



INTERPRETATIONS & PROCEDURES

DEVELOPMENT SERVICES DEPARTMENT

BUILDING DIVISION

CODE: 2015 International Building Code **INDEX NUMBER:** IBC-2017-007
SECTION: 707, 711, 712, 1019, and 1023 **ISSUE DATE:** 08/10/2017
SUBJECT: **Group B Occupancies – Interconnected Stories**

ISSUE:

There is an increasing demand for open stairways within tenant spaces of office buildings beyond the limits defined by the building code. The City of Bellevue Building Division has previously approved additional interconnected stories for Group B occupancies in buildings of all construction types.

Under the 2015 IBC:

- Section 712 includes provisions for unprotected vertical openings in floors,
- Section 712.1.3.1 allows floor openings for escalators with area limitations,
- Section 712.1.7 references the atrium requirements for floor openings,
- Section 712.1.9 allows two interconnected stories via an open shaft, with some limitations, and
- Section 1019.3 includes exceptions to enclose a shaft for a stair or ramp.

POLICY: (See Attached Illustrations)

To establish equivalency to the code requirements, the following construction is approved by this policy within a single tenant space. In Type I construction, the 2-story opening may be extended one story directly above and below by vertical openings in floors when the installation complies with all of the following. In all construction types, the 2-story opening may be extended one story directly above or below:

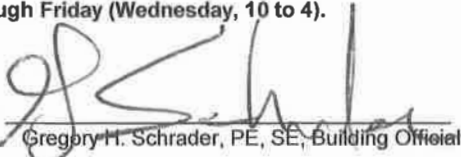
1. The interconnected opening area does not contain an interior exit stairway or ramp used as a required exit component in the means of egress system.
2. Both the extended top and bottom stories must be completely separated from the floor opening with fire barriers in accordance with IBC Section 707. Enclosures shall have a fire-resistance rating of not less than 2 hours where connecting four stories, and not less than 1 hour where connecting three stories. Fire-resistance rating of the fire barriers shall not be less than the floor assembly penetrated, but need not exceed 2 hours.
3. Fire barrier walls shall be located adjacent to the perimeter of the floor opening within a distance to allow for required landings and similar floor areas, but so as to reasonably minimize the area included within the interconnected space.

EXCEPTIONS:

- a) When only three stories are interconnected by floor openings, only the top or bottom story must be separated as indicated above.
- b) The area of either, but not both, the top or bottom opening enclosure may be increased to include an additional floor area not greater than 750 square feet. This area shall not include any space used for storage.
4. The size of the floor openings enclosed per items 2 and 3 above shall not exceed the lesser of 1000 square feet or 25% of the area of that floor. Floor openings at the one intermediate floor, for the 3-story condition, and at the two intermediate floors, for the 4-story condition, shall not be limited in size by this policy.
5. None of the connected stories include assembly occupancies totaling more than 10% of the floor area of the story.
6. The building shall be provided with an approved automatic sprinkler system throughout.
7. There shall be no other floor openings, including those allowed in Section 712.1.3.1 and 1019.3, into the extended story above or below from the original open two stories.
8. Use of this policy is not permitted when any of the affected stories contains an *atrium* constructed in accordance with Section 404.

Note: For questions concerning required permits please visit or call Development Services (425-452-6800) between 8 a.m. and 4 p.m., Monday through Friday (Wednesday, 10 to 4).

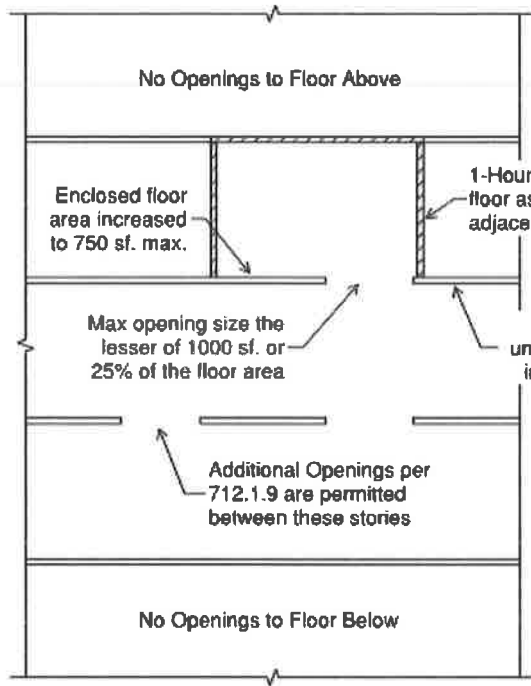
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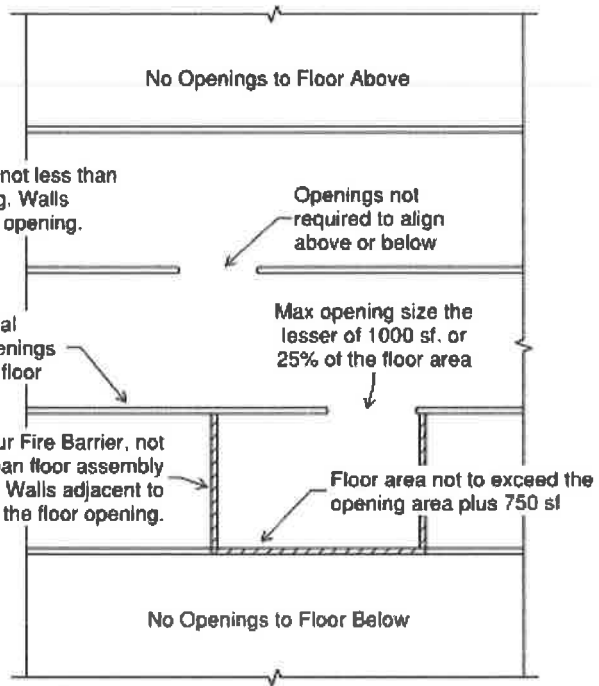
Gregory H. Schrader, PE, SE, Building Official

DATE: August 10, 2017

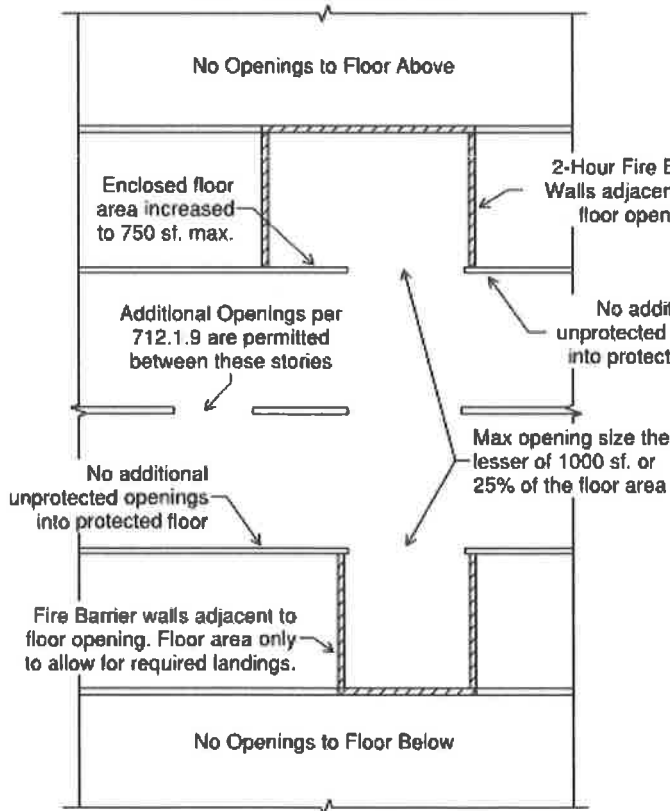
Three Story Opening w/ Top Extension
All Construction Types



Three Story Opening w/ Bottom Extension
All Construction Types



Four Story Opening w/ Top Reception Area
Type I Construction Only



Four Story Opening w/ Bottom Reception Area
Type I Construction Only

