

# Rigips MR Plasterboard 12.5 (moisture resistant)





**Product description:** Gypsum plasterboard acc. to DIN EN 520, type H2, moistureresistant, made of a special, reinforced gypsum core encased in cardboard.

**Area of application:** For installation of wall- and ceiling systems usually without fire protection requirements e. g. in domestic bathrooms and similarly used rooms.













Hydrophobiert

Anwendung Feuchtraum

Gewicht

Plattendicke

Längskante

Querkanten

## Technical specifications

Parameters	Sign	Value	Unit	Certification	
Material					
Type of material		gypsum plasterboard			
Typesetting					
Туре		H2		EN 520	
		GKBI		DIN 18180	
Building material class					
Fire behaviour		A2-s1, d0		EN 13501-1	
Edges					
Longitudinal edge		VARIO			
Transverse edge		SK, SKF			
Dimensions					
Thickness	t	12.5	mm	EN 520	
Width	w	1250	mm	EN 520	
Length	1	2000 / 2500 / 3000	mm	EN 520	

The information in this publication is based on our current technical knowledge and experience. In view of the many factors that may affect processing and application of our products, these data do not relieve the users of our products from the responsibility of carrying out their own inspections and tests, as they only represent general guidelines. They neither do imply any legally binding assurance of certain properties or of suitability for a particular application. It is the responsibility of those to whom we supply our products to ensure that any proprietary rights and existing laws and regulations are observed. We reserve the right to modifications in the interests of technical advancement without prior notice.





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Parameters	Sign	Value	Unit	Certification	
Tolerances					
Thickness		±0.5	mm	EN 520	
Width		+0/-4	mm	EN 520	
Length		+0/-5	mm	EN 520	
Perpendicularity: deviation per meter of width		2.5	mm/m	EN 520	
Nominal Weight					
Surface-related mass	≥	8.5	kg/m²	DIN 18180	
Bulk density	≥	680	kg/m³	EN 520	

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Parameters	Sign	Value	Unit	Certification
Characteristic strength values				
Bending breaking load - in parallel direction of the board	≥	210	N	EN 520 / DIN 18180
Bending fracture load - in transverse direction of the board	≥	610	N	EN 520 / DIN 18180
Bending tensile strength - parallel to the fibre (in the transverse direction of the sheet)		2.4	N/mm²	Calculated
Bending tensile strength - transverse to the fibre (in the longitudinal direction of the panel)		6.8	N/mm²	Calculated
Tensile strengths - across the board fibre (in board transverse direction) approx.		1.0-1.2	N/mm²	Gypsum data book
Tensile strengths - in longitudinal direction of board approx.		1.8-2.5	N/mm²	Gypsum data book
Modulus of elasticity - parallel to the fibre (in the transverse direction of the board)	≥	2200	N/mm²	DIN 18180
Modulus of elasticity - transverse to the fibre (in the longitudinal direction of the panel)	≥	2800	N/mm²	DIN 18180
Adhesion strength - of joint filler	≥	0.25	N/mm²	EN 13963
Shear strength - of the connection between panel and substructure		510	N	EN 520
Shear strength - vertical to the surface approx.		3.0-4.5	N/mm²	Gypsum data book
Shear strength - parallel to the surface approx.		2.5-4.0	N/mm²	Gypsum data book
Compressive strength - perpendicular to the surface approx.		5-10	N/mm²	Gypsum data book
Surface hardness - according to Brinell		10-18	N/mm²	EN ISO 6506-1
Improved structural cohesion at high temperatures		approved		EN 520
Heat				
Thermal conductivity	$\lambda_{_{R}}$	0.25	W/m.K	EN ISO 10456
Specific heat capacity c at 20°C	С	0.96	kJ/(kg.K)	Gypsum data book
Specific heat capacity	С	0.96	kJ/(kg.K)	EN 12524
Coefficient of thermal expansion at 60% relative humidity approx.		0.013-0.020	mm/(m·K)	Gypsum data book
Limit load by heat (long-term exposure)		max. 50 (short term 60)	°C	Gypsum data book

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Humidity       Moisture absorption at 20°C, 80% rel. h. approx.»     1.0-2.0     mass-%     Gypsum data book       Moisture absorption at 20°C, 60% rel. humidity approx.     0.6-1.0     mass-%     Gypsum data book       Moisture absorption at 20°C, 40% rel. humidity approx.     0.3-0.6     mass-%     Gypsum data book       Capillary rise of water / immersion time approx. 24 h     1.5-2.0     cm     Gypsum data book       Capillary rise of water / diving time approx. 24 h     0.5     cm     Gypsum data book       Capillary rise of water / diving time approx. 24 h     0.5     cm     Gypsum data book       Capillary rise of water / diving time approx. 24 h     0.5     cm     Gypsum data book       Capillary rise of water / diving time approx. 24 h     0.5     cm     Gypsum data book       Capillary rise of water / diving time approx. 24 h     0.5     cm     Gypsum data book       Capillary rise of water / diving time approx. 24 h     0.5     cm     Gypsum data book       Capillary rise of water / diving time approx. 24 h     0.0     cm     Gypsum data book       Water vapour diffusion approx. 25 h     sd. 20     0.05     m     Calculated       Water vapour diffusion equivalent air layer thickness (ver)     4     0.13     m     Calculated       Water vapour diffusion equivalent air layer thickness (ver)     2	Parameters	Sign	Value	Unit	Certification
Moisture absorption at 20°C, 60% rel. mass-% Gypsum data book Moisture absorption at 20°C, 40% rel. humidity approx.  Moisture absorption at 20°C, 40% rel. humidity approx.  Moisture absorption at 20°C, 40% rel. humidity approx.  Capillary rise of water / immersion time approx. 24 h  Capillary rise of water / diving time approx. 24 h  Capillary rise of water / diving time approx. 2 h  Capillary rise of water / dive time approx. 5 h  Drying time after 2 h water storage approx.  (total) water absorption after 2 h storage under water thickness (wet)  Water vapour diffusion equivalent air layer thickness (wet)  Water vapour diffusion equivalent air layer thickness (dry)  Water vapour diffusion resistance factor  ### 4	Humidity	'			
humidity approx.       Oile-10       Illess-76       Sypsum data book         Moisture absorption at 20°C, 40% rel. humidity approx.       0.3-0.6       mass-%       Gypsum data book         Capillary rise of water / immersion time approx. 24 h       1.5-2.0       cm       Gypsum data book         Capillary rise of water / diving time approx. 2 h       0.5       cm       Gypsum data book         Capillary rise of water / dive time approx. ½ h       0       cm       Gypsum data book         Drying time after 2 h water storage approx.       15       hour(s)       Gypsum data book         (total) water absorption after 2 h storage under water       ≤10       mass-%       Gypsum data book         Water vapour diffusion equivalent air layer thickness (wet)       sd <sub>wet</sub> 0.05       m       Calculated         Water vapour diffusion equivalent air layer thickness (dry)       sd <sub>dry</sub> 0.13       m       Calculated         Water vapour diffusion resistance factor       µ <sub>dry</sub> 10       EN ISO 10456         Miscellaneous       L4 · 10 <sup>6</sup> m³/(m²·s·Pa)       EN 520         Air permeability       1.4 · 10 <sup>6</sup> m³/(m²·s·Pa)       EN 520         PH value       6-9       ph         Notes       Dry Flat and level Shady Air access       Shady Air access			1.0-2.0	mass-%	Gypsum data book
humidity approx.       O.3-O.6       mass-%       Gypsum data book         Capillary rise of water / immersion time approx. 24 h       1.5-2.0       cm       Gypsum data book         Capillary rise of water / diving time approx. 24 h       0.5       cm       Gypsum data book         Capillary rise of water / diving time approx. ½ h       0       cm       Gypsum data book         Drying time after 2 h water storage approx.       15       hour(s)       Gypsum data book         Water absorption after 2 h storage under water       ≤10       mass-%       Gypsum data book         Water vapour diffusion equivalent air layer thickness (wet)       sd <sub>wet</sub> 0.05       m       Calculated         Water vapour diffusion equivalent air layer thickness (dry)       sd <sub>dry</sub> 0.13       m       Calculated         Water vapour diffusion resistance factor       μ <sub>wet</sub> 4       EN ISO 10456         Miscellaneous       I.4 · 10 <sup>6</sup> m³/(m²-s-Pa)       EN 520         Miscellaneous         Air permeability       1.4 · 10 <sup>6</sup> m³/(m²-s-Pa)       EN 520         PH value       6-9       ph         Notes       Pry Flat and level Shady Air access       Shady Air access         Shelf Life       Unlimited       Form of delivery       Form of delivery			0.6-1.0	mass-%	Gypsum data book
approx. 24 h  Capillary rise of water / diving time approx. 2 h  Capillary rise of water / dive time approx. 2 h  Capillary rise of water / dive time approx. 3 h  Capillary rise of water / dive time approx. 4 h  Capillary rise of water / dive time approx. 5 h  Capillary rise of water / dive time approx. 6 cm  Capillary rise of water / dive time approx. 7 cm  Capillary rise of water / dive time			0.3-0.6	mass-%	Gypsum data book
approx. 2 h  Capillary rise of water / dive time approx. % h  Drying time after 2 h water storage approx. 15 hour(s) Gypsum data book gypsum data book gypsum data book approx. 15 hour(s) Gypsum data book gypsum			1.5-2.0	cm	Gypsum data book
½ h     O     cm     Gypsum data Book       Drying time after 2 h water storage approx.     15     hour(s)     Gypsum data book       (total) water absorption after 2 h storage under water     ≤10     mass-%     Gypsum data book       Water vapour diffusion equivalent air layer thickness (wet)     sd <sub>wet</sub> 0.05     m     Calculated       Water vapour diffusion equivalent air layer thickness (dry)     sd <sub>dry</sub> 0.13     m     Calculated       Water vapour diffusion resistance factor     μ <sub>wet</sub> 4     EN ISO 10456       Miscellaneous       Air permeability     1.4 · 10 <sup>6</sup> m³/(m²-s-Pa)     EN 520       PH value     6-9     ph       Notes       Storage     Dry Flat and level Shady Air access     Shady Air access       Shelf Life     Unlimited       Form of delivery     According to Pricelist			0.5	cm	Gypsum data book
approx.  (total) water absorption after 2 h storage under water    Solution			0	cm	Gypsum data book
under water       SIO       ITIASS-76       Gypsull data book         Water vapour diffusion equivalent air layer thickness (wet)       sd <sub>wet</sub> 0.05       m       Calculated         Water vapour diffusion equivalent air layer thickness (dry)       sd <sub>dry</sub> 0.13       m       Calculated         Water vapour diffusion resistance factor       μ <sub>wet</sub> 4       EN ISO 10456         Miscellaneous       I.4 · 106       m³/(m²-s-Pa)       EN 520         PH value       6-9       ph         Notes       Pry Flat and level Shady Air access       Shady Air access         Shelf Life       Unlimited         Form of delivery       According to Pricelist	• •		15	hour(s)	Gypsum data book
Iayer thickness (wet)     sd <sub>wet</sub> 0.05     m     Calculated       Water vapour diffusion equivalent air layer thickness (dry)     sd <sub>dry</sub> 0.13     m     Calculated       Water vapour diffusion resistance factor     μ <sub>wet</sub> 4     EN ISO 10456       Miscellaneous       Air permeability     1.4 · 10 <sup>6</sup> m³/(m²·s·Pa)     EN 520       pH value     6-9     ph       Notes       Storage     Dry Flat and level Shady Air access       Shelf Life     Unlimited       Form of delivery     According to Pricelist			≤10	mass-%	Gypsum data book
	·	sd <sub>wet</sub>	0.05	m	Calculated
$ \begin{tabular}{lllllllllllllllllllllllllllllllllll$	· · · · · · · · · · · · · · · · · · ·	sd <sub>dry</sub>	0.13	m	Calculated
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	Water vapour diffusion resistance factor	$\mu_{\text{wet}}$	4		EN ISO 10456
Air permeability  1.4 · 106 m³/(m²·s·Pa) EN 520  pH value  6-9 ph  Notes  Storage  Dry Flat and level Shady Air access  Shelf Life  Unlimited  Form of delivery  According to Pricelist		$\mu_{\text{dry}}$	10		EN ISO 10456
pH value 6-9 ph  Notes  Storage Dry Flat and level Shady Air access  Shelf Life Unlimited  Form of delivery According to Pricelist	Miscellaneous				
Notes  Storage  Dry Flat and level Shady Air access  Shelf Life  Unlimited  According to Pricelist	Air permeability		1.4 · 10 <sup>6</sup>	$m^3/(m^2\cdot s\cdot Pa)$	EN 520
Storage  Dry Flat and level Shady Air access  Shelf Life  Unlimited  According to Pricelist	pH value		6-9	ph	
Storage  Flat and level Shady Air access  Shelf Life  Unlimited  According to Pricelist	Notes				
Form of delivery  According to Pricelist	Storage		Flat and level Shady		
Pricelist Price	Shelf Life		Unlimited		
Wast key 170802	Form of delivery		_		
	Wast key		170802		

The values listed in this product data sheet only reflect the performance characteristics of the products. In addition, gypsum plaster systems have structural and structural properties, which can be found in our system documentation (e. g. Planen und Bauen).



