



## S7-21

**Committee Action:**

**As Submitted**

**Committee Reason:** The proposal was approved as it revises the language to meet the intent and corrects what could have been misread. (Vote: 13-1)

The reason statement from proposal S7-21 follows:

The 2021 IBC changed penthouse construction requirements to be as required for building elements based on type of construction instead of requiring walls, floors and roofs to be as required for the type of construction. This change results in overly conservative fire-resistance ratings when the exceptions to this section are used since the exceptions only reduce ratings for exterior walls and roofs. For example, Exception 1 could allow exterior walls and roofs to not have a fire-resistance rating; however, the exception doesn't apply to the secondary members supporting the roof, primary structural frame supporting the roof, or interior bearing walls supporting the roof. The result would be a non-rated roof supported by a primary structural frame with a 1 or 2-hour rating, secondary members with a 1 or 1 1/2-hour framing and interior bearing walls with a 1 or 2-hour rating.

Prior to the 2021 change, IBC Section 704.1 required the fire-resistance rating of supporting construction for penthouse exterior walls and roofs to be not less than the rating of the wall or roof supported. This level of protection is appropriate for a penthouse that is constructed above the roof of the building and is not considered to be part of the primary structural frame of the building. This proposal makes this clear by putting this requirement into the penthouse requirements rather than relying on Section 704.1.

This proposal also removes the requirement that penthouse floors be constructed as required for the type of construction. By definition, rooftop structures (including penthouses) are constructed over the roof deck of the building, so the fire-resistance rating of the roof of the building should be allowed for the "floor" of the penthouse.

**Bibliography and Access to Materials** (as needed when substantiating material is associated with the amendment proposal):

### **Other Regulations Proposed to be Affected**

**\*For proposals to delete content from the 2019 Denver Green Code in conjunction with adding it to other mandatory Denver codes and/or regulations, only.**

Please identify which other mandatory codes or regulations are suggested to be updated (if any) to accept relocated content.

### **Referenced Standards:**

List any new referenced standards that are proposed to be referenced in the code.

### **Impact:**

How will this proposal impact cost and restrictiveness of code? ("X" answer for each item below)

Cost of construction:    \_\_\_ Increase    \_X\_ Decrease    \_\_\_ No Impact

Cost of design:        \_\_\_ Increase    \_\_\_ Decrease    \_X\_ No Impact

Restrictiveness:      \_\_\_ Increase    \_X\_ Decrease    \_\_\_ No Impact

### **Departmental Impact (City use only):**

This amendment proposal increases/decreases/is neutral to the cost of plans review.

This amendment increases/decreases/is neutral to the cost of inspections.