

STRUCT GUARD –PRIMER & SATURANT (Epoxy adhesive for wrapping system)

DESCRIPTION:

STRUCT GUARD PRIMER & SATURANT is a two-component high strength epoxy adhesive resin system comprised of a base and curing agent for wrapping system.

AREAS OF APPLICATION:

- In wrapping of unidirectional Carbon fibre sheets to concrete structural elements for structural strengthening and seismic retrofitting applications.
- Beams and columns
- Slabs and foundations
- Bridges and highways

ADVANTAGES:

- Saturant ensures a strong bond between the Carbon fibre sheet and the substrate
- Saturant protects the Carbon fiber from environmental degradation.
- Saturant helps to transfer loads to the Carbon fiber, increasing overall strength.
- Saturant protects the substrate from corrosion and damage.
- Saturant is typically easy to apply, reducing labor time and costs.
- Saturant can be used on various substrates, including concrete, steel, and wood.
- Saturant helps to extend the lifespan of the Carbon wrap and substrate.

PRODUCT INFORMATION:

Sr. No	Specifications	Technical Details
1	Base	Epoxy (Two component)
2	Application	By brush or roller after surface preparation
3	Pot life (Primer)	30 min. @ 30° C
4	Pot life (Saturant)	120 min. @ atmospheric temperature
5	Curing (Primer & Saturant)	24 Hrs @ atmospheric temperature
Properties	Primer	Saturant
Mix proportion (By weight)	A: B 2: 1	A: B 2: 1
Coverage	4-5 sq. mtr/kg	1-2 sq.mtr/kg

DIRECTION FOR USE:

SURFACE PREPARATION:

- Concrete to be treated shall be free from oil residues, demoulding agents, curing compounds, grouting lines and protrusions.
- The damaged structures shall be repaired with epoxy mortar/ low viscous epoxy grout guard or polymer modified mortar.
- Undulations in the concrete shall be filled by Epoxy putty. Differences in concrete levels shall not be more than 1 mm.

HOW TO APPLY:

- Mix STRUCT GUARD-PRIMER in proportion 2:1 and stir for 5-10 minutes in a clean plastic container.
- Apply the primer by roller.
- Application of STRUCT GUARD- CARBON (Carbon Fibre Sheet) shall be done over 2nd coat (i.e., saturant coat) with mixing ratio 2:1.
- Apply STRUCT GUARD- SATURANT in proportion 2: 1 over applied Carbon fibre and allow it to cure.
- Note:(Pressure out the resin through the fibre as much as possible).

TECHNICAL DATA:

Property	Testing Standards	Result
Compressive Strength	ASTM C 881 / D 695	75 MPa
Tensile Strength	ASTM D 638 Type I	52 MPa
Tensile Modulus	ASTM D 638 Type I	3.2 GPa
Elongation %	ASTM D 638 Type I	5 %
Flexural Strength	ASTM D 790	55 MPa
Flexural Modulus	ASTM D 790	3.14 GPa

SAFETY PRECAUTIONS:

Care should be taken to avoid contact with eyes, skin, and mouth and food stuff. Any splashes on the human body must be washed off with plenty water. Wear protective gloves, goggles, and nose masks while handling the material.