AGENDA

UBC COMMISSION
STRUCTURAL ADVISORY COMMITTEE

July 10, 2025, 3:00 pm

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

Anchor Location
Room 474
Heber M Wells Building
160 E 300 S
Salt Lake City, UT

Join with Google Meet
meet.google.com/rxq-vxfm-mkz

Join by phone
(US) +1 240-528-8520 PIN: 560 007 859#

1. Roll call
2. Approve the minutes from the June 5, 2025, meeting
3. Review proposed amendments for IBC Section 1905 and 1909

Next Scheduled Meeting: August 7, 2025 (if needed)

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

In compliance with the Americans with Disabilities Act, individuals needing special accommodations (including auxiliary communicative aids and services) during this meeting should notify Jenna Mayne, ADA Coordinator, jenenamayne@utah.gov **801-530-6256** at least three working days prior to the meeting. 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

June 5, 2025

CONVENED: 3:02 ADJOURNED 3:52

STAFF:
Steve Duncombe, Bureau Manager
Sharon Smalley, Board Secretary

COMMITTEE MEMBERS:
Tim Strickland
Patrick Tomasino
John Saunders, absent
Brent Maxfield
Josh Blazzard, Commission Liaison
Oliver Burt, absent
Tyler Wright

VISITORS:

MINUTES

During the review of the minutes, Brent Maxfield asked that the minutes show who attended the meeting in person. Tyler Wright asked that the minutes be corrected to show page 45 and not 46. A motion was made by Brent Maxfield to approve the minutes from the May 1, 2025, meeting as corrected. The motion was seconded by Tim Strickland and passed unanimously.

DO A FINAL REVIEW OF THE STRUCTURAL PORTION OF THE 2024 IBC AND IEBC

Tyler Wright reported that SEAU codes committee was not ready to submit any amendments at this time. They are considering a proposal that would adopt the ACI 318 -2025.

The committee did a final review of all of their recommendations for changes and new amendments for the structural portion of the 2025 IBC.

REVIEW AMENDMENTS FOR THE STRUCTURAL PORTION OF THE 2024 IBC & IEBC

Brent Maxfield questioned the wording for the first sentence in the new amendment for Section 1613.1.2. The original submittal will be reviewed and if necessary, the wording will be corrected. No other changes were recommended. If SEAU has the amendments ready for the July meeting

and they are approved by the committee, they will be presented to the Commission at their August meeting.

MAKE A RECOMMENDATION TO THE UBC COMMISSION

Following the review of the recommendations for new and current amendments that this committee has made for the structural portion of the 2024 IBC and IEBC, a motion was made by Tyler Wright to make a recommendation that this committee has reviewed the structural portion of the 2024 IBC and IEBC and have approved the amendments as presented with the modifications to be adopted into the state code. The motion was seconded by Brent Maxfield and passed unanimously.

A motion was made by Brent Maxfield to send this committee's recommendations for the structural portion of the 2024 IBC & IEBC forward to the UBC Commission. The motion was seconded by Tyler Wright and passed unanimously.

The committee agreed to hold the July meeting on the 10th and not the 3rd.

The meeting adjourned at 3:29.

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.

UTAH DEPARTMENT OF COMMERCE
DIVISION OF OCCUPATIONAL AND PROFESSIONAL LICENSING
160 East 300 South Salt Lake City UT 84111
PO Box 146741 Salt Lake City UT 84114-6741
E-mail: b8@utah.gov
Web: www.dopl.utah.gov

REQUEST FOR CODE AMENDMENT

Requesting Agency/Person: SEAU Codes Committee	Date: 6/02/2025
Street Address: SEAU Codes Committee	
City, State, Zip Salt Lake City, Utah 84105	
Contact Person: Danny Currit	Phone: (206) 375-4188
Code to be Amended: 2024 INTERNATIONAL BUILDING CODE (Include edition)	
Section: 1905	
Section Title: SEISMIC REQUIREMENTS	

AMENDMENT:

Type proposed amendment in rule change form. (Using strikeout on portions being removed and underline on all new wording.)

1. Include the entire section you wish to amend.
2. Attach additional sheets if necessary.

See attached sheets.

Purpose of or Reason for the amendment: During the 2021 IBC code cycle changes were made to the concrete code (ACI 318) adopted by the IBC that were later found to be overly conservative. Since that time, the ACI code has been revised to change some of these provisions to be less onerous. These revisons will not be captured in the IBC until 2027 code cycle, at the earliest. This purpose of this amendment is to make these changes effective sooner in the State of Utah.
Cost or Savings Impact of Amendment: The amendment will result cost savings to many who are constructing new buildings in the State of Utah when concrete is used as building material. It would be difficult to estimate the magnitude of the savings, since this amendment will reduce the required thickness of concrete shear walls where seismic forces control the wall design having no impact on other building elements/materials.
Compliance Costs for Affected Persons (APerson@ means any individual, partnership, corporation, association, governmental entity, or public or private organization of any character other than an agency.) (You must break out the impact cost to State Budget, Local Government and you must state aggregate cost to other persons {cost per person times number of persons affected}): There are no costs incurred for compliance.

Signature:	Date:

For Division Use:

Date Received:	
Committee Action: ☐ Approved ☐ Denied ☐ Approved with revisions ☐ Referred to: ☐ Tabled	**UBC Commission Decision for Hearing:** ☐ Approved for hearing ☐ Denied ☐ Approved with revisions ☐ Referred to: ☐ Tabled
Date Filed:	Public Hearing Date:
UBC Commission Decision for Adoption: ☐ Approved ☐ Denied ☐ Approved with revisions ☐ Referred to: ☐ Tabled	Effective Date:

New IBC, Sections 1905.8 and 1905.9 are added as follows:

1905.8 ACI 318, Section 18.10.3. Delete ACI 318 Section 18.10.3 and replace with the following:

18.10.3 Design Forces

18.10.3.1 Design shear forces for horizontal wall segments, including coupling beams, shall be in accordance with 18.10.7.

18.10.3.2 Design shear forces for wall piers shall be in accordance with 18.10.8.

18.10.3.3 Design shear forces for parts of walls not covered by 18.10.3.1 or 18.10.3.2 shall be in accordance with the requirements of 18.10.3.3.1 through 18.10.3.3.5.

18.10.3.3.1 If the wall design actions are determined in accordance with nonlinear dynamic analysis procedures satisfying Appendix A, design forces shall be as determined in Appendix A.

18.10.3.3.2 If the design shear force is determined by linear analysis procedures of the general building code, it shall be amplified by the product $\Omega_v \omega_v$, where Ω_v and ω_v are defined in 18.10.3.3.3 through 18.10.3.3.5.

18.10.3.3.3 Ω_v and ω_v shall be in accordance with Table 18.10.3.3.3. Alternatively, it shall be permitted to calculate $\Omega_v = M_{pr}/M_u$ at the critical section for flexure, where M_{pr} is calculated for axial force that includes the effects of E and the expected gravity loads, with expected gravity loads in accordance with ASCE/SEI 7 Section 16.3.2.

Table 18.10.3.3.3—Factors Ω_v and ω_v

Condition	Ω_v	ω_v
$h_{wcs}/\ell_w \le 1.0$	1.0	1.0
$1.0 < h_{wcs}/\ell_w < 2.0$	Linear interpolation permitted between 1.0 and 1.5	
$h_{wcs}/\ell_w \ge 2.0$	1.5	$0.8 + 0.09h_n^{1/3} \ge 1.0$

18.10.3.3.4 If the general building code includes provisions to account for overstrength of the seismic-force-resisting system, it shall be permitted to take $\Omega_v \omega_v$ equal to Ω_0.

18.10.3.3.5 If $\Omega_v \omega_v = \Omega_0$, it shall be permitted to take the redundancy factor contained in the general building code equal to 1.0 for determination of the design shear force.

1905.9 ACI 318, Section 22.2.4.1 Modify ACI 318 Section 21.2.4.1 to read as follows:

21.2.4.1 For any member designed to resist E, except for walls where $\Omega_v \ge 1.5$ or if $\Omega_v \omega_v$ is taken as equal to Ω_0, ϕ for shear shall be 0.60 if the nominal shear strength of the member is less than the shear corresponding to the development of the nominal moment strength of the member. The nominal moment strength shall be the maximum value calculated considering factored axial loads from load combinations that include E.

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REQUEST FOR CODE AMENDMENT

Requesting Agency/Person: SEAU Codes Committee	Date: 6/02/2025
Street Address: SEAU Codes Committee	
City, State, Zip Salt Lake City, Utah 84105	
Contact Person: Danny Currit	Phone: (206) 375-4188
Code to be Amended: 2024 INTERNATIONAL BUILDING CODE (Include edition)	
Section: 1909	
Section Title: MODIFICATIONS TO ACI 318	

AMENDMENT:

Type proposed amendment in rule change form. (Using strikeout on portions being removed and underline on all new wording.)

1. Include the entire section you wish to amend.
2. Attach additional sheets if necessary.

See attached sheets.

Purpose of or Reason for the amendment: During the 2021 IBC code cycle changes were made to the concrete code (ACI 318) adopted by the IBC that were later found to be overly conservative. Since that time, the ACI code has been revised to change some of these provisions to be less onerous. These revisons will not be captured in the IBC until 2027 code cycle, at the earliest. This purpose of this amendment is to make these changes effective sooner in the State of Utah.
Cost or Savings Impact of Amendment: The amendment will result cost savings to many who are constructing new buildings in the State of Utah when concrete is used as building material. It would be difficult to estimate the magnitude of the savings, since this amendment will reduce the required thickness of shear-controlled concrete slabs, walls, and footings in new construction while having no impact on other building elements/materials.
Compliance Costs for Affected Persons (APerson@ means any individual, partnership, corporation, association, governmental entity, or public or private organization of any character other than an agency.) (You must break out the impact cost to State Budget, Local Government and you must state aggregate cost to other persons {cost per person times number of persons affected}): There are no costs incurred for compliance.

Signature:	Date:

For Division Use:

Date Received:	
Committee Action: ☐ Approved ☐ Denied ☐ Approved with revisions ☐ Referred to: ☐ Tabled	**UBC Commission Decision for Hearing:** ☐ Approved for hearing ☐ Denied ☐ Approved with revisions ☐ Referred to: ☐ Tabled
Date Filed:	Public Hearing Date:
UBC Commission Decision for Adoption: ☐ Approved ☐ Denied ☐ Approved with revisions ☐ Referred to: ☐ Tabled	Effective Date:

A new IBC, Section 1909 is added as follows:

SECTION 1909
MODIFICATIONS TO ACI 318

1909.1 General. The text of ACI 318 shall be modified as indicated in Sections 1905.2 to 1905.5.

1909.2 ACI 318, Section 13.2.6.2. Modify ACI 318 Section 13.2.6.2 to read as follows:

13.2.6.2 For shallow foundation members continuously supported by soil and designed based upon the assumption of rigid behavior of the shallow member, (a) and (b) shall be permitted:

(a) For one-way shear strength, V_c shall be taken as: V_c = 2

(b) For two-way shear strength, the size factor, $_s$, specified in 22.6 shall be taken equal to 1.0.

1909.3 ACI 318, Section 13.3.6.1.1. Add ACI 318 Section 13.3.6.1.1 to read as follows:

13.3.6.1.1 It shall be permitted to calculate V_c for cantilever retaining walls as: V_c = 2

1909.4 ACI 318, Section 13.3.7 Add ACI 318 Section 13.3.7 to read as follows:

13.3.7 Basement Walls

13.3.7.1 The design of basement walls to resist out-of-plane lateral earth pressure shall satisfy (a) through (e):

(a) Basement walls shall be designed as one-way slabs in accordance with the applicable provisions of Chapter 7 or as two-way slabs in accordance with the applicable provisions of Chapter 8.
(b) Basement walls shall be designed to resist hydrostatic pressure, if applicable.
(c) It shall be permitted to calculate the one-way shear strength of concrete as V_c = 2
(d) For two-way shear strength, the size effect factor, $_s$, as specified in 22.6 shall be taken equal to 1.0.
(e) Basement walls shall satisfy the applicable provisions of Chapter 18.

13.3.7.2 For loads other than out-of-plane lateral earth pressure, basement walls shall satisfy the applicable provisions of Chapter 11.

1909.5 ACI 318, Section 22.5.5.1.1. Modify ACI 318 Section 22.5.5.1.1 to read as follows:

22.5.5.1.1 V_c shall not be taken as greater than <u>V_c need not be taken as less than except in cases (a) or (b):</u>

<u>(a) elements subject to net axial tension</u>
<u>(b) if sections 18.6.5.2 or 18.7.6.2.1 apply.</u>