



## Technical Data

### Sto Guard® Assembly with Sto Gold Fill® and Sto Gold Coat®

TEST	METHOD	CRITERIA	RESULTS
<b>Aging/Water Penetration Resistance</b>	AATCC 127 (Water Column)	Resist 21.6 in (55 cm) water for 5 hours before and after aging	No water penetration before and after aging. No water penetration at 332 inches (845 cm) head of water before aging
<b>Structural Loading/Water Penetration Testing</b>	ASTM E-1233/ ASTM E-331	No water at exterior plane of sheathing. (exterior gypsum, Dens-Glass® Gold, plywood, OSB) after 10 cycles @ 80% design load and 75 minutes water spray at 6.24 psf (299 Pa) pressure differential with water spray rate of 5 gal/ft <sup>2</sup> -hr (3.4 L/m <sup>2</sup> -min)	No water penetration
<b>Cyclic Pressure/Water Penetration Testing</b>	ASTM E-283/ ASTM E-331	No water penetration or evidence of elevated moisture levels in plywood sheathing after 10 cycles of conditioning at 299 Pa (6.24 psf) positive and negative pressure followed by 75 minutes water spray at 6.24 psf (299 Pa) pressure differential with water spray rate of 5 gal/ft <sup>2</sup> -hr (3.4 L/m <sup>2</sup> -min)	No water penetration, no elevated moisture levels
<b>Water Resistance Testing: Sto Gold Coat®</b>	ASTM D-2247	Absence of deleterious effects after 14 day exposure	No deleterious effects after 14 day exposure
<b>Resistance to Mold Growth: Sto Gold Coat®</b>	ASTM D-3273	No mold growth after 28 days	No mold growth after 28 day exposure
<b>Freeze/Thaw Resistance</b>	ICBO Method (AC 24)	No visible effects (cracking, checking, delamination, erosion) when viewed at 5x	No visible deleterious effects at 5x magnification
<b>Water Vapor Transmission: Sto Gold Coat®</b>	ASTM E-96  Method B (Water Method)	Measure	5.7 perms at 5-7 DFT [327 ng/(Pa·s·m <sup>2</sup> )]
<b>Air Leakage: Wall Assembly w/Sto Gold Fill® &amp; Sto Gold Coat®</b>	ASTM E-283 (SBCCI PST & ESI Method)	<0.06 cfm/ft <sup>2</sup> @ 1.57 psf (0.00030 m <sup>3</sup> /s·m <sup>2</sup> @ 75 Pa)	0.0044 cfm/ft <sup>2</sup> (0.000022 m <sup>3</sup> /s·m <sup>2</sup> )
<b>Structural Integrity</b>	ASTM E-330	2 inches (51 mm) water pressure (positive and negative) for 1 hour	No loss of structural integrity
<b>Flexibility</b>	ASTM D-522	No cracking or delamination using 1/8" (3 mm) mandrel at 14° F (-10° C) before and after aging	No cracking or delamination before and after aging
<b>Tensile Adhesion</b>	ASTM C-297	>15 psi (103 kPa)	Gypsum (ASTM C 79): >30 psi (206 kPa) Gypsum (ASTM C 1177): > 30 psi (206 kPa) Exposure 1 OSB: > 50 psi (344 kPa) Exterior Plywood: > 90 psi (620 kPa)
<b>Surface Burning</b>	ASTM E-84	Flame Spread: <25 Smoke Developed: <450	Flame Spread: 5 Smoke Developed: 10 NFPA Class A, UBC Class 1 building material
<b>Fire Testing</b>	UBC 26-9	No increase in fire hazard	Pass

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

Sto Gold Coat® is specially formulated for use with Sto Insulated Wall Cladding (EIFS).

Sto Gold Coat® is one component of the Sto Guard® Assembly, which is a liquid applied building wrap that offers a superior water-proofing/air barrier. Sto Guard® can be used beneath various claddings including brick, wood, vinyl, or fiber/cement sidings, and as part of Sto EIFS NExt®.

#### Coverage

Dens-Glass® Gold: 425-525 ft<sup>2</sup> (39-49 m<sup>2</sup>) per pail.  
Exterior Gypsum: 550-650 ft<sup>2</sup> (51-60 m<sup>2</sup>) per pail.  
Plywood: 550-650 ft<sup>2</sup> (51-60 m<sup>2</sup>) per pail.  
OSB: (2 coats): 300-400 ft<sup>2</sup> (28-37 m<sup>2</sup>) per pail.  
CMU: (2 coats): 88-130 ft<sup>2</sup> (7.4-12 m<sup>2</sup>) per pail.

Coverages may vary depending on application technique and surface conditions.

#### Packaging

4.7 gallon (17.8 L)

#### Shelf Life

12 months, if properly stored and sealed.

#### Storage

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

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

\*\*100% failure of substrate

Features	Benefits
<b>1 Waterproof coating for sheathing</b>	Minimizes risk of water damage to sheathing and associated repair or replacement costs
<b>2 Vapor Permeable</b>	Moisture does not get trapped in the wall cavity
<b>3 Structural</b>	No air moisture intrusion between the sheathing and Sto Guard; rigid and stable under air pressure loads; does not tear or blow off the wall with wind
<b>4 Seamless</b>	No tears, holes, or mislapped joints that can compromise performance in service
<b>5 Durable</b>	Does not tear or lose its effectiveness with exposure to weather during construction or while in service
<b>6 Resists UV Degradation</b>	Gives peace of mind if construction delays occur
<b>7 Liquid Formulation - Water Based</b>	Safe non-toxic, VOC compliant, saves time and money when installing the product, does not require highly skilled labor

## 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. Spot fasteners, knots or other voids in sheathing surface with Sto Gold Fill®.

**Over Exterior Gypsum Sheathing, Dens-Glass® Gold, Exterior Plywood:** Apply Sto Gold Coat® to the prepared substrate using spray equipment such as Sto's M-8 Spray Pump, or Graco 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 G-P Dens-Glass® Gold sheathing: use 3/4" (19 mm) nap roller. Application over plywood and exterior gypsum sheathing: use a 1/2" (13 mm) nap roller.

**Over Oriented Strand Board (OSB):** A two-coat application of Sto Gold Coat® is required over OSB. The first coat is applied over the prepared substrate prior to treating sheathing joints, rough openings, and corners. Apply Sto Gold Coat® by spray or roller with a 3/4" (19 mm) nap roller in a single, uniform coating at a wet thickness of 10 mils and allow to dry. For air barrier, sheathing joints, rough openings, and corners must then be covered with Sto Guard® Mesh and Sto Gold Fill®. Substrate to receive the second coat of Sto Gold Coat® must be continuous without joints, holes, etc. exceeding 1/32" (0.8 mm) in size. The second coat of Sto Gold Coat® must be applied over the treated surface in a single, uniform coating to a wet thickness of 10 mils.

### Over Concrete Masonry Wall Construction:

Concrete masonry must be clean, dry and free from damage, frost, and all bond-inhibiting material, including dust, dirt, mold, algae and efflorescence. Repair shrinkage cracks up to 1/8 inch (3 mm) wide by filling with Sto Gold Fill®. Rake the crack with a sharp tool to remove loose or friable material, and blow clean with oil free compressed air. Apply Sto Gold Fill® by spray, trowel or putty knife over the crack and smooth with the knife or

trowel. For cracks wider than 1/8 inch (3 mm) and up to 1/4 inch (25 mm) wide use a paintable acrylic latex caulk to fill the crack and tool flush with the surface. For moving cracks, consult a structural engineer. Do not use Sto Guard® materials to repair moving cracks or cracks wider than 1/8 inch (3 mm). Protect crack repair materials from rain and freezing until dry.

**Spray-applied over CMU:** Spray one coat of Sto Gold Coat® to a uniform wet mil thickness of 30 mils. Back roll the coating. Spray a second coat of Sto Gold Coat® to a uniform wet mil thickness of 30 mils. Back roll the second coat. Re-apply if necessary to achieve a void and pin hole free surface.

**Roller-applied over CMU:** Roll one coat of the Sto Gold Coat® to a uniform wet mil thickness of 30 mils. Allow the first coat to dry before applying a second coat of Sto Gold Coat® to a uniform wet mil thickness of 30 mils. Re-apply if necessary to achieve a void and pin hole free surface.

Protect from rain and freezing until dry.

### 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/Drying

Sto Gold Coat® is dry to touch and can be overcoated within 2-4 hours under normal conditions (70°F [21°C], 50% RH). Wait 24 hours before adhesive attachment of Sto insulation board.

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.

## 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 re-use.

**Spills:** Collect with a suitable absorbent material such as cotton rags.

**Disposal:** Dispose in accordance with local, state and 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.

## Limitations

Apply only when the surface and ambient temperatures are above 40°F (4°C) and below 100°F (38°C) during application and drying period. Not recommended for use when cool, damp conditions exist for prolonged periods. Cool, damp conditions retard drying and may require extended periods of protection.

Do not use on damp surfaces, below grade, or on surfaces subject to water immersion. Do not use over pressure treated or fire retardant treated wood surfaces. Not recommended for spanning sheathing joints or holes in excess of 1/8" (3 mm) wide.

For complete information refer to Sto Guard® Air Barrier and Moisture Control Handbook.

### 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.

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