



**CARBON
FIBER
GLUE**

CARBON FIBER GLUE

A-606

碳纤维胶（浸渍胶）

PRODUCT DESCRIPTION & CHARACTERISTICS

产品介绍及特点

INTRODUCTION

产品介绍

Carbon fiber reinforcement glue is composed of A-606 carbon fiber glue (impregnated glue), A-612 primer, and A-613 leveling glue.

It is a two-component modified epoxy adhesive with A and B components.

FEATURES

产品特点

- Carbon fiber adhesive has the characteristics of low viscosity, high strength, good wettability and permeability, strong thixotropy, and good construction performance.
- The cured adhesive layer has excellent physical and mechanical properties and strength and toughness.
- Good anti-aging and media resistance (acid, oxygen, water).
- Cured at room temperature, the hardening process has small shrinkage.
- It does not contain volatile solvents, is safe and non-toxic, is easy to construct and has good compatibility with carbon fiber.



SCOPE OF APPLICATION

适用范围

- Carbon fiber impregnating glue is mainly used for impregnating and pasting component surfaces such as concrete, bricks, rocks and other base materials with carbon fiber, glass fiber and other fiber sheets during the building reinforcement and renovation process.
- Primer glue is mainly used to apply and repair the bottom layer of the surface of reinforced components, and repair glue is mainly used to repair and level defects on the surface of reinforced components.



MAIN PERFORMANCE

主要性能

Appearance:

Part A: light yellow, clear and transparent liquid

Part B: dark brown liquid

Tensile elastic modulus: $\geq 2.4 \times 10^3$ MPa

Non-volatile matter content: $\geq 99\%$

Curing performance (5-45°C) operating time: 20~90min

Recommended ratio (weight ratio): A:B=2:1

Density after mixing: 1.05 ± 0.1 g/cm³

Bending strength: ≥ 50 MPa, and no brittle (fragmentation) failure

Curing time: 3-7 days

GLUE PROPERTY

胶体性能

Tensile Strength (MPa)	≥ 38
Elongation(%)	≥ 1.5
Compressive Strength (MPa)	≥ 70

BONDING ABILITY

粘接能力

Steel-steel tensile shear strength (MPa)	≥ 14
Normal tensile bond strength to concrete (MPa)	≥ 2.5 And the cohesive failure of concrete

PRIMER

底胶

Appearance:

Component A: light yellow transparent liquid

Component B: sassafras liquid

Concrete bond strength: C60 concrete failure

Operable time: ≥ 60 min

Touch dry time (20°C h): 1-2

Mix ratio: A: B=2: 1

DIP GLUE

浸渍胶

Appearance: Component A: viscous liquid

Component B: viscous liquid

BASIC PROPERTIES OF BONDED CARBON FIBER CURING

粘贴碳纤维固化后的基本性能

Tensile strength standard value (MPa)	≥ 10
Modulus of elasticity (MPa)	≥ 2500
Ultimate elongation (%)	≥ 1.5
Mix ratio	A: B = 2: 1

LEVELING GLUE

找平胶

Exterior: Component A: thick paste
Component B: thick paste
Mix ratio: A: B=2:1
Steel-steel bond strength (shear): 20 MPa

Operable time: >30min
Operating temperature: 5-40℃
Touch dry time (20℃h): 1-2
Pot-steel bond strength (tensile): 35 MPa

ENGINEERING APPLICATIONS

工程应用

Mainly used for effective penetration bonding between substrate and carbon fiber fabric



CONCRETE



STEEL



STONE



WOOD



CERAMIC



CARBON FIBER



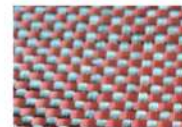
GLASS FIBER



BASALT FIBER



ARAMID FIBER



MIXED FIBER

HOW TO USE

使用方法

DOSAGE

Use 0.2-0.3 kg of carbon fiber bonding material (A-612 primer) per square meter of fiber cloth; use 0.6-0.9 kg of carbon fiber bonding material (impregnated glue) per square meter of fiber cloth.

OPERATIONAL POINTS

1. The construction environment should be ventilated and dry, the pasting surface should be clean and roughened thoroughly, and the oily areas should be cleaned.
2. To ensure that components A and B are evenly mixed, mechanical stirring is used.
3. Use primer and repair glue to apply and repair the concrete surface, and wait for the glue to initially solidify before proceeding to the next process.

4. The amount of glue used must be sufficient and full. Use appropriate tools such as rollers or smooth rollers to repeatedly roll the carbon fiber cloth in the same direction until the glue seeps out of the surface to remove air bubbles and fully soak the carbon fiber cloth with the glue.
5. The curing temperature of normal temperature glue shall not be lower than 5℃. The curing time shall not be less than 3 days when the ambient temperature is 20-25℃. The curing time shall not be less than 7 days when the ambient temperature is lower than 10℃. When the temperature is 5℃, Use low-temperature curing carbon fiber series glue.
6. When the temperature is low, moderate heating with infrared lamp or iodine tungsten lamp can be used to promote curing.

CONSTRUCTION STEPS

施工步骤

Reinforcement design → Concrete surface treatment → Preparation of leveling glue, scraping and leveling
→ Preparation and application of primer → Preparation of impregnating glue → Pasting of carbon fiber cloth
→ Curing and curing → Quality inspection

CONSTRUCTION POINTS

施工要点

混凝土表面处理 Concrete Surface Treatment

The whitewash layer should be chiseled off the concrete surface, and then 1-2mm of the original surface layer should be ground away with an angle grinder. The corners should be chamfered. After polishing, use compressed air to blow away any floating particles. Finally, wipe the surface with cotton cloth and acetone to keep it dry.

找平施工 Leveling Construction

If there are pore defects or depressions on the concrete surface, use leveling glue to fill them. Use leveling glue to repair the corners into smooth arcs with a radius of not less than 20mm. After the leveling grain is cured, the next process can be carried out.

底胶施工 Primer Construction

During construction, the two components of primer A and B are weighed according to the prescribed glue ratio, poured into a clean container and stirred evenly. Use a brush or roller brush to apply evenly on the concrete surface. Wait for the glue to solidify before proceeding. A process. The glue solution prepared each time should be used up within the applicable period of the glue.

浸渍胶施工 Impregnated Glue Construction

The two components A and B are weighed according to the prescribed glue ratio, poured into a clean container and stirred evenly. Use a brush or roller brush to apply evenly on the concrete surface.

碳纤维布的粘贴 Carbon Fiber Cloth Pasting

Tighten and align the carbon fiber cloth and then paste it on the newly painted impregnated glue base material. Use a plastic scraper or roller to roll it repeatedly in the same direction until the glue seeps out. Then evenly apply impregnation on the outer surface of the carbon fiber cloth. Glue and roll repeatedly to fully soak the carbon fiber cloth. If multiple layers are applied, wait until your fingers feel dry before applying the next layer. If the carbon fiber cloth needs to be overlapped, the overlap length should not be less than 100mm.

固化养护 CURING AND MAINTAIN

Prevent rain or moisture within 24 hours after the completion of construction, and pay attention to protection to prevent hard objects from damaging the construction surface. When the average temperature is 20-25°C, the curing time shall not be less than 3 days; when the average temperature is 10°C, the curing time shall not be less than 7 days.

PACKAGING, TRANSPORTATION, STORAGE & SAFETY

包装、运输、储存、安全

包装 PACKAGE

A and B two-component iron drum packaging.
Component A is 20kg, component B is 10kg.

运输 SHIPPMENT

1. This product is non-toxic and non-dangerous and should be transported as general chemical building materials;
2. Do not expose to the sun, rain or turn upside down during transportation.

储存 STORE

1. Components A and B should be stored separately to avoid mixing.
2. This product is stored dry at room temperature (25°C) and has a storage period of 12 months.

注意事项 PRECAUTIONS

1. The construction environment should be ventilated and dry, and the pasting surface should be clean and free of oil.
2. Gloves, masks, goggles and other protective equipment must be worn during construction.
3. If accidentally eaten or splashed into eyes, seek medical attention immediately.

4. If it is accidentally exposed to skin or clothing, it can be cleaned with acetone and rinsed with clean water.
5. When the temperature drops suddenly during construction, the viscosity of component A of the carbon fiber strand will become too high. Heating measures can be taken. For example, heating methods such as iodine tungsten lamps, electric furnaces or water baths can be used to preheat the glue to 20°C to 40°C before use.
6. When the temperature drops sharply during winter construction, component A of the impregnating glue may occasionally crystallize. It needs to be heated to about 30~50°C and maintained for about 30 minutes. It can be used after it is dissolved and stirred evenly. It has no impact on the curing performance.
7. The curing speed of structural adhesive has a great relationship with the temperature of the environment in which it is used. As the temperature decreases, the solidification time increases. Insulation measures can be taken.