# ThermalBuck High-Performance Installation

#### WRB Interior to Continuous Insulation Installation Guide









## **CUT WRB**

Cut each jamb back 1.5" to expose sheathing.

Cut corners at 45° angles.

# **TRIM**

Trim WRB flush with opening at the sill.

Trim WRB flap at head. It should extend 4" into the rough opening.

Tape back the head piece and both jambs.

# **MEASURE**

Measure the RO. Allow 1/2" extra on all sides (1" overall) than recommended by window manufacturer.

Level & plumb, shim interior if needed.









# **INSPECT**

Inspect ThermalBuck for any damage, cuts, dents, or gouges through the coating.

# CUT

Angle cut each piece of ThermalBuck 45° with a mitre saw.

Undersize 1/16"-1/8" to allow for sealant.

# **DRY-FIT**

Dry-Fit the pieces of ThermalBuck to make sure it fits properly, adjust if needed.

Slight gaps are needed for sealant at corners.

## **SEAL WRB**

Apply 3/8" bead of sealant along sheathing at sill where WRB will adhere to sheathing.

**NOTE:** The sill is the only place where the WRB goes underneath ThermalBuck.

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#### **PRESS**

WRB should be flush at sill. Press WRB into the sealant against sheathing at bottom sill

Smooth to remove all wrinkles in WRB.

# **AIR & WATER SEAL**

Apply three 3/8" beads of recommended sealant\* to the back of each piece of ThermalBuck.

Ensure 100% ooze-out at all transitions for tight air & water seal.

## **ATTACH**

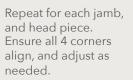
Starting at the sill, push ThermalBuck firmly into the rough opening along the total length to ensure you have a good seal, and 100% ooze out.

# **SEAL ENDS**

Add sealant to mitered ends. Ensure 100% ooze-out at all transitions for complete air & water seal. Add sealant if needed.

**NOTE:** Continue to attach jambs then head.





**NOTE:** 100% ooze-out is needed at all transitions for a good air & water seal..



## **NAIL TONGUE**

Firmly hold ThermalBuck in place, and nail a 2" galvanized roofing nail through the 1/2" tongue into the structure, every 10"-12".

Use nail gun or hand nail.



## **CLAMP**

Clamp all 4 corners with two roofing nails while the sealant cures (24 hrs).

**NOTE:** Do not install window until sealant has cured



# **SMOOTH**

Once 100% ooze-out is achieved, smooth sealant and remove excess.

Make sure all seams are well covered.
Add sealant if needed.

Install ThermalBuck with recommended sealants: DAP Dynaflex 800 or Dow Corning 758

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# **SEAL JAMB**

Apply 3/8" bead of sealant around the edge of each jamb meets the OSB.



## **TRIM JAMB**

Trim excess WRB at both jambs 1/2" to 3/4" inch from the wall



## **PRESS WRB**

Press WRB into the bead of sealant firmly, to ensure a good seal.

Smooth to remove all wrinkles out of WRB.



## **FLASH**

Flash the angled cut of the WRB with the WRB manufacturers' recommended seam tape on the bottom corners.



Flash entire length of each jamb, extending 2" past ThermalBuck on top, and 4" on bottom. Flashing should cover both ThermalBuck and WRB.

**NOTE:** Do not place flashing on surface of ThermalBuck where nail flange will attach.



Cut end of flashing in half lengthwise to continue 90° angle. Press the outer half against the structure. Press the inner half against ThermalBuck, wrapping around the corner.

Do not install window until sealant has cured (24 hrs).



# **INSTALL WINDOW**

Install window according to the manufacturers' instructions.

Skip seal leaving 3" gaps, or do not seal bottom flange.



# **REVIEW**

Please refer to the installation instructions of the WRB, CI and window manufacturer you have selected, and consider best practice building science for the remaining steps.

Install ThermalBuck with recommended sealants: DAP Dynaflex 800 or Dow Corning 758

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## **SECURE**

Center the window in ThermalBuck, then install screws in each of the upper corners to hold window into place. (Min. 1-1/4" penetration into structure.)

## **LEVEL**

Check to see if window is plumb and level, adjust shims if necessary.

Ensure nail holes on head & jambs have 100% ooze-out.

# **FASTEN**

Fasten window with #10 screws or nails, angled slightly away from the window to ensure good penetration into structure. (Min. 1-1/4")

## **FLASH JAMBS**

Flash nail flange at each jamb with WRB manufacturers' tape.

Release head flap and press WRB into wet sealant at head, smooth to remove wrinkles.









# **SEAL HEAD**

Apply 3/8" bead of sealant around the edge of head transition of ThermalBuck and OSB.

Bring head flap down, and press into wet sealant.

# FLASH HEAD

Trim WRB at head so WRB will cover flange holes, then flash WRB transition across window head with WRB manufacturers' tape.

Cover the angled cuts at head with tape .

# CONTINUOUS INSULATION

Install CI, ensure max. 1/8" tolerance to ThermalBuck.

Flash transition of ThermalBuck to continuous insulation.

**NOTE:** Do not flash the head transition to allow for drainage.

# INTERIOR FINISH

Seal both the transition of ThermalBuck to the window and to the framing to complete the air and water seal.

**NOTE:** If extension jambs are pre-installed, seal the ThermalBuck to the rough opening prior to the window install.

Install ThermalBuck with recommended sealants: DAP Dynaflex 800 or Dow Corning 758

# **Materials & Tools:**

- ThermalBuck<sup>™</sup>
- Dow Corning 758 or DAP Dynaflex 800
- 2" Roofing Nails for ThermalBuck
- #10 Nails or Screws for flange (min. penetration 1-1/4" into structure)
- Window
- WRB
- Continuous Insulation
- Flashing (see WRB recommendations)

- Mitre Saw
- Measuring Tape
- Utility Knife
- Level
- Hammer
- Pencil
- Sealant Gun
- Safety Glasses & Hearing Protection



## **Guidelines:**

- Review the rough opening preparation from the window manufacturer, then *add an additional* 1" overall to their rough opening recommendation to accommodate ThermalBuck.
- Refer to the manufacturer's installation guides for the WRB, CI, and window, and consider best practices for integrating the installation steps.
- Avoid inhaling dust particles from machining ThermalBuck.
- Wear protective gear.
- Operate tools safely and follow manufacturer's operation guidelines.
- If injury occurs, seek medical attention immediately.

# **Attention:**

- Refer to the manufacturer's installation guides for the WRB, CI, and window, and consider best practices for integrating the installation steps. This is the responsibility of the architect, builder, consultant, and buyer.
- Request written product instruction, associated warranties and damage coverage, then provide this information and warranties to the end user and/or building owner for future reference.
- Follow all manufacturer's guidelines regarding material use, compatibility, preparation, personal safety, and disposal.
- Any alterations to the installation instructions and recommended materials could cause failures.

For additional information please refer to following document, FMA/AAMA/WDMA 500-16 Standard Practice for the Installation of Mounting Flange Windows into Walls Utilizing Foam Plastic Insulation (FPIS) with a Separate Water-Resistive Barrier (WRB). Available for download at aaamanet.org