

# Flexible, adaptable and individual. READY FOR RAIL.

Composite panel for rail and road transportation

**Application area:** Areas subject to high loads, e. g. floor area

**Lay-up thickness:** 11.8 mm

Glass fibre layers

Foam core

Glass fibre layers



strength



lightweight



environment



serviceability



integration



customization



3D



stiffness

## Technical Data

### MATERIAL



layers  
glass fibre and  
phenol-formaldehyde



core material  
structural foam

### DIMENSIONS



surface weight  
(semi-finished sandwich)  
5.4 kg/m<sup>2</sup>



thickness  
11.8 mm



length & width  
Standard:  
2810 mm x 1860 mm  
Arbitrarily expandable

### TEMPERATURE



fire & smoke, HL2  
FST according to  
DIN EN 45545-2



operating temperature  
-25 – +55 °C



temperature  
resistance  
-35 – +70 °C



Thermal expansion  
coefficient  
50 E-06 K<sup>-1</sup>  
at +20 to +50 °C  
34 E-06 K<sup>-1</sup>  
at -20 to +20 °C

### MECHANICAL & PHYSICAL PROPERTIES



thermal insulation  
4.2 W/(m<sup>2</sup>K)



acoustic damping  
29.1 dB according to  
DIN EN ISO 10140-2



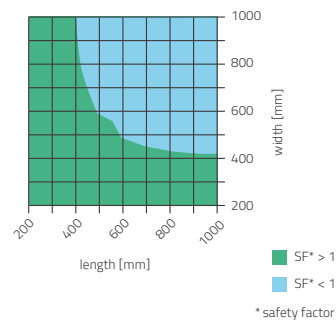
drum peel strength  
1.4 N/mm according to  
DIN EN 2243-3



indentation (Ø 6 mm)  
750 N



support distance for L/300  
550 mm



### SPECIAL FEATURES



product lifetime  
32 years at  
20 million load cycles



certifications  
DIN EN 9100



design elements  
selective and area  
reinforcement, edge  
protection, floating  
inserts, panel connection  
elements, heatable

# Flexible, adaptable and individual.

## READY FOR RAIL.

Composite panel for rail and road transportation

**Application area:** Areas subject to high loads, e.g. floor area

**Lay-up thickness:** 18 mm

Glass fibre layers

Foam core

Glass fibre layers



## Technical Data

MATERIAL	DIMENSIONS	TEMPERATURE	MECHANICAL & PHYSICAL PROPERTIES	SPECIAL FEATURES
<p>layers glass fibre and phenol-formaldehyde</p>	<p>surface weight (semi-finished sandwich) 5.7 kg/m<sup>2</sup></p>	<p>fire &amp; smoke, HL2 FST according to DIN EN 45545-2</p>	<p>thermal insulation 2.4 W/(m<sup>2</sup>K)</p>	<p>drum peel strength 2.4 N/mm according to DIN EN 2243-3</p>
<p>core material structural foam</p>	<p>thickness 18 mm</p>	<p>operating temperature -25 – +55 °C</p>	<p>acoustic damping 30 dB according to DIN EN ISO 10140-2</p>	<p>product lifetime 32 years at 20 million load cycles</p>
	<p>length &amp; width Standard: 2900 mm x 1870 mm Arbitrarily expandable</p>	<p>temperature resistance -35 – +70 °C</p>	<p>indentation (Ø 8 mm) 750 N</p>	<p>certifications DIN EN 9100</p>
		<p>Thermal expansion coefficient 50 E-06 K<sup>-1</sup> at +20 to +50 °C 34 E-06 K<sup>-1</sup> at -20 to +20 °C</p>	<p>support distance for L/300 750 mm</p>	<p>design elements selective and area reinforcement, edge protection, floating inserts, panel connection elements, heatable</p>

