## 1305.0717 SECTION 717, DUCTS AND AIR TRANSFER OPENINGS.

Subpart 1. **IBC section 717.5.3.** IBC section 717.5.3 is amended by adding exception 6 as follows:

6. Fire dampers, smoke dampers, and combination fire/smoke dampers are not required in laboratory hood exhaust duct penetrations of shaft enclosures where laboratory ventilation systems are installed in accordance with Chapters 1 to 4, 7, and 8 of NFPA 45.

## Subp. 2. **IBC section 717.6.1.** IBC section 717.6.1 is amended to read as follows:

**717.6.1 Through penetrations.** In occupancies other than Groups I-2 and I-3, a duct constructed of approved materials in accordance with the International Mechanical Code that penetrates a fire-resistance-rated floor or floor/ceiling assembly that connects not more than two stories is permitted without a shaft enclosure protection, provided a listed fire damper is installed at the floor line or the duct is protected in accordance with section 714.4. For air transfer openings, see Section 712.1.8.

## **Exceptions:**

- 1. A duct is permitted to penetrate three floors or less without a fire damper at each floor, provided the duct meets all of the following requirements:
  - a. The duct shall be contained and located within the cavity of a wall and shall be constructed of steel having a minimum wall thickness of 0.0187 inches (0.4712 mm) (No. 26 gage) or the duct shall be protected by an approved through-penetration firestop system installed and tested in accordance with ASTM E 814 or UL 1479. The approved through-penetration firestop system shall have an F rating or T rating of not less than the required rating of the horizontal assembly being penetrated.
  - b. The duct shall open into only one dwelling or sleeping unit and the duct system shall be continuous from the unit to the exterior of the building.
  - c. The duct shall not exceed 4-inch (102 mm) nominal diameter and the total area of such ducts shall not exceed 100 square inches (0.065  $\text{m}^2$ ) in any 100 square feet (9.3  $\text{m}^2$ ) of floor area.
  - d. The annular space around the duct is protected with materials that prevent the passage of flame and hot gases sufficient to ignite cotton waste where subjected to ASTM E 119 or UL 263 time temperature conditions under a minimum positive pressure differential of 0.01 inch

- (2.49 Pa) of water at the location of the penetration for the time period equivalent to the fire-resistance rating of the construction penetrated.
- e. Grille openings located in a ceiling of a fire-resistance-rated floor/ceiling or roof/ceiling assembly shall be protected with a listed ceiling radiation damper installed in accordance with Section 717.6.2.1.
- 2. In Groups I-2 and I-3 occupancies, a duct constructed of approved materials in accordance with the International Mechanical Code that penetrates a fire-resistance-rated floor or floor/ceiling assembly that connects not more than two stories is permitted without a shaft enclosure protection, provided a listed smoke/fire damper is installed at the floor line.

**Statutory Authority:** MS s 326B.02; 326B.101; 326B.106

**History:** 39 SR 1605

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