



Sto Primer/Adhesive-B is a one-component, polymer-modified, cement based, dry powder material used as an adhesive and base coat in StoTherm® Insulated Wall Claddings, including StoTherm Essence NExT™.

Technical Data

REPORT	TEST METHOD	TEST CRITERIA	TEST RESULTS
Surface Burning	ASTM E-84	< 25 Flame Spread < 450 Smoke Developed	0 5
Adhesion	ASTM C-297 Modified	28 days	> 20 - Gypsum Sheathing* > 15 - EPS Board* > 80 - Concrete Block* > 35 - Dens-Glass® Gold* **
Impact Strength	EIMA 101.86	Standard Impact Classification	Pass

* Failure of substrate

**Dens-Glass® Gold is a registered trademark of G-P Gypsum Corp.

Coverage

“Through the wall”: 55-70 ft² (5.1-6.5 m²) per bag (when used for both adhesive and base coat applications).
As an adhesive over sheathing: 90-125 ft² (8.4-11.6 m²) per bag, applied with a 1/2" x 1/2" (13 mm x 13 mm) U-notched trowel having 2" (51 mm) spread between notches.

As an adhesive over masonry: 85-100 ft² (7.9-9.3 m²) per bag, applied with a 5/8" x 5/8" (16 mm x 16 mm) square-notched trowel, having 5/8" (16 mm) spread between notches.

As a base coat: 75-115 ft² (7-10.7 m²) per bag.

As a skim coat: 90-135 ft² (8.4-12.5 m²) per bag.

Coverages may vary depending on application technique and surface conditions.

Packaging

50 lb. bag (23 kg).

Shelf Life

12 months, if properly stored and protected from moisture.

Storage

Store off the ground in a dry area. Protect from extreme heat [90°F (32°C)], moisture and direct sunlight.

Features	Benefits
1 One-component	Ready to use; easily mixed with water on the job site
2 Polymer-modified	Excellent adhesion; increases durability and freeze/thaw resistance
3 Creamy smooth consistency	Trowels on easily; increases productivity
4 Vapor permeable	Allows substrate to breathe naturally; resists blisters caused by trapped vapor
5 Factory blended Portland cement	Assures performance mix ratio
6 Low cement ratio	Less alkalinity, less free lime, less efflorescence
7 Bagged powder product	Less solid waste than pails; freezing protection not required prior to use

101 Sto Primer/Adhesive-B

Surface Preparation

Concrete and masonry surfaces: Surfaces must be clean, dry, and free of frost, damage and 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

Use 5-6.5 quarts (4.7-6.2 L) of water per 50 lb. bag (23 kg). Mix automatically using Sto's Continuous Mixer, or mix manually by adding one 50 lbs. (23 kg) bag of Sto Primer/Adhesive-B to 5-6.5 quarts (4.7-6.2 L) of clean, potable water in a clean mixing pail. Mix with a clean, rust-free electric drill and

Application

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

As an adhesive: Apply to the back of insulation board with the appropriate size notched trowel, or directly onto the substrate using Sto's M-8 Spray Pump, then the appropriate sized notched trowel. Form uniform ribbons of adhesive parallel to the long* dimension of the board. Immediately install the board horizontally with staggered joints and apply firm pressure over the entire board surface.

*NOTE: For Sto Essence NEX^T, form adhesive ribbons parallel to the short dimension of the insulation board.

As a base coat: Apply with spray equipment such as Sto's M-8 Spray Pump or apply manually with a stainless steel trowel to an approximate thickness of 1/8" (3 mm). Work horizontally or vertically in strips of 40" (1 m) and immediately embed Sto Mesh in the wet Sto Primer/Adhesive-B by troweling from the center to the edges of the mesh. Avoid wrinkles in the mesh and smooth the base coat to eliminate trowel marks. Minimum

Limitations

- Use Sto Primer/Adhesive-B only when surface and ambient temperatures are above 40°F (4°C) during application and drying period.
- Prevent rapid loss of moisture from exposure to direct sun, wind and high temperatures.
- Sto Primer/Adhesive-B should not be used on weather exposed horizontal or below grade surfaces, or where immersion in water may occur.
- Sloped surfaces: Refer to Sto details.
- Sto Primer/Adhesive-B should not be used as a finish coating.
- It should not be used over wood surfaces except for wood sheathing surfaces protected by StoGuardTM.

StoTherm[®] Exterior Insulation and Finish Systems (EIFS): Insulation board must be rasped and free of all bond-inhibiting materials.

Sheathing: (Gypsum sheathing in compliance with ASTM C-79 or Glass Mat faced gypsum sheathing in compliance with ASTM C-1177 [such as G-P Dens-Glass[®] Gold]). Surface must be clean, dry and free of frost, damage and of all bond-inhibiting materials. Sheathing must be installed and protected in accordance with manufacturer's requirements. Remove and replace weather damaged sheathing. Avoid application over irregular, out of plane surfaces.

paddle. Allow to set approximately five minutes, adjust mix if necessary by adding up to 12 fl.oz. (.35 L) of water per bag, remix to a uniform consistency. Avoid retempering after mixing of product. Do not exceed maximum amount of water in mix ratio.

recommended dry thickness of the reinforced base coat is 1/16" (1.6 mm) when dry. Reapply additional base coat if necessary to achieve minimum thickness as soon as the first application is dry.

As a skim coat: Apply in one application to a maximum thickness of 1/16" (1.6 mm) to the prepared surface and smooth the surface.

Curing/Drying

Dries within 24 hours under normal drying conditions [70°F (21°C), 50% RH]. Allow additional drying time during cold and/or humid weather before application of primer and finish to hardened Sto Primer/Adhesive-B.

Protect from rain, freezing, and continuous high humidity until completely dry.

Sto recommends priming using the appropriate Sto Primer prior to application of finish.

Clean Up

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

Health And Safety

Health Precautions

Contains Portland cement and crystalline-free silica. Avoid breathing dust.

Safety Precautions

Use adequate ventilation. Use of a NIOSH/MSA approved dust respirator, safety goggles and protective gloves is 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 reuse.

Spills

Collect in an appropriate container. Uncured material may be removed with water.

Disposal

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

Warning

KEEP CONTAINERS 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

THESE PRODUCTS ARE 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.

Refer to Sto Specifications for more complete information on proper use and handling of these products.

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 EXPRESSED 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.

Sto Corp.

3800 Camp Creek Parkway
Building 1400, Suite 120
Atlanta, GA 30331
Tel: 404-346-3666
Toll Free: 1-800-221-2397
Fax: 404-346-3119
www.stocorp.com

5155-101 05/08 VEN 5609



sto[®]