

Temperature Rise Limit For Doors

The Building Standards Department issues Builder Tips as part of our customer service program. They are designed to provide an improved understanding of the Building Code and to reduce the costs associated with correcting infractions. Please contact your area building inspector for further information or call the Building Standards Department at 905.475.4848 extension 2189

3.1.8.17. Temperature Rise Limit for Doors

(1) Except as permitted by Article 3.1.8.19., the maximum temperature rise on the opaque portion of the unexposed side of a door used as a closure in a fire separation in a location shown in Table 3.1.8.17., shall conform to the Table when tested in conformance with Sentence 3.1.8.4.(1)

3.1.8.18. Area Limits for Wired Glass, Glass Block and Safety Glazing

(1) Except as permitted by Article 3.1.8.19., the maximum aggregate area of wired glass or safety glazing in a door used in locations shown in Table 3.1.8.17. shall conform to the Table. (See Note A-3.1.8.18.(1))

(2) Except as permitted by Article 3.1.8.19., the maximum area of glass block, wired glass or safety glazing panels not in a door, used in the locations shown in Table 3.1.8.17., shall conform to the Table.

3.1.8.19. Temperature Rise and Area Limits Waived

(1) The temperature rise limits and glass area limits required by Articles 3.1.8.17. and 3.1.8.18. are waived for a closure between an exit enclosure and an enclosed vestibule or corridor provided

(a) the vestibule or corridor is separated from the remainder of the floor area by a fire separation having a fire-resistance rating not less than 45 min,

(b) the fire separation required by Clause (a) contains no wired glass, glass block or safety glazing within 3 m (9 ft 10 in) of the closure into the exit enclosure, and

(c) the vestibule or corridor contains no occupancy.

(See Note A-3.1.8.19.(1))

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OBJECTIVE

Doors which are constructed to provide only a <u>fire protection rating</u> do not meet the temperature rise limit requirement. When specifying or installing doors in the location indicated in the table below, the doors must conform to the <u>temperature rise limit</u> criteria, in addition to the fire protection rating.

LOCATION	MIN. REQUIRED FIRE PROTECTION RATING OF DOOR	MAX. TEMP. RISE ON OPAQUE PORTION OF UNEXPOSED SIDE OF DOOR. °C (°F)	MAX. AREA OF WIRED GLASS IN DOOR. m² (in²)	MAX. AGGREGATE AREA OF GLASS BLOCK AND WIRED GLASS PANELS NOT IN DOOR m² (in²)
BETWEEN A DEAD END CORRIDOR AND AN ADJACENT OCCUPANCY WHERE THE CORRIDOR PROVIDES THE ONLY ACCESS TO EXIT AND IS REQUIRED TO HAVE A FIRE RESISTANCE RATING	LESS THAN 45 MIN.	NO LIMIT	NO LIMIT	NO LIMIT
	45 MIN.	250 (450) AFTER 30 MIN.	0.0645 (100)	0.0645 (100)
BETWEEN AN EXIT ENCLOSURE AND THE REMAINDER OF THE FLOOR AREA IN BUILDINGS NOT MORE THAN 3 STOREYS IN BUILDING HEIGHT	ALL RATINGS	NO LIMIT	0.8 (1,240)	0.8 (1,240)
BETWEEN AN EXIT ENCLOSURE AND THE REMAINDER OF THE FLOOR AREA (EXCEPT AS PERMITTED ABOVE)	45 MIN.	250 (450) AFTER 30 MIN.	0.0645 (100)	0.0645 (100)
	1.5 HR.	250 (450) AFTER 1 HR.	0.0645 (100)	0.0645 (100)
	2 HR.	250 (450) AFTER 30 MIN.	0.0645 (100)	0.0645 (100)
IN A FIRE WALL	1.5 HR.	250 (450) AFTER 30 MIN.	0.0645 (100)	0
	3 HR.	250 (450) AFTER 1 HR.	0	0

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