

Sto Powerflex®

280, 281, 282 & 283

Division 9

280 Sto Powerflex Fine
281 Sto Powerflex Medium
282 Sto Powerflex Swirl
283 Sto Powerflex Freeform

Sto Powerflex is a ready-mixed, elastomeric textured wall coating used as a decorative and protective wall finish over prepared vertical, above grade concrete, masonry and plaster/stucco substrates.

Coverage

Sto Powerflex *Fine*: 148-158 ft² (13.8-14.1 m²) per pail.
Sto Powerflex *Medium*: 111-120 ft² (10.3-11.2 m²) per pail.
Sto Powerflex *Swirl*: 120-130 ft² (11.2-12.1 m²) per pail.
Sto Powerflex *Freeform*: 92-160 ft² (8.5-14.9 m²) per pail.

Coverages may vary depending on application technique and surface conditions.

Packaging

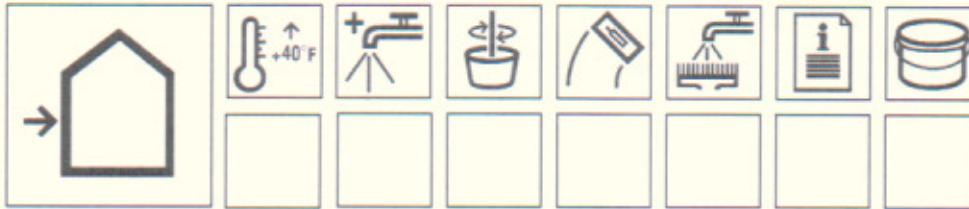
5 gallon pail (19 L).

Shelf Life

One year if properly stored and sealed.

Storage

Protect from extreme heat [90°F (32°C)], freezing, and direct sunlight.



Technical Data

TEST	METHOD	CRITERIA	RESULTS
Elongation (%)	ASTM D-412	28 days	200*
Flexibility	ASTM D-522	1/2" mandrel bend @ -30, 26, 32, 86°F (-34, -3, 0, 30°C)	Pass
Surface Burning	ASTM E-84	< 25 Flame Spread < 450 Smoke Developed	15 5
Water Vapor Permeability (U. S. perms)	ASTM D-1653	28 days	21.7
Water Absorption (oz/ft ² /hr)	DIN 52-617	1 week	0.375
Wind Driven Rain	Fed TT-C-555B	24 hour driving rain	No water penetration
Dirt Pick-up Resistance	Lab Method	56% Red oxide slurry 1 hour	89% reflectance retained
Adhesion (psi)	ASTM C-297 Modified	28 days	> 95 to concrete
Tensile Strength (psi)	ASTM D-412	28 days	60
VOC (g/L)	Calculated		34 (47.5**)

*Neat film results

**Less water and exempt solvents.

Features

Benefits

1 Elastomeric	Bridges hairline cracks
2 Acrylic-based	Excellent adhesion; weather-resistant
3 Ready-mixed	Ready to use; no additives needed
4 Water-based	Safe, non-toxic; cleans up with water

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Surface Preparation

Concrete and masonry surfaces: Surfaces must be free of all bond-inhibiting materials, including dirt, efflorescence, form oil and other foreign matter. Loose or damaged material must be removed by waterblasting, sandblasting or mechanical wire brushing and repaired. Avoid application over irregular surfaces.

Resurface, patch or level surfaces to required tolerance and smoothness with appropriate Sto leveling materials. Refer to ASTM D-4258 and ASTM D-4261 for complete details on methods of preparing cementitious substrates for coatings.

Mixing

Mix with a clean, rust-free electric drill and paddle. A small amount of clean water may be

added to aid workability. Limit addition of water to amount needed to achieve the finish texture.

Application

Apply only to sound, clean, dry, properly prepared, frost-free surfaces.

Trowel

Apply Sto Powerflex with a clean stainless steel trowel to a rough thickness slightly more than the largest aggregate size. Use the trowel to scrape the material down to a uniform thickness no greater than the largest aggregate size. Achieve final texture by floating with the appropriate trowel in a figure eight motion with a plastic float. For Powerflex Freeform, application thickness varies depending on the pattern or thickness desired. Minimum thickness for Freeform should be no less than 1/16". Texturing may be achieved by trowel, special roller or putty knife. Once applied, the working time is up to 20 minutes depending upon material, ambient temperatures and surface conditions.

Spray

Apply Sto Powerflex with a hand-held gravity-feed hopper type sprayer, texture spray pump machine, or other appropriate equipment such as the StoSilo system or Sto's M-8 spray pump. Apply an even coat to ensure full coverage of the surface. (Spray application is not recommended for Sto Powerflex Swirl).

IMPORTANT: ALWAYS check color for proper match. If color does not match, STOP—call your Sto

representative. For best results always prime cementitious substrates. Apply coating in a continuous application, always working from a wet edge or architectural break to eliminate cold joints. Minor shade variations may occur from batch to batch (refer to batch no. on pail). Avoid installing separate batches side-by-side and avoid application in direct sunlight. Avoid installing new finish adjacent to weathered or aged finish. Sto Corp. will not be responsible for shade or color variation from batch to batch, variation caused by application or substrate deficiencies, or fading resulting from natural causes such as weather. See Tech Hotline Nos. 0694-C, 0893-EC and 1202-CF for helpful tips on prevention of color problems. Protect installed product from rain, freezing, and continuous high humidity until completely dry.

Curing/Drying

Sto Powerflex dries within 24 hours under normal conditions (70°F (21°C), 50% RH). Drying time varies with temperature/humidity and surface conditions.

Clean Up

Clean tools and equipment with water immediately after use. Dried material can only be removed mechanically.

Limitations

- Use Sto Powerflex only when surface and ambient temperatures are above 40°F (4°C) during application and drying period.
- Sto Powerflex is not recommended over interior wall surfaces.
- Sto Powerflex should not be used on horizontal, below grade or water immersed surfaces.

Health And Safety

Health Precautions

Product is water-based. As with any chemical construction product, exercise care when handling.

Safety Precautions

Use adequate ventilation. Safety goggles and protective gloves are recommended. Remove contaminated clothing immediately.

First Aid

SKIN CONTACT: Wash thoroughly with soap and water.

EYE CONTACT: Flush immediately with water for 10-15 minutes and contact a physician.

RESPIRATORY PROBLEMS: Remove affected person to fresh air immediately and contact a physician.

HYGIENE: Wash hands immediately after use. Wash clothing before re-use.

Spills

Collect with suitable absorbent material such as cotton rags.

Disposal

Dispose of in accordance with local, state or federal regulations.

Warning

KEEP CONTAINER CLOSED WHEN NOT IN USE. KEEP OUT OF THE REACH OF CHILDREN. NOT FOR INTERNAL CONSUMPTION. FOR INDUSTRIAL USE ONLY. Consult the Material Safety Data Sheet for further health and safety information.

LIMITED WARRANTY

THIS PRODUCT IS SUBJECT TO A WRITTEN LIMITED WARRANTY WHICH CAN BE OBTAINED FREE OF CHARGE FROM: Sto Corp., 3800 Camp Creek Parkway, Building 1400, Suite 120, Atlanta, GA 30331; Tel: 404-346-3666; Fax: 404-346-3119.

ATTENTION

This product is intended for use by qualified professional contractors, not consumers, as a component of a larger construction assembly as specified by a qualified design professional, general contractor or builder. It should be installed in accordance with those specifications and Sto's instructions. Sto Corp. disclaims all, and assumes no, liability for on-site inspections, for its products applied improperly, or by unqualified persons or entities, or as part of an improperly designed or constructed building, for the nonperformance of adjacent building components or assemblies, or for other construction activities beyond Sto's control. Improper use of this product or use as part of an improperly designed or constructed larger assembly or building may result in serious damage to this product, and to the structure of the building or its components. **STO CORP. DISCLAIMS ALL WARRANTIES EXPRESS OR IMPLIED EXCEPT FOR EXPLICIT LIMITED WRITTEN WARRANTIES ISSUED TO AND ACCEPTED BY BUILDING OWNERS IN ACCORDANCE WITH STO'S WARRANTY PROGRAMS WHICH ARE SUBJECT TO CHANGE FROM TIME TO TIME.** For the fullest, most current information on proper application, clean-up, mixing and other specifications and warranties, cautions and disclaimers, please refer to the Sto Corp. website, www.stocorp.com.

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