



**Informal Interpretation Report
Number 7844**



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Section 707.5

Question:

Code Section 707.5 regarding the continuity of fire barrier walls says, "Fire barriers shall extend from the top of the foundation or floor/ceiling assembly below to the underside of the floor or roof sheathing, slab or deck above and shall be securely attached thereto. Such fire barriers shall be continuous through concealed space, such as the space above a suspended ceiling. Joints and voids at intersections shall comply with Sections 707.8 and 707.9." Question: We are using a U.L. floor/ceiling system called the DualDeck (UL Design No. K919) consisting of a precast concrete top slab and bottom slab separated by steel reinforcing. This separation of the two slabs creates a concealed space. However, the bottom slab, top slab and steel reinforcing work together to form a single composite fire-rated structural component. Code Section 705.5 seems to apply only to conventional construction where it's possible for a wall to penetrate a non-structural suspended ceiling. This is highlighted by the fact Section 705.5 says, "such as the space above a suspended ceiling." The DualDeck system functions more like a large version of a precast concrete hollow core slab. The hollow core slab would have concealed spaces, but a fire barrier wall would have to stop at the underside of the hollow core slab, and not penetrate into the hollow core slab itself. Based on this information, is code Section 705.5 satisfied if a fire barrier wall stops at the underside of the DualDeck system?

Answer

As described, the section does not apply. However, if there are any openings or penetrations into the concealed space the conditions could change.

Commentary:

This is a composite floor system with no combustibles.

Notice:

The Building Officials Association of Florida, in cooperation with the Florida Building Commission, the Florida Department of Business & Professional Regulation, ICC, and industry and professional experts offer this interpretation of the Florida Building Code in the interest of consistency in their application statewide. This interpretation is informal, non-binding and subject to acceptance and approval by the local building official.