

Glasroc F (Ridurit)



Glasroc F (Ridurit) is a glass reinforced gypsum board (GRG) according to DIN EN 15283-1, type GM-FH2 with low water absorption capacity and best resistance against high temperatures. It combines gypsum, glass fibre tissue, glass fibre rovings, silicone and paper pulp. Glasroc F (Ridurit) consists of gypsum incorporating a tissue of glass fibre immediately below the surface of the board. The core is reinforced with glass fibre rovings and paper pulp.

The resistance against high temperatures allows the application in powerful fire protection constructions, because the board is stable and strong after long exposure to fire. The H2 classification enable the use in areas with temporarily heightened humidity.

Glasroc F (Ridurit) offers especially even and smooth surfaces. Glasroc F (Ridurit) is non combustible and classified to class A1 according to DIN EN 13501-1. The boards are signed with the CE-mark. By request Glasroc F (Ridurit) can be supplied for marine applications in shipbuilding as a non combustible material with approval (module B and F) according to the requirements of the Marine Equipment Directive (MED).

Glasroc F (Ridurit) is predominantly used in high-class fire protection systems, for example in:

- shaft walls F 90
- trapezoidal sheeting roof F 30 to F 90
- retrofitting ceilings F 90
- free span ceilings F 90
- fire incasements of steelstructures F 30 to F 180
- installation ducts according to DIN 4102-11, I 30 to I 120
- cable ducts according to DIN 4102-12, E 30 to E 90

Glasroc F (Ridurit) is easy to install. The excellent performance and high strength of Glasroc F (Ridurit) enable good connections of edge fixing using screws or staples. For installation refer to the instructions of Saint-Gobain Rigips GmbH.

The information in this publication is based on our current technical knowledge and experience. Due to the wide range of factors that may affect the processing and use of our products, it does not absolve users from responsibility for performing their own inspections and tests, and serves only as a general guideline. No legally binding guarantee of specific properties or suitability for a concrete purpose may be inferred. Users shall be responsible for ensuring that any trademarks and existing laws and provisions are observed at all times. We reserve the right to make changes in the interests of technical progress.

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technical values

Confirmation:

Gypsum board with fibrous reinforcement,
type GM-FH2 according to DIN EN 15283-1

Reaction to fire:

A1, non combustible according to DIN EN 13501-1

Edge type:

four-sided square edge (cut)



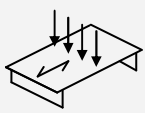
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weight	dry density	850 [+50 / -40]			[kg/m ³]
	weight per area m ² (average values)	Glasroc F (Ridurit) 15	Glasroc F (Ridurit) 20	Glasroc F (Ridurit) 25	[kg/m ²]
		12,75	17,00	21,25	
dimensions	nominal thickness	Glasroc F (Ridurit) 15	Glasroc F (Ridurit) 20	Glasroc F (Ridurit) 25	[mm]
		15,0	20,0	25,0	
	width	1.200			[mm]
	length	2.000 special lengths (interim lengths, overlengths) and cutted boards are possible – delivery on request.			[mm]
dimensions	tolerances	thickness +0,7 / -0,5 (in these tolerances the difference of the “thickest” and the “thinnest” point of the board has to be smaller than 1,0 mm)			[mm]
		width +0 / -3 length +0 / -3 rectangularity: 2,5 mm / m (deviation per meter width)			
thermotechnical values	thermal conductivity λ_R according to DIN EN 12524	0,25			[W/m×K]
	vapour diffusion resistance coefficient μ according to DIN EN 12524	10			[-]

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resistance and strength	bending tensile strength according to DIN EN 15283-1	⊥ longitudinal direction topside below				
		∥ cross direction topside above				
		Glasroc F (Ridurit) 15	Glasroc F (Ridurit) 20	Glasroc F (Ridurit) 25	[N]	
	⊥	≥ 645	≥ 860	≥ 1.075		
	∥	≥ 252	≥ 336	≥ 420		
surface hardness according to DIN EN 15283-1 respectively DIN EN 520	Glasroc F (Ridurit) 15	Glasroc F (Ridurit) 20	Glasroc F (Ridurit) 25	[mm]		
	≤ 14	≤ 15	≤ 15			
arc resistance according to DIN 53484	arc pull-off: 16-19, degree L4			[mm]		

thermal values	specific heat c_p	1.700			[J/kgK]
	moisture content p	0			[%]
	thermal conductivity for columns λ_p	0.20			[W/mK]
	thermal conductivity for beamss λ_p	$40 \text{ m}^{-1} \leq U/A < 100 \text{ m}^{-1}$	$100 \text{ m}^{-1} \leq U/A < 200 \text{ m}^{-1}$	$200 \text{ m}^{-1} \leq U/A < 300 \text{ m}^{-1}$	[W/mK]
$0,5 - \frac{0,3}{100} \times \frac{U}{A}$		0.25	0.30		

U=perimeter exposed to fire, A= cross section area of the steel element

The above mentioned thermal values are given for the calculation of steel constructions in terms of fire protection according to Eurocode 3 part 1-2.

Glasroc F (Ridurit) according to EN 15283-1 corresponds to the product Ridurit according to the national approval Z-56.413-557.

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