South Carolina Minimum Insulation Requirements for Low-Slope Commercial Roofing

The applicable building energy code that determines the minimum insulation requirements for commercial roofs with insulation entirely above the deck in South Carolina is the 2009 South Carolina Energy Standard (based on the 2009 International Energy Conservation Code with state specific amendments and ASHRAE 90.1-2007). This code is effective January 1, 2013. The minimum insulation requirements apply both to new construction and roof replacements on existing buildings.

The current model code requirements for insulation entirely above the roof deck in Climate Zone 3 are 25% more stringent (R-25) than the State's minimum requirements. Building owners should consider exceeding the State's minimum requirements when installing a new or replacement roof system in order to improve energy efficiency and reduce operating costs.

Minimum R-value Requirements for Insulation Entirely Above the Roof Deck

Minimum R-values:
- Climate Zone 3: R-20ci

Notes
- **About R-value:** R-value is a measurement of a material’s ability to resist heat flow. The higher the R-value, the greater the insulating power. Installers should consult data sheets provided by polyiso manufacturers for information on product-specific R-values.
- **Code Compliance:** The International Energy Conservation Code recognizes ASHRAE 90.1 as an alternate compliance option for both new construction and existing buildings.

Resources
- Polyisocyanurate Insulation Manufacturers Association
- U.S. Department of Energy
For more information on polyisocyanurate insulation, visit [www.polyiso.org](http://www.polyiso.org)

### About PIMA

Since 1987, PIMA has served as the voice of the North American rigid polyiso insulation industry. PIMA is a leading advocate for safe, cost-effective, sustainable, and energy-efficient construction. The Association is comprised of polyiso manufacturers and industry suppliers, and represents the public policy interests of its membership at the local, national, and international levels to advance high-performance building practices.

### About Polyiso Insulation

Polyiso is a rigid foam insulation used in more than 70% of commercial roof construction and offers a continuous insulation solution for commercial and residential wall assemblies. As one of North America’s most widely used and readily available building products, polyiso is a cost-effective insulation option for reducing building energy use and improving the overall service-life of roofs and walls.