



## **Product Specification Sheet**

MICROSHIELD®'s Microboard® is an FTP Code 2010 - Part 1 certified construction board for the building of interior fittings and other applications in shipbuilding. The Microboard® is lightweight and offers high mechanical strength including edge stability. The Microboard® can be processed with common commercially available machines and offers further advantages in versatile application possibilities.

Non-flammability and excellent acoustic insulation, as well as indoor and outdoor applicability, are just some of the features that meet our customer's versatile needs.



Microboard®s are easy to work with. Cutting, sawing, nailing, stapling, painting, direct veneering, etc. are just some of the advantages over standard products.

Microboard®s have a smooth upside surface structure without any blowholes and allow direct decorative coating without any pretreatment. The ground and calibrated side for example, is ideal for laying tiles

Microboard®s do not contain organic materials, formaldehyde, asbestos or other toxic substances. They are environmentally neutral and without any influences for humans and the environment.

Construction boards from MICROSHIELD® require about 30% less energy in production than conventional, cement-bonded construction boards. This makes Microboard®s more ecological than other products and contributes to the global reduction of carbon dioxide.



The 3mm Microboard® already offers a fire resistance of more than 1 hour. No other construction board known offers similar results in terms of both, performance and price!

MICROSHIELD®'s Microboard® is a construction platform used successfully in the building industry, in particular, to meet high fire safety requirements and above all to optimize costs / benefits

The Microboard®s are available from 3mm to 50mm in the standard panel size of 1220x2440mm, all FTP Code 2010 - Part 1 certified.

Talk to us, we are happy to help













### **Product Features:**

Non-combustible MICROSHIELD®'s Microboard®s are classified as non-combustible-material

according to FTP Code - 2010 Part 1 certification.

**Water resistant** Microboard®s are resistant to moisture and do not delaminate or deteriorate.

**Weather resistant** Microboard®s withstand high and low temperatures, are not sensible to light and may be

used in humid and dry weather conditions.

**Sound insulating** Microboard®s provide excellent sound insulation.

**Heat insulating** Microboard®s achieve excellent heat insulation for personal and infrastructure safety.

**Impact resistant** Microboard®s withstand heavy compression and are therefore the preferred choice for

construction boards in the shipbuilding industry

#### **Termite-proof and fungi-resistant**

Microboard®s prevent from termite infestation and bacterial fungal growth.

### Lightweight and durable

Althought MICROSHIELD®'s Microboard®s are lightweight, they are tough, sturdy and durable.

**Non-deforming** Microboard®s are dimensionally stable and do not deform.

### Strong and nail-holding

Microboard®s are of high mechanical strength and hold nails and screws firmly. No pre-drilling is necessary.

### **Fabricating and laminating**

Microboard®s can be easily assimilated / fabricated with honeycomb, veneers, laminates or vinyl coverings etc.

#### Free of harmful substances

Microboard®s are odorless and do not contain asbestos, crystalline silicon oxides, phenol and formaldehyde.

Microboard®s are breathable and support a healthy indoor climate.







# **Technical Specifications**

| Testing Item                 | Data   | Basis  |
|------------------------------|--|--|
| Apparent density             | Appr. 0.95 g/cm <sup>3</sup>                           |  |
| Percentage of water swelling | ≤0.6%  |  |
| Screw withdrawal force       | ≥70N/mm  |  |
| Flammability class           | Non-combustible substrate                              | FTP Code 2010 - Part 1   |
| Fire resistance class        | >2h (F120)   | 65 mm steel framed partition with 6 mm Microboard®,, inside isolated with rockwool |
| Fire resistance class        | >3h (F180)   | 70 mm steel framed partition with 9 mm Microboard®, inside isolated with rockwool  |
| Fire resistance class        | >4h (F240)   | 75 mm steel framed partition with 12 mm Microboard®, inside isolated with rockwool |
| Sound insulation             | >42dB  | 9 mm Microboard®, +50 mm rockwool isolation  |
| Bending strength             | >16MPa   | 10 mm Microboard®  |
| Impacting strength           | >5.5kJ/m²  | 10 mm Microboard®  |
| Environment                  | no asbest, no formaldehyde                             |  |
| Thermal conductivity         | 0.109W/(m*K)   |  |
| Color                        | Pink white   |  |
| Surface Texture              | Front surface: Smooth Back surface: Rough / calibrated |  |

## Microboard® sizes

| Thickness     | Length × Width |
|---------------|----------------|
| 3 mm to 50 mm | 2440 × 1220 mm |





## Climatic change cycles

KLW rating

No cracks or delamination after 25 cycles in the test



## Our Commitment to the Environment:



Green in materials: MICROSHIELD®'s Microboard®s are odorless and do not contain asbestos,

crystalline silica, or any toxic glues, such as urea/phenol formaldehyde.

Green in production: MICROSHIELD®'s Microboard®s require 30% less energy to manufacture

then comparable products.

Green in installations: Microboard®s can be conventionally processed and coated.

