



Composite sandwich PUROXIT® panels represent a revolutionary construction element that will enable significant mass reduction in any of your projects while keeping excellent mechanical properties.

LIGHTWEIGHT  
NON-FLAMMABLE  
PANELS









## WHAT ARE PUROXIT® BOARDS?

Non-flammable sandwich composite panels comprising special light-weight core materials coated by laminate on both sides.



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## MAIN ADVANTAGES OF PUROXIT® PANELS

-  very light material (35% lighter than plywood)
-  non-flammable material (EN 45 545-2)
-  high strength makes the panel convenient material for transport vehicle floors
-  easy to glue
-  thermal and acoustic insulation
-  can be joined into large units, whereas the joints would not concentrate tension
-  flat panels or 3D shapes
-  waterproof (even in salt water)

## APPLICATION

Its properties make this material an ideal element for floors, walls and ceilings in transport vehicles (trains, trams, buses) for best utilisation of its low mass, while keeping substantial stiffness and impact resistance. The scope of application is very broad; PUROXIT® panels can be used in building industry, automotive industry, shipbuilding, etc.

|   |                     |
|---|---------------------|
| Skin (cover sheets)                               | PUR fibreglass      |
| Skin thickness (mm)                               | 2 x 1,5             |
| Core  | foam                |
| Area weight (kg/m <sup>2</sup> , thickness 15 mm) | 6,5 ± 0,5           |
| Compressive strength (MPa)                        | 1,5                 |
| Compression modulus (MPa)                         | 70                  |
| Stiffness (E*) (kN*mm <sup>2</sup> )              | 2,1.10 <sup>6</sup> |
| Flexural modulus (MPa)                            | 6000*               |
| Flexural modulus (MPa)                            | 10000**             |
| Flexural strength (MPa)                           | 100***              |

|  |                         |
|--|-------------------------|
| Shear strength (MPa)                           | 0,8                     |
| Shear modulus (MPa)                            | 25                      |
| Standards                                      | DIN 5510-2, EN 45 545-2 |
| Thermal conductivity (W/mK)                    | 0,0459                  |
| Temperature resistance (°C)                    | -75 to +80              |
| Heat transfer coefficient (W/m <sup>2</sup> K) | 1,9                     |
| Acoustic insulation Rw(dB)                     | 25                      |

\* calculated on the full thickness homogeneous material

\*\* calculated on the supporting cover-layers only

\*\*\* span between supports edges 500 mm, width of the sample 100 mm

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