BUILDING TRUST

PRODUCT DATA SHEET

Sikaflex® TX 1

(formerly MSeal TX 1)

ONE-COMPONENT, TEXTURIZED, MOISTURE-CURING, GUN-GRADE ELASTOMERIC POLYURETHANE SEALANT

PRODUCT DESCRIPTION

Sikaflex® TX 1 is a one-component, texturized, moisture-curing, gun-grade polyurethane sealant. It requires no mixing and typically requires no priming on common building materials. Sikaflex® TX 1 has a textured appearance, which blends well with masonry substrates.

USES

- Horizontal and vertical joints
- Interior and exterior
- Expansion joints
- Panel walls
- Precast units
- Aluminum and wood window frames
- Vinyl siding
- Fascia
- Parapets
- Roofing

Substrates

- Concrete
- Masonry
- Aluminum
- Wood
- Stucco
- Brick
- Metal

CHARACTERISTICS / ADVANTAGES

- The one-component formula requires no mixing, helping to reduce labor costs
- Gun grade
- Does not sag in vertical joints
- Weather resistant, producing long-lasting weathertight seals
- Textured appearance compliments rough surfaces like masonry and stucco
- Accepts joint movement of ±25%, keeping moving joints tightly sealed
- High-quality polyurethane polymer resists age-hardening
- Easy to gun and tool, speeding up application and making neater joints
- Available in 10 standard colors to match common substrates
- Wide temperature application range makes Sikaflex® TX 1 suitable for all climates
- No primer is required for most construction materials, lowering installation costs
- Compatible with non-rigid coatings and
- can be painted
- Lower odor compared to other textured sealants

APPROVALS / STANDARDS

- ASTM C 920, Type S, Grade NS, Class 25, Use NT, M, A, and O*
- Federal Specification TT-S-00230C, Type II, Class A
- USDA-compliant for use in meat and poultry areas

PRODUCT INFORMATION

Chemical Base	Sikaflex® TX 1 is a one-component moisture-curing polyurethane containing fibers for a textured appearance.
Packaging	300 ml cartridges, 30 per carton
Shelf Life	1 year when properly stored
Storage Conditions	Store in unopened containers in a cool, dry area. Storing at elevated temperatures will reduce the shelf life.
Color	Standard colors: White, Stone, Limestone, Black, Special Bronze, Aluminum Gray, Buff, and Natural Stone. Refer to the Sika Color Portfolio.

TECHNICAL INFORMATION

Shore A Hardness	At standard conditions: 25 – 30 After heat aging (max Shore A: 50): 30 – 35	(ASTM C 661)
Tensile Strength	215psi (1.48MPa)	(ASTM D 412)
Elongation at break	735%	(ASTM D 412)
Movement Capability	±25%	(ASTM C 719)
Adhesion in peel	22 pli(min 5 pli)	(ASTM C 794)
Tear Strength	50 pit	(ASTM D 1004)
Service Temperature	-40 to 180 ° F (-40 to 82 ° C)	
Thermal Resistance	**Weight Loss after heat aging** <10%	(ASTM C 792)
	Cracking and Chalking after heat aging None	(ASTM C 792)
Resistance to Weathering	Xenon arc, 3,000 hours: no elastomeric property change	(Atlas 6500)
Color	No visible change	(ASTM C 510)

Joint width

Table 1

Joint Width	Sealant Depth at Midpoint
¼–½in (6–13mm)	¼in (6mm)
½–¾in (13–19mm)	¼–3⁄8in (6–10mm)
¾–1in (19–25mm)	3⁄8–½in (10–13mm)
1–1½in (25–38mm)	½in (13mm)

APPLICATION INFORMATION

Coverage

Linear Feet per Gallon

Joint Width(Inches)		Joint Depth(Inches)	
	¼	3⁄8	½
¼	308		
3⁄8	205		
½	154		
5⁄8	122	82	
¾		68	51
7⁄8		58	44
1		51	38
1½			26
2			19
3			12

Meters per Liter

Joint Width(mm)		Joint Depth(mm)	
	6	10	13
6	24.8		
10	16.5		
13	12.4		
16	9.8	6.6	
19		5.5	4.1
22		4.7	3.5
25		4.1	3
38			2.2
50			1.5
75			.7

Sagging

1/16 inch at 120° F (49° C) (ASTM C 639)

Cure Time

The cure of Sikaflex® TX 1 varies with temperature and humidity. The following times assume 75° F (24° C), 50% relative humidity, and a joint 1/2" width by 1/4" depth (13 by 6 mm).

- Skins: overnight or within 24 hours
- Full cure: approximately 1 week
- Immersion service: 21 days

Tack Free Time

Passes, (maximum 72 hours) (ASTM C 679)

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.

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.

APPLICATION INSTRUCTIONS

NOTES ON INSTALLATION

- Do not allow uncured Sikaflex® TX 1 to come in contact with alcohol-based materials or solvents.
- Do not apply Sikaflex® TX 1 in the vicinity of uncured silicone sealants or uncured Sikaflex® HY 150.
- Fresh Sikaflex® TX 1 should not come in contact with oil-based caulking, silicone sealants, polysulfides, or fillers impregnated with oil, asphalt, or tar.

- Protect unopened containers from heat and direct sunlight.
- In cool or cold weather, store the container at room temperature for at least 24 hours before use.
- Sikaflex® TX 1 should not be used for prolonged immersion in water. Call Sika Technical Service for recommendations.
- Do not apply over freshly treated wood; treated wood must have weathered for at least
- 6 months.
- Substrates such as copper, stainless, and galvanized steel typically require the use of a primer; Sika® Primer-173 or Sika® Primer-176 is acceptable. For Kynar coatings, use only Sika® Primer-173. An adhesion test is recommended for any other questionable substrate.
- UV exposure may cause white Sikaflex® TX 1 to discolor. This does not affect sealant performance; where maintaining a true white appearance is critical, use Ultra sealant
- Sikaflex® TX 1 can be applied below freezing temperatures only if substrates are completely dry, free of moisture, and clean.
- Lower temperatures will extend curing times.
- Pursuant to accepted industry standards and practices, using rigid paints and/or coatings over flexible sealants can result in a loss of adhesion of the applied paint and/or coating, due to the potential movement of the sealant. However, should painting and/or coating be desired, it is required that the applicator of the paint and/or coating conduct on-site testing to determine compatibility and adhesion.
- Proper application is the responsibility of the user. Field visits by Sika personnel are for the purpose of making technical recommendations only and not for supervising or providing quality control on the jobsite.
- Do not use it in swimming pools or other submerged conditions where the sealant will be exposed to strong oxidizers. Avoid submerged conditions where water temperatures will exceed 120˚ F (50˚ C).

SUBSTRATE PREPARATION

1. The product may be used in sealant joints designed in accordance with SWR Institute's Sealants - The Professional's Guide.
2. In optimal conditions, the depth of the sealant should be ½ the width of the joint. The sealant joint depth (measured at the center) should always fall between the maximum depth of ½" and the minimum depth of ¼". Refer to Table 1.
3. In deep joints, the sealant depth must be controlled by a closed-cell backer rod or soft backer rod. Where the joint depth does not permit the use of a backer rod, a bond breaker (polyethylene strip) must be used to prevent three-point bonding.
4. To maintain the recommended sealant depth, install the backer rod by compressing and rolling it into the joint channel without stretching it lengthwise. Closed cell backer rod should be about 1⁄8" (3 mm) larger in diameter than the width of the joint to allow for compression. The soft backer rod should be approximately 25% larger in diameter than the joint width. The sealant does not adhere to it, and no separate bond breaker is required. Do not prime or puncture the backer rod.

Surface Preparation

Substrates must be structurally sound, fully cured, dry, and clean. Substrates should always be free of the following: dirt, loose particles, oil, grease, asphalt, tar, paint, wax, rust, waterproofing or curing and parting compounds, membrane materials, and sealant residue.

Concrete, Stone, And Other Masonry

Clean by grinding, sandblasting, or wire brushing to expose a sound surface free of contamination and laitance.

Wood

New and weathered wood must be clean, dry, and sound. Scrape away loose paint to bare wood. Any coatings on wood must be tested to verify the adhesion of the sealant or to determine an appropriate primer.

Metals

Remove scale, rust, and loose coatings from metal to expose a bright white surface. Any coatings on metal must be tested to verify the adhesion of the sealant or to determine an appropriate primer.

Priming

1. Sikaflex® TX 1 is considered a non-priming sealant, but special circumstances or substrates may require a primer. It is the user's responsibility to check the adhesion of the cured sealant on typical test joints at the project site before and during application. Refer to the product data sheet on Sika® Primer-173 or Sika® Primer-176, and consult Technical Service for additional information.
2. For immersion applications, Sika® Primer-173 must be used.
3. Apply primer full strength with a brush or clean cloth. A light, uniform coating is sufficient for most surfaces. Porous surfaces require more primer; however, do not over-apply.
4. Allow the primer to dry before applying Sikaflex® TX 1. Depending on temperature and humidity, the primer

will be tack-free in 15–120 minutes. Priming and sealing must be done on the same day.

APPLICATION

1. Sikaflex® TX 1 comes ready to use. Apply using a professional-grade caulking gun. Do not open cartridges until preparatory work has been completed.
2. Fill joints from the deepest point to the surface by holding an appropriately sized nozzle against the back of the joint.
3. Dry tooling is recommended. Proper tooling results in the correct bead shape, neat joints, and optimal adhesion.
4. For roof tile applications, apply a bead of Sikaflex® TX 1 sufficient in size to make a bond between two tiles on the upper surface of the downslope tile. Install the upslope tile and press it into the sealant bead to ensure good contact between the sealant and both tiles.

CLEANING OF TOOLS

1. Immediately after use, clean equipment with SikaSwell®-990 or xylene. Use proper precautions when handling solvents.
2. Remove cured sealant by cutting with a sharp-edged tool.
3. Remove thin films by abrading.

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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