SubSeal® Liquid Waterproofing Membrane
Product Data & Installation Instructions

Important: Proper installation of this system requires use of the appropriate primers and companion products. Read and understand Product Data (PDS) and Material Safety Data (MSDS) for all products prior to installation.

SubSeal® Liquid

SubSeal® Liquid Waterproofing Membrane with Crack Isolation Technology

SubSeal® is a high solids, one part, ready-to-use elastomeric waterproofing membrane for interior and exterior substrates.

SubSeal® also functions as a sealant, stand-alone crack suppressant and moisture barrier for hard surface, resilient and wood flooring.

SubSeal® can be applied with a trowel, brush, roller or airless sprayer. SubSeal® bonds to the substrate with superior adhesion and meets ANSI A118.10 for thin-bed, load bearing waterproofing membranes.

How It Works

SubSeal® cures to form a thin, flexible layer that is an impervious water barrier providing superior waterproofing protection. It bonds directly to stainless steel, metal, PVC, and ABS fixtures. It can also be used for seam and corner applications such as shower pans and exterior decks and balconies.

SubSeal® can be used at floor-to-wall and wall-to-wall joints, at drains and protrusions and at all perimeters. The membrane bonds to the substrate while creating a new surface to accommodate A118.4 or better latex mortars, organic adhesives and solvent-free epoxy setting materials. Recommended under thin-bed and medium-bed installations of ceramic, porcelain, stone, marble, granite and other floors requiring integrated waterproofing.

SubSeal® can reduce tile failure by protecting tile and other hard surface floors from substrate movement up to 1/8”, while waterproofing underlying or adjacent building structures.

Suitable Substrates

SubSeal® is an excellent solution for areas such as, food courts, restaurants, balconies, decks, commercial kitchens, showers, lavatories, spa areas, parking decks, laundry rooms, and other areas needing on grade or above grade waterproof protection.

Concrete: Poured, pre-stressed and pre-cast. Cement backerboard, mud beds, gypsum board, lightweight concrete and patching/leveling compounds.

Wood: Exterior or exposure 1 plywood

Other Substrates: Exterior decks and balconies, existing ceramic and porcelain tile and resilient flooring.

SubSeal® Liquid Waterproofing Membrane

Features and Benefits

- Suitable for interior and exterior use
- Use as a stand alone waterproofing membrane
- Crack suppression up to 1/8”
- Thin, low profile with superior flexibility when cured
- Protects against reflective cracking and delamination
- Assures waterproof integrity of corners and seams
- Eases application in hard to reach areas
- Quick drying allows same day tile installation
- Flood test in less than 24 hours
- Effective barrier against mold
- Easily applied with trowel, roller, brush or sprayer

Cautions

- Do not apply to surfaces that may drop below 40°F within 72 hours of application.
- Typical dry time is about 2 hours depending conditions but may take up to 12 hours to cure.
- Protect SubSeal® application from rain, direct sunlight and inclement weather if not setting flooring immediately.
- SubSeal® shall not be used as finished surface and must be covered with a manufacturer’s approved finished surface.
- Not for use to cover existing expansion, construction, control, cold or saw-cut joints.
- Not to be used as an adhesive.
- Use only solvent-free products in conjunction with SubSeal®.
- Do not use as a primary roofing membrane.
- Do not apply over wet surfaces or surfaces subject to hydrostatic pressure.
- SubSeal® has a 12 month shelf life. Store in original, tightly sealed containers in a cool area. Protect from freezing – do not store below 35°F (2°C).
- Refer to waterproofing applications in the TCNA handbook for additional guidelines.
Surface Preparation

1. Wear rubber gloves and eye protection while using this product.
2. Surface temperature must be above 40°F (4°C) for 24 hours prior to application of SubSeal® and for 48 hours after application.
3. Exterior and wet areas must have proper sloping to drains.
4. Surfaces must be level, structurally sound and meeting 1/360 for ceramic and porcelain tile or 1/720 for stone tile on live or dead loads. Maximum variation of 1/4” in 10’ from the required plane.
5. Grind bumps and level slab depressions with a quality latex underlayment in accordance with manufacturers’ instructions. Surfaces must be free of holes, projections, moisture, dirt, waxes, curing compounds or other bond breakers. On smooth surfaces, scarify floor.
6. Prefill cracks and joints by forcing SubSeal® into the openings. Gaps between plywood sheets must also be prefilled.
7. Do not use under self leveling underlayments.
8. Keep SubSeal® and companion products protected from the elements until the tile is fully installed, grouted and cured.

Installation Instructions

1. Apply SubSeal® evenly with:
   - Trowel: v-notch trowel (3/16” x 1/4”), using flat side, flatten ridges to a uniform thickness.
   - Roller: rough textured (3/4”) synthetic roller.
   - Paint Brush: standard bristle paint brush.
   - Airless Sprayer: with a PSI between 1900-2300, a tip opening between .025 to .029 and a flow rate 1.0 - 1.5 gpm.

Ensure SubSeal® appropriately covers and penetrates corners and end seams. Pre-formed Inside and Outside fabric corners may be used to add additional support to the corners.

2. Average dry time of SubSeal® is about two hours but may vary due to temperature, humidity, interior moisture level, porosity of substrate and application thickness.

3. After the first coat has dried, apply a second coat of SubSeal® at a right angle to the first coat. This is recommended for water containment and/or if voids or pinholes are found. Periodically check the film thickness with a wet-film gauge. When wet, the combined coatings must be at least 60-70 mils thick. The combined dry coating thickness should be a minimum of 47 mil and should not exceed 115 mils wet-film thickness.

4. Install tile or stone flooring with a polymer modified mortar that meets ANSI A118.4 standard.
5. Clean tools and hands with water prior to material drying.

Caution

- Substrate temperature must be at least 40°F. Keep SubSeal® and companion products protected from the elements until tile is fully installed grouted and cured.
- Average product coverage is about 110 Sq. Ft. per gallon but is contingent upon the type of applicator used and porosity of the substrate. For highly absorptive surfaces, additional coats may be required.

Technical Data

SubSeal® Liquid Waterproofing Membrane

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<thead>
<tr>
<th>Property</th>
<th>Test Value</th>
<th>Test Method</th>
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For full test results, please contact NAC Corporate Office.