The applicable building energy code that determines the minimum insulation requirements for commercial roofs with insulation entirely above the deck in Washington is the Washington State Energy Code, Third Edition (based on the 2015 International Energy Conservation Code with state-specific amendments). This code is effective July 1, 2019. 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

![Map of Washington showing minimum R-values for insulations]

**Minimum R-values:**
- Climate Zone 5: R-38ci
- Climate Zone 4: R-38ci

### 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-38ci Roof Assembly

- Roof Membrane
- 3.3” Polyiso Boards
- Structural Roof Deck
- Two layers of 3.3” polyiso R-38.4

Option #2 - R-38ci Roof Assembly

- Roof Membrane
- 0.5” HD Polyiso Cover Board
- 3.1” Polyiso Boards
- Structural Roof Deck
- Two layers of 3.1” polyiso R-36.0
- 0.5” HD polyiso cover board R-2.5
- Total R-38.5

PIMA
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