StoGuard® RapidFill™

81295 StoGuard® RapidFill™

**Technical Data**

<table>
<thead>
<tr>
<th>REPORT</th>
<th>TEST METHOD</th>
<th>TEST CRITERIA</th>
<th>TEST RESULTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water Penetration</td>
<td>AATCC-127 (water column)</td>
<td>Resist 21.6” (55 cm) water for 5 hours</td>
<td>No water penetration</td>
</tr>
<tr>
<td>Adhesion (psi)</td>
<td>ASTM D 4541</td>
<td>&gt; 50 psi (345 kPa) or sheathing failure</td>
<td>&gt; 40 psi (276 kPa) to gypsum sheathing (core failure of sheathing) &gt; 80 psi (552 kPa) to OSB</td>
</tr>
<tr>
<td>Elongation at Break</td>
<td>ASTM D 412</td>
<td>N/A</td>
<td>275%</td>
</tr>
<tr>
<td>Tensile Strength</td>
<td>ASTM D 412</td>
<td>N/A</td>
<td>225 psi (1151 kPa)</td>
</tr>
<tr>
<td>Water Vapor Permeability</td>
<td>ASTM E 96 wet cup method</td>
<td>N/A</td>
<td>14 perms at 35 DFT (805 ng/Pa·s·m²)</td>
</tr>
<tr>
<td>Surface Burning</td>
<td>ASTM E 84</td>
<td>Flame Spread: &lt; 25 Smoke Developed: &lt; 450</td>
<td>Flame Spread: &lt; 25 Smoke Developed: &lt;450 NFPA and ICC Class A Building Material</td>
</tr>
<tr>
<td>% Solids by Volume</td>
<td>Calculation</td>
<td>N/A</td>
<td>99%</td>
</tr>
<tr>
<td>VOC Content</td>
<td>Calculation</td>
<td>Compliant with EPA and South Coast AQMD Requirements</td>
<td>Compliant, ≤ 30 g/L</td>
</tr>
</tbody>
</table>

**Features**

<table>
<thead>
<tr>
<th>Benefits</th>
<th>Features</th>
</tr>
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<tbody>
<tr>
<td>Allows work to proceed quickly without costly delays and interruptions to work schedule</td>
<td>Fast cure</td>
</tr>
<tr>
<td>Simplifies and speeds application</td>
<td>Eliminates mesh, fabric and tapes at sheathing joints (when used with other StoGuard air barrier membranes)</td>
</tr>
<tr>
<td>Avoids costly wet weather work shut downs or wash-offs; adheres to damp substrates without blistering or increase in drying time</td>
<td>Cures in wet weather and on damp substrates</td>
</tr>
<tr>
<td>Extends construction period deeper into cold weather season</td>
<td>Installs down to near freezing temperatures (35°F [2°C])</td>
</tr>
<tr>
<td>Facilitates continuity with other air barrier, moisture barrier or waterproofing components; minimizes construction sequencing issues</td>
<td>Chemically compatible with urethane and silicone sealants and coatings (Always perform tests to verify compatibility and adhesion)</td>
</tr>
<tr>
<td>Does not require highly skilled applicator work force – reduces labor costs</td>
<td>Easy to install</td>
</tr>
<tr>
<td>Bridges cracks and seams in construction without tearing or compromise in performance</td>
<td>Excellent Elongation</td>
</tr>
<tr>
<td>Compatible with other Sto liquid applied air and moisture barrier components; facilitates continuity at transition areas in construction</td>
<td>Can be overcoated</td>
</tr>
<tr>
<td>Compliant with all national, state and local VOC regulatory requirements; can be used throughout the US and Canada. Qualifies for LEED credits</td>
<td>Low VOC and South Coast AQMD Compliant</td>
</tr>
<tr>
<td>Resists blistering caused by trapped water vapor</td>
<td>Water Vapor Permeable</td>
</tr>
<tr>
<td>Easy to create an airtight seal around complex geometrical shapes</td>
<td>Liquid Application</td>
</tr>
</tbody>
</table>

StoGuard® RapidFill™ is a one-component air barrier and waterproof material used to seal sheathing joints, seams, cracks, and transitions in above grade wall construction. Rapid drying time will usually allow for same day installation of other Sto air barrier components.

StoGuard® RapidFill™ is compatible with most common building materials, including concrete, concrete masonry, brick, gypsum sheathing, wood, galvanized metal and cement based sheathings.

**Coverage**

Approximately 60-95 lineal feet (18-29 m) of joint per cartridge or 35-60 lineal feet (10-18 m) per sausage when applied at 20-30 wet mils (0.5-0.8 mm) with 1 inch (25 mm) on each side of sheathing joint.

Coverage will vary depending on application technique, sheathing joint gap, and surface conditions. Rough surfaces will reduce coverage.

**Packaging**

- 29 oz. (0.86 L) cartridges per case
- 20 oz. (0.6 kg) sausages per case
- 20 sausages per case

**Shelf Life**

12 months if properly stored and sealed.

**Storage**

Store in a cool (less than 80°F [27°C]), dry area. Protect from heat, moisture and direct sunlight. Keep from freezing.
Surface Preparation
Surfaces must be clean and free of frost, damage, and all bond-inhibiting materials, including dirt, dust, efflorescence, form oil and other foreign matter. Wood, concrete, or concrete masonry may be damp with no adverse effect on adhesion. Galvanized metal surfaces should be solvent wiped with cotton cloth to remove surface contamination. May be applied to clean, dry pressure-treated and fire-retardant treated plywood. Surfaces must not have standing water on them.

Mixing
Not required. Ready to use.

Application
StoGuard RapidFill may be applied over or under any of the Sto air and moisture barrier coatings:

- Sto EmeraldCoat
- StoGuard VaporSeal
- Sto AirSeal
- Sto Gold Coat (StoTherm® ci Systems)

Apply with a caulking gun. Tool or spread with a DRY joint knife, trowel or spatula while material is still wet, usually within 2-3 minutes of gun application. Seal voids or pinholes with additional material. Do not use soapy water when tooling or spreading.

Sheathing Joints
Apply to properly installed sheathing - butted joints for gypsum sheathing, and gapped joints for plywood and OSB sheathings (wood-based sheathing typically requires 1/8 inch (3 mm) spacing at edge and end joints). Apply a thick bead of StoGuard RapidFill with a caulking gun along sheathing joints, or apply in a zig-zag pattern across and down the joints. Spread to a uniform thickness of 20-30 mils (0.5-0.6 mm). Spread 1 inch (25 mm) beyond the sheathing joint on each side. Follow the same procedure for inside and outside corners.

Transition Detailing
Flashing Transition: where possible bed the flashing leg in a thick bead of StoGuard RapidFill, tool the material along the top edge of the flashing, and secure the flashing in place with fasteners. Make sure the flashing leg is flat against the wall surface. Apply a thick bead of StoGuard RapidFill along the flashing leg/wall surface seam or apply in a zig-zag pattern across the seam. Spread to create a seamless counter-flashing that covers fastener penetrations and directs water away from the wall.

Through Wall Penetrations (pipe, electrical box, and scupper penetrations): penetrations must be fitted snug against abutting wall surfaces. Apply a fillet bead of StoGuard RapidFill around the penetration and tool against both surfaces (wall surface and penetration). Create a bead profile that directs water away from the wall penetration.

Fasteners and Masonry Ties: spot fasteners to seal fastener penetrations. Apply as a backer seal beneath masonry ties or apply from installed flange of masonry tie to wall surface around the tie.

IMPORTANT: StoGuard Rapid Fill can fill joints up to ½ inch (13 mm) wide. In cases where large gaps exist between sheathing joints, or between the penetration and the sheathing, alternative transition detailing may be used, or other steps may be necessary to correct the deficient condition. Refer to Sto details.

Curing and Drying
Product is moisture curing. Tack free time is 30 minutes and drying time is within 4 hours under normal conditions (70°F [21°C] and 50% RH). Drying time is slower with low temperature/low humidity and faster with high temperature/high humidity.

Clean Up
Clean tools by removing wet material from the drywall knife with a rag before the material cures. Cured material can be removed with a citrus solvent, xylene or mineral spirits. Exercise care when handling cleansing agents and follow precautions on packaging.
**StoGuard® RapidFill™**

**Limitations**

- Use only when surface and ambient temperatures are above 35°F (2°C) and below 110°F (43°C) during application and drying period.
- Do not use on surfaces with standing water or frost.
- Do not use below grade or in locations that are continually immersed in water.
- Do not use as a structural sealant, as an expansion joint sealant, or as an exposed weather seal.
- Do not use to fill gaps, seams, or cracks greater than 1/2 inch (13 mm) wide.
- Do not use in place of appropriate through wall flashing.
- When top coating with StoGuard or other Sto coatings apply top coat after material skins and within 48 hours of drying.
- Do not leave exposed to weather for more than 30 days. Requires permanent protection with wall cladding or other finish material.

**Health And Safety**

**DANGER!**
May damage the fertility or the unborn child. **Health Precautions**
Breathing large amounts of vapor may be harmful. Can cause eye irritation. Symptoms include redness and burning of skin, Swallowing large amounts may be harmful. **Safety Precautions**
Use adequate ventilation. Safety goggles and protective gloves are recommended. Remove contaminated clothing immediately. **First Aid**
SKIN CONTACT: Wash affected areas with large amounts of running water and soap, if available, for 15 minutes. Remove contaminated clothing and shoes. Wash clothing and decontaminate shoes before re-use. 
Get medical attention if irritation develops and persists. EYE CONTACT: Immediately rinse eyes with water. Remove any contact lenses. Hold eyelids apart to ensure rinsing of the entire surface of the eyes and lids with water. Continue flushing eyes with running water for at least 15 minutes. Get medical attention if irritation develops. **Respiratory Problems**: Remove from area to fresh air. If not breathing clear airway and start mouth-to-mouth artificial respiration or use a bag mask respirator. 
Get immediate medical attention. If victim is having trouble breathing, transport to medical care and, if available, give supplemental oxygen. **INGESTION**: DO NOT induce vomiting. 
DO NOT give anything by mouth to an unconscious or convulsing person. Get immediate medical attention. **HYGIENE**: Wash hands immediately after use. Wash clothing before re-use. **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 Safety Data Sheet (SDS) for further health and safety information. Safety Data Sheet (SDS) is available at www.stocorp.com. **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.