

PRODUCT DATA SHEET

SikaTile®-920 Underlay C

PROFESSIONAL-GRADE, POLYMER-MODIFIED PORTLAND CEMENT MORTAR BED UNDERLAYMENT

PRODUCT DESCRIPTION

SikaTile®-920 Underlay C is a pre-blended, Portland cement-based, polymer-modified thick-bed and render mortar that includes a blend of selected aggregates with a high compressive strength. SikaTile®-920 Underlay C can be used to flatten, level or slope over existing substrates before the installation of tile and stone.

USES

- SikaTile®-920 Underlay C as a bonded or non-bonded, conventional thick mortar bed on horizontal surfaces
- Provides a solid foundation substrate prior to the installation of tile and stone
- Floating shower pans
- Can be directly bonded or used as a detached mortar bed over a waterproofing membrane
- Both residential and commercial applications in dry and wet areas
- Can be used with heated flooring systems
- Can be used under all types of flooring

CHARACTERISTICS / ADVANTAGES

SUITABLE SUBSTRATES

SikaTile®-920 Underlay C can be installed in most interior and exterior residential and commercial installations on floors over the following recommended substrates:

Cement Backer Board¹ • Cement Mortar Beds • Cement Plaster • Cement Terrazzo • Ceramic Tile and Stone • Concrete • Concrete Masonry • Exterior Grade Plywood² • Gypsum Wallboard² • Sikalevel • SikaTile® Membranes • Approved SikaLastic Under Tile Waterproofing

¹ Consult cement backer board manufacturer for installation recommendations and to verify acceptability for exterior use.

² Interior Use Only.

CHARACTERISTICS / ADVANTAGES

- Easy to install by screed or trowel
- Excellent bond to concrete and wood with minimal preparation
- Trowels to a smooth, uniform finish
- Cures in 6 to 8 hours
- Crack resistant and fire retardant
- Good thermal and acoustical insulating properties
- Excellent adhesion to most common substrates
- May be installed from 1/8 to 3"
- Easy to mix with the addition of water

ENVIRONMENTAL INFORMATION

Environmental Consideration

Sika® is committed to environmental responsibility in both products produced and in manufacturing practices. Complete the LEED Product Data Request Form at SikaTile.com for detailed information based on project location. Use of this product can contribute toward LEED® v4.1 certification:

- Up to 2 points toward MR Credit 5, Regional Materials
- Up to 1 point towards IEQ Credit 4.1, Low-Emitting Materials – Adhesives & Sealants

APPROVALS / STANDARDS

American National Standards Institute (ANSI) — ANSI A108.01 of the American National Standards for the Installation of Ceramic Tile ASTM International (ASTM)

- ASTM C109 Standard Test Method for Compressive Strength of Hydraulic Cement Mortars (Using 2-in. or [50-mm] Cube Specimens)
- ASTM C627 Standard Test Method for Evaluating Ceramic Floor Tile Installation Systems Using the Robinson-Type Floor Tester
- 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.

Property	Test Method	Results
Weight	--	1.2 lb. per sq.ft. at 1/8"
Indentation	MIK-D-3135d	< 3%
Shear to Concrete	--	> 550 psi
Compressive Strength 28 day	ASTM C109	6,000 psi
VOC content	--	0 g per L

PRODUCT INFORMATION

Chemical Base	Portland cement, selected aggregates, water retention additives, re-dispersible polymer
Packaging	50 lb. (22.68 kg.) bag; 48 bags per pallet
Color	Gray
Shelf Life	18 months from date of production when stored in original, sealed package
Storage Conditions	Store in undamaged, original, sealed package, in dry conditions at 73° F (23° C)

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.

USES

- Do not use below 40°F (4°C) or above 95°F (35°C).
- Do not allow mortar to freeze for the first 72 hours.
- Cool and wet weather may delay set times.
- Do not use over Masonite®, cement asbestos board, metal, glass, plastic, gypsum mortar beds or other unstable substrates. Improperly cured or wet plywood, particle board or strip wood are not suitable substrates.
- Do not use as a finished surface.

ENVIRONMENTAL, HEALTH AND SAFETY

APPLICATION INSTRUCTIONS

INSTALLATION

SikaTile® underlayments, when properly installed in accordance with the following installation guidelines, provide years of protection for finished flooring. 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 materials being used in total, or any part of, an installed floor system with SikaTile®. Consult your selected manufacturer of these previously mentioned components to ensure products are compatible with SikaTile® underlayments.

SURFACE PREPARATION

All surfaces must be between 40°F (4°C) and 90°F (32°C) and structurally sound (deflection not to exceed L/360 for ceramic and porcelain tiles and L/720 for natural stone), dry, clean, and free from oil, grease, wax, paint, old adhesives, sealers, and curing compounds. Any contaminants that 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' or 1/8" in 10' for large format tiles. Patching, leveling or areas requiring a mortar bed should be prepared using Sika® 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.

Mixing:

Dry Pack Mix: In a clean container, add approximately

3.5 quarts (3.3 liters) of clean, cool potable water. Then add the contents of the 50-lb (22.7-kg) SikaTile®-920 Underlay C. Mix thoroughly by hand in a mud box or wheelbarrow or with a slow speed mixer to a semi-dry, thick, trowelable consistency. Mixed material should be able to be formed into a ball without crumbling apart. Do not temper with additional water.

Slurry (Key) Coat: In a clean container, mix a small amount of SikaTile®-920 Underlay C and enough water to achieve a thick soup-like consistency.

Patching: In a clean container, add approximately 5 quarts (4.7 liters) of clean, cool potable water. Then add the contents of the 50-lb. (22.68 kg) SikaTile®-920 Underlay C. Mix thoroughly by hand or with a slow speed mixer to a smooth, thick, trowelable consistency. Do not temper with additional water. SikaTile®-920 Underlay C can be applied from 1/8 to 3" in a single pass application.

Application:

Read and follow manufacturer's instructions before installation.

For concrete floors, first broom a uniform, bond coat of Portland cement paste mixture onto the floor. Immediately apply mixed SikaTile®-920 Underlay C by packing and screeding the material into place. It may be installed from 1/2 to 3". SikaTile®-920 Underlay C can be applied over most clean, dry sub-surfaces. It has an initial set in two hours and final set in five hours based on thickness and ambient conditions. Consult job specifications and industry standards for final thickness application.

For wood floors and counters, first apply roofing felt or building paper followed by minimum 2.5-lb. metal lath overlapping both the paper and the lath. Lath should be fastened every 8 inches. For unbonded mud bed, install the lath between the mortar bed. Apply SikaTile®-920 Underlay C same as for concrete floors, ensuring to press the mortar through lath with pressure to a final thickness of 1/2 to 3".

Refer to ANSI A108.1 industry standard for details on mortar bed installations.

Cleaning

Water is all that is needed to remove any uncured mortar from tiles, tools and equipment.

Coverage

50-lb. bag will cover 50 sq. ft at 1/8" thickness.

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Product Data Sheet

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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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