

## **REZI-WELD™ 1000** **Multi-Purpose Construction Epoxy**

### **DESCRIPTION**

SEALTIGHT REZI-WELD 1000 is a medium viscosity, two-component, construction grade structural epoxy adhesive. It is moisture insensitive and chemical resistant. High modulus, high strength REZI-WELD 1000 is color coded to assure proper mixing, self-leveling and easy to apply.

As a neat mix, REZI-WELD 1000 is used to bond fresh concrete to fresh or old concrete and to bond metals and other materials to hardened concrete. REZI-WELD 1000 is also used to secure metal anchors, bolts, rebars and dowels in concrete.

Mixed with sand or aggregates, REZI-WELD 1000 may be used to patch spalls or defects in concrete. A thin film coating sprinkled with sand or grit, becomes a durable, non-skid pathway.

### **FEATURES AND BENEFITS**

- Offers high-modulus, high-strength and self-leveling characteristics
- Resists many industrial chemicals and is moisture insensitive
- Easy-to-apply...VOC compliant
- Furnished in unique, color-coded, unitized, pre-measured packaging to assure proper mixing...eliminates mishandling and mismatching components
- May be extended with sand or aggregates to patch minor spalls and defects in concrete
- Provides a non-skid interior or exterior pathway when sprinkled with sand or grit

### **SPECIFICATIONS**

ASTM C 881, Type I, II, IV & V, Grade 2, Classes B & C  
AASHTO M 235, Type I, II, IV & V, Grade 2, Classes B & C  
USDA Accepted

### **PACKAGING**

1 Quart (.95 Liter) Unit  
1 Gallon (3.79 Liter) Unit  
2 Gallon (7.58 Liter) Unit  
10 Gallon (37.9 Liter) Unit

### **PHYSICAL PROPERTIES**

Color:	Part A...White Part B...Black
Mix ratio:	1:1 by volume
Pot life:	45 minutes at 77 °F
Cure time:	7 days at 77 °F
Shelf life:	2 years in unopened container
Storage:	40-95 °F (4-35°C)
Coverage:	1 gal. neat yields 231 cubic inches

### **APPLICATION**

#### **FOR INDUSTRIAL AND PROFESSIONAL USE ONLY**

**Surface Preparation...** Mechanically abrade all surfaces to be bonded. All surfaces to be bonded must be free of standing water and completely clean of dirt, rust, curing compounds, grease, oil, paint and unsound materials which would prevent a solid bond. Vacuum or blow dust away with oil-free, compressed air. Smooth surfaces require sanding or other mechanical abrasion. 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...** Condition all components to 60-85° F for 24 hours prior to use. Pre-mix each component. Mechanically mix at slow speed (600-900rpm) using a drill and Jiffy Blade or drum mixer for 3 minutes or until completely mixed while scraping the sides to ensure complete blending of components. The mixed product should be uniform gray in color and not show streaks. Avoid air entrapment. Mix only very small quantities by hand for a minimum of 3 minutes or until sufficiently blended together using the supplied stirring stick. Scrape sides of the container to ensure complete blending of the components. Mix only the amount of epoxy that can be applied within the product's potlife. Potlife will decrease as the ambient temperature and/or mass size increases.

CONTINUED ON REVERSE SIDE

**BONDING FRESH CONCRETE TO HARDENED CONCRETE:** Use a stiff brush to apply a layer of mixed epoxy to concrete surface. Spread a thin, uniform coating at a rate of 85 to 110 square feet per gallon, not to exceed 1/4" in thickness. Place fresh concrete as soon as possible after applying the adhesive. If epoxy becomes tack-free, consult a W.R. MEADOWS, INC. representative.

**OTHER BONDING...** To bond cured concrete or metal to concrete, apply a layer no less than a 1/64" (.40mm) to the prepared surface and join immediately. Clamping pressure, beyond what will hold parts in place, is not necessary.

**AGGREGATES FOR EPOXY-RESIN MORTARS...** Combine clean, dry aggregates to freshly mixed epoxy in ratio of one part epoxy to one to four parts of dry, clean graded aggregate by volume. A rotary drum mixer with a stationary paddle is recommended for blending aggregates and epoxy. Apply a thin coating of aggregate-free epoxy to the prepared surface as a primer. Patch thickness should not exceed 1-1/2" (38.1mm) per lift.

**METAL ANCHORS IN PREFORMED HOLES IN CONCRETE...** Preformed holes should be approx. 1/4" (6.35mm) larger in diameter than the anchor bolt diameter. The depth of the hole should be 10-15 times the bolt diameter. Consult Engineer for job specification requirements. Fill the hole from the bottom up, about half way with mixed epoxy and place the bolt, dowel or rebar. Top off with more epoxy and finish.

**INTERIOR NON-SKID PATHWAYS:** Apply mixed epoxy at a rate not to exceed 80 square feet per gallon. Spread sand thinly over wet epoxy and embed the grains with a mohair roller. For heavy coverage, apply a layer of sand or grit over the epoxy and allow it to set. Blow excess sand away. NOTE: REZI-WELD 1000 IS NOT TO BE USED AS A FLOOR COVERING OR PROTECTIVE TREATMENT.

## TECHNICAL DATA

The following physical properties were determined at a 1:1 mix ratio of A:  
B by Volume cured at 77<sup>0</sup> F (25<sup>0</sup> C) & 50% RH

Test Method	Actual	Required per ASTM C 881-99, TYPE IV
Gel Time Per ASTM C 881-99 <sup>1</sup>	37 minutes	Minimum 30 minutes
Viscosity Per ASTM D 2393 Mixed	3,500 cps	Maximum 10,000 cps
Compressive Strength Per ASTM D 695-96 @ 1 day @ 7 days <sup>1</sup>	10,000 psi (70 MPa) 12,500 psi (79 MPa)	Not Required Minimum 10,000 psi (70 MPa)
Compressive Modulus Per ASTM D 695-96 <sup>1</sup> @ 7 Days	530,000 psi (3655 MPa)	Minimum 200,000 psi (1,400 MPa)
Slant Shear Bond Strength Per ASTM C 882 <sup>1</sup> , Moist Cured @ 2 days (Old to Old Concrete) @ 14 days (Old to Old Concrete) @ 14 days (New to Old Concrete)	1,250 psi (8.6 MPa) 1,900 psi (13.1 MPa) 2,100 psi (14.5 MPa)	Minimum 1,000 psi (7.0 MPa) Minimum 1,500 psi (10.0 MPa) Minimum 1,500 psi (10.0 MPa)
Tensile Strength Per ASTM D 638-98 <sup>1</sup> @ 7 days	7,250 psi (51 MPa)	Minimum 7,000 psi (48 MPa)
Tensile Elongation Per ASTM D 638-98 <sup>1</sup> @ 7 days	1.5%	Minimum 1%
Heat Deflection Temperature Per ASTM D 648-98 <sup>1</sup> @ 7 days	135 <sup>0</sup> F (57 <sup>0</sup> C)	Minimum 120 <sup>0</sup> F (50 <sup>0</sup> C)
Linear Coefficient of Shrinkage Per ASTM D 2566 <sup>1</sup> @ 7 days	0.002	Maximum 0.005
Water Absorption Per ASTM D 570-98 <sup>1</sup> @ 7 Days	0.41% w/w	Maximum 1.0% w/w

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

<sup>1</sup>Independent Reports Are Available Upon Request.

## CLEAN UP

Clean tools and equipment immediately with Toluene or Xylene. Clean equipment away from all ignition sources and avoid breathing vapors or allowing epoxy-containing solvent to contact skin. Should this material come in contact with the skin, wash thoroughly with soap and water, not solvent.

## LIMITATIONS/PRECAUTIONS

Not recommended for use when the concrete temperature has been below 40°F for the past 24 hours. Do not thin with solvents or use to seal cracks under hydrostatic pressure. Do not warm epoxy over direct heat...use the double-boiler method or store material in warm room, prior to application. Unused epoxy will generate excessive heat, especially in large quantities. Unused epoxy should be mixed with dry sand in the container to help lower heat. SEALTIGHT REZI-WELD 1000 is not to be used as an exterior coating. In bonding applications, cured epoxy will require mechanical scarification prior to adhering subsequent toppings.

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[www.wrmeadows.com](http://www.wrmeadows.com)

## LIMITED WARRANTY

"W.R. MEADOWS, INC. warrants at the time and place we make shipment, our material will be of good quality and will conform with our published specifications in force on the date of acceptance of the order." Read complete warranty. Copy furnished upon request.

## Disclaimer

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