WAC 51-11C-40221 Section C402.2.1—Multiple layers of continuous insulation.

C402.2.1 Multiple layers of continuous insulation. Where two or more layers of continuous insulation board are used in a construction assembly, the continuous insulation boards shall be installed in accordance with Section C303.2. If the continuous insulation board manufacturer's installation instructions do not address installation of two or more layers, the edge joints between each layer of continuous insulation boards shall be staggered.

EXCEPTIONS:
1. Continuously insulated roof assemblies where the thickness of insulation varies 1 inch (25 mm) or less and where the area-weighted U-factor is equivalent to the same assembly with the R-value specified in Table C402.1.3.
2. Where tapered insulation is used with insulation entirely above deck, those roof assemblies shall show compliance on a U-factor basis per Section C402.1.4. The effective U-factor shall be determined through the use of Tables A102.2(1), A102.2(3) and A102.2(3).
3. Two layers of insulation are not required where insulation tapers to the roof deck, such as at roof drains. At roof drains, the immediate 24 inch by 24 inch plan area around each roof drain has a minimum insulation requirement of R-13, but otherwise is permitted to be excluded from the roof insulation area-weighted calculations.

WAC 51-11C-40221 Section C402.2.1—Roof assembly.

C402.2.1 Roof assembly. The minimum thermal resistance (R-value) of the insulating material installed either between the roof framing or continuously on the roof assembly shall be as specified in Table C402.1.3, based on construction materials used in the roof assembly. Continuous insulation board shall be installed in not less than 2 layers and the edge joints between each layer of insulation shall be staggered. Insulation installed on a suspended ceiling with removable ceiling tiles shall not be considered part of the minimum thermal resistance of the roof insulation.

EXCEPTIONS: 1. Continuously insulated roof assemblies where the thickness of insulation varies 1 inch (25 mm) or less and where the area-weighted U-factor is equivalent to the same assembly with the R-value specified in Table C402.1.3.
2. Where tapered insulation is used with insulation entirely above deck, those roof assemblies shall show compliance on a U-factor basis per Section C402.1.4. The effective U-factor shall be determined through the use of Tables A102.2(1), A102.2(3) and A102.2(3).
3. Two layers of insulation are not required where insulation tapers to the roof deck, such as at roof drains. At roof drains, the immediate 24 inch by 24 inch plan area around each roof drain has a minimum insulation requirement of R-13, but otherwise is permitted to be excluded from the roof insulation area-weighted calculations.