

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



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.

PHOTOS: Granite column base fragments rebonded with FLEXI-WELD 520T



APPLICATION:

Apply to clean damp or dry surfaces free of dust, dirt, grease, oil, coatings or other extraneous material which may hinder adhesion.

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 alternately inverting and righting the container for 1 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

PROPERTIES:

| PROPERTY | FLEXI-WELD 520 | FLEXI-WELD 520-T |
|-----------------------|----------------|--------------------------------------|
| Mix Ratio, by Volume | 3:1 | 8:1 |
| Viscosity, mixed, cps | 700 - 1700 | 3,000 - 7,000 |
| Gel Time, 100g, 25°C | 5.5 minutes | 17 minutes |
| Color | Clear | Neutral Base (Std.) or Custom Colors |

PERFORMANCE:

| PERFORMANCE PROPERTY | RESULT |
|----------------------------|------------|
| Tensile Strength | 10,200 psi |
| % Elongation | 4.0% |
| Flexural Strength, approx. | 15,000 psi |
| Compressive Strength | 12,900 psi |

pump, due to the fast setting characteristics of the product. Perform pressure injection work in accordance with industry standard procedures.

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 place the piece to be bonded in contact with the adhesive. Maintain light pressure during cure to achieve the best bond.

"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.

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 Material Safety Data Sheets supplied with this product.

STORAGE:

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

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 | 2,200 psi |
| Aluminum | Solvent Wipe | 2,000 psi |
| Aluminum | Acid-etched | 2,900-4,200 psi |
| Concrete, Damp, to Steel | None | >300 psi; Failure in Substrate |



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