

# Revised LTTR Values for Polyiso Effective 01/01/2014

The ASTM C 1289 Standard Specification for Faced Rigid Cellular Polyisocyanurate Thermal Insulation Board (ASTM C 1289-11) has been updated and features important improvements regarding the prediction of long-term thermal resistance ("LTTR") value for a variety of polyiso insulation boards. As a participating member of the Polyisocyanurate Insulation Manufacturers Association (PIMA), GAF has voluntarily joined the PIMA QualityMark program, the only third-party program for the certification of the thermal value of polyiso insulation, and along with other members will begin reporting long-term thermal resistance (LTTR) values in accordance with ASTM C 1289-11 on January 1, 2014. The QualityMark program was developed by PIMA and is administered by FM Global.

To participate in PIMA QualityMark Certification program, a Class 1 roof is required to have a minimum design R-value of 5.7 per inch. Please find a comparison R-value by thickness table below. Polyiso is unique in that the R-value increases with the thickness of the foam, so three inches of polyiso has a higher R-value per inch than two inches, and polyiso remains the highest R-value per inch of any insulation available.

Thickness (Inches)	2010 LTTR (ASTM C 1289)	2014 LTTR (ASTM C 1289-11)	2014 LTTR per Inch
1 ½"	9.0	8.5	5.7
2"	12.1	11.4	5.7
3"	18.5	17.4	5.8
4"	25	23.6	5.9

How does this affect me?

## Specifiers and Designers:

- The product is the same just the test method has improved.
- For 2014 project planning please use design R-value of 5.7 per inch.
- During this transition period specify polyiso insulation by its thickness, not R-value, based on the required R-value for specific project conditions.

## Contractors and Distributors:

- The product is the same just the test method has improved.
- No action required on 2013 projects.
- For 2014 project refer to revised LTTR values, and encourage Designers to specify polyiso insulation by its thickness not R-value.
- Distributors may decide to adjust commonly stocked thicknesses to compensate for the revised LTTR values.

In preparation for January 1, 2014, GAF will be updating all its EnergyGuard literature and supporting website documents by no later than October 1, 2013. For any further information please contact technical services at 1-800-766-3411 or your local GAF Territory Manager.