



Drywall Systems

K872e.de

Product Data Sheet

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DESIGNBOARD 230 WOOD

The veneered gypsum fibreboard

Product description

Board type

DESIGNBOARD 230 WOOD acc. to EN 14190 consists of a non-flammable gypsum fibreboard acc. to EN 15283-2 and is veneered with real wood and painted surface during manufacture at the factory.

Storage

Dry and even on board pallets

Quality

In compliance with EN 14190, the product is subject to an initial test as well as continuous production monitoring in the plant, and carries the CE mark.

Properties and added value

- Non-flammable A2-s1, d0
- Universally applicable
- Robust surface
- Good structural cohesion under the effect of fire
- Simple processing
- Low swelling and shrinkage when climatic conditions change
- Verified non-polluting carrier board

The veneered gypsum fibreboard

Application area

DESIGNBOARD 230 WOOD is used in all areas of high-quality interior design with very exacting design requirements. The embellished surfaces of DESIGNBOARD 230 WOOD enable individual designs to be achieved, meaning that tomorrow's requirements can be met today. Acoustic protection, acoustic properties, fire protection as well as robustness are requirements met by DESIGNBOARD 230 WOOD in correspondingly tested systems alongside very great flexibility in design. Excellently suited to use in areas subject to building regulations in which non-flammable composite materials are required.

DESIGNBOARD 230 WOOD can be installed using our KEILLEISTE or DESIGNBOARD FIX substructures.

For example in:

- Public buildings
- Escape and rescue routes
- Meeting places
- Hospitals
- High-rise blocks
- Sports halls

Applicability

- Ceiling lining and suspended ceilings
- Wall systems
- Acoustic systems

Processing

DESIGNBOARD 230 WOOD can be processed using the usual machines and carbide-tipped tools used in wood processing: sawing, routing, drilling and screwing. Diamond-coated tools also have the benefit of longer service lives, and are recommended for high-speed machines. Precautionary measures are required to prevent scratches, such as maintaining a clean workplace and working on the back of the board material. Dust extractors are recommended to reduce dust generation.

Note

- Screw connections can be made depending on the screw diameter and screw type used.
- Pilot holes are recommended with wood screws and Euro screws.
- Always carry DESIGNBOARD 230 WOOD vertically upright.
- When applying the DESIGNBOARD 230 WOOD boards to the substructure, it is helpful to leave expansion joints in order to allow for shrinkage and swelling of the boards.
- Design measures taken on the substructure make it possible to avoid cracking and distortions at abutting joints.

Technical data

DESIGNBOARD 230 WOOD	Unit	1100	1500	Standard
Standard formats	mm mm	3100 x 1260 2560 x 1260	2560 x 1260	–
Thicknesses	mm mm	12.6 / 16.6 / 18.6 / 21.6 / 23.6 / 25.6	12 / 18	–
Dimensional tolerances				–
Length	mm/m		+/- 0.3	
Width	mm/m		+/- 0.3	
Thickness	mm		+/- 0.5	
Exception for 18.6 mm	mm		- 0.0 /+ 0.5	
Edge configuration ¹⁾			Unprocessed	–
Reaction to fire	Class		A2-s1, d0	DIN EN 13501-1
Water vapour diffusion resistance coefficient μ ²⁾		17	30 / 50	DIN 52615
Thermal conductivity λ	W/(m•K)	0.38	0.44	DIN EN 12664
Unprocessed density ²⁾	kg/m ³	≥ 1100	≥ 1500	–
Specific heat capacity c	J/(kg•K)	> 1000	> 1000	–
Hygrothermal installation conditions	°C % r.h.	+10 – +30 45 – 60	+10 – +30 45 – 60	–
Hygrothermal usage conditions	°C % r.h.	+10 – +30 45 – 60	+10 – +30 45 – 60	–
Coefficient of thermal expansion α ²⁾	1/K	12.9*10 ⁻⁶	12.9*10 ⁻⁶	–
Change in length on change in temperature ²⁾	mm/(mK)	≤ 0.02	≤ 0.02	–
Flexural strength ²⁾	N/mm ²	≥ 4.2	≥ 10.5	–
Modulus of elasticity ²⁾	N/mm ²	≥ 2200	≥ 6000	–
Surface				
Abrasion stress	Degree		2E	DIN 68861-2
Scratch-resistance	Degree		4B	DIN 68861-4

1) Edge coating in the joint tested according to EN 13501-1 A2-s1, d0.

Components required: Knauf Design PU edge adhesive, Knauf Design Melamine edge 0.3 mm, Knauf Design Melamine edge with hotmelt glue 0.3 mm, according to delivery range

2) Carrier board

Non-polluting properties: Evaluation of the eurofins emissions test results

DESIGNBOARD 230 WOOD			
Regulation or protocol	Conclusion		
French VOC regulation	A+	after 28 days	Below the evaluation limit
French CMR components	Met	after 28 days	Below the evaluation limit
AgBB	Met	after 3 and 28 days	Below the evaluation limit
Belgian regulations	Met	after 28 days	Below the evaluation limit
EMICODE	EC 1 PLUS	after 3 and 28 days	Below the evaluation limit
Indoor Air Comfort	Met	after 3 and 28 days	Below the evaluation limit
EN 717-1	E1 (0.003 mg/m ³)	after 28 days	Below the evaluation limit
Blue Angel (RAL UZ 132)	Met	after 28 days	Below the evaluation limit
BREEAM International	Compliant	GN22: BREEAM Recognised Schemes for VOC Emissions from Building Products	
LEED v4 (outside U.S.)	Compliant	LEED v4 for Building Design and Construction (April, 2015)	
Carcinogenic substances ¹⁾	after 3 and 28 days		Not identifiable
TVOC ²⁾	after 3 and 28 days		Below the evaluation limit
SVOC ³⁾	after 28 days		Below the evaluation limit
VOC ⁴⁾ -individual substances R _D and R _B	after 28 days		Below the evaluation limit
VOC ⁴⁾ -individual substances without NIK _D	after 28 days		Below the evaluation limit
Formaldehyde	after 28 days		Below the evaluation limit

1) Carcinogenic substances = substances which can cause cancer

2) TVOC = total volatile organic compounds

3) SVOC = semivolatile organic compounds

4) VOC = volatile organic compounds

The VOC emissions have been tested on the product and meet the requirements of national regulations in Europe.



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