
FIRE PREVENTION AND BUILDING SAFETY COMMISSION
Department of Homeland Security**Written Interpretation of the State Building Commissioner****Interpretation #:** CEB-2020-36-2020 IRC-R302.5**Building or Fire Safety Law Interpreted**

[675 IAC 14-4.4](#), 2020 Indiana Residential Code, Section R302.5 Dwelling-garage opening and penetration protection. Openings and penetrations through the walls or ceilings separating the *dwelling* from the garage shall be in accordance with Sections R302.5.1 through R302.5.3.

R302.5.1 Opening protection. Openings from a private garage directly into a room used for sleeping shall not be permitted. Other openings between the garage and the residence shall be equipped with solid wood doors not less than 1-3/8 inches (35 mm) in thickness, solid or honey-comb core steel doors not less than 1-3/8 inches (35 mm) thick, or 20 minute fire-rated doors. Pull down stairs that have a 20 minute fire rating may be installed in garage/attic separations.

R302.5.2 Duct penetration. *[Omitted for lack of relevance to interpretation request – use limited to duct penetrations.]*

R302.5.3 Other penetrations. *[Omitted for lack of relevance to interpretation request – use limited to fireblocking.]*

Issue

Whether Sections R302.5 and R302.5.1 of the 2020 Indiana Residential Code (IRC) limit allowable attic access openings in rated garage ceiling assemblies to those utilizing 20-minute fire-resistance-rated pull-down stair assemblies.

Interpretation of the State Building Commissioner

Sections R302.5 and R302.5.1 do *not* limit attic access openings in rated garage ceiling assemblies to only those utilizing 20-minute fire-resistance-rated pull-down stair assemblies.

Rationale

2020 IRC Section R302.5 is a scoping section that introduces the requirements for openings and penetrations that occur in the required rated assemblies that separate the garage and the residence or dwelling. Its subsections provide the specific performance requirements for openings (R305.2.1) and penetrations (R302.5.2 and R305.2.3) in these rated assemblies.

While the amended language of R302.5.1 could have been worded more clearly, research into the code change proposals of the 2020 IRC adoption process indicates the amendment was never intended to limit the means with which approved access may be provided through the garage/attic separation. The statement was added merely to provide the information that such rated stair assemblies are an acceptable solution for access in that location.

One must look to the section and the design and performance characteristics of those means and systems that are listed to determine what methods are compliant. Besides doors, the section lists as an acceptable means a 20-minute fire-resistance-rated pull-down stair assembly. Such pull-down rated stair assemblies provide two key features – rated protection for openings in the separation, and an easy means of gaining physical access to the attic space. Of those two features, R302.5.1 is concerned only with the protection of the opening in the separation, and not the ease of physical access to the attic space. In fact, there is no requirement in the code for stairs of any kind at any attic access location, garage or elsewhere, rated or not. Given that the stair's presence does not contribute in any way to the fire resistance rating of the assembly, any similarly rated access panel device that does not include a stair is also acceptable.

We caution, however, that simply utilizing building materials deemed acceptable by the code for other fire-rated uses – namely the gypsum drywall used as membranes in rated assemblies and the solid wood blocking used as fireblocking and in protection of penetrations of such assemblies – to site-construct a non-rated access panel *will not qualify* the access panel for approval by virtue of its materials' acceptability for their originally intended use. "Openings" in rated assemblies are not the same thing as "penetrations" of rated assemblies, and the means and methods of required protection for the two differ substantially from one another.

Having said this, it is equally important to note that the purpose of R302.5 and its subsections is to provide the necessary protected openings between the garage and the rest of the dwelling unit, and not between the garage and its attic. This is reflected in the language of R302.5.1 when it calls for the rated stair assembly to be installed in the garage/attic "separation", and not merely in the garage "ceiling". The language presupposes the required separation is occurring at the garage ceiling, which will not always be the case. There is no code requirement for a fire separation specifically between a garage and its attic. Depending on the design of the structure, the required separation between garage and dwelling may occur at the garage ceiling, but it may also occur elsewhere instead, e.g., at the common wall between the garage and the rest of the house, provided it is designed and constructed as required by code. All that matters is that the dwelling be acceptably separated from the garage, wherever that separation is achieved.

The idea that the separation is required only between the garage and the dwelling is confirmed in commentary for Section R302.6, which states, "garage walls *and ceilings* that do not form a separation from the dwelling unit are not required to be rated unless they are an extension of a rated assembly" (emphasis added). Therefore, if the required separation is provided somewhere other than at the garage ceiling, the garage ceiling is not required to be rated and any kind of access panel or device or opening may be used there.

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