

FLEXI-WELD 520, 520-T

MOISTURE-INSENSITIVE, 100% SOLIDS, HI-MOD EPOXY ADHESIVES

DESCRIPTION:

Flexi-Weld 520 and 520-T are two-component, moisture insensitive, high-strength 100% solids epoxy adhesives for general use in bonding of a wide variety of materials. Suitable substrates include damp or dry concrete, steel, aluminum, glass*, polystyrene, and PVC (with proper preparation.)

Flexi-Weld 520 is a low viscosity, high strength adhesive which may be pressure-injected, gravity fed, or mixed with fillers and tooled onto bonding surfaces.

Flexi-Weld 520-T is a paste-grade adhesive that contains thixotropic additives to allow application on vertical and overhead surfaces. The system also has the capacity to accept additional mineral fillers, such as silica or crushed stone, to permit the preparation of toppings or thick section adhesives.

*Requires addition of *Type G* Bonding Additive

APPLICATION:

Apply to clean damp or dry surfaces free of dust, dirt, grease, oil, coatings, or other extraneous material which may hinder adhesion. Concrete and masonry surfaces may be smooth or rough, damp or dry, but must be sound and clean and free of laitance, efflorescence, curing compounds, or other contaminants.

Flexi-Weld 520: Small repairs and crack filling by gravity are most easily performed using 24 oz. pre-measured units of *Flexi-Weld 520*. Pour the contents of the bottle of Hardener (Part B) into the short-filled bottle of Resin (Part A). Thoroughly mix the two *520* components by alternatively inverting and righting the container for one minute or using hand tools. When using larger units, mix in small quantities, as will be applied in 3-5 minutes. Allow material to flow completely along container sides and from top to bottom to assure complete blending of all materials. Pressure injection equipment for *Flexi-Weld 520* should be fitted with a disposable static mixer to prevent damage to pump, due to the fast-setting characteristics of the product.

Flexi-Weld 520-T: Mix the components for 2 minutes using a slow speed (250-450 rpm) drill with "Jiffy" type mixer. Scrape container sides and bottom to assure complete mixing. Spread the mixture over the surface to be bonded immediately and place the piece to be bonded in contact with the adhesive. Maintain light pressure during cure to achieve the best bond. Relatively heavy pieces may require clamping until the material reaches sufficient strength.

Material to be used with dutchman repairs can be color matched to the original stone color. Dutchman repairs are achieved by buttering the stone and anchors with a thin layer of material, sliding the stone into place, and then cleaning any excess material.

"Grab" and cure times may be accelerated by heating the surface of the piece to be bonded. Temperatures up to 180°F are acceptable for accelerating cure. Handle hot masonry pieces with caution.

Immediately remove any runs or spills with xylene or similar high-strength solvent. **CAUTION: Solvents are hazardous materials and should be handled in accordance with their manufacturers' instructions and safety guidelines.** Excess material can also be cut away with a razor blade once set.

PROPERTIES:

PROPERTY	FLEXI-WELD 520	FLEXI-WELD 520-T
Mix Ratio (by Volume)	3:1	8:1
Viscosity, mixed, cps	700-1700	3000-7000
Gel Time, 100g, 25°C	5.5 minutes	17 minutes
Color	Clear	Neutral Base (Std.) or Custom Colors

PERFORMANCE:

PERFORMANCE PROPERTY	RESULT
Tensile Strength	10200 psi
% Elongation	4.0%
Flexural Strength, approx..	15000 psi
Compressive Strength	12900 psi

TEMPERATURE:

Temperature of product and substrate affect cure rate. Low temperatures increase viscosity and slow cure. High temperatures reduce viscosity and accelerate cure.

Minimum application temperature is -5°F
Maximum application temperature is 90°F

At temperatures above or below this range, ask your Edison Coatings Technical Representative for alternative formulations intended for use under extreme conditions.

SAFETY & HANDLING:

WARNING: Hardener is a Corrosive Liquid (Skin). Avoid skin and eye contact. Use protective gloves, goggles, and clothing as required to prevent contact. Use with adequate ventilation. Do not use in areas where food products are stored unless first removing all materials which may absorb product vapor.

Read and observe all safety and handling guidelines as detailed in the Safety Data Sheets supplied with this product.

STORAGE:

Store in a dry place off the floor, above 50°F and below 90°F for best results.



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3 Northwest Drive, Plainville, CT 06062

Phone: (860) 747-2220 or (800) 341-6621

E-mail: chad@edisoncoatings.com

Fax: (860) 747-2280 or (866) 658-1189

Internet: www.edisoncoatings.com

BOND STRENGTH DEVELOPMENT:

SUBSTRATE	SURFACE PREPARATION	TENSILE SHEAR STRENGTH
Concrete, Dry	None	>900 psi; Failure in Substrate
Concrete, Damp	None	>900 psi; Failure in Substrate
Cold Rolled Steel	Solvent Wipe	2200 psi
Aluminum	Solvent Wipe	2000 psi
Aluminum	Acid-etched	2900-4200 psi
Concrete, Damp, to Steel	None	>300 psi; Failure in Substrate

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