BUILDING TRUST

PRODUCT DATA SHEET

SikaTile®-225 Fracture Guard PNS

40 MIL PEEL AND STICK SOUND CONTROL AND CRACK ISOLATION SHEET MEMBRANE

ANSI A118.12 APPROVED

PRODUCT DESCRIPTION

SikaTile®-225 Fracture Guard PNS is a 40 mil (1 mm), thin, flexible, self-bonding, fabric reinforced, membrane that isolates ceramic and natural stone tile from cracks in the substrate. Suitable for both full and partial coverage applications. SikaTile®-225 Fracture Guard PNS is a crack isolation membrane that exceeds the requirements of ANSI A118.12 and protects tile from in plane movement up to 3⁄8” (9.5 mm). Its strong self-adhesive backing and uniquely designed surface provide secure bonding for all types of ceramic, natural stone, and terrazzo tile. After application, ceramic tile or stone can be installed immediately using appropriate SikaTile® polymer-modified cement-based mortar. Additionally, glue-down wood flooring can also be installed with approved urethane adhesives. SikaTile®-225 Fracture Guard PNS also reduces the transmission of impact and airborne sound through floors when installed under ceramic tile, stone, or wood floor coverings.

USES

- Residential (homes, apartments, and condominiums) and commercial (airports, malls, office buildings, restaurants, and galleries) floors, both interior and exterior (with proper drainage)
- Ideal for multi-family or multi-story buildings to reduce noise transmission through floors

RECOMMENDED SUBSTRATES

SikaTile®-225 Fracture Guard PNS can be installed in most interior and exterior residential and commercial installations on floors over the following recommended substrates:

- Cement Backer Board[1]
- Cement Mortar Beds (cured)
- Cement Plaster
- Cement Terrazzo
- Ceramic Tile and Stone
- Concrete
- Concrete Masonry
- Exterior Grade Plywood[2]
- Lightweight Gypsum Concrete[2]
- SikaLevel® Products

[1] Consult cement backer board manufacturer for installation recommendations and to verify acceptability for exterior use.
[2] Interior Use Only.

CHARACTERISTICS / ADVANTAGES

- Crack Isolation to 3/8”
- Reduces Sound Transmission
- Moisture Vapor Barrier up to 5 lbs. per 1,000 sq. ft in 24 hours
- Easy to position, cut-to-size and install
- Rapid installation - Prime, peel, stick and then immediately install tile, stone, or wood
- Interior or exterior
- Mold and mildew resistant

ENVIRONMENTAL INFORMATION

Sika® is committed to environmental responsibility in both products produced and in manufacturing practices. Use of this product can contribute towards LEED® v4.1 certification:

- Up to 2 points towards MR Credit 5, Regional Materials

APPROVALS / STANDARDS

American National Standards Institute (ANSI) — ANSI A108.01, A108.17, A118.12 and A118.13 of the American National Standards for the Installation of Ceramic Tile
ASTM International (ASTM)

- Resilient Floor Covering Institute - (RFCI) Recommended Work Practices for Removal of Resilient Floor Coverings
- Tile Council of North America (TCNA) - TCNA Handbook for Ceramic Tile Installation, TCNA F125, F125A and EJ171 Movement Joint Guidelines.
- ANSI 118.12 – "ANSI specifications for crack isolation membranes for thin-set ceramic tile and dimension stone installation".
  - Meets or exceeds ANSI 118.12

PRODUCT INFORMATION

Chemical Base	Asphalt and polyethylene, polypropylene or styrene-butadiene-styrene resins, fiberglass or polyester mat, plastic film, sand, or granules
Packaging	225 sq. ft. per roll; 20 rolls per pallet
Appearance / Color	White
Shelf Life	3 years from date of production when stored in original, sealed package
Storage Conditions	Store in undamaged, original, sealed package, in dry conditions
Dimensions	3 ft (0.91 m) x 75 ft (22.86 m) roll
Thickness	Total Thickness: 40 mils (1mm) Fabric Thickness: 30 mils (0.76 mm)

SYSTEM INFORMATION

Systems

Property	Test Method	Results
Adhesion to Plywood	ASTM D1790	8 lbs. per inch
Adhesion to Primed Concrete	ASTM D903	10 lbs. per inch
Elongation	ASTM D882	> 350%
Pliability	ASTM D146	Pass - 25
Tensile MD	ASTM D1682	> 1,270 psi

BASIS OF PRODUCT DATA

Results may differ based upon statistical variations depending upon mixing methods and equipment, temperature, application methods, test methods, actual site conditions and curing conditions.

LIMITATIONS

- Protect from traffic, dirt, or dust from other trades until the final installation of the floor covering
- Do not use as a final wear surface.
- Do not use on vertical surfaces, under glass tile installations, as a waterproofing or roof deck membrane, for submerged applications, or on plywood in exterior applications.
- Do not use below 40º F (4º C) or above 90º F (32º C).
- Do not install over substrates containing asbestos.
- Do not apply over self-stick tile, particleboard, or similar types of dimensionally unstable substrates.
- Do not use over cracks or control joints subject to out-of-plane movement or in-plane movement greater than 3/8" (10 mm).
- Do not use on concrete floors when hydrostatic pressure is present.

ENVIRONMENTAL, HEALTH AND SAFETY

For further information and advice regarding

transportation, handling, storage and disposal of chemical products, user should refer to the actual Safety Data Sheets containing physical, environmental, toxicological and other safety related data. User must read the current actual Safety Data Sheets before using any products. In case of an emergency, call CHEMTREC at 1-800-424-9300, International 703-527-3887.

DIRECTIVE 2004/42/CE - LIMITATION OF EMISSIONS OF VOC

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APPLICATION INSTRUCTIONS

SURFACE PREPARATION

All surfaces must be between 40º F (4º C) to 90º F (32º C) and structurally sound (deflection not to exceed 1⁄360 of the span), dry clean and free from oil, grease, wax, paint, old adhesives, sealers and curing compounds. Any contaminates which inhibit proper bond must be removed. Substrate preparation should be completed following ANSI A108 AN-2 “General Requirements for Sub-surfaces”. All substrates should be plumb and true, surface deviation should not exceed 1⁄4" in 10’. Patching, leveling or areas requiring a mortar bed should be prepared using SikaLevel® Underlayments. Movement (Expansion) joints should be provided to comply with TCNA method EJ171. Concrete must be free of any negative hydrostatic pressure and/or excessive moisture.

SUBSTRATES

Concrete Substrates: All concrete substrates should be cured a minimum of 28 days. Smooth steel troweled floors should be roughed up using mechanical chipping, scraping, or shot blasting. Dampen porous or dry concrete prior to installation of tile. Do not leave puddles or standing water. 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 lbs. per 1000 sq. ft. in 24 hours. Existing joint openings larger than 3/16” must be prepared and filled with an approved caulking or sealant prior to the application of primer and elastomeric membrane.

Patching, Self-Leveling Compounds, Lightweight Gypsum Concrete: Should be cured to the minimum manufacture’s requirement for moisture sensitive installations.

Plywood and OSB Substrates: Must be a minimum of two (2) layers 5/8” exterior grade plywood (EGP). 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. Maximum joist spacing should be 16” on center and the deflection of the floor structure and sub-floor must 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 lbs. per 1,000 sq. ft. in 24 hours.

Other Substrates: All other substrates and or sub-flooring systems shall be installed in a manner approved by both the product manufacturer and using appropriate installation method.

Primer: Before applying Sika® Level-01 Primer Plus, thoroughly shake the container in which the material is supplied in to agitate the contents and to ensure all solids are distributed throughout the dispersion and a uniform consistency is achieved. Mix with potable water (approx. 70 °F, 21.1 °C) into a suitable sized and clean mixing container. Mix for 1 minute with a low-speed drill (300 rpm) and a paint mixing paddle. Apply with a stiff bristle, exploded tip push broom (Sika® does not recommend the use of paint rollers or spray equipment). Apply evenly at 400-500 sq. ft. per gallon, with 100% surface coverage. When first applied, Sika® Level-01 Primer Plus appears white; once dry, it is clear. This facilitates quality control in terms of complete coverage and clearly confirms when the underlay can be installed.

APPLICATION

Read all installation instructions before installation. Place SikaTile®-225 Fracture Guard PNS with release paper still attached over the area to be treated. Unroll the membrane and cut leaving a 2”-3” excess at one end. 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. Carefully butt edges (overlapping will cause the floor to become uneven). Immediately after installation press membrane into place working out from the center of the membrane by applying heavy pressure with the flat side of a trowel or a 100 lb. roller. Protect exposed membrane from dirt, traffic, and harmful elements until flooring is installed, grouted, and cured.

Finish Surface Installation

Apply finish flooring in compliance with 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.

SikaTile® 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 reference the most current edition of American National Standards Institute (ANSI), 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) and Manufacturer's instructions of selected setting materials, substrates, sub-floors, or other manufacturers being used in total, or any part of, an installed flooring system with SikaTile®. Consult your selected manufacturer of these above mentioned components to ensure selected products are compatible with SikaTile® elastomeric membranes.

CLEANING OF TOOLS

Clean tools and tile with water before the material dries.

OTHER RESTRICTIONS

See Legal Disclaimer.

LEGAL DISCLAIMER

- **KEEP CONTAINER TIGHTLY CLOSED**
- **KEEP OUT OF REACH OF CHILDREN**
- **NOT FOR INTERNAL CONSUMPTION**
- **FOR INDUSTRIAL USE ONLY**
- **FOR PROFESSIONAL USE ONLY**

Prior to each use of any product of Sika Corporation, its subsidiaries or affiliates ("SIKA"), the user must always read and follow the warnings and instructions on the product's most current product label, Product Data Sheet and Safety Data Sheet which are available at usa.sika.com or by calling SIKA's Technical Service Department at 1-800-933-7452. Nothing contained in any SIKA literature or materials relieves the user of the obligation to read and follow the warnings and instructions for each SIKA product as set forth in the current product label, Product Data Sheet and Safety Data Sheet prior to use of the SIKA product.

SIKA warrants this product for one year from date of installation to be free from manufacturing defects and to meet the technical properties on the current Product Data Sheet if used as directed within the product's shelf life. User determines suitability of product for intended use and assumes all risks. User's and/or buyer's sole remedy shall be limited to the purchase price or replacement of this product exclusive of any labor costs. **NO OTHER WARRANTIES EXPRESS OR IMPLIED SHALL APPLY INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. SIKA SHALL NOT BE LIABLE UNDER ANY LEGAL THEORY FOR SPECIAL OR CONSEQUENTIAL DAMAGES. SIKA SHALL NOT BE RESPONSIBLE FOR THE USE OF THIS PRODUCT IN A MANNER TO INFRINGE ON ANY PATENT OR ANY OTHER INTELLECTUAL PROPERTY RIGHTS HELD BY OTHERS.**

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