

## HM-3.0T

### Carbon Fiber Laminate for structural strengthening

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**Description** HM-3.0T is a pultruded carbon fiber reinforce polymer(CFRP) laminated designed for strengthening concrete ,timer and masonry structures. HM-3.0T is bonding onto the structure as external reinforcement using HM-160 epoxy resin as the adheisve.

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#### 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

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#### Advantages

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

<b>Base</b>	
<b>Shelf Life</b>	Unlimited(no exposure to directsunlight)
<b>Color</b>	Black
<b>Tensile Strength</b>	
<b>Mean Value</b>	$4.49 \times 10^5$ psi(3100MPa)
<b>Design Value</b>	$3.47 \times 10^5$ psi(2400MPa)
<b>Modulus Of Elasticity</b>	
<b>Mean Value</b>	$23.9 \times 10^6$ psi(165,000MPa)
<b>Design Value</b>	$23.2 \times 10^6$ psi(160,000MPa)
<b>Elongation at Break</b>	1.7%
<b>Thickness</b>	3.0mm
<b>Temperature Resistance</b>	> 300°F(> 150C°)
<b>Fiber Volumetric Content</b>	> 68%
<b>Density</b>	0.058 lbs./in <sup>3</sup> (1.6g/cm <sup>3</sup> )