

CHAPTER 7 FIRE AND SMOKE PROTECTION FEATURES

SECTION 713.8 2015 Edition IBC Interpretation 29-17 Issued 9-13-2017 BU_15_29_17

713.8 Penetrations. Penetrations in a shaft enclosure shall be protected in accordance with Section 714 as required for *fire barriers*. Structural elements, such as beams or joists, where protected in accordance with Section 714 shall be permitted to penetrate a shaft enclosure.

713.8.1 Prohibited penetrations. Penetrations other than those necessary for the purpose of the shaft shall not be permitted in shaft enclosures.

REFERENCED SECTIONS:

CHAPTER 10 MEANS OF EGRESS

1023.5 Penetrations. Penetrations into or through *interior exit stairways* and *ramps* are prohibited except for equipment and ductwork necessary for independent ventilation or pressurization, sprinkler piping, standpipes, electrical raceway for fire department communication systems and electrical raceway serving the *interior exit stairway* and *ramp* and terminating at a steel box not exceeding 16 square inches (0.010 m²). Such penetrations shall be protected in accordance with Section 714. There shall not be penetrations or communication openings, whether protected or not, between adjacent *interior exit stairways* and *ramps*.

Exception: Membrane penetrations shall be permitted on the outside of the *interior exit stairway* and *ramp*. Such penetrations shall be protected in accordance with Section 714.3.2.



Q: In a multi-story building, when a shaft enclosure is designed such that the fire barrier walls creating the shaft enclosure are constructed on and supported by each of the building floor assemblies through which the shaft enclosure passes, and the floor assemblies have a fire-resistance rating equal to or greater than that required for shaft enclosure, does the presence of the floor assemblies constitute prohibited penetrations into or through the shaft enclosure?

A: No.

Provided the floor assemblies and the support system of the floor assemblies are protected to afford the required fire-resistance rating of the fire barrier supported, the integrity of the shaft enclosure would be maintained and the floor assembly would not be considered a prohibited penetration of the shaft enclosure.