MEDITE® SMARTPLY®
INNOVATIVE TIMBER PRODUCTS





EXTREME

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MEDITE TRICOYA EXTREME (MTX) is a high-performance wood-based panel, exhibiting outstanding durability and dimensional stability which allows it to be used in applications once limited to products such as concrete, plastics or metals.

The combination of acetylated wood fibre with the manufacturing technology of MEDITE makes this specially engineered panel suitable for applications in which traditional wood-based panels cannot be used.

Combining the excellent machinability of MEDITE products with a guarantee of up to 50 years above ground and 25 years in ground, this ground-breaking panel provides architects, specifiers and designers with an entirely new construction material, allowing great design flexibility and endless opportunities for creativity.

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FEATURES & BENEFITS



DURABLE

Longer lasting, perfect for external and internal wet environments



50 YEAR GUARANTEE

Peace of mind with a 25 year in-ground and 50 year above ground guarantee



ENHANCED STABILITY

Swelling and shrinking dramatically reduced



DESIGN FREEDOM

All the design, fixing and machining flexibility of MDF



LOWER MAINTENANCE COSTS

Extended periods between exterior coatings maintenance



PERFECT FOR COATING

Improved stability and durability enhances service life of the coating. Damaged coating will not affect the core



SUSTAINABLY SOURCED

FSC® certified. Wood used from sustainable sources



RESISTANT TO FUNGAL DECAY

Effective barrier to fungal decay*



DESIRED SERVICE LIFE OF 60 YEARS

Independent testing by BRE shows an expected service life of 60 years for exterior use

SUITABILITY

MEDITE TRICOYA EXTREME is suitable for a wide range of applications due to its properties. It can be used internally for kitchen and bathroom furniture, window glazing, and in high-demand conditions exposed to constant running water. In external conditions, MTX is used for doors, signage, shopfronts, garden furniture and planters, external cladding and facades, external kitchens and more. Due to the panel's dimensional stability and durability, it can be used for a wide range of projects in different applications, internally or externally. Its diverse use cases make it perfect for both small one-off projects and large detailed constructions.

With a 50-year guarantee in above ground applications, and a 25-year below ground guarantee, MEDITE TRICOYA EXTREME ensures the projects it's used in will stay looking good for the foreseeable future. MTX gives the design freedom of internal use MDF while often exceeding the longevity of other construction materials.

SIZES

MEDITE TRICOYA EXTREME is produced in the following standard panel sizes.

Other sizes and thicknesses are available on request, subject to minimum order quantities.

Dimensions	Thickness
1220 x 2440mm	4, 6, 9, 12, 15, 18mm
1220 x 3050mm	12, 15, 18mm

*Surface mould, algae or moss growth may still arise, however will not affect performance of the board.

EXTREME
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SPECIFICATION AND PERFORMANCE

MEDITE TRICOYA EXTREME is manufactured in accordance with the requirements of EN 13986 and EN 622-1 and complies with the requirements of the grade MDF-H (Option 2) of EN 622-5. It is suitable for applications in exterior, humid environments with ground contact as defined by Use Class 4 of EN 335.

MEDITE TRICOYA EXTREME is light brown in colour and is supplied pre sanded as standard.

In accordance with EN13986, the reaction to fire performance of MEDITE TRICOYA EXTREME with a minimum thickness of 9mm is a Euroclass E.

TRANSPORT, STORAGE AND HANDLING

Correct storage and handling are important for all wood-based panels, as it ensures the quality of the panels we supply is maintained, and that they will perform to the expected standard.

Panels should be stacked flat on a level surface with all four edges flush, sufficiently clear of the ground to avoid any potential splashing from water. Moisture resistant panels can tolerate high humidity conditions but direct contact with water should be avoided to prevent aesthetic surface damage.

When stacked on battens, they should be of equal thickness at maximum 600mm centres, and the overhang at ends and edges should not exceed 150mm. Where thin panels (6mm or less) are being stacked, it is recommended that they are supported under their whole area by a thicker panel (≥ 18mm).

Stacking panels on their edges should be avoided. Where space will only permit stacking on edge, then the edges should not come into direct contact with the ground or floor to avoid any possible moisture pick-up or damage to the edges.

Failure to follow written storage guidelines may result in reduced panel quality and could render the product unusable due to permanent warping or bending.

During transport the panels should be protected from any water or structural damage. When lifting, moving and stacking panels, edge protection should be provided to avoid damage by lifting ropes and/or forklift tines.

When handling pre-finished panels, it is essential to avoid damage or dirt on the finished surfaces. Pre-finished panels should be lifted from the stack and not slid. Incorrect handling of wood-based panels can result in either damage to the panels or injury to the operative, and it is therefore important that correct handling techniques are employed.



EXTREME
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MOISTURE CONTENT AND CONDITIONING

MEDITE TRICOYA EXTREME is manufactured with a moisture content of less than 5%, and the panels are produced to close dimensional tolerances. It is therefore important to condition the panels so that the moisture content of the panel is as close as possible to its final in-service moisture content at the time of installation to avoid any complications after installation. The moisture content of MTX should be below 10% before processing and coating applications.

MEDITE TRICOYA EXTREME panels should be conditioned to the final environment for two to three days before cutting, finishing and fixing. Panels can be conditioned by stacking with spacers to improve air circulation. While MTX is moisture stable, it is not waterproof. This means it will still absorb small amounts of water due to the manufacturing process it goes through, but this will not negatively impact board properties. It is still of vital importance to make sure the panel is adequately conditioned to its final service environment before installation. The moisture resistance of wood-based panels varies with product type, according to the specification, and the use of a product in the wrong Service Class or Use Class could lead to poor performance or premature failure.

Failure to allow panels to sufficiently condition can result in performance issues, such as warping or bowing.

CUTTING AND MACHINING

MEDITE TRICOYA EXTREME may be cut, machined and used in the same way as other wood-based panels; there is no change in machinability. It is important to follow standard woodworking best practice (sharp cutters, adequate support for saws and cutters, dust extraction etc.), as this will help ensure that a high-quality result is achieved safely.

High moisture content in a panel will affect the quality of the cut and should therefore be avoided wherever possible. Panels should also be cut to size after conditioning when a close cut is required, making sure the moisture content when machining the panel is as close as possible to its final in-service moisture content.

MEDITE products are pre-sanded, providing a smooth surface that is ready to be painted or laminated. However, if applying very thin surface foils, a further light sanding with 200 grit abrasive may be advisable. Excessive sanding of the faces should be avoided, as this can cause an imbalance on the surface which can lead to warping.



EXTREME
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LAMINATING AND COATING

MEDITE TRICOYA EXTREME is a suitable substrate for paints, stains, varnishes and textured coatings, and can be veneered and laminated with high- and low-pressure laminates, paper and PVC foils. MTX can be decorated with conventional paints, coatings and stains, taking care that the appropriate primers are used. Some exterior varnishes with UV absorbers are available, which will preserve the colour and quality of the coating when used externally. Paint manufacturers should be consulted as to suitability.

There are a variety of paint and coating systems suitable for use on MTX panels; please see our website or contact us for more information. Always follow paint manufacturer's guidelines when coating MEDITE TRICOYA EXTREME panels to ensure the highest quality is achieved. It is recommended that corners and edges are rounded to a minimum radius of 3mm, by machining or light sanding, to enhance paint retention and ensure a continuous film thickness as all paints tend to draw away from a sharp edge or corner. This is particularly important with panels exposed to exterior conditions. The edges of MTX panels are more porous than the panel surfaces, and as a result, absorption at the edges is greater than on the face and care must be taken to ensure that edges are adequately sealed using an end grain sealer compatible with the coating system. It is advisable to avoid using paints or coatings that contain calcium carbonate, as this can react poorly with MEDITE TRICOYA EXTREME, causing blistering on the surface. Please consult your coating supplier for guidance.

MEDITE TRICOYA EXTREME does not need to be coated to maintain its durability and dimensional stability, and the performance of the product will remain unaffected. However, MEDITE TRICOYA EXTREME is susceptible to weathering when exposed to outdoor conditions. Its surface will be affected by UV light, meaning it will begin to grey when exposed to the sun for long periods of time. Under certain conditions, the surface of the panel will be affected by mould, algae, or moss growth. This will not affect the performance of the panel, however, and the exposed surface can be treated with a fungicide to remove any extra growth on the surface. Best practice should be followed in these circumstances, contact MEDITE SMARTPLY for further information.

Wood veneers, plastic laminates, paper, and foils can be applied on MEDITE panels. MTX is delivered with a 120-grit sanded finish; it may be sanded with finer papers to achieve smoother surfaces. The appropriate adhesive should be selected for the manufacturing process and end use application of the finished product. In most applications the use of a balancing laminate or veneer is required to avoid panel deformation.

MEDITE TRICOYA EXTREME meets the requirements of class D4, durability category, of BS 4965, making it suitable as a substrate for decorative laminated plastics and veneers in areas of frequent and prolonged exposure to running or condensed water. When applying laminates to a substrate for use in external environments, it's important to consider the service class of the laminate and class of adhesives used, ensuring they are suitable for exterior grade applications. MEDITE TRICOYA EXTREME is dimensionally stable, and it will stay the same when exposed to various weather conditions, whereby the attached laminate may not have the same stability, potentially causing delamination. Failure to ensure the laminates and adhesives are suitable for the application will compromise the quality of the substrate and reduce its service life.



EXTREME
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FIXING AND GLUING

MEDITE TRICOYA EXTREME panels can be fixed using standard woodworking fixings (nails, screws or staples), adhesives, or a combination of fixings and adhesives (e.g. wood dowels). However, due to the excess acetic acid present in the panels, the metal fixings used must be corrosion resistant, ideally made from stainless steel. They must be A2 or A4 (EN 10088-1) quality or AISI type 304 or 316, and A4 quality fixings should be used in challenging environments and high exposure level applications. When stainless steel, corrosion resistant aluminium or naval brass is not available it is important to take precautions using lesser grade metals. The metal and/or the MTX should be coated or otherwise separated to avoid direct contact.

When using screws, it is recommended to predrill the panel to a diameter at least 85% of the screws core diameter. When inserted on the surface the fixings should be at least 12mm from the panel edge and 25mm from the panel corner. When inserted into the edge the fixing should be at least 70 mm from the panel corner. Nails and staples have lower holding capacity than screws and are usually used to hold glued joints during the setting time.

Adhesives can be used to fix panels in position, glue surface finished to the panels, or join panels or other wood-based products together. MEDITE TRICOYA EXTREME can be bonded with polyurethane (PU), emulsion poly isocyanate (EPI), epoxy and phenol resorcinol formaldehyde (PRF) wood glue systems. It is recommended to test the compatibility of an adhesive to determine finish quality and performance, and to use the most suitable adhesive for your application. Attributes to consider include glue strength, moisture and durability performance, curing times, compatibility with other materials, where required, and ease of use. As MTX is ideal for external applications, D4 class adhesives should be used as these will be the best fit for these purposes. Best practice and product guidelines provided by the adhesive supplier should be followed. See our MTX Product Guide for more information, available for download on our website.

TECHNICAL SPECIFICATION SHEET

Property	Standard	Unit	4.0mm	6.0mm	9.0mm	12.0mm	15.0mm	18.0mm
Internal Bond	EN 319	N/mm²	≥ 0.80	≥ 0.80	≥ 0.80	≥ 0.80	≥ 0.80	≥ 0.80
Modulus of Rupture	EN 310	N/mm²	≥ 30.0	≥ 30.0	≥ 30.0	≥ 25.0	≥ 20.0	≥ 20.0
Modulus of Elasticity	EN 310	N/mm²	≥ 3000	≥ 3000	≥ 3000	≥ 2500	≥ 2500	≥ 2500
Screw Holding Face	EN 320	N	-	-	-	-	900	900
Screw Holding Edge	EN 320	N	-	-	-	-	700	700
Thickness Tolerance	EN 324-1	mm	±0.15	±0.15	±0.15	±0.15	±0.15	±0.15
Thickness Swelling (24 hrs)	EN 317	%	< 2.5	< 2.5	< 2.0	< 2.0	< 1.5	< 1.5
Dimensional Movement								
Length/Width	EN 318	%	0.10	0.10	0.10	0.10	0.10	0.10
Thickness	EN 318	%	1.00	1.00	1.00	1.00	1.00	1.00
After Boil Test - EN1087-1								
Internal Bond	EN 319	N/mm²	0.65	0.65	0.65	0.65	0.65	0.65

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QUALITY & ENVIRONMENTAL CERTIFICATION

All MEDITE products supplied for use in the construction and civil engineering industries are CE marked according to the requirements of the harmonised European standard for wood-based panels EN 13986 - Wood-based panels for use in construction – characteristics, evaluation of conformity and marking. This provides the necessary assurance to customers and users that MEDITE conforms with the European MDF standard, EN 622-5 and meets all the essential requirements for the Construction Products Directive that are relevant to the product.

MEDITE operates under an Integrated Management System (IMS) for Quality (ISO 9001), environment (ISO 14001), Health and Safety (ISO 45001) and Energy (ISO 50001), which is certified by the National Standard Authority of Ireland (NSAI).

All MEDITE products are manufactured from Forest Stewardship Council® (FSC) certified timber, and other controlled sources.

MEDITE operates under an Industrial Emissions (IED) licence, which is monitored by the Environmental Protection Agency (EPA) in Ireland.



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FORMALDEHYDE EMISSIONS – EU REACH AND CARB

An EU REACH (Registration, Evaluation, Authorisation and Restriction of Chemicals) revision (effective 06/08/2026) imposes new formaldehyde emission limits in Europe on all formaldehyde emitting products, including wood-based panels. This restriction is introduced under EU REACH Annex XVII (Formaldehyde Restriction). The limit of the harmonised standard for wood-based panels EN13986, known as E1, is 0.124 mg/m^3 and the new EU REACH restriction lower this threshold to 0.062mg/m^3 for wood-based panels, introducing the industry classification E05.

MEDITE TRICOYA EXTREME panels are manufactured with no added formaldehyde and therefore meet the lower EU REACH requirements (E05).

In accordance with the provisions of Third-Party Certification required within the Final Regulations Order of the Airborne Toxic Control Measure (ATCM) by the California Air Resources Board (CARB) all MEDITE products are CARB Phase 2 Compliant. The approved Third-Party Certifier (TPC) Entwicklungs-und Pruflabor Holztechnologie GmbH (EPH – TPC No W-08-010) is contracted by MEDITE to perform the quarterly assessment of the factory production control and to have the stipulated formaldehyde tests carried out by the accredited EPH test laboratory.



Chelsea Flower Show © Ollie Dixon



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For further information and/or technical advice please contact our dedicated customer service team.

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The recommendations provided in this technical datasheet for the correct use of **MEDITE TRICOYA EXTREME** are specifically designed to ensure longevity and performance of this quality product in service. It is therefore essential that these recommendations are strictly followed.

The product is designed to be installed by a competent contractor, experienced with this type of product. MEDITE EUROPE DAC cannot be held responsible for damages arising from nonadherence to these recommendations, or product failures resulting from inadequate structural design or misuse of this product.

In order to provide comprehensive guidance for the correct use of **MEDITE TRICOYA EXTREME**, this technical datasheet makes reference to relevant BS and EN standards. MEDITE EUROPE DAC cannot be held responsible for claims arising from the use of any information that has been extracted from such sources.