

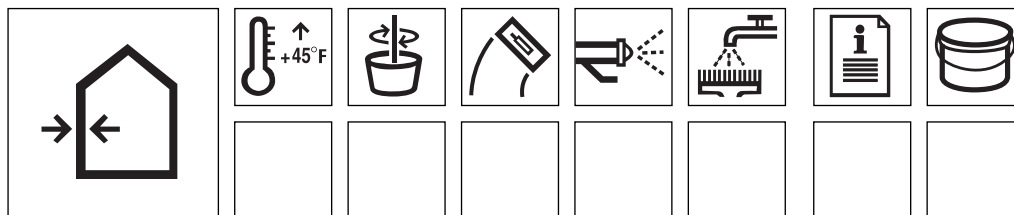
Sto Gold Fill®

StoGuard™ Mesh 4.25"

StoGuard™ Mesh 9.5"

Division 7 & 9

80266 Sto Gold Fill
80267 StoGuard Mesh 4.25"
80268 StoGuard Mesh 9.5"
ICC Code Recognition



Technical Data

StoGuard™ Mesh		(ASTM D-5035)		TENSILE STRENGTH POST ALKALINE		STRENGTH
DESCRIPTION	WT/SQ YD.	WIDTH OF ROLL	LENGTH OF ROLL	WARP	WEFT	SOAK (EIMA 105.01)
StoGuard Mesh – 4.25"	5 oz.	4.25" (11 cm)	150' (45.7 m)	150	165	> 120
StoGuard Mesh – 9.5"	5 oz.	9.5" (24 cm)	150' (45.7 m)	150	165	> 120

StoGuard™ Assembly with Sto Gold Fill® and Sto Gold Coat®

TEST	METHOD	CRITERIA	RESULTS
Aging/Water Penetration Resistance	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
Structural Loading/Water Penetration Testing	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 6.24psf (299 Pa) pressure differential with water spray rate of 5 gal/ft²-hr (3.4 L/m²-min)	No water penetration
Cyclic Pressure/Water Penetration Testing	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/ft²-hr (3.4 L/m²-min)	No water penetration, no elevated moisture levels
Freeze/Thaw Resistance	ICBO Method (AC 24)	No visible effects (cracking, checking, delamination, erosion) when viewed at 5x	No visible deleterious effects at 5x magnification
Water Vapor Transmission: Sto Gold Fill	ASTM E-96 Method B (Water Method)	Measure	Sto Gold Fill: 17.3 perms [994 ng/(Pa·s·m²)]
Air Leakage: Wall Assembly with Sto Gold Fill	ASTM E-283 (SBCCI PST & ESI Method)	< 0.06 cfm/ft² @ 1.57 psf (0.00030 m³/s·m² @ 75 Pa)	0.0044 cfm/ft² (0.00022 m³/s·m²)
Air Leakage: Sto Gold Fill	ASTM E-283	< 0.003 cfm/ft² @ 1.57psf (< 0.02 L/s·m² @ 75 Pa)	< 0.0002 cfm/ft² (< 0.0014 L/s·m²)
Air Leakage: Sto Gold Fill	ASTM E-2178	< 0.003 cfm/ft² @ 1.57psf (< 0.02 L/s·m² @ 75 Pa)	< 0.0002 cfm/ft² (< 0.0014 L/s·m²)
Structural Integrity	ASTM E-330	2 inches (51 mm) water pressure (positive and negative) for 1 hour	No loss of structural integrity
Dry Tensile Strength: Sto Gold Fill	ASTM D-882	20 lbs/in (3503 N/m) minimum before and after aging	Sto Gold Fill: 159 pli (27.8 kN/m) before aging; 213 pli (37.3 kN/m) after aging
Flexibility	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
Tensile Adhesion	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)
Surface Burning	ASTM E-84	Flame Spread: < 25 Smoke Developed: < 450	Flame Spread: 5 Smoke Developed: 10 NFPA Class A, UBC Class 1 building material
Fire Testing	UBC 26-9	No increase in fire hazard	Pass
VOC (g/L)	This product complies with US EPA (40 CFR 59) and South Coast AQMD (Rule 1113) VOC emission standards for architectural coatings. VOC less than 100 g/L.		

Sto Gold Fill is a ready-mixed, flexible, joint treatment and air barrier material for vertical above grade walls. It is applied to rough openings, corners, and sheathing joints in walls with StoGuard Mesh.

StoGuard Mesh is a glass fiber self-adhesive mesh for use with Sto Gold Fill.

For waterproofing, apply Sto Gold Coat or Sto EmeraldCoat® to the sheathing and Sto Gold Fill.

Sto Gold Fill and StoGuard Mesh are part of the StoGuard Assembly which is a liquid applied building wrap that offers a superior waterproofing/air barrier. StoGuard can be used beneath various claddings including brick, wood, vinyl, or fiber/cement sidings, and as part of StoTherm® NEXt.

Coverage

StoGuard Mesh
4.25" (11 cm) x 150 ft² (45.7 m).
StoGuard Mesh
9.5" (24 cm) x 150 ft² (45.7 m).

Sto Gold Fill: One pail will treat approximately 175-250 linear feet (53-76 m) of sheathing joints and rough openings. Coverage may vary depending on application technique, sheathing type, the size of sheathing joints and the number and condition of rough openings.

Packaging

Sto Gold Fill: 5 gallon (19 L) pail.

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.

Sto Gold Fill[®], StoGuard[™] Mesh 4.25" & 9.5"

Features	Benefits
1 Air Barrier	Reduces risk of condensation caused by air leaks through the wall construction; reduces energy costs by reducing heating/cooling loads
2 Vapor Permeable	Moisture does not get trapped in the wall cavity
3 Structural	No air leakage between the sheathing and StoGuard; rigid and stable under air pressure loads; does not tear or blow off the wall with wind
4 Seamless	No tears, holes, or mislapped joints that can compromise performance in service
5 Durable	Does not tear or lose its effectiveness with exposure to weather during construction or while in service
6 Resists UV Degradation	Gives peace of mind if construction delays occur
7 Water Based	Safe non-toxic, VOC compliant

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.

Installation over Sheathed Wall Construction:

Place minimum 4 inch (101 mm) wide mesh at sheathing joints and minimum 9 inch (152 mm) wide mesh at rough openings and inside and outside corners (refer to Sto detail 20.23a). Immediately apply Sto Gold Fill by spray or trowel over the mesh and trowel smooth. Protect from rain and freezing until dry. Spot fasteners, knots, or other voids in sheathing surface with Sto Gold Fill.

For waterproofing, apply Sto Gold Coat or Sto EmeraldCoat to sheathing and Sto Gold Fill. See Sto Gold Coat or Sto EmeraldCoat product bulletins for more information.

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 Fill is dry to touch and can be overcoated within 4 hours under normal [70°F (21°C), 50% RH] conditions.

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 Gold Fill[®]:

- 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.
- Fire-retardant treated or pressure treated plywood substrates must be dry and free of all bond-inhibiting materials.

- Not recommended for spanning sheathing joints or holes in excess of 1/8" (3 mm) wide.

StoGuard[™] Mesh:

- High humidity or adverse weather may result in loss of adhesion prior to application of Sto Gold Fill. Immediately cover with Sto Gold Fill to prevent loss of adhesion.
- Avoid contact with dirt and debris which will cling to self-adhesive side of mesh.
- Not for use on concrete or masonry surfaces. Use Sto Detail Mesh embedded in Sto Gold Fill for these surfaces.

For complete information refer to StoGuard Air Barrier and Moisture Control Handbook.

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 reuse.

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.

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.

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