



3.1.7.3. Exposure Conditions for Rating

- (1) Floor, roof and ceiling assemblies shall be rated for exposure to fire on the underside.
- (2) Firewalls and interior vertical fire separations shall be rated for exposure to fire on each side.
- (3) Exterior walls shall be rated for exposure to fire from inside the building.

The Ontario Building Code Section 3 states:

“ **3.1.7.3. Exposure Conditions for Rating**

(1) Floor, roof and ceiling assemblies shall be rated for exposure to fire on the underside.

3.1.8. Fire Separations and Closures

3.1.8.1. General Requirements

(1) Any wall, partition or floor assembly required to be a fire separation shall,

- (a) except as permitted by Sentence (2), be constructed as a continuous element, and
- (b) as required in this Part, **have a fire-resistance rating as specified.**

(2) Openings in a fire separation shall be protected with closures, shafts or other means in conformance with Articles

3.1.8.4. to 3.1.8.18. and Subsections 3.1.9. and 3.2.8.”.

3.1.8. Fire Separations and Closures

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 - (a) except as permitted by Sentence (2), be constructed as a continuous element, and
 - (b) as required in this Part, have a fire-resistance rating as specified.
- (2) Openings in a fire separation shall be protected with closures, shafts or other means in conformance with Articles 3.1.8.4. to 3.1.8.18. and Subsections 3.1.9. and 3.2.8.

3.1.8.2. Combustible Construction Support

(1) Combustible construction that abuts on or is supported by a noncombustible fire separation shall be constructed so that its collapse under fire conditions will not cause the collapse of the fire separation.

3.1.8.3. Continuity of Fire Separations

- (1) Except as permitted by Sentence 3.6.4.2.(2), a horizontal service space or other concealed space located above a required vertical fire separation, including the walls of a vertical shaft, shall be divided at the fire separation by an equivalent fire separation within the service space.
- (2) The fire separation required by Sentence (1) shall terminate so that smoke-tight joints are provided where it abuts on or intersects,
 - (a) a floor,
 - (b) a roof slab, or
 - (c) a roof deck.
- (3) Except as required by Subsection 3.6.3. for a shaft penetrating a roof assembly, a shaft, including an exit enclosure, that penetrates a fire separation, shall,
 - (a) extend through any horizontal service space or any other concealed space, and
 - (b) terminate so that smoke-tight joints are provided where the shaft abuts on or intersects,
 - (i) a floor,
 - (ii) a roof slab, or
 - (iii) a roof deck.
- (4) The continuity of a fire separation shall be maintained where it abuts another fire separation, a floor, a ceiling, or an exterior wall assembly.

3.1.8.4. Determination of Ratings

- (1) Except as permitted by Sentences (2) and 3.1.8.14.(1), the fire-protection rating for a closure shall be determined on the basis of the results of tests conducted in conformance with the appropriate provisions in
 - (a) CAN4-S104-M, “Fire Tests of Door Assemblies”,
 - (b) CAN4-S106-M, “Fire Tests of Window and Glass Block Assemblies”, or

(c) CAN/ULC-S112-M, “Fire Test of Fire-Damper Assemblies”.

(2) Except as permitted by Sentence 3.1.8.10.(1), the fire-protection rating of a closure shall conform to Table 3.1.8.4. for the required fire-resistance rating of the fire separation.

Table 3.1.8.4. Fire-Protection Rating of Closure

Forming Part of Sentence 3.1.8.4.(2) and Clause 3.1.9.1.(1)(a)

Item	Column 1 Fire-Resistance Rating of Fire Separation	Column 2 Required Fire-Protection Rating of Closure
1.	30 min	20 min
2.	45 min	45 min
3.	1 h	45 min
4.	1.5 h	1 h
5.	2 h	1.5 h
6.	3 h	2 h
7.	4 h	3 h

3.1.8.5. Installation of Closures

- (1) Except where fire dampers, window assemblies and glass block are used as closures, closures of the same fire-protection rating installed on opposite sides of the same opening are deemed to have a fire-protection rating equal to the sum of the fire-protection ratings of the closures.
- (2) Except as otherwise specified in this Part, every door, window assembly or glass block used as a closure in a required fire separation,
 - (a) shall be installed in conformance with NFPA 80, “Fire Doors and Other Opening Protectives”, and
 - (b) where required to have a fire-protection rating, shall have labels or classification marks to identify the testing laboratory.
- (3) If a door is installed so that it could damage the integrity of a fire separation if its swing is unrestricted, door stops shall be installed to prevent the damage.

3.1.8.6. Maximum Openings

- (1) The size of an opening in an interior fire separation required to be protected with a closure shall be not more than 11 m², with no dimension more than 3.7 m, if a fire compartment on either side of the fire separation is not sprinklered.
- (2) The size of an opening in an interior fire separation required to be protected with a closure shall be not more than 22 m², with no dimension more than 6 m, provided the fire compartments on both sides of the fire separation are sprinklered.