The applicable building energy code that determines the minimum insulation requirements for commercial roofs with insulation entirely above the deck in Minnesota is the 2020 Minnesota Energy Code (based on the 2018 International Energy Conservation Code with state-specific amendments). This code is effective March 31, 2020. The minimum insulation requirements apply both to new construction and roof replacements on existing buildings.

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-30ci Roof Assembly

Two layers of 2.6” polyiso | R-30

Option #2 - R-30ci Roof Assembly

Two layers of 2.4” polyiso | R-276
0.5” HD polyiso cover board | R-2.5
Total | R-30.1

Option #1 - R-35ci Roof Assembly

Two layers of 3.1” polyiso | R-36.0

Option #2 - R-35ci Roof Assembly

Two layers of 2.9” polyiso | R-33.6
0.5” HD polyiso cover board | R-2.5
Total | R-36.1
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