



Drywall Systems

**K874b.de**

Product Data Sheet

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# DESIGNLINE R

The veneered gypsum fibre baffle

## Product description

DESIGNLINE R 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 initial type testing and continuous factory production control and bears the CE marking.

## Properties and added value

- Not easily flammable B-s1, d0
- Universal application
- Robust surface
- Good coherence of structure when exposed to fire
- Easy application
- Low expansion and shrinkage when climate conditions change
- Non-combustible substrate

## The veneered gypsum fibre baffle

### Field of application

DESIGNLINE R is used in all areas of high-quality interior design with very exacting design requirements. The embellished surfaces of DESIGNLINE R enable individual designs to be achieved, meaning that tomorrow's requirements can be met today. Sound insulation, acoustics, fire resistance as well as robustness are requirements met by DESIGNLINE R in correspondingly tested systems alongside very great flexibility in design. Excellently suited to use in areas subject to building regulations in which not easily flammable composite materials are required. DESIGNLINE R can be installed using the DESIGNLINE FIX fastening system.

Examples include:

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

### Usability

- Partition systems
- Acoustical systems

### Application

DESIGNLINE R can be processed using the common machines and carbide-tipped tools used in wood processing for sawing, routing, drilling and screw fastening. Diamond-tipped tools also have the benefit of longer service lives, and are recommended for high-speed machinery. 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 the formation of dust.

#### Notes

- Screw connections can be performed depending on the screw diameter and screw type used.
- Pilot holes are recommended with wood screws and Euro screws.
- Design measures taken on the substructure make it possible to avoid cracking and distortions at abutting joints.

## Technical data

Description	Standard	Unit	DESIGNLINE R
Standard lengths	–	mm	2560 and 3100
Standard widths	–	mm	35, 42 and 48
Thickness	–	mm	18 / 25 / 50
Length dimensional tolerances	–	mm/m	+ 2.0 / - 0.5
Width dimensional tolerances	–	mm/m	+ 0.3 / - 0.3
Thickness dimensional tolerances	–	mm	+ 0.5 / - 0.5
Edge type <sup>1)</sup>	–	–	Rounded off veneer edge
Reaction to fire	EN 13501-1	Class	B-s1, d0
Water vapour diffusion resistance $\mu^2)$	DIN 52615	–	21
Thermal conductivity $\lambda$	EN 12664	W/(m·K)	0.3
Density <sup>2)</sup>	–	kg/m <sup>3</sup>	1000 ÷ 1250
Specific heat capacity c	–	J/(kg·K)	> 1000
Hygrothermal installation conditions	–	°C % r.h.	+ 10 – + 30 45 – 70
Hygrothermal usage conditions	–	°C % r.h.	+ 10 – + 30 45 – 70
Thermal expansion coefficient $\alpha^2)$	–	1/K	10*10 <sup>-6</sup>
Change in length on change in humidity <sup>2)</sup>	–	mm/m	0.3
Bending tensile strength <sup>2)</sup>	–	N/mm <sup>2</sup>	4.5
Modulus of elasticity <sup>2)</sup>	–	N/mm <sup>2</sup>	3900
Surface abrasion stress	DIN 68861-2	Degrees	2E
Surface scratch resistance	DIN 68861-4	Degrees	4B

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

Required components: Knauf Design PU edge adhesive, Knauf Design Melamine edge 0.3 mm, Knauf Design Melamine edge with hotmelt glue 0.3 mm, according to product portfolio

2) Carrier board

## Building biology: Evaluation of the eurofins emissions test results

DESIGNLINE R			
Regulation or protocol	Conclusion		
French VOC directive	A+	after 28 days	Below the evaluation limit
French CMR components	fulfilled	after 28 days	Below the evaluation limit
AgBB	fulfilled	after 3 and 28 days	Below the evaluation limit
Belgian regulations	fulfilled	after 28 days	Below the evaluation limit
Indoor Air Comfort GOLD	fulfilled	after 3 and 28 days	Below the evaluation limit
EN 717-1	E1 (0.007 mg/m <sup>3</sup> )	after 28 days	Below the evaluation limit
BREEAM NOR	Compliant	BREEAM International New Construction v2.0 (2016)	
LEED v4.1 BETA (outside U.S.)	Compliant	LEED v4.1 BETA for Building Design and Construction (February 2021)	
Carcinogenic substances <sup>1)</sup>	after 3 and 28 days		Below the evaluation limit
TVOC <sup>2)</sup>	after 3 and 28 days		Below the evaluation limit
SVOC <sup>3)</sup>	after 28 days		Below the evaluation limit
VOC <sup>4)</sup> individual substances R <sub>D</sub> and R <sub>B</sub>	after 28 days		Below the evaluation limit
VOC <sup>4)</sup> individual substances without NIC <sub>D</sub>	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 = semi-volatile 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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[www.knauf.de/knauf-design-videos](http://www.knauf.de/knauf-design-videos)



**Observe safety data sheet!**

For safety data sheets and CE marking see  
[knauf-design.com](http://knauf-design.com)



Tender specifications for all Knauf Design systems and products.  
[knauf-design.com](http://knauf-design.com)

## Knauf Design

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