MEDITE® SMARTPLY®
INNOVATIVE TIMBER PRODUCTS



MEDITE® VENT

MEDITE VENT is a high-performance breathable sheathing panel with structural properties, suitable for use in all types of timber frame structures.

Developed at MEDITE's world-class MDF facility in Clonmel, MEDITE VENT expands the MEDITE family of high-performance MDF products

AT A GLANCE > MEDITE VENT:

- BREATHABLE PANEL
- NO ADDED FORMALDEHYDE
- USED IN LOW ENERGY BUILDINGS
- CE MARKED
- EU REACH COMPLIANT
- FSC® CERTIFIED

www.mdfosb.com

MEDITE®
DEFINING THE STANDARD OF MDF

DATASHEET

MEDITE® VENT

FEATURES & BENEFITS

- Integral component in Passive House Institute (PHI) Certified MEDITE SMARTPLY AIRTIGHT building systems, also incorporating SMARTPLY AIRTIGHT OSB
- Breathable sheathing panel suited to 'water vapour diffusion open' wall designs
- Very low water vapour diffusion factor to prevent condensation (Tested by Fraunhofer Institute for Building Physics)
- High performance – in excess of Category 1 racking strength
- CE 2+ Marked in accordance with EN 13986 for structural applications
- Suited for use in timber frame and diffusion open systems
- No added formaldehyde contributing to healthy environments
- EU REACH and CARB 2 compliant
- Manufactured using FSC® certified timber

SUITABILITY

MEDITE VENT differs from a traditional MDF panel with its structural and breathable properties, developed specifically for sheathing in timber frame wall buildups. Combining high vapour permeability with high racking strength that exceeds Category 1 requirements, MEDITE VENT is the perfect choice for the outer sheathing layer in 'diffusion open' breathable timber frame walls.

Classified as a structural sheathing panel suitable for use in humid conditions, MEDITE VENT can be used as part of a Passive House wall system with SMARTPLY AIRTIGHT, a certified airtight OSB/3 panel with an integrated AVCL layer.

SPECIFICATION AND PERFORMANCE

MEDITE VENT is manufactured in accordance with the requirements of EN 13986 and EN 622-1. MEDITE VENT is a structural sheathing panel which is suitable for use in humid conditions as defined by Service Class 2 to Eurocode 5 (EN 1995-1-1). It is suitable for use in Use classes 1 and 2 of EN 335.

MEDITE VENT is light brown in colour and a CE marking to EN13986 is placed on the surface for clear identification of the panel.

SIZE

MEDITE VENT is produced in the following standard panel size.

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

Dimensions	Thickness
1197 x 2397mm	12mm

MEDITE VENT

MOISTURE CONTENT AND CONDITIONING

The moisture content of MEDITE VENT is typically in the range of 5-9% at the time of manufacture, and the panels are produced to close dimensional tolerances. As with all wood-based materials, changes in panel moisture content from the surrounding environment will result in changes to the dimensions of the panel (length, width and thickness). 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, as this will mostly avoid any in-service distortion problems.

MEDITE VENT 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. 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.

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.

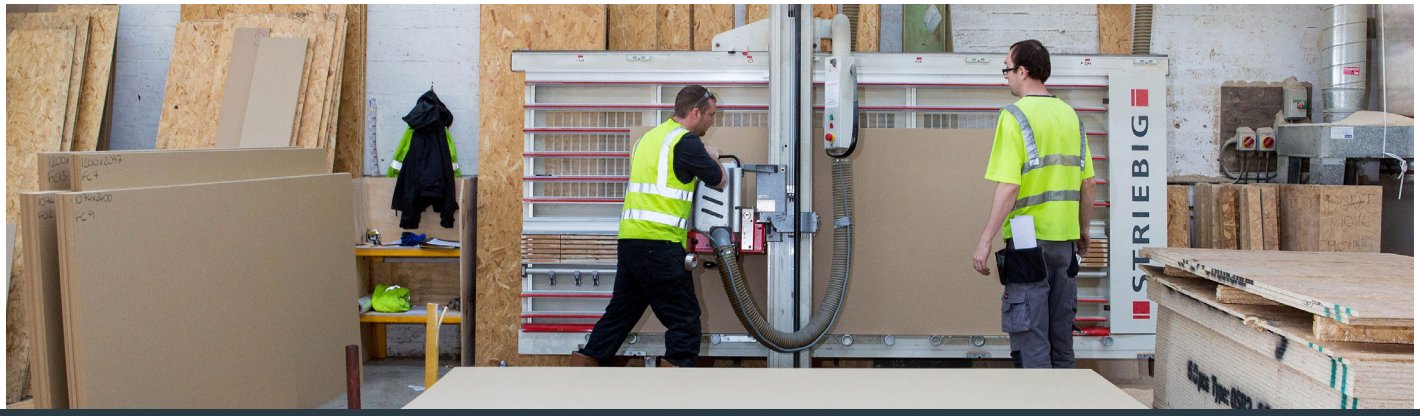
Panels should be stacked flat on a level surface with all four edges flush, sufficiently clear of the ground to avoid any potential splashing from water. Moisture resistant panels can tolerate high humidity conditions but direct contact with water should be avoided to prevent aesthetic surface damage.

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.

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.



MEDITE VENT

INSTALLATION

When installing MEDITE VENT panels, a 3mm expansion gap should be left around the edges of the panel to accommodate any movement resulting from changes in humidity. It is essential that the gaps are kept free from plaster, mortar and other debris during construction.

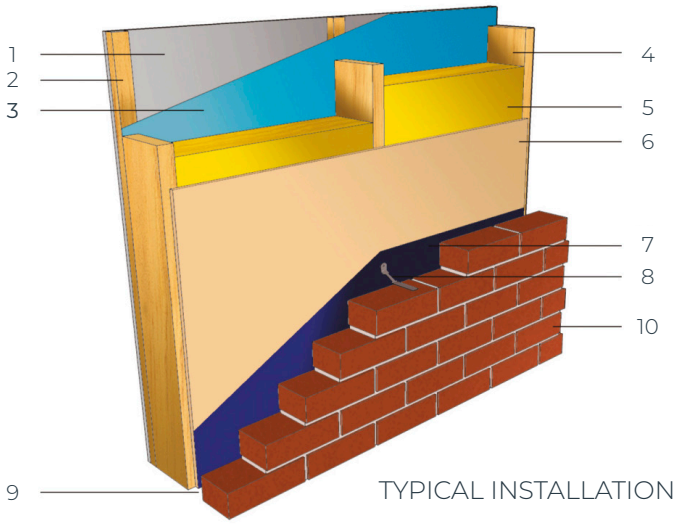
MEDITE VENT may be installed with typical timber fixings such as nails (smooth and threaded), staples and woodscrews. Typical specified nail diameters range from 2.7mm to 3.35mm depending on the building class and method of driving. The smaller of these diameters is preferable for 38mm thick studs to reduce the possibility of splitting. All fixings should be a minimum of 50mm in length or 2.5 times the thickness of the panel, whichever is greater.

Fixings should be galvanised, stainless steel, or have similar corrosion resistant properties. Fixings should be spaced at maximum 150mm centres along panel perimeters and at 300mm centres on intermediate studs. Fixings must be at least 10mm from the edge of the panel. The type, size, and spacing of fixings should be confirmed by the timber frame panel designer. To avoid buckling, fixings should commence at the top centre of the panel and continue outwards and downwards.

MEDITE VENT is suitable for sheathing timber frame wall panels with stud framing no less than 38mm in width and at a maximum of 600mm centres. Suitable sawing, routing and drilling tools should always be used. During and especially after site erection, the timber frame wall panels must be protected from the weather using a permanently fixed approved breather membrane.

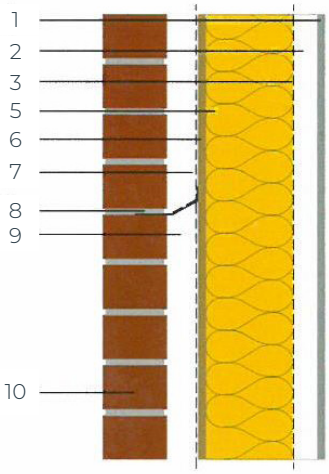
MEDITE VENT may be used in a roofing system where high breathability racking panels are required. However, as it is 12mm in thickness, it cannot be used as a decking panel.

For best practice guidance in panel sheathing applications, the datasheet SMARTPLY FRAME can be consulted.



TYPICAL INSTALLATION

1. Inner lining
2. Timber batten providing service voil
3. Vapour control layer
4. Timber stud
5. Insulation
6. MEDITE VENT
7. Breather membrane
8. Stainless stell wall tie
9. Ventilated and drained cavity
10. Rainscreen cladding



MEDITE® VENT

HYGROTHERMAL DESIGN

Due to its very low water vapour diffusion factor MEDITE VENT is principally adopted as sheathing in applications where drying of the structure is required. An approved breather membrane is recommended and is a requirement of some building control authorities. When used in combination with MEDITE VENT, it is important to ensure that the water vapour diffusion factor is equivalent or lower to that of MEDITE VENT, to ensure that wall breathability is not compromised.

A condensation risk analysis or advanced hygrothermal assessment of composite wall systems is recommended to ensure that the construction will not be at risk of moisture damage throughout the lifetime of the building. Detailed recommendations for control of condensation are given in BS 5250 which now refers to EN ISO 13788 as the method of calculation (Glaser method), but more modern and advanced methods of hygrothermal simulation are recommended, as detailed in EN 15026.

TECHNICAL SPECIFICATION SHEET

Property	Standard	Unit	12.0mm
Modulus of Rupture	EN 310	N/mm^2	≥ 13.0
Modulus of Elasticity	EN 310	N/mm^2	≥ 1400
Internal Bond	EN 319	N/mm^2	0.30
Thickness Swelling (24 hrs)	EN 317	%	< 10.0
Water Impermeability	EN 12467	-	Pass
Water Vapour Diffusion	EN 12572	μ	11.2
Vapour Resistance	EN 12086	Mns/g	0.672
Racking Strength	EN 594 (BS 5268)	KN/m	2.0 (Category 1 racking)
Thermal Conductivity	EN 13986	W/(m.K)	0.1

The MEDITE MDF range delivers an innovative selection of products, each designed with specific performance benefits. **MEDITE PREMIER** is a general purpose MDF panel with a smooth surface and consistent quality, made to a variety of sizes and thicknesses for use in a diverse range of applications.

Find out more.



MEDITE VENT

QUALITY & ENVIRONMENTAL CERTIFICATION

All MEDITE MDF 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.



FSC www.fsc.org FSC® C020700 The mark of responsible forestry

CE

MEDITE VENT

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 VENT 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 MDF products are CARB Phase 2 Compliant. The approved Third-Party Certifier (TPC) Entwicklungsund 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.

EXPLORE OUR MEDITE RANGE

For quick reference, see below our table that highlights each product's features and benefits.

PRODUCT	General Purpose Joinery	Deep Routed Profiles	Can be Veneered/ Laminated	Moisture Resistant	Flame Retardant	Structural Sheathing Panel	No Added Formaldehyde	External Use
MEDITE PREMIER	●		●					
MEDITE MR	●	●	●	●				
MEDITE INDUSTRIAL MR	●	●	●	●				
MEDITE MR LITE	●		●	●				
MEDITE LITE	●		●					
MEDITE CLEAR	●		●				●	
MEDITE EXTERIOR			●	●			●	●
MEDITE MR PLUS	●			●				
MEDITE PREMIER FR			●		●			
MEDITE VENT						●	●	



MEDITE® SMARTPLY®
INNOVATIVE TIMBER PRODUCTS

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

UK: +44 (0) 1322 424900
Ireland: +35 (0) 3518 10205
France: +33 (0) 9751 89830
Netherlands: +31 (0) 8588 86230
Belgium: +32 (0) 2808 6256

As we continually update our technical datasheets, please check on www.mdfosb.com that you have the latest version.

This technical datasheet is provided for information purposes only and no liability or responsibility of any kind is accepted by **MEDITE EUROPE DAC** or their representatives. **MEDITE EUROPE DAC** have used reasonable efforts to verify the accuracy of any advice, recommendation or information. **MEDITE EUROPE DAC** reserves the right to alteration of its products, production information and range without notice.

The recommendations provided in this technical datasheet for the correct use of **MEDITE VENT** 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 VENT**, 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.