CHAPTER 7
FIRE AND SMOKE PROTECTION FEATURES

SECTION 716.5.3.1
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716.5.3.1 Smoke and draft control. Fire door assemblies shall also meet the requirements for a smoke and draft control door assembly tested in accordance with UL 1784. The air leakage rate of the door assembly shall not exceed 3.0 cubic feet per minute per square foot (0.01524 m³/s : m²) of door opening at 0.10 inch (24.9 Pa) of water for both the ambient temperature and elevated temperature tests. Louvers shall be prohibited. Installation of smoke doors shall be in accordance with NFPA 105

REFERENCED SECTIONS:

701.2 Multiple use fire assemblies. Fire assemblies that serve multiple purposes in a building shall comply with all of the requirements that are applicable for each of the individual fire assemblies.

716.5.3 Door assemblies in corridors and smoke barriers. Fire door assemblies required to have a minimum fire protection rating of 20 minutes where located in corridor walls or smoke barrier walls having a fire-resistance rating in accordance with Table 716.5 shall be tested in accordance with NFPA 252 or UL 10C without the hose stream test.

Exceptions:
1. Viewports that require a hole not larger than 1 inch (25 mm) in diameter through the door, have at least a 0.25-inch- thick (6.4 mm) glass disc and the holder is of metal that will not melt out where subject to temperatures of 1,700°F (927°C).
2. Corridor door assemblies in occupancies of Group I-2 shall be in accordance with Section 407.3.1.
3. Unprotected openings shall be permitted for corridors in multitheater complexes where each motion picture auditorium has at least one-half of its required exit or exit access doorways opening directly to the exterior or into an exit passageway.
4. Horizontal sliding doors in smoke barriers that comply with Sections 408.3 and 408.8.4 in occupancies in Group I-3.

Q: Door openings for elevators, exit stairways, and incidental use areas are located in walls that also form a corridor. The corridor does not require a fire-resistance rating in accordance with Section 1018. Are these doors required to meet the requirements for a smoke and draft control assembly in accordance with Section 716.5.3.1?

A: No.

Section 716.5.3 and its subsections are applicable to fire door assemblies located in corridor walls that have a fire-resistance rating in accordance with Table 716.5. For Section 716.5.3 to be applicable, the required rating of the corridor walls would need to be either 0.5 hour or 1 hour (Table 716.5). Since there is no rating required for the corridor, Section 716.5.3 is not applicable. Even though the fire barrier wall for the elevator, exit stairway, and incidental use area serve as part of the corridor, the corridor is not considered to be fire-resistance rated. The segment of the corridor wall is fire-resistance-rated based on the elevator enclosure, exit stairway enclosure, and incidental use area separation requirement, not because of the corridor requirement. Therefore, the fire door assembly in the fire-resistance-rated part of the corridor wall is not required to meet the requirements for a smoke and draft control assembly.