

Footnote requirements to TABLE 151-B, TABLE 151-C and TABLE 151-D.

- 1 The R-values shown for ceiling, wood frame wall and raised floor are for wood-frame construction with insulation installed between the framing members. For alternative construction assemblies, see §151(f)1A.

The heavy mass wall R-value in parentheses is the minimum R-value for the entire wall assembly if the wall weight exceeds 40 pounds per square foot. The light mass wall R-value in brackets is the minimum R-value for the entire assembly if the heat capacity of the wall meets or exceeds the result of multiplying the bracketed minimum R-value by 0.65. Any insulation installed on heavy or light mass walls must be integral with, or installed on the outside of, the exterior mass. The inside surface of the thermal mass, including plaster or gypsum board in direct contact with the masonry wall, shall be exposed to the room air. The exterior wall used to meet the R-value in parentheses cannot also be used to meet the thermal mass requirement.
- 2 The installed fenestration products shall meet the requirements of §151(f)3.
- 3 The installed fenestration products shall meet the requirements of §151(f)4.
- 4 If the package requires thermal mass, the thermal mass shall meet the requirements of §151(f)5.
- 5 Thermostats shall be installed in conjunction with all space-heating systems in accordance with §151(f)9.
- 6 HSPF means "heating seasonal performance factor."
- 7 Electric-resistance water heating may be installed as the main water heating source in Package C only if the water heater is located within the building envelope and a minimum of 25 percent of the energy for water heating is provided by a passive or active solar system.
- 8 As an alternative under Package E in climate zone 1, glazing with a maximum 0.57 U-factor and a 92 percent AFUE furnace or an 8.4 HSPF heat pump may be substituted for the Package E glazing U-factor requirement. All other requirements of Package E must be met.
- 9 As an alternative under Package E in climate zone 16, glazing with a maximum 0.57 U-factor and a 90 percent AFUE furnace or an 8.4 HSPF heat pump may be substituted for may be substituted for the Package E glazing U-factor requirement. All other requirements of Package E must be met.
- 10 A supplemental heating unit may be installed in a space served directly or indirectly by a primary heating system, provided that the unit thermal capacity does not exceed two kilowatts or 7,000 Btu/hr and is controlled by a time-limiting device not exceeding 60 minutes.

§152 (a) and §152 (b)

(a) **Additions.** Additions to existing residential buildings shall meet the requirements of §111 through §118, §119, and §150, and either §152(a)1 or 2.

1. **Prescriptive approach.** Additions to existing buildings shall meet the following additional requirements:

- A. Fenestration in additions up to 100 ft² shall not have more than 50 ft² of fenestration area, and shall meet the U-factor and Solar Heat Gain Coefficient requirements of Package D (§151(f)3A, §151(f)4 and Standards TABLE 151-C) or
- B. Additions up to 1000 ft² shall meet all the requirements of Package D (§151(f) and Standards TABLE 151-C), except that the addition's total glazing area limit is the maximum allowed in Package D plus the glazing area that was removed as a result of the construction of the addition, and the wall insulation value need not exceed R-13.

EXCEPTION TO §152(a)1B: In climate zones 2, 4, 7-15 the total allowed west-facing glazing area shall be five percent of the conditioned floor area of the addition plus the amount of west-facing glazing removed from the existing building as a result of the construction of the addition.

- C. Additions of more than 1000 ft² shall meet all the prescriptive requirements of §151(f).

2. **Performance approach.** Performance calculations shall meet the requirements of §151(a) through (e), pursuant to either Item A or B, below.

- A. For additions alone, the addition complies if the addition alone meets the combined water-heating and space-conditioning energy budgets as specified in §151(b).
- B. For existing plus addition plus alteration compliance. The energy use of the combination of the altered existing building plus the proposed addition shall be equal to or less than the energy use of the existing building with all alterations meeting the requirements of §152(b)2, plus the standard energy budget of an addition that complies with §151(a) through (e). When determining the standard design, the fenestration area shall be the smaller of the sum of the installed fenestration area up to 20 percent of the conditioned floor area of the addition plus glass removed from the existing building as a result of the construction of the addition or the proposed glass area in the addition.

EXCEPTION 1 to §152(a): Existing structures with R-11 framed walls showing compliance with §152(a)2 (Performance Approach) are exempt from §150(c).

EXCEPTION 2 to §152(a): If the addition will increase the total number of water heaters in the building, one of the following types of water heaters may be installed to comply with §152(a)1 or §152(a)2A:

- 1. A gas storage non-recirculating water heating system that does not exceed 50 gallons capacity; or
- 2. If no natural gas is connected to the building, an electric storage water heater that does not exceed 50 gallons capacity, has an energy factor not less than 0.90; or