Roofing Insulation

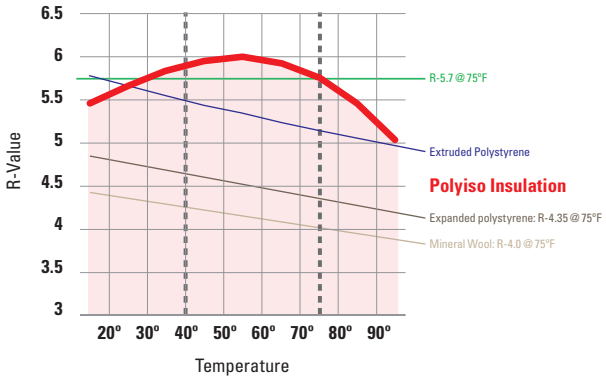
THINK POLYISO INSULATION CAN'T HANDLE THE ELEMENTS? THINK AGAIN.

POLYISO INSULATION

High-performing, cost-efficient polyiso insulation delivers the **highest R-value per inch in real-world conditions**, making it the smartest investment you can make when insulating your roof.

Firestone Building Products is proud to offer ISO 95+™ GL Insulation, Tapered ISO 95+ Insulation and RESISTA™ Insulation—four outstanding polyiso insulation products that will keep your building totally covered no matter the season.

R-Values and Temperatures



Data presented in *Professional Roofing Magazine*

HIGH PERFORMANCE INSULATION = HUGE COST SAVINGS

- Reduced blocking thickness
- Shorter fasteners
- Thinner, lighter boards that ease contractor labor and associated costs
- Need for fewer pallets of insulation, resulting in reduced handling and crane fees

PRODUCT BENEFITS

- Easy to install
- Does not require thermal barrier because it acts as one (per IECC 2012 ASHRAE 90.1)
- Will not soften or melt when exposed to extreme temperatures
- Excellent compressive strength allows insulation to stand up to foot traffic from routine maintenance
- Requires less embodied energy to manufacture

SEE FULL DETAILS ON OTHER SIDE >

Firestone BUILDING PRODUCTS
NOBODY COVERS YOU BETTER.™

Let's Get Real About R-Values.

A 2010 National Roofing Contractor Association (NRCA) study used applicable ASTM standards to test fifteen 2-inch samples of polyiso roof insulation against four mean temperatures: 110°F, 75°F, 40°F and 25°F.

In a recent bulletin, the NRCA recommended that to calculate design R-value,* roof designers should use a value of R-5.0 in all climates, based on the assumption that the appropriate reference temperature should be somewhere between 25°F and 45°F.

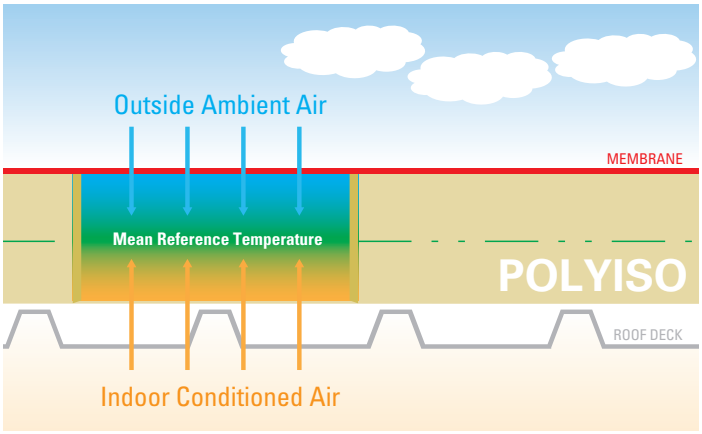
However, based on actual climate data evaluated by the Polyisocyanurate Insulation Manufacturers Association (PIMA) **(See Chart A)**, the most suitable mean winter heating reference temperature for testing roof insulation R-value should be:

NO LESS THAN 45°F FOR THE COLDEST CLIMATES, AND UP TO 70°F FOR THE WARMEST CLIMATES.

After previously published average R-value data is applied to the 45- to 70-degree mean reference temperature range, the R-values calculated do not vary significantly **(See Chart B)**—and the notion of a design temperature of 5.0 is rendered unrealistic.

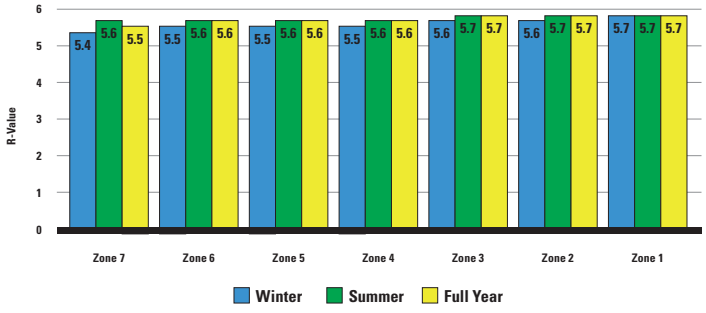
In real-world conditions,
Firestone polyiso insulation *outperforms,* every time!

Chart A. Mean Winter Reference Temperatures



Climate Zone	Mean Ambient Temperature	Mean Reference Temperature	Mean Indoor Temperature
1	71°F	70°F	68°F
2	56°F	63°F	68°F
3	49°F	59°F	68°F
4	39°F	54°F	68°F
5	36°F	52°F	68°F
6	28°F	48°F	68°F
7	22°F	45°F	68°F

Chart B. Average Polyiso R-Value by Climate Zone
Uses 2010 data rounded to 0.1 R-value as published by PIMA



* The design R-value is the R-value multiplied by the inches of insulation needed

For more information, contact your local Sales Rep or visit FBPE.CO/POLYISO

FIRESTONE BUILDING PRODUCTS
250 WEST 96TH ST., INDIANAPOLIS, IN 46260
CORPORATE OFFICE: (800) 428-4442 • (317) 575-7000

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