ZIP System™ Liquid Flash
Installation Manual

another innovation from

HUBER ENGINEERED WOODS

Contents

ATTENTION: This installation guide is intended to provide general information for the designer and end user. The following guidelines will help you properly apply ZIP System™ Liquid Flash. We urge anyone installing this product to read these guidelines in order to minimize any risk of safety hazards and to prevent voiding any applicable warranties. This manual is a general installation guide and does not cover every installation condition. Proper installation shall be deemed to mean the most restrictive requirement specified by Huber Engineered Woods (HEW), local building code, engineer or architect of record or other authority having jurisdiction. You are fully and solely responsible for all safety requirements and code compliance. For additional information, contact Huber Engineered Woods, LLC.

What is ZIP System™ Liquid Flash?

ZIP System™ Liquid Flash is a liquid-applied flashing membrane that can be used to create a continuous barrier to help protect your building envelope against air and water infiltration. The seamless air and water barrier provides instant rough dry-in during construction in addition to air and water protection. Designed for both light commercial and residential construction, ZIP System Liquid Flash provides ultimate versatility in sealing irregular, curved or hard to flash areas such as window and door rough openings and through wall penetrations.

ZIP System Liquid Flash is easy to gun, spread and tool in harsh and demanding weather conditions. It bonds to damp or dry surfaces, when used with ZIP System panels it does not need a primer to bond with the surface. Please refer to the installation instructions in this manual for specifics on installation. It also becomes opaque (can't see through it) when the minimum thickness is achieved ensuring good quality control and efficiency.

Recommended Applications

Only use in buildings of Type III (roof applications only) and V construction or construction permitted under the International Residential Code. Use it for the following areas:
-   Irregular, curved or hard to flash areas
-   Rough opening flashing
-   Through wall penetrations such as pipes, etc.
-   Transitions between wood sheathing and concrete or masonry

For other applications, please contact Huber technical support at 800-933-9220.

ZIP System™ Liquid Flash Advantages:
-   Flows easily to seal irregular, curved, or hard to flash areas
-   Seamless, durable, long-lasting protection against air and water penetration
-   Withstands rain immediately after installation, providing fast rough dry-in
-   Warranted for up to 180 days of exposure, accommodating delays to the construction schedule.
-   Easy to apply in demanding and wet weather conditions
-   Bonds to damp or dry surfaces
-   Adheres to ZIP System sheathing without a primer
-   Bonds to most common building materials including structural sheathing, concrete, masonry, architectural metals, painted metals, glass, PVC, FRP, and EPDM.
-   Target application thickness is achieved when you can't see the substrate underneath (approximately 12-15 mils thick)
-   No solvents or isocyanates
-   Complies with common VOC regulations such as US EPA, CARB

ZIP System™ Liquid Flash Notes and Limitations
- Not recognized for use where non-combustibles sealant materials are required by code.
- Do not use as a structural sealant or adhesive.
- Do not use in place of appropriate through wall flashing.
- Do not use below grade or in locations which are continuously immersed in water.
- Ambient and panel surface temperatures should be 35°F (2°C) and rising and below 110°F (43°C) during application and drying. If air or surface temperatures exceed 95°F (35°C), apply to shaded surfaces and before daytime air and surface temperatures reach their peak.
- Do not apply to surfaces with standing water or frost.
- Service temperatures for cured ZIP System Liquid Flash are between -75°F (-24°C) and 400°F (204°C).
- Do not exceed 180 days of weather exposure.
- Do not dilute or alter. No mixing required.
- Do not disturb applied product during curing/drying sequence.
- For ultimate bond, do not use over ZIP System™ Tape without proper application of primer.
- ZIP System Liquid Flash is slippery when wet and may cause a safety hazard if used on non-vertical, sloped surfaces such as for roof penetrations.
- Any gaps that exceed ½" should be filled with expandable foam insulation, backer rod or fiber-reinforced gap filler prior to the application of ZIP System Liquid Flash.

Storage and Handling
Store ZIP System™ Liquid Flash in a cool, dry place. Keep container tightly closed when not dispensing. Do not open container until preparation work has been completed. Do not alter or mix with other chemicals. When stored at or below 80°F (27°C) ZIP System Liquid Flash has a shelf life of 12 months after the date of manufacture. This shelf life assumes upright storage of factory-sealed containers. Do not double stack pallets. Dispose of unused product and container in accordance with local, state and federal regulations.

ZIP System™ Liquid Flash Coverage Rates
20 oz. Sausage Packs - Coverage varies based on surface texture, irregularities and installer experience. Assuming an installed thickness of 12-15 mils, one 20-oz. sausage pack will cover roughly 20 linear feet of window sill flashing in a wall constructed of 2x4 framing. Liquid Flash sausage covers approximately 50 linear feet when used to seal panel seams.
29 oz. Cartridges - Coverage varies based on surface texture, irregularities and installer experience. Assuming an installed thickness of 12-15 mils, one 29-oz. cartridge will cover roughly 29 linear feet of window sill flashing in a wall constructed of 2x4 framing. Liquid flash cartridge covers approximately 70 linear feet when used to seal panel seams.

ZIP System™ Liquid Flash Curing and Drying
At 70°F (21°C) and 50% relative humidity, product skins within 30 minutes and dries in four hours. Liquid Flash is moisture curing. Low temperatures and low relative humidity slow drying time. High temperatures and high humidity accelerates drying time. Do not disturb applied product during curing/drying sequence.

ZIP System™ Liquid Flash Cleanup
Clean tools and equipment with mineral spirits or similar solvent immediately after use. Isopropyl alcohol works for removing wet Liquid Flash from tools and hands. Follow all safety precautions. Remove cured Liquid Flash mechanically using a sharp-edged tool.

ZIP System™ Liquid Flash Safety Guidelines
Read full product label and Material Safety Data Sheet for precautionary instructions before using the product.
- Use adequate ventilation. Breathing large amounts of vapor may be harmful. Due to the viscosity, rapid curing and minimal volatility of raw materials in this product, no significant vapor exposure is expected in typical exterior applications.
- May cause eye irritation. Symptoms may include stinging, tearing, redness or swelling.
- May cause skin irritation. Symptoms may include redness, itching, and swelling.
- Do not ingest. Swallowing large amounts may be harmful.
- Safety goggles and protective gloves are recommended.
- Remove contaminated clothing immediately.

ZIP System™ Liquid Flash First Aid
- EYE CONTACT: Immediately rinse eyes with plenty of 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.
- SKIN CONTACT: Wipe off material with a dry cloth. Follow with a non-aqueous skin cleaner and rinse with clean water. Get medical attention if irritation develops and persists.
- INHALATION: Remove from area to fresh air. If symptoms persist, get medical attention.
- INGESTION: DO NOT induce vomiting. DO NOT give anything by mouth to an unconscious or convulsing person. Get immediate medical attention.

ZIP System Liquid Flash Installation

Overview: ZIP System® Sheathing or other sheathing panels should be fully installed before the ZIP System™ Liquid Flash is applied. The following manufacturer installation steps and recommendations are presented as a general outline of the installation process. You are fully and solely responsible for all safety requirements. Good construction practices should be followed at all times.

Step 1. Preparation

Load 20 oz. ZIP System Liquid Flash sausage tube or 29 oz. ZIP System Liquid Flash cartridge into appropriate applicator gun.

To ensure best results, apply ZIP System Liquid Flash to clean surfaces free of contaminants. Chemical residues, surface coatings or films may adversely affect adhesion.

Protect people, vehicles, property and all other surfaces not intended to receive Liquid Flash.

Fill or repair any gaps larger than 1/2-inch. Backer rod is recommended. Liquid Flash is compatible with urethane and silicone sealants.

Prime any ZIP System™ Tape that is intended to receive Liquid Flash using PVC primer for ultimate bond. Allow primer to dry before applying Liquid Flash.

Review area to receive ZIP System Liquid Flash and hammer flush any protruding fasteners prior to beginning application of Liquid Flash.

Window Installation for Flanged Windows

DISCLAIMER: The following steps represent a general overview for the proper installation of window flashing. Please defer to/consult the installation instructions of your window manufacturer as well as local code requirements. It is the responsibility of the General Contractor to coordinate rough opening dimension with window dimensions and install any necessary extensions as needed.

Step 1. Fill Gaps

Ensure rough sill has positive drainage to the exterior. Apply a thick bead of ZIP System Liquid Flash over any visible gaps in the window rough opening including corners and where the sheathing meets the framing.
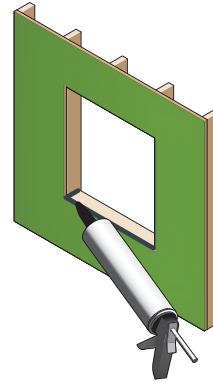
Step 2. Create the Pan

Apply Liquid Flash in straight parallel lines or zigzag pattern to the rough sill, a minimum of 6-inches up the jambs and extending a minimum of 2-inches over the surface of the ZIP System wall sheathing surface. Smooth wet product using the ZIP System spatula, a plastic spreader, putty knife or similar tool. Liquid Flash becomes opaque (you can't see the substrate underneath) when minimum thickness of 12-15 mils is achieved.

Allow treated surfaces to cure before installing windows. If cold or dry weather conditions slow curing, surfaces may be misted with fresh water to accelerate the cure.
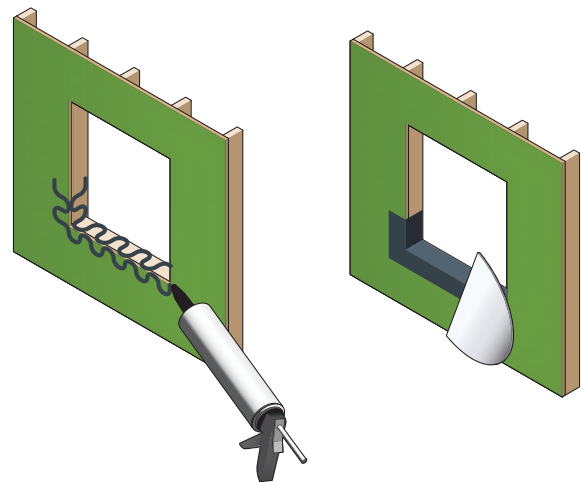
Step 3. Install Window

Apply window sealant around inside face of mounting flange. Window sealant must be gapped at the sill to permit drainage. Install window per window manufacturer's installation instructions. Verify sealant compatibility with window manufacturer. Butyl, polyurethane and 100% silicone sealants are acceptable with ZIP System products. DO NOT use latex caulk or ZIP System Liquid Flash as a window flange sealant.

NOTE: Window flanges should lay flat against sheathing surface if Liquid Flash is to be used to flash the jambs and head as shown in Step 4. If flanges do not sit flat, 6-inch ZIP System Tape is recommended.
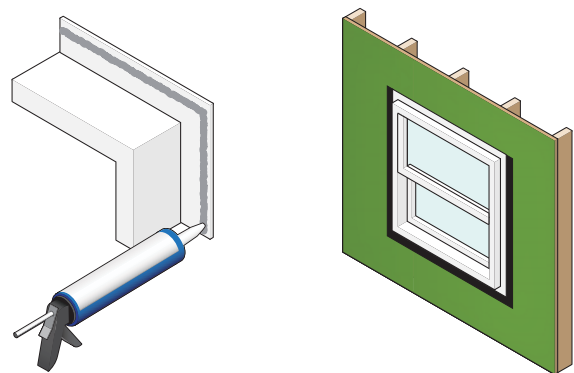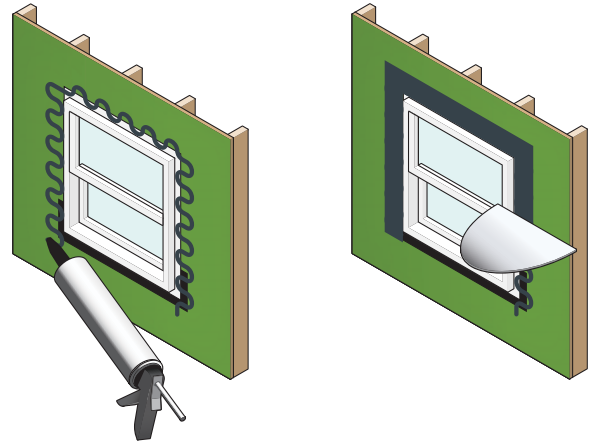
Window Installation for Flanged Windows (continued)

DISCLAIMER: The following steps represent a general overview for the proper installation of window flashing. Please defer to/consult the installation instructions of your window manufacturer as well as local code requirements. It is the responsibility of the General Contractor to coordinate rough opening dimension with window dimensions and install any necessary extensions as needed.

Step 4. Flash Window

Apply Liquid Flash in straight parallel lines or zigzag pattern at the jamb and head flanges with a minimum 1-inch lap on to panel surface. Smooth wet product using ZIP System spatula or similar tool. Liquid Flash can skin quickly in hot and humid conditions so only apply enough that can be smoothed out before skin develops.

CAUTION: ZIP System Liquid Flash bonds aggressively to vinyl flanged windows. Installers should take precautions not to get Liquid Flash on outside face of window. Wipe off any Liquid Flash immediately that comes into contact with the outside frame.

Step 5. Back Dam from Inside

From the interior, apply approved back dam materials such as low-pressure polyurethane foam between the rough opening and the window frame. If opening between sill flashing and window is too narrow for foam, urethane, 100% silicone or other approved air barrier sealants may be used. DO NOT use latex sealants or ZIP System Liquid Flash as a back dam material.
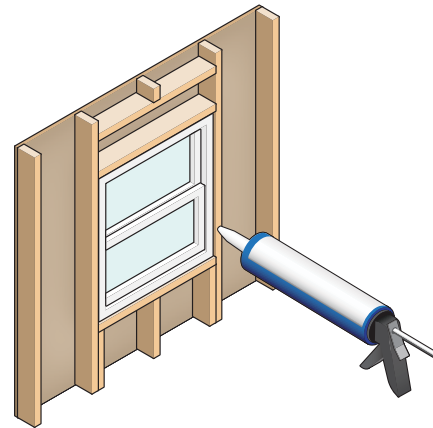
Window Installation for Brick Mould Windows

DISCLAIMER: The following steps represent a general overview for the proper installation of window flashing. Please defer to/consult the installation instructions of your window manufacturer as well as local code requirements. It is the responsibility of the General Contractor to coordinate rough opening dimension with window dimensions and install any necessary extensions as needed.

Step 1. Fill Gaps

Apply a thick bead of ZIP System Liquid Flash over any visible gaps in the window rough opening including all four corners and where the sheathing meets the framing.
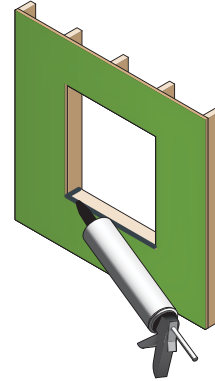
Step 2. Prep the Rough Opening

Ensure rough sill has positive drainage to the exterior. Apply Liquid Flash in straight parallel lines or zigzag pattern to the entire rough opening and extending a minimum of 2-inches over the surface of the water-resistive barrier or face of mechanical flashings. Smooth wet product using a ZIP System spatula or similar tool. Liquid Flash becomes opaque (you can't see the substrate underneath) when minimum thickness of 12-15 mils is achieved. Liquid Flash can skin quickly in hot and humid conditions so only apply enough that can be smoothed out before skin develops.

Allow treated surfaces to cure before installing windows. If cold or dry weather conditions slow curing, surfaces may be misted with fresh water to accelerate the cure.
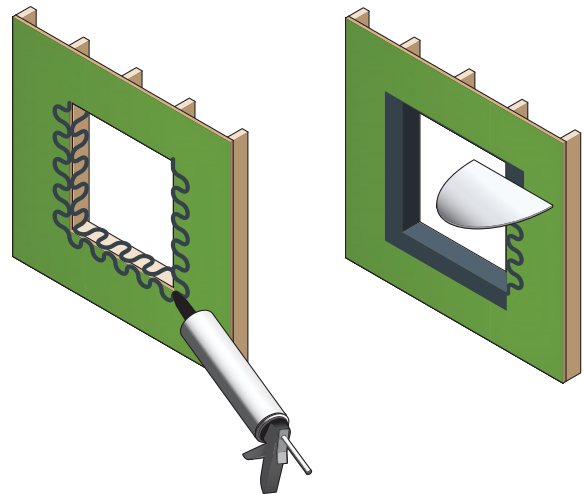
Step 3. Install Window

Install window per window manufacturer's installation instructions. Apply compatible sealant behind brick mould at head and jambs. Verify sealant compatibility with window manufacturer. Butyl, polyurethane and 100% silicone sealants are acceptable with ZIP System products. DO NOT use latex caulk or ZIP System Liquid Flash as a window flange sealant.

NOTE: Metal head flashing should lay flat against sheathing surface if Liquid Flash is to be used to flash the jambs and head as shown in Step 4. If flanges do not sit flat, 6-inch ZIP System Tape is recommended.
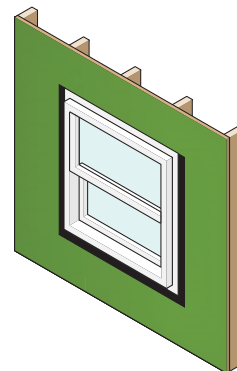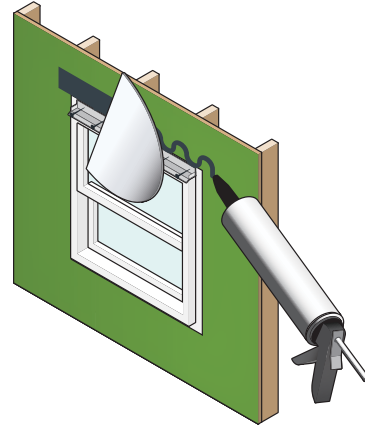
Window Installation for Brick Mould Windows (continued)

DISCLAIMER: The following steps represent a general overview for the proper installation of window flashing. Please defer to/consult the installation instructions of your window manufacturer as well as local code requirements. It is the responsibility of the General Contractor to coordinate rough opening dimension with window dimensions and install any necessary extensions as needed.

Step 4. Flash Window
Apply Liquid Flash in straight parallel lines or zigzag pattern at the head over the mechanical flashing (minimum 1-inch width). Smooth wet product using a ZIP System spatula or similar tool.

Step 5. Back Dam from Inside
From the interior, apply approved back dam materials such as low-pressure polyurethane foam between the rough opening and the window frame. If opening between sill flashing and window is too narrow for foam, urethane, 100% silicone or other approved air dam material may be used. DO NOT use latex sealants or ZIP System Liquid Flash as a back dam material.
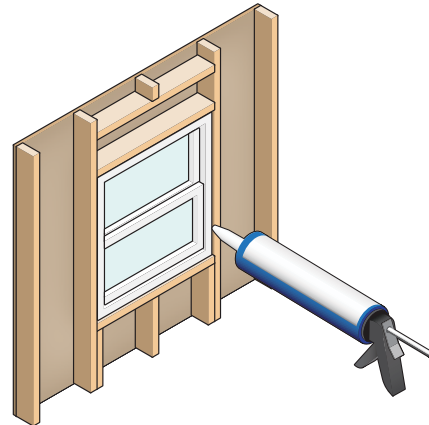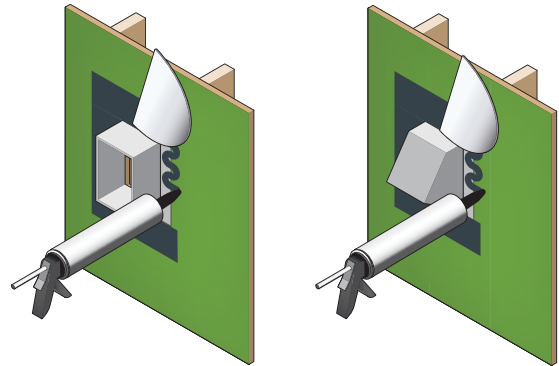
Mechanical Flashing Transition and Wall Penetrations

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Flanged Electrical Boxes and Vent Hoods

Fasten to wall sheathing surface using mechanical fasteners. Apply a generous bead of Liquid Flash to the edge of the flanges. Spread the wet product to create a monolithic "cap flash" flashing membrane that extends 1-inch on to the panel surface.


Mechanical Flashing Transitions

Fasten the vertical flashing leg to the vertical wall surface with mechanical fasteners.

Apply a bead of Liquid Flash to the top edge of the vertical flashing leg. Apply a generous bead of Liquid Flash (approx. 3/8-inch dia. bead) to the mechanical flashing/wall sheathing joint.

Spread the wet product to create a monolithic "cap flash" flashing membrane that extends 1-inch on to the panel surface and at least 1-inch on to the mechanical flashing.
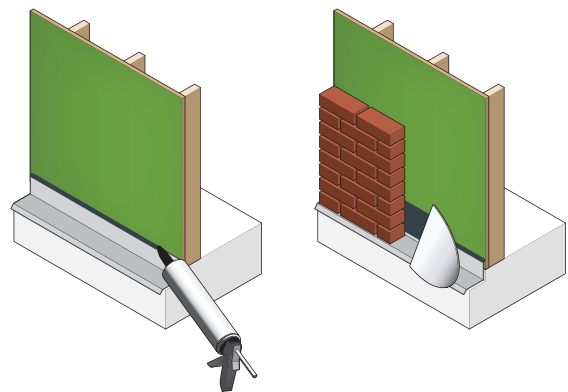
Pipe or Conduit Penetrations in Sheathing

Apply a generous bead of Liquid Flash between the pipe and the cut panel edge and on to the panel surface. Spread the wet product to create a monolithic "cap flash" flashing membrane. Tool the Liquid Flash material using a radius caulking knife. Cake frosting spreaders sold at hobby and craft stores also work well. Any gaps between pipe and cut wall edge that exceed ½" should be filled with expandable foam insulation, backer rod or fiber-reinforced gap filler.

CAUTION: Do not use to seal around wall penetrations where non-combustible sealant materials are required by code.