

# Horse HM-CFJS

## Bidirectional Carbon Fiber Jacketing Plate

---

### Description

HM-CFJS is a high strength, high modulus carbon fiber jacketing system for column, beam strengthening. It can be used underwater, and application together with HM-MT030 waterproof mortar.

---

### Application Range

#### ■ Load Increase

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

#### ■ Seismic Reinforcement

Concrete column wrapping, beam strengthening, wall strengthening  
Masonry walls reinforcement

#### ■ Damage to Structural Parts

Aging of construction materials  
Fire  
Vehicle impact

#### ■ Change of Structural System

Removal of walls or columns  
Removal of slab sections for openings

#### ■ Design or Construction Defects

Lack of reinforcing bars  
Lack of member cross section

#### ■ Improve Structural State

Reduce the deformation  
Reduce the stress of the original structure  
The crack reinforcement

---

---

<b>Product Characteristic</b>	<ul style="list-style-type: none"><li>■ High strength, high toughness, high modulus</li><li>■ Light self weight, easy to install</li><li>■ Long shelf life and aging resistance</li><li>■ High temperature resistance</li><li>■ Acid, alkali &amp; salt resistance</li><li>■ Seismic resistance</li><li>■ Environmental-friendly</li><li>■ Can be used underwater</li></ul>
-------------------------------	---

---

<b>Horse Advantage</b>	<ul style="list-style-type: none"><li>■ <b>Aviation Grade Yarn</b> Japan imported aviation grade raw material, excellent quality and stable performance.</li> <li>■ <b>World Leading Production Line</b> Germany imported intelligent production line. Point to point active weft insertion. No damage to the yarn during the weaving process. excellent flatness enable epoxy easy to penetrate, hence high bonding strength can be achieved</li> <li>■ <b>Patented Tension Controlling System</b> Our own developed whole process tension controlling</li></ul>
------------------------	---

---

<b>Package</b>	This product is rolled into a ring and uses a belt to bind. The length, width, thickness can be customized according to the request.
----------------	--

---

## Basic Information

<b>Model</b>	HM-CFJS
<b>Appreance</b>	Black laminate
<b>Length</b>	Customized
<b>Width</b>	Regular width is 1m, 2m, 3m other width can be

<b>Thickness</b>	From 2mm - 6mm
<b>Shelf Life</b>	50 years
<b>Storage Conditions</b>	Store in dry conditions at 40°F to 95°F (4°C to 35°C)
<b>Braiding</b>	0°-90° (Bidirectional)

---

### Performance indexes

<b>Tensile Strength</b>	
Horizontal	≥550MPa
Vertical	≥550MPa
<b>Bending Strength</b>	
Horizontal	≥550MPa
Vertical	≥550MPa
<b>Bending Elastic Modulus</b>	
Horizontal	≥25GPa
Vertical	≥25GPa
Water absorption	< 0.7%
Temperature Resistance	>70°C
Fiber volume content	≥55%
Density	1.6g/cm <sup>3</sup>

### Construction Process

1. Setting out according to designing;
2. Polish the surface of concrete surface to remove painting of the surface, blow out the floating dust with compressed air;

3. Put the jacketing material according to the design position and fixing with the provide accerssories.
  4. Seal the bottom with the sealing band, ensure there is no leaking.
  5. Mix the motar and filling the gap between jacketing and structure.
  6. Maintenance: conservation time should be no less than 24 hours at room temperature.
- 

**Points for Attention**

The construction workers should take necessary protective measures such as wearing masks, gloves, goggles etc. Pay attention to fire prevention and maintain good ventilation on site.

Carbon fiber material is conductive, be careful to the electrical equipments around.

For more information, please visit our website at [www.horseen.com](http://www.horseen.com)



INTERNATIONAL  
CONCRETE REPAIR  
INSTITUTE

