

PRODUCT DATA SHEET

Sika Thorocoat[®]-100 TW

(formerly MProtect HB 100)

WATER-BASED, ACRYLIC COPOLYMER HEAVILY TEXTURED COATING

PRODUCT DESCRIPTION

Sika Thorocoat[®]-100 TW is a water-based, heavily textured acrylic copolymer wall coating containing perlite aggregate. It is ideal for exterior applications over concrete substrates and tilt-up walls.

USES

- Exterior
- Vertical and overhead surfaces
- Above grade
- Tilt-up walls

Substrates

- Concrete
- Cast-in-place and precast concrete

CHARACTERISTICS / ADVANTAGES

- A uniform textured perlite finish hides minor surface imperfections
- Cost-effective quality provides an economical coating for tilt wall concrete surfaces
- Excellent color retention resists long-term fading
- Breathable to allow water vapor to escape
- Recoatable making it easy and cost-efficient to maintain
- Available in medium tint base and able to be pigmented to a limited range of custom colors

PRODUCT INFORMATION

Chemical Base	Contains water, acrylic copolymer emulsion, fillers, and other proprietary ingredients	
Packaging	5 gallon (18.9 L) pails	
Shelf Life	18 months when properly stored	
Storage Conditions	Store in unopened, containers protected from freezing in a clean, dry area	
Appearance / Color	Contains medium sized perlite aggregate (approximate maximum aggregate size 1/10" [2 mm]).	
Density	9.5 ±0.5 lbs/gal (1.14 ±0.06 kg/L)	(ASTM D 1475)
Solid content by mass	50.3%	(ASTM D 5201)
Solid content by volume	45%	(ASTM D 5201)

TECHNICAL INFORMATION

Solar Reflectance	Contrast ratio(hiding power) 98%	(ASTM D 2805)
Low Temperature Bend	No Cracking, 1" mandrel	(ASTM D 522)
Thermal Resistance	Heat age stability Passed, 30 days at 140° F (60° C)	(Fed. Std.-141 C #3019.1)
Resistance to wind-driven rain	Meets requirements – no water penetration (modified over concrete panels)	(TT-C-555B)
Permeability to Water Vapor	>8 perms	(ASTM E 96)
Water resistance	Passed after 14 days	(ASTM D 2247)
UV Exposure	Artificial Weathering and UV resistance Passed after 4,000 hours	(ASTM G 53)
Salt spray resistance	No change after 300 hours	(ASTM B 117)

APPLICATION INFORMATION

Coverage	50-70 ft ² /gal/coat(1.2-1.7 m ² /L)
Drying Time	70° F (21° C) and 50% relative humidity. To touch: 2 – 4 hours To full cure: 5 days Lower surface or air temperatures and higher relative humidity will extend the drying time.

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

For Best Performance

- Protect from freezing. If partially frozen, material may be usable if containers are placed in a heated area and allowed to warm gradually. Do not apply heat directly to the containers.

- Do not apply when the temperature (substrate or ambient) is 40° F (4° C) or below or is expected to fall below 40° F (4° C) within 24 hours after application.
- Do not apply if rain is expected within 24 hours of application.
- Do not use below grade. Do not use where the coating is subject to hydrostatic pressure or immersion.
- Do not apply to horizontal, traffic-bearing, or marginally sloped surfaces.
- Do not apply over moving cracks, control joints, expansion joints, or as a crack-bridging system.
- Apply a 4 by 4 ft (1.2 by 1.2 m) test area to verify acceptable color and adhesion before proceeding with any project. The test method for measuring adhesion is ASTM D 3359, Measuring Adhesion by Tape, Method A. On the 0 – 5 scale, a minimum adhesion rating of 4A is required.
- Before applying Sika Thorocoat®-100 TW, test the adhesion of any existing coatings by ASTM D 3359. Adhesion tests should be carried out in multiple areas to ensure accurate results.
- Make certain the most current versions of the product data sheet and SDS are being used; call Customer Service (1-800-433-9517) to verify the most current version.
- 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.

- Keep pails covered when not in use or when spraying to reduce the potential for skinning.

SUBSTRATE PREPARATION

1. The surface should be clean and sound. Concrete substrates should have a minimum 28-day cure and be free of all bond-inhibiting contaminants.
2. High-pressure water blast (or abrasive blast on hard, dense surfaces) surface to medium grit sandpaper texture (reference ICRI guide 310.2 SP 3).
3. Repair any holes, spalled, and damaged concrete with appropriate Sika repair materials. Remove any protruding concrete accessories and smooth out any irregularities.
4. Some stains may require chemical removal. Be sure to neutralize the compounds and rinse with clean water.
5. Remove any blisters or delaminated areas and sand edges to smooth rough areas and provide a transition to old paint areas.
6. Check the adhesion of old paint using ASTM D 3359, measuring adhesion by Tape Method A.
7. Treat cracks greater than 1/32" with Sika Thorocoat®-746 Knife Grade or SikaWall® FL 748. Treat cracks larger than 1/4" as expansion joints and fill with appropriate Sika sealant.

Cracks

1. Locate and properly prepare all cracks.
2. Clean and detail static hairline cracks caused by plastic or drying shrinkage and fill with a brush coat of Sika Thorocoat®-400 and allow to dry.
3. Treat cracks greater than 1/32" with Sika Thorocoat®-746 Knife Grade or SikaWall® FL 748. Treat cracks larger than 1/4" as expansion joints and fill with appropriate Sika sealant.

Primer or Base Coat

1. Prime very slick, dense concrete surfaces with a coat of Sika Thorocoat®-150 Primer at a rate of 175 – 275 ft² /gallon (4.3 – 6.7 m²/L) before the application of Sika Thorocoat®-100 TW.

MIXING

1. Sika Thorocoat®-100 TW is a heavily aggregated material.
2. Mechanically mix contents at a slow speed with a drill and mixing paddle before and occasionally during the application to ensure color uniformity and even aggregate suspension. Slow-speed mixing minimizes air entrapment.
3. In multi-pail applications, mix the contents of each new pail into the partially used pail to ensure consistent transitions from pail to pail.
4. Do not dilute or thin material.

APPLICATION

Spray Application

1. Spraying Sika Thorocoat®-100 TW is the recommended method of application.

2. Sika Thorocoat®-100 TW can be spray applied with a hopper gun, using compressed air or other select air-assisted equipment (rotor/stator or diaphragm) capable of spraying heavy-bodied and heavy-aggregated materials.
3. Maintain proper uniform coverage and application techniques during application to ensure the desired appearance and performance characteristics (see coverage rates).
4. Always work to a natural break and maintain a wet edge during application.
5. For consistency of texture, keep application methods uniform throughout. Inconsistent application techniques will produce texture variations that may appear as color variations to the untrained eye. The objective is to obtain a pinhole-free system that achieves a consistent film build on all treated surfaces.

Roller and Brush Application

1. General applications by brush or roller are not recommended due to the difficulty in achieving consistency in appearance.
2. Sika Thorocoat®-100 TW can be brushed to "cut in" hard-to-reach areas if desired, but care must be taken to evenly distribute the aggregate.
3. Work material uniformly onto the wall, always maintaining a wet edge to be followed by the spray finish.

CLEANING OF TOOLS

Clean all tools and equipment immediately with water. Cured material may be removed by mechanical means.

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

Product Data Sheet

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September 2024, Version 02.01

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replacement of this product exclusive of any labor costs.
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Product Data Sheet

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September 2024, Version 02.01
020303110010000089

SikaThorocoat-100TW-en-US-(09-2024)-2-1.pdf

