

RB14-020

## BUILDING CODE APPLICATION TO +15 WALKWAYS

### **Reference: Alberta Building Code 2014 Div B, 3.2.3.19. Sentences (1) thru (5) and Div A, 1.4.1.2**

**Div B, 3.2.3.19.(1)** “Except as required by Sentence 3.2.3.20.(2), if *buildings* are connected by a *walkway*, each *building* shall be separated from the *walkway* by a *fire separation* with a *fire-resistance rating* not less than 45 min.”

**Div B, 3.2.3.19.(2)** “Except as permitted by Sentence (3), a *walkway* connected to a *building* required to be of *noncombustible construction* shall also be of *noncombustible construction*.”

**Div B, 3.2.3.19.(3)** “A *walkway* connected to a *building* required to be of *noncombustible construction* is permitted to be of *heavy timber construction* provided

- a) not less than 50% of the area of any enclosing perimeter walls is open to the outdoors, and
- b) the *walkway* is at ground level.”

**Div B, 3.2.3.19.(4)** “A *walkway* of *noncombustible construction* used only as a pedestrian thoroughfare need not conform to the requirements of Articles 3.2.3.14. and 3.2.3.15.”

**Div B, 3.2.3.19.(5)** “A *walkway* between *buildings* shall be not more than 9 m wide.”

**Div A, 1.4.1.2.** “*Walkway* means a covered or roofed pedestrian thoroughfare used to connect 2 or more *buildings* in which the width of the thoroughfare does not exceed 9 m.”

### **Question:**

It has been queried whether for noncombustible +15 walkways and bridges connecting noncombustible buildings whether sprinklering both the buildings and the walkway/bridge should be considered equivalent to the fire separation with 45 minute fire-resistance rating required in 3.2.3.19.(1).

### **Commentary / Relevant Facts / Conclusion:**

These guidelines are meant to provide an acceptable level of life safety in +15 walkway systems. They are not intended to cover every case or to replace the ABC 2014. Therefore they should be applied in general terms.

**Occupancy:** No occupancy is allowed in walkways.

#### Regulation Bulletin General Policy Statement

Unless stated otherwise, the Code references in this Regulations Bulletin are to Division B of the Alberta Building Code 2014 (ABC 2014). Regulation Bulletins do not overrule the ABC 2014 nor constitute a relaxation of the Code. They serve to clarify the Code in areas where the latter is ambiguous or does not cover a specific topic. Regulation Bulletins are City of Calgary clarifications for staff use to enable consistency in the application of the Code. Regulation Bulletins should always be read in the context of the appropriate requirements of the Code

**Exiting:**

1. Exiting into adjacent buildings from walkways is permitted if such buildings are accessible twenty-four hours. Otherwise an independent exit stair from the walkway to grade is required.
2. Walkways are convenience links between buildings. A walkway shall not be used as an exit from the building.
3. Maximum travel distance to an exit shall be 25 m if only one exit is provided.
4. Where more than one exit is required, the travel distance from any point in the walkway to at least 1 exit shall be not more than 30 m if the walkway is not sprinklered and 45 m if it is sprinklered.
5. The door swing shall be from the walkways into the adjacent buildings.

**Spatial Separation:**

1. When a walkway runs parallel to a building, the exposing building face of the walkway is permitted to have unlimited unprotected openings provided the building face which the walkway is attached to conforms to the spatial separation requirements of the ABC 2014 and there is no occupancy above the walkway.
2. The requirements for fire protection of exterior walls meeting at a fire separation will not apply where a walkway is of noncombustible construction.
3. The interior finish material used on walls, ceiling or floor shall have a flame-spread rating in accordance with the ABC 2014.

**Fire Separation:**

Each building shall be separated from the walkway by at least a 45 minute fire separation, except that:

- a) A sprinklered +15 bridge/walkway of noncombustible construction connecting two noncombustible, sprinklered buildings is considered meeting the intent of the Code if a fire separation with no fire-resistance rating is provided between the building and the bridge/walkway at each end.
- b) An unsprinklered +15 bridge/walkway connecting two noncombustible sprinklered buildings is considered meeting the intent of the Code if a sprinklered vestibule that forms a fire separation with no fire-resistance rating is provided between each building and the bridge/walkway.

Note: If either building is a high building, see the additional provisions under “HVAC Requirements – High Buildings.”

**Covered Lane Walkway:** No covered lane walkway is permitted unless it is acceptable to the Authority Having Jurisdiction.

**H.V.A.C. Requirements:**

1. An enclosed +15 walkway must be ventilated with a fresh air flow of at least one air change per hour. The Code requires all rooms and spaces in buildings to be ventilated.
2. Consideration should be given to heating and air-conditioning of walkways to provide a comfortable environment.

## High Buildings

- a) When an enclosed +15 walkway is connected to a high rise building, life safety measures shall be taken to limit the movement of contaminated air from one building into another during a fire.
- b) See the provisions in “Appendix B – Fire Safety in High Buildings –B-3.2.6.3.(1) Connected Buildings”

**Permits:** A development permit and a building permit are required prior to construction.

Chief Building Inspector