# Horse HM-120M

# **High Performance Steel Jacketing Epoxy Adhesive**

#### **Description**

HM-120M Steel jacketing structural adhesive is new-type modified epoxy resin building structural perfusion adhesive, specifically for supporting adhesive bonded bar reinforcement. It can be bonded with various substrates and metal, with advantages such as high bonding strength, excellent toughness and shear strength, acid- alkali resistance, aging resistance.

## **Application Range**

- Steel-bonded reinforcement of reinforced concrete, old and new buildings' bending drawknot components;
- Wet steel-encased reinforcement;
- Concrete crack pouring or casting steel-bonded reinforcement;
- Adhesion of other building components.

# Product Characteristics

- Using modified epoxy resin, without any solvent, safe and non-toxic;
- Fast load to the building structure, strong bonding force, large compression and tensile resistance;
- Construction in wide temperature range, no precipitation, simple construction, good process performance;
- Good acid-alkali resistance and aging resistance properties, low moisture sensitivity, small contraction;
- Suitable for almost all building substrates.



## **Product Advantages**

- Low density, low initial viscosity, good liquidity, easy to do the perfusion construction.
- Unique island structure toughening system, superior bonding strength, good fatigue resistence. No stripping or tearing damage.
- Advanced formula used to have the coupling reaction between adhesive and different base material. At least 18% higher bonding strength, better durability.
- Moderate curing time, enough operation time, no need to hurry.
- Special deforming formula can quickly eliminate the bubbles in the mixing process, so that the adhesive will be more compact after curing, more efficient to improve the bonding strength and pressure resistance.

## **Package**

**Bucket packaging** 

A group: 20kg/barrels; B group:10kg/barrels

# Shelf Life

When stored correctly, the shelf life will be at least 12

months from the date of manufacture.

## **Storage Conditions**

Seal and store in dry and clean warehouse of ambient temperature  $-5^{\circ}\text{C}-40^{\circ}\text{C}$ . Do not store in the open air or rain. Do not damage the package. A part and B part should be stored separately to avoid mixing.

#### **Technical Parameters**

#### **Physical Parameters**

Appearance Part A (Epoxy)	Milky liquid	
Appearance Part B (Hardener)	Brown liquid	
Viscosity (mpa·s)	Part A:600	Part B:2100



Density after curing	1.2±0.1 g/cm <sup>3</sup>
Mixture ratio (weight ratio)	2:01
Applicable time (25 ℃,h)	2
Touch Dry time (25℃,h)	12

#### **Performance Parameters**

Colloidal performance	Tensile strength	≥30 <b>M</b> pa
	Modulus of elasticity	≥2500Mpa
	Elongation	≥1.2%
	Bending strength	≥45 <b>M</b> pa
	Compressive strength	≥65 <b>Mpa</b>
	Solid matter content	≥99%
	Distortion temperature	≥65℃
A dhaai an	Steel-steel tensile anti-shear strength	≥15Mpa
	Steel to steel uneven tear strength	≥16km/m
	Steel-steel bonding strength	≥33 <b>Mpa</b>
	Tensile bonding strength of steel to concrete	≥2.5, Concrete cohesion Failure
	Steel-steel T impact stripping length	≤25mm



## The Detailed Construction Process of HM-120M Steel Jacketing

Please check this Youtube link for construction process. https://www.youtube.com/watch?v=NJWQM9e7XhM

#### **Points for Attention**

- Use within the applicable period
- Seal the package if any remaining glue, do not expose the glue to the air
- Temperature will influence the curing High temperature will increase the curing speed. Low temperature will lead to longer curing time.
- Construction personnel should take the necessary safety protection measures (such as wearing masks, gloves, goggles, etc.)
- Pay attention to fire and maintain good ventilation on site
- If stained on skin or clothing, clean it with acetone and rinse with a large amount of water immediately
- If swallowed or splashed into eyes by accident, please seek medical help immediately

## **Transportation**

This product is not flammable, explosive or toxic. It belongs to non-dangerous goods, transport as a general chemical building material. Do not damage the package or expose to sunshine or rain. Do not incline or invert the goods during transpotation.

For more information, please visit our website at www.horseen.com





