

Rubberseal™ Roll and Trowel Grade

Flexible, Chemically Resistant, Seamless Rubber Membrane

Description

Rubberseal™ roll or trowel grade is a water based, VOC (Volatile Organic Compounds) free, cold applied seamless rubber membrane specifically designed for protecting and waterproofing concrete in corrosive environments, including applications in sewage and manhole rehabilitation. Offering exceptional chemical resistance, puncture resistance and elongation of >1500%, Rubberseal™ is a high-end emulsion that exhibits tremendous bond strengths. Rubberseal™ installs easily by roll or trowel, quickly developing excellent film strength. Rubberseal™ roll and trowel grade provide a sure seal, the choice for a durable waterproof solution in the most demanding service applications.

Features & Benefits

- ✓ Elongation of >1500% to completely bridge and seal cracks that would allow penetration of chemicals into the concrete structure.
- ✓ Can be applied in as little as 24 hours after removal of concrete forms
- ✓ Excellent chemical resistance, resistant to hydrogen sulfide attack.
- ✓ Tremendous tensile strength and puncture resistance
- ✓ Bonds to most of construction materials.
- ✓ Water based, non-toxic, non-flammable, solvent free and odorless, Rubberseal™ Spray, Roller Grade or Trowel Grade will not contaminate the waste stream and is safe for installation in confined areas.
- ✓ Resistant to aging, and UV exposure
- ✓ Zero VOC's
- ✓ Modified formulas for spray-on applications

LEED Points Contribution

MR Credit 5, Regional Materials 10% and 20%*
EQ Credit 4.2, Low-Emitting Materials: Paint & Coatings

LEED Points

1-2 points
1 point

**Using this Inflow's product may help contribute to LEED certification of projects in the categories shown above. Points are awarded based on contributions of all project materials.*

Where to Use

- Properly prepared sound and stable concrete substrates that have had the forms removed for at least 24 hours, and are surface dry.
- Use in conjunction with the Spray Grade of Rubberseal™ to complete waterproofing applications in areas inaccessible to the spray application.
- Use with Inflow Geotextile to effect details (out of plane joints) or repairs in new or existing applications of Rubberseal™ Roll-on or Trowel. Use to waterproof and coat concrete in sewage and drainage systems to prevent the deterioration caused by hydrogen sulfide attack.
- Use to waterproof concrete wherever a durable, chemical resistant coating is desired.
- Use to protect steel from corrosive elements.
- Use in fresh & saltwater fountains, reflecting pools, wastewater treatment plants, canals, drainage systems, foundations, concrete planters, catch basins and more.

Limitations

- Substrate and ambient temperatures must be between 50F – 95F (10C – 35C)
- Do not apply in rain, or if rain is expected within 6 hours.

- Verify substrate is free of bond-inhibiting or bond-breaking materials such as curing compounds and dust.
- Repair all cracks and seal surface from running water and contaminants prior to application
- Do not apply over unprimed galvanized steel.
- Contact Technical Services for applications where the product will be exposed to chlorinated water.

Suitable Substrate

- ▶ Sound, Stable Concrete
- ▶ Tiles
- ▶ All Metals
- ▶ Exterior Grade plywood, shiplap, tongue and groove.
- ▶ Veneer, plastic laminate, Glue-laminate Wood.
- ▶ Masonry Block free from dirt (Parged where required by local codes)
- ▶ Foamglas® Block
- ▶ Woods and Plastic
- ▶ Bricks
- ▶ Glass

Consult Inflow Solutions LLC Technical Services Department for installation recommendations regarding any substrates and conditions not listed.

Substrate Preparation

- All substrates must be structurally sound, dry, solid and stable. The surface shall be clean of dirt, oil, and grease and free of loose impediments.
- The surface may be damp (not wet). However any running water must be sealed or contained through relief pipes that are commonly used in grouting work.
- Mechanically clean the area to be sealed (use a stiff wire brush or equivalent)
- Complete structural repairs to substrate prior to application of the Rubberseal™ Roll-On or Trowel.
- When applying over existing installations of Rubberseal™ Spray Grade, thoroughly wash the area of application with fresh water, and wipe dry before applying the material.

Mixing

Rubberseal™ Roll Grade must be thoroughly mixed using a paddle mixer at **SLOW (approx. 100 RPM)** speed. **Caution: Mixing at medium or high speed may cause separation of the polymer, creating small chunks of material in the product.** Mix for 5 minutes prior to installation, until material is entirely homogenous (any film will return to solution with mixing).

If material sits more than 3 hours, remix for 5 minutes. Do not add water, solvents, or any other materials to the product.

*****Rubberseal™ Trowel Grade does not require mixing prior to use.*****

Note: Choose all appropriate safety equipment before use. Refer to MSDS for more information.

PRODUCT APPLICATION

Roll Application – Rubberseal™ Roll Grade may be applied using a standard 3/8" (8mm) nap roller with standard cage in small areas. When applying over large areas, ensure that a dual mount caged roller is used. Roll material onto concrete and spread evenly to achieve a thorough depth and film consistency of at least 15 mil WFT (wet film thickness) on the first coat.

Once dry, apply additional coats to realize > 30 mil DFT (dry film thickness) for damp-proofing applications, and >60 mils DFT for waterproofing applications. Damp-proofing applications, and >60 mils DFT for waterproofing applications. Ensure no voids are present in the application.

Trowel Application – Application by trowel is particularly useful when detailing cant strips, corners, approaches, or creating a slope to control drainage when required in a waterproofing application. In these cases where a heavier build of material is required Rubberseal™ Trowel Grade may be applied by trowel at thicknesses up to 1” (25mm) in isolated areas. Wait until the material has dried to a firm state, and then overlap with geotextile, and roll or spray to complete the waterproofing application. When applying as a trowel coat, use a 3/16” - 1/4” (4 - 6mm) V-notched trowel to key the material into the concrete. Immediately trowel the material flat and tight to the concrete to create a membrane > 30 mil DFT (dry film thickness) for damp-proofing applications, and >60 mils DFT for waterproofing applications. Ensure no voids are present in the application.

Curing - The product will cure for flood testing in 24 hours at and will be fully cured in 72 hours at 70 F (21 C). When applied, the product will be a dark brown, and will turn to black once dried. A second coat may be applied as soon as the first has dried from the brown shade, to the black (typically 60 minutes at 70 F (21 C) and depending on the thickness of application).

If the first coat is left to cure more than 7 days, or if it gets dirty prior to the application of the second coat, wash thoroughly with fresh water and dry prior to the application of the second coat. Allow additional cure time in colder temperatures, or in higher humidity.

Repairs - If repairing an existing application of Rubberseal™ coatings, repeat the application process and overlap the damaged area that has been trimmed and cleaned. Apply a patch of Inflow Geotextile R-200 or suitable geotextile for reinforcement over the repair area (see below). Prior to application of coats on top of existing Rubberseal™ coatings, clean by rinsing thoroughly with fresh water.

Reinforcing – When addressing out of plane areas, cracks, joints, or where requiring reinforcement or repair, utilize a geotextile such as Inflow Geotextile R-200. Contact Technical Services to determine the suitable geotextile for the specific jobsite requirement. Saturate the geotextile with Rubberseal™ roll grade and place the material. Wait about 2 hours until dry, and apply topcoat. Alternately apply a 20 mil coat of Rubberseal™ roll grade and immediately place the fabric and roll lightly, to ensure full contact between the geotextile and the initial coat of Rubberseal™ or the concrete. Wait about. 2 hours and apply the final build of Rubberseal™ Roll Grade.

Cleaning Equipment and Tools: Equipment may be cleaned using water or mineral spirits.

Product Performance Properties

<i>Thickness Tested Mils (mm)</i>	80 mils (2 mm)	
<i>Color</i>	Black or White	
<i>VOC's</i>	0 g/l	
<i>Density</i>	1.059 g/cc	ASTM D 792/1505
<i>Resistance to Puncture</i>	2.2 inches(56.4 mm) at avg. 1.2 lb(.55 kg)	ASTM E154-99
<i>Dimensional Stability</i>	0.2%-0.6%	ASTM D1204, 212F(100C)1 hr
<i>Ozone Resistance</i>	No observation of cracking	ASTM D1149-99, 7 days
<i>Water Absorption</i>	0.23 %	ASTM D570-98
<i>Tensile Strength at Break</i>	1.19 lbf(5.28 N) at 73F(23C)	ASTM D412-92
<i>Elongation</i>	> 1500% at 73F(23C) > 450% at 22F(-6C)	ASTM D412-92
<i>Service Temperature</i>	22 F to 195 F (-6 C to 90 C)	ASTM D412-92
<i>Salt Fog Resistance</i>	1000 Hours at 95F (-6C to 90C)	ASTM B-117-90
<i>Hydrostatic Pressure Resistance</i>	>35 ft. (10m) head of water	ASTM D5385-93

Shelf Life & Application Properties

Shelf Life	1 year (store in a cool, dry location, out of direct sunlight and above 40F (7C))
Full Cure Time (@73F (23C)) and 50% humidity	72 hours
Flash Point (Seta Flash)	>212F (100C)

*****PROTECT FROM FREEZING IN SHIPMENT AND STORAGE*****

CSI Division Classifications

Product Code	Grade and Size
07 10 00	Damp proofing and Waterproofing
32269	Rubberseal™ Roll Grade 5 US G (18,9 L)
32268	Rubberseal™ Trowel Grade 5 US G (18,9 L)

Approximate Product Coverage

Substrate Preparation	Recommended Application Tool	Coverage
Clean surface / Power wash	Trowel or 3/8" (8mm Nap Roller on industrial cage)	32 ft ² (3 m ²) – per 1 US GAL (3,79 L) at 40 mils (1 mm) Thickness *Depending on the profile of the substrate.

* Coverages shown are for estimating purposes only. Actual jobsite coverages may vary according to substrate conditions and setting practices.

Statement of Responsibility

Before using, user shall determine the suitability of the product for its intended use and user alone assumes all risks and liability whatsoever in connection therewith.

ANY CLAIM SHALL BE DEEMED WAIVED UNLESS MADE IN WRITING TO US WITHIN FIFTEEN (15) DAYS FROM DATE IT WAS, OR REASONABLY SHOULD HAVE BEEN, DISCOVERED

Warranty

Products are free of Defects.

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