.

Cutting

Saw blades used for particleboard are normally satisfactory. Compared to saw blades for solid wood, all types of MDF saw blades require higher clearance and increased tooth angles (Consult tool suppliers for further guidance).

External mitre joints on plinths are not recommended. This is due to the difficulties encountered when sealing and coating the apex of these joints and the complication encountered when allowing the recommended spacing for linear expansion. Edge to face type joints offer a similar aesthetic effect, with improved coating and edge protection. Please refer to figure 3.

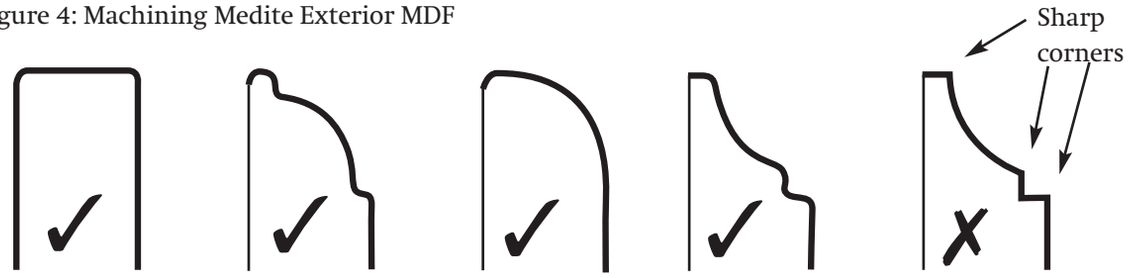
Figure 3: Preferred jointing system



Machining

One of the prime features of Medite Exterior is its clean edge and face machining characteristics. Contoured designs are almost unlimited. However, care must be taken in the selection of profiles, as the presence of sharp corners or narrow sections will alter the uniformity of paint coverage and reduce the resistance of profiled edges to impact damage (see figure 4).

Figure 4: Machining Medite Exterior MDF



When machining Medite Exterior, as with any MDF, cutter angles are important (see figure 5). A large hook angle is required to ensure clean cutting with minimum wear of the cutting tip. A large clearance angle prevents the back of the cutter from rubbing against the machined edges. The increase in both these angles is limited by the requirement to maintain adequate strength at the tool tip.

Cutters for all types of MDF are normally supplied with angles in the following ranges:

Cutting (hook) angle: (a)	10 to 20 degrees
Clearance angle: (b)	20 to 22 degrees

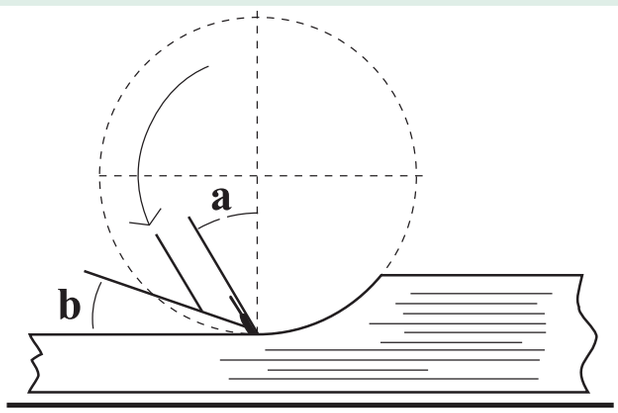


Figure 5: Cutter angles

To minimise sanding after machining, feed speed should be selected to produce at least 8 cutter marks per cm. This can be compared to 6 cutter marks per cm which would be acceptable in a typical solid wood machining operation. Achieving the recommended cutter marks per cm is a function of material feed speed, the number of cutters and the rotational speed of the cutting block. The optimal feed speed for each cutting block can be calculated as follows:

$$\text{Feed Speed (m/min)} = \frac{\text{RPM x No. of cutter edges}}{\text{100 x cutter marks / cm}}$$

At lower feed speeds, the cutters will compress and abrade the MDF. The resulting high pressure on the tips and increasing temperature due to frictional heat will reduce the life of the cutters between sharpening. At higher speed, a greater spacing between cutter marks will increase roughness, thereby necessitating more sanding to achieve the required level of smoothness before finishing.

Dust removal during machining

Efficient dust removal for all cutting and machining operations helps to prolong tool life, by reducing potential overheating of the cutting tool. A minimum air velocity of 23-30 m/sec is recommended for dust extraction.

7. SANDING

Carbide-based abrasives are generally recommended for sanding MDF. A modified “closed coat” abrasive is also recommended. This combines the smoother finishing properties of “closed coat” systems with resistance to fine dust clogging of “open coat” systems.

Face sanding

Medite Exterior is shipped with a 150 grit final factory finish. This provides an excellent smooth surface, ideally suited to the direct application of most veneers, plastic foils and painting. Scuff sanding, with the object of increasing adhesion may be detrimental to surface quality. Deep sanding of the faces of Medite Exterior with the object of reducing thickness is not recommended. Heavy one-side sanding should also be avoided to prevent warping.

Edge sanding

Cut edges may require sanding with a 150-240 grit paper. This sanding is useful for cleaning up “fibre nap”. Sanding before sealing can reduce the amount of sealer required, but “fibre raise”, or imperfections caused by incomplete dispersion of solids in the sealer, may call for a subsequent de-nibbing.

Dust extraction during sanding

During the sanding operation, Medite Exterior produces a very fine light dust, in common with all MDF material. As with all fine dusts, a common sense approach to safe working conditions must be adopted.

An efficient dust extraction system is essential during automatic sanding, both for performance and life of sanding belts and operative comfort. A minimum air velocity of 23-30 m/sec is recommended for dust extraction.

During hand sanding, the wearing of dust masks is recommended, to protect the operative from inhalation of fine particles.

Please contact Medite Europe sales office or technical support staff for further information.

8. SEALING AND PAINTING OF MEDITE EXTERIOR

Introduction

Medite Exterior, in common with natural woods, will maintain a moisture equilibrium with atmospheric relative humidity. In sustained high relative humidity conditions, moisture is absorbed and some swelling will occur. This tendency is regulated by correct sealing and painting to control moisture uptake.

Sealing and painting correctly maintains dimensional stability, minimises panel movement and moisture variations and provides the required decorative finish. It is strongly recommended that all finishing materials be obtained as a complete coating system from one supplier. Please note, before applying a new paint system to a large area, it is recommended to experiment with a sample of Medite Exterior. Follow the paint manufacturer's instructions and if in doubt, seek further information and advice.

Board preparation

Virtually all paints have a tendency to draw away from a sharp edge or corner and weathering will consequently cause cracks in the paint film at these points. Therefore, radius all corners and ease all edges to a rounded profile of at least 3mm by machining or light sanding to enhance paint retention.

Panel surfaces have a 150 grit factory finish and generally do not require any further sanding. Any dirt or grease marks should be removed with light sanding, using a 150 grit or finer paper.

Paints & Painting

Paint dries in stages. This drying process is necessary to achieve the quality you expect in your finished product. The first stage is "Tack free", which is the point where the paint film no longer feels sticky to the touch; however, a fingerprint pushed into the film will remain visible, even after the film completely dries out. The second stage is "dry to touch", at which point light handling will not result in fingerprinting of the film. "Dry to sand" or "dry to recoat" is the third stage and "dry-film cure" is the fourth and final stage of drying. It is of vital importance to differentiate between the last two stages. Even though a film appears dry enough to allow sanding and recoating (with the same paint), it is usually not ready to proceed further until the film has achieved dry film cure.

One fairly simple test to determine adequate paint dryness and adhesion is the "cross hatch" test. On a test sample, use a sharp knife (or Stanley blade) to cut four parallel lines, spaced approx. 1.5mm apart. Rotate the test sample one quarter turn and cut four more parallel lines also spaced approx. 1.5mm, across the first set of lines. Next put a piece of fairly sticky tape over the cut lines, press down well and remove tape with a quick pulling motion. Both adhesion and drying are complete if this does not result in removal of any of the little squares of paint. If any squares are removed, let the sample dry for a further day and try test again. If after the second test the squares are still being removed, check if the primer is loose from the sealer or the top coat is loose from the priming coat.
Allow each coat to dry thoroughly. Too heavy a coat or premature re-coating may result in bubbling, cracking, peeling or poor adhesion between coats etc. Painting on Medite Exterior generally requires longer drying time due to its smoother engineered dense surface and the slower penetration of the solvents into the Medite Exterior panel. Adequate time must be allowed for the panel to "breathe out" the excess solvent. A thin coating will dry much faster than a thick coating. Therefore, adequate time must be allowed for each paint coat to cure.

Sealing

The edges of Medite Exterior are more porous than the panel surfaces and can be likened to end grain on a piece of solid wood. Absorption is greater as a result, and care must be taken to ensure adequate sealing in these areas.

All edges, machined, carved or sandblasted areas must be sealed and sanded before application of primer and top coats. Most primers do not provide adequate sealing. For a more effective, longer lasting and durable sealant, it is advisable that one of the following be used as a basecoat, whenever the core of the Medite Exterior is exposed:

1. An epoxy coating or other suitable adhesive.

2. Unthinned exterior wood varnish with a minimum solids content of 48 %.

Low-solids sealers, or penetrating sealers for decks or masonry, are not recommended. Edge sealing is critical. Medite Europe recommends the sealing of all edges and machined areas first, in addition to the paint manufacturer's exterior coating systems. It is important that sealing and coating systems are compatible. Refer to paint manufacturers for details.

Priming

A good quality priming coat will improve the durability and weather resistance of the finished product. It will also improve the coverage and quality of topcoats which must be applied later. Priming coats are not designed to provide extended protection against exterior weathering conditions. Therefore primed Medite Exterior must be top coated before exposure to exterior weather conditions,

A light sanding is necessary after sealing to eliminate raised fibres. Wood, wood products and many paints are susceptible to degradation from fungal growth and ultraviolet radiation.

Dry film thickness (build) is critical to performance of a paint coating. Simply applying enough paint to hide the colour of the substrate is not adequate. The primer should be applied to achieve a minimum of 50 microns dry film thickness.

Automotive type lacquer primers are not recommended for use on Medite Exterior.

Top Coating

Properly primed Medite Exterior may be top coated with most high quality, exterior coatings for wood products. The top coat should be applied to all surfaces and eased edges, attaining a final dry film thickness of minimum 50 microns. Again it is recommended that the paint must be applied in several thin coats, rather than a single heavy application. Each coat must be allowed to dry thoroughly before application of the next coat.

9. FIXING RECOMMENDATIONS

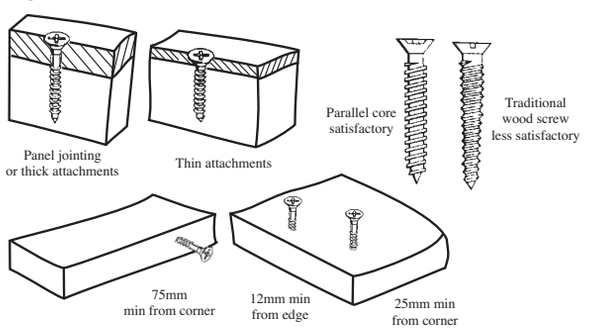
Screws & Fasteners

Use corrosion resistant screws and fasteners as appropriate. Screws should be of parallel core type. Pilot holes are required to 85-95% of screw root diameter, unless self piloting screw types are used. Pilot holes are of particular importance when screwing into board edges and should be drilled a minimum of 1 mm beyond the depth of the screw into the board.

Elastic type fillers that are not water-based are recommended for the filling of countersunk fixings. A number have been shown to work particularly well with Medite Exterior. Panels should be fitted with spacers and not fitted flush to any masonry or brickwork. Expansion gaps MUST be fully filled with an elastic sealant (suitable mastics or silicone) at the time of fixing.

Screws should not be located too closely to the corners of panels. In general, a screw driven through the face of a board should be at least 25mm from corners and at least 75mm from corners on the edges (please refer to figure 6). Where other methods of fixing are not practicable, small diameter nails can be used successfully provided they are not closer than 70mm to a corner when inserted into board edges. They should be spaced at least 150mm apart to reduce the risk of core delamination. Improved holding power in the edges can be achieved by using ring shank nails and inserting them at a small angle to the perpendicular.

Figure 6: FIXING RECOMMENDATIONS



Fixing Centres

Medite Exterior is a non-structural panel and therefore the distances between the supports can be crucial to its ultimate performance. It is essential that in the design, an allowance for a small degree of movement of up to 5mm per 2440mm length be provided. Maximum recommended spans between fixing centres are shown in table 2:

TABLE 2 - RECOMMENDED FIXING CENTRES

Thickness		Recommended fixing centres
6 - 9 mm	-	300 mm
12 mm	-	450 mm
15 mm	-	600 mm
18 mm & over	-	750 - 1000 mm

Mounting

Medite Exterior should not be mounted flush to any wall. There should be a minimum of 6mm spacing with furring strips or galvanised washers.

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.

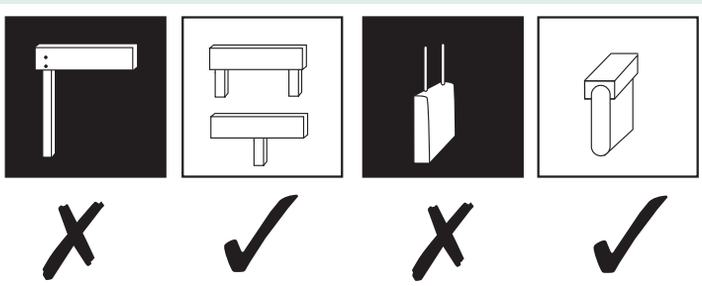
Where caulking is not used, sufficient spacing must be provided between the panel edges, to allow maintenance of the coatings.

When fastening large panels to supporting framework, fix the centre first and work outwards, or work from one end to the other.

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 (figure 7).

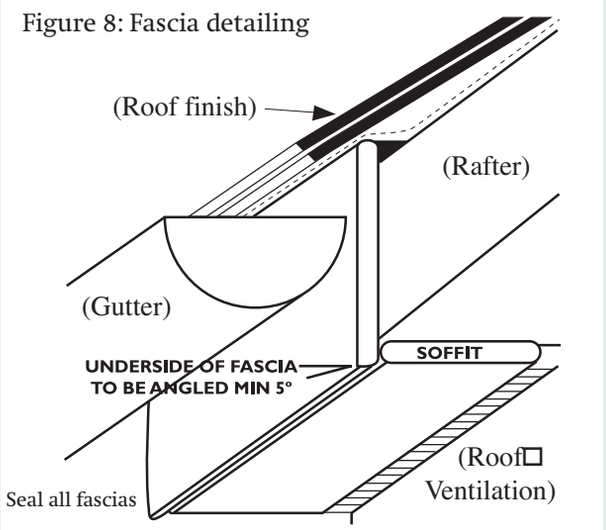
Medite Exterior should not be placed in continuous contact with the ground, soil or water. It is recommended that Medite Exterior MDF be installed at least 100mm above ground level.

Figure 7: Mounting



When using Medite Exterior in a fascia or soffit application, the details as shown in figure 8 must be adhered to.

Figure 8: Fascia detailing



10. SPECIAL NOTES

1. It is important that boards are allowed to condition before use. See p.6 for further details.

2. All uncoated edges and surfaces of prefabricated components must be fully coated prior to assembly or exposure to weathering.

3. To aid with edge sealing, all edges must be rounded to a minimum 3mm radius.

4. Solvent-based sealers are particularly recommended for initial coating of the board. However, if a water-based primer is used, it should be force dryed to maintain the smooth quality of the board surface, before applying the subsequent coats.

5. Certain transparent or clear stains / topcoats are not recommended due to their potential for degradation by ultraviolet light. Exterior coatings with UV inhibitors are available and must be used. Paint manufacturers should be consulted as to suitability.

6. Design of assembly must be such that any lodging of water on any area or section is avoided.

7. Sealing and painting of one side only is not recommended as the unpainted side of the panel will be unbalanced by the painted side. This will allow direct access by moisture into the unpainted side of the panel creating conditions for warp, expansion and buckling of the panels 'in situ'.

8. All fasteners must be corrosion resistant.

9. Mitre joints are not recommended due to the difficulty in coating sharp edges. Edge to face type joints offer a similar aesthetic effect, with improved coating and edge protection.

10. It is strongly recommended that a coating maintenance programme be adopted. Refer to coating manufacturers' recommendations.

Fire

Medite Exterior is expected to achieve Euroclass D classification in accordance with the new European Standard EN 13501-1.

Authority

Medite Exterior is manufactured under an NSAI registered I.E. EN ISO 9001 quality management system and CE marked. For more information about our CE mark, see page 3 in the Medite product brochure.

APPENDIX 1

European Standard EN1087-1 1995

The European Standard EN1087-1 1995 Modified procedure specifies a test for evaluating the moisture resistance of wood based panels, intended for use in humid conditions according to option 2 in tables 3 and 5 of EN 622-5.

The principle of this test is that of tensile strength, perpendicular to the plane of the board (Internal Bond) determined using test pieces, which have been immersed in boiling water.

The test method is as follows:

1. Test pieces are placed in a water bath, ensuring that they are separated from each other and from the sides and bottom of the water bath by the least 15 mm.

2. The specimens are covered with water, which is then heated to boiling (100°C) over a period of 90+/-10 mins.

3. After 120+/-5 mins in boiling water the test pieces are removed and immersed in water at 20+/- 5°C for 60+/-5 mins.

4. Following step 3, the pieces are removed from the water, dried with a paper towel and placed, with their faces horizontal, in a drying oven at 70+/-2°C for 960+/- 15 min.

5. Finally, the test pieces are removed from the oven, allowed to cool to approximately room temperature and bonded to internal bond loading blocks. The internal bond (EN319) of the samples is then determined, and results must be equal to, or in excess of, the minimum requirements.

APPENDIX 2

BS EN 3900 Part F3 Resistance to artificial weathering

BS 3900 Part F3 describes a procedure for determining the resistance of coated films and coat film systems to artificial weathering. A substrate is coated with various coatings and exposed to weathering cycles. The artificial weathering has been designed to mimic the natural weathering conditions in the U.K. There can be no direct precise relationship between the test and natural weathering conditions.

As a good general guide, 12 weeks of continuous exposure in the artificial system will expose film failure. Such failure is equal to three to four years of exposure to natural weathering in the UK. It will also expose failure of the substrate in the same manner.

Medite Europe has tested Exterior boards with various coatings in these conditions and compared Exterior's performance with other substrates. It has also tested uncoated Medite Exterior boards versus other uncoated substrates.

All results indicate positive performance.