

SealBoss®

1640 Structural Strength Slab Lifting Leak Seal & Water Plug Foam



Product Data Sheet

SealBoss® 1640 Dry & Wet Applications

- Lifting Of Concrete Slabs And Foundations
- Undersealing Of Slabs And Foundations
- Filling of Voids
- Instant Water-Plug Applications

Typical Structures

Concrete Highways, Airport Runways, Taxiways,
Bridge Approach Slabs, Concrete Slab Floors,
Concrete Pipes, Unconsolidated Soil, Large Cracks



Lift-Seal-Fill-Densify

Structural Strength,
Fast Cure, Hydrophobic
Two Component Polyurethane
Foam & Seal Injection Grout

Injecting SealBoss® 1640 Foam through
injection lances into soil under slab.

Product Description

SealBoss® 1640 Structural Strength SlabLifter™ & Leak Seal Foam is a closed cell, two-component, non-shrink polyurethane foam with structural properties. This MDI (methylene-diphenyl-isocyanate) based product is 100% solvent free and 100% solids. The product starts to react when mixed and does not need moisture from external sources for the reaction. SealBoss® 1640 Structural Strength SlabLifter™ expands up to eight times forming a closed cell structure and cutting down the material consumption drastically. The cured foam offers limited structural strength combined with increase in volume and excellent bonding properties on dry and with limitations on wet surfaces. The product is not a replacement for typical epoxy injection but offers an alternative for filling larger spaces that demand limited structural strength. The compressive strength of the reacted product is typically much higher when filled with an inert mineral such as sand.

SealBoss® 1640 Structural Strength Foam is designed to fill voids in soil and stone, brick or concrete structures for the purpose of waterproofing as well as regaining certain structural strength. The excellent combination of hardness and flexibility qualifies SealBoss® 1640 Structural Strength SlabLifter for use in areas where structural strength and moderate flexibility are desired.

SealBoss® 1640 Structural Strength SlabLifter™ is an excellent soil solidification foam which can be used to seal, lift, fill and densify soil next to and under structures such as roadways, driveways, runways, patios and other buildings by utilizing a deep grout injection process.

The expanding and compressive strength qualities of SealBoss® 1640 Structural Strength Foam make it a price competitive alternative for the filling of large voids and 'pockets'. The structural strength of the foam product is highly correlated to the expansion rate and the use of inert fillers such as sand. SealBoss® 1640 Structural Strength Foam can be applied in dry and wet areas. Additional moisture may increase the expansion. The standard mixture expands approximately six times in volume. Job site testing is recommended to determine product suitability. To achieve most satisfying and permanent results in certain applications, a combination of SealBoss® 1640 Structural Strength Foam with other systems of our product line may be advised.

SealBoss® 1640 Structural Strength Foam is not designed to stop high velocity water leaks. To stop active water leaks please refer to **SealBoss® 1510 WaterStopFoam**. Ask your SealBoss®

technician for details. The product is for professional use.

Installation Guidelines

SealBoss® 1640 Structural Strength Foam is a two-component foam system. The mixing ratio is 1:1 (A:B) by volume. Condition the product to room temperature prior to use. The components need to be thoroughly mixed either in a container prior to the application or by the use of a static mix head just prior to injection. Due to the short gel time, dual-component equipment must be used for injection. In some gravity feed applications the product may be poured. The product is also available in cartridges.

All equipment, pumps and hoses must be dry. Avoid moisture contact with the mixture to prevent premature reaction. If product foams while pumping, immediately shut down the machine and flush with a cleaner to avoid built up and clogging of the equipment.

Maintenance of Equipment

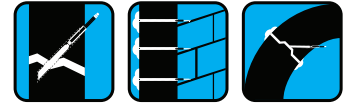
Tools and equipment must be cleaned immediately after use. Remove all excess product. Cured product is hard to remove. **SealBoss® R70 Pump Flush** is a solvent free, non-flammable cleaner, lubricator, pump and hose conditioner. Please refer to the product data sheet for detailed information.

Health and Safety

Protect your health! Observe container labels, SDS, applicable laws and regulations and all instructions before using the product and equipment. 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 the 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! 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. Get immediate medical attention as needed.

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Technical Properties

Components	TEST METHOD	COMP. A	COMP. B	COMP. A/B Mixed
Solids		100%	100%	
Viscosity A/B mixed	ASTM D 2196			280-400 mixed
Specific gravity	ASTM D 891	1.2	1.04	
Weight per gal, lb		10.0	8.68	
Mix ratio	by weight	52	48	
	by volume	50	50	
Cured Material				
Density		4 lbs/ft ³		
Compressive strength		11,520 psf (80 psi) (fully cured)		
Physical Properties				
Initial Reaction Time		5 seconds to 20 seconds (depending on temperature)		
Rise time, minutes		2-4		
Tack free time		60 seconds to 240 seconds (depending on temperature)		
Max. Expansion (unconfined)		20 times (2000%)		
Shrinkage		<1%		
Packaging				
Cartridge Systems		22 oz (650 ml)		
Bulk		5 gal	5 gal	
		55 gal	55 gal	
		Tote Tanks		
Storage		1 year. Unopened containers at 15-30°C, 58-85°F Store indoors Cartridges: 9 months		
Corrosiveness		Non-Corrosive		
Appearance		Gold-Yellow Polyurethane Foam		
Resistance to Chemicals		High Resistance to Most Organic Solvents, Mild Acids, Alkali and		



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Revised 202501