

Builder Tip

LOADING ON GUARDS

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ONTARIO BUILDING CODE

9.8.8.2. Loading on Guards

- (1) Except as provided in Sentences (5), guards shall be designed to resist the specified loads in Table 9.8.8.2.
- (2) Where the width and spacing of balusters in guards within dwelling units and in exterior guards serving not more than two dwelling units is such that three balusters can be engaged by a load imposed over a 300 mm width, the load shall be imposed so as to engage three balusters.
- (3) None of the loads specified in Table 9.8.8.2.need be considered to act simultaneously.
- (4) For guards within dwelling units and for exterior guards serving not more than two dwelling units, Table 9.8.8.2. need not apply where the guard construction has been demonstrated to provide effective performance.
- (5) Guards constructed in accordance with the requirements in MMAH Supplementary Standard SB-7, "Guards for Housing and Small Buildings" shall be deemed to satisfy the requirements of Sentence (1).

9.8.8.7. Glass in Guards

- (1) Glass in guards shall be,
- (a) safety glass of the laminated or tempered type conforming to CAN/CGSB-12.1-M, "Tempered or Laminated Safety Glass". or
- (b) wired glass conforming to CAN/CGSB-12.11-M, "Wired Safety Glass".

OBJECTIVE

Guards installed in dwelling units or on exterior stairs serving not more than 2 dwelling units must meet the loading requirement in Table 9.8.8.2. Guards that are not designed in accordance with Supplementary Standard SB-7 (SB-7) are required to conform to Part 4 of the Building Code. SB-7 is specifically for guards consisting of wood components, therefore, guards consisting of glass or metal such as steel or aluminum must be professional engineered. Proof of the engineered design must be submitted to the building inspector prior to installation.

Horizontal loads applied inward on elements within the guards such as solid panels (glass, wood, etc) and pickets, must be applied over a maximum width and height of 300 mm (11¾ in); meaning that if loads are applied on balusters (pickets) three pickets will be engaged. Refer to the table below for the design load.

Table 9.8.8.2. Specified Loads for Guards⁽¹⁾

	MINIMUM DESIGN LOADS		
LOCATION OF GUARD	Horizontal Load Applied Inward or Outward at any Point at the Top of the Guard	Horizontal Load Applied Inward or Outward on Elements Within the Guard, Including Solid Panels and Pickets	Evenly Distributed Vertical Load Applied at the Top of the Guard
Guards within dwelling units and exterior guards serving not more than 2 dwelling units	0.5 kN/m or concentrated load of 1.0 kN applied at any point ⁽¹⁾	0.5 kN applied over a maximum width of 300 mm and a height of 300 mm ⁽²⁾	1.5 kN/m
Guards serving access walkways to equipment platforms, contiguous stairs and similar areas	Concentrated load of 1.0 kN applied at any point	Concentrated load of 0.5 kN applied at any point on individual elements	1.5 kN/m
All other guards	0.75 kN/m (or concentrated load of 1.0 kN applied at any point ⁽¹⁾	Concentrated load of 0.5 kN applied at any point on individual elements	1.5 kN/m

Notes to Table 9.8.8.2.

(1) The load that creates the most critical condition shall apply

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