BUILDING BULLETIN

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GLASS GUARDRAIL REQUIREMENTS

Purpose: The purpose of the bulletin is to clarify the requirements for glass guardrails in commercial and residential applications.

Disclaimer: This Building Bulletin has been prepared as a convenience for the Town of Osoyoos residents. It is not intended to replace or supersede existing Building Code requirements, Town Bylaws or other legal documents which maintain legal authority. It is the responsibility of the user to verify the information and to make decisions based on the governing documents.

All guardrails with glass must conform to the requirements of the 2024 edition of the BC Building Code: 4.1.5.14, 9.8.8.2.(1), and 9.8.8.7.(1). In addition, they must comply with ASTM E1300 "Standard Practice for Determining Load Resistance of Glass in Building" and A500-16 "Building Guards". Projects under the supervision of a Professional Engineer must also meet the additional requirements contained in EGBC Guideline "Designing Guards for Building Projects".

The following requirements are noted:

Manufactured Aluminum/Wood Guards with Glass Infill Panels: Manufacturer's specifications shall be provided for review by the Building Official demonstrating conformance with the requirements of Table 9.8.8.2 for Part 9 buildings and Sentence 4.1.5.14 for Part 3 buildings. Projects under the supervision of an Architect or Professional Engineer (Part 3 Complex buildings) must provide approval of the guardrail design and installation in accordance with the submitted Letters of Assurance Schedule B.

Custom Glass Guardrails (Custom Top Cap): sealed engineered drawings must be submitted in support of the approval of the guardrail submission. Drawings must clearly indicate compliance with all the above-mentioned codes, standards and guidelines. Professional Engineer shall provide confirmation of the guardrail design and installation in accordance with the submitted Letters of Assurance Schedule B.

Custom Glass Guardrail (No Top Cap): Guardrails with no top cap shall be submitted under the provisions of an Alternative Solution (Section 2.3 Alternative Solutions). Required documentation shall include:

a) A Code analysis outlining the analytical methods and rationales used to determine that a proposed alternative solution will achieve at least the level of performance required by Clause 1.2.1.1.(1)(b) of Division A:
    a. The Code analysis shall identify the applicable objectives, functional statements and acceptable solutions, and any assumptions, limiting or restricting factors, testing procedures, engineering studies or building performance parameters that will support a Code compliance assessment.
    b. The Code analysis shall include information about the qualifications, experience and background of the person or persons taking responsibility for the design.
    c. The information provided shall be in sufficient detail to convey the design intent and to support the validity, accuracy, relevance and precision of the Code analysis.
    d. A single person to co-ordinate the preparation of the design, Code analysis and documentation referred to in this Article.

b) Information concerning any special maintenance or operational requirements, including any building component commissioning requirements, that are necessary for the alternative solution to achieve compliance with the Code after the building is constructed.