

HM-1.4T

Carbon Fiber Laminate for structural strengthening

Description

HM-1.4T is a pultruded carbon fiber reinforce polymer(CFRP) laminated designed for strengthening concrete ,timer and masonry structures. HM-1.4T 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-1.4T CARBON FIBER LAMINATE

HORSE

Typical Data

BASE

Shelf Life Unlimited(no exposure to direct sunlight)

Color Black

Tensile Strength

Mean Value 4.49×10^5 psi(3100MPa)

Design Value 406×10^5 psi(2800MPa)

Modulus of Elasticity

Mean Value 23.9×10^6 psi(165,000MPa)

Design Value 23.2×10^6 psi(160,000MPa)

Elongation at Break 1.7%

Thickness 1.4mm

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

Fiber Volumetric Content $> 68\%$

Density 0.058 lbs./in³ (1.6g/cm³)

Packing

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

Transportation and storage

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