# FIRE PREVENTION AND BUILDING SAFETY COMMISSION Department of Homeland Security

## Written Interpretation of the State Building Commissioner

Interpretation #: CEB-2023-06 [2020 IRC-R302.6]

### **Building or Fire Safety Law Interpreted**

675 IAC 14-4.4 2020 Indiana Residential Code Section R302.6 Dwelling-garage fire separation. The garage shall be separated as required by Table R302.6. Openings in garage walls shall comply with Section R302.5. Attachment of gypsum board shall comply with Table R702.3.5. The wall separation provisions of Table R302.6 shall not apply to garage walls that are perpendicular to the adjacent *dwelling unit* wall.

[Requirements of Table R302.6 reproduced here:]

- At separation between garage and the residence and attics: Not less than 1/2-inch gypsum board or equivalent applied to the garage side.
- At separation between garage and habitable rooms above the garage: Not less than 5/8-inch Type X gypsum board or equivalent.
- At structure(s) supporting floor/ceiling assemblies used for separation required by this section: Not less than 1/2-inch gypsum board or equivalent.
- At garages located less than 3 feet from a dwelling unit on the same lot: Not less than 1/2-inch gypsum board or equivalent applied to the interior side of exterior walls that are within this area.

#### Issue

Whether Section R302.6 of the 2020 Indiana Residential Code (IRC) requires a minimum of 1/2-inch gypsum board to be installed full-height on garage walls supporting a fire-resistance-rated floor/ceiling assembly immediately above the garage.

## Interpretation of the State Building Commissioner

Yes, Section R302.6 of the 2020 IRC does require a minimum of 1/2-inch gypsum board to be installed full-height on garage walls supporting a fire-resistance-rated floor/ceiling assembly immediately above the garage, if that floor/ceiling assembly represents a fire separation required by Section R302.6.

#### Rationale

The basic tenet of the 2020 IRC's Section R302.6 is that a garage poses a fire hazard that requires separation from the dwelling through the installation of fire-resistive assemblies. The section references Table R302.6 which specifies the locations at which fire-resistive materials are required, and what those materials must be. The second of these locations, as seen in the table excerpt above, is the floor/ceiling assembly between a garage and a habitable space immediately above it.

The third entry in the table addresses the structures that provide support for that protected floor/ceiling assembly. This requirement should be thought of as a continuation of the fire protection concept, since without the safety of protected supports, the horizontal assembly is likely to collapse in a fire, breaching the protective barrier between garage and dwelling. Consequently, the table requires protection of those support elements through the installation of not less than 1/2-inch gypsum board or equivalent. This applies to any structural element providing support for the floor/ceiling above, whether they are walls, columns, girders, beams, etc.

It should be noted that this is not a membrane penetration issue. The concern is not to prevent the passage of fire and combustion byproducts around the edges of the ceiling by installing a small section of gypsum board at the top of the walls to complete a "seal." It is a requirement to protect the entirety of the structure that *supports* that ceiling. In short, if the section requires fire-resistance for the horizontal assembly between the garage and the space immediately above it, then the section also requires fire-resistance for all structural elements that support that assembly, including the full height of any walls contributing to that support.

The request for interpretation included correspondence between the interested person and the local official that appears to suggest that the local jurisdiction allows the elimination of this fire protection as a "variance" in their area. It must be emphasized that the requirements of the 2020 Indiana Residential Code are in full force and effect throughout the State of Indiana, and in accordance with IC 22-13-2-3, rules adopted by the Indiana Fire Prevention and Building Safety Commission take precedence over local ordinances or regulations that cover the same subject matter. The Indiana Code provides for the local adoption of ordinances or other regulations that are more stringent than the commission's rules (if they do not conflict), but it does not permit the adoption of less

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stringent ones, such as the elimination of this protection requirement. Further, in accordance with <u>IC 22-13-2-7</u>, variances to locally adopted ordinances may only be granted with the approval of the Indiana Fire Prevention and Building Safety Commission.

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