StoGuard® Transition Membrane

Technical Data

<table>
<thead>
<tr>
<th>Width of Roll</th>
<th>Length of Roll</th>
<th>Thickness</th>
</tr>
</thead>
<tbody>
<tr>
<td>120 mm (4.75”)</td>
<td>50 m (164’)</td>
<td>25 mils</td>
</tr>
<tr>
<td>152 mm (6”)</td>
<td>50 m (164’)</td>
<td>25 mils</td>
</tr>
<tr>
<td>228 mm (9”)</td>
<td>50 m (164’)</td>
<td>25 mils</td>
</tr>
<tr>
<td>304 mm (12”)</td>
<td>50 m (164’)</td>
<td>25 mils</td>
</tr>
<tr>
<td>457 mm (18”)</td>
<td>50 m (164’)</td>
<td>25 mils</td>
</tr>
</tbody>
</table>

TEST

| Elongation | ASTM D 412 | Measure | 260% |
| Tensile Strength | ASTM D 412 | Measure | 41 MPa (60 psi) |
| Tear and Adhesion | ASTM C 1523 | No tearing or loss of adhesion after conditioning | Pass after dry, wet, frozen, and heat aged conditioning |
| Water Vapor Permeance | ASTM E 96 | ≤ 0.02 L/m²·s @ 75 Pa (≤ 0.004 cfm/ft² @ 1.57 psf) | 1.48 perms (85ng/Pa•s•m²) |
| Air Leakage | ASTM E 2178 | Pass on plywood, OSB, concrete, and CMU substrates. Exceeds strength of glass mat facing attachment when adhered to glass mat gypsum sheathing |
| Water Column | AATCC 127 (modified) | No leakage for 5 hours minimum | Passed |
| Adhesion | ASTM D 4541 | 414 kPA (≥ 60 psi) | No loss of continuity of membrane or loss of bond at joint |
| Cyclic Elongation | Lab Method | 500 cycles at 0% to 50% elongation and return | No loss of continuity of membrane or loss of bond at joint |

1 Elongation and Tensile strength measured in transverse direction (perpendicular to length of roll).
2 Based on extrapolation of similar E 2178 test data.

Features

1 Waterproof
Virtually impermeable to the passage of liquid water.

2 Flexible
Accommodates wide range of conditions and building tolerances where peel and stick membranes may not work.

3 Fully adhered membrane
Does not peel or suffer loss of adhesion along edges.

4 Fast and easy to install
No priming required. No special tools or training required for installers.

5 Durable
Does not tear or lose its effectiveness while in service.

6 Resists UV Degradation
Gives peace of mind if construction delays occur; up to 6 months exposure (when protected with Sto Gold Coat, Sto EmeraldCoat or Sto AirSeal), 3 months if protected with Sto VaporSeal or Sto ExtraSeal.

7 No adhesive leaching or streaking
Will not stain surfaces or lose adhesion while in service.

8 Compatible with all StoGuard fluid-applied and cementitious membranes
Can be used with vapor permeable or vapor impermeable membranes, fluid-applied or cementitious trowel-applied.

9 Versatile
Wide range of applications for both static and moving joint conditions – one product solves multiple job site conditions.

10 Sustainability
Asphalt emulsion free. Used with Low VOC StoGuard coatings; EPA and SCAQMD compliant.

StoGuard Transition Membrane is a flexible air barrier membrane for use on vertical above grade wall construction over properly prepared concrete, concrete masonry (CMU), glass mat gypsum sheathing and Exterior or Exposure I wood-based sheathing. It is used with StoGuard waterproof air barrier membranes including Sto Gold Coat®, Sto EmeraldCoat®, Sto AirSeal™, Sto VaporSeal™ and Sto ExtraSeal™. It is used at detail areas to provide flexible connections to achieve continuity of the air barrier assembly. It also functions as a secondary weather seal at joints in construction.

Use for continuity at transitions:
- Sheathing to foundation
- Dissimilar materials (e.g CMU to frame wall)
- Wall to balcony floor slab or ceiling
- Flashing shingle lap transitions
- Floor line deflection joints
- Masonry control joints
- Through-wall joints in masonry or frame construction

Packaging
50 m (164 lineal feet) per roll; 1 roll per box.

Shelf Life
2 years if properly stored.

Storage
Store in a cool, dry area. Protect from direct sunlight.

Compliance
IECC -2012 Compliant
ASHRAE 90.1 Compliant
ASHRAE 189.1 Compliant
StoGuard® Transition Membrane

Surface Preparation
Surfaces must be structurally sound, clean, dry, and free of frost, damage, and all bond-inhibiting materials, including dirt, dust, mildew, algae, laitance, efflorescence, form oil, curing compounds, coatings, chalking and other foreign matter. Sheathing must be code compliant Exterior Grade or Exposure 1 wood-based sheathing or glass mat gypsum sheathing in compliance with ASTM C 1177. Sheathing must be installed in compliance with the building code and manufacturer’s recommendations. CMU surfaces should have flush joints. Concrete and CMU surfaces must be without projecting ridges, form ties or other surface irregularities. See surface preparation instructions for StoGuard waterproof air barrier coatings for additional guidance.

Mixing
No mixing required.

Application
StoGuard Transition Membrane is installed with any of the StoGuard fluid-applied air barrier products: Sto Gold Coat, Sto EmeraldCoat, Sto AirSeal or Sto VaporSeal. It also may be installed using Sto ExtraSeal cementitious, trowel-applied air barrier material. Provide adequate ventilation during application and drying of these products.

Surface and ambient temperature must be minimum 4° C (40° F) and rising during application and drying period and below 38° C (100° F). Apply only to sound and clean, dry, properly prepared, frost-free surfaces.

Cut lengths of StoGuard Transition Membrane with scissors or a sharp utility knife. Use the longest lengths possible to minimize overlaps. Use caution when cutting membrane already on the wall to ensure the cuts do not inadvertently damage in-place membrane.

For floor line deflection joints, static joints and transitions – sheathing to foundation, dissimilar materials (e.g. CMU to frame wall), flashing shingle-lap transitions, wall to balcony floor slab or ceiling:
Apply the StoGuard waterproof membrane coating liberally to properly prepared surfaces with brush, roller, or spray. (Apply Sto ExtraSeal by trowel.) Apply only as much material as can be covered with the transition membrane while the coating is still wet. Install the membrane by placing pre-cut lengths into the wet StoGuard coating with the length centered over the transition area. At changes in plane crease the membrane and similarly place the membrane in the wet coating. Top-coat the membrane with additional coating and apply pressure with brush or roller to fully embed the membrane in the coating and achieve a smooth and wrinkle-free surface without gaps or voids. Apply liberally along all top horizontal edges on walls and along all edges on balcony floor slabs. Overlap minimum 50 mm (2 inches) at ends and adhere lap seams together with coating. Shingle-lap vertical seams and vertical to horizontal intersections with minimum 50 mm (2 inch) overlap.

For movement joints up to 50% movement – masonry control joints, through-wall joints in masonry or frame construction:
Insert backer rod sized to friction fit in the joint (diameter 25% greater than joint width). Recess the backer rod 13 mm (½”). Apply StoGuard coating liberally to properly prepared surfaces with brush, roller or spray along each side of the joint. Immediately place the membrane by looping it into the joint against the backer rod surface to provide slack. Embed the membrane in wet coating along the sides of the joint by top-coating with additional coating material and applying pressure with a brush or roller.

After the membrane installation is complete and the StoGuard waterproof coating is dry, apply a liberal coat of the waterproof coating to all top horizontal edges on walls to ensure waterproofing integrity. Similarly apply coating at all edges on balcony floor slabs. Inspect the installed membrane for fish mouths, wrinkles, gaps holes or other deficiencies. Correct fish mouths or wrinkles by cutting, then embedding the area with additional coating applied under and over the membrane. Seal gaps, holes and complex geometries at three-dimensional corners with StoGuard RapidSeal.

Refer to StoGuard Transition Membrane Installation Guide at www.stocorp.com for more detailed instructions and illustrations.

Curing/Drying
StoGuard coatings generally dry in 2-6 hours under normal drying conditions [21°C (70°F), 50% RH] and cure within 24 hours. Protect from rain and freezing until completely dry. Cold weather or damp conditions will prolong drying period. Hot or dry weather will accelerate drying.

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

- Use only when surface and ambient temperatures are and will remain above 4°C (40°F) and below 38°C (100°F) during application and drying period.
- Maximum exposure 6 months when protected with StoGuard fluid-applied air barrier membrane coatings – Sto Gold Coat, Sto EmeraldCoat and Sto AirSeal, 3 months with Sto VaporSeal and Sto ExtraSeal. Maximum exposure period is 30 days if left unprotected.
- Not recommended at service temperature exposures lower than -30°C (-20°F) or higher than 90°C (194°F).
- Not recommended for moving joints in excess of 25 mm (1 inch) width or +50% movement.
- Do not use on surfaces with standing water, below grade, or on surfaces subject to water immersion.
- Not recommended as a primary outer weather seal or where exposed permanently to weather.

**Health And Safety**

**Health Precautions**
As with any chemical construction product, exercise care when handling.

**Safety Precautions**
Use adequate ventilation. Safety goggles and protective gloves are recommended.

**First Aid**
**SKIN CONTACT:** Wash thoroughly with soap and water.
**EYE CONTACT:** Flush affected areas with water and contact a physician.
**RESPIRATORY PROBLEMS:** If respiratory irritation occurs, go to fresh air. Flood work area with fresh air and if irritation continues, seek medical attention.
**HYGIENE:** Wash hands immediately after use. Wash clothing before re-use.

**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 Safety Data Sheet (SDS) on www.stocorp.com 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. Refer to Sto Specifications for more complete information on proper use and handling of this product.

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**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 non-performance 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 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 Canada Ltd. website, www.stocanada.com.