



DEPARTMENT OF ADMINISTRATIVE SERVICES

PROPOSED CHANGE OF THE CONNECTICUT STATE BUILDING CODE AND FIRE SAFETY CODE

DATE SUBMITTED: 4/11/2024

CODE INFORMATION

Proposed change to: [X] Building Code [ ] Fire Safety Code

Code section(s): 2022 CSBC: 1807.2.1.1 (del)

2024 IBC: 1807.2.5 (amd)

PROPONENT INFORMATION

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PROPOSAL INFORMATION

Description of change and reason for change (attach additional information as needed):

Amend guard requirements at retaining walls to better align with 2024 IBC. See attachment.

Proposed text change, addition or deletion (attach additional information as needed):

See attachment.

Supporting data and documents (attach additional information as needed)

[X] This Proposal is original material. (Note: Original material is considered to be the submitter's own idea based on or as a result of his/her own experience, thought or research and, to the best of his/her knowledge, is not copied from another source.)

[ ] This Comment is not original material, its source (if known) is as follows: (such as material / code development proposal from a prior development cycle or proposal submitted to model code committee etc.)

[ ] I would like to make an in-person presentation of my proposal.

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Handwritten signature of Thomas Bronson

Proponent's Signature

Thomas Bronson

Printed Name

PLEASE EMAIL (PREFERRED) TO DAS.CodesStandards@CT.GOV OR MAIL OR FAX (SEE BELOW)

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## **DESCRIPTION FOR CHANGE AND REASON FOR CHANGE:**

The requirement to provide guards at retaining walls was first introduced into the CSBC with the adoption of the 2009 Amendment to the 2005 CSBC; at that time, there were no parallel requirements within the IBC. Similar requirements were added in the 2024 IBC, but these were limited to retaining walls located adjacent to walking surfaces; the IBC provisions did not include requirements for guards along parking lots or driveways.

This proposal incorporates the language of the 2024 IBC but amends it to include parking lots and driveways per the prior CSBC provisions. The 2024 IBC is triggered by a 2'-6" difference in elevation versus the 4'-0" difference in elevation utilized in the prior editions of the CSBC; the 2'-6" trigger from the 2024 IBC was retained. The 2024 IBC is also triggered by a 3'-0" lateral distance from the surface in question to the edge of the open side whereas the CSBC was based on a 2'-0" lateral distance from the surface in question to the nearest side of the retaining wall. The 2024 IBC requirement seems more pragmatic and was retained.

Missing from both the CSBC and the IBC are requirements for the guards to resist vehicular impact when a parking lot or driving surface occur alongside a retaining wall. The requirements for vehicular guards have been added. The loading requirements are the same as those for a parking structure. The trigger of the 2'-6" difference in elevation was utilized; this is less stringent than the 1'-0" trigger for parking garages contained in Section 406.4.2.

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## **PROPOSED TEXT CHANGES:**

### **2022 CSBC – 2021 IBC Amendments – CHAPTER 18**

~~(Del.) **1807.2.1.1 Guards.** Retaining walls with a difference in height between the finished grade at the top of the wall and the finished grade at the bottom of the wall that is greater than 4 feet (1219 mm) shall be provided with *guards* complying with Sections 1015.3, 1015.4 and 1607.8 when there is a walking surface, parking lot or driveway on the high side located closer than 2 feet (610 mm) to the nearest side of the retaining wall. For the purpose of this section, grass, planting beds or landscaped areas shall not be considered a walking surface.~~

### **IBC 2024 - CHAPTER 18**

**(Amd.) 1807.2.5 Guards and Vehicle Barriers.**

*Guards and vehicle barriers* shall be provided at retaining walls in accordance with Sections 1807.2.5.1 through 1807.2.5.3.

~~**Exception:** *Guards are not required at retaining walls not accessible to the public.*~~

#### **1807.2.5.1 Where required.**

At retaining walls located within 36 inches (914mm) of walking surfaces, parking lots, or driveways, a *guard* shall be required between the walking surface, parking lot, or driveway, and the open side of the retaining wall where the walking surface, parking lot or driveway is located more than 30 inches (762 mm) measured vertically to the surface or grade below at any point within 36 inches (914mm) horizontally to the edge of the open side. *Guards* shall comply with the loading requirements of Section 1607.9. For the purpose of this section, grass, planting beds, or landscaped areas shall not be considered a walking surface.

At retaining walls located within 36 inches (914 mm) of parking lots or driveways, *guards* shall also serve as *vehicle barriers* and shall be required between the parking lot or driveway and the open side of the retaining wall where the parking lot or driveway is located more than 30 inches (762 mm) measured vertically to the surface or grade below at any point within 36 inches (914mm) horizontally to the edge of the open side. *Guards* serving as *vehicle barriers* shall comply with the loading requirements of Sections 1607.9 and 1607.11.