

AGENDA

UBC COMMISSION
STRUCTURAL ADVISORY COMMITTEE

April 5, 2018 3:00 pm
Heber M Wells Building Room 402
160 E 300 S Salt Lake City, UT

This agenda is subject to change up to 24 hours prior to the meeting.

1. Approval of the minutes from March 1, 2018 meeting
2. Review the seismic and snow load requirements and current amendments in Chapter 16
3. Review Chapter 23 of the IBC
4. Start the review of the 2018 IEBC and current amendments

Next Scheduled Meeting: May 3, 2018

Please call Sharon at 530-6163 or email ssmalley@utah.gov if you do not plan on attending this meeting.



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Division of Occupational and Professional Licensing, 160 East 300 South, Salt Lake City UT 84111, Phone 530-6628 or toll-free in Utah only 866-275-3675

MINUTES

UTAH
UNIFORM BUILDING CODE COMMISSION
STRUCTURAL ADVISORY COMMITTEE
MEETING

March 1, 2018

Room 474 – 4th Floor 3:00
Heber M Wells Building
160 East 300 South
Salt Lake City UT 84111

STAFF:

Robyn Barkdull, Bureau Manager
Sharon Smalley, Board Secretary

COMMITTEE MEMBERS:

Jeremy Achter
Jerel Newman
John Saunders

Michael Buehner
Josh Blazzard
Peter Donough

VISITORS:

SWEAR IN NEW MEMBER

Thomas Dickinson resigned from this committee.

MINUTES

A motion was made by Jeremy Achter to approve the minutes from the February 1, 2018 meeting as written. The motion was seconded by John Saunders and passed unanimously.

REVIEW THE SEISMIC AND SNOW
LOAD REQUIREMENTS AND
CURRENT AMENDMENTS IN
CHAPTER 16

Josh Blazzard gave a report on the status of the snow load study. He reported that the study probably would not be ready until July.

Josh Blazzard will review the references to ASCE 7 and report back at the next meeting so the current snow load amendments in Chapter 16 can be reviewed.

Jeremy Achter gave a report on the seismic sections and the current amendments. A motion was made by Jeremy Achter to keep the current amendment in 15A-3-107(10). The motion was seconded by Jerel Newman and passed unanimously.

A motion was made by Jerel Newman to delete the current amendment in 15A-3-107(11) pending

review by the Unified Code Analysis Council and the Architectural Advisory Committee. The motion was seconded by John Saunders and passed unanimously.

The committee will review a new recommendation for 1613.1.1 at the next meeting.

The following assignments were made for the review of the 2018 IEBC:

Josh Blazzard Chapters 1, 2, and 3

Michael Buehner Chapters 4, 5, and 6

Peter McDonough Chapters 7 and 8

Jerel Newman Chapters 9 and 10

John Saunders Chapters 11 and 12

Jeremy Achter Chapters 13, 14 and 15

The meeting adjourned at 4:16.

Note: These minutes are not intended to be a verbatim transcript but are intended to record the significant features of the business conducted in this meeting. Discussed items are not necessarily shown in the chronological order they occurred.

1613.1.1 ASCE 12.7.2 and 12.14.8.1 of Chapter 12 of ASCE 7 referenced in Section 1613.1, Definition of W, Item 4 is deleted and replaced with the following:

4. Where flat roof snow load, P_f , exceeds 30 psf, the snow load included in seismic design shall be calculated, in accordance with the following formula: $W_s = (0.20 + 0.025(A-5))P_f$ is greater than or equal to $0.20 P_f$.

WHERE:

W_s = Weight of snow to be included in seismic calculations

A = Elevation above sea level at the location of the structure (ft./1,000)

P_f = Design roof snow load, psf

For the purpose of this section, snow load shall be assumed uniform on the roof footprint without including the effects of drift or sliding. The Importance Factor, I, used in calculating P_f may be considered 1.0 for use in the formula for W_s .

1613.1.1 Effective Seismic Weight. In ASCE 7 Sections 12.7.2 and 12.14.8.1, as referenced in Section 1613.1, in the Definition of Effective Seismic Weight, W, Item 4 shall be deleted and replaced with the following:

4. Where flat roof snow load, P_f , exceeds 30 psf, the snow load included in the effective seismic weight shall be calculated in accordance with the following equation: $W_s = (0.20 + 0.025(A-5))P_f \geq 0.20 P_f$.

WHERE:

W_s = Weight of snow to be included as effective seismic weight

A = Elevation above sea level at the location of the structure (ft./1,000)

P_f = Design roof snow load, psf

For the purpose of this section, snow load shall be assumed uniform on the roof footprint without including the effects of drift or sliding. The Importance Factor, I, used in calculating P_f may be considered 1.0 for use in the formula for W_s .

In IBC 2308.3.1 a new exception, 1, is added as follows: "1. In Seismic Design Category D, foundation plates and sills are to be bolted or anchored to the foundation with not less than ½-inch (12.7 mm) diameter steel bolts or approved anchors spaced to give equivalent capacity as the steel bolts, embedded at least 7 inches (178 mm) into concrete or masonry, and spaced not more than 32 inches (816 mm) apart. There shall be a minimum of two bolts or anchor straps per piece with one located not less than 4 inches (102mm) nor more than 12 inches (305 mm) from each end of each piece. A properly sized nut and washer shall be tightened on each bolt to the plate.

In IBC 2308.3.1 a new exception, 2, is added as follows: "2. In Seismic Design Category E, foundation plates and sills are to be bolted or anchored to the foundation with not less than 5/8-inch (15.9 mm) diameter steel bolts or approved anchors spaced to give equivalent capacity as the steel bolts, embedded at least 7 inches (178 mm) into concrete or masonry, and spaced not more than 32 inches (816 mm) apart. There shall be a minimum of two bolts or anchor straps per piece with one located not less than 4 inches (102mm) nor more than 12 inches (305 mm) from each end of each piece. A properly sized nut and washer shall be tightened on each bolt to the plate.

(5) Section ~~403.5~~ 503.6 is deleted and replaced with the following:

~~“403.5 503.6~~ Bracing for unreinforced masonry parapets and other appendages upon reroofing. Where the intended alteration requires a permit for reroofing and involves removal of roofing materials from more than 25% of the roof area of a building assigned to Seismic Design Category D, E, or F that has parapets constructed of unreinforced masonry or appendages such as cornices, spires, towers, tanks, signs, statuary, etc., the work shall include installation of bracing to resist out-of-plane seismic forces, unless an evaluation demonstrates compliance of such items. ~~For purposes of this section, design seismic forces need not be taken greater than 75% of those that would be required for the design of similar nonstructural components in new buildings of similar purpose and location.~~ Reduced seismic forces shall be permitted.

For purpose of design

(5) Section 503.6 is deleted and replaced with the following:

“503.6 Bracing for unreinforced masonry parapets and other appendages upon reroofing. Where the intended alteration requires a permit for reroofing and involves removal of roofing materials from more than 25% of the roof area of a building assigned to Seismic Design Category D, E, or F that has parapets constructed of unreinforced masonry or appendages such as cornices, spires, towers, tanks, signs, statuary, etc., the work shall include installation of bracing to resist out-of-plane seismic forces, unless an evaluation demonstrates compliance of such items. Reduced seismic forces shall be permitted.

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New Amendment

906.6

(5) Section ~~503.6~~ is deleted and replaced with the following:

906.6

~~"503.6~~ Bracing for unreinforced masonry parapets and other appendages upon reroofing. Where the intended alteration requires a permit for reroofing and involves removal of roofing materials from more than 25% of the roof area of a building assigned to Seismic Design Category D, E, or F that has parapets constructed of unreinforced masonry or appendages such as cornices, spires, towers, tanks, signs, statuary, etc., the work shall include installation of bracing to resist out-of-plane seismic forces, unless an evaluation demonstrates compliance of such items. ~~Reduced seismic forces shall be permitted.~~

*For purpose
of design*

1006.3 Seismic Loads. Where a change of occupancy results in a building being assigned to a higher risk category, or when such change of occupancy results in a design occupant load increase of 100% or more, the building shall satisfy the requirements of section 1603 of the International building code using Full seismic forces.