



PRODUCT DATA SHEET

Sika Thoroseal®-582 F

(formerly MasterSeal® 582)

WATERPROOF CEMENT-BASED COATING FOR EXTERIOR BELOW-GRADE CONCRETE AND MASONRY

PRODUCT DESCRIPTION

Sika Thoroseal®-582 F is a waterproof Portland cement-based coating for below-grade exterior concrete and masonry surfaces. Polymer-modified with Sika Thoroseal® Acryl 60, Sika Thoroseal®-582 F creates a cost-effective durable waterproofing barrier.

USES

- Exterior
- Below and above grade
- Foundations
- Exterior above-grade as a waterproof base coat for high-build acrylic coatings
- Concrete
- Masonry

CHARACTERISTICS / ADVANTAGES

- Waterproof to protect building interiors from dampness and moisture damage
- Resistant to both positive and negative hydrostatic pressure
- Breathable to allow interior moisture to escape without damaging the coating
- Cement-based formula helps to bond concrete and masonry substrates

PRODUCT INFORMATION

Chemical Base	Sika Thoroseal®-582 F contains cement, graded sand, and proprietary additives.
Packaging	50 lb (22.7 kg) bags
Shelf Life	1 year when properly stored
Storage Conditions	Transport and store Sika Thoroseal®-582 F in unopened containers and keep them in a clean, dry place protected from rain, dew, and humidity. Do not stack bags more than two pallets high. Store Sika Thoroseal® Acryl 60 in similar conditions. Do not allow Sika Thoroseal® Acryl 60 to freeze.
Appearance / Color	Gray
Density	Specific gravity 1.2

TECHNICAL INFORMATION

Surface hardness	47	(Fed. Spec. TT-P-0035, at 21 days)
Impact Strength	24 lbs = passed	(Fed. Spec. TT-P-0035)
Water Absorption	Boiling water submersion at 3.9%	(ASTM C 67)
	5 hours	
	Water loss after 5 hours	0.42%
Water Vapor Transmission	12 perms	(ASTM E 96)

APPLICATION INFORMATION

Coverage	225 ft ² /50 lb bag (20.9 m ² /22.7 kg bag) as a base coat at 1/16" (1.6 mm) dry-film thickness.
	450 ft ² /50 lb bag (41.8 m ² /22.7 kg bag) as a topcoat at 1/32" (0.8 mm) dry-film thickness.
	Coverage will vary depending on surface texture and porosity.

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

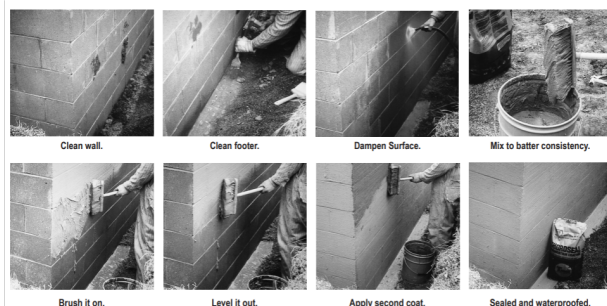
For further information and advice regarding transportation, handling, storage and disposal of chemical products, user should refer to the actual Safety Data Sheets containing physical, environmental, toxicological and other safety related data. User must read the current actual Safety Data Sheets before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

APPLICATION INSTRUCTIONS

NOTES ON INSTALLATION

- Sika Thoroseal®-582 F must be modified with Sika Thoroseal® Acryl 60 to achieve the properties listed in the product data sheet.
- For NSF applications, refer to the Sika Thoroseal®-582 F data sheet
- Do not apply to substrates with active water leaks or moving cracks.
- Maintain or place expansion and control joints as necessary.
- Do not apply in rain or when rain is expected within 24 hours. Do not apply above 90°F (32°C) or below 40°F (4°C) or when temperatures are expected to fall below 40°F (4°C) within 24 hours. For hot and cold temperature applications, store Sika Thoroseal®-582 F, Sika Thoroseal® Acryl 60, and water at 50 to 70°F (10 to 21°C) before use.

- Windy, dry, or hot conditions may require rewetting of Sika Thoroseal®-582 F during cure and the use of polyethylene barriers.
- Before specifying Sika Thoroseal®-582 F for water-retaining structures, conduct tests to determine water quality. Sika Thoroseal®-582 F is not intended for continuous contact with acid or sulfate-containing water. Very soft water will have an adverse effect on Sika Thoroseal®-582 F.
- Service temperatures: immersion, up to 140°F (60°C); cleaning water, up to 200°F (93°C); dry air, up to 220°F (104°C).
- Allow Sika Thoroseal®-582 F to cure 7–10 days before immersion in water.
- On all projects, it is recommended that a sample be prepared on-site and approved prior to the commencement of the work. The site sample should confirm the color, texture, and workmanship required until the job is finished and accepted. Retain the sample until final approval is secured.
- Not intended as a decorative finish coat.
- 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.



SURFACE PREPARATION

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1. Surface preparation is extremely important for proper adhesion. Substrates must be sound and free of dust, dirt, laitance, paints, oils, grease, curing compounds, or any other contaminants. Verify substrate has properly cured. Concrete should obtain 80% of design strength, typically achieved within 3–14 days. If efflorescence is present, mechanically remove it before proceeding. For extreme cases where this is not adequate, contact Technical Service.
2. Patch all holes and non-moving cracks before installation with the appropriate Sika product.
3. Relieve hydrostatic pressure in concrete block with weep holes.
4. Roughen or brush blast extremely smooth surfaces such as precast and cast-in-place concrete to ensure good mechanical adhesion of Sika Thoroseal®-582 F.
5. Completely saturate the substrate with water and allow the surface to dry before the application starts. A damp surface will prevent surface drag on the material, keep the substrate cool, and eliminate flash drying.

MIXING

1. Mix Sika Thoroseal®-582 F with a mixing liquid consisting of a blend of Sika Thoroseal® Acryl 60 diluted with water. The maximum dilution ratio is one part Sika Thoroseal® Acryl 60 to three parts water. Approximately 6 quarts (5.7 L) of mixing liquid is needed per 50 lbs (22.7 kg) of powder. Water demand may vary with ambient temperatures and humidity levels.
2. For best results, mix Sika Thoroseal®-582 F with a slow-speed drill and mixing paddle. Gradually add the powder to the mixing liquid while the drill is running.
3. When properly blended, Sika Thoroseal®-582 F will have the lump-free consistency of smooth, heavy batter.
4. Allow the mixed Sika Thoroseal®-582 F/Sika Thoroseal® Acryl 60 to rest undisturbed for a minimum of 10 minutes to fully wet out all the powder. Then mix the wet mixture and apply. A small amount of mixing liquid can be added to the mixture.

APPLICATION

1. Apply Sika Thoroseal®-582 F with a tampico brush or broom or equivalent stiff fiber brush or textured spray equipment. Spray applications of the first coat require back brushing or brooming to properly fill voids and achieve uniformity and optimum adhesion.
2. It is essential to work the first coat thoroughly into the substrate to completely fill and cover all voids, holes, and nonmoving cracks. Finish with a horizontal stroke for an even coat.
3. Allow to cure for 24 hours, then apply the second coat and finish with a vertical stroke. Above grade, the second coat can be replaced with a Sika high-build architectural coating to achieve better color uniformity.

APPLICATION METHOD / TOOLS

For ordinary water pressure or dampness in block or concrete foundations:

1. Apply two evenly distributed applications of Sika Thoroseal®-582 F, each a minimum of 2 lbs/yd² (1 kg/m²), or a total of 4 lbs/yd² (2 kg/m²).
2. Make sure both applications carry down to and over the footer, forming an 11/2" (38 cm) cove at the junction of walls and footer.

For Severe Water Pressure And Parge Coat

1. Brush on coating using 2 lbs/yd² (1 kg/m²).
2. After 12 hours, apply a trowel coat a minimum of 12 lbs/yd² (5.4 kg/m²) or sufficient material to bring the surface to true and level lines.
3. For trowel applications add 25 lbs (13.6 kg) of clean silica sand to each 50 lbs (22.7 kg) of Sika Thoroseal®-582 F or use SikaTop®-584 SealPlaster mix.

For Exterior Above Grade As A Base Coat

1. On above-grade exterior applications, apply Sika Thoroseal®-582 F at a minimum of 2 lbs/yd² (1 kg/m²), back-brushing the material down vertically to even out the texture.
2. Allow to cure a minimum of 24 hours, then top coat with Sika Thorocoat® high-build coatings.

LEGAL DISCLAIMER

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

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