




## Memorandum

**Date:** November 13, 2017

**To:** Melanie Bachman, Executive Director  
Connecticut Siting Council

**From:** Joseph V. Cassidy, P.E., State Building Inspector  
Department of Administrative Services 

**Subject:** Acceptable Overstress for Communication Towers

I am in receipt of your Memorandum to the telecommunications carriers, dated November 6, 2017 regarding requests for exempt modifications to existing jurisdictional towers. In it you state "...*the Council will accept filings if the filing is accompanied by a formal opinion from the Connecticut State Building Inspector specifically regarding the structure in question stating that such overstress of the specific structure is allowable.*"

A structural analysis report prepared by a Connecticut Professional Engineer, licensed pursuant to Chapter 391 of the Connecticut General Statutes (CGS), is an acceptable demonstration of compliance with the State Building Code and would be accepted by our office in accordance with CGS 20-304. The Council may do the same, without the need for a formal opinion for each request from the State Building Inspector.



# STATE OF CONNECTICUT

## CONNECTICUT SITING COUNCIL

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### MEMORANDUM

Date: November 6, 2017

To: Telecommunications Carriers and their Representatives

From: Melanie Bachman, Executive Director *MAB*

Re: Exempt Modification/Tower Share Filing  
Acceptable Overstress for Communications Towers

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The Connecticut Siting Council (Council) has received requests for exempt modifications to existing jurisdictional towers that include statements relating to allowable potential "overstress" in the structural analysis reports submitted with exempt modification filings. Given the statement in the Connecticut State Building Inspector's April 27, 2017 correspondence to the Council, a copy of which is attached, indicating that "the State Building Code would allow limited overstresses under certain conditions for existing towers," the Council will accept such filings if the filing is accompanied by a formal opinion from the Connecticut State Building Inspector specifically regarding the structure in question stating that such overstress of the specific structure is allowable. If the exempt modification filing with an overstress situation does not include this formal opinion specific to the structure, the filing will be denied.

Thank you in advance for your cooperation.

MAB/CMW/laf

Enclosure: State Building Inspector Letter, dated April 27, 2017

c: Joseph V. Cassidy, P.E., State Building Inspector





DEPARTMENT OF ADMINISTRATIVE SERVICES

April 27, 2017

Melanie A. Bachman, Esq.  
Executive Director/Staff Attorney  
Connecticut Siting Council  
10 Franklin Square  
New Britain, CT 06051

Re: Interpretation of 2016 CT State Building Code IBC Section 3404  
Acceptable Loading of Existing Structures

Ms. Bachman,

In your email of March 24, 2017 you requested an interpretation regarding the structural stresses allowed during an alteration of an existing communication tower, specifically whether an overstress up to 5% would be allowed by the State Building Code.

Answer:

These alterations are regulated by chapter 34 – Existing Buildings and Structures of the 2012 IBC portion of the 2016 State Building Code. Section 3404.3 discusses gravity loading and states in salient part “Any existing gravity load-carrying structural element for which an alteration causes an increase in design gravity load of more than 5 percent shall be strengthened...”. Section 3404.4 discusses lateral loads and includes an exception which states in salient part “Any existing lateral load-carrying structural element whose demand-capacity ratio with the alteration considered is no more than 10 percent greater than its demand-capacity ratio with the alteration ignored shall be permitted to remain unaltered.” This exception continues to require that the effects of all additions and alterations must be included in this analysis.

Therefore, the State Building Code would allow limited overstresses under certain conditions for existing towers.

Sincerely,

Joseph V. Cassidy, P.E.  
State Building Inspector