

VX CarbonPlate Adhesive is a specialty system for structural purposes. It is a two component system of VX CarbonPlate Adhesive resin and VX CarbonPlate Adhesive hardener. VX CarbonPlate Adhesive Resin is a bisphenol-A based epoxy resin and VX CarbonPlate Adhesive hardener is a moderate viscosity, modified amine hardener. VX CarbonPlate Adhesive system is recommended for room temperature curing. An ideal application is recommended for Bonding of 'Uni-directional Fiber Laminates - VX Carbon Bar to concrete structural elements for strengthening and retrofitting applications.

#### **USES**

- Simple and tolerant mixing ratio.
- Solvent less system.
- Thixotropic resin/hardener mix for better application.
- Excellent water resistance.
- Excellent covering of substrate surface.
- Excellent bonding to concrete.

# **TECHNICAL SPECIFICATIONS: RESIN (Part A)**

Characteristic	Test Method	Unit	Specification
Appearance	Visual	-	Grey Color
Viscosity at 25°C	ASTM D2196	сР	Thixotropic nature
Density at 25°C	ASTM D891	g/cc	1.15 - 1.35
Storage life at 25°C	-	Years	1

## **TECHNICAL SPECIFICATIONS: HARDENER (Part B)**

Characteristic	Test Method	Unit	Specification
Appearance	Visual	-	Amber color
Viscosity at 25°C	ASTM D2196	сР	Thixotropic nature
Density at 25°C	ASTM D891	g/cc	1.1 - 1.3
Storage life at 25°C	-	Years	1

### **CAST EPOXY PROPERTIES**

Description	Test Method	Unit	Specification
Tensile strength	ASTM D638 Type-1	MPa	20 Min
Cured density	ASTM D792	g/cc	1.21

Disclaimer. The information and the recommendations relating to the application and end use of this product are given in good faith and are based on the information provided by the manufacturer of the product and/or the Company's current knowledge and experience in connection with the product when properly stored, handled and applied under normal conditions and no liability of final function at the job site is assumed. In practice, the differences in materials substrates and actual size conditions are such that no warranty in respect of merchantability of or fitness for particular purpose, nor any liability by the Company will be accepted for misuse, misreading or derivation from recommended guidelines in respect of this product and the user shall determine the suitability of the product for his intended use and all risks and liability in connection therewith. The information contained in the brochure may change at any time without notice.



#### PROPERTIES OF THE SYSTEM

Mix ratio	VX CarbonPlate Adhesive resin: VX CarbonPlate Adhesive hardener 100 : 35 (w/w)
Pot life at 25-28°C	30 – 40 minutes
Get time at 25-28°C	60 minutes
Tack free time at 25-28°C	2 – 3 hours
Full cure time	7 days
Adhesive strength to concrete (ASTM D7234)	2.7 MPa nominal

#### **PACKAGING**

Pack sizes available: 5 Kg, 20 Kg

#### **BATCH PREPARATION**

The batches should be prepared in clean containers, avoid any type of contamination. Prepare batches in small quantities. Add the resin and hardener in the prescribed ratio and mix thoroughly for 5-7 minutes. Allow to stand the mixture for 5 minutes before application. Consume the batch within 20-25 minutes.

#### **APPLICATION**

Apply one coat of VX Savior Multi EP by roller or brush and wait until dry to apply the second coat. If necessary, apply a coat of VX Savior BondPaste EP using a putty knife, to fill any blow holes or imperfections to the concrete or timber surfaces. Apply one layer of VX CarbonPlate Adhesive 1 – 2 mm thick on both the surfaces (substrate & laminate).

Apply VX Carbon Bar against the substrate using roller; exert a constant pressure by moving the tool both ways in the directions of the fibers.

# STORAGE, HANDLING AND DISPOSAL

**Storage** Store in a cool, dry place

**Shelf life** As given in the product specifications **Handling** Use hand gloves and protective glasses

**Disposal** Dispose by incineration or as per local regulations

### **SAFETY INFORMATION**

Flash point >150°C

**Precautions** In case of skin contact, wash with soap and water. In case of eye

irritation, bathe the affected eye with running water for at least 15

minutes, and get immediate medical attention

**Special Care** The reaction is exothermic and mixture will be heated up, hence

should be applied quickly after mixing (please prepare small batches

of mixes)

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