

CHANGE TYPE: Clarification

CHANGE SUMMARY: Vertical doors that access unconditioned attics and crawl spaces do not require an R -value to match the required wall insulation. Such doors must comply with the fenestration U -factor requirements of Table N1102.1.2.

2015 CODE: N1102.2.4 (R402.2.4) Access Hatches and Doors.

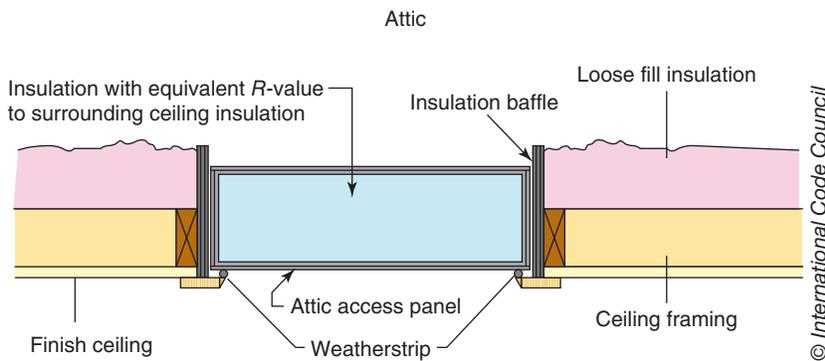
Access doors from conditioned spaces to unconditioned spaces such as attics and crawl spaces shall be weatherstripped and insulated to a level equivalent to the insulation on the surrounding surfaces. Access shall be provided to all equipment that prevents damaging or compressing the insulation. A wood-framed or equivalent baffle or retainer is required to be provided when loose fill insulation is installed, the purpose of which is to prevent the loose fill insulation from spilling into the living space when the attic access is opened, and to provide a permanent means of maintaining the installed R -value of the loose fill insulation.

Exception: Vertical doors that provide access from conditioned to unconditioned spaces shall be permitted to meet the fenestration requirements of Table N1102.1.2 based on the applicable climate zone specified in Section N1101.7.

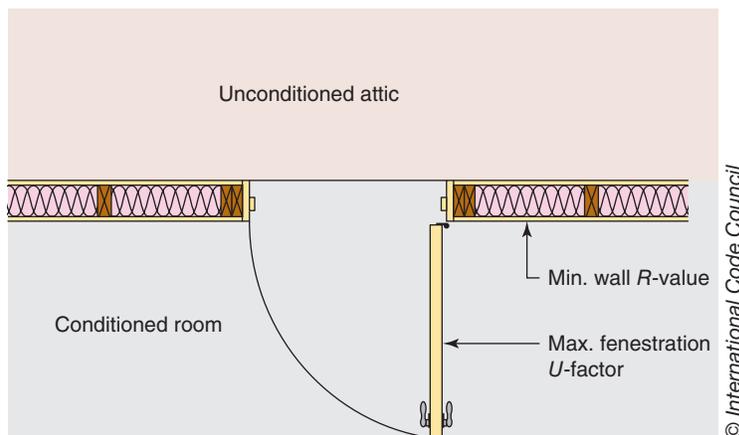
N1102.2.4 continues

N1102.2.4

Access Hatches and Doors



Horizontal attic access hatch



Vertical attic access door

N1102.2.4 continued

CHANGE SIGNIFICANCE: Provisions introduced in the 2009 edition of the IRC clarified that the building thermal envelope requirements apply to hatches and doors that access unconditioned areas such as attics and crawl spaces. The primary intent was to regulate typical attic access hatches that are installed in the ceiling of the dwelling unit to gain entry to the unconditioned attic. In addition to meeting the R -value of the area surrounding the access hatch, the code calls for weatherstripping of the hatch to reduce air leakage and infiltration. The code also provides for a baffle or barrier to retain loose fill insulation at the access opening and to maintain the installed R -value of the insulation. The provision for a baffle seems to imply that the section applies to horizontal access hatches in ceilings. However, the section title includes doors, and many code users understood that the insulation R -value applied to a vertical door used to provide access from conditioned to unconditioned space. A typical installation would be a door in a wall separating a second-floor room from the unconditioned attic of a single-story portion of the building.

The 2015 IRC specifically excludes vertical access doors from the requirement for meeting the required R -value of the surrounding wall. Proponents of this change reasoned that such a requirement conflicts with the provisions that apply to exterior doors. Both an access door and an exterior door serve to move from a conditioned space to an unconditioned space, define a portion of the building thermal envelope, and should have the same minimum thermal resistance properties. Table N1102.1.2 requires fenestration, which by definition includes doors, to comply with the maximum U -factor. For example, in Climate Zone 5, the table sets a maximum U -factor of 0.32 for an exterior door. The provisions for wood frame wall insulation would require a minimum R -value of R-20, which is much more stringent than the maximum U -factor and would be difficult to achieve with a standard exterior door. The 2015 IRC clarifies that the fenestration U -factor from the table applies to a vertical door used for access to an unconditioned space such as an attic. For a horizontal access hatch to the attic, the insulation for the hatch must meet the minimum ceiling R -value, which for Climate Zone 5 is R-49.



This excerpt is taken from ***Significant Changes to the International Residential Code®*, 2015 Edition**.

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