

# MEDITE®

## OPTIMA



MEDITE OPTIMA is a specially engineered moisture resistant MDF panel with an extra smooth surface finish, designed for use in humid conditions in accordance with MDF.H (Option 1) as defined in EN 622-5. Ideal for applications where users need added density, enhanced machinability and higher surface quality than is found in standard moisture resistant panels. Developed at MEDITE's world class MDF facility in Clonmel, MEDITE OPTIMA broadens the range of MEDITE's high performance moisture resistant panels.

Photo: Richard Baker Furniture

### APPLICATIONS

MEDITE OPTIMA is used as a substitute for softwoods and hardwoods and as a panel product in non-stressed applications. Designed with increased machinability and smoother surface quality, it is successfully used for kitchen furniture, bathroom furniture, architectural mouldings, window boards, flooring and general interior joinery where a high quality moisture resistant board is required. MEDITE OPTIMA is suitable for interior humid conditions and is manufactured in accordance with EN 622-5.

MEDITE OPTIMA is not suitable for external applications. MEDITE OPTIMA must be sealed, primed and painted on all surfaces prior to installation, especially when placed next to damp plaster. Boards of this type are suitable for use in use classes 1 and 2 environments of EN 335 provided an appropriate coating system is used.

### PERFORMANCE

The test methods used for moisture resistant MEDITE OPTIMA includes a specialized cyclic test (EN 321) in which test pieces, after conditioning, are immersed in water at 20°C for 72 hours, frozen in air at -12°C for 24 hours, and heated in an air-circulated oven at 70°C for 72 hours. This cycle is carried out three times, followed by post conditioning and physical testing according to EN 622-5 test methods.

### APPEARANCE

MEDITE OPTIMA is distinguishable from other MEDITE MDF products by its green identification colour.

### CONDITIONING

The moisture content of MEDITE OPTIMA is in the range of 4.5 – 7.5% at the time of manufacture. Changes in dimensions of wood and wood-based sheet materials occur due to changes in relative humidity. For this reason, MEDITE OPTIMA panels should be conditioned to the final environment for two to three days before cutting and fixing.

### MACHINING/FINISHING

Cut or profiled edges of MEDITE OPTIMA should first be sanded with 150-240 grit, prior to painting. The recommended coating system for the edges is to seal, prime and topcoat with de-nibbing in between coats to produce a smooth finish. The desired finish on the face can be achieved by application of a base-coat and top-coat. If water-based coatings are used, it is important that forced drying or quick-drying systems be applied in order to maintain the quality of surface.

### FIRE RATING

MEDITE OPTIMA is expected to achieve a fire class rating of Euroclass D within the European classifications.

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## AUTHORITY

MEDITE OPTIMA is manufactured under an NSAI registered I.S ISO 9001 quality management system.

## SUPPLY

MEDITE OPTIMA is produced in the following standard panel sizes: 1220 x 2440mm and 1220 x 3050mm. Standard thicknesses produced are 6, 9, 12, 15, 18, 22 and 25mm. Other sizes and thicknesses available on request and subject to minimum order quality.

## SERVICE

For further information and/or technical advice regarding processing and painting/finishing MEDITE OPTIMA please contact MEDITE Technical Support Personnel:

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All MEDITE MDF products supplied for use in the construction and civil engineering industries are CE and UKCA marked according to the requirements of the harmonised European standard for wood based panels EN 13986. 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 Regulation that are relevant to the product. 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 Prüflabor 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.

## MEDITE OPTIMA TECHNICAL SPECIFICATION TABLE

PROPERTY	STANDARD	UNIT	>6.0mm to 9.0mm	>9.0mm to 12.0mm	>12.0mm to 19.0mm	>19.0mm to 30.0mm
Internal Bond	EN 319	N/mm <sup>2</sup>	≥ 0.80	≥ 0.80	≥ 0.75	≥ 0.75
Modulus of Rupture	EN 310	N/mm <sup>2</sup>	≥ 27	≥ 26	≥ 24	≥ 22
Modulus of Elasticity	EN 310	N/mm <sup>2</sup>	≥ 2700	≥ 2500	≥ 2400	≥ 2300
Screw Holding Face	EN 320	N	-	-	1200	1200
Screw Holding Edge	EN 320	N	-	-	900	900
Moisture Content	EN 322	%	4 to 11	4 to 11	4 to 11	4 to 11
Thickness Tolerance	EN 324-1	mm	± 0.2mm	± 0.2mm	± 0.2mm	± 0.2mm
Thickness Swelling (24hrs)	EN 317	%	< 12	< 10	< 8	< 7
<b>DIMENSIONAL MOVEMENT</b>						
Length/Width	EN 318	%	0.30	0.30	0.30	0.30
Thickness	EN 318	%	4.0	4.0	4.0	4.0
<b>CHANGES AFTER WET CYCLE TEST – EN 321</b>						
Thickness Swelling	EN 317	%	< 19	< 16	< 15	< 15
Internal Bond	EN 319	N/mm <sup>2</sup>	≥ 0.30	≥ 0.25	≥ 0.20	≥ 0.15

The results as listed above are based on the minimum specification requirements for all MEDITE OPTIMA MDF manufactured by MEDITE EUROPE DAC. All board parameters are in compliance with EN 622 parts 1 & 5 for type MDF.H (Option 1). As part of the MEDITE EUROPE DAC ongoing product development programme, the right to modify these product specifications without notice is reserved. MEDITE OPTIMA conforms to E1 formaldehyde levels as well as also complying with the lower levels required by CARB phase 2.

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