

Department of Consumer and Business Services Building Codes Division

1535 Edgewater Street NW P.O. Box 14470 Salem, OR 97309-0404 503-378-4133

Fax: 503-378-2322 oregon.gov/bcd

Building Codes Structures Board

Meeting agenda Wednesday, Nov., 3, 2021, at 9:30 a.m. Virtual meeting

Meeting connection for video: <u>global.gotomeeting.com/join/176207885</u>

Meeting connection for phone:872-240-3412Meeting ID:176207885

Online streaming for nonparticipants: Oregon.gov/bcd/Pages/bcd-video.aspx

I. Board business

- A. Call to order
- B. Roll call
- C. Approval of agenda and order of business
- D. Approval of the draft board meeting minutes of Aug. 4, 2021
- E. Date of the next scheduled meeting: Jan. 19, 2022
- F. Board review of 2022 calendar
- G. Election of board officers

II. Public comment

The board will hear any public testimony.

III. Reports and updates

Program update

IV. Communications - none

V. Unfinished business - none

VI. New business

Board to provide feedback and approval regarding <u>proposed rule changes</u> to adopt amendments to the 2019 Oregon Structural Specialty Code needed to comply with the new requirements established by 2021 Oregon Laws Chapter 360 (Enrolled HB 2605), effective Jan. 1, 2022.

VII. Announcements

The board chair or board members can make announcements during this time.

VIII. Adjournment

Agenda Item I.D.

State of Oregon

Building Codes Structures Board Virtual Meeting Minutes Aug. 4, 2021

Members present: Eric Schmidt, vice-chair, acting chair, building official

Andrew Dykeman, three-plus stories general contractor Stephen Forster, fire protection agency representative

Brenda Hartzog, energy supplier

Gary Heikkinen, owner or manager of commercial office building Randy Samuelson, Oregon Disabilities Commission representative

Kail Zuschlag, building trade representative

Members absent: Eric Sandoval, chair, architect

Vacancy, heavy industry construction contractor

Staff present: Alana Cox, administrator, Building Codes Division

Richard Rogers, chief building official, Policy & Technical

Services

Tony Rocco, structural program chief Julia Hier, senior policy advisor

Mark Heizer, mechanical and energy code engineer

Tyler Glaze, policy analyst

Eric McMullen, building code specialist
Warren Jackson, manager, Statewide Services
Rebert Rice, assistant building official

Robert Rice, assistant building official

Debi Barnes-Woods, boards administrator, coordinator

Melissa Stiles, policy development coordinator

Guests Present: Don Wall, Modern Building Systems Pre Fab Structures

David Heslam, executive director, Earth Advantage

Eric Lacey, chairman, Responsible Energy Codes Alliance Lorne Bulling, Pac/West Lobby Group, National Electrical

Contractors Association (NECA) Rich Anderson, ICC Director PMG Sara Pavey, Mayfield Energy Scott Lang, Honeywell

Eric Bressman, Ankrom Moisan Associated Architects

I. Board business

- **A.** Call to order: Vice Chair Eric Schmidt called the Building Codes Structures Board virtual meeting to order at 9:30 a.m.
- **B. Roll call:** Seven members were present. Chair Sandoval was absent due to a family emergency.
- C. Approval of the meeting agenda and order of business: The vice chair ruled the agenda and order of business approved.

- **D.** Approval of the draft board meeting minutes: The vice chair ruled final the draft meeting minutes of June 30, 2021.
- **E.** Date of the next regularly scheduled meeting: Nov. 3, 2021.

II. Public comment

There were no requests for general public comment.

III. Reports

Structural program update: Tony Rocco, structural program chief, said there are no new updates since the board's recent meeting on June 30. He said today's big news will come from Julia Hier, senior policy advisor.

Legislative update: Julia Hier gave the board an update on Oregon's regular 2021 legislative session, which began in January 2021 and ended June 26. She said there were many bills this session affecting the Building Codes Division. She reviewed the bill summary on Pages 7-17 of the agenda packet posted online: www.oregon.gov/bcd/boards/Documents/bcsb-20210804-agenda.pdf
She said the first section of the summary outlines bills of highest interest to the Building Codes Structures Board and the second section outlines bills affecting Building Codes Division. She welcomed any questions. Vice Chair Schmidt thanked Julia Hier for the concise format of the summary and said he plans to use it to provide a legislative update for the city council he works with.

IV. Communications – None

V. Appeals – None

VI. Unfinished business

Board review and approve committee membership for the 2022 Oregon Structural Specialty Code adoption process.

Tyler Glaze said at the June 30 Building Codes Structures Board meeting, board members discussed appointing a code review committee for the 2022 Oregon Structural Specialty Code and appointed a board subcommittee to review applications. On July 1, the division issued a solicitation for anyone interested in participating in the code review committee. The solicitation closed July 22. The board subcommittee discussed the applications and prepared a recommended list, which is on Page 19 of the agenda packet posted online here:

www.oregon.gov/bcd/boards/Documents/bcsb-20210804-agenda.pdf

The board has the entire of annuaving an modifying the sylvanimittee

The board has the option of approving or modifying the subcommittee recommendations. Vice Chair Schmidt asked for board discussion or a motion.

MOTION by Gary Heikkinen moved to approve the names as listed for the Oregon Structural Specialty Code review committee.

Roll call vote:

Yea: Andrew Dykeman, Stephen Forster, Brenda Hartzog, Gary Heikkinen, Randy Samuelson, Kail Zuschlag, Vice-Chair Eric Schmidt

Nay: none

Motion carried unanimously.

Member Steve Forster thanked Tony Rocco, structural chief, for being available at a moment's notice and answering all the subcommittee questions, often after work hours. Vice Chair Schmidt thanked the code committee members in advance for their work.

VII. New business

Vice Chair Schmidt asked the board if they had any new business for today or a future meeting. Member Heikkinen asked if the election of officers could be added to the agenda for the November meeting. Member Forster said he supports that. He said he has been on the board five years and there was only one election of officers during that time. He said with a large board it is healthy to give members opportunity to lead, grow, have diversity in leadership, and plan for succession as some members term out soon. He said it would be good timing before the next code adoption. He encourages first-term members with a passion for leadership to consider throwing their name in the hat for chair or vice chair. Vice Chair Schmidt asked staff to add the election to the November agenda.

Vice Chair Schmidt asked about the process for renewing board terms. He said several members were termed out. Tyler Glaze said board members can serve two, four-year terms and must re-apply for the second term. There are no term limits for serving as chair and vice chair. Vice Chair Schmidt said members coming up on second terms need to apply for reappointment through the governor's office. Administrator Cox said staff will help board members get the appointment forms for submitting to the governor's office. The chair asked how far in advance the forms need to be submitted. Administrator Cox said the time clock is related to the Senate confirmation hearings, held quarterly during legislative days. The governor's office prepares lists months before the hearing. The form has changed since BCSB members first applied so she recommended reserving enough time to fill it out. While there is no set time for submittal, board members seeking reappointment and with expiring terms should go ahead and complete the form, she said.

Member Zuschlag said he filled out the paperwork months ago but has not heard back and asked if he should follow up. Administrator Cox said she knows Member Zuschlag is on the list for September legislative days. She said during the recent legislative session, there were no reappointments due to a backlog of membership applications and changes in application forms. They are doing their best to catch up. She said BCD staff is happy to confirm a board member's name is on the list. September is the next time the division will see Senate confirmations.

VIII. Announcements

Don Wall of Modern Building Systems Pre Fab Structures asked if he could provide a comment to the board and the vice chair agreed. Mr. Wall commended Building Codes Division on its current process allowing electronic submittals for prefab structures. Mr. Wall said his company appreciates being able to electronically submit a complete package with drawings, receive immediate confirmation, and track the progress. He said it is a great system. He asked if Building Codes Division could coordinate a similar electronic submittal system with the state of Washington. He said Washington has been working on an electronic process for at least seven years and his company was selected for a pilot program. But he said the program never got off the ground. Vice Chair Schmidt thanked Mr. Wall for the encouraging words and support of the state efforts. He said he can't speak on behalf of the Building Codes Division, but he is sure if there is an opportunity to share knowledge with other states, BCD would be willing to do that.

IX. Adjournment

Vice Chair Schmidt adjourned the meeting at 10:05 a.m.

Respectfully submitted by Melissa Stiles, policy development coordinator.

Agenda Item I.F.

Board meeting dates for 2022

Electrical and

Elevator Board

Meets the fourth Thursday of every other month beginning in January:

January 27, 2022 March 24, 2022 May 26, 2022 July 28, 2022 September 22, 2022 November 17, 2022 Holiday schedule

Board of Boiler Rules

Meets the first Tuesday quarterly beginning in March:

March 1, 2022 June 7, 2022 September 13, 2022 Holiday schedule December 6, 2022

Building Codes Structures Board

Meets the first Wednesday quarterly beginning in February:

January 19, 2022 Additional meeting February 2, 2022 May 4, 2022 August 3, 2022 November 2, 2022

Mechanical Board

Meets the first Wednesday quarterly beginning in March:

March 2, 2022 June 1, 2022 September 14, 2022 Holiday schedule December 7, 2022

State Plumbing

Board

Meets the third Thursday of every other month beginning in February:

February 17, 2022 April 21, 2022 June 16, 2022 August 18, 2022 October 20, 2022 December 15, 2022

Residential and Manufactured

Structures Board

Meets the first Wednesday quarterly beginning in January:

January 5, 2022 April 6, 2022 July 13, 2022 Holiday schedule October 5, 2022

Construction Industry Energy Board

Meets at least twice a year on a Tuesday:

February 8, 2022 June 21, 2022 October 18, 2022

Meetings may be held virtually, or in Conference Room A at Building Codes Division, 1535 Edgewater Street NW, Salem, OR 97309. All board meetings begin at 9:30 a.m. unless otherwise publically noticed. Meetings may be canceled or rescheduled.

The calendar adjustments are to accommodate holidays and/or code adoptions. All board-meeting information is posted to the BCD website.

Agenda Item VI.

State of Oregon Board memo

Building Codes Division

Nov. 3, 2021

To: Building Codes Structures Board

From: Tyler Glaze, policy analyst, Policy and Technical Services

Subject: Rules Advisory Committee for 2021 Oregon Laws Ch. 360 (Enrolled HB 2605)

Action requested:

• Request feedback and approval regarding proposed rule changes to adopt amendments to the 2019 Oregon Structural Specialty Code (OSSC) needed to comply with the new requirements established by 2021 Oregon Laws Ch. 360 (Enrolled HB 2605).

Background:

HB 2605 recently passed the Oregon legislature and was signed into law by the Governor. The bill takes effect on Jan. 1, 2022. A copy of the Enrolled bill is included in the board packet.

This bill imposes tsunami design standards for certain buildings and other structures. It requires that sites for new structures be evaluated for vulnerability to seismic geologic hazards if structures are major structures or are designated as having specified tsunami risk for design. It also requires a developer of a building designated as having specified tsunami risk for design to request a determination, scientific evidence, and recommendations from the State Department of Geology and Mineral Industries. The bill further requires the State Department of Geology and Mineral Industries to report annually regarding requests, determinations, and suggestions.

Complying with the new law will require the Building Codes Division (division) to engage in rulemaking. The division appoints the Building Codes Structures Board as a Rule Advisory Committee (RAC) under ORS 183.333. The division has taken steps to identify the rules it believes will be affected by the adoption of the new code, and it has prepared proposed changes to the rule language. The division seeks the board's input on the proposed rules, and if the board recommends them, approval of the division to engage in rulemaking. The proposed rules are included in the board packet.

In addition, the division seeks board recommendation on whether the rule changes will have a fiscal impact. If so, the division seeks to understand the extent of that impact and whether the impact will be significant for small businesses.

Options:

- Provide input on rulemaking and any fiscal impact, approve the proposed rules, 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.
- Provide input on rulemaking and any fiscal impact, amend and approve the proposed rules, 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.
- Provide input on rulemaking and any fiscal impact, and disapprove the proposed rules, recommending an alternative to comply with the requirements of HB 2605.

2019 Oregon Structural Specialty Code Tsunami (HB 2605, 2021) Draft amendments

Agenda Item VI.

Changes are denoted as follows:

Blue/underline: New code language Red/strikethrough: Deleted code language

(Purple/italics): Editorial note

SECTION 101 GENERAL SCOPE AND APPLICATION

Section 101.2.1 and 101.2.2.2

This code language amends the interim chapter 1 amendments adopted April 1, 2021.

101.2.1 Optional local adoption. In addition to the work exempt from building *permit* in Section 105, the following matters are exempt from building *permits* unless specifically required by a *municipality's* local ordinance. If a *municipality* adopts an ordinance to require a *permit* for any of the items below, the construction standards of this code shall be applicable:

(Items 1-11 remain unchanged.)

- 12. Tsunami loads, in accordance with Appendix O.
- 12. Rodentproofing, in accordance with Appendix F.
- 13. The design and construction of in-ground *swimming* pools accessory to not more than four *dwelling units*.

101.2.2.2 Matters preempted by the state building code. The following matters are preempted by the *state building code* and may not be adopted by a local *municipality*:

- 1. Appendix B (Board of Appeals).
- 2. Appendix E (Supplementary Accessibility Requirements).
- 3. Appendix K (Administrative Provisions).
- 4. Appendix L (Earthquake Recording Instrumentation).
- 5. Appendix M (Tsunami-generated Flood Hazard).
- 6. Appendix N (Replicable Buildings).
- 7. Appendix O (Tsunami Loads), rescinded January 1, 2022. See Section 1615.

SECTION 202 DEFINITIONS

ESSENTIAL FACILITIES. <u>Risk Category IV</u> <u>buildings</u> and other structures that are intended to remain operational in the event of extreme environmental loading from wind, snow or earthquakes determined in accordance with Section 1803.2 and ORS 455.447-1604.5.

MAJOR STRUCTURE. See ORS 455.447.

TSUNAMI INUNDATION ZONE. OAR Chapter 632, Division5.

TSUNAMI RISK CATEGORY III. The categorization for design of *Risk Category* III buildings and other structures located within the Tsunami Design Zone. See Section 1615 and ORS 455.447.

TSUNAMI RISK CATEGORY IV. The categorization for design of *Risk Category* IV buildings and other structures located within the Tsunami Design Zone. See Section 1615 and ORS 455.447.

SECTION 1613 EARTHQUAKE LOADS

Section 1613.5

1613.5 Earthquake Recording Instrumentation. In Seismic Design Category D, E, or F, every all new building over six stories above grade in height with an aggregate floor area of 60,000 square feet (5574 m²) or more, and every new building over 10 stories in height regardless of floor area major structures and Risk Category III and IV buildings shall be provided with an approved system with not less than three approved recording accelerographs. The accelerographs shall be interconnected for common start and common timing.

Exception: In lieu of installing the earthquake recording instrumentation as outlined in this section, the applicant is permitted to make a deposit of an equivalent cost to the Earthquake Recording Instrument Fund in the Oregon Department of Geology and Mineral Industries (DOGAMI). Proof of this deposit shall be provided to the *building official*.

Section 1615.1 to 1615.2.8

1615.1 Reserved See Appendix O. General. The design and construction of *Tsunami Risk Category III* and *IV* buildings and other structures shall be in accordance with Chapter 6 of ASCE 7, except as modified by Section 1615.2.

<u>1615.2 Modifications to ASCE 7, Chapter 6.</u> The text of Chapter 6 of ASCE 7 shall be modified as indicated in Sections 1615.2.1 through 1615.2.11.

<u>**1615.2.1 ASCE 7 Section 6.1.1.**</u> Modify ASCE 7, Section <u>6.1.1, Scope</u>, to read as follows:

Tsunami Risk Category III-and IV buildings and other structures, as defined in Chapter 2 of the Building Code, located within the Tsunami Design Zone shall be designed for the effects of Maximum Considered Tsunami, including hydrostatic and hydrodynamic forces, waterborne debris accumulation and impact loads, subsidence, and scour effects in accordance with this chapter.

Tsunami Design Zone shall be determined using the ASCE Tsunami Design Geodatabase of geocoded reference points shown in Figure 6.1-1. The ASCE Tsunami Design Geodatabase of geocoded reference points of Runup and associated Inundation Limits of the Tsunami Design Zone is available at [asce7tsunami.online].

Designated nonstructural components and systems associated with *Tsunami Risk Category IV* buildings and other structures subject to this chapter shall be located above, protected from, or otherwise designed for inundation in accordance with Section 6.15 so that they are able to provide their essential functions immediately following the Maximum Considered Tsunami event.

<u>1615.2.2 ASCE 7 Section 6.2.</u> <u>Modification to ASCE 7, Section 6.2, *Definitions*.</u>

1615.2.2.1. The following terms are deleted:

CRITICAL EQUIPMENT OR CRITICAL SYSTEMS
CRITICAL FACILITY

NONBUILDING CRITICAL FACILITY STRUCTURE

TSUNAMI VERTICAL EVACUATION REFUGE

STRUCTURE.

<u>1615.2.2.2.</u> Modify the term *Tsunami Risk Category*, to read as follows:

TSUNAMI RISK CATEGORY. See definitions in Chapter 2 of the *Building Code*.

1615.2.3 ASCE 7 Section 6.4. ASCE 7, Section 6.4, Tsunami Risk Categories, is deleted.

1615.2.4 ASCE Section 6.5.1. Modify ASCE 7, Section 6.5.1, Tsunami Risk Category II and III Buildings and Other Structures, to read as follows:

6.5.1 Tsunami Risk Category III Buildings and Other Structures. The Maximum Considered Tsunami inundation depth and tsunami flow velocity characteristics at a Tsunami Risk Category III building or other structure shall be determined by using the Energy Grade Line Analysis of Section 6.6 using the inundation limit and runup elevation of the Maximum Considered Tsunami given in Figure 6.1-1.

The site-specific Probabilistic Tsunami Hazard Analysis (PTHA) in Section 6.7 shall be permitted as an alternate to the Energy Grade Line Analysis. Site-specific velocities determined by PTHA shall be subject to the limitation in Section 6.7.6.8.

1615.2.5 ASCE Section 6.5.1.1. ASCE 7, Section 6.5.1.1, Runup Evaluation for Areas Where No Map Values Are Given, is deleted.

1615.2.6 ASCE Section 6.5.2. Modify the exception to ASCE 7, Section 6.5.2, *Tsunami Risk Category IV Buildings and Other Structures*, to read as follows:

Exception: A site-specific Probabilistic Tsunami Hazard Analysis need not be performed where the inundation depth resulting from the Energy Grade Line Analysis is determined to be less than 12 ft (3.66 m) at any point within the location of the *Tsunami Risk Category IV* structure.

1615.2.7 ASCE 7 Section 6.8.2. Modify ASCE 7, Section 6.8.2, Performance of Tsunami Risk Category III Critical Facilities and Tsunami Risk Category IV Buildings and Other Structures, to read as follows:

- 6.8.2 Performance of Tsunami Risk Category IV Buildings and Other Structures. Tsunami Risk Category IV buildings and other structures located within the Tsunami Design Zone shall be designed in accordance with the following requirements.
- 1. The operational nonstructural components and equipment of the building necessary for essential functions and the elevation of the bottom of the lowest horizontal structural member at the level supporting such components and equipment shall be above the inundation elevation of the Maximum Considered Tsunami.
- 2. Structural components and connections in occupiable levels and foundations shall be designed in accordance with Immediate Occupancy Structural Performance criteria. Occupiable levels shall be permitted where the elevation equals or exceeds the Maximum Considered Tsunami inundation elevation.

1615.2.8 ASCE 7 Table 6.8-1. Modify ASCE 7, Table 6.8-1, *Tsunami Importance Factors for Hydrodynamic and Impact Loads*, to read as follows:

<u>Table 6.8-1 Tsunami Important Factors</u> for Hydrodynamic and Impact Loads

Tsunami Risk Category	<u>I_{tsu}</u>
<u>III</u>	1.25
<u>IV</u>	<u>1.25</u>

<u>1615.2.9 ASCE 7 Section 6.11.</u> Modify the last paragraph of ASCE 7, Section 6.11, *Debris Impact Loads*, to read as follows:

Tsunami Risk Category IV buildings and other structures determined to be in the hazard zone for strikes by ships and barge in excess of 88,000 lb (39,016 kg) Deadweight Tonnage (DWT), as determined by the procedure of Section 6.11.5, shall be designed for impact by these vessels in accordance with Section 6.11.7.

<u>1615.2.10 ASCE 7 Section 6.11.7.</u> Modify the first sentence of ASCE 7, Section 6.11.7, Extraordinary Debris Impacts, to read as follows:

Where the maximum inundation depth exceeds 12 ft (3.66 m), extraordinary debris impacts of the largest deadweight tonnage vessel with ballasted draft less than the inundation depth within the debris hazard region of piers and wharves defined in Section 6.11.5 shall be assumed to impact the perimeter of *Tsunami Risk Category IV* buildings and other structures anywhere from the base of the structure up to 1.3 times the inundation depth plus the height to the deck of the vessel.

1615.2.11 ASCE 7 Section 6.14. ASCE 7, Section 6.14, Tsunami Vertical Evacuation Refuge Structures, is deleted.

SECTION 1803 GEOTECHNICAL INVESTIGATIONS

Sections 1803.1 and 1803.3.2

1803.1 General. Geotechnical investigations shall be conducted in accordance with Section 1803.2 and reported in accordance with Section 1803.6. Where required by the *building official* or where geotechnical investigations involve in-situ testing, laboratory testing or engineering calculations, such investigations shall be conducted by a *registered design professional*.

Exception: Sites for structures and facilities defined by ORS 455.447 as *essential facilities, hazardous facilities, major structures* or *specialty occupancy structures Risk Category* III or IV structures shall be evaluated on a site-specific basis for vulnerability to seismic-induced geologic hazards as required by Section 1803.3.2.

1803.3.2 Site-specific seismic hazard investigation. Sites for structures and facilities defined by ORS 455.447 as essential facilities, hazardous facilities, major structures or specialty occupancy structures Risk Category III or IV buildings and other structures shall be evaluated on a sitespecific basis for vulnerability to seismic-induced geologic hazards and reported in accordance with Section 1803.6.1. The degree of detail of investigation shall be compatible with the type of development and geologic complexity, and the structural system required by other parts of this code. This evaluation shall be done by an especially qualified engineer or engineering geologist registered by the state to practice as such. Such an evaluation and report may require the services of persons especially qualified in fields of engineering seismology, earthquake geology geotechnical engineering.

APPENDIX O TSUNAMI LOADS

(Appendix O is rescinded, effective January 1, 2022)

See Section 1615 for tsunami loads.

Building Codes Structures Board Rulemaking Advisory Committee

Draft Rule Changes to Implement HB 2605 Tsunami Design Standards

918-460-0015

Amendments to the Oregon Structural Specialty Code

Agenda Item VI.

- (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, 2021, Chapter 1 of the Oregon Structural Specialty Code is amended according to the following:
- (a) Amend Section 101 to specify exceptions for optional local adoption regarding building permits, including for certain retaining walls, fences other than those serving as swimming pool barriers, flagpoles under 25 feet, ground mounted photovoltaic systems, fixed docks not supporting a structure, unoccupied grain elevators and silos, tsunami loads, rodent proofing, and in-ground swimming pools, to specify matters not available for local regulation under the statutory authority of the state building code, and to clarify a municipality's ability to require application of its own ordinances.
- (b) Amend Section 102 to clarify that building officials cannot waive fire and life safety provisions that would create dangerous or unsafe conditions.
- (c) Amend Section 103 to state that it is not adopted as part of the state building code.
- (d) Amend Section 104 to clarify building official record retention requirements, that building officials cannot waive fire and life safety provisions that would create dangerous or unsafe conditions, and the scope of modifications available to a building official.
- (e) Amend Section 105 to clarify the scope of work for certain permits, the scope of municipal authority, and a building official's flexibility to adopt local permit and inspection record policies.
- (f) Amend Section 107 to clarify construction document requirements, and the scope of municipal authority.
- (g) Amend Section 110 $\underline{\mathbf{to}}$ clarify the scope of building official inspection authority, and the scope of municipal authority.
- (h) Amend Section 111 to clarify the scope of building official revocation authority, and the scope of municipal authority.
- (i) Sections 103, 112, 115, and 116 are not adopted.
- (3) Effective January 1, 2022, in addition to the amendments articulated in section (2) of this rule, the Oregon Structural Specialty Code is further amended according to the following:
- (a) Amend Section 202 to align the definition of "essential facilities" with ORS 455.447, to remove "tsunami inundation zone" definition, and to add "Tsunami Risk Category III" and "Tsunami Risk Category IV" definitions.
- (b) Amend Section 1613 to clarify scope of Earthquake Recording Instrumentation to cover all new major structures and Risk Category III and IV buildings.

- (c) Amend Section 1615 to state that Tsunami Risk Category III and IV buildings and other structures will be designed and constructed in accordance with Chapter 6 of ASCE 7, except as modified in Section 1615.
- (d) Amend Section 1803 to update which sites for structures and facilities shall be evaluated for vulnerability to seismic-induced geologic hazards, and update requirements for site-specific seismic hazard investigations.

(e) Rescind Appendix O.

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

Statutory/Other Authority: ORS 447.231, 455.030, 455.110, 455.477 & 455.496

Statutes/Other Implemented: ORS 455.110, ORS 455.477

Enrolled House Bill 2605

Sponsored by Representatives GOMBERG, SMITH DB, WEBER; Representatives EVANS, LEIF, WRIGHT (Presession filed.)

CHAPTER	
---------	--

AN ACT

Relating to tsunami risk; creating new provisions; and amending ORS 455.447 and 672.107.

Be It Enacted by the People of the State of Oregon:

SECTION 1. (1) As used in this section:

- (a) "ASCE" means the American Society of Civil Engineers.
- (b) "ASCE 7" means the ASCE Minimum Design Loads and Associated Criteria for Buildings and Other Structures that appear in the Oregon Structural Specialty Code.
- (2) Notwithstanding any contrary standard under the structural specialty code, the following must be designed to meet or exceed the tsunami loads and effects design standards applicable under the provisions related to tsunamis in ASCE 7:
- (a) Risk Category III buildings and structures, as defined in "Risk Category of Buildings and Other Structures," Table 1604.5 of the Oregon Structural Specialty Code. Buildings and other structures described in this paragraph must be designated as Tsunami Risk Category III for design.
- (b) Risk Category IV buildings and structures, as defined in "Risk Category of Buildings and Other Structures," Table 1604.5 of the Oregon Structural Specialty Code. Buildings and other structures described in this paragraph must be designated as Tsunami Risk Category IV for design.

SECTION 2. ORS 455.447 is amended to read:

- 455.447. (1) As used in this section, unless the context requires otherwise:
- [(a) "Essential facility" means:]
- [(A) Hospitals and other medical facilities having surgery and emergency treatment areas;]
- [(B) Fire and police stations;]
- [(C) Tanks or other structures containing, housing or supporting water or fire-suppression materials or equipment required for the protection of essential or hazardous facilities or special occupancy structures;]
 - [(D) Emergency vehicle shelters and garages;]
 - [(E) Structures and equipment in emergency-preparedness centers;]
 - [(F) Standby power generating equipment for essential facilities; and]
- [(G) Structures and equipment in government communication centers and other facilities required for emergency response.]
- [(b) "Hazardous facility" means structures housing, supporting or containing sufficient quantities of toxic or explosive substances to be of danger to the safety of the public if released.]

- [(c)] (a) "Major structure" means a building over six stories in height with an aggregate floor area of 60,000 square feet or more, every building over 10 stories in height and parking structures as determined by Department of Consumer and Business Services rule.
- [(d)] (b) "Seismic hazard" means a geologic condition that is a potential danger to life and property that includes but is not limited to earthquake, landslide, liquefaction, tsunami inundation, fault displacement, and subsidence.
 - [(e) "Special occupancy structure" means:]
- [(A) Covered structures whose primary occupancy is public assembly with a capacity greater than 300 persons;]
- [(B) Buildings with a capacity greater than 250 individuals for every public, private or parochial school through secondary level or child care centers;]
 - [(C) Buildings for colleges or adult education schools with a capacity greater than 500 persons;]
- [(D) Medical facilities with 50 or more resident, incapacitated patients not included in subparagraphs (A) to (C) of this paragraph;]
 - [(E) Jails and detention facilities; and]
 - [(F) All structures and occupancies with a capacity greater than 5,000 persons.]
- (2) The Department of Consumer and Business Services shall consult with the Seismic Safety Policy Advisory Commission and the State Department of Geology and Mineral Industries prior to adopting rules. Thereafter, the Department of Consumer and Business Services may adopt rules as set forth in ORS 183.325 to 183.410 to amend the state building code to:
- (a) Require new building sites [for essential facilities, hazardous facilities, major structures and special occupancy structures] to be evaluated on a site specific basis for vulnerability to seismic geologic hazards if the sites are for structures that are:
 - (A) Major structures; or
- (B) Designated under section 1 of this 2021 Act as Tsunami Risk Category III or IV for design.
- (b) Require a program for the installation of strong motions accelerographs in or near selected major buildings.
- (c) Provide for the review of geologic and engineering reports for seismic design of new [buildings of large size, high occupancy or critical use] major structures or buildings that have been designated under section 1 of this 2021 Act as Tsunami Risk Category III and IV for design.
- (d) Provide for filing of noninterpretive seismic data from site evaluation in a manner accessible to the public.
- (3) For the purpose of defraying the cost of applying the regulations in subsection (2) of this section, there is hereby imposed a surcharge in the amount of one percent of the total fees collected under the structural and mechanical specialty codes for [essential facilities, hazardous facilities,] major structures and [special occupancy structures] buildings that have been designated under section 1 of this 2021 Act as Tsunami Risk Category III or IV for design, which fees are retained by the jurisdiction enforcing the particular specialty code as provided in ORS 455.150 or enforcing a building inspection program under ORS 455.148.
- [(4) Developers of new essential facilities, hazardous facilities, major structures and special occupancy structures that are located in an identified tsunami inundation zone, as described in ORS 455.446 (2), shall consult with the State Department of Geology and Mineral Industries for assistance in determining the impact of possible tsunamis on the proposed development and for assistance in preparing methods to mitigate risk at the site of a potential tsunami. Consultation must take place prior to submittal of design plans to the building official for final approval.]
- (4) Before submitting design plans for a proposed building designated under section 1 of this 2021 Act as Tsunami Risk Category III or IV for design, the developer shall request consultation from the State Department of Geology and Mineral Industries with respect to the impacts from potential tsunami activity on the proposed building and the department shall provide the developer with the best available scientific evidence of potential impacts.

The department shall make a determination as to the likely impacts and recommend any design or other changes to mitigate the impacts that the department deems advisable or necessary. The department shall notify the developer and the official responsible for approving the development not later than 45 days after receiving the developer's request. An official that approves the development shall include the department's determination and recommendations with permit documents for the building.

SECTION 3. The State Department of Geology and Mineral Industries shall report regarding requests, determinations and recommendations made under ORS 455.447 (4) to an interim committee of the Legislative Assembly related to general government in the manner provided by ORS 192.245, no later than September 15 of each year.

SECTION 4. ORS 672.107 is amended to read:

672.107. (1) For purposes of this section:

- (a) "Essential facility" means Risk Category IV buildings and structures, as defined in "Risk Category of Buildings and Other Structures," Table 1604.5 of the Oregon Structural Specialty Code.
- (b) "Hazardous facility" means structures housing, supporting or containing sufficient quantities of toxic or explosive substances to be of danger to the safety of the public if released.
 - [(a)] (c)(A) "Significant structure" means:
 - [(A)] (i) Hazardous facilities and special occupancy structures[, as defined in ORS 455.447];
- [(B)] (ii) Essential facilities[, as defined in ORS 455.447,] that have a ground area of more than 4,000 square feet or are more than 20 feet in height;
- [(C)] (iii) Structures that the Director of the Department of Consumer and Business Services determines to have irregular features; and
- [(D)] (iv) Buildings that are customarily occupied by human beings and are more than four stories or 45 feet above average ground level.
 - [(b)] (B) "Significant structure" does not mean:
 - [(A)] (i) One-family and two-family dwellings and accompanying accessory structures;
 - [(B)] (ii) Agricultural buildings or equine facilities, both as defined in ORS 455.315; or
- [(C)] (iii) Buildings located on lands exempt from Department of Consumer and Business Services enforcement of building code regulations.
- (d) "Special occupancy structure" means Risk Category III buildings and structures, as defined in "Risk Category of Buildings and Other Structures," Table 1604.5 of the Oregon Structural Specialty Code.
- (2) Consistent with ORS 672.255, the State Board of Examiners for Engineering and Land Surveying shall adopt rules establishing standards of competence in structural engineering analysis and design relating to seismic influence.
- (3) An engineer may not provide engineering services for significant structures unless the engineer possesses a valid professional structural engineer certificate of registration issued by the board

SECTION 5. Section 1 of this 2021 Act, and the amendments to ORS 455.447 by section 2 of this 2021 Act, apply to buildings for which a building permit is initially issued on or after January 1, 2022.

Passed by House April 15, 2021	Received by Governor:
Repassed by House June 8, 2021	, 202
	Approved:
Timothy G. Sekerak, Chief Clerk of House	, 202
Tina Kotek, Speaker of House	Kate Brown, Governor
Passed by Senate June 7, 2021	Filed in Office of Secretary of State:
	, 2022
Peter Courtney, President of Senate	
•	Shemia Fagan, Secretary of State