SUPER - SIM 90

7.31.2024

1. PRODUCT NAME
SUPER SIM-90

2. MANUFACTURER
PROFLEX® Products, Inc.
1603 Grove Ave.
Haines City, FL 33122
Telephone: 863-937-9623
Toll Free: 877-577-6353
Fax: 863-937-9624
Internet: www.proflex.us

3. PRODUCT DESCRIPTION
PROFLEX® SUPER SIM-90 is a 90 mil composite sound control underlayment consisting of a rubberized membrane laminated to a high strength reinforcing fabric on the face and a release sheet on the adhesive side. SS-90 achieved a 50 IIC, 52 STC on a 6" concrete slab with no acoustic ceiling.

Uses

PROFLEX® SUPER SIM-90 is specially designed to be used under approved thinsets, mortars, and adhesives for interior and exterior applications of ceramic tile, stone, and brick, and for interior applications of wood flooring to eliminate the transmission of cracks and sound. Other applications also may be suitable. Contact Technical Support for further information. To eliminate cracks in finished floor work, the product should be applied to the entire substrate prior to the installation of the finished flooring.
Not intended for use around pools

Advantages

- Easy and fast to install with standard tools
- Ready for tiling immediately after installation
- Crack and joint isolation up to ⅜"
- Moisture Vapor Protection up to 5#-1000sqft-24hr CaCl test (see installation instructions)
- Sound Control 50 IIC, 52 STC on a 6" slab with **no acoustic ceiling**

Packaging

100 sq. ft/roll, 20 rolls per pallet

Data Sheets are subject to change without notice. For latest revision, visit www.proflex.us

7.31.2024

Shelf-Life

PROFLEX® SUPER SIM-90: Factory-sealed containers of this product are to be of first quality for one (1) year if stored at temperatures between 40°F and 95°F

Companion Products

- PR-series Primer
- PIB - Perimeter Isolation Barrier

Suitable Substrates

- Concrete (Poured, Prestressed, Precast)
- Cured Mortar beds
- Patching and Self Leveling Compounds
- Lightweight Gypsum Concrete (Gyp-Crete®)
- Exterior-grade plywood
- Cement backer-board
- Other substrates, contact Technical Support

Cautions and Limitations

- Substrate must be primed with PROFLEX® Primer.
- PROFLEX® shall be installed in compliance with the most current edition of the following publications: PROFLEX® Installation Instructions, ANSI (American National Standards Institute) TCNA (Tile Council of North America) handbook for ceramic tile Installation, MIA (Marble Institute of America) Dimension Stone Design Manual, NWFA (National Wood Flooring Association).
- PROFLEX® requires consultation with your selected manufacturer of Thinsets, Mortars, and adhesives to ensure selected product is suitable for use with PROFLEX® elastomeric membranes. **Mortars should be at a minimum ANSI 118.11 specification.**
- Not for use over expansion joints (structural design joints) or structural (out-of-plane) movement cracks. Use of this product does not eliminate the need for movement joints, including perimeter joints within the tiled surface. Perimeter expansion of 1/4" minimum must be maintained for warranty. Movement joints shall be installed within the industry standards in the publications listed in point 2 of the Cautions and Limitations section of this publication.
- Not recommended for use on concrete floors when hydrostatic pressure is present. PROFLEX® recommends testing the substrate prior to installation of product using a Calcium-Chloride (CaCl) test kit, and /or concrete test for relative humidity (Rh)
- Impervious tile (less than 0.5% absorption) may require a 48- hour cure prior to grouting. The mortar will be

Data Sheets are subject to change without notice. For latest revision, visit www.proflex.us

sandwiched between two non absorptive materials and will require additional cure time.

- Cooler weather will also increase set time.
- Protect Primers from freezing.

4. TECHNICAL DATA

Property	Test Method	Result
Total Thickness		90 mil.
Fabric Thickness		30 mil.
Elongation	ASTM D882	350% min.
Tensile MD	ASTM D1682	1270 psi
Pliability	ASTM D146	Pass-25
Adhesion to Plywood	ASTM D1790	8 lb/in.
Adhesion to Primed Concrete	ASTM D903	10 lb/in.
Impact Insulation Class (IIC)	ASTM E989-89 ASTM E492-90	50*
Sound Transmission Class (STC)	ASTM E90-02	52*

* Sound testing performed as to ASTM E90-02, ASTM E989-89, ASTM E492-90. Test conducted on 6" concrete slab with **no** ceiling assembly.

5. INSTALLATION

Applications Instructions

PROFLEX® elastomeric membranes, when properly installed in accordance with the following installation guidelines, will provide years of protection for finish flooring installations. In addition to these instructions, installers shall also refer to the most current edition of the following publications: American National Standards Institute (ANSI) publications. Tile Council of North America (TCNA) Handbook for Ceramic Tile Installations The Marble Institute of America (MIA) Dimension Stone Design Manual, NWFA (National Wood Flooring Association). Manufacturer's instructions of selected setting materials, substrates, sub-floors, or other manufacturers being used in the total, or any part of, an installed flooring system with PROFLEX® Consult your selected manufacturer of these above-mentioned components to ensure selected products are compatible with PROFLEX® elastomeric membranes.

Data Sheets are subject to change without notice. For latest revision, visit www.proflex.us

7.31.2024

Exclusions

PROFLEX® should not be installed without contacting technical support for including, but not limited to, the following conditions: Expansion or structural design joints in concrete slabs, Out of plane, or structural movement cracks. Horizontal cracks that exceed

⅜" (10mm) Areas where moisture vapor or hydrostatic pressure exceeds 5#-1000sqft-24hrs, as tested using a Calcium Chloride (CaCl) test. Substrates installed not in compliance with industry standards. Substrates that have not been approved by PROFLEX® in this document, or by written authorization from a PROFLEX® representative.

Surface Preparation of Selected Substrates

Concrete Substrates shall be in place a minimum of 28 days. Concrete shall be installed in compliance with industry standards, and concrete manufacturer's instructions. The surface shall have a smooth finish and be free from voids, sharp protrusions, and loose aggregate. Substrate temperatures should be between 40oF and 90oF Concrete shall be structurally sound, dry, clean, and free of dirt, oils, grease, paint, concrete sealers or curing compounds, cement laitance, and other similar bond inhibiting materials. Rough or uneven surfaces should be made smooth with a Latex Portland cement underlayment to provide a wood float or better finish. Do not level with asphalt based products. Concrete should be tested for both moisture vapor transmission and hydrostatic pressure, by use of a Calcium-Chloride (CaCl) test. Consult technical support if test readings indicate a reading greater than 5 # per 1000 sqft-24hours. Existing joint openings larger than 3/16" must be prepared and filled with an approved caulking or sealant prior to the application of PROFLEX®. ***Patching,*** *Self Leveling Compounds, Lightweight Gypsum Concrete (Gyp-Crete®) shall cured to the minimum manufactures requirement for moisture sensitive installations. The surface shall have a smooth finish and be free from voids, sharp protrusions, and loose aggregate. Substrate temperatures should be between 40oF and 90oF and shall be structurally sound, dry, clean, and free of dirt, oils, grease, paint, sealers or curing compounds.*

Plywood must be a minimum of two (2) layers 5/8" exterior grade plywood. Plywood shall be securely fastened in accordance with industry standards. Maintain a 1/8" gap between plywood sheets and all surfaces they abut. Joints in the top layer should be offset from the joints on the bottom layer. It is the responsibility of the installer to verify the deflection of the floor structure and sub-floor does not exceed L/360 of the span under combined live or dead loads. The substrate should be tested for both moisture vapor transmission and hydrostatic pressure, by use of a Calcium-Chloride (CaCl) test. Consult technical support if test readings indicate a reading greater than 5 # per 1000 sqft-24hours

Other Substrates

All other substrates and or sub-flooring systems shall be installed in a manner approved by both the product manufacturer and using an appropriate installation method as recommended in the most current edition of the publications mentioned in page 1, of Application Instructions. Concrete Patching and Leveling compounds should be applied only after a consultation with PROFLEX® technical staff. (1-877-577-6353) or at technical@proflex.us. Substrates should be tested for both moisture vapor transmission and hydrostatic pressure, by use of a Calcium-

Data Sheets are subject to change without notice. For latest revision, visit www.proflex.us

Chloride (CaCl) test. Consult technical support if test readings indicate a reading greater than 5 # per 1000 sqft-24hours.

Priming

For floors, interior applications, Ceramic Tile, Porcelain Tile, Marble or Stone, engineered wood, hardwood floors. *Priming*: Stir or shake PROFLEX® Primer thoroughly. Apply primer with a long nap roller, brush, or spray application. Apply evenly at 300-400 sq. ft. per gallon, with 100% surface coverage. The PROFLEX® Primer has dried satisfactorily when the surface is tacky but does not transfer when touched. (Note: The primer does not serve as an adhesive, over-application of the product will increase drying times and may compromise the overall bond ability of PROFLEX® membranes to the substrate)

Membrane Application

If PROFLEX® is to be used as a vapor barrier, apply Rubber Seam Tape (PROFLEX® RST) beneath all seams, after the surface has been primed. The 4" rubber seam tape should be centered under every seam. The RST will need to be pre-positioned and installed prior to the installation of the PROFLEX® membrane. *PROFLEX® Hydra-Seal may be used in lieu of the RST at seams for waterproofing applications. Hydra-Seal and mesh may also be used with the membranes for flashing up the sides of the walls to the top of the membrane.* Place PROFLEX® Membrane with release paper still attached over the area to be treated. Unroll the membrane and cut leaving a 2"-3" excess at one end.

Method 1: Fold membrane lengthwise. Peel ½ of the release paper from the leading edge of the membrane and slowly pull the release paper toward you, exposing the tacky surface of the membrane and carefully attaching the membrane onto the primed surface, avoiding wrinkles and bubbles.

Method 2: Roll up ½ of the membrane, leaving the other half unrolled. Cut the release paper from the portion of the membrane and slowly pull the release paper toward you, exposing the tacky surface of the membrane and carefully attaching the membrane onto the primed surface, avoiding wrinkles and bubbles. Repeat the procedure with the unrolled portion of the membrane.

Additional Instructions on membrane application

For full coverage application, carefully butt edges (overlapping will cause the floor to become uneven, but not affect performance). Immediately after installation press membrane into place working out from the center of the membrane by applying heavy pressure with the flat side of the trowel or use a 75-100# roller. Protect exposed membrane and companion products from dirt, traffic, and harmful elements until flooring is installed, grouted, and cured.

Setting Materials

All mortars and thinsets must meet or exceed ANSI 118.11. Urethane Wood adhesives may be used for wood installations, consult manufacturer for product suitability and approval for use with PROFLEX® elastomeric membranes Consult selected mortar or thinset manufacturer for product suitability and approval for use with

Data Sheets are subject to change without notice. For latest revision, visit www.proflex.us

7.31.2024

PROFLEX® elastomeric membranes Use appropriate notched trowel for application of setting materials in compliance with ANSI, TCNA, MIA, NWFA, and setting materials guidelines and recommendations. Visit our website at www.proflex.us and click to our link listing our approved setting materials that have been approved for use.

Finish Surface Installation

Apply finish flooring in compliance with the publications listed in Applications Instructions, for methods of installation over crack-isolation membranes. Do not install any defective, damaged, or any finish flooring surface not for its intended use. The installation of this product does not eliminate the need for movement joints, including perimeter joints with a tiled surface. Perimeter expansion of ¼" must be maintained at all times. Use PROFLEX® PIB (Perimeter Isolation Barrier) to assist in maintaining the expansion gap. Consult the TCNA handbook for other movement joint applications EJ171. The product is not for use over expansion joints, or structural (out –of –plane) movement cracks.

6. AVAILABILITY

PROFLEX® Products are available nationwide.
To locate PROFLEX® products in your area, please contact:
Phone: 877-577-6353
Website: www.proflex.us

7. WARRANTY

PROFLEX® Products, Inc. offers a limited warranty for this product when used in accordance with printed specifications. A copy of the limited warranty can be obtained by calling technical services at 877-577-6353 or visiting www.proflex.us

8. MAINTENANCE

None required, but installation performance and durability may depend on properly maintaining products supplied by other manufacturers.

9. TECHNICAL SERVICES

Technical assistance
Information is available by calling the Technical Support
Toll Free: 877-577-6353
Fax: 863-937-9624
Technical and safety literature: To acquire technical and safety literature, please visit our website www.proflex.us

10. FILING SYSTEM

Division 9

Data Sheets are subject to change without notice. For latest revision, visit www.proflex.us