

## HM-1.2T

### Carbon Fiber Laminate for structural strengthening

#### Description

HM-1.2T is a pultruded carbon fiber reinforce polymer(CFRP) laminated designed for strengthening concrete ,timer and masonry structures. HM-1.2T is bonding onto the structure as external reinforcement using HM-120CP epoxy resin as the adhesive.

#### Where to Use

##### Load Increase

- Increased live loads in warehouses
- Increased traffic volumes on bridges
- Installation of heavy machinery in industrial building
- Vibrating structures
- Changes of building utilization

##### Seismic Strengthening

- Column wrapping
- Masonry walls

##### Damage to Structural Parts

- Aging of construction materials
- Vehicle impact
- Fire
- Blast impact

##### Change in Structural Parts

- Removing of wall or columns
- Removal of slab section for openings

##### Design or Construction Defects

- Insufficient reinforcements
- Insufficient structural depth

#### Advantages

- Approved by GB50367-2013/GB50728-2011/GB50550-2010
- High Strength
- Light Weight
- Non-corrosive
- Alkali Resistant

# HORSE CONSTRUCTION

HORSE

HM-1.2T CARBON FIBER LAMINATE

HORSE

## Typical Data

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### BASE

**Shelf Life** Unlimited(no exposure to direct sunlight)

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**Color** Black

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### Tensile Strength

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**Mean Value**  $4.49 \times 10^5$ psi(3100MPa)

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**Design Value**  $406 \times 10^5$ psi(2800MPa)

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### Modulus of Elasticity

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**Mean Value**  $23.9 \times 10^6$ psi(165,000MPa)

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**Design Value**  $23.2 \times 10^6$ psi(160,000MPa)

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**Elongation at Break** 1.7%

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**Thickness** 1.2mm

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**Temperature Resistance**  $> 300^\circ\text{F} (> 150^\circ\text{C})$

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**Fiber Volumetric Content**  $> 68\%$

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**Density** 0.058 lbs./in<sup>3</sup> (1.6g/cm<sup>3</sup>)

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### Packing

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Available carton package at 10sqm/carton. Type 50mm width, 2rolls per carton; Type 100mm width, 1 roll per carton.

### Transportation and storage

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This product should be stored in dry, cool and well-ventilated enviroment without rain, exposure or impact with sharp objects;

Carbon fiber materials transport and storage shall not be squeezed to avoid carbon fiber damage, or direct sunlight and rain