

## 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 sheet / e-glass 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 Glass fiber / carbon fibre sheet and the substrate.
- Saturant protects the Glass fiber from environmental degradation.
- Saturant helps to transfer loads to the Glass 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 Glass 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	50 min.	
4	Storage	Stored in original un-opened packaging under normal conditions.	
Properties	Primer	Saturant	
Mix proportion (By weight)	A:B 2:1	For (GFRP) Glass fibre sheet	For (CFRP) Carbon fibre sheet
		A:B 1:1	A:B 3:1
Coverage	4-5 sq. mtr/kg	1-2 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 STRUCT GUARD 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 brush and roller.
- Application of STRUCT GUARD- GLASS (Glass Fiber Sheet) / STRUCT GUARD-CARBON (Carbon fibre sheet) shall be done over 2nd coat (i.e., saturant coat).
- Apply the second coat of STRUCT GUARD- SATURANT in proportion 1:1 (for glass fibre) & 3:1 (for carbon fibre) over applied Glass fiber / Carbon fibre and allow it to cure.
- Pressure out the resin through the fiber 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	45 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.