Oregon
Kate Brown, Governor

Department of Consumer and Business Services
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Building Codes Structures Board
Regular meeting agenda
Wednesday, November 7, 2018, at 9:30 a.m.
Conference Room A
Board meetings are now
available live via the Internet

I. Board business

A. Call to order
B. Roll call
C. Approval of agenda and order of business
D. Approval of the board meeting draft minutes of August 1, 2018
E. Date of the next regularly scheduled meeting: February 6, 2019
F. Board meeting schedule for 2019
G. Formal farewell to leaving board member Rene Gonzalez, contractor specializing in 3-stories above grade
H. Welcome new member Andrew Dykeman, contractor specializing in 3-stories above grade
I. Board vote on chair and vice-chair
J. Board vote on two members of this board for representation on the Construction Industry Energy Board

II. Public comment

This time is available for individuals wanting to address the board on ***non-agenda items only.*** The board will not take action on non-agenda items raised under public comment at this meeting. Testimony on agenda items will be heard when the item is called. (See "*Issues to remember when addressing the board"* at the end of this agenda.)

III. Reports

Program update

IV. Communications - None

V. Appeals - None

VI. Unfinished business - None

VII. New business

A. Board review and provide a recommendation to the Administrator on adoption of the code committee's recommendations for the 2019 Oregon Structural Specialty Code for Chapters 2 through 4, Chapters 9, 10, and Chapters 29 through 35
B. Board review and provide approval of the technical and scientific facts of the Statewide Alternate Method No.18-20; Oregon Zero Code
C. Board review and provide a recommendation to the Administrator on adoption of the code committee's recommendation for Chapter 13 of the 2019 Oregon Structural Specialty Code

VIII. Announcements - None

IX. Adjournment

Issues to remember when addressing the board:

- All public participation is subject to the discretion of the Board Chair for order of testimony, length and relevance.
- Speakers are generally limited to five minutes.
- Please register on the attendance registration form and on the public testimony registration form, listing the appropriate agenda item.
- The Board Chair will call you to the front testimony table.
- Please state your name and the organization you represent (if any).
- Always address your comments through the Chair.
- If written material is included, please provide 20 three-hole-punched copies of all information to the boards coordinator prior to the start of the meeting and, when possible, staff respectfully requests an electronic copy of materials 24 hours prior to the meeting.

Interpreter services or auxiliary aids for persons with disabilities are available upon advance request. Persons making presentations including the use of video, DVD, PowerPoint, or overhead projection equipment are asked to contact boards coordinator 24 hours prior to the meeting. For assistance, please contact Debi Barnes-Woods at 503-378-6787.

Please do not park vehicles with "E" plates in "customer only" spaces.

Note: For information regarding re-appointments or board vacancies, please visit the Governor's website.

Agenda Item I.D.

Building Codes Structures Board
minutes
August 1, 2018

Members present: Stephen Forster, fire protection agency representative
Brenda Hartzog, energy supplier
Gary Heikkinen, owner/manager of commercial office building
Eric Sandoval, architect
Eric Schmidt, SE, PE, CBO, building official
Kail Zuschlag, building trade representative

Members absent: Rene Gonzalez, three-plus stories general contractor
Vacancy, representative of Oregon Disabilities Commission
Vacancy, heavy industry construction contractor

Staff present: Mark Long, Administrator of Building Codes Division
Tony Rocco, structural program chief, Building Codes Division
Richard Rogers, chief building official, Policy and Technical Services
Mark Heizer, P.E., mechanical and energy systems engineer, Policy and Technical Services
Jeremy Williams, P.E., structural program engineer, Policy and Technical Services
Eric McMullen, building code specialist, Policy and Technical Services
Wendy McKay, Northwest regional coordinator, Regional Program Section
Alana Cox, senior policy advisor, Policy and Technical Services
Todd Smith, policy analyst, Policy and Technical Services
Debi Barnes-Woods, boards administrator/coordinator, Policy and Technical Services

Guests Present: Senator Betsy Johnston, Oregon State Legislature
Tien Peng, National Ready Mixed Concrete Association
Dennis Richardson, American Wood Council
Michael Trabue, Oregon Fire Marshals Association
Blake Shelide, Oregon Department of Energy
James Bela, Oregon Earthquake Awareness
David Heslam, Earth Advantage, Zero Ready Oregon Coalition
Rich Angstrom, OCAPA
Terry Whitehill, City of Portland
Timm Locke, Oregon Forestry Institute
Aron Faegre, Oregon Aviation Industries
John Barsalou, Crater Lake Klamath Regional Airport
Rob Mathis, Port of Portland Fire & Rescue
Mark Prince, Hillsboro Fire
Kristine Evertz, NEMA
Troy Wiltbank, Johnson Controls
Scott Peterson, Katerra
Robert Gerard, Katerra
Kyle Freres, Freres Lumber
Quinn Guerrero, D.R. Johnson Lumber
David Mills, Oregon State Fire Marshal

Corey Stanley, Portland Fire
John Durkin, Northwest Fire Suppression

I. Board business

A. Call to order

Tony Rocco, structural program chief, called the Building Codes Structures Board meeting of August 1, 2018, to order at 9:33 a.m. The meeting was held at Building Codes Division in Conference Room A, 1535 Edgewater Street NW, Salem, Oregon.

B. Roll call

Rene Gonzalez was excused.

This board has two vacancies: A contractor specializing in construction for heavy industry, and representative from Oregon Disabilities Commission.

C. Approval of the meeting agenda and order of business

The agenda and order of business was amended then approved by unanimous consent after the following changes were announced:

- Agenda Item VII.D. was moved forward to be heard directly following Agenda Item II. Public comment
- Agenda Item VII.B. was amended to be heard as close to 11:00 a.m. as possible.

D. Approval of board meeting draft minutes of February 7, 2018

The draft meeting minutes of February 7, 2018, were ruled approved by unanimous consent.

E. Date of the next regularly scheduled meeting: November 7, 2018.

F. Formal farewell to leaving board members:

- **Dan Carlson, represented the building trades**
- **Gregory Nelson, represented utility or energy supplier**

Administrator Long of Building Codes Division was present to congratulate both leaving members for each of their eight years of service on the Building Codes Structures Board. He distributed certificates from the Governor and the Administrator's letter of appreciation to both leaving members after Tony Rocco, structural program chief, highlighted some of their work while on the board.

G. Welcome new members:

- **Brenda Hartzog, representing utility or energy supplier**
- **Eric Schmidt, PE, SE, CBO**

Chief Rocco highlighted some accomplishments and welcomed both new members to the Building Codes Structures Board.

II. Public comment

David Heslam, Earth Advantage, Zero Energy Ready Oregon Coalition, briefly discussed board bylaws related to parliamentary procedures.

Mr. Heslam said that if the board plans on having a discussion about the Reach Code, the temporary rules put forward should be taken into consideration at the same time.

James Bela, Oregon Earthquake Awareness, discussed recent news that Hatfield Marine Science Center is claiming to be earthquake and tsunami resistant.

The agenda was amended to hear New Business Item VII.D. before Item III. Reports

VII.D. Board review and make recommendation on the technical and scientific facts of the Statewide Alternate Method No. 18-01; Tall Wood Buildings

Administrator Long discussed the reason for the alternate method.

There should be different ways of addressing innovation when constructing buildings because the building code should not become a barrier to construction.

The Statewide Alternate Method is another form of construction that is recognized throughout jurisdictions that provides an optional standard for the builders.

Tien Peng, National Ready Mixed Concrete Association, testified in opposition of the Statewide Alternate Method (SAM) No. 18-01, Tall Wood Buildings, and the adoption of the code for cross laminated timber (CLT). He said that the testing so far is insufficient for capturing the fire response characteristics in question. No tests were done to factor in wind, exterior performance, panel connections or moisture, which impacts material performance, fire-fighting and property damage. Mr. Peng's opinion was that the International Code Council (ICC) should not adopt code provisions that will put the public at risk.

Rich Angstrom, OCAPA, recognized that Oregon has done all the technical work that ICC is relying on for CLT, but his membership feels strongly in favor of ICC finishing the code adoption process before the states put something forward.

Dennis Richardson, American Wood Council, was in favor of the Statewide Alternate Method for Tall Wood Buildings. He said that in the proposal, the material is limited on the exterior of buildings except for the water resistive barrier to fully non-combustible material. Foam insulation can not be used on the outside.

James Bela, Oregon Earthquake Awareness, said the board has no choice but to disapprove the technical and scientific facts of what is being proposed because there are no technical and scientific facts given in any of the documents presented.

Terry Whitehill, City of Portland, said that he is in favor of the SAM and was one of the individuals that helped push the code change proposal through to the 2019 ICC.

Timm Locke, Oregon Forestry Institute, brought to the board's attention that PRG-320 in the 2018 edition has been changed to address the adhesive issues.

Gary Heikkinen was comfortable with voting in favor of moving the SAM forward because it has been well vetted throughout industry.

Eric Sandoval and Kail Zuschlag were also in support of voting in favor of the technical and scientific facts of the SAM.

Stephen Forster asked that for future statewide alternates, the technical and scientific data be listed for the members to clearly identify for their review.

Motion by Gary Heikkinen to approve the technical and scientific facts of Statewide Alternate Method No. 18-01; Tall Wood Buildings.
Motion carried unanimously.

The Agenda was back in order.

III. Reports

Program update:
Chief Rocco briefed the board on the 2019 Oregon Structural Specialty Code Review Committee, which met eight times reviewing 133 public code change proposals, and discussed approximately 600 independent items.

IV. Communications – None

V. Appeals – None

Before the next agenda item was discussed, Stephen Forster announced he will be leaving the meeting at 11:30 a.m. for an appointment previously scheduled in Washington.

Mr. Forster also asked that the division include on the next scheduled meeting agenda, board vote for a chair, vice-chair, and to vote for two members to be represented on the Construction Industry Energy Board.

VI. Unfinished business

Board review and provide a recommendation for adoption of permanent rule for Emergency Responder Radio Coverage
Richard Rogers, chief building official, said that the 2018 fire code references a standard for emergency responder radio coverage that is not currently in play. NFPA 1221, which has technical requirements which require vetting as part of the 2019 code adoption. The division informed the board that adopting this rule was critical to emergency personnel, but because of unresolved issues, a temporary rule was filed. The authority of the division to adopt rules in this area was subsequently challenged by the Office of State Fire Marshal and the Department of Administrative Services through the Strategic Interoperability Extension Council. The division received confirmation and clarification from the Oregon Department of Justice regarding the division's ability to adopt rules for construction requirements for emergency responder radio coverage. The division filed updated temporary rules in accordance with the guidance provided by the Department of Justice. The division has worked with the fire service and other

industry stakeholders to refine and maintain consistent and predictable requirements for ERRC while resolving the authority and scoping issues. All members were in favor of adopting the current temporary rule as a permanent rule.

Amended agenda hearing New Business Item VII.B. before Item VII.A.

B. Board review and make a recommendation to the Administrator to forward to rulemaking a code amendment to Chapter 4, Section 412; Aircraft Hangar Buildings in the 2014 Oregon Structural Specialty Code

Eric McMullen, building code specialist, Policy and Technical Services, summarized the issue explaining what had happened at the code change committee meeting when all four of Mr. Faegre's submittals were denied. He then explained what had previously occurred at the board level, and then reviewed in detail the latest modifications done to accomplish what was before the board for review.

Senator Betsy Johnson, representing Senate District 16 in the Oregon State Legislature, said that this fix is appropriate to keep economic development opportunities alive and well in rural parts of the state. She thanked the Director of the Department of Consumer and Business Services Cameron Smith, and at the State Fire Marshals Office Chief Walker for helping to achieve a reasonable administrative solution that has stalled several significant projects in Oregon.

Senator Johnson made available a handout from John Gale, Sr. Director, Nike Flight, which said that Nike Flight supported the amendments to Chapter 4, Section 412 Aircraft Hangar.

Aron Faegre, Oregon Aviation Industries, said that he was in support of the division's changes to the code proposal.

John Barsalou, airport director, Crater Lake Klamath Regional Airport, said that a project was terminated this past year losing 2.8 million dollars in grant monies because of the foam system requirements. With the proposed amendment in place, Mr. Barsalou believed that the project would have been able to move forward with the grant monies with not having to put the foam system in place. Foam is a hazardous waste that needs to be contained, and now, Mr. Barsalou said, he read an article that DEQ is not only requiring the foam to be contained, but controlled as well.

Senator Betsy Johnson said that first responders safety is a great concern in the aviation industry and she believed that the proposed code change will work.

Michael Trabue, Oregon Fire Marshals Association, said that although the fire industry is in support of the proposed amendment, the fire industry would like to request a more comprehensive study related to the fire protection requirements for

the 2019 code. Most of the requirements are related to the allowable fuel amount in buildings, the amount of fire protection and how it is being provided, and sprinkler density.

Eric Sandoval asked how one would know if the accounting of the quantity of the fuel is less than 5,000 gallons. Mr. Trabue said that the fuel amount is a constant area of discussion during inspection. The existing NFPA Standard differentiates it between fueled and unfueled aircraft. This is an area of concern with the fire industry and one of the reasons a more comprehensive study should occur.

Troy Wiltbank, Johnson Controls, said that his specialty is working with flammable liquids. Mr. Wiltbank addressed some of the cautionary issues with the proposed amendment because of his background. He said that placing the buildings closer together as it says in the amendment with having certain firewall ratings, but not having a fire suppression system in place is defeating the issue. He added that a lot of codes are written based on the fire suppression systems already in place. When asked by member Heikkinen if he was in opposition of the new amendment, Mr. Wiltbank said that one of the reasons he was opposed was because of the size requirements that deviate from code.

Eric McMullen was back at the table to address technical questions from board members. Mr. Sandoval was concerned with fires that may start and where the fuel sits on top of the water suppression system. He was also concerned with spill control and secondary containment.

Eric Schmidt expressed his concern with the exception in 2.3 in the proposed amendment with containment verses capacity. Senator Johnson responded by saying that all individuals working in and around aircraft hangars are federally licensed.

Motion by Gary Heikkinen to approve changes and forward to the Administrator for rulemaking and subsequent adoption, with the finding that the added cost, if any, is necessary to the health and safety of the occupants or the public or necessary to conserve scarce resources.
Motion carried unanimously.

The board took a 15-minute break while board member Stephen Forster left the meeting at 11:45 a.m. to be connected by teleconference when the meeting reconvened at noon.

Agenda back in order.

VII. New business

A. Board review and make a recommendation to the Administrator to consider code amendment correlating egress requirements between the 2014 Oregon Structural Specialty Code and the 2018 Oregon Boiler and Pressure Vessel Specialty Code

Chief Rogers explained the process and what the Board of Boiler Rules voted on at its June 5, 2018, board meeting related to the adoption of the 2018 Oregon Boiler and Pressure Vessel Specialty Code (OBPVSC). He explained that to avoid confusion or conflict in Means of Egress requirements for certain equipment rooms between the OBPVSC and in Chapter 10 of the 2014 Oregon Structural Specialty Code (OSSC), the division asked the board to consider an amendment in OSSC Section 1015.3 that would correlate the provisions in both codes.

Eric Sandoval questioned why the need for repetitive language to the proposed code change. Chief Rocco suggested that a sentence be added at the end of 1015.3 "**Equipment rooms containing boilers shall be per 10.15.3.1.**" Then Eric Sandoval suggested leaving the word Boiler in the beginning of 1015.5.3 instead of strikethrough language.

Motion by Eric Sandoval to approve the proposed code amendment by adding "**Equipment rooms containing boilers shall be per 10.15.3.1.**" Then leaving the word Boiler in the beginning of 1015.5.3 instead of strikethrough language and forward to the Administrator for rulemaking and subsequent adoption with the finding that the added cost, if any, is necessary to the health and safety of the occupants or the public or necessary to conserve scarce resources.
Motion carried unanimously.

Member Stephen Forster was not connected by teleconference for this agenda item and did not participate in the vote for this item.

C. Board review and provide a recommendation to the Administrator on adoption of the code committee's recommendations for the 2019 Oregon Structural Specialty Code for Chapters 5 through 8, Chapters 11 and 12, Chapters 14 through 28, and Appendices

Chief Rocco introduced the item explaining what chapters in the code the board will be voting on and asked that the two board members that were on the code committee discuss the committee review process.

Eric Sandoval and Gary Heikkinen were both in agreement with how well the committee reviewed each proposal and said that all items were well vetted throughout industry.

Motion by Eric Sandoval to approve the recommendations of the code review committee for Chapters 5 through 8, 11, 12, 14 through 28, and Appendices, and recommend that the Administrator proceed with the rulemaking and subsequent adoption for these portions of the 2019 Oregon Structural Specialty Code with the finding that the added cost, if any, is necessary to the health and safety of the occupants or the public or necessary to conserve scarce resources.
Motion carried unanimously.

Board member Stephen Forster was connected by teleconference for the motion.

E. Board review and provide comments to the Administrator for changes to the 2018 Oregon Reach Code Part 1 Energy Efficiency Construction Code
Alana Cox, senior policy analyst, Policy and Technical Services, said that the division is not asking the board to take formal action for this item but any suggestions would be appreciated. She said that the Oregon Reach Code is an optional set of standards that all municipalities must accept. When adopting this code, the division considers economic and technical feasibility, and any published codes that are newly developed for construction. Part 1 is the 2018 International Energy Conservation Code. It is intended to be used as an alternate compliance method for Chapter 13 of the Oregon Structural Specialty Code. The goal is to keep the reach code ahead of the actual code. Its anticipated availability date is September of 2018.

Gary Heikkinen suggested that the division allow a public process for input to the reach code before the board gets the document. Eric Sandoval agreed and suggested that once the document is published on the division website, an area be available for collective input of suggestive changes to the next Oregon Reach Code.

David Heslam said that in the board memo under ORS 455.500 it says that the division may adopt Reach Code standards. He went on to say that when checking the statute, it states that the division shall adopt Reach Code standards. Mr. Heslam also agreed with Mr. Heikkinen that there should be more time for public input of the next Oregon Reach Code.

VIII. Announcements - None

IX. Adjournment

Structural Program Chief Rocco adjourned the meeting at 1:01 p.m.

Respectfully submitted by Debi Barnes-Woods, boards administrator/coordinator.

Agenda Item I.F.

Board meeting dates 2019

Electrical & Elevator Board

Meets the fourth Thursday of every other month:

January 24, 2019
March 28, 2019
May 23, 2019
July 25, 2019
September 26, 2019
November 21, 2019 **Holiday schedule**

Board of Boiler Rules

Meets the first Tuesday of The 3rd, 6th, 9th, and 12th months:

March 5, 2019
June 4, 2019
September 10, 2019 **Holiday schedule**
December 3, 2019

Building Codes Structures Board

Meets the first Wednesday of the 2nd, 5th, 8th, and 11th months:

February 6, 2019
May 1, 2019
August 7, 2019
November 6, 2019

Construction Industry Energy Board

Meets twice a year:

April 23, 2019
October 22, 2019

Mechanical Board

Meets the first Wednesday of The 3rd, 6th, 9th, and 12th months:

March 6, 2019
June 5, 2019
September 11, 2019 **Holiday schedule**
December 4, 2019

State Plumbing Board

Meets the third Thursday of every other month:

February 21, 2019
April 18, 2019
June 20, 2019
August 15, 2019
October 17, 2019
December 19, 2019

Residential &Manufactured Structures Board

Meets the first Wednesday of each quarter:

January 8, 2019 **Holiday schedule**
April 3, 2019
July 10, 2019 **Holiday schedule**
October 2, 2019

Meetings are held at Building Codes Division in Conference Room A. 1535 Edgewater Street NW Salem Oregon 97304

All board meetings begin at 9:30 a.m. unless otherwise Noticed. Meetings may be canceled or rescheduled.

The calendar adjustments are to accommodate holidays and code adoptions. All board information is posted at the BCD website

Agenda Item VII.A.

State of Oregon **Board memo**

Building Codes Division **November 7, 2018**

To: Building Codes Structures Board

From: Tony Rocco, structural program chief, Policy and Technical Services

Subject: 2019 Oregon Structural Specialty Code (OSSC)

Action requested:
Board review code review committee's recommendations of **Chapters 2 through 4, 9, 10, and 29 through 35** for the proposed 2019 OSSC.

Background:
The 2019 OSSC is currently anticipated to become effective on October 1, 2019. The base document for these portions was the 2018 International Building Code (IBC). The division opened two independent public code proposal periods on November 18, 2016, through January 31, 2017, and December 21, 2017, through February 5, 2018. The division received 133 public proposals.

The code review committee, appointed by the board, completed its process in eight public meetings and approximately 45 hours of detailed review. The primary groups of items reviewed were significant model code changes, public code change proposals, existing Oregon amendments, existing Oregon code interpretations and statewide alternate methods.

Chapter 13 is covered under a separate agenda item. The remaining chapters, not identified above, were covered during the August 1 meeting.

Discussion:
The committee focused their review on reducing Oregon amendments to the 2018 IBC and reducing unclear language or unenforceable requirements. Particular changes of interest from these portions of code include:

- Chapter 4 – public proposal **19OSSC-12** mandates Group E gymnasium and cafeteria spaces of certain sizes be built as "earthquake relief shelters" under a Risk Category IV designation.
- Chapter 9 – carbon monoxide detection expanded by model code to include Group E, and expanded beyond the model code to Groups A, B and M by public proposal **19OSSC-29**.

- Chapter 29 – public proposal **19OSSC-41** removes the requirement for separate toilet facilities (male and female) in any occupancy classification when floor to ceiling partitions are provided in the design.
- Chapter 34 – the model code removed Chapter 34 in favor of the 2018 International Existing Building Code (IEBC) provisions. Amendments to the IEBC will be printed in Chapter 34 of the OSSC.

Options:

- Approve the recommendations of the code review committee for Chapters 2 through 4, 9, 10, 29 through 35, and recommend that the Administrator proceed with rulemaking and subsequent adoption for portions of the 2019 Oregon Structural Specialty Code with the finding that the added cost, if any, is necessary to the health and safety of the occupants or the public or necessary to conserve scarce resources.

- Recommend modifications to the code review committee's recommendations for Chapters 2 through 4, 9, 10, 29 through 35, and recommend that the Administrator proceed with rulemaking and subsequent adoption for portions of the 2019 Oregon Structural Specialty Code with the finding that the added cost, if any, is necessary to the health and safety of the occupants or the public or necessary to conserve scarce resources.

- Disapprove the rule and recommendations and state reasons for the disapproval, for the record.

2019 Oregon Structural Specialty Code (OSSC)
Code Review Committee – Recommendation

The following is a summary matrix showing the code review committee's
Chapters 2 through 4, 9, 10 and 29 through 35 recommendation to the Building Codes Structures Board for the adoption of the *2019 Oregon Structural Specialty Code (OSSC)*.

Source abbreviations

IBC CH – International Building Code (IBC) change
OR A – Existing Oregon amendment
SAM – Statewide Alternate Method
Interp – Statewide Code Interpretation

Committee outcome markings

* – Denotes an item with a fiscal impact. The committee's estimated impact can be found in the description column.
Bold text – denotes a possible amendment to the model code, the *2018 International Building Code (IBC)*.

No.	Source	Section	Subject and description of change	Committee outcome
Chapter 2				
2-01			Chapter 2 definitions include various existing amendments and several new model code terms related to new model provisions and referenced standards. The code review committee's action on the provisions located in the body of the code will guide and dictate removal or modification of terms in Chapter 2, as applicable.	Approve
Chapter 3				
3-01	IBC CH	302	Classification of Outdoor Areas. IBC modified.	Approve
3-02	OR A	304.2	Lockup facilities. OR added section.	**Retain**
3-03	OR A	306.3	Low-hazard factory industrial, F-2. OR added wood barrel and bottled wine.	**Retain**
3-04	OR A	307.1.2	Storage of Class 1.4G Class C Common. Fireworks. OR added section.	**Retain**
3-05	OR A	308.2	Institutional Group I-1. OR modified section.	**Retain**
3-06	OR A	308.2.1	Condition 1. OR added Condition 1.	**Retain**
3-07	OR A	308.2.2	Condition 2. OR added Condition 2. OR added section.	**Retain**
3-08	OR A	308.2.3	Six to sixteen persons receiving custodial care. OR modified section. Aligns.	Rescind
3-09	OR A	308.2.4	Five or fewer persons receiving custodial care. OR adds reference to ORSC, App. T.	**Retain**
3-10	Proposal	OSSC-13	DHS Licensed facilities.| Dan Purgiel Committee: *Approve portions of the proposal that are different from the 18 IBC requirements and rescind OR amendments where applicable.*	Approve
3-11	OR A	308.3.2	Five or fewer persons receiving medical care. OR added reference to ORSC, App. T.	**Retain**
3-12	OR A	308.5.5	Family Childcare Homes. Group I-4. OR added section.	**Retain**
3-13	IBC CH	310.3	Residential Group R-2. IBC modified to include "owner occupied lodging houses." Committee: *Approve as modified: delete "owner-occupied" to align with ORSC.*	**Approve as modified**
3-14	OR A	310.3	Residential Group R-2. OR added section.	**Retain**
3-15	IBC CH	310.4	Residential Group R-3. IBC modified.	Approve
3-16	OR A	310.4	Residential Group R-3. OR added language.	**Retain**
3-17	IBC CH	310.4.2	Lodging houses. IBC added in 2015 and modified in 2018. Committee: *Approve as modified: delete "owner-occupied" to align with the ORSC.*	**Approve as modified**
3-18	OR A	310.5	Residential Group R-4. OR modified section.	**Retain**
3-19	OR A	310.5.1	Condition 1. OR added Condition 1.	**Retain**

2019 Oregon Structural Specialty Code (OSSC)
Code Review Committee – Recommendation

No.	Source	Section	Subject and description of change	Committee outcome
3-20	OR A	310.5.2	Condition 2. OR added Condition 2.	**Retain**
3-21	IBC CH	311.1.1	Accessory storage spaces. IBC added.	Approve
3-22	Proposal	OSSC-14	Accessory storage spaces. | Johnathan Balkema, OBOA	Approve
3-23	OR A	311.3	Low-hazard storage, Group S-2. OR added wood barrels.	**Retain**
3-24	OR A	311.4	Mausoleums and Columbariums. Group S-3. OR added section.	**Retain**
3-25	IBC CH	312.1	Classification of communication equipment structures. IBC modified.	Approve
3-26	IBC CH	312.1.1	Greenhouses. IBC modified.	Approve

Chapter 4

4-01	Proposal	OSSC-15	Fire service access elevator.| Jesse Emory, GBD Architects	Disapprove
4-02	IBC CH	404.5	Smoke Control. Exception IBC modified.	Approve
4-03	IBC CH	404.6	Enclosure of atriums. IBC modified.	Approve
4-04	IBC CH	406	Motor Vehicle-Related Occupancies. IBC rewrote section.	Approve
4-05	IBC CH	406.2.2	Clear Height. IBC added: private garage ceiling height min.7 ft. clear, etc. Fiscal impact: *Less than or equal to 5% increase.*	Approve*
4-06	IBC CH	406.3.1	Classification. IBC added: New private garage floor area limitation 1000 ft^2. Fiscal impact: *Less than or equal to 5% increase.*	Approve*
4-07	IBC CH	406.8	Repair Garages. IBC modified. Fiscal impact: *Less than or equal to 5% increase.*	Approve*
4-08	IBC CH	407	Group I-2. IBC modified.	Approve
4-09	IBC CH	407.1	Group I-2 General. IBC modified.	Approve
4-10	IBC CH	407.2.5	Nursing Home Housing Units. IBC added.	Approve
4-11	IBC CH	407.5	Maximum Smoke Compartment Size I-2. IBC modified.	Approve
4-12	OR A	408.2	Other occupancies Group I-3. OR modified.	**Retain**
4-13	OR A	408.3.9	Cell tier exiting. OR added section.	**Retain**
4-14	OR A	408.9	Windowless buildings. OR deleted.	**Retain**
4-15	OR A	408.11	Emergency ventilation. OR added section.	**Retain**
4-16	IBC CH	412.4.3	Fire Suppression. IBC modified.	Approve
4-17	Proposal	OSSC-16	412.4.1 Exterior walls.| Aron Faegre, OR Aviation Industries, Inc.	Disapprove
4-18	Proposal	OSSC-17	412.4.3 Floor surface.| Aron Faegre, OR Aviation Industries, Inc.	Disapprove
4-19	Proposal	OSSC-18	412.4.4 Heating equipment. | Aron Faegre, OR Aviation Industries, Inc.	Disapprove
4-20	Proposal	OSSC-19	412.4.6| Aron Faegre, OR Aviation Industries, Inc.	Disapprove
4-21	OR A	412.4.6	Fire suppression. OR adds 2nd exception.	Rescind
4-22	IBC CH	412.5	Aircraft Paint Hangars. IBC modified. Paint hangar provisions are more restrictive. Fiscal impact: *Slight decrease.*	Approve*
4-23	IBC CH	415.5	Emergency Alarms. IBC added. For Group H emergency alarm requirements.	Approve
4-24	IBC CH	420	Groups I-1, R-1, R-2, R-3, and R-4. IBC modified.	Approve
4-25	OR A	420.6	Smoke barriers in Group I-1 Condition 2. OR added section.	Rescind
4-26	IBC CH	422.6	Electrical Systems in Ambulatory…IBC added "electrical system" requirements.	Approve
4-27	OR A	424	Piers and Wharves. OR added section.	**Retain**
4-28	IBC CH	425	Hyperbaric facilities. IBC requires NFPA 99 for all hyperbaric facilities.	Approve

2019 Oregon Structural Specialty Code (OSSC)
Code Review Committee – Recommendation

No.	Source	Section	Subject and description of change	Committee outcome
4-29	OR A	425	Mausoleums and Columbariums. OR added sections.	**Retain**
4-30	IBC CH	426	Combustible Dusts, Grain Processing and Storage. IBC added new section.	Approve
4-31	IBC CH	427	Medical Gas Systems. IBC added section.	Approve
4-32	IBC CH	428	Higher Education Laboratories. IBC added section.	Approve
4-33	Proposal	OSSC-12	Earthquake relief shelter.| Jeffrey Soulages, OSSPAC Committee: *Approve as modified by deleting a section on "seismic separation."*	**Approve as modified**

Chapters 5-8—Reviewed by the Building Codes Structures Board on Aug. 1, 2018.

Chapter 9

9-01	OR A	901.1	Scope. OR modified.	**Retain**
9-02	OR A	901.1.2	Fire protection system shop drawings. OR added section.	**Retain**
9-03	Proposal	OSSC-26	Environment.| Johnathan Balkema, OBOA Committee: *Approve and add "and shall not be considered a conditioned space."*	**Approve as modified**
9-04	IBC CH	903	Automatic Sprinkler Systems. IBC modified Grp. A sprinkler applications: A1-A4. Fiscal impact: *Less than or equal to $2.65 per square foot increase.*	Approve*
9-05	IBC CH	903.2.1.6	Assembly occupancies on roofs. IBC modified specific sprinkler requirements.	Approve
9-06	IBC CH	903.2.1.7	Multiple fire areas. IBC modified.	Approve
9-07	Interp	2008-04	Automatic sprinkler requirements in F-1 woodworking operations.	Retain
9-08	OR A	903.2.6	Group I. OR deleted Exception number 2.	Rescind
9-09	OR A	903.2.7	Group M. OR deleted item number 4 and added Section 903.2.7.2. Fiscal impact: *Less than or equal to $2.65 per square foot increase.*	Rescind*
9-10	OR A	903.2.8	Group R. OR modified and added section.	Rescind
9-11	OR A	903.2.8.4	Care facilities. OR added section.	Rescind
9-12	OR A	903.2.8.5	Substantial Alterations of Group R2. OR modified.	**Retain**
9-13	Proposal	OSSC-27	Balconies and Decks.| Johnathan Balkema, OBOA Committee: *Approve and retain the existing amendment.* Fiscal impact: *Slight increase.*	**Approve as modified***
9-14	IBC CH	904.13	Domestic cooking systems. IBC requires protection on domestic cooking systems for R-2 dorms. Committee: *Approve as modified by adding "operated by a college or university for student housing."*	**Approve as modified**
9-15	Proposal	OSSC-28	Protection from fire. | Johnathan Balkema, OBOA	Disapprove
9-16	OR A	906	Portable fire extinguishers. OR deleted entire section.	**Retain**
9-17	Interp	2012-02	Fire alarm design in health care facilities public vs. private mode.	Retain
9-18	IBC CH	907.2.9.3	Group R-2 college and university buildings.	Approve
9-19	IBC CH	907.2.10.3	Emergency voice/alarm communication system. IBC modified and *aligns with OSSC.*	Approve
9-20	OR A	907.2.10	Single- and multiple-station smoke alarms. OR doesn't adopt Sect. 29.3.8 of NFPA 72.	**Retain**
9-21	Interp	2015-03	Low frequency alarms in sleeping areas.	Retain Interp
9-22	IBC CH OR A	907.5.2.3	Visible Alarms. IBC expanded appliances in I-1, R-1, R-2. OR modified R-2. Fiscal impact: *$280/unit*	Approve* Rescind

2019 Oregon Structural Specialty Code (OSSC)
Code Review Committee – Recommendation

No.	Source	Section	Subject and description of change	Committee outcome
9-23	OR A	908.7	Carbon monoxide alarms. OR doesn't adopt NFPA 720 section 9.4.2.2.	**Retain**
9-24	OR A	908.7.2	Group R. OR separated out Group R provisions and added a Group R section.	Rescind
9-25	Proposal	OSSC-29	Groups A, B, and M.| Mark Kohorst, NEMA Committee: *Approve as revised by the proponent.*	**Approve as modified**
9-26	IBC CH	909.21.1	Pressurization requirements. IBC modified.	Approve
9-27	IBC CH	910	Smoke and Heat Removal. IBC modified.	Approve
9-28	Proposal	OSSC–30	Load Performance.| Herb Kroeger, Architectural Specialties	Disapprove
9-29	IBC CH	915	Carbon Monoxide Detection. IBC modified carbon monoxide detection. Committee: *Approve the model code as modified by integrating the existing amendments.*	**Approve as modified**
9-30	IBC CH	917	Mass Notification Systems. IBC modified to require a risk analysis per NFPA 72. Fiscal impact: *Approx. $5,000 increase*	Approve*

Chapter 10

10-01	OR A	1003.2	Ceiling height. OR added hallways and corridors to exception. Fiscal impact: *Slight increase.*	Rescind*
10-02	IBC CH	1004.2	Cumulative Occupant Loads. IBC modified the cumulative occupant load determinations.	Approve
10-03	IBC CH	1004.5	Table 1004.5: Maximum Floor Area Allowances per Occupant. IBC modified.	Approve
10-04	IBC CH	1006	Number of Exits and Exit Access Doorways. IBC modified.	Approve
10-05	IBC CH	1007	Exit and Exit Access. Doorway Configuration. IBC modified.	Approve
10-06	Proposal	OSSC-31	Exit and Exit Access. Heather Christenson, OBOA	Disapprove
10-07	Interp	2011-03	Emergency power illumination in warehouse applications.	Retain Interp
10-08	Proposal	OSSC-32	Door Swing. Jesse Emory, GBD Architects	Disapprove
10-09	IBC CH	1010.1.4.4	Locking Arrangements in Educational Occupancies. IBC modified.	Approve
10-10	IBC CH	1010.1.9	Door operations. IBC modified controlled, electromagnetic, and sensor release/locking doors. Fiscal impact: *Slight increase.*	Approve*
10-11	OR A	1010.1.10	Panic and fire hardware. OR modified.	**Retain**
10-12	Proposal	OSSC-33	Stairways to roof.| Eric Bressman, Ankrom Moisan Architects Committee: *Approve as modified. Only adopt 'noncombustible' language.*	**Approve as modified**
10-13	IBC CH	1011.15	Ship Ladders, Ladders.	Approve
10-14	OR A	1017.2	Table 1017.2: Exit Access Travel Distance. OR added note D.	Rescind
10-15	IBC CH	1017.2.2	Groups F-1 and S-1 increase. IBC modified.	Approve
10-16	OR A	1018.1	Construction. OR modified – adds exception. *14 OSSC 1017.1.*	Rescind
10-17	IBC CH	1018.3	Aisles in Groups B and M. IBC modified.	Approve
10-18	IBC CH	1023.3.1	Extension. IBC allows int. exit stair to connect to exit passageway without fire door separation. Fiscal impact: *Slight decrease.*	Approve*

Chapters 11-12 and 14-28—Reviewed by the Building Codes Structures Board on Aug. 1, 2018.

2019 Oregon Structural Specialty Code (OSSC)
Code Review Committee – Recommendation

No.	Source	Section	Subject and description of change	Committee outcome
Chapter 29				
29-01	OR A	2901.1	Scope. OR modified.	**Retain**
29-02	IBC CH	2902	Minimum Plumbing Facilities. IBC modified. Committee: *Approve the model code; use the 18 IBC Table and retain the drinking fountain column, delete "other" column, and maintain the existing footnote amendments.*	**Approve as modified**
29-03	OR A	2902.1	Minimum number of fixtures. Table: Minimum number of fixtures (see above).	Rescind
29-04	OR A	2902.2	Separate facilities. OR added exception.	**Retain**
29-05	Proposal	OSSC-41	Separate facilities.| Tom Schmidt, Hacker Architects Committee: *Approve as modified – add 'shall be based on separate facilities."*	**Approve as modified**
29-06	IBC CH	2902.3	Public Toilet Facilities. IBC modified.	Approve
29-07	OR A	2902.3.2	Location of toilet facilities in occupancies other than malls. OR added exception.	**Retain**
29-08	OR A	2902.5	Drinking fountain locations. OR modified. Committee: *Rescind the existing amendment and adopt a new amendment deleting the section.*	Rescind **New OR A**
29-09	OR A	2903	Alteration of existing group A, M &E Occupancies. OR added section.	Rescind
Chapter 30				
30-01	IBC CH	3001.2	Emergency Elevator Communications Systems. IBC added. Fiscal impact: *$5,000 increase per elevator.*	Approve*
30-02	OR A	3001.2	Reference standards. OR modified and added language.	**Retain**
30-03	OR A	3003.1.3	Two or more elevators. OR modified.	**Retain**
30-04	IBC CH	3004	Elevator hoistway venting. IBC modified.	Approve
30-05	OR A	3004.1	Vents required. OR modified to clarify the measurement.	Rescind
30-06	OR A	3004.2	Location of vents. OR added language.	Rescind
30-07	OR A	3004.4	Plumbing and mechanical systems. OR modified and deleted exception.	**Retain**
30-08	Proposal	OSSC-42	Rated Corridors.| Justin Schmidt, Interior Tech	Withdrawn
Chapter 31				
31-01	IBC CH	3111	Solar Energy Systems. IBC added a new section on "solar energy systems."	**Disapprove**
31-02	OR A	3111	Solar photovoltaic panels/modules. OR added new section. Committee: *Retain the existing amendment and add "accessible ground level disconnect."*	**Retain as modified**
31-03	Proposal	SEAO-50	Wind tunnel testing for solar panels.| SEAO	**Approve**
31-04	IBC CH	3113	Relocatable Buildings. IBC added a new section.	**Disapprove**
Chapter 33				
33-01	IBC CH	3314	Fire Watch during Construction. IBC added. Committee: *Disapprove the model code but leave printed in the code with a reference to the local jurisdiction.*	**Disapprove**

2019 Oregon Structural Specialty Code (OSSC)
Code Review Committee – Recommendation

No.	Source	Section	Subject and description of change	Committee outcome
Chapter 34				
34-01	IBC CH		Existing Structures. IBC deleted. This chapter has been removed completely. Committee: *Adopt 18 IEBC where it doesn't create substantial increases in cost, incorporate the existing Oregon amendments and approve proposed amendments as discussed where it does not conflict with statutory requirements.*	**Approve as modified**
34-02	Proposal	SEAO-42	Alteration, addition or change of occupancy.| SEAO	Disapprove
34-03	Proposal	OSSC-45	Compliance alternatives. Scott Caufield, Clackamas County	**Approve**
34-04	Proposal	SEAO-43	New and replacement materials.| SEAO	**Approve**
34-05	Proposal	SEAO-45	Removes Appendix A as optional compliance method.| SEAO	**Approve**
34-06	Proposal	OSSC-44	Existing Building Repair.| Scott Caufield, Clackamas County Committee: *Approve as modified by adding "legally existing."*	**Approve as modified**
34-07	Proposal	SEAO-46	Repairs for less than substantial structural damage.| SEAO Committee: *Approve as modified by adding "structural."*	**Approve as modified**
34-08	Proposal	SEAO-44	Seismic loads for Change of Occupancy.| SEAO Vote: *5/3 and 1 abstain.* Fiscal impact: *$20K increase per floor.*	**Approve***
34-09	Proposal	SEAO-47	Seismic loads and seismic force-resisting system.| SEAO	**Approve**
34-10	Proposal	OSSC-43	Compliance.| Warren Jackson, Marion County	**Approve**
34-11	Proposal	SEAO-48	Bracing for unreinforced masonry bearing wall parapets.| SEAO	**Approve**
34-12	Proposal	SEAO-49	1006.3 Seismic loads.| SEAO	**Approve**

Final motion:

The committee moved to forward the recommendations to the Building Codes Structures Board for consideration and adoption of the 2019 OSSC with the finding that the added cost is necessary to the health and safety of the occupants or the public, or necessary to conserve scarce resources.

2019 Oregon Structural Specialty Code (OSSC)
New Construction – International Fire Code Provisions

The following is a summary matrix showing the new construction provisions of the 2018 International Fire Code, as agreed upon by the Ad Hoc Work Group, that will be included in the *2019 Oregon Structural Specialty Code (OSSC).*

Subject **2018 IFC Location/Section.**	**2019 OSSC** **Location/Section**
Definitions (General). Ch. 2 (*selected definitions*)	Ch. 2
Motion Picture Projection Rooms. 306 (all)	409
Vehicle Impact Protection. 312 (all)	912.4.3
Rooftop Gardens and Landscaped Roofs. 317.1 317.2 317.3	1507.16
Stairway access - roof. 504.3	1011.12
Fire Command Center size. 508.1.3	911.1.3
Fuel Oil Storage Systems. 603.3 603.3.2 - 603.3.2.7	Ch. 28
Electrical Room Signage. 604.3.1	Ch. 27
Mechanical Refrigeration. 605.7 - 605.8.1 605.10 - 605.10.2.2 605.12 - 605.13 605.16 - 605.17.3	Ch. 28
Commercial Kitchen Cooking Oil. 608 (*all*)	Include in new 444
Motion Picture Screens. 807.5.1.2	806

Combustible Lockers.	803
808.4	
Explosion Control.	New 919
911 (*all except Table 911.1*)	
Existing Smoke Alarms.	Ch. 34 / IEBC
1103.8 - 1103.8.3	
Stationary Fuel Cell Power Systems.	New 429
1205 (*all, except 1205.2 and 1205.8*)	
Electrical Energy Storage Systems.	New 430
1206 (*all, except 1206.2.1,1206.2.6, 1206.2.7, 1206.2.8.6 exception, 1206.2.8.7 exception - 1206.2.8.7.4, 1206.3.2.6 - 1206.3.2.6.4 and,1206.3.6*)	
Heliport and Helistop Fire Protection.	412.7
2007.5 2007.6	
Dry Cleaning.	New 431
2101.1 2102.1 2103.1 - 2103.3 2104.1 2104.2.1 2104.2.2 2104.2.4 2107.1 2107.2 2107.2.2 - 2107.3 2108.1 - 2108.3	
Combustible Dust-Producing Operations.	426
2201.1 2203.1 2203.2 2204.1 Table 2204.1	
Motor Fuel-Dispensing Facilities and Repair Garages.	406
2301.1 2301.4 2301.4.1 2306.2.2 2306.2.6 2306.4 - 2306.6.2.6 2309.3 - 2309.3.1.2 2309.3.1.2.2 2309.3.1.3 - 2309.3.2 2310.1 - 2310.2.3 2311.1 2311.2.2 2311.2.2.1 2311.2.4 - 2311.3.1 2311.4 - 2311.4.3 2311.8 2311.8.2 - 2311.8.4.4 2311.8.6	

Flammable Finishes.		416
2401.1	2404.7.8 - 2404.7.8.4	
2401.2	2404.7.8.7 - 2404.9.4	
2402.1 (*all definitions*)	2405.1 - 2405.3.4.2	
2403.1	2405.4 - 2405.4.1.1	
2403.2	2405.6 - 2405.11	
2403.2.1.1	2406.1 - 2406.4.1	
2403.2.2	2406.6	
2403.2.5	2406.6.1	
2403.2.7	2406.6.4	
2403.4.4	2406.7	
2404.1 - 2404.4	2407.1 - 2407.4.1	
2404.5.2 - 2404.6.1.	2407.6 - 2407.9	
2404.6.1.2	2408.1 - 2408.3.1	
2404.6.1.2.1	2409.1 - 2409.3	
2404.7	2409.5 - 2409.6.1	
Fruit and Crop Ripening.		New 432
2501.1	2504.2	
2501.3	2506.1	
2503.1	2506.2	
2503.2	2507.1	
Semiconductor Fabrication Facilities.		415.11
2701.1 - 2701.3	2703.10.5	
2702.1 (*selected definitions*)	2703.14.3	
2703.3	2703.16	
2703.3.5 - 2703.3.7	2704.1	
2703.3.9	2704.2	
2703.10 - 2703.10.2	2705.1 - 2705.2.3.2	
2703.10.4.3	2705.2.3.3 - 2705.2.3.4	
2703.10.4.4	Table 2705.2.2	
2703.10.4.4.2 - 2703.10.4.4.4		
Lumber Yards and Woodworking Facilities.		New 433
2801.1	2804.1 - 2804.4	
2802.1 (*selected definitions*)	2805.1 - 2805.3	
2803.2 - 2803.3	2807.3	
2803.4	2808.7	
2803.5.2		
Manufacture of Organic Coatings.		418
2901.1	2904.4	
2902.1 (all)	2905.1	
2903.1	2905.3 - 2905.6	
2903.2	2906.1 - 2906.5	
2903.4	2907.1 - 2907.5	
2903.6	2909.1	

2903.10	2909.2	
2903.11	2909.4	
2904.1 - 2904.3.1	2909.6	
Industrial Ovens.		New 434
3001.1	3006.1	
3002.1 (*all*)	3006.2	
3003.1 - 3003.4	3007.1	
3004.1 - 3004.3	3007.2	
3005.1		
Tents and Membrane Structures.		3102
3102 (*selected definitions*)	3107.6 - 3107.8	
3104 (*all*)	3107.11 - 3107.12.3	
3105 (*all except 3105.9*)	3107.12.5	
3106.2	3107.12.7 - 3107.13.2	
3107.1 - 3107.4	3107.14 - 3107.14.2	
High-Piled Combustible Storage.		New 435
3201.1	3206.7 - 3206.7.7	
3201.3 - 3201.3.2	3206.8 - 3206.10.3	
3202.1 (*selected definitions*)	3207.1 - 3207.4	
3203.1 - 3203.10.3	3208.1 - 3208.5.1	
3204.1	3209.1 - 3209.4	
3204.2	3210.1	
3206.1 - 3206.5		
Tire Rebuilding.		New 436
3403.1		
3403.2		
3403.4		
Combustible Fibers.		New 437
3701.1	3703.7 - 3703.7.2	
3701.2	3704.1 - 3704.6	
3703.5	3405.1	
Higher Education Laboratories.		428
3802.1 (*selected definitions*)		
3803.1		
3803.1.3		
3803.1.7 - 3803.2.2		
Processing and Extraction Facilities.		New 438
3901.1	3903.1 - 3903.6	
3902.1 (*all*)	3905.1 - 3905.2	
Hazardous Materials.		414

5001.1 - 5001.3.3.18	5003.11.3 - 5003.11.3.11	
5002.1 (*selected definitions*)	5004.1	
5003.1 – 5003.2.1	5004.2 (*not exception*)	
5003.2.3 - 5003.2.4 (*not tables*)	5004.2.1 - 5004.2.2.3	
5003.2.8 – 5003.2.9	5004.2.2.5	
5003.2.9.1	5004.2.2.6	
5003.5 - 5003.7.1	5004.3 - 5004.10	
5003.8 - 5003.8.3.4	5004.12 - 5004.13	
5003.8.4 - 5003.8.7.2 (*not tables*)	5005.1 – 5005.1.11	
5003.9.3	5005.2 – 5005.2.2.4	
5003.9.8 - 5003.9.10	5005.3.9	
5003.11	5005.4.4	
5003.11.1		
Aerosols.		New 439
5101.1	Table 5103.1	
5101.4	5104.1 - 5104.8.2	
5102.1 (*selected definitions*)	5106.1 - 5106.5.8	
5103.1	5107.1	
Compressed Gases.		New 440
5301.1	5303.16 - 5303.16.14	
5302.1 (*selected definitions*)	5304.1 - 5304.2	
5303.2 - 5303.3.3	5305.1 - 5305.5	
5303.3.5 - 5303.4.1	5306.1 - 5306.2.3	
5303.4.3 - 5303.7.1	5306.5	
5303.7.9 - 5303.7.11.2	5307.1 - 5307.4.7	
Corrosive Materials.		New 441
5401.1	5404.1	
5403.1	5404.1.1	
5403.2	5405.1 - 5405.1.2	
Cryogenic Fluids.		New 442
5501.1	5504.1 - 5504.2.2.3	
5502.1 (*all*)	5505.1 - 5505.2	
5503.1.2 - 5503.10	5505.4 - 5505.4.3	
Explosives and Fireworks.		
5601.1	5605.4	New 443
5602.1 (*selected definitions*)	Table 5605.3	
Table 5604.5.2(1)	5605.5 - 5605.5.1.1	
Table 5604.5.2(2)	5605.5.2	
Table 5604.5.2(3)	5605.5.3	
5605.1	5606.1 - 5606.5.2.2	
5605.3		
Flammable and Combustible Liquids.		

5701.1	5704.3.6 - 5704.3.6.3	New 444
5701.2	5704.3.7 - 5704.3.7.2.2 (*with tables*)	
5701.5	5704.3.7.3 - 5704.3.7.5.1	
5702.1 (*selected definitions*)	Table 5704.3.7.5.1	
5703.1 - 5703.2	5704.3.8 - 5704.3.8.5	
Table 5703.1.1 (*portions)*	5704.4.7	
5703.6.4 - 5703.6.5	5705.1 – 5705.2.2	
5704.1 - 5704.2	5705.2.4 – 5705.3.5.1 (*not tables*)	
5704.2.3 - 5704.2.3.2	5705.3.5.3	
5704.2.5 - 5704.2.7.3.5.1	5705.3.6.2.2	
5704.2.7.3.5.3 - 5704.2.7.5.2	5705.3.6.2.3	
5704.2.7.5.4 – 5704.2.7.5.5.1	5705.3.6.2.5 - 5705.3.7.6.3	
5704.2.7.5.6 - 5704.2.7.5.8	5705.3.8.4 - 5705.4.8 (*not tables*)	
5704.2.7.7 – 5704.2.7.9	5706.4 - 5706.4.5	
5704.2.7.11 - 5704.2.9	5706.4.7	
5704.2.9.2 - 5704.2.9.5.2	5706.4.7.2 - 5706.4.7.4	
5704.2.9.7 - 5704.2.9.7.5.1	5706.4.7.6	
5704.2.9.7.6 - 5704.2.10.3	5706.4.10	
5704.10.5	5706.4.10.2	
5704.3.2 - 5704.3.3	5706.5	
5704.3.3.5 - 5704.3.3.5.2	5706.5.1.2	
5704.3.3.6 - 5704.3.3.8	5706.5.1.3	
5704.3.4	5706.5.1.6	
5704.3.4.1	5706.5.1.12	
5704.3.4.3	5706.7	
5704.3.5	5706.7.1	
5704.3.5.1		

Flammable Gases and Flammable Cryogenic Fluids.	New 445

5801.1	5804.1.1
5802.1 (*selected definitions*)	5806.1
5803.1 – 5803.1.2	5806.3 - 5806.3.2.1
5803.1.4.2 - 5803.1.5.2	5807.1 - 5807.1.3
5803.2	5807.1.10
5804.1	5808.1 - 5808.7

Flammable Solids.	New 446

5901.1	5906.3
5902.1 (*selected definitions*)	5906.3.1
5903.1	5906.4
5903.2	5906.4.2
5904.1	5906.5
5904.1.3	5906.5.1
5905.1	5906.5.3 - 5906.5.6
5906.2.2	

Highly Toxic and Toxic Materials.	New 447

6001.1	6004.2.2.8 - 6004.2.2.10.3
6002.1 (*selected definitions*)	6004.3.3

6003.1 - 6003.1.5.3	6005.1 – 6005.3.2	
6003.2.5	6005.4.2 – 6005.6	
6004.1 - 6004.2.2.7.4		
Liquefied Petroleum Gases.		New 448
6101.1		
6102.1 (all)		
6109.1		
6109.3 - 6109.11.2		
Organic Peroxides.		New 449
6201.1	Table 6204.1.2	
6203.1 - 6203.2	6204.1.8 - 6204.1.11.1	
6204.1 - 6204.1.6	6205.1	
Oxidizers. Oxidizing Gases and Oxidizing Cryogenic Fluids.		New 450
6301.1	6303.2	
6302.1 (*selected definitions*)	6304.1 - 6304.1.8.1 (*with tables*)	
6303.1 – 6303.1.1.3	6305.1	
Pyrophoric Materials.		New 451
6401.1		
6402.1 (*all*)		
6403.1		
6403.2 - 6404.1.4		
6404.2.2		
6405.1 - 6405.3		
Pyroxylin (Cellulose Nitrate) Plastics.		New 452
6501.1		
6504.1 - 6504.1.5		
6504.2 - 6504.4		
Unstable (Reactive) Materials.		New 453
6601.1		
6603.1 - 6603.2		
6604.1 - 6604.1.5		
Water-Reactive Solids and Liquids.		New 454
6701.1		
6703.1		
6703.2		
6704.1 - 6704.1.6		
Referenced Standards.		Ch. 35
ASTM D92-12b	NFPA 69	
ASTM E1529 -14a	NFPA 86	
CGA C-7	NFPA 96	

CGA G-13	NFPA 318
CGA P-18	NFPA 400
CGA S-1.1	NFPA 495
CGA S-1.2	NFPA 835
CGA S-1.3	UL 30
CPSC 16 CFR Part 1500.41	UL 142
CPSC CFR Part 1500.42	UL 900
DOT 27 CFR Part 55	UL 1275
NFPA 02	UL 1313
NFPA 15	UL 1805
NFPA 25	UL 2017
NFPA 30B	UL 2075
NFPA 33	UL 2085
NFPA 34	UL 2245
NFPA 35	UL 2335
NFPA 52	UL 2360
NFPA 55	UL 9540
NFPA 58	

CHAPTER 34
EXISTING BUILDINGS

SECTION 3401
MODIFICATIONS TO IEBC CHAPTER 1
SCOPE AND ADMINISTRATION

3401.1 IEBC Chapter 1, Administration and scope. IEBC Chapter 1 is deleted in its entirety. The provisions of Chapter 1 of the *Building Code* shall apply. The text of the 2018 *International Existing Building Code* (IEBC) shall be modified as indicated in this chapter.

3401.2 Appendix chapters not available for municipal adoption. The following appendix chapters are not adopted by the State of Oregon and municipalities may not adopt the same as the subject matter is encompassed by the *state building code*:

1. A – Guidelines for the Seismic Retrofit of Existing Buildings;
2. B – Supplementary Accessibility Requirements for Existing Buildings;
3. C – Guidelines for the Wind Retrofit of Existing Buildings.

3401.3 Reference codes and standards. The codes and standards referenced in this code and the *Building Code* shall be considered as part of the requirements of this code to the prescribed extent of such reference.

References to the *International Building Code* or the *Building Code* shall mean the *Oregon Structural Specialty Code* as adopted by OAR 918-460-0010.

References to the *International Electrical Code*, the *NFPA 70*, or the *Electrical Code* shall mean the *Oregon Electrical Specialty Code* as adopted by OAR 918-305-0100.

References to the *International Energy Conservation Code*, or to the *Energy Code* shall mean the *Oregon Energy Efficiency Specialty Code* as adopted by OAR 918-460-0500.

References to the *International Fuel Gas Code* shall mean the *Oregon Mechanical Specialty Code, Appendix C* as adopted by OAR 918-440-0010.

References to the *International Mechanical Code, the International Fuel Gas Code* or the *Mechanical Code* shall mean the *Oregon Mechanical Specialty Code* as adopted by OAR 918-440-0010.

References to the *International Plumbing Code* or the *Plumbing Code* shall mean the *Oregon Plumbing Specialty Code* as adopted by OAR 918-750-0110.

References to the *International Residential Code* or the *Residential Code* shall mean the *Oregon Residential Specialty Code* as adopted by OAR 918-480-0005.

References to the *Elevator Code* shall mean the *Oregon Elevator Specialty Code* as adopted by OAR 918-400-0455.

SECTION 3402
MODIFICATIONS TO IEBC CHAPTER 2
DEFINITIONS

3402.1 Scope. The following words and terms are adopted as part of this code. All definitions in Chapter 2 of the *2018 International Existing Building Code* are deleted. Where terms are not defined in this section, the definitions in Chapter 2 of the *Building Code* shall apply.

CODE OFFICIAL. See *Building Official.*

EQUIPMENT OR FIXTURE. Any facilities or installations that are related to building services and for which the *state building code* provides specific requirements. Equipment or fixture shall not include manufacturing, production, process equipment or other equipment not regulated by the *state building code*.

NONCOMBUSTIBLE MATERIAL. A material that, under the conditions anticipated, will not ignite or burn when subjected to fire or heat. Materials that pass ASTM E136 are considered noncombustible materials.

REHABILITATION. Any work, as described by the categories of work defined herein, undertaken in an *existing building*.

SEISMIC FORCES. The loads, forces and requirements prescribed herein, related to the response of the building to earthquake motions, to be used in the analysis and design of the structure and its components. Seismic forces are considered either full or reduced, as provided in Chapter 3.

SUBSTANTIAL STRUCTURAL ALTERATION. An alteration in which the gravity load-carrying structural elements altered within a 5-year period support more than 30 percent of the total floor and roof area of the building or structure. The areas to be counted toward the 30 percent shall include mezzanines, penthouses, and in-filled courts and shafts tributary to the altered structural elements.

UNSAFE. Buildings that are deficient due to inadequate means of egress facilities, or that constitute a fire hazard, or in which the structure or individual structural members meet the definition of "*Dangerous*," or that are otherwise dangerous to human life, or that involve illegal or improper occupancy.

WORK AREA. That portion or portions of a building consisting of all reconfigured spaces as indicated on the construction documents. Work area excludes other portions of the building where incidental work entailed by the intended work must be performed and portions of the building where work not initially intended by the owner is specifically required by this code.

SECTION 3403
MODIFICATIONS TO IEBC CHAPTER 3
PROVISIONS FOR ALL COMPLIANCE METHODS

3403.1 IEBC Section 301, Administration.

Section 301.3.1 is modified:

301.3.1 Prescriptive compliance method. *Alterations*, *additions* and *changes of occupancy* complying with Chapter 5 of this code shall be considered in compliance with the provisions of this code.

Section 301.5 is modified:

301.5 Compliance with accessibility. Accessibility requirements for *existing buildings* shall comply with Chapter 11 of the *Building Code* and the 2009 edition of ICC A117.1.

3403.2 IEBC Section 302, General provisions.

Sections 302.3 and 302.4 are modified:

302.3 Additional codes. This section is deleted in its entirety.

302.4 Existing materials. Materials already in use in a building in compliance with requirements or approvals in effect at the time of their erection or installation shall be permitted to remain in use unless determined by the *building official* to be *dangerous*.

Section 302.5.1 is modified:

302.5.1 New structural members and connections. New structural members and connections shall comply with the provisions of the *Building Code* for new buildings of similar structure, purpose and location.

Exception: Where alternative design criteria are specifically permitted.

3403.3 IEBC Section 303, Structural design loads and evaluation and design procedures.

Section 303.2 is modified:

303.2 Snow loads on adjacent buildings. This section is deleted in its entirety.

Section 303.3.2 is modified: ***19 OSSC SEAO-45***

303.3.2 Compliance with reduced seismic forces. Where seismic evaluation and design is permitted to use reduced seismic forces, the criteria used shall be in accordance with one of the following:

1. The *Building Code* using 75 percent of the prescribed forces. Values of R, Ω_0 and C_d used for analysis shall be as specified in Section 303.3.1 of this code.
2. ASCE 41, using the performance objective in Table 303.3.2 for the applicable *risk category*.

TABLE 303.3.2
PERFORMANCE OBJECTIVES FOR USE IN ASCE 41 FOR COMPLIANCE WITH REDUCED SEISMIC FORCES

RISK CATEGORY (Based on IBC Table 1604.5)	STRUCTURAL PERFORMANCE LEVEL FOR USE WITH BSE-1E EARTHQUAKE HAZARD LEVEL (See note d)	STRUCTURAL PERFORMANCE LEVEL FOR USE WITH BSE-2E EARTHQUAKE HAZARD LEVEL (See note e)
I	Life Safety (S-3). See Note a	Collapse Prevention (S-5)
II	Life Safety (S-3). See Note a	Collapse Prevention (S-5)
III	Damage Control (S-2). See Note a	Limited Safety (S-4). See Note b
IV	Immediate Occupancy (S-1)	Life Safety (S-3). See Note c

a. For Risk Categories I, II and III, the Tier 1 and Tier 2 procedures need not be considered for the BSE-1E earthquake hazard level.
b. For Risk Category III, the Tier 1 screening checklists shall be based on the Collapse Prevention, except that checklist statements using the Quick Check provisions shall be based on *MS*-factors that are the average of the values for Collapse Prevention and Life Safety.
c. For Risk Category IV, the Tier 1 screening checklists shall be based on Collapse Prevention, except that checklist statements using the Quick Check provisions shall be based on *MS*-factors for Life Safety.
d. The BSE-1E shall be taken in accordance with ASCE 41 except that the spectral acceleration at any period shall not be taken less than 75 percent of the BSE-1N.
e. The BSE-2E shall be taken in accordance with ASCE 41 except that the spectral acceleration at any period shall not be taken less than 75 percent of the BSE-2N.

3403.4 IEBC Section 305, Accessibility for existing buildings.

Sections 305.1 and 305.2 are modified:

305.1 Scope. The provisions of Sections 305.1 through 305.9 apply to *change of occupancy*, *additions* and *alterations* to *existing buildings*, including those identified as *historic buildings*.

305.2 Maintenance of facilities. This section is deleted in its entirety.

Section 305.4 is modified:

305.4 Change of occupancy. *Existing buildings* that undergo a change of group or occupancy shall comply with this section. Unless *additions* or *alterations* are made to the building or facility, change in use or occupancy alone shall not require compliance with the provisions of Chapter 11 of the *Building Code*.

Exception: Type B dwelling or sleeping units required by Section 1107 of the *Building Code* are not required to be provided in *existing buildings* and facilities undergoing a *change of occupancy* or *alterations* .

Sections 305.4.1 and 305.4.2 are modified:

305.4.1, Partial change in occupancy. This section is deleted in its entirety.

305.4.2, Complete change in occupancy. This section is deleted in its entirety.

Section 305.6 is modified:

305.6 Alterations. *Alterations* to a *facility* shall comply with the applicable provisions in Chapter 11 of the *Building Code*, unless *technically infeasible*. Where compliance with this section is *technically infeasible*, the *alteration* shall provide access to the maximum extent technically feasible.

Exceptions:

1. The altered element or space is not required to be on an accessible route, unless required by Section 305.7.
2. Accessible means of egress required by Chapter 10 of the *Building Code* are not required to be provided in existing facilities.
3. The *alteration* to Type A individually owned *dwelling units* within a Group R-2 occupancy shall be permitted to meet the provision for a Type B *dwelling unit*.

Section 305.7 is modified:

305.7 Alterations affecting an area containing a primary function. Where an *alteration* affects the accessibility to, or contains an area of *primary function*, the route to the *primary function* area shall be *accessible*. The accessible route to the *primary function* area shall include toilet facilities and drinking fountains serving the area of *primary function*.

Exceptions:

1. The costs of providing the *accessible* route to the altered area are not required to exceed 25 percent of the costs of the *alterations* affecting the area of *primary function*. See ORS 447.241.
2. This provision does not apply to *alterations* limited solely to windows, hardware, operating controls, electrical outlets and signs.
3. This provision does not apply to *alterations* limited solely to mechanical systems, electrical systems, installation or *alteration* of fire protection systems and abatement of hazardous materials.
4. This provision does not apply to *alterations* undertaken for the primary purpose of increasing the accessibility of a *facility*.
5. This provision does not apply to altered areas limited to Type B *dwelling* and *sleeping units*.

Sections 305.8.2 and 305.8.3 are modified:

305.8.2 Elevators. Altered elements of existing elevators shall comply with the *Elevator Code*.

305.8.3 Platform lifts. Platform (wheelchair) lifts complying with ICC A117.1 and installed in accordance with the *Elevator Code* shall be permitted as a component of an *accessible route*.

Sections 305.8.6 through 305.8.8 are modified:

305.8.6 Accessible dwelling or sleeping units. Where Group I-1, I-2, I-3, R-1or R-4 dwelling or sleeping units are being altered or added, the requirements of Section 1107 of the *Building Code* for Accessible units apply only to the quantity of spaces being altered or added.

Where Group R-2 *dwelling* or *sleeping units* are being added through *addition*, the requirements of Section 1107 of the *Building Code* for Accessible units apply only to the quantity of spaces being added.

305.8.7 Type A dwelling or sleeping units. Where more than 20 Group R-2 dwelling or sleeping units are being altered or added, the requirements of Section 1107 of the *Building Code* for Type A units apply only to the quantity of the spaces being altered or added.

Exception: Where existing bathing facilities are being altered in both Group I-1, Condition 2 residential care facilities without memory care endorsement and Group R-4, Condition 2 residential care facilities without memory care endorsement, one in ten existing bathing facilities shall be required to meet the roll-in type shower compartment requirements of Section 1107 if a common bathing facility is provided outside the dwelling or sleeping unit.

305.8.8 Type B dwelling or sleeping units. Where four or more Group I-1, I-2, R-1, R-2, R-3 or R-4 dwelling or sleeping units are being added through *addition*, the requirements of Section 1107 of the *Building Code* for Type B units apply only to the quantity of the spaces being added.

Section 305.8.13 is modified:

305.8.13, Fuel dispensers. This section is deleted in its entirety.

Section 305.8.15 is modified:

305.8.15, Amusement rides. This section is deleted in its entirety.

Section 305.9 is modified:

305.9 Historic buildings. These provisions shall apply to facilities designated as historic structures that undergo alterations or a change of occupancy, unless technically infeasible. Where compliance with the requirements for accessible routes, entrances or toilet rooms would threaten or destroy the historic significance of the facility, as determined by the *building official* after consultation with the appropriate historic preservation officer, the alternative requirements of Sections 305.9.1 through 305.9.4 for that element shall be permitted.

Exception: Type B dwelling or sleeping units required by Section 1107 of the *Building Code* are not required to be provided in historic buildings.

Sections 305.9.3 and 305.9.4 are modified:

305.9.3 Entrances. Not fewer than one main entrance shall be accessible.

Exception: If a public entrance cannot be made accessible, an accessible entrance that is unlocked while the building is occupied shall be provided; or, a locked accessible

entrance with a notification system or remote monitoring shall be provided.

The route of travel for the accessible entry shall not pass through hazardous areas, storage rooms, closets, kitchens or spaces used for similar purposes.

Signs complying with Section 1111 of the *Building Code* shall be provided at the public entrance and the accessible entrance.

305.9.4 Toilet and bathing facilities. Where toilet rooms are provided and the alteration of the same would adversely affect the historical significance of the building, not fewer than one accessible family or assisted-use toilet room complying with Section 1109.2.1 of the *Building Code* shall be provided.

3403.5 Additional Chapter 3 provisions. The following provisions are added to IEBC Chapter 3.

SECTION 306
FIRE ALARMS

306.1 Fire alarm systems. When required by the compliance path selected, an approved fire alarm system shall be installed in existing buildings and structures in accordance with Sections 306.1.1 through 306.1.6 and provide occupant notification in accordance with Section 907.5 of the *Building Code* unless other requirements are specified by other sections of this chapter.

Exception: Occupancies with an existing, previously *approved* fire alarm system.

306.1.1 Group E. A fire alarm system shall be installed in existing Group E occupancies in accordance with Section 907.2.3 of the *Building Code*.

Exceptions:

1. A manual fire alarm system is not required in a building with a maximum area of 1,000 square feet (93 m^2) that contains a single classroom and is located not closer than 50 feet (15 240 mm) from another building.
2. A manual fire alarm system is not required in Group E occupancies with an occupant load less than 50.

306.1.2 Group I-1. An automatic fire alarm system shall be installed in existing Group I-1 facilities in accordance with Section 907.2.6.1 of the *Building Code*.

Exception: Where each sleeping room has a means of egress door opening directly to an exterior egress balcony that leads directly to the exits in accordance with Section 1021 of the *Building Code*, and the building is not more than three stories in height.

306.1.3 Group I-2. In Group I-2, an automatic fire alarm system shall be installed in accordance with Section 907.2.6 of the *Building Code*.

Exception: Manual fire alarm boxes in patient sleeping areas shall not be required at exits if located at all nurses' control stations or other constantly attended staff locations, provided such that manual fire alarm boxes are visible, are provided with ready access, and travel distances required in Section 907.4.2.1 of the *Building Code* are not exceeded.

306.1.4 Group I-3. An automatic and manual fire alarm system shall be installed in existing Group I-3 occupancies in accordance with Section 907.2.6.3 of the *Building Code*.

306.1.5 Group R-1. A fire alarm system and smoke alarms shall be installed in existing Group R-1 occupancies in accordance with Sections 306.1.5 through 306.1.5.2.1.

306.1.5.1 Group R-1 hotel and motel manual fire alarm system. A manual fire alarm system that activates the occupant notification system in accordance with Section 907.5 of the *Building Code* shall be installed in existing Group R-1 hotels and motels more than three stories or with more than 20 sleeping units.

Exceptions:

1. Buildings less than two stories in height where all sleeping units, attics and crawl spaces are separated by 1-hour fire-resistance-rated construction and each sleeping unit has direct access to a public way, egress court or yard.
2. Manual fire alarm boxes are not required throughout the building where the following conditions are met:
   - 2.1. The building is equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.1 or 903.3.1.2 of the *Building Code*.
   - 2.2. The notification appliances will activate upon sprinkler water flow.
   - 2.3. Not less than one manual fire alarm box is installed at an approved location.

306.1.5.1.1 Group R-1 hotel and motel automatic smoke detection system. An automatic smoke detection system that activates the occupant notification system in accordance with Section 907.5 of the *Building Code* shall be installed in existing Group R-1 hotels and motels throughout all interior corridors serving sleeping rooms not equipped with an approved, supervised automatic sprinkler system installed in accordance with Section 903 of the *Building Code*.

Exception: An automatic smoke detection system is not required in buildings that do not have interior corridors serving sleeping units and where each sleeping unit has a means of egress door opening directly to an exit or to an exterior exit access that leads directly to an exit.

306.1.5.2 Group R-1 boarding and rooming houses manual fire alarm system. A manual fire alarm system that activates the occupant notification system in accordance with Section 907.5 of the *Building Code* shall be installed in existing Group R-1 boarding and rooming houses.

Exception: Buildings less than two stories in height where all sleeping units, attics and crawl spaces are separated by 1-hour fire-resistance-rated construction and each sleeping unit has direct access to a public way, egress court or yard.

306.1.5.2.1 Group R-1 boarding and rooming houses automatic smoke detection system. An automatic smoke detection system that activates the occupant notification system in accordance with Section 907.5 of the *Building Code* shall be installed in existing Group R-1 boarding and rooming houses throughout all interior corridors serving sleeping units not equipped with an approved, supervised sprinkler system installed in accordance with Section 903 of the *Building Code*.

Exception: Buildings equipped with single-station smoke alarms meeting or exceeding the requirements of Section 907.2.10.1 of the *Building Code* and where the fire alarm system includes not less than one manual fire alarm box per floor arranged to initiate the alarm.

306.1.6 Group R-2. A manual fire alarm system that activates the occupant notification system in accordance with Section 907.5 of the *Building Code* shall be installed in existing Group R-2 occupancies more than three stories in height or with more than 16 dwelling or sleeping units.

Exceptions:

1. Where each living unit is separated from other contiguous living units by fire barriers having a fire-resistance rating of not less than $^3/_4$ hour, and where each living unit has either its own independent exit or its own independent stairway or ramp discharging at grade.
2. A separate fire alarm system is not required in buildings that are equipped throughout with an approved supervised automatic sprinkler system installed in accordance with Section 903.3.1.1 or 903.3.1.2 of the *Building Code* and having a local alarm to notify all occupants.
3. A fire alarm system is not required in buildings that do not have interior corridors serving dwelling units and are protected by an approved automatic sprinkler system installed in accordance with Section 903.3.1.1 or 903.3.1.2 of the *Building Code*, provided that dwelling units either have a means of egress door opening directly to an exterior exit access that leads directly to the exits or are served by open-ended corridors designed in accordance with Section 1027.6, Exception 3 of the *Building Code*.
4. A fire alarm system is not required in buildings that do not have interior corridors serving dwelling units, do not exceed three stories in height and comply with both of the following:
   4.1. Each dwelling unit is separated from other contiguous dwelling units by fire barriers having a fire-resistance rating of not less than $^3/_4$ hour.
   4.2. Each dwelling unit is provided with hard-wired, interconnected smoke alarms as required for new construction in Section 907.2.10 of the *Building Code*.

SECTION 307
SMOKE ALARMS

307.1 Single- and multiple-station smoke alarms. When required by the compliance path selected, single-and multiple-station smoke alarms shall be installed in existing Group I-1 and R occupancies in accordance with Sections 307.1.1 through 307.1.3.

307.1.1 Where required. Existing Group I-1 and R occupancies shall be provided with single-station smoke alarms in accordance with Section 907.2.10 of the *Building Code*. Interconnection and power sources shall be in accordance with Sections 307.1.2 and 307.1.3, respectively.

Exceptions:

1. Where the code that was in effect at the time of construction required smoke alarms and smoke alarms complying with those requirements are already provided.
2. Where smoke alarms have been installed in occupancies and dwellings that were not required to have them at the time of construction, additional smoke alarms shall not be required provided that the existing smoke alarms comply with requirements that were in effect at the time of installation.
3. Where smoke detectors connected to a fire alarm system have been installed as a substitute for smoke alarms.

307.1.2 Interconnection. Where more than one smoke alarm is required to be installed within an individual dwelling or sleeping unit, the smoke alarms shall be interconnected in such a manner that the activation of one alarm will activate all of the alarms in the individual unit. Physical interconnection of smoke alarms shall not be required where listed wireless alarms are installed and all alarms sound upon activation of one alarm. The alarm shall be clearly audible in all bedrooms over background noise levels with all intervening doors closed.

Exceptions:

1. Interconnection is not required in buildings that are not undergoing alterations, repairs or construction of any kind.
2. Smoke alarms in existing areas are not required to be interconnected where alterations or repairs do not result in the removal of interior wall or ceiling finishes exposing the structure, unless there is an attic, crawl space or basement available that could provide access for interconnection without the removal of interior finishes.

307.1.3 Power source. Single-station smoke alarms shall receive their primary power from the building wiring provided that such wiring is served from a commercial source and shall be equipped with a battery backup. Smoke alarms

with integral strobes that are not equipped with battery backup shall be connected to an emergency electrical system. Smoke alarms shall emit a signal when the batteries are low. Wiring shall be permanent and without a disconnecting switch other than as required for overcurrent protection.

Exceptions:

1. Smoke alarms are permitted to be solely battery operated in existing buildings where construction is not taking place.
2. Smoke alarms are permitted to be solely battery operated in buildings that are not served from a commercial power source.
3. Smoke alarms are permitted to be solely battery operated in existing areas of buildings undergoing alterations or repairs that do not result in the removal of interior walls or ceiling finishes exposing the structure, unless there is an attic, crawl space or basement available that could provide access for building wiring without the removal of interior finishes.

SECTION 308
CARBON MONOXIDE ALARMS

308.1 Carbon monoxide alarms. When required by the compliance path selected, carbon monoxide alarms shall be installed in existing dwelling units and sleeping units where those units include any of the conditions identified in Sections 915.1.2 through 915.1.6 of the *Building Code*. The carbon monoxide alarms shall be installed in the locations specified in Section 915.2 and the installation shall be in accordance with Section 915.4 of the *Building Code*.

Exceptions:

1. Carbon monoxide alarms are permitted to be solely battery operated where the code that was in effect at the time of construction did not require carbon monoxide detectors to be provided.
2. Carbon monoxide alarms are permitted to be solely battery operated in dwelling units that are not served from a commercial power source.
3. A carbon monoxide detection system in accordance with Section 915.5 of the *Building Code* shall be an acceptable alternative to carbon monoxide alarms.

SECTION 3404
MODIFICATIONS TO IEBC CHAPTER 4
REPAIRS

3404.1 IEBC Section 401, General.

Section 401.2 is modified:

401.2 Compliance. The work shall not make the building less complying than it was before the *repair* was undertaken. ***(19-OSSC 44—Caufield REVISED)***

Devices or safeguards which are required by this code shall be repaired in conformance with the code edition under which installed. To determine compliance with this subsection, the *building official* shall have the authority to require a building or structure to be reinspected.

Work on nondamaged components that is necessary for the required *repair* of damaged components shall be considered a part of the *repair* and shall not be subject to the requirements for *alterations*. Routine maintenance, ordinary *repairs* exempt from permit in accordance with Section 105.2 of the *Building Code*, and abatement of wear due to normal service conditions shall not be subject to the requirements for *repairs*.

Where it becomes necessary to *repair* all or a portion of a legally existing building that has been damaged by a cause outside of the control of the building owner including but not limited to fire, wind, flood, earthquake and other similar damage where, prior to the damage, the legally existing building did not contain *dangerous* conditions, the building may be constructed exactly as it existed prior to the damage provided the building meets the applicable requirements of Section 405. Such *repairs* are not required to meet code requirements for new construction. Where *dangerous* conditions existed prior to the damage occurring, the building may be constructed as it existed prior to the damage provided the *dangerous* conditions are corrected, as determined by the *building official*. The absence of fire-resistance-rated construction, related building components, automatic sprinkler systems and other life-safety features shall not be deemed to be an *unsafe* or *dangerous* condition where such systems and construction methods were not required at the time the building was originally constructed or modified through *permit*.

Section 401.3 is modified:

401.3 Flood hazard areas. In flood hazard areas established by the Flood Plain Administrator, *repairs* that constitute *substantial improvement* shall require that the building comply with Section 1612 of the *Building Code*.

3404.2 IEBC Section 402, Building elements and materials.

Section 402.1 is modified:

402.1 Glazing in hazardous locations. Replacement glazing in hazardous locations shall comply with the safety glazing requirements of the *Building Code*.

Exception: Glass block walls, louvered windows and jalousies repaired with like materials.

3404.3 IEBC Section 405, Structural.

Sections 405.2.1 and 405.2.2 are modified:

(19 OSSC SEAO-46)

405.2.1 Repairs for less than substantial structural damage. Unless otherwise required by this section, for damage less than *substantial structural damage*, the damaged structural elements shall comply with the requirements of the *Building Code*.

405.2.2 Disproportionate earthquake damage. This section is deleted in its entirety.

Section 405.2.4.1 is modified:

405.2.4.1 Lateral force-resisting elements. Regardless of the level of damage to vertical elements of the lateral force-resisting system, if *substantial structural damage* to gravity load-carrying components was caused primarily by wind or seismic effects, then the building shall be evaluated in accordance with Section 405.2.3.1 and, if noncompliant, retrofitted in accordance with Section 405.2.3.3.

Exception: Buildings assigned to Seismic Design Category A, B, or C whose substantial structural damage was not caused by earthquake need not be evaluated or retrofitted for load combinations that include earthquake effects.

Section 405.2.5 is modified:

405.2.5 Flood hazard areas. This section is deleted in its entirety.

3404.4 IEBC Section 406, Electrical. This section is deleted in its entirety.

3404.4 IEBC Section 407, Mechanical. This section is deleted in its entirety.

3404.3 IEBC Section 408, Plumbing. This section is deleted in its entirety.

SECTION 3405
MODIFICATIONS TO IEBC CHAPTER 5
PRESCRIPTIVE COMPLIANCE METHOD

3405.1 IEBC Section 501, General.

Sections 501.1 and 501.2 are modified:

501.1 Scope. The provisions of this chapter shall control the *alteration*, *addition* and *change of occupancy* of *existing buildings* and structures, including *historic buildings* and structures as referenced in Section 301.3.2.

Exception: Existing bleachers, grandstands and folding and telescopic seating shall comply with ICC 300. Sections 501.2, 502, 503 and 504 of ICC 300 are not adopted.

501.2 Fire-resistance ratings. Where *approved* by the *building official*, in buildings where an automatic sprinkler system installed in accordance with Section 903.3.1.1 or 903.3.1.2 of the *Building Code* has been added, and the building is now sprinklered throughout, the required fire-resistance ratings of building elements and materials shall be permitted to meet the requirements of the current building code. The building is required to meet the other applicable requirements of the *Building Code*.

Plans, investigation and evaluation reports, and other data shall be submitted indicating which building elements and materials the applicant is requesting the *building official* to review and approve for determination of applying the current building code fire-resistance ratings. Any special construction features, including fire-resistance-rated assemblies and smoke-resistive assemblies, conditions of occupancy, means of egress conditions, *approved* modifications or *approved* alternative materials, design and methods of construction, and equipment applying to the building that impact required fire-resistance ratings shall be identified in the evaluation reports submitted.

3405.2 IEBC Section 502, Additions.

Sections 502.2 through 502.8 are modified:

502.2 Disproportionate earthquake damage. This section is deleted in its entirety.

502.3 Flood hazard areas. For buildings and structures in *flood hazard* areas established by the Flood Plain Administrator in Section 1612.3 of the *Building Code*, any *addition* that constitutes *substantial improvement* of the *existing structure* shall comply with the flood design requirements for new construction, and all aspects of the *existing structure* shall be brought into compliance with the requirements for new construction for flood design.

For buildings and structures in *flood hazard areas* established by the Flood Plain Administrator in Section 1612.3 of the *Building Code*, any *additions* that do not constitute *substantial improvement* of the *existing structure* are not required to comply with the flood design requirements for new construction.

502.4 Existing structural elements carrying gravity load. Any existing gravity load-carrying structural element for which an *addition* and its related *alterations* cause an increase in design gravity load of more than 5 percent shall be replaced or altered as needed to carry the gravity loads required by the *Building Code* for new structures. Any existing gravity load-carrying structural element whose vertical load-carrying capacity is decreased as part of the *addition* and its related *alterations* shall be considered to be an altered element subject to the requirements of Section 503.3. Any existing element that will form part of the lateral load path for any part of the *addition* shall be considered to be an existing lateral load-carrying structural element subject to the requirements of Section 502.5.

502.5 Existing structural elements carrying lateral load. Where the *addition* is structurally independent of the *existing structure*, existing lateral load-carrying structural elements shall be permitted to remain unaltered. Where the *addition* is not structurally independent of the *existing structure*, the *existing structure* and its *addition* acting together as a single structure shall be shown to meet the requirements of Sections 1609 and 1613 of the *Building Code* using full seismic forces.

Exception: Any existing lateral load-carrying structural element whose demand-capacity ratio with the *addition* considered is not more than 10 percent greater than its demand-capacity ratio with the *addition* ignored shall be permitted to remain unaltered. For purposes of calculating demand-capacity ratios, the demand shall consider applicable load combinations with design lateral loads or forces in accordance with Sections 1609 and 1613 of the *Building Code*. For purposes of this exception, comparisons of demand-capacity ratios and calculation of design lateral loads, forces and capacities shall account for the cumulative effects of *additions* and *alterations* since original construction.

502.6 Smoke alarms in existing portions of a building. Where an *addition* is made to a building or structure of a Group R or I-1 occupancy, the *existing building* shall be provided with smoke alarms in accordance with Section 307 in this code.

502.7 Carbon monoxide alarms in existing portions of a building. Where an *addition* is made to a building or structure of Group I-1, I-2, I-4 or R occupancy, the existing building shall be provided with carbon monoxide alarms in accordance with Section 308 of this code.

Exceptions:

1. Work involving the exterior surfaces of buildings, such as the replacement of roofing or siding, the addition or replacement of windows or doors, or the addition of porches or decks.
2. Installation, alteration or *repairs* of plumbing or mechanical systems, other than fuel-burning appliances.

502.8 Additions to Group E facilities. This section is deleted in its entirety.

3405.3 IEBC Section 503, Alterations.

Sections 503.1 through 503.3 are modified:

503.1 General. Except as provided by Section 302.4, 302.5 or this section, *alterations* to any building or structure shall comply with the requirements of the *Building Code* for new construction. *Alterations* shall be such that the *existing building* or structure is not less complying with the provisions of the *Building Code* than the *existing building* or structure was prior to the *alteration*.

Exceptions:

1. An existing stairway shall not be required to comply with the requirements of Section 1011 of the *Building Code* where the existing space and construction does not allow a reduction in pitch or slope.
2. Handrails otherwise required to comply with Section 1011.11 of the *Building Code* shall not be required to comply with the requirements of Section 1014.6 of the *Building Code* regarding full extension of the handrails where such extensions would be hazardous because of plan configuration.

503.2 Flood hazard areas. For buildings and structures in *flood hazard areas* established by the Flood Plain Administrator in Section 1612.3 of the *Building Code*, any *alteration* that constitutes *substantial improvement* of the *existing structure* shall comply with the flood design requirements for new construction, and all aspects of the *existing structure* shall be brought into compliance with the requirements for new construction for flood design.

For buildings and structures in *flood hazard areas* established by the Flood Plain Administrator in Section 1612.3 of the *Building Code*, any *alterations* that do not constitute *substantial improvement* of the *existing structure* are not required to comply with the flood design requirements for new construction.

503.3 Existing structural elements carrying gravity load. 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 replaced or altered as needed to carry the gravity loads required by the *Building Code* for new structures. Any existing gravity load-carrying structural element whose gravity load-carrying capacity is decreased as part of the *alteration* shall be shown to have the capacity to resist the applicable design dead, live and snow loads including snow drift effects required by the *Building Code* for new structures.

Exception: Buildings in which the increased dead load is due entirely to the addition of a second layer of roof covering weighing 3 pounds per square foot (0.1437 kN/m^2) or less over an existing single layer of roof covering.

Sections 503.5 through 503.12. These sections are deleted in their entirety.

Sections 503.14 through 503.16 are modified:

503.14 Smoke alarms. Individual sleeping units and individual dwelling units in Group R and I-1 occupancies shall be provided with smoke alarms in accordance with Section 307 in this code.

503.15 Carbon monoxide alarms. Carbon monoxide alarms shall be provided to protect sleeping units and dwelling units in Group I-1, I-2, I-4 and R occupancies in accordance with Section 308 in this code.

Exceptions:

1. Work involving the exterior surfaces of buildings, such as the replacement of roofing or siding, the addition or replacement of windows or doors, or the addition of porches or decks.
2. Installation, alteration or *repairs* of plumbing or mechanical systems, other than fuel-burning appliances.

503.16 Refuge areas. This section is deleted in its entirety.

3405.4 IEBC Section 505, Windows and emergency escape openings.

Sections 505.2, 505.3, and 505.4 are modified:

505.2 Replacement window opening control devices. In Group R-2 or R-3 buildings containing dwelling units, window opening control devices complying with ASTM F2090 shall be installed where an existing window is replaced and where all of the following apply to the replacement window:

1. The window is operable.
2. The window replacement includes replacement of the sash and the frame.
3. In Group R-2 or R-3 buildings containing dwelling units, the top of the sill of the window opening is at a height less than 36 inches (915 mm) above the finished floor.
4. The window will permit openings that will allow passage of a 4-inch-diameter (102 mm) sphere when

the window is in its largest opened position.

5. The vertical distance from the top of the sill of the window opening to the finished grade or other surface below, on the exterior of the building, is greater than 72 inches (1829 mm).

The window opening control device, after operation to release the control device allowing the window to fully open, shall not reduce the minimum net clear opening area of the window unit to less than the area required by Section 1030.2 of the *Building Code*.

Exceptions:

1. Operable windows where the top of the sill of the window opening is located more than 75 feet (22 860 mm) above the finished grade or other surface below, on the exterior of the room, space or building, and that are provided with window fall prevention devices that comply with ASTM F2006.
2. Operable windows with openings that are provided with window fall prevention devices that comply with ASTM F2090.

505.3 Replacement window emergency escape and rescue openings. Where windows are required to provide *emergency escape* and *rescue openings* in Group R-2 and R-3 occupancies, replacement windows shall be exempt from the requirements of Sections 1030.2, 1030.3 and 1030.4 of the *Building Code*, provided that the replacement window is the manufacturer's largest standard size window that will fit within the existing frame or existing rough opening. The replacement window shall be permitted to be of the same operating style as the existing window or a style that provides for an equal or greater window opening area than the existing window.

Window opening control devices complying with ASTM F2090 shall be permitted for use on windows required to provide emergency escape and rescue openings.

505.4 Emergency escape and rescue openings. Emergency escape and rescue openings shall be operational from the inside of the room without the use of keys or tools. Bars, grilles, grates or similar devices are permitted to be placed over emergency escape and rescue openings provided that the minimum net clear opening size complies with the code that was in effect at the time of construction and such devices shall be releasable or removable from the inside without the use of a key, tool or force greater than that which is required for normal operation of the escape and rescue opening. Where such bars, grilles, grates or similar devices are installed, they shall not reduce the net clear opening of the emergency escape and rescue openings. Smoke alarms shall be installed in accordance with Section 307 of this code, regardless of the valuation of the *alteration.*

3405.5 IEBC Section 506, Change of occupancy.

Sections 506.1 and 506.1.1 are modified:

506.1 Compliance. A *change of occupancy* shall not be made in any building unless that building is made to comply with the requirements of the *Building Code* for the use or occupancy. Changes of occupancy in a building or portion thereof shall be such that the *existing building* is not less complying with the provisions of this code than the *existing building* or structure was prior to the change. Subject to the approval of the *building official*, changes of occupancy shall be permitted without complying with all of the requirements of this code for the new occupancy, provided that the new occupancy is not more hazardous, based on life and fire risk, than the existing occupancy.

Unless *additions* or *alterations* are made to the building or facility, change in use or occupancy alone shall not require compliance with the provisions of Chapter 11 of the *Building Code*. Additionally, changes in occupancy resulting in multifamily dwellings need not comply with *covered multi-family dwellings* accessibility provisions (see Section 202 of the *Building Code*).

Exception: The building need not be made to comply with Chapter 16 of the *Building Code* unless required by Section 506.4.

506.1.1 Change in the character of use. A change in character of use with no *change of occupancy* classification shall not be made to any structure that will subject the structure to any special provisions of the *state building code*, without approval of the *building official*. Compliance shall be only as necessary to meet the specific provisions and is not intended to require the entire building be brought into compliance.

Section 506.4.3 is modified:

506.4.3 Seismic loads (seismic force-resisting system). Where a *change of occupancy* results in a building being assigned to a higher *risk category*, the building shall satisfy the requirements of Section 1613 of the *Building Code* for the new *risk category* using full seismic forces.

Exceptions:

1. Specific seismic detailing requirements of Section 1613 of the *Building Code* for a new structure shall not be required to be met where the seismic performance is shown to be equivalent to that of a new structure. A demonstration of equivalence shall consider the regularity, overstrength, redundancy and ductility of the structure.
2. Where a change of use results in a building being reclassified from *Risk Category* I or II to *Risk Category* III and the seismic coefficient, S_{DS}, is less than 0.33, compliance with this section is not required.

Section 506.4.4 is modified:

506.4.4 Access to Risk Category IV. This section is deleted in its entirety.

3405.6 IEBC Section 507, Historical buildings.

Section 507.1 through 507.4 are modified:

507.1 Historic buildings. Repairs, alterations and additions necessary for the preservation, restoration, rehabilitation or continued use of a building or structure may be made without

conformance to all the requirements of this code when authorized by the building official, provided:

1. The building or structure has been designated by official action of the legally constituted authority of the jurisdiction as having special historical or architectural significance.
2. Any *dangerous* conditions, as described in this code, are corrected.
3. The restored building or structure will be no more hazardous based on life safety, fire safety and sanitation than the existing building.
4. The building official seeks the advice of the State of Oregon historic preservation officer. In case of appeals related to historic buildings, the local appeals board or the appropriate state appeals board shall seek the advice of the State of Oregon historic preservation officer.

507.2 Life safety hazards. Section 507.2, Life safety hazards, is deleted in its entirety.

507.3 Flood hazard areas. Within flood *hazard areas* established by the Flood Plain Administrator in accordance with Section 1612.3 of the *Building Code*, where the work proposed constitutes *substantial improvement*, the building shall be brought into compliance with Section 1612 of the *Building Code*.

Exception: *Historic buildings* meeting any of the following criteria need not be brought into compliance:

1. Listed or preliminarily determined to be eligible for listing in the National Register of Historic Places.
2. Determined by the Secretary of the U.S. Department of Interior as contributing to the historical significance of a registered historic district or a district preliminarily determined to qualify as an historic district.
3. Designated as historic under a state or local historic preservation program that is *approved* by the Department of Interior.

507.4 Structural. This section is deleted in its entirety.

SECTION 3406
MODIFICATIONS TO IEBC CHAPTER 6
CLASSIFICATION OF WORK

3406.1 IEBC Section 608, Relocated buildings. Section 608 heading is modified to Moved buildings.

Sections 608.1 and 608.2 are modified:

608.1 Scope. Moved building provisions shall apply to relocated or moved buildings.

608.2 Application. Moved buildings shall comply with the provisions of Chapter 14.

SECTION 3407
MODIFICATIONS TO IEBC CHAPTER 7
ALTERATIONS—LEVEL 1

3407.1 IEBC Section 701, General.

Sections 701.3 and 701.4 are modified:

701.3 Flood hazard areas. In *flood hazard areas* established by the Flood Plain Administrator, *alterations* that constitute *substantial improvement* shall require that the building comply with Section 1612 of the *Building Code*.

701.4 Emergency escape and rescue openings. Emergency escape and rescue openings shall be operational from the inside of the room without the use of keys or tools. Bars, grilles, grates or similar devices placed over emergency escape and rescue openings shall comply with the minimum net clear opening size required by the code that was in effect at the time of construction. Such devices shall be releasable or removable from the inside without the use of a key, tool or force greater than that which is required for normal operation of the escape and rescue opening. Where such bars, grilles, grates or similar devices are installed, they shall not reduce the net clear opening of the emergency escape and rescue openings. Smoke alarms shall be installed in accordance with Section 307.

3407.2 IEBC Section 702, Building elements and materials.

Sections 702.4 through 702.6.1 are modified:

702.4 Window opening control devices on replacement windows. In Group R-2 or R-3 buildings containing dwelling units, window opening control devices complying with ASTM F2090 shall be installed where an existing window is replaced and where all of the following apply to the replacement window:

1. The window is operable.
2. The window replacement includes replacement of the sash and the frame.
3. The top of the sill of the window opening is at a height less than 36 inches (915 mm) above the finished floor.
4. The window will permit openings that will allow passage of a 4-inch-diameter (102 mm) sphere when the window is in its largest opened position.
5. The vertical distance from the top of the sill of the window opening to the finished grade or other surface below, on the exterior of the building, is greater than 72 inches (1829 mm).

The window opening control device, after operation to release the control device allowing the window to fully open, shall not reduce the minimum net clear opening area of the window unit to less than the area required by Section 1030.2 of the *Building Code*.

Exceptions:

1. Operable windows where the top of the sill of the window opening is located more than 75 feet (22 860 mm) above the finished grade or other surface below, on the exterior of the room, space or building, and that are provided with window fall

prevention devices that comply with ASTM F2006.

2. Operable windows with openings that are provided with window fall prevention devices that comply with ASTM F2090.

702.5 Replacement window emergency escape and rescue openings. Where windows are required to provide emergency escape and rescue openings in Group R-2 and R-3 occupancies, replacement windows shall be exempt from the requirements of Sections 1030.2, 1030.3 and 1030.4 of the *Building Code*, provided that the replacement window is the manufacturer's largest standard size window that will fit within the existing frame or existing rough opening.

Window opening control devices complying with ASTM F2090 shall be permitted for use on windows required to provide *emergency escape* and *rescue openings*.

702.6 Materials and methods. New work shall comply with the materials and methods requirements in the *Building Code*, as applicable, that specify material standards, detail of installation and connection, joints, penetrations, and continuity of any element, component, or system in the building.

702.6.1 International Fuel Gas Code. This section is deleted in its entirety.

3407.3 IEBC Section 703 and 704. These sections are deleted in their entirety.

3407.5 IEBC Section 705, Reroofing.

Section 705.2 through 705.6 are modified: These sections are deleted in their entirety.

3407.6 IEBC Section 706, Structural.

Section 706.2 is modified:

706.2 Addition or replacement of roofing or replacement of equipment. Any existing gravity load-carrying structural element for which an *alteration* causes an increase in design dead, live or snow load, including snow drift effects, of more than 5 percent shall be replaced or altered as needed to carry the gravity loads required by the *Building Code* for new structures.

Sections 706.3.1 and 703.6.2 are modified:

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706.3.1 Bracing for unreinforced masonry parapets. Where a permit is issued for reroofing for more than 25 percent of the roof area of a building assigned to Seismic Design Category D, E or F that has parapets constructed of unreinforced masonry, the work shall include installation of parapet bracing unless an evaluation demonstrates compliance of such items. Reduced seismic forces shall be permitted.

706.3.2, Roof diaphragms resisting wind loads in high wind regions. This section is deleted in its entirety.

3407.7 IEBC Section 707, Energy conservation. This section is deleted in its entirety.

SECTION 3408
MODIFICATIONS TO IEBC CHAPTER 8
ALTERATIONS—LEVEL 2

3408.1 IEBC Section 801, General.

Section 801.3 is modified:

801.3 Compliance. New construction elements, components, systems, and spaces shall comply with the requirements of the *Building Code*.

Exceptions:

1. Where windows are added they are not required to comply with the light and ventilation requirements of the *Building Code*.
2. The length of dead-end corridors in newly constructed spaces shall only be required to comply with the provisions of Section 805.6.
3. The minimum ceiling height of the newly created habitable and occupiable spaces and corridors shall be 7 feet (2134 mm).
4. New structural members and connections shall be permitted to comply with alternative design criteria in accordance with Section 302.

3408.2 IEBC Section 802, Building elements and materials.

Section 802.2.1 is modified:

802.2.1 Existing vertical openings. Existing interior vertical openings connecting two or more floors shall be enclosed with *approved* assemblies having a fire-resistance rating of not less than 1 hour with *approved* opening protectives.

Exceptions:

1. Where vertical opening enclosure is not required by the *Building Code*.
2. Interior vertical openings other than stairways may be blocked at the floor and ceiling of the *work area* by installation of not less than 2 inches (51 mm) of solid wood or equivalent construction.
3. The enclosure shall not be required where:
   - 3.1. Connecting the main floor and mezzanines; or
   - 3.2. All of the following conditions are met:
     - 3.2.1. The communicating area has a low-hazard occupancy or has a moderate-hazard occupancy that is protected throughout by an automatic sprinkler system.
     - 3.2.2. The lowest or next-to-the-lowest level is a street floor.
     - 3.2.3. The entire area is open and unobstructed in a manner such that it is reasonable to assume that a fire in any part of the interconnected spaces will be readily obvious to all of the occupants.
     - 3.2.4. Exit capacity is sufficient to provide egress simultaneously for all

occupants of all levels by considering all areas to be a single floor area for the determination of required exit capacity.

3.2.5. Each floor level, considered separately, has not less than one-half of its individual required exit capacity provided by an exit or exits leading directly out of that level without having to traverse another communicating floor level or be exposed to the smoke or fire spreading from another communicating floor level.

4. In Group A occupancies, a minimum 30-minute enclosure shall be provided to protect all vertical openings not exceeding three stories.

5. In Group B occupancies, a minimum 30-minute enclosure shall be provided to protect all vertical openings not exceeding three stories. This enclosure, or the enclosure specified in Section 802.2.1, shall not be required in the following locations:

   5.1. Buildings not exceeding 3,000 square feet (279 m2) per floor.

   5.2. Buildings protected throughout by an *approved* automatic fire sprinkler system.

6. In Group E occupancies, the enclosure shall not be required for vertical openings not exceeding three stories where the building is protected throughout by an *approved* automatic fire sprinkler system.

7. In Group F occupancies, the enclosure shall not be required in the following locations:

   7.1. Vertical openings not exceeding three stories.

   7.2. Special-purpose occupancies where necessary for manufacturing operations and direct access is provided to not fewer than one protected stairway.

   7.3. Buildings protected throughout by an *approved* automatic sprinkler system.

8. In Group H occupancies, the enclosure shall not be required for vertical openings not exceeding three stories where necessary for manufacturing operations and every floor level has direct access to not fewer than two remote enclosed stairways or other *approved* exits.

9. In Group M occupancies, a minimum 30-minute enclosure shall be provided to protect all vertical openings not exceeding three stories. This enclosure, or the enclosure specified in Section 802.2.1, shall not be required in the following locations:

   9.1. Openings connecting only two floor levels.

   9.2. Occupancies protected throughout by an *approved* automatic sprinkler system.

10. In Group R-1 occupancies, the enclosure shall not be required for vertical openings not exceeding three stories in the following locations:

    10.1. Buildings protected throughout by an *approved* automatic sprinkler system.

    10.2. Buildings with less than 25 dwelling units or sleeping units where every sleeping room above the second floor is provided with direct access to a fire escape or other *approved* second exit by means of an *approved* exterior door or window having a sill height of not greater than 44 inches (1118 mm) and where both of the following conditions are met:

        10.2.1. Any exit access corridor exceeding 8 feet (2438 mm) in length that serves two means of egress, one of which is an unprotected vertical opening, shall have not fewer than one of the means of egress separated from the vertical opening by a 1-hour fire barrier.

        10.2.2. The building is protected throughout by an automatic fire alarm system, installed and supervised in accordance with the *Building Code*.

11. In Group R-2 occupancies, a minimum 30-minute enclosure shall be provided to protect all vertical openings not exceeding three stories. This enclosure, or the enclosure specified in Section 802.2.1, shall not be required in the following locations:

    11.1. Vertical openings not exceeding two stories with not more than four dwelling units per floor.

    11.2. Buildings protected throughout by an *approved* automatic sprinkler system.

    11.3. Buildings with not more than four dwelling units per floor where every sleeping room above the second floor is provided with direct access to a fire escape or other *approved* second exit by means of an *approved* exterior door or window having a sill height of not greater than 44 inches (1118 mm) and the building is protected throughout by an automatic fire alarm system complying with Section 803.4.

12. Group S occupancies where connecting not more than two floor levels or where connecting not more than three floor levels and the structure is equipped throughout with an *approved* automatic sprinkler system.

13. Group S occupancies where vertical opening protection is not required for open parking garages and ramps.

Section 802.2.3 is modified:

802.2.3 Supplemental stairway enclosure requirements. Where the *work area* on any floor exceeds 50 percent of that floor area, stairways that are part of the means of egress serving the *work area* shall, at a minimum, be enclosed with smoke-tight construction on the highest *work area* floor and all floors below.

Exception: Where stairway enclosure is not required by the *Building Code*.

3408.3 IEBC Section 803, Fire Protection.

Sections 803.4.1.1 through 803.4.1.6 are modified:

803.4.1.1 Group E. A fire alarm system shall be installed in *work areas* of Group E occupancies as required by Section 306 for existing Group E occupancies.

803.4.1.2 Group I-1. A fire alarm system shall be installed in *work areas* of Group I-1 residential care/ assisted living facilities as required by Section 306 for existing Group I-1 occupancies.

803.4.1.3 Group I-2. A fire alarm system shall be installed throughout *work areas* in Group I-2 occupancies as required by Section 306.

803.4.1.4 Group I-3. A fire alarm system shall be installed in *work areas* of Group I-3 occupancies as required by Section 306.

803.4.1.5 Group R-1. A fire alarm system shall be installed in *work areas* of Group R-1 occupancies as required by Section 306 for existing Group R-1 occupancies.

803.4.1.6 Group R-2. A fire alarm system shall be installed in *work areas* of Group R-2 apartment buildings as required by Section 306 for existing Group R-2 occupancies.

Section 803.4.3 is modified:

803.4.3 Smoke alarms. Individual sleeping units and individual dwelling units in any *work area* in Group R and I-1 occupancies shall be provided with smoke alarms in accordance with Section 307.

Exception: Interconnection of smoke alarms outside of the *work area* shall not be required. See other exceptions in Section 307.

3408.4 IEBC Section 804, Carbon monoxide detection.

Section 804.1 is modified:

804.1 Carbon monoxide alarms. Any *work area* in Group I1, I-2, I-4 and R occupancies shall be equipped with carbon monoxide alarms in accordance with Section 308.

Exception: Work involving the exterior surfaces of buildings, such as the replacement of roofing or siding, the addition or replacement of windows or doors, or the addition of porches or decks**.**

3408.5 IEBC Section 805, Means of egress.

Section 805.2 is modified:

805.2 General. The means of egress shall comply with the requirements of this section.

Exceptions:

1. Where the *work area* and the means of egress serving it complies with NFPA 101.
2. Means of egress complying with the requirements of the building code under which the building was constructed shall be considered to be compliant means of egress .

3408.6 IEBC Section 806, Structural.

Section 806.2 is modified:

806.2 Existing structural elements carrying gravity loads. Any existing gravity load-carrying structural element for which an *alteration* causes an increase in design dead, live or snow load, including snow drift effects, of more than 5 percent shall be replaced or altered as needed to carry the gravity loads required by the *Building Code* for new structures. Any existing gravity load-carrying structural element whose gravity load-carrying capacity is decreased as part of the *alteration* shall be shown to have the capacity to resist the applicable design dead, live and snow loads, including snow drift effects, required by the *Building Code* for new structures.

Exception: Buildings in which the increased dead load is attributable to the addition of a second layer of roof covering weighing 3 pounds per square foot (0.1437 kN/m^2) or less over an existing single layer of roof covering.

3408.7 IEBC Section 807, Electrical. This section is deleted in its entirety.

3408.8 IEBC Section 808, Mechanical. This section is deleted in its entirety.

3408.9 IEBC Section 809, Plumbing. This section is deleted in its entirety.

3408.10 IEBC Section 810, Energy conservation. This section is deleted in its entirety.

SECTION 3409
MODIFICATIONS TO IEBC CHAPTER 9
ALTERATIONS—LEVEL 3

3409.1 IEBC Section 902, Special use and occupancy.

Section 902.1.2 is modified:

902.1.2 Elevators. Where there is an elevator or elevators for public use, not fewer than one elevator serving the *work area* shall comply with this section. Existing elevators with a travel distance of 25 feet (7620 mm) or more above or below the main floor or other level of a building and intended to serve the needs of emergency personnel for fire-fighting or rescue purposes shall be provided with emergency operation in accordance with the *Elevator Code*. New elevators shall be

provided with Phase I emergency recall operation and Phase II emergency in-car operation in accordance with the *Elevator Code*.

3409.2 IEBC Section 903, Building elements and materials.

Section 903.2.1 is modified:

903.2.1 Separation required. Where the *work area* is in any attached dwelling unit in Group R-3, walls separating the dwelling units that are not continuous from the foundation to the underside of the roof sheathing shall be constructed to provide a continuous fire separation using construction materials consistent with the existing wall or complying with the requirements for new structures. Work shall be performed on the side of the dwelling unit wall that is part of the *work area*.

Exception: Where *alterations* or *repairs* do not result in the removal of wall or ceiling finishes exposing the structure, walls are not required to be continuous through concealed floor spaces.

3409.3 IEBC Section 904, Fire protection.

Sections 904.1 and 904.1.1 are modified:

904.1 Automatic sprinkler systems. An automatic sprinkler system shall be provided within a *work area* where required by Section 802.2 or this section.

904.1.1 High-rise buildings. An automatic sprinkler system shall be provided within *work areas* where the high-rise building has a sufficient municipal water supply for the design and installation of an automatic sprinkler system at the site.

3409.4 IEBC Section 906, Structural.

Section 906.2 is modified:

906.2 Existing structural elements resisting lateral loads. Where work involves a *substantial structural alteration*, the lateral load-resisting system of the altered building shall be shown to satisfy the requirements of Sections 1609 and 1613 of the *Building Code*. Reduced seismic forces shall be permitted.

Exception: Where the intended *alteration* involves only the lowest story of a building, only the lateral load resisting components in and below that story need comply with this section.

Sections 906.4 and 906.5 are modified:

906.4. Anchorage for concrete and masonry buildings. For any building assigned to Seismic Design Category D, E or F with a structural system that includes concrete or reinforced masonry walls with a flexible roof diaphragm, the *alteration* work shall include installation of wall anchors at the roof line of all subject buildings in accordance with Section 1604.8 of the *Building Code* unless an evaluation demonstrates compliance of existing wall anchorage. Reduced seismic forces shall be permitted.

906.5 Anchorage for unreinforced masonry walls. For any building assigned to Seismic Design Category C, D, E or F with a structural system that includes unreinforced masonry bearing walls, the *alteration* work shall include installation of wall anchors at the roof and floor lines in accordance with Section 1604.8 of the *Building Code*, unless an evaluation demonstrates compliance of existing wall anchorage. Reduced seismic forces shall be permitted.

Category C, D, E or F, unreinforced masonry partitions and nonstructural walls within the *work area* and adjacent to egress paths from the *work area* shall be anchored, removed, or altered as needed to resist the reduced *Building Code*-level out-of-plane seismic forces in accordance with Section 303.3, unless an evaluation demonstrates compliance of such items. Use of reduced seismic forces shall be permitted.

Section 906.7 is modified:

906.7 Anchorage of unreinforced masonry partitions. Where the building is assigned to Seismic Design Category C, D, E or F, unreinforced masonry partitions and nonstructural walls within the *work area* and adjacent to egress paths from the *work area* shall be anchored, removed, or altered as needed to resist the reduced *Building Code*-level out-of-plane seismic forces in accordance with Section 303.3, unless an evaluation demonstrates compliance of such items. Use of reduced seismic forces shall be permitted.

3409.5 IEBC Section 907, Energy conservation. Section 907, Energy conservation, is deleted in its entirety.

SECTION 3410
MODIFICATIONS TO IEBC CHAPTER 10
CHANGE OF OCCUPANCY

3410.1 IEBC Section 1001, General.

Section 1001.2 through 1001.2.2.1 is modified:

1001.2 Certificate of occupancy. A certificate of occupancy shall be issued where it has been determined that the requirements for the *change of occupancy* have been met.

1001.2.1 Change of use. This section is deleted in its entirety.

1001.2.2 Change of occupancy classification or group. This section is deleted in its entirety.

1001.2.2.1 Partial change of occupancy. This section is deleted in its entirety.

Section 1001.3 is modified:

1001.3 Certificate of occupancy required. This section is deleted in its entirety.

3410.2 IEBC Section 1006, Structural.

Sections 1006.2 and 1006.3 are modified:

1006.2 Snow and wind loads. Where a *change of occupancy* results in a structure being assigned to a higher *risk category*, the structure shall satisfy the requirements of Sections 1608 and 1609 of the *Building Code* for the new risk category

Exception: Where the area of the new occupancy is less than 10 percent of the building area.

1006.3 Seismic loads. Where a *change of occupancy* results in a building being assigned to a higher *risk category*, the building shall satisfy the requirements of Section 1613 of the *Building Code* for the new *risk category* using full seismic forces.

Exceptions:

1. Where a change of use results in a building being reclassified from *Risk Category* I or II to *Risk Category* III and the seismic coefficient, SDS, is less than 0.33.
2. Where the area of the new occupancy is less than 10 percent of the building area and the new occupancy is not assigned to *Risk Category* IV.

3410.3 IEBC Section 1007, Electrical. This section is deleted in its entirety.

3410.4 IEBC Section 1008, Mechanical. This section is deleted in its entirety.

3410.5 IEBC Section 1009, Plumbing. This section is deleted in its entirety.

3410.6 IEBC Section 1011, Change of occupancy classification.

Sections 1011.1.1 and 1011.1.1.1 are modified:

1011.1.1 Compliance with Chapter 9. The requirements of Chapter 9 shall be applicable throughout the new occupancy classification based on the separation conditions set forth in Sections 1011.1.1.1 and 1011.1.1.2.

1011.1.1.1 Change of occupancy classification without separation. Where a portion of an *existing building* is changed to a new occupancy classification or where there is a *change of occupancy* within a space where there is a different fire protection system threshold requirement in Chapter 9 of the *Building Code*, and that portion is not separated from the remainder of the building with fire barriers having a fire-resistance rating as required in the *Building Code* for the separate occupancy, the required separation shall be provided or the entire building shall comply with all of the requirements of Chapter 9 of this code applied throughout the building for the most restrictive occupancy classification in the building and with the requirements of this chapter.

Section 1011.1.2 is modified:

1011.1.2 Fire protection and interior finish. The provisions of Sections 1011.2 and 1011.3 for fire protection and interior finish, respectively, shall apply to all buildings or areas of buildings undergoing a change of occupancy classification.

Section 1011.4.1 is modified:

1011.4.1 Means of egress for change to a higher-hazard category. Where a change of occupancy classification is made to a higher-hazard category (lower number) as shown in Table 1011.4, the means of egress serving areas of the building undergoing the change of occupancy classification shall comply with the requirements of Chapter 10 of the *Building Code*.

Exceptions:

1. Stairways shall be enclosed in compliance with the applicable provisions of Section 903.1.
2. Existing stairways including handrails and guards complying with the requirements of Chapter 9 shall be permitted for continued use subject to approval of the *code official*.
3. Any stairway replacing an existing stairway within a space where the pitch or slope cannot be reduced because of existing construction shall not be required to comply with the maximum riser height and minimum tread depth requirements.
4. Existing corridor walls constructed on both sides of wood lath and plaster in good condition or $^1/_2$-inch-thick (12.7 mm) gypsum wallboard shall be permitted. Such walls shall either terminate at the underside of a ceiling of equivalent construction or extend to the underside of the floor or roof next above.
5. Existing corridor doorways, transoms and other corridor openings shall comply with the requirements in Sections 805.5.1, 805.5.2 and 805.5.3.
6. Existing dead-end corridors shall comply with the requirements in Section 805.6.
7. An existing operable window with clear opening area not less than 4 square feet (0.38 m2) and minimum opening height and width of 22 inches (559 mm) and 20 inches (508 mm), respectively, shall be accepted as an emergency escape and rescue opening.

Section 1011.5.1.1 is modified:

1011.5.1.1 Fire wall alternative. In other than Groups H, F-1 and S-1, fire barriers and horizontal assemblies constructed in accordance with Sections 707 and 711, respectively, of the *Building Code* shall be permitted to be used in lieu of fire walls to subdivide the building into separate buildings for the purpose of complying with the area limitations required for the new occupancy where all of the following conditions are met:

1. The buildings are protected throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 of the *Building Code*.
2. The maximum allowable area between fire barriers, horizontal assemblies, or any combination thereof shall not exceed the maximum allowable area determined in accordance with Chapter 5 of the *Building Code* without an increase allowed for an automatic sprinkler system in accordance with Section 506 of the *Building Code*.
3. The fire-resistance rating of the fire barriers and horizontal assemblies shall be not less than that specified for fire walls in Table 706.4 of the *Building Code*.

Exception: Where horizontal assemblies are used to limit the maximum allowable area, the required fire-resistance rating of the horizontal assemblies shall be permitted to be

reduced by 1 hour provided that the height and number of stories increases allowed for an automatic sprinkler system by Section 504 of the *Building Code* are not used for the buildings.

SECTION 3411
MODIFICATIONS TO IEBC CHAPTER 11
ADDITIONS

3411.1 IEBC Section 1101, General.

Sections 1101.1 and 1101.2 are modified:

1101.1 Scope. An *addition* to a building or structure shall comply with the *state building code* as adopted for new construction without requiring the *existing building* or structure to comply with any requirements of those codes or of these provisions, except as required by this chapter. Where an *addition* impacts the *existing building* or structure, that portion shall comply with this code.

1101.2 Creation or extension of nonconformity. An *addition* shall not create or extend any nonconformity in the *existing building* to which the *addition* is being made with regard to accessibility, structural strength, fire safety, or means of egress systems.

3411.2 IEBC Section 1103, Structural.

Sections 1103.1 through 1103.3 are modified:

1103.1 Additional gravity loads. Any existing gravity load-carrying structural element for which an *addition* and its related *alterations* cause an increase in design gravity load of more than 5 percent shall be replaced or altered as needed to carry the gravity loads required by the *Building Code* for new structures. Any existing gravity load-carrying structural element whose gravity load-carrying capacity is decreased as part of the *addition* and its related *alterations* shall be considered to be an altered element subject to the requirements of Section 806.2. Any existing element that will form part of the lateral load path for any part of the *addition* shall be considered to be an existing lateral load-carrying structural element subject to the requirements of Section 1103.2.

1103.2 Lateral force-resisting system. Where the *addition* is structurally independent of the *existing structure*, existing lateral load-carrying structural elements shall be permitted to remain unaltered. Where the *addition* is not structurally independent of the *existing structure*, the *existing structure* and its *addition* acting together as a single structure shall meet the requirements of Sections 1609 and 1613 of the *Building Code* using full seismic forces.

Exception: Any existing lateral load-carrying structural element whose demand-capacity ratio with the *addition* considered is not more than 10 percent greater than its demand-capacity ratio with the *addition* ignored shall be permitted to remain unaltered. For purposes of calculating demand-capacity ratios, the demand shall consider applicable load combinations with design lateral loads or forces in accordance with Sections 1609 and 1613 of the *Building Code*. For purposes of this exception, comparisons of demand-capacity ratios and calculation of design lateral loads, forces and capacities shall account for the cumulative effects of *additions* and *alterations* since original construction.

1103.3 Flood hazard areas. *Additions* and *foundations* in *flood hazard areas* determined by the Flood Plain Administrator shall comply with the following requirements:

1. For horizontal *additions* that are structurally interconnected to the *existing building*:
   1.1. If the *addition* and all other proposed work, when combined, constitute *substantial improvement*, the *existing building* and the *addition* shall comply with Section 1612 of the *Building Code*.
   1.2. If the *addition* constitutes *substantial improvement*, the *existing building* and the *addition* shall comply with Section 1612 of the *Building Code*.
2. For horizontal *additions* that are not structurally interconnected to the *existing building*:
   2.1. The *addition* shall comply with Section 1612 of the *Building Code*.
   2.2. If the *addition* and all other proposed work, when combined, constitute *substantial improvement*, the *existing building* and the *addition* shall comply with Section 1612 of the *Building Code*.
3. For vertical *additions* and all other proposed work that, when combined, constitute *substantial improvement*, the *existing building* shall comply with Section 1612 of the *Building Code*.
4. For a raised or extended foundation, if the foundation work and all other proposed work, when combined, constitute *substantial improvement*, the *existing building* shall comply with Section 1612 of the *Building Code*.
5. For a new foundation or replacement foundation, the foundation shall comply with Section 1612 of the *Building Code*.

3411.3 IEBC Section 1104, Smoke alarms in occupancy Groups R and I-1.

Section 1104.1 is modified:

1104.1 Smoke alarms in existing portions of a building. Where an *addition* is made to a building or structure of a Group R or I-1 occupancy, the *existing building* shall be provided with smoke alarms as required by Section 307.

3411.4 IEBC Section 1105, Carbon monoxide alarms in Groups I-1, I-2, I-4 and R.

Section 1105.1 is modified:

1105.1 Carbon monoxide alarms in existing portions of a building. Where an *addition* is made to a building or structure of a Group I-1, I-2, I-4 or R occupancy, the *existing building* shall be equipped with carbon monoxide alarms in accordance with Section 308.

3411.5 IEBC Section 1106, Storm shelters. This section is deleted in its entirety.

3411.6 IEBC Section 1107, Energy conservation. This section is deleted in its entirety.

SECTION 3412
MODIFICATIONS TO IEBC CHAPTER 12
HISTORIC BUILDINGS

3412.1 IEBC Chapter 12, Historic buildings. This chanpter is deleted in its entirety. Historic buildings shall comply with Sections 305.9 and 507.

SECTION 3413
MODIFICATIONS TO IEBC CHAPTER 13
PERFORMANCE COMPLIANCE METHODS

3413.1 IEBC Section 1301, General.

Section 1301.1 is modified: ***(19OSSC-45 Caufield)***

1301.1 Scope. The provisions of this chapter shall apply to the *alteration*, *addition* and *change of occupancy* of *existing structures*, including historic structures, as referenced in Section 301.3.3. The provisions of this chapter are intended to maintain or increase the current degree of public safety, health and general welfare in *existing buildings* while permitting repair, alteration, addition and change of occupancy without requiring full compliance with Chapters 5 or 6 through 12, except where compliance with other provisions of this code is specifically required by this chapter. The provisions of this section are not mandatory and are intended for optional use by a building owner for elected *repairs*, *alterations*, *additions*, and changes of occupancy. Where the provisions of this chapter are utilized, this chapter must be used in its entirety.

Section 1301.2.3.1 is modified:

1301.2.3.1 Additions to Group E facilities. This section is deleted in its entirety.

Section 1301.2.4 is modified:

1301.2.4 Alterations. An *existing building* or portion thereof shall not be altered in such a manner that results in the building being less safe than such building is currently.

Exception: Where the current level of safety is proposed to be reduced, the portion altered shall conform to the requirements of the *Building Code*.

Sections 1301.3.1 through 1301.3.3 are modified:

1301.3.1 Hazards. This section is deleted in its entirety.

1301.3.2 Compliance with other codes. This section is deleted in its entirety.

1301.3.3 Compliance with flood hazard provisions. In *flood hazard areas* determined by the Flood Plain Administrator, buildings that are evaluated in accordance with this section shall comply with Section 1612 of the *Building Code*, if the work covered by this section constitutes *substantial improvement*.

Sections 1301.6.14 and 1301.6.14.1 are modified:.

1301.6.14 Elevator control. Evaluate the passenger elevator equipment and controls that are available to the fire department to reach all occupied floors. Emergency recall and in-car operation of elevators shall be provided in accordance with the *Elevator Code*. Under the categories and occupancies in Table 1301.6.14, determine the appropriate value and enter that value into Table 1301.7 under Safety Parameter 1301.6.14, Elevator Control, for fire safety, means of egress and general safety. The values shall be zero for a single-story building.

1301.6.14.1 Categories. The categories for elevator controls are:

1. Category a—No elevator.
2. Category b—Any elevator without Phase I emergency recall operation and Phase II emergency in-car operation.
3. Category c—All elevators with Phase I emergency recall operation and Phase II emergency in-car operation as required by the *Elevator Code*.
4. Category d—All meet Category c; or Category b where permitted to be without Phase I emergency recall operation and Phase II emergency in-car operation; and at least one elevator that complies with new construction requirements serves all occupied floors.

SECTION 3414
MODIFICATIONS TO IEBC CHAPTER 14
RELOCATED OR MOVED BUILDINGS

3414.1 IEBC Chapter 14, Relocated or moved buildings. This section is deleted in its entirety. Relocated or moved buildings shall comply with ORS 455.410.

SECTION 3415
MODIFICATIONS TO IEBC CHAPTER 15
CONSTRUCTION SAFEGUARDS

3415.1 IEBC Chapter 15, Construction safeguards. This section is deleted in its entirety. Construction safeguards shall be in accordance with Chapter 33 of the *Building Code*.

SECTION 3416
MODIFICATIONS TO IEBC CHAPTER 16
REFERENCED STANDARDS

3416.1 IEBC Chapter 16, Referenced standards. The referenced standard editions listed in the *Building Code* shall apply. Where the standard is not in the *Building Code*, those listed in Chapter 16 of the *International Existing Building Code* shall apply. Referenced standards shall only apply as specifically referenced within a provision.

918-460-0010
Adopted Oregon Structural Specialty Code

(1) The Oregon Structural Specialty Code is adopted pursuant to OAR chapter 918, division 8.

(2) Effective ~~July 1, 2014~~ **October 1, 2019** the ~~2014~~ **2019** Oregon Structural Specialty Code is:

(a) The ~~2012~~ **2018** Edition of the International Building Code, as published by the International Code Council, and amended by the Building Codes Division; and

(b) The energy provisions adopted pursuant to OAR 918-460-0500.

(3)(a) For the purposes of implementing a phase-in period for the ~~2014~~ **2019** Oregon Structural Specialty Code, the ~~2010~~ **2014** Oregon Structural Specialty Code is adopted for the period beginning ~~July 1, 2014~~ **October 1, 2019** and ending ~~September 30, 2014~~ **December 31, 2019**.

(b) During the phase-in period established in subsection (3)(a), all building departments in the state are required to accept plans for structures designed to either the ~~2014~~ **2019** Oregon Structural Specialty Code or to the ~~2010~~ **2014** Oregon Structural Specialty Code.

(4) Code requirements in effect at the time a plan review or permit application is filed controls the construction under the application unless the applicant agrees to be controlled by subsequent changes.

[Publications: Publications referenced are available from the agency.]

Stat. Auth.: ORS 455.020, 455.110 & 455.447
Stats. Implemented: ORS 455.110
Hist.: DC 34, f. 6-5-74, ef. 6-25-74; DC 36(Temp), f. & ef. 7-1-74; DC 37, f. 8-30-74, ef. 9-25-74; DC 45, f. 4-7-75, ef. 4-25-75; DC 51(Temp), f. & ef. 7-3-75 - 10-31-75; DC 61, f. 11-20-75, ef. 1-1-76; DC 67, f. & ef. 2-19-76; DC 68, f. 3-3-76, ef. 4-1-76; DC 76, f. 5-21-76, ef. 8-1-76; DC 77, f. 5-26-76, ef. 6-3-76; DC f. 8-19-76, ef. 10-1-76; DC 102, f. & ef. 11-1-77; DC 104, f. 12-1-77, ef. 12-10-77; DC 2-1978, f. 1-20-78, ef. 3-1-78; DC 18-1978, f. 5-4-78, ef. 5-15-78; DC 5-1978(Temp), f. 2-22-78, ef. 3-1-78 thru 4-29-78; DC 29-1978, f. 10-27-78, ef. 1-1-79; DC 31-1978(Temp), f. 12-8-78, ef. 1-1-79; DC 33-1978(Temp), f. 12-27-78, ef. 1-1-79; DC 6-1979 (Temp), f. 3-13-79, ef. 4-1-79; DC 8-1979, f. 4-30-79, ef. 5-1-79/8-1-79/1-1-80; DC 12-1979(Temp), f. 7-2-79, ef. 8-1-79; DC 13-1979, f. 11-1-79, ef. 12-1-79; DC 7-1980, f. 6-5-80, ef. 7-1-80; DC 15-1980(Temp), f. & ef. 10-13-80; DC 11-1981, f. & ef. 7-20-81; DC 13-1981, f. 10-30-81, ef. 11-1-81; DC 15-1981, f. 10-30-81, ef. 1-1-82; DC 9-1982, f. & ef. 3-1-82; DC 14-1983, f. 6-23-83, ef. 8-1-83; DC 26-1984, f. 8-31-84, ef. 9-15-84; DC 35-1984, f. & ef. 11-28-84; DC 14-1985(Temp), f. & ef. 6-21-85; DC 21-1985, f. 12-18-ef. 1-1-86; DC 10-1986, f. 6-30-86, ef. 7-1-86; DC 19-1986, f. 10-31-86, ef. 11-1-86; DC 5-1987(Temp), f. & ef. 3-26-87; DC 12-1987(Temp), f. 4-21-87, ef. 4-24-87; BCA 7-1987, f. & ef. 9-3-1987; BCA 11-1987, f. & ef. 10-21-87; BCA 12-1987, f. & ef. 11-5-87; Renumbered from 814-026-0005; BCA 34-1989, f. 12-21-89, cert. ef. 1-1-90; BCA 30-1990, f. 12-21-90, cert. ef. 1-1-92; BCA 43-1991(Temp), f. 12-24-91, cert. ef. 1-1-92; BCA 3-1992(Temp), f. 3-4-92, cert. ef. 3-5-92; BCA 12-1992, f. 6-29-92,

cert. ef. 7-1-92; BCA 27-1992, f. 12-29-92, cert. ef. 1-1-93; BCA 3-1993(Temp), f. & cert. ef. 3-3-93; BCA 19-1993(Temp), f. 8-26-93, crt. ef. 9-1-93; BCA 26-1993, f. 10-22-93, cert. ef. 11-1-93; BCD 6-1994, f. 2-25-94, cert. ef. 5-1-94; BCD 2-1996, f. 2-2-96, cert. ef. 4-1-96; BCD 19-1998, f. 9-30-98, cert. ef. 10-1-98; BCD 16-2004, f. 9-24-04, cert. ef. 10-1-04; BCD 1-2007, f. 2-15-07, cert. ef. 4-1-07; BCD 4-2010, f. 5-14-10, cert. ef. 7-1-10; BCD 6-2011, f. & cert. ef. 3-11-11; BCD 23-2011, f. 7-26-11, cert. ef. 10-1-11;BCD 7-2014, f. 6-20-14, cert. ef. 7-1-14

918-460-0015
Amendments to the Oregon Structural Specialty Code

~~(1)~~ The Oregon Structural Specialty Code is amended pursuant to OAR chapter 918, division 8. Amendments adopted **during the code-cycle** for inclusion into the Oregon Structural Specialty Code are placed in this rule, showing the section reference, a descriptive caption, and a short description of the amendment.

~~(2) Effective April 1, 2015 the Oregon Structural Specialty Code is amended according to the following:~~

~~(a) Amend Chapter 2 Definitions to include definitions related to solar photovoltaic installations;~~

~~(b) Amend Section 1008.1.10 Panic and Fire Exit Hardware by changing the ampere threshold to 800 to align with the Oregon Electrical Specialty Code. Clarifies that the Oregon Electrical Specialty Code determines what constitutes a "work space";~~

~~(c) Amend Table 1016.2 Exit Access Travel Distance by adding "Note" (d) specifying exit travel distance;~~

~~(d) Amend Section 1018.1 Corridors by adding "Exception" (6) relating to fire-resistance rating;~~

~~(e) Amend Sections 1107.5.1 Group I-1 and 1107.6.4 Group R-4 by adding an "Exception" allowing folding seats to be omitted and shower controls to be located on the side wall;~~

~~(f) Amend Section 2902.2 Separate Facilities by amending "Exception" (2), and adding "Exception" (3); and~~

~~(g) Adopt Section 3111 Solar Photovoltaic Panels/Modules.~~

~~(3) Effective February 1, 2016, the Oregon Structural Specialty Code, Sections 907.2.11 and 908.7, for low frequency single- and multiple-station smoke alarms and carbon monoxide alarms is amended. NFPA 72 Section 29.3.8 and NFPA 720 Section 9.4.2.2 are not adopted.~~

~~(4) Effective October 1, 2018, amend Section 1015.3 and adopt Section 1015.3.1, for boiler, incinerator, and furnace rooms means of egress.~~

[Publications: Publications referenced are available from the agency.]

Stat. Auth.: ORS 447.231, 455.030, 455.110, 455.496
Stats. Implemented: ORS 455.110
Hist.: BCA 18-1993, f. 8-24-93, cert. ef. 8-29-93; BCA 28-1993, f. 10-22-93, cert. ef. 1-1-94; BCD 6-1994, f. 2-25-94, cert. ef. 5-1-94; BCD 22-1994, f. 9-28-94, cert. ef. 1-1-95; BCD 31-1994(Temp), f. & cert. ef. 12-23-94; BCD 32-1994, f. & cert. ef. 12-30-94; BCD 2-1995, f. & cert. ef. 2-9-95; BCD 5-1995, f. & cert. ef. 3-15-95; BCD 2-1996, f. 2-2-96, cert. ef. 4-1-96; BCD 6-1996, f. 3-29-96, cert. ef. 4-1-96; BCD 12-1997, f. 9-10-97, cert. ef. 10-1-97; BCD 19-1998, f. 9-30-98, cert. ef. 10-1-98; BCD 24-1998(Temp), f. & cert. ef. 12-1-98 thru 5-29-99; Temporary Rule repealed by BCD 3-1999, f. 3-12-99, cert. ef. 4-1-99; BCD 5-1999, f. 6-17-99,

cert. ef. 10-1-99; BCD 12-1999(Temp), f. 9-23-99, cert. ef. 11-1-99 thru 4-28-00; BCD 2-2000 f. 1-14-00, cert. ef. 4-1-00; BCD 20-2000, f. 9-15-00, cert. ef. 10-1-00; BCD 8-2001, f. 7-17-01, cert. ef. 10-1-01; BCD 18-2001, f. 12-21-01, cert. ef. 1-1-02; BCD 14-2003, f. 8-13-03, cert. ef. 10-1-03; BCD 18-2003(Temp) f. & cert. ef. 11-14-03 thru 5-11-04; BCD 5-2004,f. & cert. ef. 4-1-04; BCD 16-2004, f. 9-24-04, cert. ef. 10-1-04; BCD 21-2004, f. & cert. ef. 10-1-04; BCD 9-2005(Temp), f. & cert. ef. 4-7-05 thru 9-30-05; BCD 14-2005, f. & cert. ef. 7-5-05; BCD 18-2005(Temp), f. & cert. ef. 7-12-05 thru 9-30-05; BCD 22-2005, f. 9-29-05, cert. ef. 10-1-05; BCD 23-2005, f. 9-29-05, cert. ef. 10-1-05; BCD 1-2006, f. & cert. ef. 2-1-06; BCD 9-2006, f. 6-30-2006, cert. ef. 7-1-06; BCD 1-2007, f. 2-15-07, cert. ef. 4-1-07; BCD 9-2008 (Temp), f. & cert. ef. 6-25-08 thru 12-22-08; BCD 20-2008, f. 9-30-08, cert. ef. 10-1-08; BCD 4-2010, f. 5-14-10, cert. ef. 7-1-10; BCD 1-2011, f. 2-15-11, cert. ef. 4-1-11; BCD 14-2011, f. & cert. ef. 5-13-11; BCD 30-2011, f. & cert. ef. 11-1-11; BCD 32-2011, f. 12-30-11, cert. ef. 1-1-12; BCD 1-2012, f. 1-31-12, cert. ef. 2-1-12; BCD 8-2012, f. 8-31-12, cert. ef. 9-1-12; BCD 7-2014, f. 6-20-14, cert. ef. 7-1-14; BCD 3-2015, f. 3-24-15, cert. ef. 4-1-15; BCD 2-2016, f. 1-28-16, cert. ef. 2-1-16; BCD 15-2016(Temp), f. & cert. ef. 11-3-16 thru 5-1-17; BCD 5-2017(Temp), f. 5-1-17, cert. ef. 5-2-17 thru 10-28-17; BCD 14-2017(Temp), f. 10-24-17, cert. ef. 10-29-17 thru 4-26-18; BCD 9-2018(Temp), f. 4-27-18, cert. ef. 4-27-18 thru 10-23-18; BCD 23-2018, f. 9-28-18, cert. ef. 10-1-18

Agenda Item VII.B.

State of Oregon **Board memo**

Building Codes Division **November 7, 2018**

To: Building Codes Structures Board

From: Mark Heizer, mechanical and energy systems engineer, Policy and Technical Services

Subject: Statewide Alternate Method No. 18-02, Oregon Zero Code

Action requested:
Board review and provide a recommendation on the technical and scientific facts of the Oregon Zero Code, to serve as a Statewide Alternate Method.

Background:
Architecture 2030 developed a ZERO Code to achieve net zero commercial buildings. That code creates the framework for the Oregon Zero Code, which consists of three parts:

1. Compliance with ASHRAE Standard 90.1- 2016 (verified via COM*check*)
2. Identification of projected energy use for the proposed building
3. Identification of how much onsite or offsite renewable energy would be needed to achieve a net zero building

This Statewide Alternate Method is an additional builder choice which can be used instead of Chapter 13 of the Oregon Structural Specialty Code.

ASHRAE Standard 90.1-2016 is a contemporary energy code, and includes both a prescriptive and performance path. COM*check* is a web based tool that is fully programmed to demonstrate compliance with Standard 90.1-2016.

The ZERO Code Calculator tool, a web based tool developed by Architecture 2030, will be used to identify the projected energy use of the proposed building. It will also identify how much onsite or offsite renewable energy would be needed to achieve a net zero building.

The three parts of the Oregon Zero Code (compliance with Standard 90.1-2016, identification of projected energy use, and identification of renewable energy needed to achieve net zero) will be plugged into a statewide energy permit application, the Oregon Zero Code Form, which will provide information needed to document compliance as part of the permit file.

Additions and alterations may choose to comply with the Oregon Zero Code. Additions and alterations shall submit an Oregon Zero Code Form, but only Part 1; the ZERO Code Calculator tool report information is not required, as the calculator is applicable to new construction only.

The Oregon Zero Code alternate method will provide another choice for building professionals through a predictable, uniform system for energy compliance.

Options:

- Approve the technical and scientific facts of the proposed alternate method.
- Amend and approve the technical and scientific facts of the proposed alternate method.
- Disapprove the technical and scientific facts of the proposed alternate method and state reasons for disapproval, for the record.

Statewide Alternate Method
PENDING

No. 18-02 Oregon Zero Code (Ref.: ORS 455.060)

Statewide Alternate Methods *are approved by the Division administrator in consultation with the appropriate advisory board. The advisory board's review includes technical and scientific facts of the proposed alternate method. In addition:*

- *Building officials shall approve the use of any material, design or method of construction addressed in a statewide alternate method;*
- *The decision to use a statewide alternate method is at the discretion of the applicant; and*
- *Statewide alternate methods do not limit the authority of the building official to consider other proposed alternate methods encompassing the same subject matter.*

Code / edition: 2014 Oregon Structural Specialty Code (OSSC)

Date: PENDING

Subject: Adoption of the Oregon Zero Code, based on the Architecture 2030 ZERO Code and ANSI/ASHRAE/IES Standard 90.1-2016 (Standard 90.1-2016) as a statewide alternate method to the provisions of Chapter 13 of the 2014 OSSC

Background:

The 2014 OSSC, an updated version of the 2012 International Building Code (IBC), is the adopted structural code in the State of Oregon. Part one of Architecture 2030's ZERO Code incorporates Standard 90.1-2016 for energy efficiency requirements, a national model code that has been incorporated into many programs to advance energy efficiency. Part two of the Architecture 2030 ZERO Code creates a system for on-site and off-site renewable energy to meet net zero energy goals. This statewide alternate method does not include part two of the Architecture 2030 ZERO Code as a mandatory provision, but creates an Oregon framework for achieving net zero commercial buildings.

This statewide alternate method, known as the Oregon Zero Code, consists of Standard 90.1-2016 (verified via COM*check*), identification of projected energy use for the proposed building, and identification of how much onsite or offsite renewable energy would be required to achieve a net zero building. The Oregon Zero Code can be used in Oregon instead of Chapter 13 of the OSSC.

Discussion:

The Oregon Zero Code consists of three parts:

1. Compliance with Standard 90.1-2016 (verified via COM*check*)
2. Identification of projected energy use for the proposed building
3. Identification of how much onsite or offsite renewable energy would be required to achieve a net zero building

Standard 90.1-2016 is a contemporary energy code promoting energy efficiency and conservation. It is a national consensus energy code recognized by the federal government and by jurisdictions across the country. It includes both a prescriptive and performance path.

To verify compliance with Standard 90.1-2016, the Oregon Zero Code incorporates COM*check*. COM*check* is a web based tool, and is fully programmed to demonstrate compliance with Standard 90.1-2016. The COM*check* tool shows whether a building will meet the requirements of the code, maintaining consistency and predictability for builders and building officials.

The second part of the Oregon Zero Code uses the ZERO Code Calculator, a web based tool created by Architecture 2030. It will allow a building owner to calculate a building's projected future energy use. The ZERO Code Calculator also projects energy use broken down into seven end use categories (heating, cooling, fans, interior lighting, plug loads, service hot water, and other), generating valuable information for designers and owners. This information can then be used by the end user to further maximize the post-construction energy efficiency of the building by adjusting building design inputs to achieve the desired result.

The third part of the Oregon Zero Code uses the ZERO Code Calculator to identify the potential for onsite and offsite renewable energy needed to achieve a net zero building. It accounts for both prescriptive and performance path options, allowing flexibility and creativity in identifying how to achieve net zero through a consistent framework.

The three parts of the Oregon Zero Code will be plugged into a uniform, statewide energy permit application (the Oregon Zero Code Form). The purpose of the Oregon Zero Code Form is to provide consistency and predictability for designers and permit applicants. It also provides a mechanism to ensure the identification of renewables is consistent. The Oregon Zero Code Form (sample attached as Appendix A) will demonstrate that the proposed building complies with the statewide alternate method, projected energy use of the proposed building, and onsite and offsite renewable energy needed to achieve net zero. The energy permit application will demonstrate energy compliance, and will also provide valuable information as part of the building permit file.

The ZERO Code Calculator is for new construction. Additions and alterations are not required to submit the ZERO Code Calculator outputs for the second and third parts of the Oregon Zero Code Form.

Using the Architecture 2030 tools as the foundation for the Oregon Zero Code also allows for the incorporation of the Standard 90.1-2016 cost analysis to determine the economic feasibility of code items during the national model code review process.

The Oregon Zero Code creates a predictable and uniform system to ensure energy compliance in Oregon. This statewide alternate method adds another choice for building professionals, designers, contractors, and owners to meet the Oregon statewide building code for energy efficiency compliance.

Conclusion:

Accordingly, the Oregon Zero Code serves as an effective alternate to Chapter 13 of the 2014 OSSC for the construction of buildings in Oregon subject to the following:

1. The use of this alternate method constitutes a separate compliance path from Chapter 13 of the 2014 OSSC in that designs must comply with the Oregon Zero Code in its entirety. Limited cross-over applications are allowed where approved by the building official.
2. Applications for a permit under this alternate method shall include a COM*check* compliance report for Standard 90.1-2016, a report from the ZERO Code Calculator, and the Oregon Zero Code Form. The form includes projected energy use of the building and an estimate of the on-site and off-site renewable energy necessary to achieve a net zero energy structure.
3. Specific Oregon amendments as noted below are considered part of this alternate method.

The following Oregon amendments to Standard 90.1-2016 are made part of the Oregon Zero Code statewide alternate method: (*Underlined text denotes an addition and ~~Strikethrough text~~ denotes a deletion)*

Chapter 1—Purpose

1.1 To establish the minimum energy efficiency requirements of commercial buildings ~~other than low-rise residential buildings~~ constructed under the *Oregon Structural Specialty Code* for

a. design, *construction*, and a plan for operation and maintenance; and

b. utilization of on-site, renewable *energy* resources.

Chapter 2—Scope

2.1 This standard, as an alternate compliance path to Chapter 13 of the *Oregon Structural Specialty Code*, provides… *(remainder unchanged)*

2.2 The provisions of this standard do not apply to

a. single-family houses, multi-family structures of 3 stories or fewer above *grade*, manufactured houses (mobile homes), and manufactured houses (modular) or

b. structures constructed under the *Oregon Residential Specialty Code*

c. *buildings* that use neither electricity or *fossil fuel*

d. agricultural structures: greenhouses and exempt agricultural buildings in accordance with the *Oregon Structural Specialty Code* and Oregon statute.

Chapter 4—Administration and Enforcement

4.1.1.2 General Requirements for Additions, Alterations, Renovations and Repairs

Additions, alterations, renovations and repairs to an existing building, building system, or portion thereof shall conform to the provisions of this standard as they relate to new construction without requiring the unaltered portion(s) of the existing building or building system to comply.

(Sections 4.1.1.2 – 4.1.1.5 are renumbered accordingly)

4.1.2 Administrative Requirements

Administrative requirements are specified in Chapter 1 of the *Oregon Structural Specialty Code*. ~~relating to permit requirements, enforcement by the authority having jurisdiction, locally adopted energy standards, interpretations claims of exemption and rights of appeal are specified by the authority having jurisdiction.~~

Delete: 4.1.3 Alternative Materials, Materials of Construction, or Design
Delete: 4.1.4 Validity
Delete: 4.1.5 Other Laws
Delete: 4.2.5 Verification and Commissioning Reporting

4.2.2.1 Construction Details

Compliance documents shall show all the pertinent data and features of the building, equipment and systems in sufficient detail to permit a determination of compliance with the requirements of this standard and Chapter 1 of the *Oregon Structural Specialty Code*.

All submissions for permit shall be made on the Oregon Zero Code Form, including a COM*check* compliance report for Standard 90.1-2016 and a ZERO Code Calculator report (See https://zero-code.org/energy-calculator/).

4.2.4 Inspections

All building construction, additions, or alterations work subject to the provisions of this standard shall remain accessible and exposed for inspection purposes until approved in accordance with ~~the procedures specified by the building official~~ Chapter 1 of the *Oregon Structural Specialty Code*.

Appendix A: Form 18-02 Oregon Zero Code

State of Oregon
Oregon Zero Code Form (SAM 18-02)

This form provides the necessary required information to demonstrate compliance with the Oregon Zero Code and must be provided to the local Building Code Official at time of submitting the plan review documents. For additions, alterations, renovations and repairs, Parts II and III are not required.

BUILDING INFORMATION

Applicant name: _____ **Phone number:** _____

Project name: _____

Address / location: _____

Primary building use:
(As indicated on ZERO Code report) _____ **Number of floors:** _____

Part I COM*check* information

Compliance path:

- ❑ **Performance path**
- ❑ **Prescriptive path**

COM*check* (Standard 90.1) results:

- ❑ **Pass**
- ❑ **Fail** *If using the performance path, submit the energy model report with this form

Prepared by or under the supervisions of: _____ **Date:** _____

Part II Projected energy use

Enter the ZERO Code Calculator results for projected energy use.

Estimated building energy consumption: _____ MBtu/yr

Part III Estimated available renewables for the building

Enter the ZERO Code Calculator results for offsets.

Total renewable energy necessary to achieve Net Zero: _____ MBtu/yr

On-site potential PV rated capacity _____ kW

CHECKLIST AND APPLICANT SIGNATURE

COM*check* report and ZERO Code Calculator report must be submitted with this form.

- ❑ **COM*check* report is attached**
- ❑ **Energy model report is attached** (if COM*check* failed)
- ❑ **ZERO Code Calculator report is attached**

Print Name	**Signature**	**Date**

Agenda Item VII.C.

State of Oregon **Board memo**

Building Codes Division **November 7, 2018**

To: Building Codes Structures Board

From: Mark Heizer, PE, mechanical and energy systems engineer, Policy and Technical Services

Subject: Chapter 13 of the 2019 Oregon Structural Specialty Code (OSSC)

Action requested:
Board review code review committee's recommendations of **Chapter 13** for the proposed 2019 OSSC.

Background:
The 2019 OSSC is currently anticipated to become effective on October 1, 2019. The base document for this chapter was the 2018 International Energy Conservation Code (IECC). The division opened two independent public code proposal periods on November 18, 2016, through January 31, 2017, and December 21, 2017, through February 5, 2018. The division received 39 public proposals related to Chapter 13 of the OSSC.

The code review committee, appointed by the board, completed its process in eight public meetings and approximately 45 hours of detailed review. The primary groups of items reviewed were significant model code changes, public code change proposals, existing Oregon amendments, existing Oregon code interpretations and statewide alternate methods.

Discussion:
The committee focused their review on reducing Oregon amendments to the model code and reducing unclear language or unenforceable requirements. Particular changes of interest from this chapter of code include:

- Increase model code envelope insulation for some categories (flat roofs; metal buildings, slab edge; opaque doors). Window thermal performance from ASHRAE 90.1 was retained with minor adjustments.
- The model code introduced a requirement to select a *single* "additional efficiency measure" in design, and public proposal **19OSSC-EN-19** increased this required selection to *two* additional efficiency measures.

- Lighting power density tables reduced allowed wattage per square foot for many space types, and occupancy sensor control is now required for space types such as open offices.

- Public proposal **19OSSC-EN-09** modifies the demand control ventilation section to require CO2 sensor/demand control on all single zone HVAC systems 5-tons and larger, regardless of the number of occupants. Model code limits this requirement to locations with high density occupancy (e.g., classrooms, conference rooms).

Options:

- Approve the recommendations of the code review committee for Chapter 13, and recommend that the Administrator proceed with rulemaking and subsequent adoption for this chapter of the 2019 Oregon Structural Specialty Code with the finding that the added cost, if any, is necessary to the health and safety of the occupants or the public or necessary to conserve scarce resources.

- Recommend modifications to the code review committee's recommendations for Chapter 13, and recommend that the Administrator proceed with rulemaking and subsequent adoption for this chapter of the 2019 Oregon Structural Specialty Code with the finding that the added cost, if any, is necessary to the health and safety of the occupants or the public or necessary to conserve scarce resources.

- Disapprove the rule and recommendations and state reasons for the disapproval, for the record.

2019 Oregon Structural Specialty Code
Chapter 13 Energy Efficiency – Code Review Committee Recommendation

The following is a summary matrix showing the code review committee's recommendation to the Building Codes Structures Board for the adoption of the *2019 Oregon Structural Specialty Code (OSSC), Chapter 13 Energy Efficiency*.

Source abbreviations

IECC CH – International Energy Conservation Code (IECC) change
OR A – Existing Oregon amendment
SAM – Statewide Alternate Method
Interp – Statewide Code Interpretation

Committee outcome markings

* – Denotes an item with a fiscal impact. The committee's estimated impact can be found in the description column.
Bold text – denotes a possible amendment to the model code, the *2018 International Energy Conservation Code (IECC)*.

No.	Source	Section	Subject and description of change	Committee outcome
Chapter 1				
			Chapter 1 provisions are administrative and include statutory components not subject to review or modification by the technical code review committee. The division will review proposed changes to Chapter 1 to make sure all administrative and statutory requirements are met.	-
Chapter 2				
			Chapter 2 definitions include various existing amendments and several new model code terms related to new model provisions and referenced standards. The code review committee's action on the provisions located in the body of the code will guide and dictate removal or modification of terms in Chapter 2, as applicable.	
Chapter 3				
13-01	IECC CH OR A	C303.1.3	Table - Default fenestration U-factors. Default tables from latest accepted default values no certified U-factor or SHGC provided.	Approve Rescind
Chapter 4				
13-02	IECC CH	C401.2	Application. IECC modified the modeling path to cover "additional measures" to 85%, must use 15% less energy than the baseline without additional measure.	**Approve**
	Proposal	EN-03	ASHRAE 90.1 Appendix G. | Thomas Young, NCMA	Disapprove
	OR A	501.2	OR deleted: ASHRAE 90.1 - equivalency not verified.	**Retain**
13-03	IECC CH	C401.2.1	Application to replacement fenestration products.	Approve
13-04	IECC CH	C402.1	Envelope. IECC added walk-in coolers and refrigerated warehouses to thermal envelope.	Approve
13-05	IECC CH OR A	C402.1.2	Equipment buildings. IECC added provisions for equipment buildings. OR eliminated wall insulation; and added allowance for small occupied shelters. Committee: *Approve model code and retain the existing amendment.*	Approve **Retain**
13-06	IECC CH	C402.1.4.1	Thermal resistance of cold-formed steel walls. New calculation method.	Approve
13-07	IECC CH	C402.1.3/ C402.1.4	Table - Thermal envelope component - R-value and U-factor. Flat roofs, attics, R-occupancy, metal building roof and walls; mass walls; floor edge insulation; opaque swinging and non-swinging doors. Fiscal impact: *Less than or equal to $8,000 increase for the sample building.*	Approve*

2019 Oregon Structural Specialty Code
Chapter 13 Energy Efficiency – Code Review Committee Recommendation

No.	Source	Section	Subject and description of change	Committee outcome
13-08	Proposal	EN-04	Opaque Thermal Envelope Table. | Thomas Young, NCMA Committee: *Approve as modified and retain the existing footnote amendments.* Modification: *Only adopt footnote h exception from the proposal.*	**Approve as modified**
13-09	IECC CH	C402.1.5	Component performance alternative. IECC modified.	Approve
13-10	OR A	502.1.3	Simplified trade-off approach. OR added. allows STA compliance COMcheck software. Committee: *Approve model code and rescind existing amendment allowing STA approach.*	Rescind
13-11	IECC CH	C402.2.2	Above-grade walls. IECC expanded mass wall heat capacity information.	Approve
13-12	IECC CH	C402.2.5	Below-grade walls. Walls more than 10ft below grade not required to be insulate.	Approve
13-13	IECC CH	C402.2.6	Insulation of radiant heating systems.	Approve
13-14	IECC CH	C402.2.7	Airspaces. IECC added a way to account for air spaces.	Approve
13-15	Proposal	EN-05	Continuous insulation. | Sean Denniston, NBI	Disapprove
13-16	Proposal	EN-06	Roof solar reflectance. | Kurt Shickman, Global Cool Cities Alliance	Approve
13-17	IECC CH	C402.4	Fenestration tables. IECC is “material neutral.” Committee: *Approve the model code U-factor for operable metal windows (U-0.45 vs. U-0.46 used in IECC) and to separate metal and non-metal in the current OEESC / ASHRAE 90.1 format, ensuring not to be less than model codes.* Fiscal impact: *Slight increase.*	Approve*
13-18	Proposal	EN-07	C402.4 Vertical Curtain Wall Systems. | Sean Denniston, NBI	Disapprove
13-19	IECC CH	C402.4.1	Maximum area. IECC allows building to exceed 30% area limit if additional efficiency list is met for extra daylight zone area and control.	Approve
13-20	IECC CH	C402.4.2	Minimum skylight fenestration area. Sets minimum skylight area for certain space types if over 2500 ft^2. Fiscal impact: *Slight increase.*	Approve*
13-21	IECC CH	C402.4.2.1	Lighting controls in toplit daylight zones.	Approve
13-22	IECC CH	C402.4.3	Maximum U-factor and SHGC. IECC added allowances for skylight performance, dynamic glazing, and area-weighted U-factor. OR: Excepted buildings complying with STA approach.	Approve
13-23	IECC CH	C402.5.2	Air leakage of fenestration.	Approve
13-24	IECC CH	C402.5.2	Table - Maximum air leakage rate for fenestration assemblies.	Approve
13-25	IECC CH	C402.5.3	Rooms containing fuel-burning appliances. Fiscal impact: *Slight increase.*	Approve*
13-26	IECC CH	C402.5.4	Doors and access openings to shafts, chutes, stairways and elevator lobbies. Fiscal impact: *Slight increase.*	Approve
13-27	IECC CH	C403.1	General. Building mechanical systems.	Approve
13-28	IECC CH	C403.2.1	Zone isolation.	Approve
13-29	OR A	503.4.6	Limited Use of Air Cooled Chillers.	**Retain**
13-30	IECC CH	C403.3.1	Equipment sizing. New equipment shall not exceed smallest available equipment size.	Approve
13-31	OR A	503.2.1.1	Packaged electric equipment. OR added section.	**Retain**
13-32	IECC CH OR A	C403.3.2	Tables: minimum efficiency requirements. Tables align with ASHRAE 90.1-2013, Exceptions: VRF Table 503.2.3(10) is not in IECC. Committee: *Approve the model code language and add in the VRF Table from ASHRAE 90.1.*	**Approve as modified**

2019 Oregon Structural Specialty Code
Chapter 13 Energy Efficiency – Code Review Committee Recommendation

No.	Source	Section	Subject and description of change	Committee outcome
13-33	Proposal	EN-08	C403.3.2.3 Plant growth environment. | Nicholas O'Neil, Energy 350 Fiscal impact: *Slight increase.*	**Approve***
13-34	IECC CH	C403.3.3	Hot gas bypass limitation. IECC deleted exception for unitary systems under 90,000 Btu/h.	Approve
13-35	IECC CH	C403.3.4	Boiler turndown. New: expands turndown requirements for systems over 1,000,000 BTU/h.	Approve
13-36	IECC CH	C403.4.1.2	Dead band.	Approve
13-37	IECC CH	C403.4.1.4	Heated or cooled vestibules. Limits when the vestibule can be heated or cooled.	Approve
13-38	IECC CH	C403.4.1.5	Hot water boiler outdoor. Boilers require setback based on outdoor air temperature.	Approve
13-39	IECC CH	C403.4.2.3	Automatic start.	Approve
13-40	Proposal	EN-35	C403.4.2.3 Automatic start and stop. | Nicholas O'Neil, Energy 350	**Approve**
13-41	IECC CH	C403.4.3.3.3	Two position valves. Allows for dedicated circulation pump in addition to 2-position valves.	Approve
13-42	IECC CH	C403.4.4	Part-load controls.	Approve
13-43	IECC CH	C403.4.4	Table C403.4.4. VSD requirement at 7.5 hp cooling pumps; 10 hp heating pumps.	Approve
13-44	IECC CH	C403.5	Economizers.	Approve
13-45	IECC CH	C403.5.1	Integrated economizer control.	Approve
13-46	IECC CH	C403.5.2	Economizer heating system impact. Shall not increase heating needs.	Approve
13-47	IECC CH	C403.5.3.2	Control signal. Mixed air sensor signal cannot be used unless single zone system.	Approve
13-48	IECC CH OR A	C403.5.3.5 503.2.4.5	Economizer dampers. Return and relief dampers required to be low leakage; there is no exception for relief dampers on RTUs; and adds return dampers. Fiscal impact: *Approx. $1,000 increase.*	Approve* Rescind
13-49	IECC CH	C403.5.4	Water-side economizers. Committee: *Approve the model code but retain the 2014 OEESC temperatures.*	**Approve as modified**
13-50	IECC CH	C403.5.4.2	Maximum pressure drop.	Approve
13-51	IECC CH	C403.5.5	Economizer fault detection and diagnostic.	Approve
13-52	IECC CH	C403.6	Requirements for mechanical systems serving multiple zones.	Approve
13-53	IECC CH	C403.6.4	Single-fan dual-duct and mixing VAV systems economizers.	Approve
13-54	IECC CH	C403.6.6	Multiple-zone VAV system ventilation optimization control.	Approve
13-55	IECC CH	C403.6.7	Parallel-flow fan-powered VAV air terminal control. Box operation requirements.	Approve
13-56	IECC CH	C403.6.8/9	DDC setpoints and static pressure sensor location.	Approve
13-57	OR A	503.2.5.1	Demand control ventilation.	**Retain**
13-58	Proposal	EN-09	C403.7.1 Demand control ventilation. | Nicholas O'Neil, Energy 350 Committee: *Approve as revised by the proponent.*	**Approve**
13-59	IECC CH	C403.7.2	Enclosed parking garage ventilation controls. Reduces trigger for 22,500 cfm.	Approve
13-60	Proposal	EN-36	C403.7.2 Enclosed parking garage ventilation. | Nicholas O'Neil, Energy 350 Committee: *Approve the proposal as modified amending only the exception requirement of less than ~~22,500~~ cfm to 8,000 cfm total exhaust capacity. Do not adopt the allowance for occupant censors.* Fiscal impact: *Slight increase.*	**Approve as modified***
13-61	IECC CH	C403.7.3	Ventilation air heating control.	Approve

2019 Oregon Structural Specialty Code
Chapter 13 Energy Efficiency – Code Review Committee Recommendation

No.	Source	Section	Subject and description of change	Committee outcome
13-62	IECC CH	C403.7.4	Energy recovery ventilation systems. Committee: *Approve the model code tables as modified by aligning everything above 70% to comply with 2014 OEESC.*	**Approve as modified**
13-63	Proposal	EN-10A	C403.7.4 Energy Recovery Ventilation. | Nicholas O'Neil, Energy 350 Committee: *Approve the proposal as revised by the proponent.*	**Approve**
13-64	Proposal	EN-10B	C403.7.4 Energy Recovery Ventilation. | Nicholas O'Neil, Energy 350	Disapprove
13-65	IECC CH	C403.7.5	C403.7.5 Kitchen exhaust systems.	Approve
13-66	IECC CH	C403.7.6	C403.7.6 Automatic control of HVAC systems serving guestrooms. Fiscal impact: *$200 per unit.*	Approve*
13-67	IECC CH OR A	C403.7.7	Shutoff dampers. low leakage motorized. Committee: *Approve the model code, retain existing amendment for grease exhaust and rescind the remaining amendment.*	Approve **Retain as modified**
13-68	IECC CH	C403.8.2	Motor nameplate horsepower.	Approve
13-69	IECC CH	C403.8.3	Fan efficiency. New efficiency rating method.	Approve
13-70	IECC CH	C403.8.4	Fractional hp fan motors. IECC added. Fiscal impact: *Slight increase.*	Approve*
13-71	IECC CH	C403.8.5	Fan control. | Fiscal impact: *Slight increase.*	Approve*
13-72	Proposal	EN-11	C403.8.6 Exhaust fans. | Sean Denniston, NBI Committee: *Approve the proposal as revised by the proponent.*	**Approve**
13-73	IECC CH	C403.9.1	Fan speed control. IECC reduced from 7.5 hp to 5 hp and modified exceptions for more specific applications. Fiscal impact: *Slight increase.*	Approve*
13-74	IECC CH	C403.9.2	Multiple-cell heat rejection equipment.	Approve
13-75	IECC CH	C403.9.3	Limitation on centrifugal fan open-circuit cooling towers.	Approve
13-76	IECC CH	C403.9.5	Heat recovery for service water heating. IECC modified.	Approve
13-77	IECC CH	C403.10	Refrigeration equipment performance. IECC added.	Approve
13-78	IECC CH	C403.10.2	Walk-in coolers and walk-in freezers.	Approve
13-79	IECC CH	C403.10.2.1	Performance standards.	Approve
13-80	IECC CH	C403.10.3	Refrigerated display cases. Fiscal impact: *Slight increase.*	Approve*
13-81	IECC CH	C403.10.4	Refrigeration systems.	Approve
13-82	IECC CH	C403.10.4.1	Condensers serving refrigeration systems.	Approve
13-83	IECC CH	C403.10.4.2	Compressor systems.	Approve
13-84	IECC CH	C403.11.3	Piping insulation. IECC modified. Fiscal impact: *Slight increase.*	Approve*
13-85	IECC CH	C403.12	Mechanical systems located outside of the building thermal envelope.	Approve
13-86	OR A	503.2.11	Heating outside a building. OR added spot heating within enclosed spaces section. Committee: *Approve model code and retain the existing amendment.*	Approve **Retain**
13-87	IECC CH	C403.19.1	Walk-in's that are not site assembled or site constructed.	Approve
13-88	IECC CH	C404.1	Service water heating. IECC added water heating equipment for space heating.	Approve
13-89	IECC CH	C404.2	Service water-heating equipment performance efficiency. IECC updated.	Approve
13-90	IECC CH	C404.2.1	High input service water-heating systems. IECC added: new central water heating systems over 1,000,000 BTU/h to be 90% or better thermal efficiency.	Approve

2019 Oregon Structural Specialty Code
Chapter 13 Energy Efficiency – Code Review Committee Recommendation

No.	Source	Section	Subject and description of change	Committee outcome
13-91	Proposal	EN-12	C404.2.2 Domestic water-heating system. | Sean Denniston, NBI	Disapprove
13-92	IECC CH	C404.4	Insulation of piping. IECC modified. Fiscal impact: *Slight increase.*	Approve*
13-93	IECC CH	C404.5	Heated water supply piping.	Approve
13-94	IECC CH	C404.6	Heated-water circulating and temperature maintenance systems. IECC modified.	Approve
13-95	IECC CH	C404.6.1	Circulation systems. IECC modified.	Approve
13-96	IECC CH	C404.6.2	Heat trace systems. IECC added.	Approve
13-97	IECC CH	C404.6.3	Controls for hot water storage. IECC added.	Approve
13-98	IECC CH	C404.7	Demand recirculation controls. IECC added.	Approve
13-99	IECC CH	C404.8	Drain water heat recovery units. IECC added.	Approve
13-100	IECC CH	C404.9.3	Covers. IECC increased 60% to 75% of heating energy is site recovered.	Approve
13-101	OR A	504.7.4	Pool heat recovery. OR added section. Committee: *Retain the 2014 OEESC language for the section.*	**Retain as modified**
13-102	IECC CH	C404.10	Energy consumption of portable spas. Requires APSP-14 efficiency standard.	Approve
13-103	IECC CH	C405	Power and lighting. IECC reorganized.	Approve
13-104	IECC CH	C405.1	General. IECC modified.	Approve
13-105	Proposal	EN-13	C405.1 Lighting system controls. | Sean Denniston, NBI Committee: *Approve the proposal as modified by adding only a new Section 405.1.1: "No less than 90% of the lighting serving dwelling units shall be provided by lamps with an efficacy of not less than 65 lm/W or light fixtures with an efficacy of not less than 55 lm/W, or with Sections C405.2.4 and C405.4. Sleeping units shall comply with Section C405.2.4, and with Section R404.1 or C405.4" and revise all references from R404.1 to C405.1.1.*	**Approve as modified**
13-106	IECC CH	C405.2.	Lighting controls. IECC modified.	Approve
13-107	IECC CH	C405.2.1	Occupant sensor controls. More space types covered.	Approve
13-108	Proposal	EN-16	C405.2.1 Occupant sensor controls. | Sean Denniston, NBI Committee: Approve proposal as modified by the following: ~~4. Corridor/transition areas.,~~ ~~11. Stairways.~~, ~~13. Janitorial closets.~~ 16. Children's ~~P~~playing areas. Testimony: Deborah Raines, Interface Engineering Fiscal impact: *Slight increase.*	**Approve as modified***
13-109	IECC CH	C405.2.1.2	Occupant sensor control function in warehouses. Fiscal impact: *Slight increase.*	Approve*
13-110	IECC CH	C405.2.1.3	Occupant sensor control function in open plan office areas. Fiscal impact: *Slight increase.*	Approve*
13-111	Proposal	EN-29	C405.2.1 Egress Lighting. | Deborah Raines, Lighting Designers Committee: *Approve proposal rescinding the existing amendment.*	**Approve** Rescind
13-112	Proposal	EN-15 EN-31	C405.2.1 Occupant sensor control function. | Sean Denniston, NBI Egress illumination. | Cody Bargholz, Interface Engineering	Disapprove
13-113	IECC CH	C405.2.2	Time-switch controls. IECC reorganized.	Approve
13-114	IECC CH	C405.2.2.2	Light-reduction controls. IECC modified with fewer exceptions.	Approve

2019 Oregon Structural Specialty Code
Chapter 13 Energy Efficiency – Code Review Committee Recommendation

No.	Source	Section	Subject and description of change	Committee outcome
13-115	IECC CH	C405.2.2.1	Time-switch control function. IECC modified. Added more override requirements 5,000 sf.	Approve
13-116	IECC CH	C405.2.3	Daylight responsive controls. IECC modified.	Approve
13-117	IECC CH	C405.2.3.1	Daylight-responsive control function. IECC added new requirements.	Approve
13-118	IECC CH	C405.2.3.2	Sidelit zone. IECC modified: calculation method; exempts glazing with less than 0.2 VT.	Approve
13-119	IECC CH	C405.2.3.3.	Toplit zone. IECC modified: calculation method.	Approve
13-120	IECC CH	C405.2.4	Specific application controls. IECC reorganized.	Approve
13-121	IECC CH	C405.2.6.3	Setback. IECC modified.	Approve
13-122	IECC CH	C405.3	Interior lighting power requirements.	Approve
13-123	IECC CH	C405.3.1	Total connected interior lighting power.	Approve
13-124	Proposal	EN-17	C405.3.1 Lighting for plant growth. | Sean Denniston, NBI	**Approve**
13-125	IECC CH	C405.3.2	Interior lighting power allowance.; Building area method.	Approve
13-126	IECC CH	C405.3.1	Tables 405.3.1 and 405.3.2 Reduction of lighting levels.	Approve
13-127	Proposal	EN-18	Tables 405.3.1 and 405.3.2 Requirements. | Louis Starr, NEEA Vote: 3/5 Testimony: Deborah Raines, Interface Engineering Testimony: Jian Zhang, PNNL	Disapprove
13-128	IECC CH OR A	C405.3.2.2 505.5.2.1	Space-by-space method.	Approve Rescind
13-129	IECC CH	C405.4	Exterior lighting power requirements. IECC added.	Approve
13-130	IECC CH	C405.4.2.1	Additional exterior lighting power. IECC modified.	Approve
13-131	Proposal	EN-34	C405.4.2 Exterior lighting. | Deborah Raines, Lighting Designers Committee: *Approve proposal as modified by only deleting Zone 4 and modify Zone 3.*	**Approve as modified**
13-132	IECC CH	C405.4.3	Gas lighting. No pilot lights for gas lighting.	Approve
13-133	IECC CH	C405.6	Electrical transformers. Federal minimums 10 CFR 431.	Approve
13-134	IECC CH	C405.6.2	Exterior lighting controls. IECC modified.	Approve
13-135	IECC CH	C405.6.2	Decorative lighting control. IECC added new exceptions.	Approve
13-136	IECC CH	C405.7	Electric motors. Federal minimums.	Approve
13-137	IECC CH	C405.8	Vertical and horizontal transportation systems and equipment.	Approve
13-138	IECC CH	C405.8.1	Elevator cabs. IECC added. | Fiscal impact: *Slight increase.*	Approve*
13-139	IECC CH	C405.8.2	Escalators and moving walks. IECC added.	Approve
13-140	IECC CH	C405.8.2.1	Regenerative drive. IECC added.	Approve
13-141	IECC CH	C405.9	Voltage drop. IECC added. *Committee requested this be recommended to the EE Board.*	Approve
13-142	Proposal	EN-38	Electrical Load Segregation. | Louis Starr, NEEA Vote: 4/3	Disapprove

2019 Oregon Structural Specialty Code
Chapter 13 Energy Efficiency – Code Review Committee Recommendation

No.	Source	Section	Subject and description of change	Committee outcome
13-143	Proposal	EN-14	C405.10 Controlled receptacles. | Louis Starr, NEEA Committee: *Approve as modified by the following:* C405.10 Controlled receptacles. At least 50 percent of all 125 volt 15- and 20-ampere receptacles installed in private offices, open offices, conference rooms~~, rooms used primarily for printing and/or copying functions~~, breakrooms, individual workstations, and classrooms, including those installed in modular partitions and modular office workstation systems, shall be controlled as required by this section. Either split receptacles shall be provided, with the top receptacle's controlled, or a controlled receptacle shall be located within 12 inches (0.30 M of each uncontrolled receptacle. Controlled receptacles shall be visibly differentiated from standard receptacles and shall be controlled by one of the following automatic control devices: Vote: 6/2	**Approve as modified**
13-144	IECC CH	C406	Additional efficiency package options. IECC modified.	Approve
13-145	Proposal	EN-19	C406.1 Additional Efficiency Measures. | Louis Starr, NEEA Vote: 4/2 Fiscal: *The fiscal impact would be less than or equal to a 2% increase in building costs in addition to the increase for item no. 142. Approval of items 142 and 143 combined is less than or equal to a minimum 3% total cost increase.*	**Approve***
13-146	Proposal	EN-20	C406.6 Dedicated outdoor air system. | Louis Starr, NEEA	**Approve**
13-147	Proposal	EN-21	C406.1 Enhanced kitchen equipment. | Nicholas O'Neil, Energy 350 Committee: *Approve the revised proposal as modified by not adopting the proposed table and revising items 1, 2, and 3.*	**Approve as modified**
13-148	OR A	C407	Total building performance. OR replaced entire section with Whole Building Approach.	**Retain**
13-149	Proposal	EN-22	C407.1 Total Building Performance. | Gary Heikkinen, NW Natural	Disapprove
13-150	Proposal	EN-23	C407.3 Performance-based compliance. | Gary Heikkinen, NW Natural	Withdrawn
13-151	IECC CH	C408	Maintenance and system commissioning. Fiscal impact: *$30K - $50K per building*	Approve*

Chapter 5

13-152	IECC CH	C505.2.2.2	Skylights. IECC modified additions.	Approve
13-153	IECC CH	C503.2	Change in space conditioning. IECC added exceptions. Fiscal impact: *$6000 increase.*	Approve*
13-154	IECC CH	C503.3.1	Roof replacement.	Approve
13-155	IECC CH	C503.4	HVAC systems. IECC added. Fiscal impact: *Increase.*	Approve
13-156	IECC CH	C505.1	Change of Occupancy. IECC added.	Approve

OAR 918-460-0500
Energy Provisions of the Oregon Structural Specialty Code

(1) The energy provisions of the Oregon Structural Specialty Code are adopted pursuant to OAR chapter 918, division 8.

(2) Effective ~~July 1, 2014~~**October 1, 2019**, the energy provisions **of the 2019 Oregon Structural Specialty Code are based upon the 2018 International Energy Conservation Code with additional Oregon amendments, and are published** in Chapter 13 of the Oregon Structural Specialty Code~~ are adopted in the publication titled 2014 Oregon Energy Efficiency Specialty Code~~.

~~(3) The publication titled 2014 Oregon Energy Efficiency Specialty Code is based upon the 2010 edition of the Oregon Energy Efficiency Specialty Code, with additional Oregon amendments.~~

~~(4)~~**(3)** For the purposes of implementing a phase-in period for the energy provisions of the Oregon Structural Specialty Code, **Chapter 13 of the 2014 Oregon Structural Specialty Code**~~the 2010 Oregon Energy Efficiency Specialty Code~~ is adopted for the period beginning ~~July 1, 2014~~**October 1, 2019** and ending ~~September 30, 2014~~**December 31, 2019**.

~~(5)~~**(4)** During the phase-in period established in subsection ~~(4)~~**(3)**, all building departments in the state are required to accept plans for structures designed to either the energy provisions in Chapter 13 of the **2019** Oregon Structural Specialty Code or to the **energy provisions in Chapter 13 of the 2014 Oregon Structural Specialty Code**~~2010 Oregon Energy Efficiency Specialty Code~~.

~~(6)~~**(5)** Code requirements in effect at the time a plan review or permit application is filed controls the construction under the application unless the applicant agrees to be controlled by subsequent changes.

~~(7)~~**(6)** All references and code provisions adopted in this rule, in OAR chapter 918, or in any specialty code adopted thereunder to the Oregon Energy Efficiency Specialty Code mean the energy provisions of the Oregon Structural Specialty Code found in Chapter 13 of the Oregon Structural Specialty Code.

[Publication: Publications referenced are available from the agency.]

Stat. Auth: ORS 455.020, 455.030, 455.110, 455.505, & 455.511
Stat. Implemented: ORS 455.110 & 455.511