



Technical Data

TEST	TEST METHOD	TEST CRITERIA	TEST RESULTS
Water Vapor Permeance	ASTM E-96 (wet cup)	>5 US perms	13.4 US perms
Aging/Water Resistance	ICC ES AC 212 AATCC 127	Resist 21.6-in (55cm) water for 5 hours before and after aging	Pass
Water Resistance Testing	ASTM D-2247	Absence of deleterious effects after	Pass
Adhesion to Substrates¹	ASTM D-4541 (ASTM C-297, modified)	>15 psi	Exterior Gypsum 16.5 Dens-Glass® Gold 15.8 OSB 62.6 Plywood 91.0
Flame Spread	ASTM E-84	Flame Spread: <25 Smoke Developed: <450	Flame Spread: <25 Smoke Developed: <450
Percent Solids, by weight			73
Percent Solids, by volume			65

Notes:

1. Adhesion testing performed after 7-day coating cure. Exterior Gypsum and Dens-Glass® Gold adhesion breaks were adhesive, between the facing of the sheathing and the sheathing core. OSB and plywood breaks were cohesive within the substrate.

Features	Benefits
1 Vapor Permeable	Moisture does not get trapped in the wall cavity
2 Structural	No air leakage between the sheathing and Sto Guard®; rigid and stable under air pressure loads; does not tear or blow off the wall with wind
3 Seamless	No tears, holes, or mislapped joints that can compromise performance in service
4 Durable	Does not tear or lose its effectiveness with exposure to weather during construction or while in service
5 Liquid Formulation - Water Based	Safe non-toxic, VOC compliant, saves time and money when installing the product, does not require highly skilled labor

Sto EmeraldCoat™ is a ready-mixed, flexible waterproofing material. It is applied directly to wall sheathing and functions as a vertical above grade waterproofing/air barrier when combined with Sto Gold Fill® and Sto Guard® Mesh.

Sto EmeraldCoat™ is specially formulated for use beneath Portland cement stucco.

Sto EmeraldCoat™ is one component of the Sto Guard® Assembly, which is a liquid applied building wrap that offers a superior waterproofing/air barrier. Sto Guard® can be used beneath various claddings including Portland cement stucco, vinyl and cement board siding, and brick.

Coverage

Dens-Glass® Gold: 425-525 ft² (39-49 m²) per pail.
 Exterior Gypsum: 550-650 ft² (51-60 m²) per pail.
 Plywood: 425-525 ft² (39-49 m²) per pail.
 OSB: 300-400 ft² (28-37 m²) per pail.

Packaging

5 gallon (19 L) pail.

Shelf Life

12 months, if properly stored and sealed.

Storage

Keep containers covered to protect from skinning. If material skins, remove skinned material from container.

Surface Preparation

Surfaces must be clean, dry, and free of frost, damage and all bond-inhibiting materials, including dirt, efflorescence, form oil and other foreign matter. Damaged sheathing must be removed and replaced. Avoid application over irregular surfaces. Substrate to be coated

must be continuous without joints, holes, etc. exceeding 1/32" (0.8 mm) in size. Sheathing must be properly installed as required by applicable building codes or sheathing manufacturer

Mixing

Mix with a clean, rust-free electric drill and paddle to a uniform consistency.

PRODUCT MUST NOT BE THINNED OR DILUTED.

Application

Apply only to sound and clean, dry, properly prepared, frost-free surfaces. Sheathing joints, inside and outside corners and rough openings must be treated with Sto Gold Fill® and Sto Guard® Mesh. Pre-spot fasteners with EmeraldCoat™. Spot surface defects such as over-driven fasteners, knots or other voids in sheathing surface with Sto Gold Fill®.

Sto EmeraldCoat™: Over Exterior Gypsum sheathing, Dens-Glass® Gold, Exterior Plywood and Oriented Strand Board (OSB): Apply Sto EmeraldCoat™ to prepared substrate using spray equipment such as Sto's M-8 Spray Pump, or Graco's TEX spray equipment: GTX 2000 or RTX 1500, or with the appropriate size nap roller in a single, uniform coating at a wet thickness of 10 mils. Application over OSB and G-P Dens-Glass® Gold sheathing: use 3/4" (19mm) nap roller. Application over plywood and exterior gypsum sheathing: use a 1/2" (13 mm) nap roller.

OSB sheathing may require touch-up with a second coat of Sto EmeraldCoat™ where wood strands are raised from the surface. Inspect surface after initial application of Sto EmeraldCoat™ and touch-up as needed.

Material Storage

Keep containers covered to protect from skinning. If skin forms, remove the skinned material from container; remaining material is unaffected by skinned material.

Curing and Drying

Sto EmeraldCoat™ is dry to the touch and can be over-coated within 2-4 hours under normal conditions [70°F (21°C), 50% RH]. Final drying varies depending on temperature/humidity and surface conditions. Protect from rain and freezing until completely dry.

Clean Up

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

Limitations

Sto EmeraldCoat™ is a water based product. Apply only when surface and ambient temperatures are 40°F (4°C) and rising and below 100°F (38°C) during application and drying period. Maintain temperatures above 40°F (4°C) during drying period for at least 24 hours. Provide adequate ventilation during application and drying period. Ventilate temporary heaters to the exterior to prevent water vapor from accumulating on or within the wall assembly materials. Not recommended for use when cool, damp conditions exist for prolonged periods. Cool,

damp conditions retard drying and may require extended periods of protection against rain or freezing. Sto EmeraldCoat™ can be left exposed to weather for up to 30 days. Install cladding over Sto EmeraldCoat™ within 30 days of installation. Do not use on damp surfaces, below grade, or on surfaces subject to water immersion. Do not use on fire retardant or pressure treated wood surfaces. Not recommended for spanning holes or sheathing joints in excess of 1/8" (3mm) wide.

NOT RECOMMENDED FOR USE BENEATH EIFS.

Health And Safety

Health Precautions

Products are 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 reuse.

Spills

Collect with suitable absorbent material such as cotton rags. Then dispose of in accordance with applicable local regulations.

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

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.

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

5155-264 08/05 VEN 5609



air barrier
abaa
association of
america

sto