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Rigips Bauplatte RBI 18

Original Rigips plasterboards have been on the market in Austria for more than 60 years now.

Rigips wallboards consist of a special gypsum core encased in cardboard.

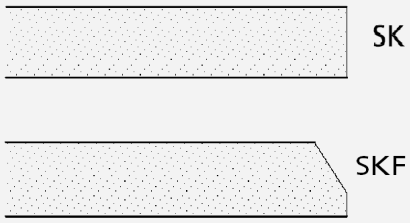
The Institut for Baubiologie in Austria (Institute for Building Biology - IBO) has classified Rigips boards as "tested and recommended building material by the IBO". This quality is re-assessed by the IBO every six months.

Rigips wallboards are used successfully in domestic buildings, offices, commercial buildings, hotels, schools and many other segments for applications such as the following:

- interior walls
- wall linings
- dry plaster
- suspended ceilings
- sloping ceilings / roofs

Rigips wallboards are to be processed as per the Rigips installation guidance and as per ÖN B 3415.

Technical Data

	Proof	**as per ÖN EN 520 and ÖN B 3410**	**Gypsum plasterboard type H2 Gypsum plasterboard GKBI**
	Classification	**as per ÖN EN 13501-1**	**A2-s1,d0 (B), non-combustible as per Building Regulations List A Part 1, Annex 0.2.2 (2004/1)**
Edge profile	**Longitudinal edges**	**designed for filling of joints with Rigips VARIO joint filler, either with or without reinforcing strips.**	
	Transverse edges		

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Plasterboard marking	On rear side	The marking in longitudinal direction in blue contains: • RIGIPS BAUPLATTE RBI • CE symbol • ÖN EN 520: type H2 • ÖN B 3410: GKBI • A2-s1, d0 (B) • Production date and/or shift number Generally, together with the lettering, a row of dots mark the board centre within a strip of ca. 5 cm width (position of the metal stud sections for walls).
	On front side	To ease installation, the board centre is marked with the letters RB which are 3-5 mm high and located at a distance of about 250mm (screw spacing) from each other. The position tolerance of the marking from the board centre is ± 2cm max.
	Edge marking	"RIGIPS VARIO 18" at the longitudinal edge in blue

Dimensions	Nominal thickness		18.0	[mm]
	Width		1250	[mm]
	Lengths		2000 2500 3000 Special lengths (intermediate sizes, overlength) and sheet cutting possible – delivery time on request .	[mm]
	Dimensional tolerances	as per ÖN EN 520	Thickness ±0.5 Width +0/-4 Length +0/-5 Squareness deviation ≤ 2.5 per m width	[mm]

Weight	Apperent density		ca. ≥ 800	[kg/m^3]
	Weight per unit area m'	as per ÖN B 3410	ca. ≥ 12	[kg/m^2]

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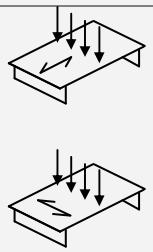
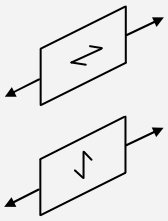
Strengths	Breaking load	as per ÖN EN 520 and ÖN B 3410	⊥ ≥ 880 ∥ ≥ 300	[N]
			⊥ perpendicular to direction of manufacture (in longitudinal direction of the board) ∥ parallel to direction of manufacture (in transverse direction of the board)	
	Bending tensile strength		⊥ ≥ 6.8 ∥ ≥ 2.4	[N/mm²]
	Modulus of elasticity	as per ÖN B 3410	⊥ ≥ 2800 ∥ ≥ 2200	[N/mm²]
	Surface hardness	as per Brinell	ca. 10 - 18	[N/mm²]
	Compressive strength vertical to the surface		ca. 5 - 10	[N/mm²]
	Tensile strength		In longitudinal direction of the board: ca. 1.8 - 2.5 In transverse direction of the board: ca. 1.0 - 1.2	[N/mm²]
	Shear strength of the connection between board and substructure	as per ÖN EN 520	510	[N]
	Shear strength		Vertical to surface: ca. 3.0 - 4.5 Parallel to surface: ca. 2.5 - 4.0	[N/mm²]
	Adhesive strength of jointing compound & gypsum glue	as per ÖN EN 13963	> 0.25	[N/mm²]

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Heat	Thermal conductivity λ	as per ÖN EN 12524	0.25	[W/(m·K)]
	Specific heat capacity c	at 20°C	0.96	[kJ/(kg·K)]
	Thermal expansion coefficient	at 60% RH	ca. 0.013 - 0.020	[mm/(m·K)]

Humidity	Vapour diffusion resistance factor μ	as per ÖN EN 12524	dry: 10 wet: 4	[—]
	Diffusion equivalent air layer thickness s_d	as per ÖN B 8110	dry: 0.13 wet: 0.05	[m]
	Water absorption for 2 h fully immersed in water	as per ÖN EN 520	≤ 10	[Masse%]
	Drying time after 2 h fully immersed in water		ca. 15	[h]
	Capillary rise of water (front edge immersed)		after ½ h: 0 after 2 h: 0.5 after 24 h: 1.5 - 2.0	[cm]
	Moisture absorption / equilIBOium moisture content (depending on room climate)	at 20°C	40% RH: 0.3 - 0.6 60% RH: 0.6 - 1.0 80% RH: 1.0 - 2.0	[Masse%]
	Change in length for a 30% change in RH	at 20°C	0.015	[%]

Other	Crystalline bonded water inside gypsum core		ca. 16 - 20	[%]
	Thermal threshold stress (long-term load)		max. 50	[°C]
	El. surface resistance at 100 V, 20°C and 65% RH	as per DIN 53486	front side: $3.5 \cdot 10^8$ - $5 \cdot 10^8$ rear side: $6.5 \cdot 10^8$ - $10 \cdot 10^8$	[Ω]
	El. volume resistance at 100 V, 20°C and 65% RH	as per DIN 53486	$2 \cdot 10^9$	[Ω]
	pH value		6 - 9	[—]
	Air permeabillity	as per ÖN EN 520	$1.4 \cdot 10^{-6}$	[m^3/(m^2·s·Pa)]