

TECHNICAL BULLETIN # 1015

SUBJECT: INSULFOAM EPS in COLD TEMPERATURE APPLICATIONS

DATE: MAY 13, 2005 [REV. APRIL 3, 2008]

Insulfoam EPS is used in many different environments including very cold applications. Insulfoam EPS does not become brittle in subzero applications and unlike some other insulating materials the insulative value (R-Value) increases as the temperature decreases. The following chart is provided as an R-Value guide for Insulfoam EPS used in below 55° F applications:

Design R-Values*

Type Insulfoam EPS	Temperatures						
	-100° F (-73.3° C)	-75° F (-59.4° C)	-50° F (-45.6° C)	-25° F (-31.7° C)	0° F (-17.8° C)	20° F (-6.66° C)	55° F (12.77° C)
I	5.9	5.3	5	4.8	4.5	4.4	4.15
VIII	6.0	5.6	5.3	5.0	4.7	4.6	4.25
II	6.3	5.9	5.4	5.1	4.85	4.8	4.5
IX	6.7	6.3	5.6	5.3	5.1	4.9	4.7
XIV	6.9	6.5	5.8	5.6	5.25	4.95	4.75
XV	7.0	6.6	5.9	5.75	5.3	5.05	4.85

*Values based on "ASHRAE Handbook Fundamentals 2001" and resin supplier data

Further questions pertaining to the R-Value of Insulfoam EPS can be made to Insulfoam-Technical Center at 1/800-469-8870.