

**FIDSATURANT®**  
EPOXY RESIN TO IMPREGNATE IN SITU FIBER SHEETS  
USED FOR STRUCTURAL STRENGTHENING



**TECHNICAL GLOBAL SERVICES**

*FIDSATURANT is a two-component epoxy product, with high solid content, ideal for impregnation of fiber sheets of the FIDCARBON, FIDGLASS, FIDARAMID series and the new FIDSTEEL series used for structural strengthening.*



**TECHNICAL DATA SHEET**

Ultimate direct tensile strength at 7 days	>25	MPa
Ultimate direct tensile modulus of elasticity at 7 days	3300	MPa
Ultimate tensile strength by flexing at 7 days	>40	MPa
Ultimate compressive strength at 7 days	>80	MPa
Ultimate compressive modulus of elasticity at 7 days	3100	MPa
Thermal expansion at 7 days	6,01·10 <sup>-5</sup>	C-1
Mixing ratio	in volume	A/B = 2/1
	in peso	A/B = 2/1
Density	A	1,1±0,05 kg/l
	B	1,0±0,05kg/l
Density (A+B)		1,08±0,05kg/l
Bonding to concrete at 7 days	> 3,5	MPa
Color	Amber transparent	
Pot life	5°C	120 min
	10°C	60 min
	20°C	30 min
	30°C	15 min
Quantity needed	0,72	kg/m <sup>2</sup>
Application temperature	5÷30	°C
Optimal storage	10÷30	°C

**PACKAGES**

Can of 6 kg. (4 kg part A + 2kg part B).  
Drum of 30 kg. (20 kg part A + 10kg part B).

**QUALITY & CERTIFICATIONS**

Material supply is accompanied by a certificate of origin of the material from the producer and the certificate of characterization of the mechanical properties issued by an Italian laboratory approved by the Ministry of Infrastructure and Transport according to Art. 59 of D. P. R. 380/2001 construction material sector following the law .1086/71, with Decree n.38194 of 14/01/1992 and followings.

\*The properties of the composite have been determined according to the UNI and ASTM standards as indicated in the CNR-DT 200/2004 guidelines " Guide for the Design and Construction of Externally Bonded FRP Systems for Strengthening Existing Structures ".

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**MATERIAL CHARACTERISTICS**

*Description*

FIDSATURANT is the recommended resin adhesive for use with FID Fiber sheets using a Manual lay-up technology. FIDSATURANT is a two-part epoxy product with 100% solids content.

*Ideal for:*

- impregnation of carbon fiber sheet FIDCARBON, glass fiber sheet FIDGLASS, aramid fiber sheet FIDARAMID and the new steel fiber sheet FIDSTEEL HARDWARE® for structural strengthening made in Reinforced/Prestressed concrete, Masonry, Natural stone, Timber and Steel.

*Advantages:*

- easy to install using trote, spatula, and special steel roof for impregnation;
- Convenient pot-life;
- High adhesive and bond strength;
- Low viscosity, good for a variety of fibre densities;
- Bonds to damp surfaces (saturated surface dry);
- High mechanical strength;
- Solvent-free.

**RECOMMENDATIONS**

When managing the resin, protective clothing, gloves and glasses must be worn and instructions regarding the installation of the materials must be followed carefully.

*Inhalation:* breath fresh air and rinse out your mouth.

*Skin contact:* no special measures are needed.

*Contact with eyes:* rinse for at least 15 minutes; in case of use of contact lenses they must be removed and rinsed for at least another 5/10 minutes; If still painful seek medical care.

*Ingestion:* rinse the mouth by drinking water and inducing vomit. Seek medical care.

*Yard storage:* Keep in a dry covered area

**APPLICATION**

*1. Substrate preparation*

The surfaces of elements that are still in good condition or restored with repair mortar should be roughened sufficiently with grit blasting or similar. With degraded substrates, the whole damaged layer should be removed by scarifying, hydro-demolition or similar and then structural restoration carried out with a suitable repair mortar or FIDPUTTY.

Angle grind, grit blast, or needle gun repair surfaces, to remove smooth, cement paste rich surface layers (laitance) and ensure aggregate is exposed and the substrate surface has a sufficient profile.

Remove oils, grease, dust or any other loose material from the surface that may impair adhesion. Ensure a maximum substrate humidity of 4%.

*2. Mixing*

Mechanically mix component A before adding component B (see mixing ratio into the technical data sheet)).

When component B has been added, mix for approximately 3 minutes until a smooth mix has been obtained.

Clean up.

*3. Installation*

The first coat of FIDSATURANT may be applied by brush or by roller, over the still tacky FIDPRIMER.

Apply fiber and remove air by rolling with a ribbed roller in the fibre direction only.

Apply a second coat of FIDSATURANT using a roller, working in the direction of the fibre.

Ensure complete wet-out of the fibre by using a squeegee to remove excess FIDSATURANT.

Repeat the last four steps for subsequent layers of Fiber.

The surface of the final layer of FIDSATURANT may be painted to ensure visual uniformity and UV protection.

*4. Cleaning*

Tools must be cleaned immediately after use with cleaning solvent for epoxy resin.

**LEGAL NOTES**

*The technical advice that Fidia S. r.l. Technical Global Services provides, orally or in writing, as assistance to the customer or installer on the basis of its experiences, corresponding to current scientific knowledge and practices, are not binding and do not demonstrate any legal or contractual obligation accessory with contract of sale. They do not exempt from liability buyer from our products as regards their suitability for use. For the rest are valid our commercial conditions. Discrepancies that original content and/or use not involve any responsibility by the company's Fidia S. r.l.. The Client is obliged to check that this report, and the values are valid for the consignment of product of its interest and not be overcome, as replaced by subsequent editions and/or new formulations of the product. In doubt, please contact advance our Technical Office.*

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