

VX CarbonMaster Plate is a pre-cured pultruded carbon fiber laminate, specially developed to meet the most stringent repair and retrofitting standards. Laminates are pull formed using high strength carbon fibers and an epoxy resin matrix to deliver a product with excellent strength and stiffness.

## USES

- Improving seismic performance.
- Increasing the strength and ductility.
- Increasing the loading capacity of structural elements.
- Enabling changes in use/alterations.
- Correcting structural design or construction defects.
- Improving service life and durability.
- Structural up-gradation.

## ADVANTAGES

- Easy to transport and install.
- High strength & stiffness to weight ratio.
- Cost effective.
- Corrosion resistance.
- Improved long term durability.
- Low overall thickness.
- Low self-weight.
- Good fatigue resistance.

### Details of Carbon Laminate FIBER PROPERTIES

Characteristic	Unit	Value
Density	g/cc	1.8 Min.
Filament diameter	µm	7 Nominal
Tensile strength	MPa	4900 Min.
Tensile modulus	GPa	240 Min.
Elongation	%	2.1 Nominal
Sizing	-	Epoxy

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.



## LAMINATE MECHANICAL PROPERTIES

Characteristic	Unit	Test Method	Tolerance	Value
Tensile strength	MPa	ASTM D3039	Min.	3100
Elongation at break	%	ASTM D3039	Max.	1.8
Tensile modulus	GPa	ASTM D3039	Min.	165
Plate Thickness	mm	ASTM D3171	± 0.10	1.2 / 1.4
Plate width	mm	ASTM D3774	-0/+0.5	50/80/100/120
Fiber volume content	%	-	-	68 - 72

### PACKAGING

Wound in coils and secured with plastics ties, wrapped in plastic film and placed in a cardboard box. Rolls lengths are typically 50m and 100m.

### STORAGE

It should be stored in its original packaging in temperatures ranging between 10°C to 35°C under dry conditions.

### SHELF LIFE

The shelf life of the product when stored as per the storage conditions mentioned above is 3 years.

### HANDLING

Use hand gloves and protective glasses. Beware of snapping of coil while unwinding.

### DISPOSAL

Dispose by incineration or as per local regulations.  
*Please refer to the MSDS for additional details.*