CHAPTER 4
SPECIAL DETAILED REQUIREMENTS BASED ON USE AND OCCUPANCY

SECTION 404.5, EXCEPTION 3
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404.5 Enclosure of atriums. Atrium spaces shall be separated from adjacent spaces by a 1-hour fire barrier constructed in accordance with Section 706 or a horizontal assembly constructed in accordance with Section 711, or both.

Exceptions:

1. A glass wall forming a smoke partition where automatic sprinklers are spaced 6 feet (1829 mm) or less along both sides of the separation wall, or on the room side only if there is not a walkway on the atrium side, and between 4 inches and 12 inches (102 mm and 305 mm) away from the glass and designed so that the entire surface of the glass is wet upon activation of the sprinkler system without obstruction. The glass shall be installed in a gasketed frame so that the framing system deflects without breaking (loading) the glass before the sprinkler system operates.

2. A glass-block wall assembly in accordance with Section 2110 and having a ¾-hour fire protection rating.

3. The adjacent spaces of any three floors of the atrium shall not be required to be separated from the atrium where such spaces are included in the design of the smoke control system.

REFERENCED SECTION:

404.4 Smoke control. A smoke control system shall be installed in accordance with Section 909.

Exception: Smoke control is not required for atriums that connect only two stories.

Q: Are spaces adjacent to a two-story atrium permitted to not be separated from the atrium, in accordance with Exception 3 to Section 404.5 of the International Building Code, when smoke control is not provided in accordance with Section 404.4?

A: Yes. Exception 3 to Section 404.5 permits a maximum of three (3) stories of an atrium to be open to adjacent spaces without separation from the rest of the building. The reference to the design of the smoke control system in Exception 3 is to require the designer to address adjacent spaces where a smoke control system is required in accordance with the provisions of Section 404.4. Because the exception to Section 404.4 exempts smoke control for a two-story atrium, Exception 3 can be applied without requiring smoke control.