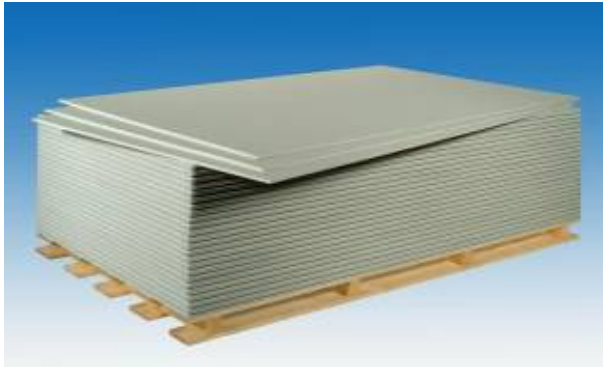


## Rigidur H 12,5



- smooth, hard and extremely robust: Ideal for all decorative topcoats
- suitable for residential damp room conditions



- made from natural ingredients
- Certified system solutions with Rigidur H: Durable and sustainable



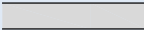

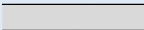
- Suitable for loadbearing timber frame construction
- Particularly suitable for load attachment to walls



- With a maximum in sound insulation and fire resistance performance

<b>Characteristics</b>	The Gypsum Fibreboard Rigidur H 12,5 contains gypsum, paper fibres and mineral additives.
<b>Application</b>	An ideal material for rigid drywall construction with excellent properties in sound absorption and fire resistance.
<b>Installation</b>	According to Rigidur installation guide

### Technical data

<b>Type</b>	GF-C1-I-W2				as per DIN EN 15283-2	
	non-combustible European Classification: A2-s1, d0				as per DIN EN 13501-1	
<b>Edges</b>	Longitudinal edges		SK		AK	
	Transverse edges		SK			
<b>Dimensions</b>	Board thickness	12.5	[mm]			
	Width x Lengths	For possible dimensions please consult our delivery programme. Special lengths (intermediate sizes, overlength) and sheet cutting possible - delivery time on request.				
	Dimensional tolerances	Thickness	±0.2	[mm]		
		Width	+0/-2	[mm]		
Length		+0/-2	[mm]			
Squareness: deviation per m width		≤ 2.0	[mm/m]	as per DIN EN 15283-2		

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.

## Rigidur H 12,5

Rigidur H 12,5				
Plasterboard marking	On rear side	The marking in longitudinal direction in black contains: - Rigidur H 12,5 - CE-marking - EN 15283-2 GF-C1-I-W2 - non-combustible A2-s1, d0 - ETA 08/0147 // KOMO K23110 // Ü-VHT Z-9.1-571 - Production date and/or shift number		
	Weight	Weight per unit area	ca. 15 [kg/m <sup>2</sup> ]	as per DIN EN 15283-2
Strengths	Apperent density	ca. 1200 [kg/m <sup>3</sup> ]		as per DIN EN 15283-2
	Flexural strength	6.9 [N/mm <sup>2</sup> ]		as per DIN EN 15283-2
	Modulus of elasticity	4050 [N/mm <sup>2</sup> ]		as per DIN EN 15283-2
Characteristic strength parameters [N/mm <sup>2</sup> ] for rating according Z-9.1-571	Surface hardness as per Brinell	35 [N/mm <sup>2</sup> ]		as per DIN EN ISO 6506-1
	Bending $f_{m,k}$	5.5 4.5	⊥ [MN/m <sup>2</sup> ]    [MN/m <sup>2</sup> ]	
	Tension $f_{t,k}$	2.2	[MN/m <sup>2</sup> ]	
	Compression $f_{c,k}$	9.0	[MN/m <sup>2</sup> ]	
	Shear $f_{v,k}$	2.3 1.2	⊥ [MN/m <sup>2</sup> ]    [MN/m <sup>2</sup> ]	
	Bending modulus of elasticity $E_{m,mean}$	4500 3500	⊥ [MN/m <sup>2</sup> ]    [MN/m <sup>2</sup> ]	
	Tension modulus of elasticity $E_{t,mean}$	4500	[MN/m <sup>2</sup> ]	
	Compression modulus of elasticity $E_{c,mean}$	4500	[MN/m <sup>2</sup> ]	
	Shear modulus of elasticity $G_{mean}$	1300	⊥ [MN/m <sup>2</sup> ]	
	Characteristic embedding strength $f_{h,k}$	$f_{h,k} = 127 \times d^{0.7}$ d = diameter of the connector The characteristic load bearing value of connectors shall be determined by using the following formula (Board thickness $t \geq 7d$ ): $R_k = 0.7 \times \sqrt{2 \times M_{y,k} \times f_{h,1,k} \times d} \text{ [N]}$ With $M_{y,k}$ = characteristic value of yield moment from connector [Nmm]	[N/mm <sup>2</sup> ]	

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.

## Rigidur H 12,5

	Class of load duration	Service Class 1	Service Class 2	according to Z-9.1-571	
calculation value	modification factor $K_{mod}$	permanent	0.20	0.15	
		long	0.40	0.30	
		average	0.60	0.45	
		Shortterm	0.80	0.60	
		Very short	1.10	0.80	
Deformation value $k_{def}$	permanent	long	3.0	4.0	
		long	2.0	2.5	
		average	1.0	1.25	
		Shortterm	0.35	0.5	
		Shortterm			
partial safety factor $\gamma_m$	1.3				
Heat	Thermal conductivity $\lambda_R$ $\lambda_{10,dry}$	0.350 0.202	[W/(m x K)]	as per DIN EN 12667	
	Thermal dilatation	0.015	[mm/(m x K)]	referring to DIN EN 318	
	Thermal threshold stress (long-term load)	max. 50	[°C]	short-term load 60°C	
Humidity	Water vapour permeability $\mu$	19	[-]	as per DIN EN 12524	
	Water vapour diffusion-equivalent air layer thickness $s_d$	0.24	[m]	as per DIN EN ISO 12527	
	Surface water absorption	≤ 1500	[g/m <sup>2</sup> ]	after 30 minutes	as per DIN EN 15283-2
	Thickness dilatation after 24h immersion in water	≤ 2	[%]		referring to DIN EN 317
	Dilatation due to changing of relative humidity by 30% (20°C)	0.045	[%]		as per DIN EN 318
	Stable moisture content at 20°C, 65% relative humidity	1-1.3	[%]		as per DIN EN 322
Sign	The values given in this product data sheet solely describe the performance characteristics of the products. Rigips-Systems also have far-reaching structural-physical and static properties, which can be found in our system documentation (e.g. Planen und Bauen).				

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.