The applicable building energy code that determines the minimum insulation requirements for commercial roofs with insulation entirely above the deck in Iowa is the [2012 International Energy Conservation Code](https://www.energystar.gov). This code is effective April 1, 2014. 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

- **Climate Zone 6**: R-30ci
- **Climate Zone 5**: R-25ci

**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](https://www.polyiso.org)
- [U.S. Department of Energy](https://www.energy.gov)
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

Option #1 - R-30ci Roof Assembly

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

Two layers of 2.6” polyiso | R-30

Option #2 - R-30ci Roof Assembly

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

Two layers of 2.4” polyiso | R-27.6
0.5” HD polyiso cover board | R-2.5
Total | R-30.1
PIMA
For more than 30 years, the Polyisocyanurate Insulation Manufacturers Association (PIMA) has served as the voice of the rigid polyiso industry, proactively advocating for safe, cost-effective, sustainable, and energy-efficient construction. Organized in 1987, PIMA is an association of polyiso manufacturers and industry suppliers. Polyiso is one of North America’s most widely-used and cost-effective insulation products.

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