Biscuit Bond Paste

High strength structural epoxy gel adhesive

Product Description

V2 Biscuit Bond Paste is a two component, 100% solids, high strength, structural epoxy gel adhesive specifically designed for the installation of V2 Repair Biscuits and the structural bonding of other V2 composite laminates.

Applications

- Bonding and embedding composite laminates to concrete, masonry, wood and steel
- Patching vertical and overhead concrete, masonry and wood surfaces
- Grouting deep dowel bars, bolts, pins, etc.
- Bonding similar and dissimilar materials such as concrete, metal, wood, etc.

Advantages

- Easy to work with; smooth gel consistency
- Super high strength
- Moisture insensitive
- Excellent bond strength
- Good chemical resistance
- **USDA** approved
- Conforms to ASTM C-881, types I, II, Grade 3, Class A, B and C

Physical Properties				
Mix ratio A:B			1:1 by volume	
Viscosity			Non-sag	
			thixotropic gel	
Color			Concrete gray	
Pot life	60 gram (golf	½ gallon	Tack free (1/8"	
	ball)	(softball)	layer)	
90°F (32°C)	4 min.	3 min.	40 min.	
73°F (23 °C)	8 min.	7 min.	1 hr., 30 min.	
50°F (10 °C)	18 min.	10 min.	2 hr., 15 min.	
Coverage				
(Neat)		231 cubic inches per gallon		
(Smooth surfaces)		1/8" thick = 12 sq. ft. per gallon		
(Rough surfaces)		1/8" thick = 6 sq	1/8" thick = 6 sq. ft. per gallon	

Test Data (strengths reported in PSI)				
Compressive strength Compressive modulus	ASTM D-695 ASTM D-638	7,050 2.30 x 105		
Tensile strength Tensile modulus	ASTM D-638 ASTM D-638	2,900 1.67 x 105		
Bond strength Dry cure	ASTM D-882	3,337 (2 day) 3,510 (14 day)		
Elongation	ASTM D-638	1.8%		
Shore hardness	D Scale	85		
Heat deflection	ASTM D-648	124°F		



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Application Techniques

Material conditioning: Pre-condition materials to 65-85°F (19 -30°C) before using.

Surface preparation: Surface must be clean and free of any dust, oil, grease, laitance, curing compounds, or any other contaminants. On concrete and steel, this should be achieved by sandblasting, water blasting or other mechanical means. Composite laminates should be wiped with MEK following any other preparation recommended by the manufacturer.

Mixing considerations: Measure exactly 1 part "A" to 1 part "B" by volume into a clean pail or onto a palette. Mix epoxy using hand methods to achieve a smooth consistency and uniform color. Note: Large batches of epoxy will set up much faster than small batches. Only mix the amount of material that can be used within the pot life.

Installing Material

Bonding and embedding: Apply material to the surfaces to be bonded taking care to work the material into the exposed surface. A glue line of 1/8" or less is desirable.

Patching overhead and vertical surfaces: Using a trowel or putty knife, apply material to area being patched. Up to one and a half parts oven dried sand may be added to the mixed epoxy to extend it and bring the coefficient of thermal expansion closer to that of concrete. Apply in 1-1/2" lifts or less.

Grouting bolts and anchor bars: Hole size should be no more than 1/8" larger than bar or bolt. Clean all dust out of the hole and grout with neat Biscuit Bond Paste.

Packaging

2-gallon units 10-gallon units

Limitations

- Mixing at other than 1:1 ratio will result in reduced properties and will potentially inhibit curing
- Do not use solvents to thin
- Minimum application temperature is 40°F (5°C)
- Minimum age of concrete must be 21-28 days
- Forms a vapor barrier after cure
- Full cure in 7 days

Caution

"A" material contains epoxy resins and may cause skin irritation. "B" material contains amines and may cause severe burns on skin.

Storage

Store resin in a dry environment at a temperature between 40 - 90°F (4 - 32°C). Ideal temperature range is 65 -75°F (18 - 24°C). Temperature below 60°F (16°C) will cause epoxy to thicken, making it difficult to properly blend the components. Under proper conditions, the shelf life is twelve (12) months in unopened, damage-free containers. Protect from moisture. Do not allow product to freeze.

First Aid

Skin contact: Wipe off contaminated area and wash with soap and water.

Eye contact: Immediately flush eyes with large amounts of water. Seek medical attention.

Inhalation: Move to fresh air if symptoms occur. If breathing is difficult, get medical attention.

Ingestion: Seek immediate medical attention.

See MSDS for more information.



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