



TuffGlass™ 27

High Strength Glass Fiber Fabric

DESCRIPTION

TuffGlass™ 27 is a custom weave unidirectional glass fiber fabric with fiber oriented in the 0° direction and additional yellow glass cross fibers at the 90°. The TuffGlass™ 27 system is field laminated using environmentally friendly, TuffSat™ saturate, a two-part, 100% solids and high strength structural adhesives to form a glass fiber reinforced polymer (GFRP) system used to reinforce structural elements. TuffSat™ epoxy is certified safe for potable water (ANSI/NSF 61) and incidental food contact.

USES:

- Increase load carrying capacities
- Seismic strengthening of columns and masonry walls
- Repair damages to structural parts
- Temporary strengthening
- Changes in structural systems
- Design or construction defects
- Underwater applications

FEATURES:

- Excellent for underwater applications
- Good high & low temperature properties
- High elongation
- Ambient cure
- Solvent free
- Non-corrosive reinforcement system
- Lightweight flexible fabric
- Can be wrapped around complex shapes
- Used for shear, confinement or flexural strengthening

TECHNICAL DATA:

Primary Fiber Direction 0° (unidirectional)
 Areal Weight 27 oz (917 gsm)
 0% VOC
 Solvent free

COVERAGE GUIDE:

PREPARATION:

TuffGlass™ 27 is applied directly to the surface of fresh concrete. No surface preparation is necessary.

Typical Data for TUFF GLASS 27		Fiber Properties (Dry)	
Storage Conditions		Store dry at 40°F - 90°F (4°C - 32°C)	
Color		White	
Primary Fiber Direction		0° (unidirectional)	
Weight		27 oz/yd ² (915 g/m ²)	
Shelf life		10 years	
Tensile Strength		475,000 psi (3,275 MPa)	
Tensile Modulus		11.6 x 10 ⁶ psi (79,970 MPa)	
Elongation		4.1 %	
Density		0.095 lb/in ³ (2.62 g/cm ³)	
Cured Laminate Properties		Average Values (1)	
Tensile Strength		82,280 psi (567 MPa)	
Modulus of Elasticity		3.87 x 10 ⁶ psi (26,680 MPa)	
Elongation at Break		2.13%	
Thickness		0.04 in. (1.016 mm)	
Strength per Unit Width		3,291 lbs/in. (0.58 kN/mm)	
Design Values (2)			
Tensile Strength		70,600 psi (487 MPa)	
Modulus of Elasticity		3.87 x 10 ⁶ psi (26,680 MPa)	
Elongation at Break		1.8%	
Thickness		0.04 in. (1.016 mm)	
Strength per Unit Width		2,824 lbs/in. (0.49 kN/mm)	

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While all reasonable care is taken in compiling technical data on the Company's products, all recommendations or suggestions regarding the use of such products are made without guarantee, since the conditions of use are beyond the control of the Company. It is the user's responsibility to satisfy himself that each product is fit for the purpose for which he intends to use it, that the actual conditions of use are suitable, and that the information relating to each product has not been altered or superseded.

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