# SealBoss® 4040 LV Epoxy Resin

# SealBoss ® 4040 Applications

- Structural Concrete Crack Injection
- Welding Cracked Concrete Segments
- Delaminated Slab Repair
- Natural Rock, Masonry, Concrete, Wood
- Gravity Feed or Pressure Injection of Cracks in Concrete, Masonry, Rock, Wood, etc.
- Seal Interior Slabs and Exterior Above-Grade Slabs

### **Product Description**

**SealBoss** ® **4040** LV Epoxy Resin is a 100% solids, himod, 2-component, moisture-tolerant, low-viscosity, high-strength, multipurpose, epoxy injection resin adhesive.

SealBoss & 4040 meets ASTM C-881/ AASHTO M-235, Types I, II, IV, V\* Grade 1, Classes B & C (\*with exception of gel time)

Ask your SealBoss technician for details. The product is for professional use.

#### **Installation Guidelines**

SealBoss ® 4040 is composed of two components. The mixing ratio by volume is 2:1 (A:B).

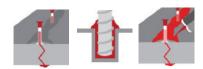
# Concrete Crack Injection:

SealBoss ® 4040 is suited for the injection of cracks and voids in concrete. The low viscosity of the material provides for good penetration at low to medium injection pressures. SealBoss ® 4040 bonds well under pressure and offers high tensile and compressive strength properties for structural repairs. Injection can be performed in moderate moist environments. Best results and highest strengths are achieved in dry conditions. Do not modify the product if used for injection. For best results, epoxy injection must only be performed with approved two component injection equipment. SealBoss ® provides tested and proven two component injection pumps and accessories.

First prepare the surfaces adjacent to the cracks to expose clean, sound concrete. The injection ports should be spaced from 8 in. (20.3 cm) to 36in. (91.4 cm) apart depending on the crack width and the thickness of the member to be injected. Crack should be sealed at the surface with **SealBoss** ® **4500** or **SealBoss** ® **4500** F epoxy gel.

## Other Applications (Not Injection):

Surface Preparation Surface must be clean and sound. It may be dry or damp, but free of standing water. Remove dust, grease, curing compounds, impregnations, oils and any other contaminants. Preparation Work: Concrete - Should be cleaned and prepared to achieve a laitance and contaminant free, open textured surface by blast cleaning or equivalent mechanical means. Steel - Should be cleaned and prepared thoroughly by blast cleaning or other equivalent mechanical means. If filled with additives, such as silica flour, sand or thixotropic fillers, a mixing ratio of 2:1 (SealBoss ® 4040: additives) should not be exceeded. Warning: Any product modification will change the physical properties of the product and published data will not be applicable.



High Strength, High-Modulus, Low-Viscosity, Epoxy Injection/Grouting/ Sealing/Binder Adhesive

# SealBoss ® 4040 Advantages

- SealBoss ® Product-Pump-Packer System Solution
- Proven, High Strength, Low Viscosity Product
- Convenient Easy Mix Ratio A:B = 2:1 by Volume
- · Advanced Solvent Free Formulation
- This Product is for Professional Use

#### Limitations:

Minimum substrate and ambient temperature 40°F (4°C).

Do not thin. Material is a vapor barrier after cure.

Not for injection of cracks under hydrostatic pressure at the time of application.

Do not inject cracks greater than 1/4 in. (6 mm) without consulting Technical Service.

Color may alter due to variations in lighting and/or UV exposure. Do not use this product for anchor bolting. Sealboss Corp. declines any responsibilities, warranties, liabilities if used for anchor bolting applications.

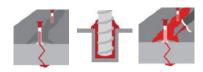
# **Maintenance of Equipment**

Tools and equipment must be cleaned immediately after use. Remove all excess product. Cured product is hard to remove. **SealBoss** ® **R70 Pump Flush** is a solvent free, non-flammable cleaner, lubricator, pump and hose conditioner. Please refer to the product data sheet for detailed information.

#### **Health and Safety**

Protect your health! Always use safety gear in compliance with OSHA and all applicable local and job-site regulations While working with products. Handling of this product may result in spills, splashes, and airborne substances. Wear appropriate safety goggles, gloves and safety clothing at all times. During any pressure injection process a full face shield is advised for anybody within reach of product spill or blowout. Consider property in proximity of the application to prevent loss or damage. Protect jobsite from unauthorized persons. Store all materials and equipment safely and out of reach of children and animals! Observe container labels, SDS, applicable laws and regulations and all instructions 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. Do not weld on, burn or torch epoxy material. Hazardous vapor is released when an epoxy is burned. Further protection: emergency showers and eyewash stations. If eye contact occurs flush with water for 15 minutes. Get immediate medical attention as needed.





#### **Technical Data:**

Mix ratio 2:1, Part A to Part B by volume

Color (mixed) Amber

Viscosity: approx. 390 cps @ 75°F (25°C) and 50% R.H.

Gel times: 60 gm mass 21 Minutes @ 73°F (23°C)

Final cure @ 7 days.

Compressive yield strength (ASTM D-695) 12,385 psi / 85,4 MPa @ 7 days Compressive Modulus (ASTM D-695) 268,000 psi / 1845.0 MPa Concrete bond strength (ASTM C-882) 2 days 2,400 psi /16.4 MPa 14 days 4250 psi / 29.2 MPa

Tensile Strength (ASTM D-638): 7,200 psi / 49.4 MPa

Elongation at break (ASTM D-638): 2.3% Water Absorption (ASTM D-570): 0.8%

ZERO VOC 0 g/L.

Compliant with all Canadian and U.S. VOC regulations including

Federal EPA, OTC, LADCO, SCAQMD & CARB.

Meets ASTM C-881/ AASHTO M-235, Types I, II, IV, V\*

Grade 1, Classes B & C (\*with exception of gel time)

231 cubic inches per gallon. Coverage

Shelf Life 1 year for cartridges, 2 years in original

unopened containers stored indoors at

temperatures between 40-95 F.

**Packaging** 

Cartridges, 1 Gallon Units



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