

# SILO SEAL

## CEMENT BASED COATING FOR CONCRETE & MASONRY

**PRODUCT DESCRIPTION:** SILO SEAL is a blended Portland cement based compound formulated to fill, seal, waterproof and protect vertical, overhead, and non-traffic bearing horizontal concrete and masonry surfaces. SILO SEAL is used interior or exterior, above or below grade where a seamless, breathing, waterproof coating is required. Typical applications include: foundations, concrete and masonry walls, parapets, median barriers, water tanks and reservoirs, tunnels, cisterns, retaining walls and basements. SILO SEAL may also be used to hide blemishes and surface defects in architectural concrete. SILO SEAL is modified with POOL BOND latex polymer solution for enhanced properties and improved durability. Standard colors are gray and white.

### BENEFITS:

- **Protects building interiors from dampness and moisture damage**
- **Cured coating becomes an integral part of the wall or substrate**
- **Highly resistant to wind driven rain and standing water**
- **Exhibits good chemical resistance**
- **Available in 3 shades: gray, white, and pearl gray**

**COMPOSITION:** Cements selected and finely graded aggregates, waterproofing agents and surface rheology modifiers.

**TECHNICAL DATA:** Complies with Federal Specification TT-P21 Type I Class A

<b>WORKING AND PERFORMANCE PROPERTIES @ 70° F (21° C) –APPROXIMATE VALUES:</b>	
Density (Wet mix) per ASTM C 138:	130 lbs./cu.ft. (2.08 kg. /cu. me.)
Working time (pot life):	45-90 minutes
Yield – for a base coat @ rate of 2 lb/sq. yd.	225 sq. ft / 50 lb bag (20.9 sq. me ./ 22.7 kg)*
Yield – for a topcoat @ rate of 1 lb/sq. yd.	450 sq. ft / 50 lb bag (41.8 sq. me ./ 22.7 kg)*
Total combined average thickness @ 1/16” (1.6 mm) @ 3 lb/sq.yd. :	150 sq. ft / 50 lb bag (13.9 sq. me ./ 22.7 kg)*
ASTM C-109 Compressive Strength: 7 day	4700 psi
ASTM C-109 Compressive Strength: 28 day	6800 psi
ASTM C-348 Flexural Strength: 7 day	390 psi
ASTM C-348 Flexural Strength: 28 day	895 psi
ASTM C-190 Tensile Strength: 7 day	345 psi
ASTM C-190 Tensile Strength: 28 day	405 psi
ASTM C-67 Absorption, PCT 24 Hour Soak / 5 hour boil:	4.6% /4.7%
ASTM C-672, Freeze-Thaw Resistance, PCT-Loss at 50 cycles:	1.20%

\*Note-Coverage will vary depending on surface texture and porosity

### DIRECTIONS FOR USE

**SURFACE PREPARATION:** Surfaces to be coated must be structurally sound, clean and free of dirt, dust, oil, paint and all contaminants that could contribute to loss of bond of SILO SEAL to the substrate. Roughen or blast extremely smooth surfaces such as precast or cast-in-place concrete to ensure good mechanical adhesion of SILO SEAL. New concrete and masonry surfaces must be cured 28 days. Repair all surface defects, water leaks, cracks and voids prior to applying SILO SEAL. Dampen the surface with potable water immediately before the application of SILO SEAL.

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**MIXING:** Mechanically mix SILO SEAL using a slow speed motor and paddle mixer for best results. Mix 1 part POOL BOND latex with 3 parts potable water to make a mixing liquid. Each 50 lb. bag of SILO SEAL will require 2.0 gallons of mixing liquid (0.5 gallon POOL BOND and 1.5 gallon water) for proper consistency. Mechanically mix for 2-3 minutes, until lump free and a smooth "pancake batter" consistency is obtained. Allow the mixed SILO SEAL to "fatten" for 5-10 minutes. If the material is too thick, adjust to a brush consistency by adding additional mixing liquid and re-mix.

**APPLICATION:** Dampen the entire surface with potable water immediately before the application of SILO SEAL. Apply SILO SEAL with either a mason's hand brush with stiff bristles, a larger push broom of the same stiff bristle type. Apply enough material to fill the voids, placing the material into the substrate using horizontal strokes for coating consistency. It is important to work the first coat thoroughly into the substrate to completely fill and cover all voids, holes, and non-moving cracks. Do not over-brush. For ordinary wall waterproofing conditions, apply SILO SEAL in two coats with 24 hours drying time between the initial coat and the finish coat. Apply the base coat at 2 lbs/ sq. yd (1.1 kg/ m<sup>2</sup>) and the finish coat at 1 lb/sq. yd (0.54kg/m<sup>2</sup>) for a total of 3 lbs/ sq. yd (1.6 kg/ m<sup>2</sup>). One 50 lb. bag of SILO SEAL will cover 150 square feet in two coats resulting in a coating approximately 1/16" thick cured nominal thickness. For severe water pressure, double the pounds per square yard or apply additional coats. If a primer is required, use POOL BOND CONCENTRATE and apply at approximate 100-150 square feet per gallon and allow the primer to dry before applying SILO SEAL.

**CAUTIONS:** Do not apply SILO SEAL to frozen or frost filled surfaces or when the temperature is below 40° F. Do not apply to previously painted surfaces. Do not apply to substrates with active water leaks or moving cracks. Patch all water leaks with suitable hydraulic cement such as Speccrete® Speccoplug, and any cracks with an appropriate epoxy or urethane injection resin. Windy, dry, or hot conditions may require re-wetting of SILO SEAL during cure and the use of polyethylene barriers. Higher application temperatures and low relative humidity can shorten working pot life. SILO SEAL is meant to go on the substrate in thin layers. The use of SILO SEAL HB (High Build) is recommended for thicker applications involving troweling or spraying.

**WARNINGS:** Contains cement and silica, avoid inhalation of dust. Wear gloves, safety goggles, and OSHA approved dust respirator during mixing and placement. Refer to product M.S.D.S. (Material Safety Data Sheet) for additional safety information. Do not take internally. Avoid prolonged contact with skin. **FOR INDUSTRIAL USE ONLY. KEEP OUT OF REACH OF CHILDREN. For medical emergencies only, call Infortrac 800-535-5053.**

**NPCS HMIS SAFETY RATINGS:** HEALTH= 2, FLAMMABILITY = 0, REACTIVITY = 0, PERSONAL PROTECTION = E

**PACKAGING:** 50# (22.70 kg) bags and pails. 50 bags/ pallet, 36 pails/ pallet

**STORAGE:** 40° F (4.4° C) to 90° F (32.2° C) in a dry environment

**SHELF LIFE:** 1 year properly stored

**FREIGHT CLASS:** Item #42130, Sub 0, LTL 50 - Cement base coating material in bags or pails