



SEPTEMBER 2013 (Supersedes August 2009)

REZI-WELDTM LV STATE

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Ultra-Low Viscosity Injection Epoxy

DESCRIPTION

REZI-WELD LV STATE is an ultra-low viscosity, two-component, 100% solids, rapid setting, epoxy-based, structural injection resin. It is a solvent-free, low odor, high strength, high modulus, moisture-insensitive, ultra-low viscosity epoxy resin system. REZI-WELD LV STATE resists most chemicals and forms a structural, monolithic bond with typical concrete.

Its low surface tension facilitates deep penetration into hairline to medium-sized cracks. The 100% solids formulation is volumetrically stable, ensuring a solid bond to both sides of the crack.

USES

REZI-WELD LV STATE is designed for gravity feeding or pressure injecting. It is available in two cartridge sizes for ease of use. It is also available in bulk units and may be injected using two-component metering pumps. It is suitable for injecting fine, non-moving structural cracks in concrete and wood for long-term repairs. REZI-WELD LV STATE makes an economical, easyto-use epoxy mortar for patching or repairing defects in concrete substrates.

FEATURES/BENEFITS

- Ultra-low viscosity is ideal for pressure injection and gravity feeding.
- Advantageous as a low viscosity, epoxy adhesive binder.
- Bonds cured concrete to wood, steel, or plastic concrete.
- Combines with aggregate to form an interior, non-skid topping.
- Resists industrial chemicals, as well as impact and attack from moisture.
- Features low-viscosity, high-modulus, highstrength, self-leveling characteristics.
- Furnished in two convenient cartridge sizes.

PACKAGING

6.1 Oz. (180 mL) Cartridges 16 Oz. (475 mL) Cartridges 3 Gallon (11.4 L) Units 15 Gallon (57 L) Units

COVERAGE

One gallon (3.8 L) neat covers approximately 85 - 100 ft.²/gal. (2.1 - 2.7 m²/L), depending on surface porosity and end use application. One gallon (3.8 L) mixed 1:1 with dry aggregate yields approx. 350 in.³ (5735 cm³) of grout.

SHELF LIFE

Two years in unopened containers and cartridges when stored between $50^{\circ} - 95^{\circ}$ F ($10^{\circ} - 35^{\circ}$ C).

SPECIFICATIONS

TECHNICAL DATA

- ASTM C 881-99 Type I, II, IV and V, Grade 1, Classes B & C
- AASHTO M 235 Type I, II, IV and V, Grade 1, Classes B & C
- Various departments of transportation approvals

PROPERTY Typical Data Test Method 7 Day Cure @ 77° F (25° C) 450 - 550 Viscosity, cps ASTM C 881 7.200 ASTM D 638 Tensile Strength, psi (49.6 MPa) Elongation, % 8.8 ASTM D 638 ASTM D Hardness, Shore D 85 2240

CONTINUED ON REVERSE SIDE...

W. R. MEADOWS, INC. P.O. Box 338 • HAMPSHIRE, IL 60140-0338 Phone: 847/214-2100 • Fax: 847/683-4544 1-800-342-5976 www.wrmeadows.com

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Flexural Strength, psi	8500 (55.2 MPa)	ASTM D 790
Compressive Yield Strength, psi	12,000 (82.7 MPa)	ASTM D 695
Compressive Modulus, psi	260,000 (1,800 MPa)	ASTM D 695
Bond Strength, psi (2 days)	2,100 (14.4 MPa)	ASTM C 882
Bond Strength, psi (14 days)	3,000 (20.6 MPa)	ASTM C 882
Heat Deflection Temperature	120° F (48° C)	ASTM D 648
Absorption, % (24 hours)	0.23%	ASTM D 570
Linear Coefficient of Shrinkage	0.004	ASTM D 2566
Linear Coefficient of Shrinkage Component Properties	0.004 Resin	ASTM D 2566 Hardener
Linear Coefficient of Shrinkage Component Properties Mix Ratio (PBV=Parts by Vol.)	0.004 Resin 2 PBV	ASTM D 2566 <i>Hardener</i> 1 PBV
Linear Coefficient of Shrinkage Component Properties Mix Ratio (PBV=Parts by Vol.) Appearance	0.004 Resin 2 PBV Clear	ASTM D 2566 <i>Hardener</i> 1 PBV Amber
Linear Coefficient of Shrinkage Component Properties Mix Ratio (PBV=Parts by Vol.) Appearance Pot Life (1000 gms) @ 75° F (21.5° C)	0.004 Resin 2 PBV Clear 20 -30 Min.	ASTM D 2566 <i>Hardener</i> 1 PBV Amber ASTM C 881
Linear Coefficient of Shrinkage Component Properties Mix Ratio (PBV=Parts by Vol.) Appearance Pot Life (1000 gms) @ 75° F (21.5° C) Tack-Free Time @ 30 mils @ 70° F (21.1° C)	0.004 Resin 2 PBV Clear 20 -30 Min. 4-5 Hrs.	ASTM D 2566 <i>Hardener</i> 1 PBV Amber ASTM C 881 ASTM C 879

All technical data is typical information, but may vary due to testing methods, conditions, and operators.

APPLICATION

Surface Preparation ... All surfaces to be bonded must be free of standing water and completely clean of dirt, rust, curing compounds, grease, oil, paint, waxes, and other materials which would prevent an optimal bond. Concrete should be prepared by mechanical abrading or high pressure water jetting to a sound surface. Vacuum or blow dust away with oil-free, compressed air. Mechanically abrade metal base plates to a bright metal finish. Exposed steel surfaces should be sandblasted and vacuumed clean; if not possible, degrease the surface and use sandpaper or a wire brush to reveal continuous, bright metal. **Mixing** ... The resin and hardener (contained in the cartridge) must be conditioned between $65^{\circ} - 85^{\circ}$ F ($18^{\circ} - 29^{\circ}$ C) at the time of application. Use the double-boiler method or store material in a warm room prior to application. Shake the cartridge vigorously for 60 seconds then stand the cartridge upright for 60 seconds, allowing the bubbles to rise to the top.

APPLICATION METHOD

- 1. Substrate temperature must be 40° F (4° C) and rising at the time of application.
- 2. Ensure static mixer nozzle is free of obstructions.
- 3. Remove nose cap.
- 4. Remove nose plug.
- 5. Insert static mixer onto cartridge nose. Slide retaining nut (located in sealed bag) down static mixer shaft.
- 6. Tighten retaining nut onto cartridge nose.
- 7. Load into standard dual cartridge dispenser tool.
- Dispense and discard approximately a 3" (73.2 mm) bead of material until a uniform amber color is achieved.
- 9. Re-insert nose plug and seal with nose cap to seal a partially used cartridge.
- 10. Follow all instructions prior to application of partially used cartridge.

Crack Injecting ... Epoxy can be pressure injected into fine cracks that are small (1/8" [3.2 mm] maximum width). Surface seal the crack and set the REZI-WELD injection ports using REZI-WELD GEL PASTE STATE or POLY-GRIP_{TM} from W. R. MEADOWS. Allow sufficient time for the surface seal to harden prior to injecting. If using one of the two cartridges, always use a high ratio application gun having a 35:1 ratio mechanical advantage.

Gravity Feed ... Seal underside of elevated slab prior to filling if cracks reflect full depth. Pour neat, properly mixed and conditioned REZI-WELD LV STATE into v-notched crack. Continue placement until completely filled.