

NATIONAL BUILDING CODE REFERENCES – GLASS DOORS

Information contained below and on the following page is provided by Hollander to answer some of the most frequently asked questions regarding building standards for architectural glass applications for glass doors. For your convenience, we have researched and summarized and referenced some of the relevant Ontario Building Code Guidelines, which are based, in large measure, on the National Building Code of Canada, and therefore are similar to the guidelines for other provinces across Canada.

This material should be used as a general guide for planning purposes only and the application and installation of glass should be based on the National Standards of Canada, published by the Canadian General Standards Board (CGSB).

Of particular relevance to the glass business are the standards referenced below which can be purchased from CGSB PUBLICATIONS by telephone (819) 956-0425 or (800) 665-CGSB (2274), Canada only; or through the website: <http://www.pwgsc.gc.ca/cgsb>

The following material is taken from the publication *Ontario Building Code and Supplementary Guidelines*, June 30, 2005 which provides a consolidated version of the 1997 Ontario Building Code which became effective April 6, 1998 and contains amendments made through June 22, 2005.

Part 9 Housing and Small Building

9.6.6 Glass Doors and Sidelights

9.6.6.1. Maximum Area of Glass

(1) The maximum area of individual panes of glass for doors shall conform to Table 9.6.6.1.

9.6.6.2. Glass in Doors and Sidelights

(1) Glass in doors and sidelights shall conform to Sentence 9.7.3.1.(1).

Table 9.6.6.1.
Maximum Glass Area for Doors
Forming part of Sentence 9.6.6.1.(1)

Glass Thickness, mm (in.)	Maximum Glass Area m ² (ft ²)		
	Type of Glass		
	Annealed	Annealed Multiple-Glazed Factory Sealed Units	Fully Tempered
3mm (1/8")	0.50m ² (5.4 ft ²)	0.70m ² (7.5 ft ²)	1.00m ² (10.8 ft ²)
4mm (5/32")	1.00m ² (10.8 ft ²)	1.50m ² (16.1 ft ²)	4.00m ² (43.1 ft ²)
5mm (3/16")	1.50m ² (16.1 ft ²)	1.50m ² (16.1 ft ²)	No Limit
6mm (1/4")	1.50m ² (16.1 ft ²)	1.50m ² (16.1 ft ²)	No Limit

Note: Maximum areas in Table 9.6.6.1 for other than fully tempered glazing are cut off at 1.50m², (for example a sheet 39.37" by 58.05") as this would be the practical limit after which safety glass would be required by Sentence 9.6.6.2.(3).

(2) Glass in sidelights greater than 500 mm (19 3/4 in) wide that could be mistaken for doors, glass in storm doors and glass in sliding doors within or at every entrance to a dwelling unit and in public areas shall be

(a) safety glass of the tempered or laminated type conforming to standard CAN/CGSB-12.1-M, "Tempered or Laminated Safety Glass", or

(b) wired glass conforming to standard CAN/CGSB-12.11-M, "Wired Safety Glass".

(3) Except as provided in Article 9.7.5.2., glass in entrance doors to dwelling units and in public areas other than the entrance door described in Sentence (2), shall be safety glass or wired glass of the type described in Sentence (2) where the glass area exceeds 0.5 m² (5.4 ft²) and extends to less than 900 mm (2 ft 11 in) from the bottom of the door.

9.6.6.3. Mirrored Glass Doors

(1) Mirrored glass doors are permitted to be used only at the entrance to clothes closets and shall conform to the requirements of standard CAN/CGSB-82.6-M, "Doors, Mirrored Glass, Sliding or Folding Wardrobe". (The standard covers mirrored glass doors for use on reach-in closets. It specifies that such doors are not to be used for walk-in closets.)

(2) Mirrored glass doors reinforced with a film backing shall meet the impact resistance requirements specified in standard CAN2-12.5-M, "Mirrors, Silvered."

9.7.3.1. Glass Standards

- (1) Glass shall conform to the following standards
- (a) CAN/CGSB-12.1-M, "Tempered or Laminated Safety Glass",
 - (b) CAN/CGSB-12.2-M, "Flat, Clear Sheet Glass",
 - (c) CAN/CGSB-12.3-M, "Flat, Clear Float Glass",
 - (d) CAN/CGSB-12.4-M, "Heat Absorbing Glass",
 - (e) CAN/CGSB-12.8-M, "Insulating Glass Units",
 - (f) CAN/CGSB-12.10, "Glass, Light and Heat/Reflecting", or
 - (g) CAN/CGSB-12.11-M, "Wired Safety Glass".

9.7.5.2 Sliding Glass Partitions

(1) Sliding glass *partitions* which separate a *public corridor* from an adjacent *occupancy* and which are open during working hours need not conform to Sentence 9.6.6.2.(3) except that such *partitions* shall be suitably marked to indicate their existence and position.