



Structural Epoxy Repair Systems

SealBoss [®] Low & Super Low Viscosity Epoxy Resins SealBoss [®] Epoxy Paste / Gel SealBoss [®] Epoxy Cartridge System SealBoss [®] Epoxy Pumps, Packers, Surface Ports

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SealBoss Structural Epoxy Repair Systems



Introduction

Thank you for choosing the SealBoss[®] Concrete Repair System for your chemical injection application. You are now well on your way to a successful and permanent concrete repair solution. In the pages to follow, SealBoss[®] would like to provide a brief repair technique introduction. At the same time, we would encourage you to familiarize yourself with the complete brochure as we proceed to explain the advantages of the SealBoss[®] repair systems and what we can offer you as a valued SealBoss[®] customer. We hope that the following information is of value to you, and thank you again for selecting SealBoss[®] Corp. as your repair system.

Application Technique Epoxy Injection:

The SealBoss $^{\mbox{\tiny \$}}$ Epoxy Injection Systems are primarily designed for structural concrete crack and joint repairs.

Some of the typical causes for concrete cracking include:

- Drying shrinkage
- Thermal contraction or expansion
- Settlement
- Lack of appropriate control joints
- Overload conditions that produce flexural, tensile, or shear cracks in concrete
 and Restraint of movement

Epoxy Injection applications are commonly found in many concrete structures such as parking structures, bridges, tunnels, load bearing columns, and many more structural substrates. The low viscosity resins are injected into standard and hairline cracks or joints and cure to form a rigid, long-lasting, structural bond-seal with a compressive strength exceeding the strength of the concrete. It is recommended to observe the steps as follows:

- 1. Clean the substrate with wire brush at a distance of approximately 1/2" (13mm) on both sides of the crack. Wire brush is recommended because grinders often leave concrete dust in the crack. High pressure water can also be used for cleaning.
- 2. Most cracks can be injected with the SealBoss® 4040 Epoxy Resin. For hairline cracks (<1/64", <0.4 mm) it may be of advantage to use the super low viscosity resin as SealBoss® 4050 SLV Epoxy Resin to increase resin flow and reduce injection pressures. Measure the width of crack in order to determine the correct product to be injected. Once the crack is exposed, clean, and dry, you may adhere surface ports. Surface ports are typically placed at 5 in (13 cm) to 8 in (20 cm) spacing, with increased spacing on wider cracks. The ports are secured to the crack with SealBoss® 4500 F QuickSeal Epoxy Paste. QuickSeal is to be applied 1" wide and approximately 1/8" (3mm) thick across the surface of the crack. Be sure to not cover the bottom opening of the port with paste as this will prohibit the flow of resin into the crack. Surface seal is designed to contain the epoxy resin in the crack. For this reason, best results are found when the entire backside of the crack is sealed.</p>
- 3. Once the SealBoss[®] 4500 F QuickSeal Epoxy Paste is fully cured, you are ready to connect the cartridge or bulk applicator to the surface port. The static mixer from the cartridge or SealBoss[®] PA3000 Epoxy Injection Pump, SealBoss[®] P3003-2C Injection Pump or other bulk epoxy injection pump couples to nylon tubing which again couplers to the surface port through a series of 3/8-¼" and ¼"-¼" quick disconnects. Vertical cracks are typically injected from the bottom up, while horizontal crack injections are commonly initiated at the point of widest crack width.
- 4. Continue to pump resin into the surface port until you see material exiting the adjacent port, called port to port travel. At this time, you may cap the port, and move on to the next. Repeat this process as you work your way along the crack.
- 5. A good practice when performing structural repairs of this nature is to document a quality assurance program such as monitoring the amount of material accepted at each port.
- 6. After all of the ports are injected, it is recommended to allow adequate time for the epoxy resin to completely cure. Following cure, the ports can be removed by cutting or grinding, and the SealBoss[®] 4500 F QuickSeal Epoxy Paste may be removed with a grinder. This process will leave a fully penetrated and repaired crack that is now ready for surface treatment to the applicators intended aesthetic results.













SealBoss Structural Epoxy Repair Systems

Benefits of SealBoss[®] Professional Starter Kits™

SealBoss $^{\rm e}$ offers competitively priced Professional Epoxy Injection Starter Kits for contractors that like to turn this repair system into a business.

SealBoss® Professional Kits include everything necessary for an industrial or commercial project including bulk packaging and a high pressure, industrial grade pump such as the SealBoss® PA3000 Epoxy Injection Machine pneumatic injection machine or the versatile SealBoss® P3003-2C Injection Pump.

Upon considering the benefits of the SealBoss[®] Professional Kits, it is quite easy to recognize the potential offered which includes:

- 1. Increased service offering
- 2. Additional revenue stream
- 3. Niche system solution creating company differentiation
- 4. Minimal investment for industrial grade system
- 5. Industrial grade pump for future applications
- 6. Higher pressure pump = better results
- 7. Significant amount of referral business
- 8. Support of established and valued SealBoss® brand

Product Name	Application	Benefits	Image
P3003-2C	High & Low Pressure Polyurethane and Epoxy Injection	 Convenient Electric Drill Operated Pumps EP and PU Resin 1:1 and 2:1 Ratios 	
PA3000	High & Low Pressure Polyurethane and Epoxy Injection	 Pneumatic Industrial Grade 2:1 or 1:1 operation 	Seallow B

Benefits of SealBoss[®] Cartridge Starter Kits[™]

SealBoss[®] offers complete kit solutions for our cartridge product line. We believe in ful system solutions that offer the applicator optimal products for successful repairs. We offer many SealBoss[®] products in convenient Starter Kit packaging for smaller repairs. Below are a few pictures of the mentioned kits. While the Kit offers significant savings, all products and materials can be reordered individually for future projects. Some of the SealBoss[®] Starter Kit benefits include:

- 1. Affordable option for beginning applicators on smaller and manageable projects
- 2. Smaller packaging for same industrial grade products
- 3. Individual item reorder options
- 4. Low investment for high return repair system offering
- 5. Great way to familiarize yourself with SealBoss[®] Concrete Solutions

Benefits of SealBoss® Approved Applicator Certificate

You are now more familiar with the SealBoss[®] epoxy injection systems, may own an industrial grade pump through the purchase of a SealBoss[®] Professional Kit, and may have repaired many cracks successfully and permanently! At this stage in the repair industry, it is time to consider the SealBoss[®] Approved Applicator Program.

SealBoss[®] puts a considerable amount of resources into engineer specification efforts and commercial architects and builders. It is quite common for engineers and architects to require an approved applicator for specialty repairs such as the chemical injection











Approved Applicators gain first access to SealBoss[®] leads and specifications.





systems. In an effort to increase quality assurance and adhere to engineer specifications, SealBoss® offers a training program for contractors to obtain an Approved Applicators Certificate.

- Set your company up for success with an approved applicator certificate 1.
- Qualify yourself in bid meetings with your certificate 2.
- 3. Gain access to the SealBoss® lead generation system
- Be included on SealBoss® applicator list for engineers 4.
- Join the proven SealBoss® Team! 5.

Please contact SealBoss® with all questions concerning our progression program to become an Approved Chemical Injection Applicator. Take the time to experience our commitment to service and knowledge by speaking with one of our experienced representatives. We look forward to hearing from you soon!



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SealBoss®

Structural Epoxy Repair Systems





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, highstrength, multipurpose, epoxy injection resin adhesive.

SealBoss 4040 LV Epoxy Resin meets ASTM C-881/ AASHTO M-235, Types I, II, IV, V, Classes B and C, Grade 1.

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

Installation Guidelines

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

Concrete Crack Injection

SealBoss 4040 LV Epoxy Resin 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 LV Epoxy Resin bonds well under pressure and offers high tensile and compressive strength properties for structural repairs. Injection can be performed in wet 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 4 in. (10 cm) to 12 in. (30 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® 4500F QuickSeal Epoxy Paste**.

Other Applications

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 LV Epoxy Resin : 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

Chemical Resistance

SealBoss 4040 LV has excellent resistance to a wide range of chemicals including acids and bases, aircraft and automotive fluids, petroleum fuels, cutting oils, etc. It has limited resistance to hydrocarbon solvents. Performance is a function of the specific chemical and concentration, ambient and solution temperatures, and exposure times.

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. The maximum in-service temperature should not exceed 20°F below the HDT in bonding applications subjected to substantial and sustained shear stresses that may cause creep.

Do not add solvents or otherwise thin this material. 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.





Product Data Sheet



Technical Data:

Mix ratio Color (mixed) Viscosity (ASTM-2393)

Gel Time, 100 g @ 50° F / 10° C (ASTM D-2471) @ 73° F / 23°C (ASTM D 2471) Compressive Yield Strength (ASTM D-695) Compressive Modulus (ASTM D-695) Concrete Bond Strength (ASTM C-882)

Tensile Strength (ASTM D-638) Flexural Strength (ASTM D-790) Flexural Modulus (ASTM D-790) Elongation at break (ASTM D-638) Heat Deflection Temperature (D-648) 2:1, Part A to Part B by volume Amber or purple approx. 350 cp mixed at 75°F (25°C) Part A 400 cp / Part B 150 cp

34 minutes 14 minutes 16,400 psi / 113 MPa 568,000 psi / 3910 MPa 2 days 3,100 psi /21 MPa 14 days 3,900 psi / 26.9 MPa 10,200 psi / 70 MPa 12,000 psi / 82 Mpa 550,000 psi / 3790 Mpa 2.1% 60°C / 140°F

Meets ASTM C-881/ AASHTO M-235, Types I, II, IV, V, Classes B and C, Grade 1

Cure schedule, 7 days at 73° ± 4° F and test temperature, 73° ± 4° F unless otherwise indicated

Coverage

231 cubic inches per gallon.

1 year for cartridges, 3 years in original unopened containers stored indoors at temperatures between 40-95°F.

Shelf Life

Packaging

14.5 oz Cartridge 15 Gallon Kit 165 Gallon Kit

Handling and Toxicity: For hazard warnings, safe handling and first aid instructions, CAREFULLY READ THE SAFETY DATA SHEETS (SDS) AND CONTAINER WARNING LABELS.

Part A: Liquid epoxy resin, HMIS Health Hazard Rating- 2 (Moderate Hazard). Warning! Causes eye and skin irritation. May cause allergic skinreaction. Harmful if swallowed. Avoid contact with eyes, skin and clothing. Wash thoroughly after handling. Avoid prolonged or repeated contact with skin. Part B: Liquid epoxy hardener, HMIS Health Hazard Rating- 3 (Serious Hazard). Contains alkaline amines. Danger! Causes severe eye and skin burns. May cause allergic skin and respiratory reaction. Combustible, corrosive. Do not get in eyes or skin or on clothing. Avoid breathing vapor. Keep container closed. Use only with adequate ventilation. Wash thoroughly after handling. Keep away from heat and open flame.

Limited Warranty Policy and Disclaimer for Products Supplied and/or Distributed by SealBoss Corp.: SealBoss Corp. Products are for Professional Use. 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. Nothing contained in any supplied materials relieves the user of the obligation to read and follow the warnings and instruction for each product as set forth in the current Technical Data Sheet, product label and Safety Data Sheet prior to product use. SealBoss Corp. warrants supplied / distributed products to be free of manufacturing defects. Seller's and manufacturer's sole responsibility shall be to replace that portion of the product of the manufacturer which proves to be defective. There are no other warranties by SealBoss Corp. of any nature whatsoever expressed or implied, including any warranty of merchantability or fitness for a particular purpose in connection with this product. SealBoss Corp. shall not be liable for damages of any sort, including remote or consequential damages resulting from any claimed breach of any warranty whether expressed or implied. SealBoss Corp. shall not be responsible for use of this product in a manner to infringe on any patent or any other intellectual property rights held by others. In addition, no warranty or guarantee is being issued with respect to appearance, color, fading, chalking, staining, shrinkage, peeling, UV damage, excessive temperature exposure, normal wear and tear or improper application by the applicator. Damage caused by abuse, neglect and lack of proper maintenance, acts of nature and / or physical movement of the substrate or structural defects are also excluded from the limited warranty. SealBoss Corp. reserves the right to conduct performance tests on any material claimed to be defective prior to any repairs by owner, general contractor, or applicator. 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. SealBoss Corp. reserves the right to change the properties of products without notice.

SealBoss® 4040 LV Epoxy Resin

Revised 202204





SealBoss[®] 4050 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® 4050 SLV Epoxy Resin is a super low viscosity, 100% solids, hi-mod, 2-component, moisture-tolerant, high strength, multipurpose, epoxy injection resin adhesive.

SealBoss 4050 SLV Epoxy Resin meets ASTM C-881/ AASHTO M-235, Types IV, V, Classes B and C, Grade 1.

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

Installation Guidelines

SealBoss 4050 SLV Epoxy Resin is composed of two components. The mixing ratio by volume is 2:1 (A:B).

Concrete Crack Injection

SealBoss 4050 SLV Epoxy Resin is suited for the injection of cracks, voids and fissures in concrete, delaminations in concrete, masonry, stone and sealed wood. The very low viscosity of the material provides for superior penetration at low to medium injection pressures. SealBoss 4050 SLV Epoxy Resin bonds well under pressure and offers high tensile and compressive strength properties for structural repairs. The product cures to a tough, resilient polymer with excellent load transfer capabilities. Injection can be performed in wet 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 4 in. (10 cm) to 12 in. (30 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® 4500F QuickSeal Epoxy Paste**.

Other Applications

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.

Super Low Viscosity High Strength, High Modulus, Epoxy Injection Resin Adhesive

SealBoss® 4050 Advantages

- SealBoss Product-Pump-Packer System Solution
- Super Low Viscosity, Deep Penetration Formula
- Convenient Easy Mix Ratio A:B = 2:1 by Volume
- Advanced Flow, Solvent Free Formulation
- VOC Free
- This Product is for Professional Use

Chemical Resistance

SealBoss 4050 SLV has excellent resistance to a wide range of chemicals including acids and bases, aircraft and automotive fluids, petroleum fuels, cutting oils, etc. It has limited resistance to hydrocarbon solvents. Performance is a function of the specific chemical and concentration, ambient and solution temperatures, and exposure times.

Limitations:

Minimum substrate and ambient temperature 37°F (3.8°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. The maximum in-service temperature should not exceed 20°F below the HDT in bonding applications subjected to substantial and sustained shear stresses that may cause creep. Do not add solvents or otherwise thin this material. 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.





Product Data Sheet

Technical Data:

Mix ratio Color (mixed) Viscosity (ASTM-2393)

Gel Time, 100 g @ 73° F / 23°C (ASTM D 2471) @ 40° F / 10° C (ASTM D-2471)

Compressive Yield Strength (ASTM D-695) Compressive Modulus (ASTM D-695) Concrete Bond Strength (ASTM C-882)

Tensile Strength (ASTM D-638) Flexural Strength (ASTM D-790) Flexural Modulus (ASTM D-790) Elongation at break (ASTM D-638) Heat Deflection Temperature (D-648) 2:1, Part A to Part B by volume Amber or purple approx. 200 cp mixed at 75°F (25°C) Part A 300 cp / Part B 95 cp

20 minutes 85 minutes

16,000 psi / 110 MPa 537,000 psi / 3702 MPa 2 days 3,600 psi /24.8 MPa 14 days 3716 psi / 25.6 MPa 10,400 psi / 71 MPa 12,000 psi / 82 Mpa 490,000 psi / 3378 Mpa 2.4% 60°C / 140°F

Meets ASTM C-881/ AASHTO M-235, Types IV, V, Classes B and C, Grade 1

Cure schedule, 7 days at 73° \pm 4° F and test temperature, 73° \pm 4° F unless otherwise indicated

Coverage

231 cubic inches per gallon.

1 year for cartridges, 3 years in original unopened containers stored indoors at temperatures between 40-95°F.

Shelf Life

Packaging

14.5 oz Cartridge 15 Gallon Kit 165 Gallon Kit

Handling and Toxicity: For hazard warnings, safe handling and first aid instructions, CAREFULLY READ THE SAFETY DATA SHEETS (SDS) AND CONTAINER WARNING LABELS.

Part A: Liquid epoxy resin, HMIS Health Hazard Rating- 2. Warning! Causes eye and skin irritation. May cause allergic skinreaction. Harmful if swallowed. Avoid contact with eyes, skin and clothing. Wash thoroughly after handling. Avoid prolonged or repeated contact with skin. Part B: Liquid epoxy hardener, HMIS Health Hazard Rating- 3. Contains alkaline amines. Danger! Causes severe eye and skin burns. May cause allergic skin and respiratory reaction. Combustible, corrosive. Do not get in eyes or skin or on clothing. Avoid breathing vapor. Keep container closed. Use only with adequate ventilation. Wash thoroughly after handling. Keep away from heat and open flame.

Limited Warranty Policy and Disclaimer for Products Supplied and/or Distributed by SealBoss Corp.: SealBoss Corp. Products are for Professional Use. 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. Nothing contained in any supplied materials relieves the user of the obligation to read and follow the warnings and instruction for each product as set forth in the current Technical Data Sheet, product label and Safety Data Sheet prior to product use. SealBoss Corp. warrants supplied / distributed products to be free of manufacturing defects. Seller's and manufacturer's sole responsibility shall be to replace that portion of the product of the manufacturer which proves to be defective. There are no other warranties by SealBoss Corp. of any nature whatsoever expressed or implied, including any warranty of merchantability or fitness for a particular purpose in connection with this product. SealBoss Corp. shall not be liable for damages of any sort, including remote or consequential damages resulting from any claimed breach of any warranty whether expressed or implied. SealBoss Corp. shall not be responsible for use of this product in a manner to infringe on any patent or any other intellectual property rights held by others. In addition, no warranty or guarantee is being issued with respect to appearance, color, fading, chalking, staining, shrinkage, peeling, UV damage, excessive temperature exposure, normal wear and tear or improper application by the applicator. Damage caused by abuse, neglect and lack of proper maintenance, acts of nature and / or physical movement of the substrate or structural defects are also excluded from the limited warranty. SealBoss Corp. reserves the right to conduct performance tests on any material claimed to be defective prior to any repairs by owner, general contractor, or applicator. 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. SealBoss Corp. reserves the right to change the properties of products without notice.







Applications / Characteristics

- Fast Cure Non-Sag Formula
- Seals cracks and around injection ports prior to pressure-injection grouting
- High-modulus, high-strength, 1: 1 ratio
- ASTM C 881 Compliant Types I, II, IV, V Grade 3, Class B & C

Product Description

SealBoss® 4500 F QuickSeal Epoxy Paste is a fast cure, 100% solids, high modulus, non-sag, non-shrink two component epoxy adhesives that bonds to concrete and other surfaces. SealBoss® 4500 F QuickSeal Epoxy Paste meets or exceeds requirements of ASTM C 881 (Types I, II, IV, & V Grade 3, Class B & C)

Installation Guidelines

Always test a mixed product to insure that the material will harden properly before proceeding. For bulk applications:

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 Bonding Adhesive:

Apply the mixed SealBoss[®] 4500 F QuickSeal Epoxy Paste to the prepared substrates. Work into the substrate for positive adhesion. Secure the bonded unit firmly into place until the epoxy has cured.

Sealboss® Corp. specifically declines any responsibilities, warranties, liabilities if used in load bearing applications.

Concrete Application Recommendations:

Surface Preparation:

Surface must be clean, dry and sound. Remove dust, grease, 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:

Pre-Mix each component separately. Mix 1 part A (resin) to 1 part B (hardener) for 3 minutes using a Jiffy Mixer. Mix at slow speed (less than 850 rpm) to avoid air entrapment. Remember, you will have less working time at higher temperatures. 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 two minutes or nozzle blockage may result.

Never thin with solvents. Surface and ambient temperature must be 45°F (7°C) or above. For applications with constant high temperature (above 120°F, 49°C), contact SealBoss[®]. Material will soften at very high temperatures. Do not expose

Fast Cure High Strength Epoxy Paste

- SealBoss[®] Product-Pump-Packer System Solution
- Bulk & Cartridge System
- This Product is for Professional Use

stored product to cold temperature (below 40°F, 5°C) for any length of time.

Note: High temperature will accelerate the setting time. As a general rule, the gel time of the epoxy will be cut in half for each 10° to 15° increase in temperature above 75°F and the gel time will double for each 10° to 15° drop below 75°F (24°C). Minimum age of concrete must be 7 days and considered fully cured, depending on curing and drying conditions.

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. Wear appropriate safety goggles, gloves and safety clothing at all times. 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. Forced local exhaust is recommended to effectively minimize exposure. 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.







Heavy Duty Drill Bits

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Product Data Sheet Two Component Pneumatic Epoxy Injection Machine

SealBoss[®] PA 3000 Epoxy Injection Pump Advanced Design Features

- Complete Set Including Hoses And Applicator
- 800 PSI
- 2:1 or 1:1 Mix Ratios
- 3" Air Cylinder
- Positive Displacement Piston
- Pressure Lines Included
- Compact and Lightweight
- Rugged Construction
- Very Affordable
- Easy To Use / Clean
- Reliable, Proven Design

The **SealBoss® PA 3000 Epoxy Injection Pump** combines high quality with a very competitive price.

The SealBoss $^{\otimes}$ PA 3000 Epoxy Injection Pump sets new standards for performance and features.

The machine is furnished with male hose adapters and push-in tube connectors for the pneumatic lines. Hoses are available in a variety of sizes. We also supply surface ports in several sizes and split sets for multi port injection. Please refer to our data sheet on the *The SealBoss® Epoxy Injection Multiple Port System* for further information.

The SealBoss® PA 3000 Epoxy Injection Pump is suitable for the two component SealBoss® Epoxy Injection Line products and Polyurethane Resins and related products with viscosities between 10 and 1000 cps. Contact your SealBoss® technician to confirm that your product is suitable for use with this machine.

The SealBoss[®] PA 3000 Epoxy Injection Machine has been refined and improved over many years for highest reliability and daily use. The pump features a three inch air cylinder for pressures up to 800 psi. The higher injection pressures allow for better performance with thicker resins and with all materials at lower temperatures.

The tanks are unitized and mounted on four easy roll caster wheels with breaks. The machine is very mobile. The pump is available in 2:1 or 1:1 mixing ratio versions. With purchase of a separate piston/cylinder unit mixing ratios can be easily interchanged.



This complete package includes material reservoirs, the applicator with static mixer and a 12' set of high pressure hoses.



Metering Pump Specifications

Standard Ratios Material Flow Rate Dimensions Weight Tank Capacities Material Viscosity Outlet Pressure Air Requirements 1:1 or 2:1 Approx. 0.4 GPM 14" x 22" x 29" 100 lb 3 1/3 gal ea Pourable, 10-1000 cps 15-800 psi 1 CFM 40-120 psi

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3000 Epoxy Injection Pump

Revised 201705





Product Data Sheet Two Component Pneumatic Epoxy Injection Machine

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3000 Epoxy Injection Pump

Revised 201705





Product Data Sheet Two Component Injection Pump Manual

SealBoss® P3003-2C Injection Pump Manual

- Very affordable two component pump system
- 2:1 ratio standard, 1:1 upon request
- Can be used as 1 Component System
- Compact & Sturdy Design
- Heavy duty for daily use
- Lightweight
- > 5000 PSI
- Easy to use, clean & maintain
- Pressure gauges
- Hoppers included
- Hose Sets (mechanical packer version / static mixer version) sold separately

The **SealBoss® P3003-2C Injection Pump** features a compact and sturdy design with integrated hoppers and stand.

This lightweight and powerful injection pump can be used for dual component epoxy and/or polyurethane injection resin with viscosities between 10 and 1000 cps. Call your SealBoss® technician for details. Please specify 2:1 or 1:1 ratio. Conversion cylinders sold separately.

Suitable for mid-size jobs and daily use this is the perfect machine for epoxy and waterproofing contractors performing commercial work and residential injection. With this pump it is a snap to get in and out of basements and confined areas as found on many job sites.

This pump is of professional grade quality for every day use. The output and pressure are exceptional for a machine of this size. The modular design keeps maintenance cost low and allows for easy cleaning.

Parts can be replaced by the savvy contractor to keep downtime at an absolute minimum.

This pump is powered by an electric drill which is sold separately by SealBoss[®]. The drill offers a variable speed adjustment to adjust material volume and pressure.

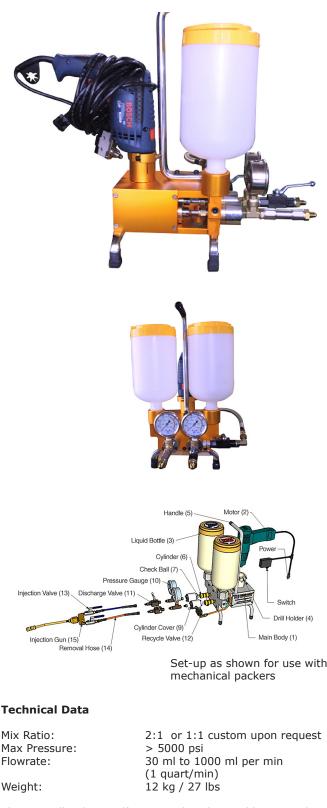
Contact your SealBoss $^{\odot}$ technician to confirm that your product can is suitable for use with this machine.

The pump can be used with our line of injection packers and ports.

Special SealBoss[®] applicators are available for polyurethane / mechanical packer and epoxy / two-component surface port injection can be ordered separately. Ask your SealBoss[®] technician for details.

North America: Standard variable speed electric drill 110V sold separately.

International Orders: Special order variable speed electric drill 220V (lead time and cost subject to availability at time of order) or voltage converter available on request. Please consult with your SealBoss® technician.



Electric Drill, adaptors/fittings and packers sold separately. Please ask your SealBoss® technician for suitable injection grouts. Viscosity range 10-1000 cps.

1:1 and 2:1 mix ratios with exchange of piston.