



## COUNTY OF PRINCE WILLIAM

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**DEPARTMENT OF  
DEVELOPMENT  
SERVICES**  
Division of  
Building Development

### **BUILDING OFFICIAL INTERPRETATION 2015-04**

**March 09, 2020**

**CODE/EDITION: VIRGINIA UNIFORM STATEWIDE BUILDING CODE/2015**

**SECTION(S): IBC/2015 Section 707 Fire Barriers  
IBC/2015 Section 708 Fire Partitions  
IBC/2015 Section 711 Floor and Roof Assemblies**

#### **QUESTION:**

1. Are "horizontal structural members supporting floor or roof decks"..."considered through-wall penetrations, much like conduits, pipes, and ducts, when they penetrate vertical fire barriers?"

#### **ANSWER:**

1. **Yes.** See the attached ICC Staff Interpretation that was originally issued with regard to the IBC/2000.

Eric M. Mays, P.E.  
Building Official

Attachment

ICC Staff Interpretation, dated July 27, 2004



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July 27, 2004

Iran Scott  
Department of Public Works  
Division of Building Development  
County of Prince William  
1 County Complex Court  
Prince William, VA 22192-9201

**RE: Sections 706.7 and 711.3 of the 2000 International Building Code**

Dear Mr. Scott:

This letter is in response to your request for a written code interpretation regarding structural penetrations of fire-resistance rated assemblies. You ask if horizontal structural members supporting floor or roof decks are considered through-wall penetrations, much like conduits, pipes and ducts, when they penetrate vertical fire barriers.

The building code does not specifically address penetrations of fire-resistance rated assemblies by structural members. Structural penetrations are considered similar to, but less of a breach than, conduits, pipes and ducts. Therefore, any of the methods in Section 711.3 that apply to through penetrations (as opposed to membrane penetrations) are considered adequate for protecting structural penetrations. Note that size limitations for penetrating pipes and conduits, as described in the exception to Section 711.3.1, are not considered applicable to penetrating structural elements. As always, alternative methods of protection are acceptable in accordance with Section 104.11.

This interpretation can be applied to fire partitions, smoke barriers and horizontal assemblies as well. It does not apply to fire walls due to their requirement for structural independence. Note that structural elements that penetrate exit stair enclosures (i.e., fire barriers) are considered acceptable penetrations with respect to Section 1005.3.4.1 when they are necessary for the direct or indirect support and/or bracing of stair components, or any part of the stair enclosure, including a roof.

We are pleased to provide you with the opinions stated herein. We have made no independent effort to verify the accuracy of your submitted information nor have we conducted a review beyond the scope of your question. The opinions of the ICC technical staff are only advisory in nature and, as such, it is up to you to choose to use this information as you desire. As always, we recognize that the final interpretation is the legal responsibility of the authority having jurisdiction, typically, the local building official.

Sincerely,

Philip Hahn, A  
Senior Staff Architect

RECEIVED

JUL 30 2004

PWC  
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