

## PRODUCT DATA SHEET

# Sika Thorocoat®-300 Arctic

(formerly MProtect HB 300SB)

WATERBORNE, HIGH-BUILD, MODIFIED ACRYLIC WATERPROOF COATING

### PRODUCT DESCRIPTION

Sika Thorocoat®-300 Arctic is a waterborne, high-build, modified acrylic waterproof coating for above-grade concrete, stucco, block, and brick surfaces.

### USES

- Exterior
- Vertical
- Above-grade
- Protecting and waterproofing

### Substrates

- Concrete
- Masonry
- Stucco
- Existing Coatings

### CHARACTERISTICS / ADVANTAGES

- Green concrete application expedites project completion
- Suitable for cool weather applications
- Adheres to properly prepared smooth and chalky surfaces
- Primerless adhesion saves time and money
- Resists wind-driven rain, helps prevent water penetration into the substrate
- Breathable to allow water vapor to escape
- Available in smooth and fine sand textures for varied finished appearances

### APPROVALS / STANDARDS

- Alberta Transportation - Type 3 sealer

### PRODUCT INFORMATION

<b>Chemical Base</b>	Sika Thorocoat®-300 Arctic is a high-build, waterborne acrylic coating.	
<b>Packaging</b>	5 gallon (18.9 L) pails	
<b>Shelf Life</b>	18 months when properly stored	
<b>Storage Conditions</b>	Store in unopened containers in a clean, dry area. Keep from freezing	
<b>Density</b>	Textured 12.4-12.7 lbs/gal (1.49-1.54 kg/L)	Smooth 10.7-11.0 lbs/gal (1.28-1.32 kg/L)
<b>Solid content by mass</b>	Textured 67.7%	Smooth 51.4%

Solid content by volume	Textured	Smooth
	49.5%	35.5%

Viscosity 122-130 KU

## TECHNICAL INFORMATION

### Dry film thickness

#### Wet and Dry Film Thickness

ft <sup>2</sup> /gal (m <sup>2</sup> /L), per coat	Average dry film, mils (mm)		Average wet film, mils (mm)
	Smooth	Fine	
60 (1.47)	9–10 (0.23–0.25)	13–14 (0.33–0.36)	26–27 (0.66–0.68)
80 (1.96)	7–8 (0.18–0.20)	10–11 (0.25–0.28)	20–21 (0.51–0.53)
100 (2.45)	5–6 (0.13–0.15)	8–9 (0.20–0.23)	16–17 (0.41–0.43)

NOTE: Coverage rates are theoretical on smooth-surfaced, properly primed substrates.

Warranty applications require a minimum of 8 dry-mil (0.25 mm) film thickness. Use the above tables to calculate the required coverage rate and number of coats to achieve 8–10 dry mils (0.25 mm).

Adhesion in peel > 100 psi (0.7 MPa) (ASTM D 4541)

Low Temperature Bend **Room-temperature flexibility**  
Passes ½" (13 mm) mandrel (ASTM D 522)

Resistance to wind-driven rain Passes, 98 mph (TT-C-555B)

Water Vapor Transmission	Wet Cup	Dry Cup	(ASTM E 96 / ASTM D 1653)
	Grains/hr/ft <sup>2</sup>		
	11.85	1.56	
	28.6	3.77	
	0.23	0.04	

Lap Shear Strength CO<sub>2</sub> Diffusion resistance 1,660,000 (μ CO<sub>2</sub>) (PR EN 1062-6)  
at 10 mils DFT 43" (1092 mm)  
equivalent concrete thickness

Microbiological Resistance **Algae Resistance**  
No growth (ASTM D 5589)

Resistance to Weathering Xenon Arc, 4,000 hrs No surface chalking, cracking, or loss of adhesion. Color change: ΔE < 5.0 (ASTM G 155)

Natural Weathering **Dirt Pick-Up**  
95% after 2 months (ASTM D 3719)

## APPLICATION INFORMATION

Coverage	Substrate	ft <sup>2</sup> /gal (m <sup>2</sup> /L) per coat
	Troweled stucco	60–80 (1.5–2.0)
	Blown on stucco	60–80 (1.5–2.0)
	Block*	50–60 (1.2–1.5)
	Brick	60–80 (1.5–2.0)
	Concrete	70–90 (1.7–2.2)

\*Two coats of Sika Thorocoat®-300 Arctic are required, or 1 coat of Sika Thorocoat®-749 Block Filler followed by 1 coat of Sika Thorocoat®-300 Arctic.

## Drying Time

Times assume 70° F (21° C) and 50% relative humidity.

To recoat: minimum of 6 hours.

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.

## USES

- Sika Thorocoat®-300 Arctic is formulated for application to cool and damp surfaces. Surface and ambient temperature must be 35° F (2° C) or warmer with a frost-free surface. All frozen water in or on the surface must be thawed. Application may begin before the ambient temperature reaches 35° F (2° C) under the following conditions: ambient temperature is at least 25° F (-4° C) and rising and the temperature will exceed 35° F (2° C) for 4–6 hours after application is completed.
- Do not apply if rain is expected within 24 hours of application.
- DO NOT apply to exterior insulation and finish systems (EIFS).
- Not for immersion service.
- Not intended for use as a horizontal traffic-bearing coating.
- Apply a 4 by 4 ft (1.2 by 1.2 m) test area to verify acceptable color, texture, 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.
- Color formulas containing organic colorants are susceptible to fading in exterior applications. Refer to Technical Support for guidance.
- Do not thin the material.
- For professional use only; not for sale to or use by the general public.
- Make certain the most current versions of the product data sheet and SDS are being used.
- 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.

## 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

### SUBSTRATE PREPARATION

1. Surfaces should be clean and sound and free of all bond-inhibiting contaminants.
2. Concrete substrates may be coated after 7 days.
3. Repair any holes, spalled and damaged concrete with appropriate Sika repair materials. Allow appropriate cure time prior to coating.
4. Remove any protruding concrete accessories and smooth out any surface irregularities.
5. High-pressure power wash surface (or abrasive blast on hard, dense surfaces) to create a profile of SP 3, per ICRI Guide 310.2.
6. Some stains may require chemical removal. Neutralize any cleaning compounds used and rinse with clean water.
7. Check the adhesion of old coatings according to ASTM D 3359, Measuring Adhesion by Tape Test Method A.
8. Remove any blisters or delaminated areas and sand edges to smooth rough areas and provide a transition to old paint areas.
9. 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.
10. New CMU must have a base coat of Sika Thorocoat®-749 Block Filler.

### MIXING

1. Prior to use, mix Sika Thorocoat®-300 Arctic at a slow speed with a drill and mixing paddle to ensure uniform color and aggregate disbursement and to minimize air entrapment.
2. In multi-pail applications, mix the contents of each new pail into the partially used previous pail to ensure color consistency and smooth transitions from pail to pail.

### APPLICATION

1. Sika Thorocoat®-300 Arctic is meant to be applied as a two-coat system, achieving a total dry-film thickness (DFT) of 8 mils (0.2 mm) minimum.
2. Apply Sika Thorocoat®-300 Arctic by brush, spray, roller, or spray-and-backroll.
3. Maintain proper uniform wet-film thickness (WFT)

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- during application to ensure the performance characteristics desired (see yield rates section).
4. Always work to a natural break and maintain a wet edge during application.
  5. For uniformity of color and texture, application techniques must be consistent throughout the project.

#### **Roller**

1. Use a quality ¾–1¼" nap roller cover.
2. Completely saturate the roller and keep it loaded with the coating to build the required mils. Never dry roll.
3. Cross roll, maintaining a wet edge, to achieve uniform thickness. Backroll in one direction for a consistent appearance.

#### **Spray**

1. Equipment is available for spraying all grades of Sika Thorocoat®-300 Arctic. For fine texture, it is necessary to use a heavy-duty sprayer designed for the application of coatings that contain sand particles. Contact the equipment manufacturer for further recommendations.
2. Backrolling in one direction after spray application is recommended to achieve uniform texture and film thickness.

#### **Brush**

1. Application by brush is recommended only for small inaccessible areas, e.g., on touch-ups.
2. On open-textured surfaces, thoroughly work coating into surface texture or pores to fill completely. Flow the coating onto the surface using straight strokes.
3. Use a stiff-fiber or nylon short-bristled brush.

#### **CLEANING OF TOOLS**

Clean all tools and equipment immediately with warm soapy 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](http://usa.sika.com) or by calling SIKA's Technical Service Department at 1-800-933-7452. Nothing contained in

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