

SealBoss® 4000 QuickSeal Epoxy Paste



**Fast Cure Epoxy Paste
Cartridge System & Bulk
Surface Seal, Port Adhesive
Structural Repairs
& Anchoring ***

RANGE OF APPLICATION

- Structural bonding of concrete, masonry, metals, wood, etc.
- Grouting bolts, dowels, pins, vertical and overhead, for extremely rapid setting, fast turn around times
- Seals cracks and around injection ports prior to pressure-injection grouting
- Interior, exterior, vertical and overhead repair of concrete as a super fast setting epoxy mortar binder.

ADVANTAGES

- High-modulus, high-strength, structural gel adhesive
- Excellent adhesion to concrete, masonry, metals, wood and most structural materials.
- Gel consistency ideal for vertical and overhead applications. Easy to mix 1: 1 ratio between components
- Extremely Fast Setting and high early strength-developing adhesive.

TYPE OF MATERIAL

SealBoss® 4000 QuickSeal-Epoxy Paste is a 100% solids, high modulus, non-sag, non-shrink two component epoxy adhesive that bonds to concrete and other surfaces.

It meets ASTM-C-881, Type I and IV, Grade 3 Classes B and C for Epoxy Resin Adhesives.

PROCESSING

To anchor bolts, dowels and pins

Annular space around bolt tested at 1/8 inch; depth of embedment is typically 10-15 times the bolt diameter. See cartridge for application instructions.

To seal cracks for injection grouting

Place the mixed material over the cracks to be pressure injected and around each injection port. Allow sufficient time to cure before pressure injecting.

As a structural adhesive

Apply the mixed SealBoss® 4000 QuickSeal-Epoxy Structural Gel Epoxy to the mating or non mating prepared substrates. Work into the substrate for positive adhesion. Secure the bonded unit firmly into place until the epoxy has cured. Non-sag gel, no flow. Pot Life: Approx. 5-10 minutes. (100 gram mass) Appearance: Compound A = White, Compound B = Grey.

Concrete Application Recommendations:

Surface Preparation:

Surface must be clean and sound. It may be dry or damp, but free of standing water. Remove dust, grease, curing compounds, waxes, foreign particles and disintegrated materials.

Preparation Work:

Concrete: Sand blast or use other approved mechanical means.

Steel: Sandblast to white metal finish.

Bulk Mixing: For bulk mixing pre-mix each component thoroughly. Proportion equal parts by volume of Component "A" and Component "B" through appropriate metered epoxy mixing equipment as recommended by the manufacture. Mix only the quantity that can be used within its pot life and do not allow mixed material to reside in static mixing head or mixer for more than five minutes or nozzle blockage may result.

MAINTENANCE OF EQUIPMENT

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

Remove all excess product and any smears. Tools and mixing equipment must be cleaned immediately after use.

SealBoss® R70 Pump Flush is good to your equipment and should always be used. For best results please follow our recommendations.

First Step is conditional - Omit if in conflict with regulations on the jobsite or the equipment you use: Flush first with a very small amount of solvent (not supplied by us) to cut remaining material. Caution: Xylol, Toluol, Acetone, M.E.K. are hazardous, combustible, aggressive towards the environment, equipment, seals and hoses. Immediately follow second step.

Second Step: Flush with **R70 Pump Flush** circulate cleaner through pump and hoses for several minutes at higher flow rates. **R70 Pump Flush** is a solvent free, non-flammable cleaner, lubricator and pump and hose conditioner. The product ships without any hazard label. We assume no responsibility for equipment damaged by use of material.

PRECAUTION

Protect your health! While working with this material, 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 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.

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Injection Guns

We supply a wide selection of injection guns for use with the **4000 LV-Epoxy-Resin** Cartridge System. Systems are either manual, electric or pneumatic. Please see injection gun data sheets for more detailed information or call our technical support.



Technical Data:

Color (A+B mixed)	Grey/Black
Viscosity (mixed)	Gel
Mix Ratio (by volume)	1:1
Pot Life 100 grams at 77°F	5-10 min
Tack Free Thin Film at 77°	1-2 hrs
Shrinkage	ASTM C-883
Absorption 24 hours	0.12 %
Heat Deflection Temperature, ASTM D-648	129°F
Bond Strength, ASTM C-882 14 days	3,250 psi
Compressive Strength, ASTM D-695 7 days	13,500 psi
Tensile Strength 73°F, ASTM D-638 14 days	5,450 psi
Flexural Strength, ASTM D-790	5,882 psi
Shear Strength, ASTM D-732	4,900 psi

Coverage

22oz. cartridge yields 39 cu. in. of epoxy gel adhesive. 46oz. cartridge yields 82 cu. in. of epoxy gel adhesive.
Shelf Life: 1 year in original unopened container.

Storage: Store indoors at temperatures between 40-95 F.

Packaging

Cartridges, 1 Gallon Units
2 Gallon Units 110 Gallon Units

*) Important Notice:

Due to the complexity of load bearing applications special processing and training may be required. This data sheet, published tech data and other provided information do not imply the general suitability of SealBoss Corp. **4000 QuickSeal Epoxy Paste** as an anchor or a structural adhesive. Special testing and approval of a trained engineer in charge of and authorized for the project may be required to ensure suitability and liability requirements. As any polymers, epoxy products are subject to aging and changes in properties. Initial maximum strength may weaken over time. Substrate temperatures, UV-exposure, etc. need to be considered.

Cartridge Capacity

	MINIMUM EMBEDMENT DEPTH	HOLES PER CARTRIDGE	
		22 oz.	46 oz.
3/8"	3-1.2"	107	223
1/2"	4-1.4"	59	122
5/8"	5"	41	85
3/4"	6-3.4"	25	52
7/8"	7-1.2"	19	39
1"	8-1.4"	15	31

Ultimate Load Capacity Using Rebar In 4000 Psi Concrete

REBAR SIZE	HOLE DIAM.	EMBED. DEPTH	TOTAL LOADS (LBS) TENSION	SHEAR
#4	5/8"	6"	14,730	19,200
#5	3/4"	6-3/4"	18,810	29,760
#6	7/8"	7-1/2"	27,640	42,240
#7	1-1/8"	8-1/4"	36,200	57,600
#8	1-1/4"	9"	64,000	75,840

Ultimate Load Capacity Using Threaded Rod In 4000 Psi Concrete

BOLT DIAM.	HOLE DIAM.	EMBED. DEPTH	TOTAL LOADS (LBS)	
			TENSION	SHEAR
1/2"	5/8"	6"	22,000	25,680
5/8"	3/4"	6-3/4"	36,750	42,575
3/4"	7/8"	7-1/2"	51,780	56,450
7/8"	1"	8-1/4"	64,650	66,890
1"	1-1/8"	9"	68,950	71,450
1-1/8"	1-1/4"	10-1/2"	94,750	97,460
1-1/4"	1-3/8"	12"	98,650	102,520

Bolt-Up And Cure Schedule

TEMPERATURE (°F)	TEMPERATURE (°C)	BOLT UP TIME S (HRS)	CURE TIME (HRS)
40-50	4-10	8	42
51-60	10-16	6	36
61-70	16-21	4	24
71-80	21-27	3	24
>80	>27	2	16

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