

# WEBAC 4000 LV

## LOW VISCOSITY EPOXY RESIN STRUCTURAL REPAIR / ANCHORING

WEBAC 4000 LV

### Low Viscosity Epoxy Resin in a Cartridge System

#### RANGE OF APPLICATION

- Structural Repairs
- Crack Injection and Gravity Feed in concrete, masonry, etc.
- Structural Joint Repair
- Welding Cracked Concrete
- Bolt Grouting
- Plate Grouting
- Delaminated Slab Welding
- Repairing Wood Beams

#### TYPE OF MATERIAL

WEBAC 4000 LV is a 100% solids, high modulus, low viscosity non-shrink two component epoxy resin that bonds to concrete and other surfaces.

4000LV meets ASTM-C-881, Type I and II, Grade 2 Classes B and C for Epoxy Resin Adhesives. It meets USDA specifications for use in food processing areas.

WEBAC 4000LV is an easy flow formulation for good penetration into cracks and voids even at lower injection pressures. The product is insensitive to moisture. Due to the high tensile and compressive strength of the cured product, WEBAC 4000LV is ideal for structural repairs.

#### PROCESSING

WEBAC 4000LV is composed of two components. The mixing ratio by volume is 2:1 (A:B). Using the WEBAC Corp. cartridge system either with a hand operated trigger gun or a pneumatic gun makes the application easy and clean. No matter how much material is dispensed the design of the gun will assure the correct mixing ratio. If a cartridge is not used up the plastic mixer needs to be replaced prior to the next use. Minimum surface temperature is 40F. Do not add solvents to the product.

#### Surface Preparation

Surface must be clean and sound. It may be dry or damp, but free of standing water (see WEBAC 4525 epoxy paste for under water applications) Remove dust, grease, curing compounds, waxes, foreign particles and disintegrated materials. For bonding applications on concrete and steel surfaces sandblasting or other approved mechanical means are recommended.

#### Various Applications

##### Gravity Feeding into Cracks

Pour material into vee-notched crack. Continue placement until completely filled. Seal underside if possible if cracks reflect through.

##### Crack Pressure Injection

Use automated or manual injection equipment. Set appropriate injection ports based on system used. Seal ports and cracks with WEBAC Quickseal paste. When the

epoxy seal has cured, inject resin with steady pressure. Consult additional data sheets and MSDS for further information.

##### Slab Seal Application

Spread resin over slab and allow penetration. Remove excess to prevent surface film. Seal interior slabs and above grade exterior slabs only.

##### Epoxy Mortar Use

Prime prepared surface with 4000LV. Place prepared epoxy mortar before primer becomes tack free. Place the epoxy mortar using trowels. Compact and level with vibrating screed or trowel. Finish with finishing trowel. Exterior application may darken with UV light exposure. Epoxy mortar can be mixed as follows: 1 gal 4000LV mixed with up to 5 gal of loose oven dried aggregate yields approx. 800 cu. inch of epoxy mortar. The gel time of pre-mixed material is determined by the quantity of the batch and the temperature. Since the reaction of the epoxy resin produces heat, a large batch is likely to react much faster than a small quantity of material.

#### MAINTENANCE OF EQUIPMENT

Cartridge Systems are disposable and some of the following recommendations may not apply.

Remove all excess sealant and any smears. Tools and mixing equipment are best cleaned immediately after use. Recommended: R70 Pump Flush is a solvent free, non-flammable and for shipping as non-hazardous classified cleaner, which conditions your pump and hoses. Circulate cleaner through pump for several minutes. Xylol, Toluol, Acetone, M.E.K. and related solvents can be used for initial flushing. Solvents are hazardous, are aggressive towards plastic and rubber and might be in conflict with regulations on the jobsite. Caution! Some cleaners are combustible.

#### PRECAUTION

Protect your health! While working with WEBAC materials, safety goggles, gloves and safety clothing must be worn at all times. While injecting, a full face shield is strongly recommended. Spills and blow-outs do happen! Protect yourself and others on the jobsite. Consider property in proximity of the application area to prevent loss or damage. Protect your jobsite from unauthorized persons. Store all materials and equipment safely and out of reach of children!

Observe container labels, MSDS, and instructions in the WEBAC Product Catalog before using the product and equipment. In case one of the components comes in contact with the skin, wash thoroughly with soap and water. Provide adequate ventilation in volume and pattern in working area. Further protection: emergency showers and eyewash stations.

#### STORAGE

Good storage stability of unopened containers at temperatures between 15-30C (58-85 F). Store indoors.



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### WEBAC 4000 Epoxy Cartridge System

#### Injection Guns

WEBAC supplies two injection guns for use with the 4000 Epoxy Cartridge System. The 4000 TG type is manually operated and offers the most economic approach to epoxy injection. The 4000 PG type gun is pneumatic and is operated with a small compressor allowing for fast injection even at higher injection pressures. Both guns are available for two to one and one to one mixing ratios. Please see injection gun data sheets for more detailed information or call our technical support.



Trigger Gun



Pneumatic Gun

TECHNICAL DATA	Comp. A	Comp. B	
Form / Color	Clear	Amber	
Solids	100%	100%	ASTM D 1010
Density, g/ml	1.14	0.93	ASTM D 3800-79
Mixing Ratio by Volume	2 parts	1 part	
Viscosity, cps	500	400	
Packaging	cartridge 34oz		
Viscosity mixed, cps	400-500		
Gel Time (C-881)	45 min.		
Pot Life (100 grams @77F)	30 min.		
Storage	Good storage stability for unopened containers at 15-30C 58-85F (1 yr). Store indoors.		
Cured Product			
Compressive Strength, psi (77F)	10,700 after 7 days		ASTM D-695
Bond Strength, psi	2,400 after 1 day		ASTM C-882
Bond Strength, psi	3,600 after 14 days		ASTM C-882
Tensile Strength, psi (77F)	7,000 after 14 days		ASTM D-638
Flexural Strength, psi	9,660		ASTM D-790
Shear Strength, psi	9,040		ASTM D-732
Bond Strength			
Concrete	Crack in Concrete		
Shrinkage	Passes		ASTM C-883
Heat Deflection Temperature	120F		ASTM D-648
<b>TYPE I, II, IV, V, GRADE 1 Classes B &amp; C Epoxy Resin Adhesive</b>	<b>ASTM C-881-87</b>		
Toxicity	Essentially Non-Toxic in Cured Form		
Resistance to Chemicals	Resistant to Most Organic Solvents, Mild Acids, Alkali and Micro Organisms		

PRODUCT WARRANTY: WEBAC AMERICA CORP. PRODUCTS ARE WARRANTED UNDER THE FOLLOWING POLICY:  
 ALL RECOMMENDATIONS, STATEMENTS AND TECHNICAL DATA HEREIN ARE BASED ON TESTS WE BELIEVE TO BE RELIABLE AND CORRECT, BUT ACCURACY AND COMPLETENESS OF SAID TESTS ARE NOT GUARANTEED AND ARE NOT TO BE CONSTRUED AS A WARRANTY EITHER EXPRESSED OR IMPLIED. USER SHALL RELY ON HIS OR HER OWN INFORMATION AND TESTS TO DETERMINE SUITABILITY OF THE PRODUCT FOR THE INTENDED USE AND USER ASSUMES ALL RISK AND LIABILITY RESULTING FROM HIS OR HER USE OF THE PRODUCT. SELLER'S AND MANUFACTURER'S SOLE RESPONSIBILITY SHALL BE TO REPLACE THAT PORTION OF THE PRODUCT OF THIS MANUFACTURER WHICH PROVES TO BE DEFECTIVE. NEITHER SELLER NOR MANUFACTURER SHALL BE LIABLE TO THE BUYER OR ANY THIRD PERSON FOR ANY INJURY, LOSS OR DAMAGE DIRECTLY OR INDIRECTLY RESULTING FROM USE OF OR INABILITY TO USE THE PRODUCT. RECOMMENDATIONS AND STATEMENTS OTHER THAN THOSE CONTAINED IN A WRITTEN AGREEMENT SIGNED BY AN OFFICER OF THE MANUFACTURER SHALL NOT BE BINDING UPON THE MANUFACTURER OR SELLER. WAC200408-w4000LV