

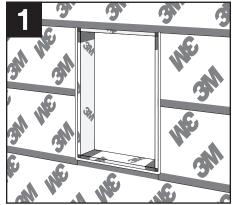
# **Installation Guide**

# **Installing a Flanged Window** onto a Flush Wall

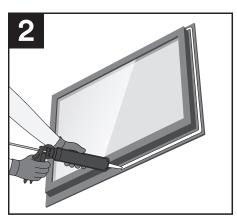


3M™ Air Barrier with Permeable Backing 3015VP and 3M™ Air and Vapor Barrier 3015NP are constructed with high performance proprietary 3M acrylic adhesive that adheres on contact to most exterior building surfaces without the use of adhesive primer.

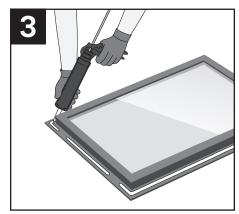
- It can be applied in temperatures between 0°F and 150°F (-18°C and 66°C) ensuring that construction projects are not delayed due to severe temperatures.
- Both the permeable and non-permeable systems work excellent for flanged window installations.
- Prior to installing a flanged window, the window opening must be properly weatherproofed. Please refer to the "3M™ Ultra Conformable Flashing Tape 3015UC Installation Guide" or "Flashing Window Opening with Wall Membrane Guide" for details.



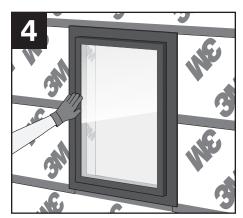
The window opening should be weatherproofed per 3M guidelines.



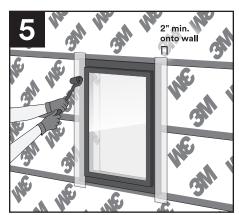
Apply a continuous bead of 3M™ Polyurethane Adhesive Sealant 540 or 3M™ Adhesive Sealant 740UV across the top and down either side of the flanged window.



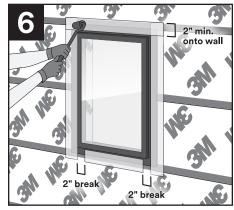
Across the bottom of the window, apply the sealant roughly 2" in from either side, then leave approximately a 2" gap, then continue a solid bead of caulk across the balance of the sill. This will allow drainage should moisture get behind the flange. If a second bead of sealant is needed, apply it directly to the wall.



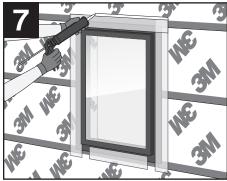
Immediately install the window into the opening and fasten per window manufacturer's instructions.



Seal either side of the window with a strip of 3M<sup>™</sup> Air and Vapor Barrier 3015NP detailing tape. The tape should cover the flange and extend onto the wall at least 2".



Extend a third strip of tape across the top of the window. The tape should cover the flange and extend on top of the vertical strips. Apply the bottom tape leaving approximately 2" open on either side to allow drainage should moisture get behind the flange.



Seal the top edge of the flashing tape with  $3M^{\infty}$  Polyurethane Adhesive Sealant 540 or  $3M^{\infty}$  Adhesive Sealant 740UV.



An alternative method is to use 3M<sup>™</sup> Adhesive Sealant 740UV to seal over the flange on either side and across the top, extending a minimum of 2" onto the wall membrane. Apply the bottom membrane leaving approximately 2" open on either side to allow drainage should moisture get behind the flange.

# 3M™ Air Barrier Products Installation Best Practices

3M<sup>™</sup> Air Barrier with Permeable Backing 3015VP, 3M<sup>™</sup> Air and Vapor Barrier 3015NP, and 3M<sup>™</sup> Ultra Conformable Flashing Tape 3015UC can be applied to a wide variety of sheathing substrates, typically without priming. Substrate condition is crucial to the adhesion performance of any adhesive membrane.

#### **Substrate Surface Requirements**

- Substrate surfaces must be free of grease, oil, un-bonded paint, corrosion or other substances that would adversely affect the adhesive bond between the membrane and substrate
- Substrate surface must be dry to the touch for optimum performance
- Ambient temperature must be between 0°F and 150°F (-18°C and 66°C)
- Rolls must be stored at a temperature between 0°F and 150°F (-18°C and 66°C) to ensure initial bond performance

#### **Surface Preparation**

- Fill gaps and cracks exceeding 1/4" but less than 1/2" width with 3M™ Polyurethane Adhesive Sealant 540 or 3M™ Adhesive Sealant 740UV (or similar), and tool the surface flush and smooth
- Fill gaps exceeding 1/2" width with closed cell foam backer rod, seal with 3M™ Polyurethane Adhesive Sealant 540, 3M™ Adhesive Sealant 740UV (or similar), and tool the surface flush and smooth
- Concrete substrates shall have fins ground flush and void areas filled
- . Masonry substrates must have mortar joints tooled or struck flush

# **Substrate Specific Guidelines**

- Exterior gypsum sheathing shall have moisture content below 19%
- Plywood sheathing shall have moisture content below 16%

# **Details, Penetrations, Windows and Doors**

All penetrations, including windows and doors, must be installed in proper sequence for appropriate moisture management. 3M recommends using 3M<sup>™</sup> Air and Vapor Barrier 3015NP for flashing and detail work. Penetrations should be additionally sealed with 3M<sup>™</sup> Polyurethane Adhesive Sealant 540, 3M<sup>™</sup> Adhesive Sealant 740UV or similar to achieve a weather-tight result.

Learn about 3M's advanced technologies for controlling airflow and optimizing the indoor climate at **3M.com/airbarrier** or contact your 3M representative at **866-513-4026**.

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