StoGuard® RapidFill™

StoGuard® Rapid Fill™ is a one-component air barrier and waterproof material used to seal sheathing joints, seams, cracks, and transitions in above grade wall construction.

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

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 cl systems)

StoGuard RapidFill can fill joints up to 1/2-inch (12.5 mm) wide.

Use when ambient and surface temperatures are between 35°F and 110°F (2°C and 43°C).

May be used on damp wood, concrete and concrete masonry substrates. May be applied in high-humidity conditions.

This Installation Guide provides basic information regarding details and steps for application of StoGuard® RapidFill™ as a sheathing joint treatment, corner treatment, perimeter seal for mechanical penetrations, and transition material for metal flashing. These installation guidelines are not intended to represent every possible configuration that may occur.

See the General Notes at the end of this document for additional guidance when using StoGuard RapidFill.

Consult with your local Sto Representative and product literature available at www.stocorp.com for more information.
Installation at Sheathing Joints:

Gypsum sheathing butted joints and wood-based sheathing gapped 1/8" (3 mm) typical

Apply StoGuard RapidFill with a calking gun in a zig-zag pattern.

Tool or spread to final width and thickness with a DRY joint knife, trowel or spatula while material is still wet, usually within 2 to 3 minutes of gun application.

Final width minimum 1-inch (25 mm) on both sides of gap.
Installation at Sheathing Joints with Oversized Gap:

Gaps up to 1/2" (12.5 mm) in width can be filled with StoGuard RapdiFill. Use of spray foam as depicted facilitates application and reduces StoGuard RapidFill consumption.

Fill wide gaps with spray foam. Trim spray foam flush with sheathing after it cures.

Apply StoGuard RapidFill with a caulk gun in a zig-zag pattern.

Tool or spread to final width and thickness with a DRY joint knife, trowel or spatula while material is still wet, usually within 2 to 3 minutes of gun application.

Final width minimum 1-inch (25 mm) onto sheathing on both sides of gap.
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Installation at inside corners

Apply StoGuard RapidFill to inside corners

Spread StoGuard RapidFill to nominally 1.5 inches (38 mm) on both sides of corner.

Apply StoGuard coatings as top coat after StoGuard Rapidfill skins and within 48 hours of RapidFill application.

(Alternatively apply StoGuard RapidFill as shown to dry StoGuard coating already applied to the sheathing.)
Installation at outside corners

Apply StoGuard RapidFill to outside corners

Spread StoGuard RapidFill to nominally 1.5 inches (38 mm) on both sides of corner.

Apply StoGuard coatings as top coat after StoGuard Rapidfill skins and within 48 hours of RapidFill application.

(Alternatively apply StoGuard RapidFill as shown to dry StoGuard coating already applied to the sheathing.)
Installation at Window and Door Openings

Treat Sheathing joints with StoGuard RapidFill

StoGuard RapidSeal

Note: Either StoGuard RapidFill or StoGuard RapidSeal can be applied first.
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Installation at Flashing Transitions

Treat sheathing termination at base of wall with StoGuard Transition Membrane.

Fasten flashing to structural support. Where possible, set top leg of flashing in a thick bead of StoGuard RapidFill.

Apply StoGuard RapidFill to top edge of flashing and tool to completely seal top of flashing and cover fasteners.
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Installation at mechanical and pipe penetrations with gaps less than 1/4-inch (6 mm)

Fill gap with StoGuard RapidFill

Apply additional StoGuard RapidFill to sheathing and penetrating element

Tool StoGuard RapidFill to lap minimum 1-inch (25 mm) onto both the sheathing and penetrating element surfaces.
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Installation at mechanical and pipe penetrations with gaps wider than 1/4-inch (6 mm)

1. Fill gap with spray foam
2. Trim excess spray foam after it hardens
3. Apply StoGuard RapidFill to trimmed foam, sheathing and penetrating element
4. Tool StoGuard RapidFill to completely cover spray foam and lap onto surrounding sheathing and onto the penetrating element minimum 1-inch (25 mm)
Apply StoGuard RapidFill to sheathing joint where no movement joint is provided between slab and framing.

Install flashing and seal top edge of flashing and fasteners with StoGuard RapidFill. Where possible set top leg of flashing in a thick bead of StoGuard RapidFill.

Note: Use StoGuard Transition Membrane detail for deflection tracks or other locations with anticipated movement.
Other details locations

Seamless Saddle Flashing at intersecting wall of different heights. Follow application recommendations for corner applications.

Roof scuppers and other rectangular mechanical penetrations. Follow application recommendations for mechanical penetrations.

Parapet termination of StoGuard system. Wrap top of parapet wall with StoGuard RapidFill prior to installation of nailer and cap flashing. Provide continuous waterproofing on both sides of wall with StoGuard and/or roofing membrane on inside of parapet. Follow application recommendations for corner applications.
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General Notes:

1. These notes apply for all applications of StoGuard RapidFill.

2. Apply with caulking gun. A zig-zag pattern has been found to be beneficial to assure sufficient material is inplace in a single pass before tooling, but other techniques may work better for certain situations.

3. A plastic spreading tool (automotive body-filler spreader) has been found to be well suited for tooling StoGuard Rapidfill. Other tools such as a taping knife, spatula or trowel may be used. Tool or spread with DRY tools. DO NOT use soapy water when tooling.

4. Final width of application at sheathing joints is a minimum of 1-inch (25 mm) on the sheathing on both sides of the joint. Where wide gaps are filled with StoGuard RapidFill or spray foam, the width of the StoGuard Rapid Fill must be minimum one inch (25 mm) on both sides of the gap.

5. IMPORTANT: StoGuard RapidFill can fill joints up to 1/2-inch (13 mm) wide. In cases where large gaps exist between sheathing joints, or between the sheathing and penetration, an alternative transition detailing may be used, or other steps may be required to correct the deficient condition.

6. The final width at all corners is 1.5-inches (38 mm).

7. Lap StoGuard RapidFill minimum 1-inch (25 mm) onto penetrating elements (pipes, ducts, electrical boxes, etc.) when sealing penetrations.

8. Spread or tool to a final thickness approximate 20-30 wet mils (0.5-0.8 mm) [about the thickness of a credit card]. Seal all gaps or pinholes that remain after tooling with additional StoGuard RapidFill.

9. Each 29 oz. (0.86 L) cartridge will cover approximately 60-95 lineal feet (18-29 m) at a 2-inch-width and the recommended thickness. Each 20 oz. (0.6 kg) sausage will cover approximately 35-60 lineal feet (10-18 m) at a 2-inch-width and the recommended thickness. Coverage will vary depending on surface roughness.

10. Apply when ambient and surface temperatures are between 35°F (1.7°C) and 110°F (43.3°C). Store at temperatures less than 80°F (27°C). Protect packages from direct sun and freezing.

11. StoGuard RapidFill may be applied to damp wood, concrete and concrete masonry, and will cure in high humidity conditions. StoGuard RapidFill may be applied to clean and dry pressure-treated and fire-retardant treated wood. Do not apply where standing water is present.

12. Tack-free time is approximately 30 minutes and drying time is within 4 hours at 70°F (21°C) and 50% RH. StoGuard RapidFill is a moisture-curing material; high humidity and damp substrates may reduce working time.

13. StoGuard RapidFill may be applied over or under any of the StoGuard coatings.

14. When top-coating StoGuard RapidFill, apply top-coat after the StoGuard RapidFill has skinned and within 48 hours of application. Do not leave exposed to weather more than 30 days. Requires permanent protection with wall cladding or other finish material.

15. Do not use below grade or in locations that are continually immersed in water.

16. Do not use as a structural sealant.

17. Do not use in place of appropriate through wall flashing.