



POLYVAN®-31

the sound absorbing sandwich panel

Product description

POLYVAN®-31 is a sound-absorbing sandwich panel with excellent thermal insulation, is lightweight, and has good environmental compatibility.

Composition

The outer layers of the sandwich panel are made of birch plywood, and the core consists of a specialty cork mat. Both the thickness of the plywood and the type of wood used for the outer layers can vary. The specialty cork core layer can also vary in terms of material and thickness.

Quality

The plywood is laminated according to EN314-2 Class 3 (exterior). The bonding of the plywood and specialty cork is waterproof.

Processing

The manufacturing and processing can be performed on common wood processing machines with a suitable ventilation and suction system.

Areas of application / References

POLYVAN®-31 is versatile and can be used as a construction material for walls, ceilings, and floors.

Stock and transport regulations

More detailed information can be found in a separated document entitled „Regulations for storage and internal transports“.

Remarks

The specific properties of the project and conditions of application have to be personally checked by the client before using this product. The material parameters listed here are determined by standard specifications and are to be understood as a guideline, but not as guaranteed values. The customer is fully responsible for the suitability and the properties of our product under the specific conditions of implementation chosen by the customer.

technical data			
material			
top layers	plywood		
core	technical cork		
dimensions			
thickness [mm]	11/16/22		
thickness tolerance, max. [mm]	+/- 1.0		
length, max. [mm]	2,480/2,980		
width, max. [mm]	1,230/1,480		
material properties			
characteristic flexural modulus [N/mm ²] <i>DIN 53293</i>	<u>thickness</u>	<u>long.</u>	<u>trans.</u>
	16 mm	3,500	2,500
characteristic bending stress [N/mm ²] <i>DIN 53293</i>	<u>thickness</u>	<u>long.</u>	<u>trans.</u>
	16 mm	31	21
screw pull-out strength [N] <i>DIN EN 320</i>	16 mm	1,400	
	21 mm	2,500	
sound reduction index $R_{w,air}$ [dB] <i>for 16 mm</i> <i>DIN 52210</i>	31		
thermal resistivity R [m ² K/W] <i>for 16 mm</i>	0.16		
density [kg/m ³]	approx. 620		
surface weight [kg/m ²] <i>for 16 mm</i>	approx. 10.3		
further information			
surface quality	BB/BB (sanded)		
bonding of the plywood <i>EN 314-2</i>	Class 3 (exterior)		
approval of Deutsche Bahn	Material Performance Sheet No. 610101		
fire protection class <i>DIN 5510-2</i> <i>EN45545-2</i>	S3, ST2, SR2, FED < 1 project related with floor covering for R10: HL2		