

Prescriptive Package Footnotes

1. Glazing area is the ratio of the area of the glazing assemblies (including sliding glass doors, skylights, and basement windows, but excluding opaque doors) to the gross wall area, expressed as a percentage. Up to 1% of the total glazing area may be excluded from the U-value requirement. For example, 3 ft² of decorative glass may be excluded from a building with 300 ft² of glazing area.
2. Glazing U-values must be tested and documented by the manufacturer in accordance with the National Fenestration Rating Council (NFRC) test procedure. Center-of-glass U-values cannot be used.
3. The ceiling R-values do not assume a raised or oversized truss construction. If the insulation achieves the full insulation thickness over the exterior walls, R-30 insulation may be substituted for R-38. Ceiling R-values represent the sum of cavity insulation plus insulating sheathing (if used). For ventilated ceilings, insulating sheathing must be placed between the conditioned space and the ventilated portion of the roof.
4. Wall R-values represent the sum of the wall cavity insulation plus the insulating sheathing (if used). Do not include exterior siding, structural sheathing, and interior drywall. For example, an R-19 requirement could be met EITHER by R-19 cavity insulation OR R-13 cavity insulation plus R-6 insulating sheathing. Wall requirements apply to wood-frame or mass (concrete, masonry, log) wall constructions, but do not apply to metal-frame construction.
5. The floor requirements apply to floors over unconditioned spaces (such as unconditioned crawl spaces, basements, or garages). Floors over outside air must meet the ceiling requirements.
6. Walls of conditioned basements below uninsulated floors must be insulated from the top of the basement wall to a depth of 10 ft below ground level or to the level of the basement floor, whichever is less. The entire opaque portion of any individual basement wall with an average depth less than 50% below grade must meet the same R-value requirement as above-grade walls. Windows and sliding glass doors of conditioned basements must be included with the other glazing. Basement doors must meet the door U-value requirement described in Note b.
7. The R-value requirements are for unheated slabs. Add an additional R-2 for heated slabs. For packages with a slab insulation requirement, the insulation must extend a total linear distance of at least 24 in. The insulation must extend 1) down from the top of the slab; 2) down from the top of the slab to the bottom of the slab and then horizontally underneath the slab; or 3) down from the top of the slab to the bottom of the slab then horizontally away from the slab, with pavement or at least 10 in. of soil covering the horizontal insulation.
8. The crawl space wall R-value requirements are for walls of unventilated crawl spaces. The crawl space wall insulation must extend from the top of the wall (including the sill plate) to at least 12 in. below the outside finished grade. If the distance from the outside finished grade to the top of the footing is less than 12 in., the insulation must extend a total vertical plus horizontal distance of 24 in. from the outside finished grade.
9. High Heating means a furnace AFUE of 90% or more, or a heat pump HSPF of 7.8 or more. High Cooling means a SEER of 12 or more. High Heat/Cool means both heating and cooling equipment must meet these minimum efficiencies. If you plan to install more than one piece of heating equipment or more than one piece of cooling equipment, the equipment with the lowest efficiency must meet or exceed the efficiency required by the selected package.

Notes:

- a) Glazing areas and U-values are maximum acceptable levels. Insulation R-values are minimum acceptable levels. R-value requirements are for insulation only and do not include structural components.
- b) Opaque doors in the building envelope must have a U-value no greater than 0.35. Door U-values must be tested and documented by that manufacturer in accordance with the NFRC test procedure. If a door contains glass and an aggregate U-value rating for that door is not available, include the glass area of the door with your windows and use the opaque door U-value to determine compliance of the door. One door may be excluded from this requirement (i.e., may have a U-value greater than 0.35).
- c) If a ceiling, wall, floor, basement wall, slab edge, or crawl space wall component includes two or more areas with different insulation levels, the component complies if the area-weighted average R-value is greater than or equal to the R-value requirement for that component. Glazing or door components comply if the area-weighted average U-value of all windows or doors is less than or equal to the U-value requirement (0.35 for doors).