

If we have a project that will be installing after January 1st 2014, we will need to have the new LTTR R-value numbers on our job site. WE NEED TO CONTACT OUR ROOFERS AND VERIFY THAT THIS CHANGE IS TAKING PLACE ON OUR JOBSITE.



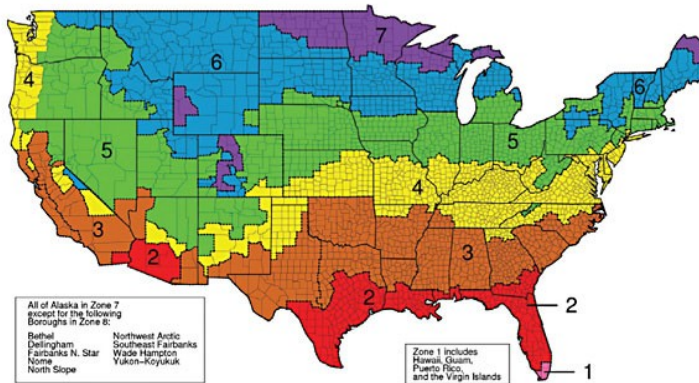
As of January 1st, 2014, the LTTR R-Value for Polyisocyanurate (Polyiso) roof insulation (the most common type) is being reduced due to more advanced testing procedures and code requirements.

What you will need to understand and how this might impact your project is identified in this Quality Technical Bulletin.

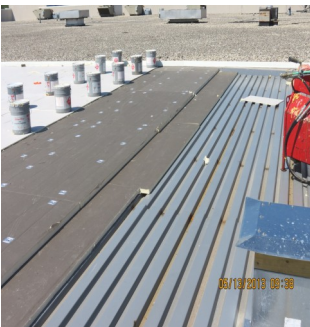
Corey Zussman, AIA, NCARB - Director of Quality Management

New Roof Insulation Requirements starting January 1st 2014:

- The LTTR (long-term thermal resistance) value is being tested in a more precise way, giving us a more accurate expected long term R-value numbers. LTTR is used for the R-value for roofing insulation.
- The Insulation material is not being affected by this change.
- This change **DOES NOT** affect the R-value for wall or foundation insulation.
- This will affect most manufacturers throughout the industry. Some manufacturers who use special blowing agents in order to make the product might not be affected...however, the manufacturers we typically see in our industry and regions for roof insulation will have new R-value data.
- The insulation thickness to achieve the code requirements is changing. We will now need more thickness of insulation in order to achieve the required R-value...see table and map below:



- This will change the height of our insulation in most cases.** If you have a parapet condition, MEP curbs, flashing at openings, etc. we need to review the new height of the roofing and make sure there is not a conflict.
- Projects that have not been submitted or will be submitted after January 1st, 2014 should be quoted and designed for the new LTTR values, including the tapered insulation drawings.
Verify with your installer.



Existing material supplier inventory can be delivered with the pre-2014 R-Values identified in the material, since the actual material is NOT changing.



If you, your installer, or Architect has ANY question related to this matter, please do not hesitate to contact me, PIMA.org, or NRCA.org.

ASHRAE & IBC Climate Zone Map	IECC 2012 Values (Illinois Code Requirement)	Pre 2014 LTTR Values (Old Values)	After 2014 LTTR Values
1, 2, 3	R-20	2 Layers @ 1.7" = 3.4"	2 Layers @ 1.8" = 3.6"
4, 5 (Illinois / Indiana / Ohio)	R-25	2 Layers @ 2.1" = 4.2"	2 Layers @ 2.2" = 4.4"
6 (Wisconsin)	R-30	2 Layers @ 2.5" = 5.0"	2 Layers @ 2.6" = 5.2"
7, 8	R-35	2 Layers @ 2.9" = 5.8"	2 Layers @ 3.1" = 6.2"

Total Board Thickness	Pre 2014 LTTR Values		After 2014 LTTR Values	
	LTTR Value	R-Value per Inch	LTTR Value	R-Value per Inch
1"	6.0	6.0	5.7	5.7
2"	12.1	6.0	11.4	5.7
3"	18.5	6.2	17.4	5.8
4"	25.0	6.2	23.6	5.9
4.5"	28.1	6.2	26.8	5.9

- Values will possibly change per manufacture
- The R-Value goes up per inch with the thickness of the insulation
- If we have a project that the shop drawings & submittals for the roofing were submitted in 2013 and will be installed in 2014, we need to RFI the architect, make sure that the change to the new LTTR is understood, and verify if the change needs to happen to the material thickness on the project. Typically, shop drawings for the tapered insulation will need to be modified, if it has not already.

