

Insulation Products





Experience the **Carlisle Difference**

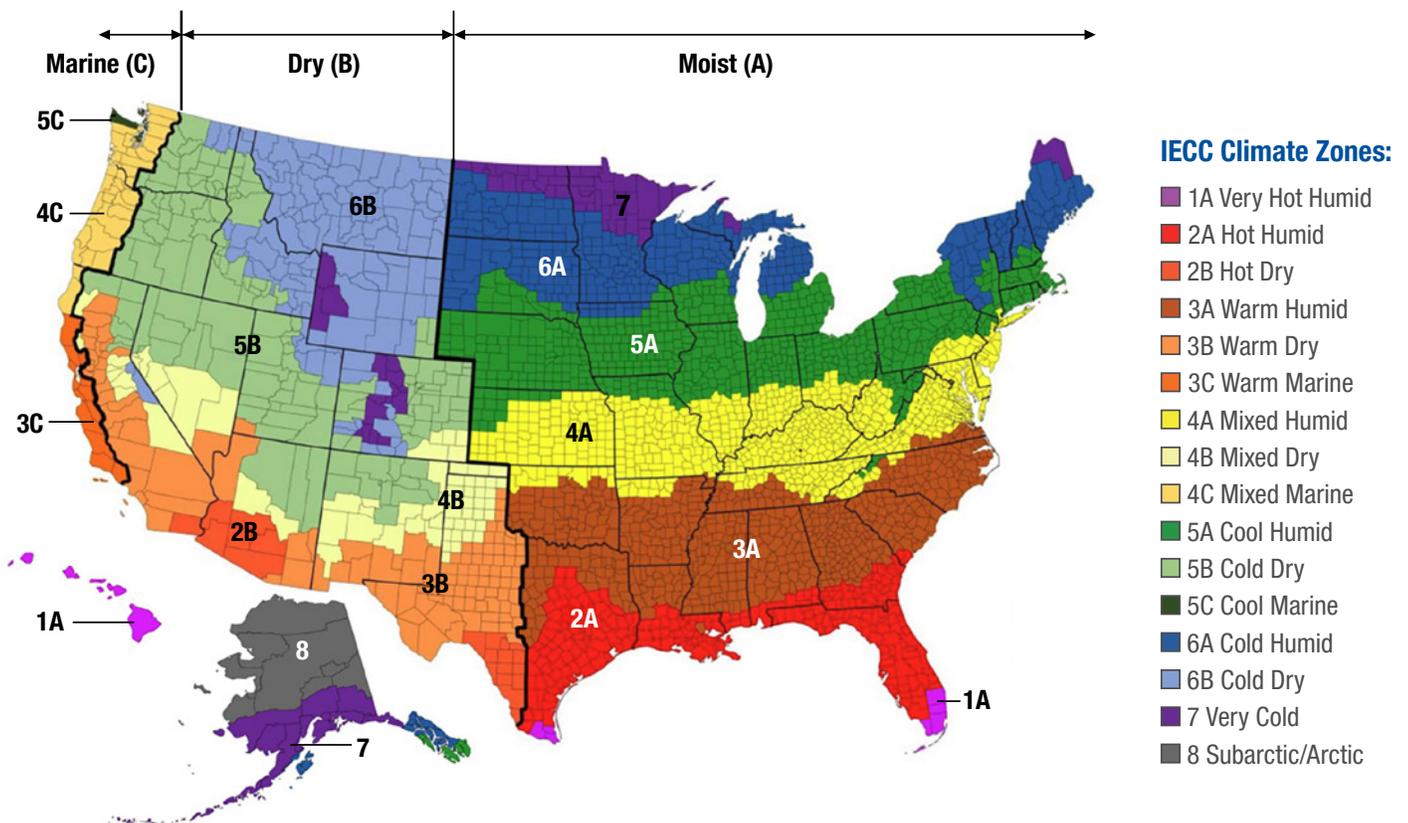
For over 50 years, the name Carlisle has been synonymous with high-quality, innovative commercial roofing materials. Since its inception as a company, Carlisle has been dedicated to providing construction professionals with the best products, services, and warranty programs on the market.

Today, as the world's largest supplier of commercial roofing materials, Carlisle's product offerings have grown but the company's mission remains much the same as it was 5 decades ago: developing and manufacturing the industry's most innovative, highest-quality products to enhance building performance and promote sustainability.

One of the simplest ways to support sustainability through construction practices is through the use of insulation. Carlisle's lightweight, cost-effective polyisocyanurate (polyiso) insulation products provide energy-efficient solutions for buildings in any region and climate, as well as outstanding return on investment and significant energy savings. With an industry leading eight polyiso manufacturing lines strategically positioned throughout North America, Carlisle is able to provide on-time delivery of its innovative insulation products to any jobsite.

Energy Codes and R-Value Minimums

The International Energy Conservation Code (IECC) sets the minimum efficiency standards for new construction for both residential and commercial buildings. Its aim is to ensure buildings are designed and constructed to minimize energy consumption and promote resource conservation over a building's lifespan. The IECC uses the ASHRAE climate zone map to determine minimum R-values.



To learn more about Minimum Insulation R-value Requirements by State, scan here:

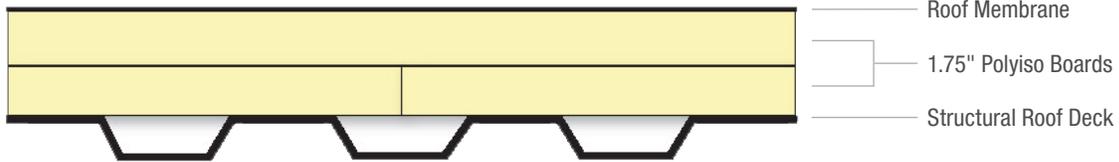


Disclaimer: The information contained in this document is meant to be used as a quick reference guide for insulation levels across the United States. The information was gathered from the Polyisocyanurate Manufacturers Association (PIMA). Final verification of actual insulation levels required for a specific project should be verified with the Local Authority Having Jurisdiction (AHJ) before construction.

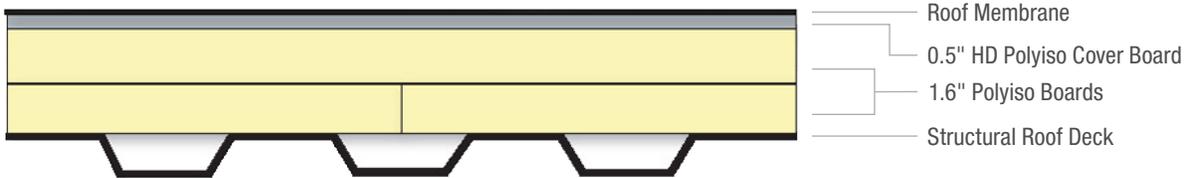


Hitting Common Minimum R-Values with

R-20



Two layers of 1.75" polyiso	R-20.0
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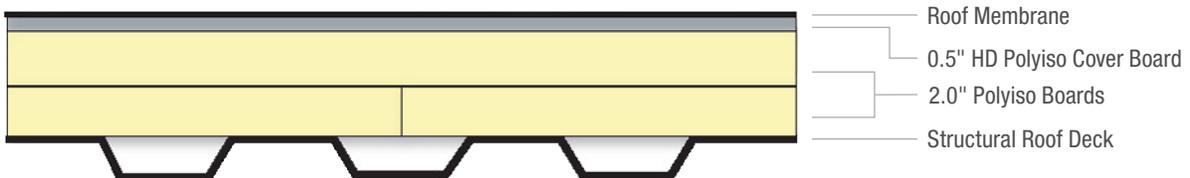


Two layers of 1.6" polyiso	R-18.2
0.5" HD polyiso cover board	R-2.5
Total	R-20.7

R-25



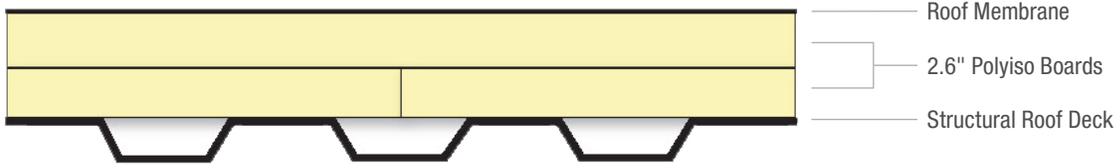
Two layers of 2.2" polyiso	R-25.2
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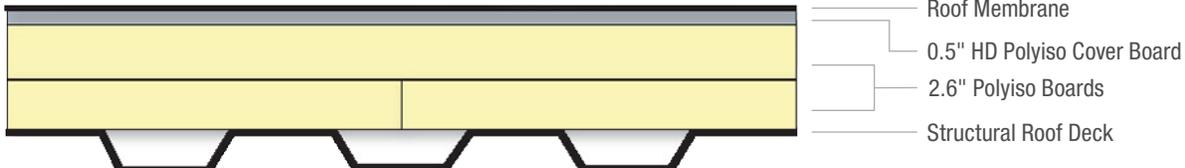
Two layers of 2.0" polyiso	R-22.8
0.5" HD polyiso cover board	R-2.5
Total	R-25.3

Polyisocyanurate Insulation

R-30

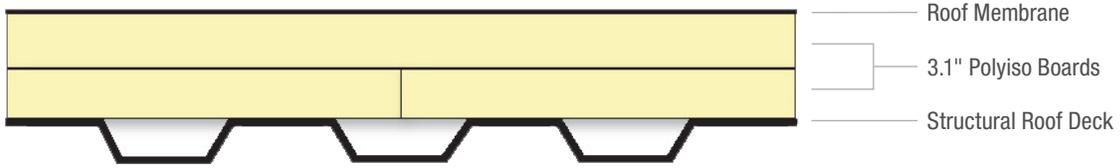


Two layers of 2.6" polyiso	R-30
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Two layers of 2.4" polyiso	R-27.6
0.5" HD polyiso cover board	R-2.5
Total	R-30.1

R-35



Two layers of 3.1" polyiso	R-36.0
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Two layers of 2.9" polyiso	R-33.6
0.5" HD polyiso cover board	R-2.5
Total	R-36.1

Improve Rooftop Productivity

Increase rooftop productivity with Carlisle's Flexible FAST™ Dual Tank Adhesive, a two-component, construction-grade, low-rise polyurethane adhesive designed for bonding insulation to various substrates.



- » Reduces labor by eliminating equipment maintenance and breakdowns.
- » Application time reduced up to 15% when compared to low-pressure dispensing machines.
- » Increased productivity when Dual Tanks are used simultaneously (each additional Dual Tank can increase productivity up to 100%).

Flexible FAST Dual Tank Adhesive Is Compatible With:

InsulBase® Polyiso, SecurShield® Polyiso, expanded polystyrene (EPS), extruded polystyrene (XPS), and spray polyurethane foam (new or scarified SPF). Compatible deck types include concrete, cellular lightweight concrete (LWC), gypsum, cementitious wood fiber, wood, and painted or galvanized steel.

Flexible FAST Dual Tank Adhesive is also compatible with the following roofing materials: smooth (previously exposed) BUR, mineral cap sheets, smooth (previously exposed) or granulated mod bit, aged EPDM, aged Hypalon®, and Carlisle's VapAir Seal™ 725TR Air and Vapor Barrier.

PRECISION YOU CAN SEE, EFFICIENCY YOU CAN COUNT ON

A Temperature Sensing Gun is included in every Flexible FAST Dual Tank Adhesive set. It provides continuous, real-time monitoring of adhesive temperature to help ensure every application is delivered at the ideal material temperature.

The TSG Delivers:

- » Real-time temperature sensing that continuously monitors adhesive temperature as material flows through the gun
- » Integrated blue, green, and red LED indicators that provide immediate visual confirmation of proper application conditions
- » Reduced risk of installation errors and material waste by clearly identifying out-of-range temperatures before application
- » Up to 75% reduced trigger force and ergonomic design to minimize installer fatigue during extended use
- » Improved flow control and application consistency to support uniform coverage and reliable curing



By eliminating guesswork related to material temperature, the TSG helps mitigate common installation risks associated with cold or overheated adhesive, including poor adhesion, inconsistent curing, and rework.

ReadyFlash

TECHNOLOGY

ReadyFlash™ Technology allows contractors to manipulate adhesive flash-off times by choosing between a light and dark facer found on every board. The dark side of the panel can increase surface temperatures up to 10°F for the glass-reinforced felt (GRF) panel and up to 50°F for the coated glass facer (CGF) panel above ambient temperatures. The light side of the panel can decrease surface temperatures up to 5°F for the GRF panel and up to 25°F for the CGF panel.



To learn more about ReadyFlash Technology, scan here:



Fastening Patterns

Looking for how to hit FM
1-90, 1-150, or 1-225?
Check out our fastening page!



Polyisocyanurate Insulation Options

INSULBASE™

A rigid roof insulation panel composed of a closed-cell polyisocyanurate foam core bonded on each side to glass-reinforced felt. This panel comes standard with ReadyFlash Technology.

Available Thicknesses: 0.5" – 4.5"

Available Panel Sizes: 4' x 4', 4' x 8', and 4' x 12' (limited thicknesses)

Insulation Attachment Type: Mechanically Fastened or Fully Adhered with Flexible FAST™ Adhesive

Membrane Attachment Type: Mechanically Fastened, Fully Adhered, Ballasted



INSULBASE ECO

A rigid roof insulation panel that contributes to carbon reduction initiatives through a mass balance approach under ISCC PLUS compliance. This product is composed of a closed-cell bio-content polyisocyanurate foam core bonded on each side to glass-reinforced felt. The amount of bio content can range between 5-49% and can be adjusted based on a building's needs. This panel comes standard with ReadyFlash Technology.

Available Thicknesses: 2.0" and 2.6"

Available Panel Sizes: 4' x 4', 4' x 8', and 4' x 12'

Insulation Attachment Type: Mechanically Fastened or Fully Adhered with Flexible FAST Adhesive

Membrane Attachment Type: Mechanically Fastened, Fully Adhered, Ballasted



INSULBASE NH

An LBC “Red List Free” rigid roof insulation panel composed of a closed-cell polyisocyanurate foam core bonded on each side to glass-reinforced felt. This product contains zero halogenated flame retardants.

Available Thicknesses: 0.5" – 4.5"

Available Panel Sizes: 4' x 4' and 4' x 8'

Insulation Attachment Type: Mechanically Fastened,
Fully Adhered with Flexible FAST Adhesive

Membrane Attachment Type: Mechanically Fastened,
Fully Adhered, Ballasted



INSULBASE RAPIDLOCK (RL™)

A rigid roof insulation panel composed of a closed-cell polyisocyanurate foam core bonded on each side to glass-reinforced felt. The RapidLock roofing system is an attachment method using VELCRO® Brand Securable Solutions in which the insulation panel acts as the hook and the FleeceBACK® membrane acts as the loop for a fully adhered, adhesiveless system.

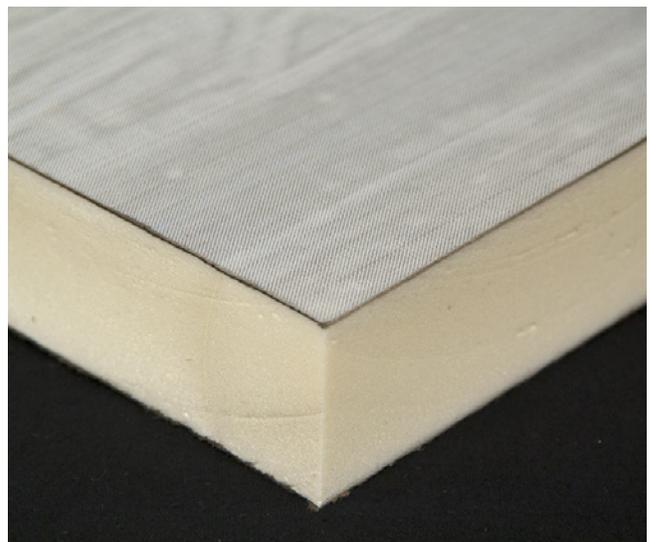
Available Thicknesses: 2.0" and 2.6"

Available Panel Size: 4' x 8'

Insulation Attachment Type: Mechanically Fastened or
Fully Adhered with Flexible FAST Adhesive

Membrane Attachment Type: Hook and Loop with FleeceBACK
RapidLock Membranes

R-Value: 11.4



SECURSHIELD®

A rigid roof insulation panel composed of a closed-cell polyisocyanurate foam core bonded on each side to a coated glass facer (CGF). This panel comes standard with ReadyFlash Technology. Utilize the dark size to increase surface temperatures up to 50°F above ambient temperatures or the light side to decrease temperatures up to 10°F below ambient temperatures.

Available Thicknesses: 0.5" – 4.5"

Available Panel Sizes: 4' x 4' and 4' x 8'

Insulation Attachment Type: Mechanically Fastened, Fully Adhered with Flexible FAST

Membrane Attachment Type: Mechanically Fastened, Fully Adhered, Ballasted



SECURSHIELD ECO

A rigid roof insulation panel that contributes to carbon reduction initiatives through a mass balance approach under ISCC PLUS compliance. This product is composed of a closed-cell bio-content polyisocyanurate foam core bonded on each side to a coated glass facer (CGF). The amount of bio content can range between 5-49% and can be adjusted based on a building's needs. This panel comes standard with ReadyFlash Technology.

Available Thicknesses: 2.0" and 2.6"

Available Panel Sizes: 4' x 4', 4' x 8', and 4' x 12'

Insulation Attachment Type: Mechanically Fastened or Fully Adhered with Flexible FAST Adhesive

Membrane Attachment Type: Mechanically Fastened, Fully Adhered, Ballasted



SECURSHIELD NH

An LBC "Red List Free" rigid roof insulation panel composed of a closed-cell polyisocyanurate foam core bonded during the manufacturing process to premium-performance coated glass facers. SecurShield NH contains zero halogenated flame retardants.

Available Thicknesses: 0.5" – 4.5"

Available Panel Sizes: 4' x 4' and 4' x 8'

Insulation Attachment Type: Mechanically Fastened, Fully Adhered with Flexible FAST

Membrane Attachment Type: Mechanically Fastened, Fully Adhered, Ballasted



SECURSHIELD RAPIDLOCK

A rigid roof insulation panel composed of a closed-cell polyisocyanurate foam core bonded on each side to glass-reinforced felt. The RapidLock roofing system is an attachment method in which the insulation panel acts as the hook and the FleeceBACK membrane acts as the loop for a fully adhered, adhesiveless system.

Available Thicknesses: 2.0" and 2.6"

Available Panel Size: 4' x 8'

Insulation Attachment Type: Mechanically Fastened or Fully Adhered with Flexible FAST Adhesive

Membrane Attachment Type: Hook and Loop with FleeceBACK RapidLock Membranes



INSULBASE TAPERED

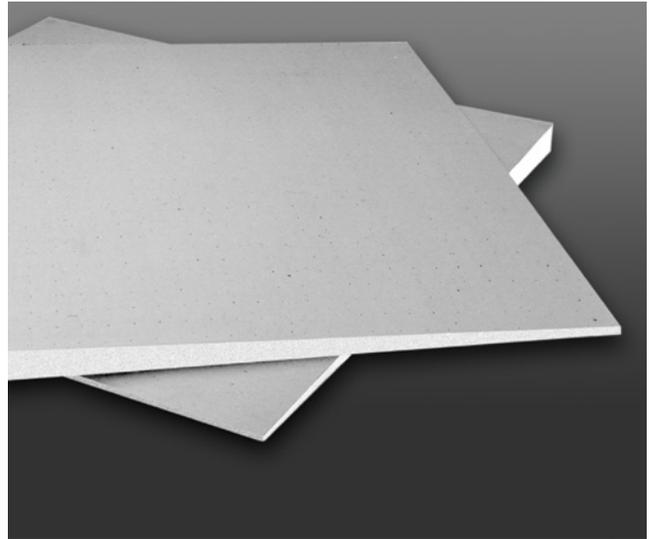
A sloped rigid roof insulation panel composed of a closed-cell polyisocyanurate foam core bonded during the manufacturing process to fiber-reinforced paper facers.

Available Slopes: $\frac{1}{8}$ " , $\frac{1}{4}$ " , $\frac{3}{8}$ " , and $\frac{1}{2}$ " per foot

Available Panel Sizes: 4' x 4' and 4' x 8'

Insulation Attachment Type: Mechanically Fastened or Fully Adhered with Flexible FAST Adhesive

Membrane Attachment Type: Mechanically Fastened, Fully Adhered, Ballasted



SECURSHIELD TAPERED

A rigid roof insulation panel composed of a closed-cell polyisocyanurate foam core laminated on-line to a premium-performance coated glass facer.

Available Slopes (20 psi): $\frac{1}{8}$ " , $\frac{1}{4}$ " , $\frac{3}{8}$ " , and $\frac{1}{2}$ " per foot

Available Slopes (25 psi): $\frac{1}{16}$ " , $\frac{1}{8}$ " , $\frac{3}{16}$ " , $\frac{1}{4}$ " , $\frac{3}{8}$ " , and $\frac{1}{2}$ " per foot

Available Panel Sizes: 4' x 4' and 4' x 8'

Insulation Attachment Type: Mechanically Fastened or Fully Adhered with Flexible FAST Adhesive

Membrane Attachment Type: Mechanically Fastened, Fully Adhered, Ballasted



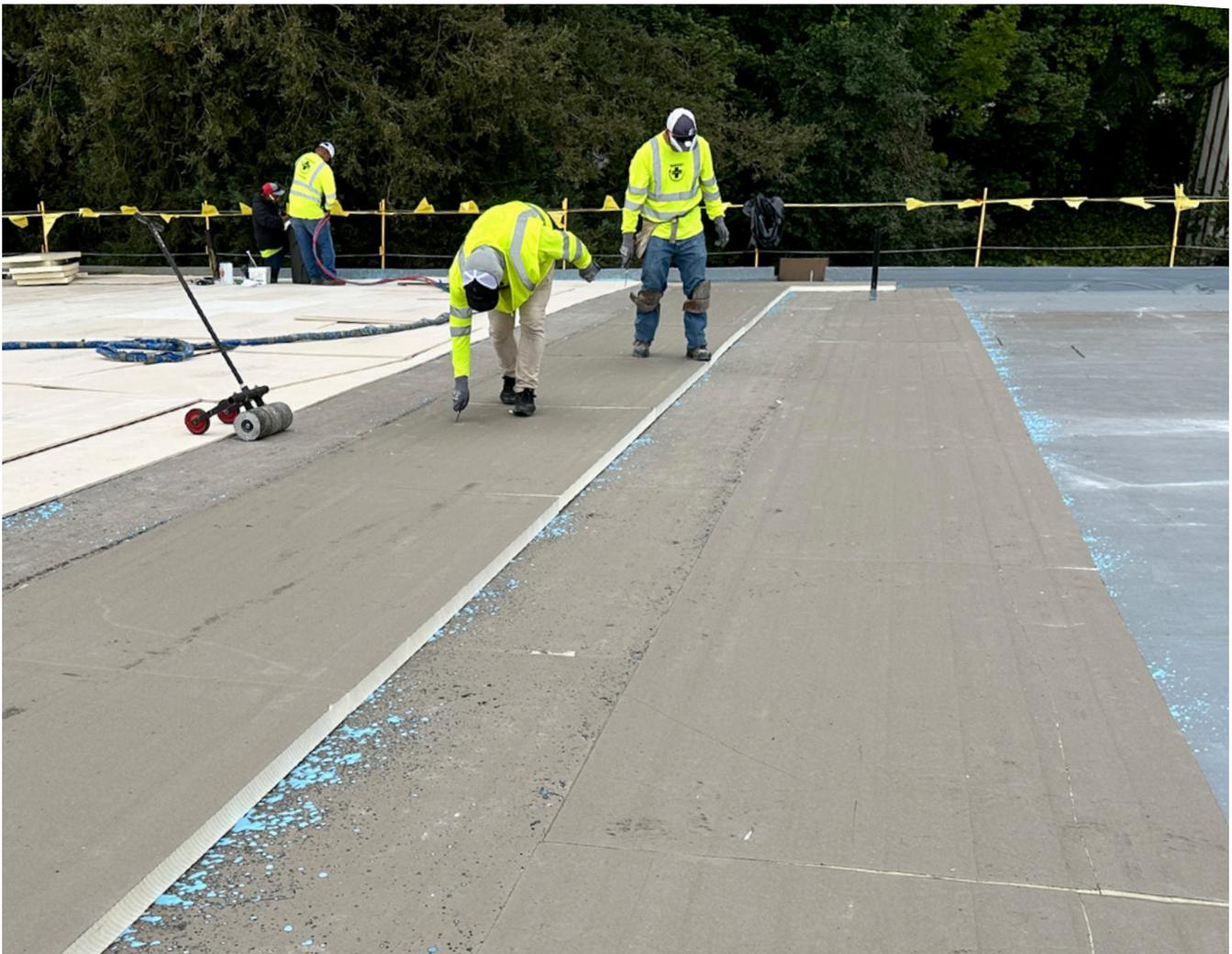
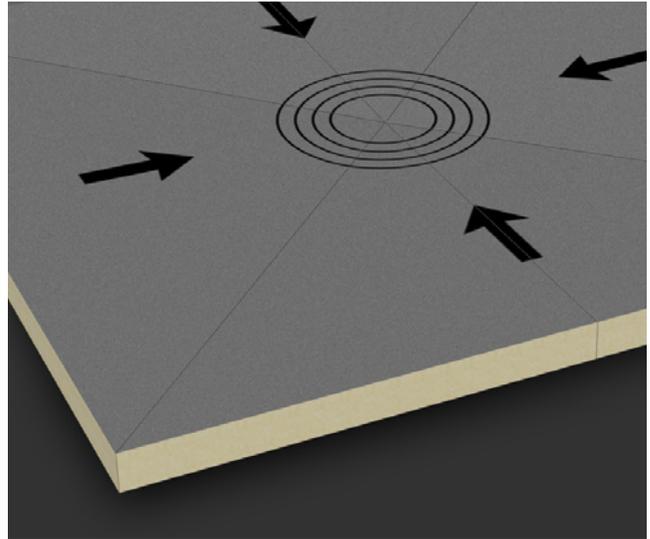
TARGET SUMP AND HINGED TARGET SUMP

8' x 8' Hinged Target Sumps are pre-assembled with Tapered H-Shield or Tapered H-Shield CG 25 PSI. Sumps have perimeter edge thicknesses of 1.5", 2", 2.5", or 3".

4' x 4' Target Sumps are manufactured with Tapered H-Shield CG 25 PSI only. This sump comes pre-assembled with a 1/2" slope in thicknesses of 0.5" to 2.0".

Insulation Attachment Type: Mechanically Fastened or Fully Adhered with Flexible FAST Adhesive

Membrane Attachment Type: Mechanically Fastened, Fully Adhered, Ballasted



EXTENDED TAPERED PANELS

An extended panel repeat uses more tapered panels and less fill — therefore, fewer panels are installed saving money on material handling, labor costs, adhesive costs and time. Extended panels are recommended for fully-adhered membrane systems where the insulation is installed using low rise foam. Below is a typical comparison to show the savings.

STANDARD PANEL SYSTEM

Standard Panel Repeat: X, Y, 2" – 2" Fill Required – 1013 squares

Standard Panel Quote \$94,600

Adhesive Costs \$50,650
(1013 squares of fill x \$50)

MATERIALS \$145,250

EXTENDED PANEL SYSTEM

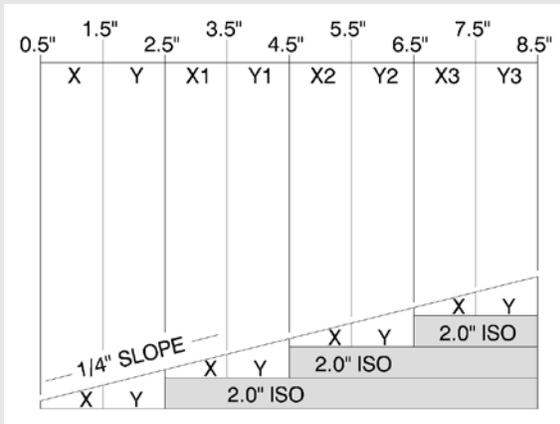
Extended Panel Repeat: X, Y, Z, ZZ, 4" – 4" Fill Required – 402 squares

Extended Panel Quote \$100,800

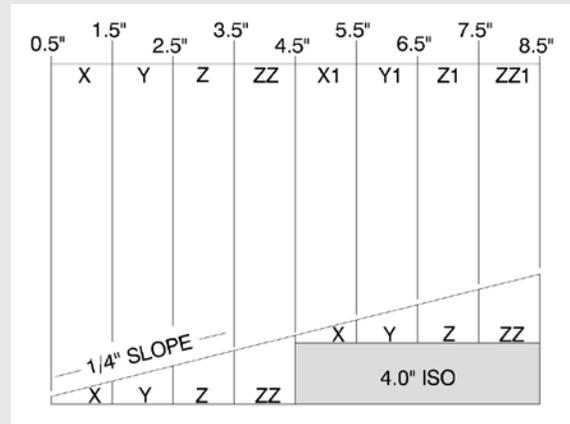
Adhesive Costs \$20,100
(402 squares of fill x \$50)

MATERIALS \$120,900

STANDARD PANEL REPEAT



EXTENDED PANEL REPEAT



TOTAL MATERIAL SAVINGS OF \$24,350

LABOR SAVINGS

- » 60% less squares of applied material
- » 60% less adhesive required

EPS Insulation Options

INSULFOAM EPS

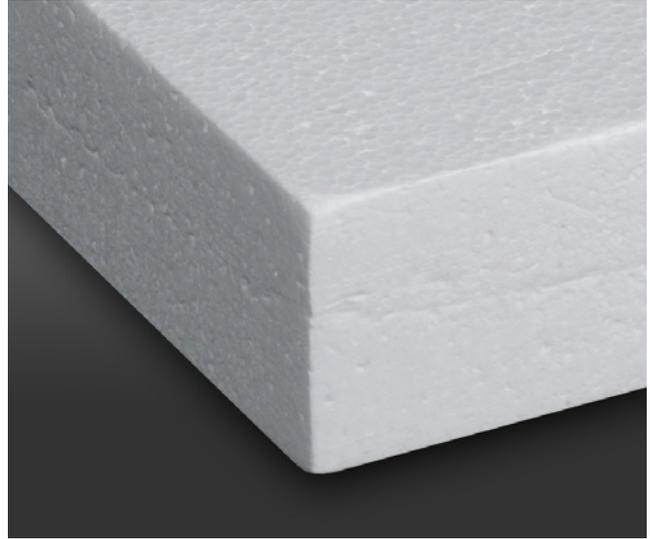
A rigid insulation board composed of closed-cell, lightweight expanded polystyrene (EPS).

Available Thicknesses: ¼" – 10"

Available Panel Sizes: 4' x 4' and 4' x 8'

Insulation Attachment Type: Mechanically Fastened or Fully Adhered

Membrane Attachment Type: Mechanically Fastened, Fully Adhered, Ballasted



INSULFOAM EPS FLUTE FILL

A custom-made, engineered insulation consisting of a superior closed-cell, lightweight expanded polystyrene (EPS).

R-Value: 3.85 per inch

Insulation Attachment Type: Mechanically Fastened or Fully Adhered

Membrane Attachment Type: Mechanically Fastened, Fully Adhered, Ballasted



INSULFOAM TAPERED EPS

An engineered insulation made of closed-cell, lightweight expanded polystyrene (EPS).

Available Thicknesses: 1/8" – 40.0"

Available Slope: No Limitations to Available Slope Per Foot

Available Panel Sizes: 4' x 4' and 4' x 8'

Insulation Attachment Type: Mechanically Fastened or Fully Adhered

Membrane Attachment Type: Mechanically Fastened, Fully Adhered, Ballasted



CHANNELDRY® EPS

A lightweight, closed-cell expanded polystyrene to be used in conjunction with one-way and two-way relief vents that allows the installation of the roof system to begin upon structural cure of concrete.

Available Thickness: 2.0"

Available Panel Size: 4' x 4'

R-Value: 7.1

Insulation Attachment Type: Mechanically Fastened, Fully Adhered

Membrane Attachment Type: Mechanically Fastened, Fully Adhered, Ballasted, Induction Welded



XPS Insulation Options

OWENS CORNING FOAMULAR®

XPS insulation is a closed-cell, moisture-resistant, rigid foam board ideal for many roofing applications, including single-ply, inverted roof membrane assemblies, tapered, vegetative roofs, plaza decks, and recover roofing.

Products Available: THERMAPINK 25 (Type IV), FOAMULAR 404 (Type VI), FOAMULAR 604 (Type VII), FOAMULAR Tapered Products

R-Value: 0.5 per inch

Insulation Attachment Type: Mechanically Fastened, Fully Adhered

Membrane Attachment Type: Mechanically Fastened, Fully Adhered



DUPONT™ STYROFOAM™ BRAND DECKMATE™ PLUS

XPS foam insulation is designed specifically to provide membrane support for conventional low-slope roof applications.

Available Thicknesses: 1.0" – 4.0"

Available Panel Sizes: 2' x 8' and 4' x 8'

Insulation Attachment Type: Fully Adhered

Membrane Attachment Type: Fully Adhered



Mineral Wool Insulation Options

ROXUL TOPROCK® DD AND TOPROCK DD PLUS

Rigid mineral wool insulation boards with rigid upper surfaces for durability and enhanced strength.

Available Thicknesses: 2.0" – 6.0"

Available Panel Size: 4' x 4'

Insulation Attachment Type: Mechanically Fastened

Membrane Attachment Type: Mechanically Fastened, Ballasted



Looking for our cover board options?

Scan the QR code to check out our cover board brochure.



EXPERIENCE THE CARLISLE DIFFERENCE



800-479-6832 | P.O. Box 7000 | Carlisle, PA 17013 | Fax: 717-245-7053 | www.carlisesyntec.com