

Insulation Minimum R-Values and Fenestration Requirements by Component for Utah Climate Zones

The following table shows R-value and fenestration requirements by component, dependent on Utah’s three climate zones.

Table R402.1.3: Insulation Minimum R-Values and Fenestration Requirements by Component			
	Climate Zone		
	3	5	6
Fenestration U-Factor	0.30	0.30	0.30
Skylight U-Factor	0.55	0.55	0.55
Glazed Fenestration SHGC	0.25	0.40	NR
Ceiling R-Value	49	60	60
Wood Frame Wall R-Value	20 or 13+5ci or 0+15	20+5 or 13+10ci or 0+15	20+5ci or 13+10ci or 0+20
Mass Wall R-Value	8/13	13/17	15/20
Floor R-Value	19	30	30
Basement Wall R-Value	5ci or 13	15ci or 19 or 13+5ci	15ci or 19 or 13+5ci
Slab R-Value & Depth	10ci, 2 ft	10ci, 4 ft	10ci, 4 ft
Crawl Space Wall R-Value	5ci or 13	15ci or 19 or 13+5ci	15ci or 19 or 13+5ci

2021 IECC insulation minimum R-values and fenestration requirements by component. Assemblies with R-value of insulation materials equal to or greater than that specified in this table shall be an alternative to the U-factor in Table 4. R-values are minimums while U-factors and SHGC are maximums. "NR" stands for not required and ci=continuous insulation. In an instance where values are formatted with a plus, such as "13+5," the first value is cavity insulation and the second value is continuous insulation. For mass walls, the second R-value applies where more than half of the insulation is on the interior of the mass wall. "5ci or 13" means R-5 continuous insulation (ci) on the interior or exterior surface of the wall or R-13 cavity insulation on the interior side of the wall. "10ci or 13" means R-10 continuous insulation (ci) on the interior or exterior surface of the wall or R-13 cavity insulation on the interior side of the wall. "15ci or 19 or 13+5ci" means R-15 continuous insulation (ci) on the interior or exterior surface of the wall; or R-19 cavity insulation on the interior side of the wall; or R-13 cavity insulation on the interior of the wall in addition to R-5 continuous insulation on the interior or exterior surface of the wall.

For more information, visit hub.utahcleanenergy.org/homebuilder-toolkit/.