Florida 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 Florida is the 2020 7th Edition Florida Building Code, Energy Conservation (based on the 2018 International Energy Conservation Code with state specific amendments). This code is effective December 31, 2020. The minimum insulation requirements apply both to new construction and roof replacements on existing buildings.

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

<table>
<thead>
<tr>
<th>Climate Zone</th>
<th>Minimum R-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>R-25ci</td>
</tr>
<tr>
<td>1</td>
<td>R-20ci</td>
</tr>
</tbody>
</table>

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
Option #1 - R-20ci Roof Assembly

- Roof Membrane
- 1.75” Polyiso Boards
- Structural Roof Deck

Two layers of 1.75” polyiso R-20.0

Total R-20.0

Option #2 - R-20ci Roof Assembly

- Roof Membrane
- 0.5” HD Polyiso Cover Board
- 1.6” Polyiso Boards
- Structural Roof Deck

Two layers of 1.6” polyiso R-18.2
0.5” HD polyiso cover board R-2.5
Total R-20.7

Option #1 - R-25ci Roof Assembly

- Roof Membrane
- 2.2” Polyiso Boards
- Structural Roof Deck

Two layers of 2.2” polyiso R-25.2

Option #2 - R-25ci Roof Assembly

- Roof Membrane
- 0.5” HD Polyiso Cover Board
- 2.0” Polyiso Boards
- Structural Roof Deck

Two layers of 2.0” polyiso R-22.8
0.5” HD polyiso cover board R-2.5
Total R-25.3
For more than 30 years, PIMA (Polyisocyanurate Insulation Manufacturers Association) has served as the unified voice of the rigid polyiso industry proactively advocating for safe, cost-effective, sustainable and energy-efficient construction. PIMA’s membership includes manufacturers of polyiso insulation and suppliers to the industry. PIMA members produce the majority of polyiso used in North America.

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.

For more information on polyisocyanurate insulation, visit www.polyiso.org