BUILDING TRUST
CONSTRUIRE LA CONFIANCE

PRODUCT DATA SHEET

Sika Thorolastic®-750

(formerly MProtect EL 750)

Water-based, 100 % acrylic, elastomeric waterproof coating

PRODUCT DESCRIPTION

Sika Thorolastic®-750 is a water-based, high-build, elastomeric, 100 % acrylic waterproof coating for above-grade concrete, masonry, stucco, and EIFS.

WHERE TO USE

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

Substrates

- Concrete
- Masonry
- Cement plaster
- Stucco
- EIFS
- Over existing coatings

CHARACTERISTICS / ADVANTAGES

- Available in a broad range of colours and textures for design versatility
- Resists wind-driven rain, helps prevent water penetration into the substrate
- Breathable to allow water vapour to escape
- High elongation and recovery for durable performance over dynamic cracks.
- Excellent adhesion, bonds securely to substrate for long-term durability
- UV resistance provides excellent color retention for a long-lasting attractive finish
- Excellent hiding power
- Textured formulations help improve the aesthetics of irregular substrates
- Effective carbon dioxide diffusion barrier protects embedded steel from corrosion
- Low VOC content
- Flexibility at very low temperatures makes it suitable for all climates
- Resistant to dirt pickup

PRODUCT INFORMATION

Composition / Manufacturing	Water-based acrylic emulsion, fillers, and other proprietary ingredients	
Packaging	18.9 L (5 US gal.) pails	
Colour	Available in a broad range of colors and textures for design versatility	
Shelf Life	24 months when properly stored in original, unopened packaging	
Storage Conditions	Store in unopened containers in a clean, dry area. Protect from freezing.	
Density	1.34–1.46 kg/L (11.2–12.2 lb/US gal.)	(ASTM D1475)

Viscosity	127-135 KU	(ASTM D562 (Stormer))
Solid content by weight	64.2 %*	(ASTM D5201)
Solid content by volume	50 %* *Value for white	(ASTM D5201)
CSC MasterFormat®	**09 96 53 | ELASTOMERIC COATINGS**	

TECHNICAL INFORMATION

Dry film thickness

Theoretical Film Thicknesses*

Coverage Rate in m²/L (ft²/US gal.)	Wet mil (mm)	Dry mil (mm)
1.2 (50)	32 (0.813)	16 (0.406)
2 (80)	20 (0.508)	10 (0.254)
2.4 (100)	16 (0.406)	8 (0.203)

The actual dry film thickness (d.f.t.) to achieve the stated performance properties is 16 mil (0.406 mm).

*Coverages are estimates for smooth, dense concrete. Coverages will vary on porous or textured surfaces.

Elongation at Break

1.5 MPa (220 psi) (ASTM D412)

Ultimate Elongation

344 % (ASTM D412)

Elongation Recovery

After 10 minutes	96.9 %	(ASTM D412)
After 24 hours	98.4 %	

Crack Bridging Ability

-60 °C (-77 °F)	0.3 mm (12 mil)	(PR EN 1062-7)
0 °C (32 °F)	0.5 mm (19.5 mil)	
23 °C (73 °F)	0.7 mm (27.5 mil)	

Resistance to Weathering

Accelerated Weathering

Passes, 5000 hours (ASTM G23, Type D)

Chalking

Passes, 5000 hours (ASTM D4214)

Natural Weathering

Dirt Pick-up

94.33 % after 6 months exposure (ASTM D3719)

Microbiological Resistance

Mildew Resistance

No growth (ASTM D3273 / 3274)

Algae Resistance

No growth (ASTM D5589)

Permeability to Water Vapour

12 perms (ASTM D1653)

Diffusion resistance to carbon dioxide

R (equivalent air layer thickness), m (ft)	80 (263)	(PR EN 1062-6)
Sc (equivalent concrete thickness), cm (in)	20 (8)	

Adhesion in Peel

Pull-off Strength Adhesion

1.4 MPa (210 psi) (ASTM D4541)

Freeze thaw resistance	Passes, 60 cycles		(ASTM C67)
Salt Spray Resistance	Passes, 300 hours		(ASTM B117)
Low Temperature Flexibility	-34 °C (-30 °F)	3 mm (1⁄8 in) mandrel	(ASTM D522)
Resistance to wind-driven rain	Passes		(TT-C-555B)
Light fastness of colour pigments	Passes, 5000 hours		(ASTM D1729)

APPLICATION INFORMATION

Waiting Time / Overcoating	12 hours minimum before recoating
Drying time	6 hours (dry to touch) **Notes:** Lower surface or air temperatures and higher relative humidity will extend the drying time. Sika Thorolastic®-750 requires ultraviolet (UV) light to cure.

BASIS OF PRODUCT DATA

Product properties are typically averages, obtained under laboratory conditions. Reasonable variations can be expected on-site due to local factors, including environment, preparation, application, curing and test methods.
Product properties tested at 21 °C (70 °F) and 50 % R.H. unless stated otherwise.

LIMITATIONS

For professional use only; not for sale to or use by the general public. Proper application of the product is the responsibility of the user. Make sure that the most recent versions of the product and safety data sheets are used. 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 apply when the substrate or ambient temperature is 4 °C (40 °F) or below or is expected to fall below 4 °C (40 °F) within 24 hours after application.
- Do not apply if rain is expected within 24 hours of application.
- Do not use on interior applications, undersides of balconies, soffits, below-grade applications, or for immersion service.
- Do not use where there may be hydrostatic water transfer from the backside of the substrate.
- Do not apply to improperly sealed substrates that are subject to rising dampness or migrating moisture.
- Not intended for use as a horizontal traffic-bearing coating.
- Elongation and crack-bridging abilities are reduced with textured grades.
- The application of nonelastomeric topcoats could reduce the performance properties of Sika Thorolastic®-750.
- Colour formulas containing organic colourants are susceptible to fading in exterior applications. Refer to Sika Canada Technical Support for guidance.
- Do not thin this product. The addition of thinners (ex.: water, solvent, etc.) will slow cure and reduce ultimate properties of this product. The use of thinners will void any applicable Sika warranty

ENVIRONMENT, HEALTH & SAFETY

User must read the most recent corresponding Safety Data Sheets (SDS) before using any products. The SDS provides information and advice on the safe handling, storage and disposal of chemical products and contains physical, ecological, toxicological and other safety-related data.

APPLICATION INSTRUCTIONS

Before proceeding with any project, apply a 1.2 m x 1.2 m (4 ft x 4 ft) test area to verify acceptable colour, texture, and adhesion. The test method for measuring adhesion is ASTM D3359, Measuring Adhesion by Tape Method A. On the 0–5 scale, a minimum adhesion rating of 4A is required.

SUBSTRATE PREPARATION

Surfaces should be clean and sound and free of all bond-inhibiting contaminants. Concrete substrates should be fully cured. Repair any holes, spalled, and damaged concrete with appropriate Sika® repair materials. Allow appropriate cure time prior to coating. Remove any protruding concrete accessories and smooth out any surface irregularities. High-pressure power wash surface (or abrasive blast on hard, dense surfaces) to create a profile of SP 3, per ICRI Guide 310.2. Some stains may require chemical removal. Neutralize any cleaning compounds used and rinse with clean water. Check the

adhesion of old coatings according to ASTM D3359, Measuring Adhesion by TapeTest Method A. Remove any blisters or delaminated areas sand edges to smooth rough areas and provide a transition to old paint areas. Treat cracks greater than 0.8 mm (1⁄32 in) with Sika Thorocoat®-746 Knife Grade or SikaWall® FL 748. Treat cracks larger than 6 mm (1/4 in) as expansion joints and fill with appropriate Sika® sealant. New CMU must have a base coat of Sika Thorocoat®-749 Block Filler.

MIXING

Prior to use, mix Sika Thorolastic®-750 at a slow speed with a drill fitted with an appropriate mixing paddle to ensure colour unifomity and texture, and to minimize air entrapment. In multi-pail applications, mix the contents of each new pail into the partially used previous pail to ensure colour consistency and smooth transitions from pail to pail.

APPLICATION

Sika Thorolastic®-750 is designed to be applied as a two-coat system, achieving a total dry film thickness (d.f.t.) of 0.4–0.5 mm (16–20 mil)

Apply Sika Thorolastic®-750 by brush, spray, roller, or spray-and-backroll. Maintain proper uniform wet film thickness (w.f.t.) during application to ensure the performance characteristics desired (see yield rates section). Always work to a natural break and maintain a wet edge during application. For uniformity of colour and texture, application techniques must be consistent throughout the project.

Roller

Use a quality 3/4–1-1/4 in nap roller cover. Completely saturate the roller and keep it loaded with the coating to build the required mils. Never dry roll. Cross roll, maintaining a wet edge, to achieve uniform thickness. Backroll in one direction for a consistent appearance.

Spray

Equipment is available for spraying all grades of Sika Thorolastic®-750.
For fine and coarse textures, 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. For smooth and fine grades, back-rolling in one direction after spray application is recommended to achieve uniform texture and film thickness.

Brush

Application by brush is recommended only for small inaccessible areas or for small touch-ups. Use only a nylon brush.

CLEAN UP

Clean all tools and equipment immediately with water. Once hardened, product can only be removed mechanically.

LEGAL NOTES

The information, and in particular, the recommendations relating to the application and end-use of Sika products, are given in good faith based on Sika’s current knowledge and experience of the products when properly stored, handled and applied under normal conditions in accordance with Sika's recommendations. In practice, the differences in materials, substrates and actual site conditions are such that no warranty in respect of merchantability or of fitness for a particular purpose, nor any liability arising out of any legal relationship whatsoever, can be inferred either from this information, or from any recommendations, or from any other advice offered. The information contained herein does not relieve the user of the products from testing them for the intended application and purpose. The proprietary rights of third parties must be observed. All orders are accepted subject to our current terms of sale and delivery. Users must always refer to the most recent issue of the local Product Data Sheet for the product concerned, copies of which will be supplied on request or may be downloaded from our website at: www.sika.ca

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