Technical Product Data Sheet

WAS_GRID Q48 C A s34 F130

Symmetrical, bidirectional carbon fiber grid with high strength, suitable for the structural reinforcement in civil and structural engineering, as well as tunnel construction.

Fiber material: C (Carbon)
Soaking agent: A (Acrylate)
Flexural rigidity: flexible
Concrete strength class: all

Chemical resistance: XD3 / XS3 / XA3



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Store in original packaging, cool and dry, as well as covered and protected from direct sunlight.

Areas of Application

- Universal application in the construction sector (road -, tunnel - and building construction, civil engineering)
- Upgrading and strengthening of existing building structures
- Replacement of steel reinforcements
- Crack control

Advantages

- Extremely high tensile strength / no corrosion
- Easy and flexible application, even overhead
- Little overlap, low construction height
- Low weight per unit area
- High bonding properties with WAS Carbon Concrete

Grid Characteristics		
Dimensions - Geometry	longitudinal direction (0°)	transverse direction (90°)
Carbon filaments (in thousands of K)	48	48
Fiber strand center dimension [mm]	37	37
Number of strands per m	26	26
Grid opening clear width [mm]	34 x 34	34 x 34
Density [g/cm³]	1,77	1,77
Mechanical data	longitudinal direction (0°)	transverse direction (90°)
Average breaking strength [N]	5887	5678
Reinforcement cross-section / Carbon fiber cross-section [mm²]	1,81	1,81
Average breaking stress [N/mm²] 1)	3252	3137
Characteristic breaking stress [N/mm²]	2500*	2500*
E-module [N/mm²]	> 210000	> 210000
Elongation at break [%] / Elongation	<1,8	<1,8
Characteristic load-bearing capacity [kN/m]	153	148
Reinforcement cross-section per m [mm²/m]	47	47
Polymer matrix (impregnation material)	ACRYLATE	

The breaking stress was determined by using a fiber strand test in the tensile direction, based on ISO 10406-1. The values listed represent static short-term strength at 23°C / 50% relative humidity.

Notes

The information, provided in this technical product data sheet, is valid for the product delivered by WAS International GmbH. The information serves to ensure the usual purpose of use. However, it does not release the user from the responsibility of checking suitability and usage.