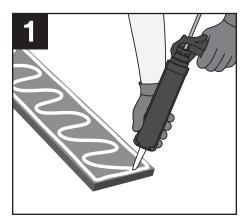
# **Installation Guide**

## Installing a Flanged Window into a CMU Wall Utilizing a Wood Buck as a Mounting Surface



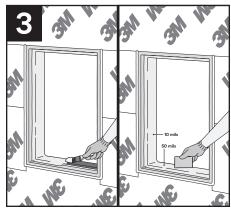
3M™ Air Barrier with Permeable Backing 3015VP and 3M™ Air and Vapor Barrier 3015NP are constructed with high performance proprietary 3M acrylic adhesive that adheres on contact to most exterior building surfaces without the use of adhesive primer. It can be applied in temperatures between 0°F and 150°F (-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 into a 3M™ Air and Vapor Barrier 3015NP or 3M™ Air Barrier with Permeable Backing 3015VP wall system that utilizes a wood buck as an mounting surface, the window opening must be properly weatherproofed. Before the wood bucks are installed, the window rough opening should be weatherproofed the same as a flush wall system. Please refer to the flashing installation guide that will be used: 3M™ Ultra Conformable Flashing Tape 3015UC or 3M™ Flashing Window Openings with Wall Membrane Guide.



Apply either 3M<sup>™</sup> Polyurethane Adhesive Sealant 540 or 3M™ Adhesive Sealant 740UV to the backside of the wood buck. Note: The window opening should be weatherproofed per 3M installation guidelines.



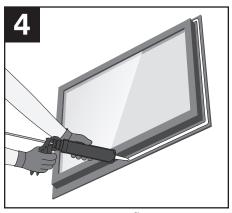
Install the bottom, then the sides, then the top and fasten per local wind load or building code requirements. Once all four sides are installed, apply sealant where the wood joins each other and around the entire perimeter.



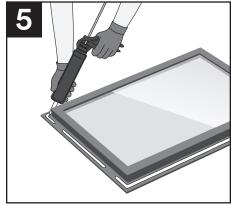
Weatherproof the installed wood buck with 3M™ Adhesive Sealant 740UV. Ensure that there are no visible pinholes and there is a minimum of 10 mils covering the side and top buck and a minimum of 50 mils on the sill. The interior side of the wood buck should remain uncoated, allowing it to dry to the interior if it would get damp.



Weatherproof the installed wood buck with 3M<sup>™</sup> Ultra Conformable Flashing Tape 3015UC and 3M™ Air and Vapor Barrier 3015NP detailing tape. Ensure the tape is applied to prevent negative laps. The interior side of the wood buck should remain open, allowing it to dry to the interior if it would get damp.

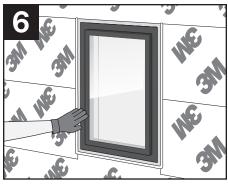


Apply a continuous bead of 3M™ Polyurethane Adhesive Sealant 540 or 3M™ Adhesive Sealant 740UV across the top and down either side of the flanged window.

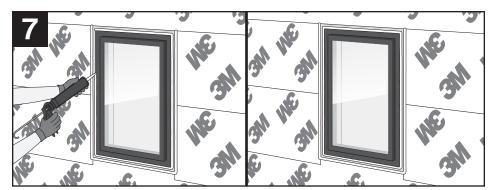


Across the bottom of the window, apply 3M™ Polyurethane Adhesive Sealant 540 or 3M™ Adhesive Sealant 740UV in 2" from either side, then leave a 2" gap, then continue a solid bead of caulk across the balance of the sill. If a second bead of sealant is needed, apply it directly to the wood buck.

Steps continued on next page.



Immediately install the window into the opening and fasten to the wood buck per window manufacturers instructions.



Weatherproof the outer edge of the flange by sealing with a bead of 3M™ Polyurethane Adhesive Sealant 540 or 3M™ Adhesive Sealant 740UV, ensuring any remaining exposed wood buck is coated. The exterior of the window is now ready for the stucco or exterior cladding to be applied.

#### 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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