

BASIC USES

ThermalBuck™ is a patented mounting system for windows and doors with continuous (exterior) insulation.

ThermalBuck™ is designed to simplify installation of continuous insulation by extending the mounting point of windows and doors to create a flush plane for cladding. ThermalBuck™ limits thermal bridging around the rough opening and is air and watertight. ThermalBuck™ is compatible with all nail flange windows, most inset windows, and most continuous insulation systems, including mineral wool, structural insulated panels (SIPs), EPS, XPS, and polyiso.

PRODUCT DESCRIPTION

ThermalBuck™ is an engineered ROESE, or Rough Opening Extension Support Element, commonly known as a “window buck”. ThermalBuck™ is designed to extend the mounting point of windows and doors to meet the exterior insulation and/or rainscreen plane. Its unique “L” shape transfers the load of the window or door to the structure, and supports the weight of the window. ThermalBuck™ acts as a thermal break for the rough opening. It is air and watertight, insulated, and dimensionally stable. It will not rot, shrink, warp, rot, or expand like wood bucks.

COMPONENTS

COATING: The outer coating of ThermalBuck™ provides structural durability, flexibility, and water and air resistance. It is made of a polyurethane/polyurea hybrid. It is durable enough for nail gun installation.

- Tensile strength: 3,100 psi.
- Tear strength: 360 psi.

CORE: ThermalBuck™ contains a core of Type XIV high density EPS (Expanded Polystyrene) that combines the strength and durability of EPS with the natural water resistant properties of wax to provide a lasting water and thermal barrier. It contains termiticide to protect against pests.

- Density: 3 pcf
- Compressive strength: 40 psi

COMPONENTS (con't)

Total combined strength:

- Compressive strength: 52 psi
- Shear strength: 70 pli

PRODUCT DIMENSIONS

ThermalBuck™ is available in 8' lengths, with eight different depths to choose from. The “depth” describes the outward face of the product attached to the exterior of the structure. This depth is matched to the thickness of the exterior insulation and/or rainscreen.

ThermalBuck™ is currently available in these depths: 1.0”, 1.5”, 2.0”, 2.5”, 2.75”, 3.0”, 3.5” and 4.0”.

Detailed dimensions are included on page three of this technical data sheet.



WARRANTY

ThermalBuck™ performance is warranted by BRINC Building Products, Inc. when used as part of the ThermalTight™ System. Visit www.ThermalBuck.com or call 814-275-5002 to obtain limited warranty details.

MANUFACTURER

BRINC Building Products, Inc.
1270 Route 66
New Bethlehem, PA 16242
Phone: 814-275-5002
Website: www.ThermalBuck.com

**FOR PROFESSIONAL USE ONLY.
KEEP OUT OF THE REACH
OF CHILDREN.**

TECHNICAL DATA:

APPLICABLE STANDARDS & CORRESPONDING PHYSICAL PROPERTIES

PROPERTY	ASTM TESTING	VALUE	TEST METHOD
Compressive Strength	@10% deformation	52.4 psi	ASTM C165
Design Pressure	+203.01 psf	<0.5 mm (0.02")	ASTM E330/E330M
Design Pressure	-203.01 psf	<0.8 mm (0.03")	ASTM E330/E330M
Structural Pressure	±300.76 psf	<0.3 mm (<0.01")	ASTM E330/E330M
Water Penetration	9.19 psf	PASS	ASTM E547
Air Infiltration	1.57 psf	<0.01 cfm/ft²	ASTM E283
Air Infiltration	6.24 psf	<0.01 cfm/ft²	ASTM E283
Burn Test	Class A or 1 Fire Rating	FS<25, SD<450	ASTM E84
Composition	Type XIV EPS with polyurethane/polyurea resin coating - contains termiticide		

Technical Data:

R-Value

ThermalBuck Depth	1.0"	1.5"	2.0"	2.5"	2.75"	3.0"	3.5"	4.0"
R-Value @75°F	4.4	6.6	8.8	11	12.1	13.2	15.4	17.6
R-Value @40°F	4.8	7.2	9.6	12	13.2	14.4	16.8	19.2
R-Value @25°F	5.0	7.5	10	12.5	13.75	15	17.5	20

ESR-3753 THERMAL INSULATION
2009, 2012, 2015, 2018, and 2021
Energy Code Compliance

INSTALLATION

Choose a Sealant: In order to qualify qualify for warranty, install ThermalBuck™ such as DAP® DYNAFLEX® 800 or DAP® AMP® Window, Siding, and Door sealant.

Install ThermalBuck: The underside of each piece is coated with 3 beads of sealant, pressed firmly into the rough opening, and secured with 2" roofing nails through the 1/2" tongue every 10" to 12" (minimum 1-1/4" penetration into structure). ThermalBuck™ seams are sealed with approved sealant and should cure for 24 hours.

Install Window: The nail flange window is attached according to the window manufacturers' recommendations, directly through the ThermalBuck™ into the structure with nails or screws (minimum 1-1/4" penetration). Screws are preferred for window attachment and should be installed at an angle.

Flashing tape is not needed inside the rough opening. The transition of ThermalBuck™ and the sheathing is sealed, as well as the interior transitions to the window, and framing.

The interior sill is finished with any scrap material on hand. If shims are needed, preferred placement on the interior between jack stud and sill. If placed on ThermalBuck™ at the sill, 1" sq shim for every 40 lbs of window weight.

NOTE: Rough openings must be oversized 1/2" on all 4 sides to accommodate the 1/2" tongue of ThermalBuck™. Split pieces of ThermalBuck™ may be used on the jambs. Whole pieces are preferred at the head and sill, unless RO is larger than 8'.



ENVIROMENTAL

ThermalBuck™ does not contain vinyl or phthalates, CFCs, HFCs, or HCFCs, only air in the insulating cells. It does not contain ozone depleting gasses or emit VOCs.

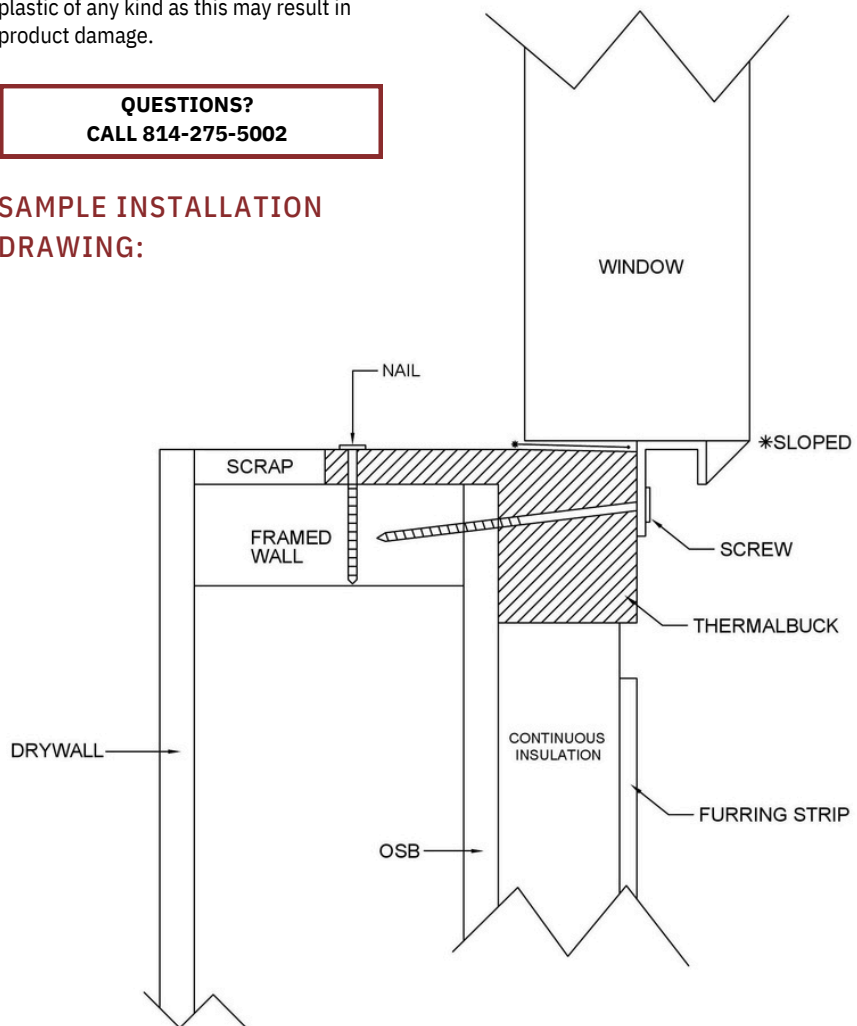
MAINTENANCE & STORAGE

No maintenance is required. Changes to color and sheen may occur within 3 month span of full UV exposure. No loss of physical properties should occur for 1 year or more.

ATTENTION: If storing ThermalBuck™ outdoors, cover with a waterproof, light-colored, opaque covering. DO NOT cover with clear, transparent, or black-colored plastic of any kind as this may result in product damage.

**QUESTIONS?
CALL 814-275-5002**

SAMPLE INSTALLATION DRAWING:



CUSTOMER SUPPORT

BRINC Building Products makes every effort to assist customers in the design, order, preparation, and installation of its products. Support services provided include photo and video installation instructions and jobsite training. For further information and assistance, please call 814-275-5002.

AVAILABILITY AND COST

Call BRINC Building Products at 814-275-5002 for latest availability information, including distributors or retailers in your region.

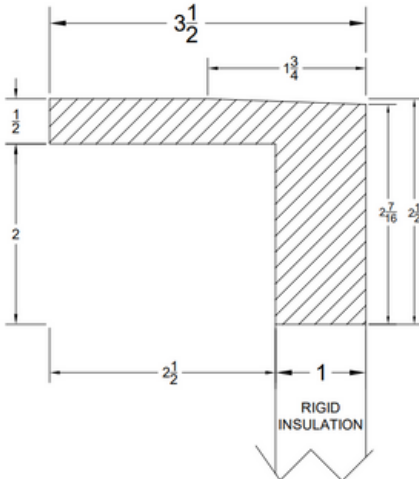
Rough Opening Preparation & Product Dimensions

- Allow 1/2" additional room on all sides of the rough opening (1" overall) than recommended by window manufacturers' instructions to accommodate the 1/2" tongue of ThermalBuck™.
- Consider continuous insulation and/or rainscreen depth.

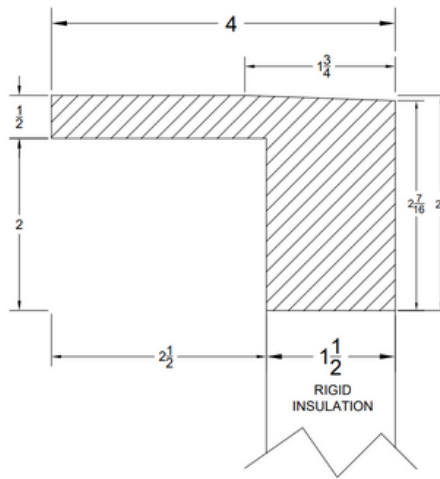
Note:

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 (FPI) with a Separate Water-Resistive Barrier (WRB). See www.ThermalBuck.com for details.

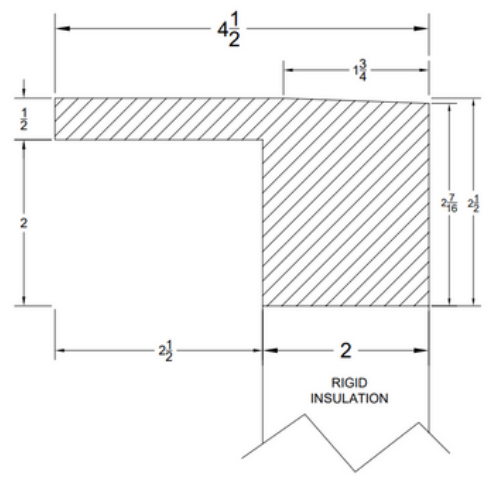
W0510 - 1" ThermalBuck™



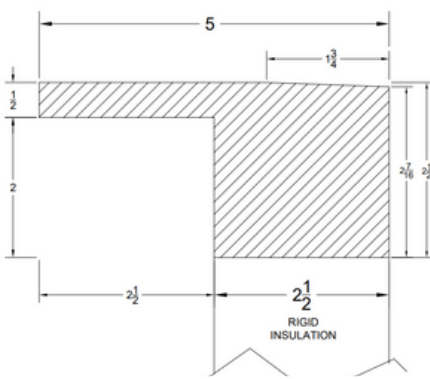
W0515 - 1.5" ThermalBuck™



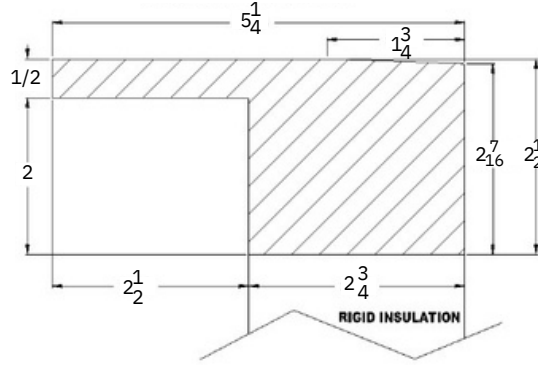
W0520 - 2" ThermalBuck™



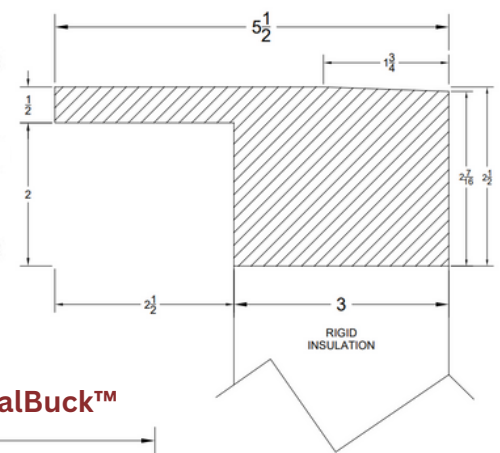
W0525 - 2.5" ThermalBuck™



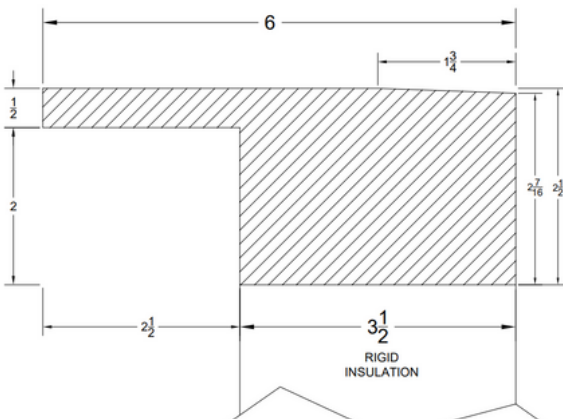
W0275 - 2.5" ThermalBuck™



W0530 - 3" ThermalBuck™



W0535 - 3.5" ThermalBuck™



W0540 - 4" ThermalBuck™

