

State of Illinois 2018 Energy Conservation Code Insulation & Fenestration Requirements Jersey County is Climate 5

Table R402.1.2

| CLIMATE ZONE | FENESTRATION U-FACTOR ^b | SKYLIGHT ^b U-FACTOR | GLAZED FENESTRATION SHGC ^{b, e} | CEILING R-VALUE | WOOD FRAME WALL R-VALUE | MASS WALL R-VALUE ⁱ | FLOOR R-VALUE | BASEMENT ^c WALL R-VALUE | SLAB ^d R-VALUE & DEPTH | CRAWL SPACE ^c WALL R-VALUE |
|-----------------|------------------------------------|--------------------------------|--|-----------------|--------------------------------|--------------------------------|-----------------|------------------------------------|-----------------------------------|---------------------------------------|
| 1 | NR | 0.75 | 0.25 | 30 | 13 | 3/4 | 13 | 0 | 0 | 0 |
| 2 | 0.40 | 0.65 | 0.25 | 38 | 13 | 4/6 | 13 | 0 | 0 | 0 |
| 3 | 0.35 | 0.55 | 0.25 | 38 | 20 or 13 + 5 ^h | 8/13 | 19 | 5/13 ^f | 0 | 5/13 |
| 4 except Marine | 0.35 | 0.55 | 0.40 | 49 | 20 or 13 + 5 ^h | 8/13 | 19 | 10 /13 | 10, 2 ft | 10/13 |
| 5 and Marine 4 | 0.32 | 0.55 | NR | 49 | 20 or 13 + 5 ^h | 13/17 | 30 ^g | 15/19 | 10, 2 ft | 15/19 |
| 6 | 0.32 | 0.55 | NR | 49 | 20 + 5 or 13 + 10 ^h | 15/20 | 30 ^g | 15/19 | 10, 4 ft | 15/19 |
| 7 and 8 | 0.32 | 0.55 | NR | 49 | 20 + 5 or 13 + 10 ^h | 19/21 | 38 ^g | 15/19 | 10, 4 ft | 15/19 |

- a. R-values are minimums. U-factors and SHGC are maximums. When insulation is installed in a cavity which is less than the label or design thickness of the insulation, the installed R-value of the insulation shall not be less than the R-value specified in the table.
- b. The fenestration U-factor column excludes skylights. The SHGC column applies to all glazed fenestration.
Exception: Skylights may be excluded from glazed fenestration SHGC requirements in Climate Zones 1 through 3 where the SHGC for such skylights does not exceed 0.30.
- c. "15/19" means R-15 continuous insulation on the interior or exterior of the home or R-19 cavity insulation at the interior of the basement wall. "15/19" shall be permitted to be met with R-13 cavity insulation on the interior of the basement wall plus R-5 continuous insulation on the interior or exterior of the home. "10/13" means R-10 continuous insulation on the interior or exterior of the home or R-13 cavity insulation at the interior of the basement wall.
- d. R-5 shall be added to the required slab edge R-values for heated slabs. Insulation depth shall be the depth of the footing or 2 feet, whichever is less in Zones 1 through 3 for heated slabs.
- e. There are no SHGC requirements in the Marine Zone.
- f. Basement wall insulation is not required in warm-humid locations as defined by Figure N1101.10 and Table N1101.10.
- g. Or insulation sufficient to fill the framing cavity, R-19 minimum.
- h. The first value is cavity insulation, the second value is continuous insulation, so "13+5" means R-13 cavity insulation plus R-5 continuous insulation.
- i. The second R-value applies when more than half the insulation is on the interior of the mass wall.

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