Product Specification

MICROSHIELD®'s Microboard® Nautic is an IMO FTP Code 2010 - Part 1 certified composite construction board especially for interior construction but also are used for other lightweight construction applications in the shipbuilding industry.

The Microboard® Nautic is light and offers high mechanical strength including edge stability. The Microboard® Nautic can be cut, sawed, drilled, etc. with standard wood-working machines and offers a wide range of possible applications.

Non-flammability and excellent acoustic properties, the high screw pull out strength, the direct veneering with real wood veneers, etc. meet the various needs of our demanding customers.

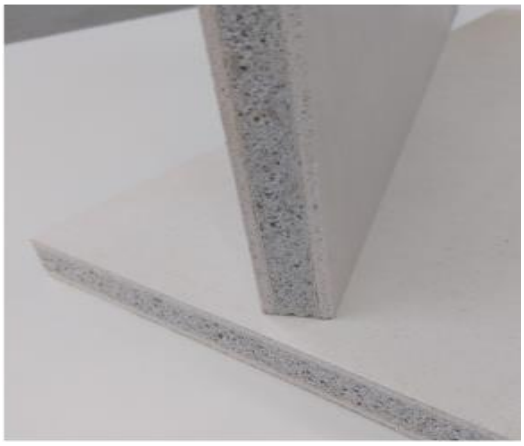
Microboard®s have a smooth, void-free surface structure on both sides and as such allow a direct decorative coating without prior treatment. The ivory-white surface can be coated with all common decorative materials, with common adhesives (epoxy, white glue, urea glue, etc.), without using an expensive primer.

Microboard®s do not contain any organic material and are free from formaldehyde, asbestos or other toxic substances. They are environmentally neutral and have no impact on people or the environment.

The construction boards from MICROSHIELD® require much less energy to manufacture than conventional construction panels. As a result, Microboard®s are more ecological than other products and make a contribution to reducing carbon dioxide

The Microboard®s are available with a thickness of 18mm as a standard 1220x2440mm plate. Of course, these are certified according to IMO FTP Code 2010 Part 1 and have a wheel-mark.

Test specimen No.	Initial temp. Furnace (°C)	Max. temp. rise Furnace (°C)	Max. temp. rise Surface (°C)	Duration of flaming (s)	Mass loss (%)
1	748	1	0	0	17.8
2	753	1	0	0	18.2
3	749	1	0	0	17.7
4	749	1	0	0	17.5
5	749	1	1	0	17.7
Average	-	1	0	0	17.8
6	752	0	0	0	17.2
7	751	0	0	0	17.6
8	748	1	1	0	17.5
9	750	1	0	0	17.7
10	749	1	0	0	17.8
Average	-	1	0	0	17.6



Product Features:

Non-combustible Microboard®s are classified as non-combustible material according to the IMO FTP Code - 2010 Part 1 certified.

Waterproof Microboard®s are resistant to water and moisture.
The panels are not subject to delamination or degradation by moisture.

Temperature-resistant
Microboard®s withstand high and low temperatures, are insensitive to light and can therefore be used indoors and outdoors without hesitation.

Soundproofing Microboard®s offer excellent soundproofing values.

Temperature-insulating
Microboard®s achieve high thermal insulation values because the core has the largest partly made of foam glass.

Mechanically resilient
Microboard®'s can withstand a wide range of loads and are therefore ideally suited as construction boards for many applications in shipbuilding. Due to the composite construction, the panels are extremely stable and withstand high forces.

Resistant to fungus and insect infestation
Microboard®s are resistant to fungal and insect attack.

Light and durable
Microboard®s are light, but nonetheless tough and durable.

Dimensionally stable
Microboard®s keep their shape even under difficult conditions and do not warp.

Mechanic solidity
Microboard®s offer extremely high mechanical strength and can be stapled, nailed and screwed.

Processing MICROSHIELD®‘s Microboard®s can be processed with commercially available machines (sawing, drilling, milling, gluing, coating, etc.).

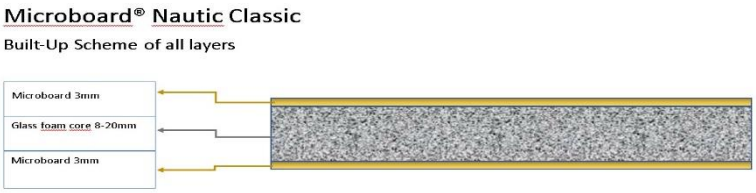
Coatings MICROSHIELD®‘s Microboard®s can be used directly as a tile substrate for ceramic tiles.

Free from harmful substances
Microboard®s are odorless
Microboard®s do not contain asbestos or crystalline silicon oxides.
Microboard®s contain no phenol and formaldehyde.
Microboard®s are breathable and support a healthy indoor climate.

Plate formats

Plate thickness	Length × width × Breite
18 mm	2440 × 1220 mm

Board Layers



Technical Data

Parameter	Values	Method
Material density	Ca 0.78 g/cm^3	
Max. percentage of water swelling	≤0.2%	
Screw extraction value	350N bis 540N	by 1 or through both cover layers
Flammability class	Non-combustible substrate	IMO FTP Code 2010 - Part 1
Sound insulation value	Ca. 40dB	
Flexural strength	＞7.5 N/mm^2	
Impact resistance	＞20kJ/m^2	
Thermal conductivity	0.08W/(mK)	
Colour	Ivory-white	

Climate change cycles

Evaluation according to KLW	No cracks or delamination after 200 cycles