



Code/Section	2018 IBC 602.1, 704, 705.6, 707.5.1, 708.4.1, 709.4, 711.2.3
Issue Date:	March 23, 2020
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The words *rated* and *rating* are used in this policy in lieu of *fire-resistance-rated/rating*.

Purpose:

Clarification when lateral bracing members are required to be provided with a *rating*.

Interpretation:

Structural members needed to stabilize and strengthen the *structure* under gravity loads shall be provided with a *rating* where required by any code provisions. Structural members used to resist wind or earthquake *loads* only are not required to be provided with a *rating*. The designer shall identify "lateral only" members on the construction drawings and provide a structural analysis that demonstrates the structural system can resist appropriate gravity load combinations without the "lateral only" members.

Exception: *Exterior walls, fire barriers, fire partitions, smoke barriers, and horizontal assemblies* can attain their lateral stability from non-*rated* floors and roofs.

Rationale and Reference:

1. A requested code opinion given by Jason C. Towes With ICC's Architectural & Engineering Services on January 29, 2020 specifically addressed IBC Section 707.5.1 when it involved lateral supports for a standalone elevator shaft. The following is an excerpt from that opinion:

"Q: Does Section 707.5.1 require structural members to be fire-resistance rated when providing lateral support only for fire-resistance rated construction?

A: No, Section 707.5.1 applies to the fire-resistance rating of supporting construction. In our opinion supporting construction, although not defined, consists of those members that carry the gravity load. It has never been the intent of the code to require a fire-resistance rating for seismic or lateral bracing members..."

2. The following is an excerpt from 2018 IBC Section 705.6's commentary: " Although the floor framing acts as a lateral support for the exterior wall, this section does not require that the entire floor system be of fire-resistance-rated construction. To state otherwise would prohibit Type IIB and VB buildings with an FSD of less than 10 feet (3048 mm). Only the structural element within the floor system that supports the vertical load of the wall must be of fire-resistance-rated construction."

3. 2018 IBC's definition of Primary Structural Frame includes "bracing members that are essential to the vertical stability of the primary structural frame under gravity loading..."

4. ASCE 7-16 Section 2.5 describes the load combination that should be applied for extraordinary events such as fires, explosions, and vehicle impacts. This load combination only contains gravity load sources, and specifically mentions that it is a gravity load combination.

5. ICC-ES's Acceptance Criteria for Post-Installed Adhesive Anchors in Concrete Elements, AC308, compliance date September 15, 2019 allows the use of adhesive anchors where "Anchors and post-installed reinforcing bars are used to resist wind or seismic forces only"