

CHAPTER 7 FIRE-RESISTANCE-RATED CONSTRUCTION

SECTION 706.4 IBC Interpretation No. 06-06 2003 Edition Issued: 05-31-06

706.4 Continuity of fire barrier walls. Fire barrier walls shall extend from the top of the floor/ceiling assembly below to the underside of the floor or roof slab or deck above and shall be securely attached thereto. These walls shall be continuous through concealed spaces such as the space above a suspended ceiling. The supporting construction for fire barrier walls shall be protected to afford the required fire-resistance rating of the fire barrier supported except for 1-hour fire-resistance-rated incidental use area separations as required by Table 302.1.1 in buildings of Type IIB, IIIB and VB construction. Hollow vertical spaces within the fire barrier wall shall be firestopped at every floor level.

Exceptions:

1. The maximum required fire-resistance rating for assemblies supporting fire barriers separating tank storage as provided for in Section 415.7.2.1 shall be 2 hours, but not less than required by Table 601 for the building construction type.
2. Shaft enclosure shall be permitted to terminate at a top enclosure complying with Section 707.12.



Q: Section 706.4 states that the building structure supporting a fire barrier wall shall be fire-resistance-rated equal to the fire barrier wall being supported. A building may be designed using unprotected construction, such as Type IIB. Depending on the height of the building, a stair shaft enclosure may be constructed with 1-hour or 2-hour fire-resistance-rated fire barrier walls. The fire barrier walls enclosing the shaft can be tied to and supported by the building construction.

Is it the intent to require the supporting construction throughout the entire building to be protected with fire-resistance-rated construction equal to the fire barrier walls?

A: No. Only the building elements within the load path of that portion of the building construction where the shaft enclosure is located are subject to the provisions of Section 706.4 with regard to supporting construction. It is not necessary to provide fire-resistance-rated construction equal to the fire barrier walls for all floors and supporting construction throughout the entire building. The purpose for allowing fire-resistance-rated construction to be isolated to the specific building elements providing structural support for fire barrier walls permits vertical shaft enclosures to be located within buildings of unprotected types of construction, such as IIB, IIIB, and VB, without requiring a change of construction type for the entire building.
