DESIGN ADVISORY

September 4, 2013

TO: Design Professionals,

On January 1, 2014, changes to R-values for Polyisocyanurate insulation will go into effect in accordance with the newly updated ASTM C1289-11 standard for insulation testing. This standard brings new testing methods for the determination and calculation of Long-Term Thermal Resistance (LTTR) values.

The LTTR values are based on consensus standards in both the United States and Canada, which are determined based on a scientific method. This method predicts the product's R-value after five years, which is equivalent to a time-weighted thermal design R-value for fifteen years.

All manufacturers who are members of the Polyisocyanurate Insulation Manufacturers Association (PIMA) have adopted the new LTTR method to measure thermal performance of permeable-faced Polyiso roof insulation. In accordance with test protocol, manufacturers voluntarily submit to third-party testing to certify LTTR values for Polyiso insulation products through the industry-leading QualityMark^{cm} Program.

In light of the above, the testing method used to calculate R-values will change, however, the physical properties of the products will not be altered. Additional information can be found on the PIMA website www.polyiso.org or by accessing the insulation page on the Carlisle website www.carlislesyntec.com.

The chart below illustrates the impact of the changes on both LTTR and R-Value.

Insulation Thickness	Old 2010 R Value (Per ASTM C1289-08)		New 2014 R Value (Per ASTM C1289-11)	
	LTTR Value	R/Inch	LTTR Value	R/Inch
1.5"	9	6	8.5	5.7
1.9"	10.8	6	11.5	5.7
2"	12.1	6	11.4	5.7
2.5"	15.3	6.1	14.4	5.8
2.6"	15.9	6.1	15	5.8
3"	18.5	6.2	17.4	5.8
4"	25	6.2	23.6	5.9

For comments, questions or concerns may be directed to the undersigned.

Sincerely,

Janial Mack

Strategic Accounts Segment Manager