

# ThermalBuck™ & ThermalTight™

## Installation Guide



### Quick Tips:

- Consider combined depth of ThermalTight insulation panel and/or rain screen when choosing the right depth of ThermalBuck. See "Product Dimensions" at [thermalbuildingsupply.com](http://thermalbuildingsupply.com) for details.
- Rough opening must be oversized by 1" overall to accommodate the 1/2" tongue of ThermalBuck.
- Flaps on ThermalTight must overlap for a good shingle effect. Consider placement of adjacent panels before removing any flaps.
- Store ThermalBuck & ThermalTight on pallet supplied by BRINC Building Products, or off the ground supported by 3 runners.
- If storing outdoors, cover ThermalBuck & ThermalTight with a waterproof, opaque cover.

[thermalbuildingsupply.com](http://thermalbuildingsupply.com)

# ThermalBuck™ & ThermalTight™ Installation Guide



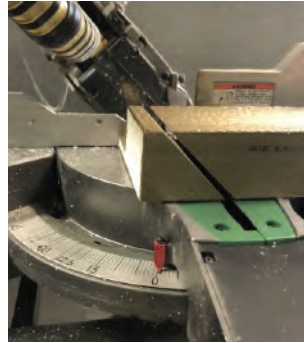
## MEASURE

Measure the pre-framed RO to confirm the additional 1/2" on all 4 sides (1" overall) than recommended by window manufacturer. Level & plumb, adjust RO if needed.



## MINIMIZE WASTE

Consider all RO dimensions, and plan cuts to minimize waste. Leftover pieces of ThermalBuck can be used on small windows, or to splice jambs.



## CUT

Miter the end of each piece at half the angle of the RO. (Typically 45°)

Undersize each piece 1/16" to 1/8" to allow for sealant at seams.



## DRY-FIT

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

Slight gaps are needed at corners for sealant.



## AIR & WATER SEAL

Apply three 3/8" beads of DAP Dynaflex 800 sealant to the back of each piece of ThermalBuck.



## INSTALL

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 at all transitions.



## SEAL ENDS

Add sealant to mitered ends.



Repeat for each jamb and head piece, considering which one will be easiest to flex into place last. Ensure all corners align before nailing tongue, and adjust as needed.

*100% ooze-out is needed at all transitions for proper water and air sealing.*



## NAIL TONGUE

Once all pieces of ThermalBuck are placed, firmly push into RO and drive a 1-3/4" roofing nail through the 1/2" tongue into the structure, every 10"-12".

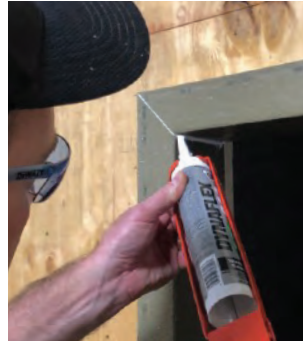
Use a roofing nail gun if preferred.



## CLAMP

Clamp corners with 2" roofing nails if gap is more than 1/4" while the sealant cures (see sealant manufacturer's instructions).

*Do not install window until sealant has cured.*



## SEAL GAPS

If 100% ooze-out did not occur at all transitions, force sealant into any voids.



## SMOOTH

Smooth sealant and remove excess.



## Z-STRIP INSTALL

Fasten Z-strip to wall at bottom of sheathing line.



## FLASHING

Adhere flashing tape to wall sheathing and outside face of nail flange on the Z-strip for a continuous air barrier.



## CUT & DRY-FIT THERMALTIGHT

Measure and cut panels to fit tight against ThermalBuck. Panels may be run horizontally or vertically.

*NOTE: All applications require staggered vertical seams.*



Apply 3/8" bead of DAP Dynaflex 800 sealant to inside lip of Z-strip before inserting insulation panel, OR set panel on strip (without sealant) for a compression type seal if considering potential drainage at bottom.





### WRAP & TRIM BOTTOM FLAP

Cut bottom flap to match thickness of the panel.



### TAPE FLAP

Apply small strips of flashing tape to the flap to adhere to the Neopor insulation.



### INSERT LOWER PANEL

Insert bottom of ThermalTight panel into the Z-Strip.



### ATTACH PANEL

Fasten ThermalTight panel to sheathing with corrosion proof ring shank nails. 12" o.c. edges, and 16" o.c. in field.



### CUT NON-SHINGLE FLAPS

Remove flaps that are not needed to overlap another panel in shingle fashion.



Flap from panel above will be adhered to this lower panel.



### VERTICAL SEAMS

Cut panel flap off to permit overlap of next panel, if the next panel being placed has a flap to cover existing panel.



Remaining flap will be adhered to previous panel.



## INSERT UPPER PANEL

Insert upper ThermalTight panel.

Ensure flap remains to overlap lower panel.



## FASTEN

Attach additional panels, and fasten with corrosion proof ring shank nails with button caps 12" o.c. edges and 16" o.c. field. Keep caps away from flashing area. Ensure flap of top panel remains to overlap panel below.



## TAPE VERTICAL SEAMS

Seams on vertical panels will need to be taped before horizontal seams. Apply BRINC double-sided seam tape to face of trimmed panel.

Remove backer to expose adhesive.



Fold the flap over adjacent panel. Flap should cover 2" of adjacent panel.



## ROLL THE TAPE

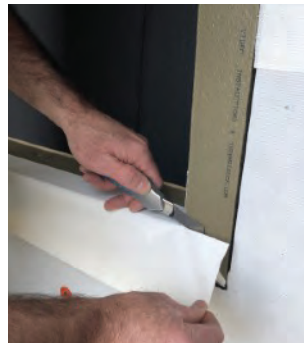
Roll the tape.

*NOTE: Repeat process on additional VERTICAL seams before taping HORIZONTAL seams for good shingle effect.*



## HORIZONTAL SEAMS

Repeat the process of taping and rolling the horizontal seams.



## FLASH SILL

Cut flashing tape to match outside width of jamb legs. Center the tape in RO, adhering into the sill bottom a minimum of 2".



Cut tape at face of jamb legs, and fold up past interior corner and across outside face of jamb



Adhere the tape from sill down and over the ThermalBuck and onto WRB.

Press AND roll the flashing tape across the sill for a good air & water seal.



## SHIM

Shim on top of the ThermalBuck if required.

Use one square inch of shim per 40 lbs. window.



## INSTALL WINDOW

*Consult window manufacturer's instructions before installing window.*

Fasten window through ThermalBuck with #10 screws or nails, angled slightly to ensure good penetration into the framing. Fasteners must penetrate min. 1 - 1/4" into the stud for structural attachment.



## FLASH JAMBS

Apply flashing tape to each jamb, starting at the top edge of ThermalBuck, and ending at the bottom edge of ThermalBuck.

Tape should cover the nail flange, ThermalBuck, and the transition on to ThermalTight panel.



Roll the tape to ensure a good air & water seal.



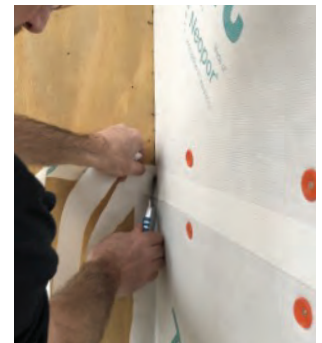
## FLASH HEAD

Cut flashing tape to extend 2" past outside edge of jamb tape.

Tape should cover nail flange, ThermalBuck, and transition on to ThermalTight panel.



Roll the tape, to ensure a good air & water seal.

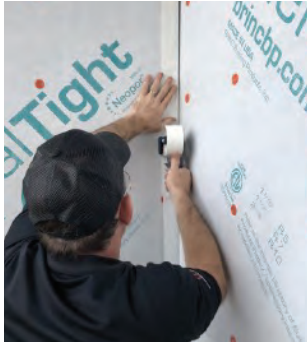


## INSIDE CORNERS

For inside corners, the panels need to overlap, and only one panel will need to have a flap. Cut flap off of first panel.

(You'll use the flap on adjacent panel to overlay the cut panel.)





## DOUBLE SIDED SEAM TAPE

Attach next panel on the opposite wall, and apply BRINC double-sided seam tape to face of trimmed panel.

Remove backer to expose adhesive.



## ROLL THE TAPE

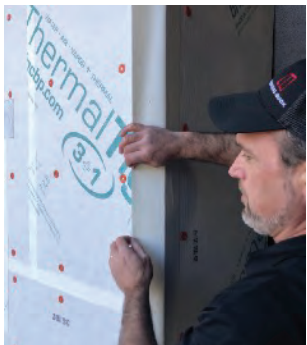
Fold the flap over trimmed panel. Flap should cover 2" of trimmed panel.

Roll the tape for a good air & water seal.



## OUTSIDE CORNERS

Cut flaps off of BOTH panels that meet at outside corners.



## FLASH

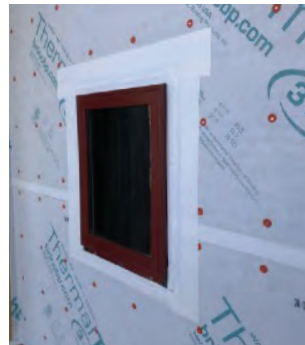
Flash the resulting corner seam with flashing tape. Ensure min. 2" coverage on face of each panel.

Run tape entire length of the corner joint to complete the continuous air & water barrier.



## ROLL THE TAPE

Roll the tape for a good air & water seal.



## INTERIOR SEAL

Use DAP 812 spray foam & DAP Dynaflex 800 sealant to create a back dam, and complete the interior air and water seal.

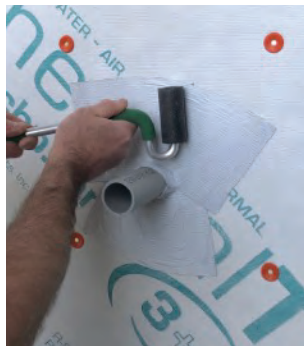
Seal *both* the transition of ThermalBuck to the window and to the framing.

# ThermalTight™ Penetrations Detailing



## CIRCULAR PENETRATIONS:

Starting at bottom, cut flex tape circumference of pipe. Remove release liner, and fold tape around pipe with top edge of tape pointed to opposite bottom side of pipe. Adhere tape to pipe, then stretch (flex) tape.



Cut flex tape 1-1/2 x the circumference of pipe for the top piece.

Repeat steps, then roll the tape for a good air & water seal.



## WIRE PENETRATIONS

Cut each piece of flashing tape to extend 2" onto WRB on all sides of the penetration.

Apply bottom piece first then top, making a complete seal around the wire.



Roll the tape for a good air & water seal.



## REPAIR MILD DAMAGE

Fill any holes in panel up to 1" with DAP Dynaflex 800.



## REPAIR MAJOR DAMAGE

Cut repair block oversize to replace any damage 1" or larger.

Trace block on wall and cut out.



Insert repair block into opening, ensure snug fit.



Cover seams with flashing tape. Roll the tape for a good air & water seal.



## Materials & Tools:

- ThermalTight panels
- ThermalBuck
- DAP Dynaflex 800 Sealant
- DAP 812 Spray Foam with accessories
- 1 - 3/4" & 2.0" Roofing Nails for ThermalBuck
- #10 Screws for flange (minimum penetration 1 - 1/4" into structure)
- Corrosion-proof ring shank nails with caps
- Z-Strip
- Window
- BRINC Flashing Tape, BRINC Flexible Flashing Tape, and BRINC Double-Sided Seam Tape
- Circular Saw
- Miter Saw
- Measuring Tape
- Utility Knife
- Level
- Hammer or Nail Gun
- J-Roller & Paddle for flashing tape
- Double-Sided tape dispenser (optional)
- Pencil/Marker
- Sealant Gun
- Safety Glasses & Hearing Protection

## Guidelines:

- Rough Opening must be sized 1/2" larger than window manufacturers' recommendations on each side (1" overall) to accommodate ThermalBuck.
- Refer to BRINC Building Product's installation guides for ThermalBuck and ThermalTight, and window manufacturers' instructions. Consider best practices for integrating the installation steps. *This is the responsibility of the architect, builder, consultant, and buyer.*
- Avoid inhaling dust particles from machining ThermalBuck & ThermalTight.
- Wear protective gear.
- Operate tools safely and follow manufacturers' operation guidelines.
- If injury occurs, seek medical attention immediately.

## Attention:

- 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 manufacturers' guidelines regarding material use, compatibility, preparation, personal safety, and disposal of any building materials.
- Any alterations to the installation instructions and recommended materials could cause failures.

**Note:** 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)



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