



Oregon

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Oregon Structural Specialty Code Committee

Thursday, June 25, 2009

Meeting Summary

****NOTE:** *The following is a summary of the committee's discussion.*

To review the meeting in its entirety, the archived video of the meeting is available on the committee's Web site at the following link: <http://www.bcd.oregon.gov/committees/10ossc.html>

- Members Present:** (Chair) Terrence Dieter, Intel
(Vice-chair) Gary Lampella, Oregon Building Officials Association (OBOA)
Andy Dykeman, Lease Crutcher Lewis
Eric McMullen, Fire Marshal
Jim Rimenschneider, Structural Engineers Association of Oregon (SEAO)
Jim Kitchin, Building Owners and Managers Association (BOMA) for Susan Steward, BOMA
- Members Absent:** George McCart, Oregon Disabilities Commission
John Rakowitz, Associated General Contractors (AGC)
- Guests Present:** Jim Hieptis, Carlson Testing Inc.
John Caul, Oregon State Fire Marshal
Robert Rice, Josephine County
Katharine Bang, City of Portland
Catherine Heeb, City of Portland
James Bela, Oregon Earthquake Awareness
Jim Young, Northwest Wall and Ceiling Bureau
Hugh Ellsworth, Port of Portland
Don Miner, Oregon Manufactured Housing Association
John Rinier, City of Hillsboro Fire Department
- Staff Present:** Richard Rogers, Structural Program Chief
Shane Sumption, Fire and Life Safety Code Specialist
Jim Hanson, Policy Analyst
Shauna Parker, Rules Coordinator
Dana Fischer, Building Code Para-Technical

Chair Dieter called the meeting to order at 9:05 a.m. He reviewed the agenda with the committee and they agreed to start reviewing public code amendment proposals to allow the proponents the opportunity to address the committee and explain their proposed code changes.

Review public code change proposals

[Code Amendment Proposal #OSSC 10-03](#)

Jim Hieptis, Carlson Testing Inc., explained his proposal relating to **Section 1704.12.5 (Density)** which increases the density testing size from 2,500 square feet to 25,000 square feet. He explained the 2007 IBC required test samples every 10,000 square feet, meaning the change to 2,500 square feet results in four times the cost for the contractor. Mr. Hieptis acknowledged that their proposed change to 25,000 square feet may not be the best solution, but that they wanted to mitigate the cost implications of the requirement. He explained the 2007 IBC and all previous editions referenced the requirements of the ASTM E 605 standard, which required samples at the 10,000 square foot mark and addressed structural members generally, rather than the specific terms of beams, trusses, and girders that are addressed in the new 2009 code requirements.

Richard Rogers, structural program chief, explained that Section 1704.10.5.2 of the current 2007 OSSC has the specific 10,000 square foot density sample requirement. He noted that instead of simply referencing the ASTM standard, the code has the requirement written in.

The committee discussed their concern with the both the model code change to the 2,500 square foot density sample requirement as well as the proposed change to increase the requirement to 25,000 square feet. They discussed the existing 10,000 square foot requirement in the current code and ASTM standard, noting they felt more comfortable with that number. The committee also talked about the difference in the proposal's use of the general term "structural member" and the more specific terms included in the 2009 model code of "beams, girders, trusses, and columns." They considered the terminology that is most appropriate for the code.

Mr. Hieptis explained the reason for changing the term to the general reference "structural members," noting that from an inspection standpoint, not all members need to be fire proofed and the more general term works better so the inspector is not checking specific members that are not required to be fire resistant.

Chief Rogers noted his reluctance to change the specific terms to "structural members" in item 2 of Section 1704.12.5 because Table 601 explains what is included in the tests and addresses the structural members individually. He explained the change may cause more confusion than it would provide clarification on the topic.

The committee agreed they were most comfortable with the 10,000 square foot density testing requirement, over the model code change or the code proposal. They also agreed they would like to hear the national code committee's justification behind the model code change since it was a 75 percent increase in the requirement. The committee noted some of the changes to this section came as a result of the recently completed studies on the September 11, 2001 attacks in New York, wondering if that was the reason behind the change.

James Bela, Oregon Earthquake Awareness, noted that he would also like to know the reasons behind ICC's change for this requirement, but that he believes there is not enough information to accept the 25,000 suggestion in the code amendment proposal.

*The committee agreed to **TABLE** the proposal to allow staff and the proponent time to track down and provide the data from the ICC hearings.*

[Code Amendment Proposal #OSSC 10-05](#)

Jim Young, Northwest Wall and Ceiling Bureau, explained his proposal that addresses lateral force bracing for suspended ceilings relating to seismic control categories. He noted the issue is whether the code requirements should apply to ceilings over 144 square feet or to those over 1,000 square feet. He provided background on this issue, explaining it has been confusing in the past and required the issuance of a statewide code interpretation. Mr. Young also provided documentation explaining the reason for the proposed change including the use of CISCA, ASCE 7-02, ASCE 7-05, and other ASTM standards. He noted the provisions in this section and in the proposal only apply to seismic categories D through F, which affects everything west of the Cascades.

Chief Rogers noted that recent testing has shown that ceilings up to 1,000 square feet have been adequately braced without lateral force bracing. He explained the 144 square foot requirement has been around for a long time, but model code and other national standards, such as ASCE 7-05, are beginning to increase the requirement to 1,000. He pointed out that approving this change would result in the deletion of the existing Oregon amendment for Section 1613.7.6.

Mr. Bela noted that he felt the provisions should not be limited to seismic design categories D through F, but that it should also apply to seismic category C.

Chief Rogers clarified that this requirement is not from model code but rather it is from the ASCE 7 standard which limits the requirements to seismic categories D through F.

Motion to withdraw the existing Oregon amendment for this section (1613.7.6) and approve code amendment proposal #OSSC 10-05, which has the 1,000 square foot requirement.

Motion carried unanimously.

[Code Amendment Proposal OSSC #10-18](#) and [Code Amendment Proposal OSSC #10-19](#)

Katherine Bang, City of Portland, discussed code proposals OSSC #10-18 relating to **Section 603.1 (Allowable materials)**, and OSSC #10-19 relating to **Section 705.5 (Fire-resistance ratings)**. She noted the code, in general, is very specific when it comes to the issue of continuity, however the code does not specifically address exterior walls. She explained that Portland is seeing a lot of frame built assembly in Type III construction and the code is not clear that the exterior wall fire rating must exist from the foundation to the top of the parapet or to the roof decking. Ms. Bang noted these proposals provide clarification on the requirement. She stated these proposals have been submitted to the ICC as an amendment.

The committee discussed the suggestions included in the proposals, reviewing existing code requirements in Sections 705.6, 705.11, 709.1, and 714.4, and whether the issue is covered under those existing code requirements. They discussed parapet requirements in code and used examples to determine how the proposal would be applied. They discussed exterior walls on Type III frame-built construction, using examples of various construction practices.

The committee considered whether this is a big enough problem to address in the code. Many of the members noted they had not encountered this problem and felt that the code addresses the problem in various ways. It was suggested that the issue may be better addressed through a statewide interpretive ruling rather than a code change. They then discussed the difference in code philosophy between the UBC and the IBC model codes. The committee agreed they would like to see how ICC responds to these proposals before adopting them in Oregon.

Motion to disapprove code amendment proposals #OSSC 10-18 and #OSSC 10-19.
Motion carried unanimously.

[Code Amendment Proposal #OSSC 10-20](#)

Catherine Heeb, City of Portland, discussed the code amendment proposal relating to the spacing in the openings of the wall in **Section 705.8.1 (Allowable area of openings)**. She noted the proposal is intended to be a clarification to the code. Ms. Heeb explained the commentary handbook states that the spacing must be proportional along the length of the wall, however that language is not in code and they would like to see that language in the code.

The committee briefly discussed the proposal, noting this does seem to be a problem.

Chief Rogers asked the committee if the proposed language provided enough direction for the code readers and plan reviewers. He noted that the use of any kind of permissive language in the code can be hard to enforce. He explained that the commentary on this section notes that the proportionality is purposely not included in the code, as the national committees could not come to enough of a consensus on the issue to include it. Chief Rogers noted that this proposed change also has an impact on the design of a building. He stated his concern with including such permissive language in the code.

Robert Rice, Josephine County, explained the use of the term “proportionally” could be problematic and suggested using language along the lines of “approximately uniform throughout the length of the wall.” He noted that he is not opposed to the proposal, but that the language could be less restrictive. Mr. Rice used examples of other permissive language in the code, explaining such language is something that plans examiners deal with every day.

Eric McMullen asked about the limitations of the code language to the length of the story. He noted that the openings could be grouped vertically along the story as well, not just lengthwise, and asked whether this was a concern that should be addressed.

Ms. Heeb explained the vertical proportionality of the openings were not a concern.

Vice-chair Lampella noted OBOA has been trying to find an appropriate word to address this section and a solution still has not been found. He acknowledged this is a problem, but argued that this proposal is not the solution and encouraged the proponents to keep working on it.

Chair Dieter also noted his concern that this proposal would impose limitations on design flexibility.

Motion to disapprove code amendment proposal #OSSC 10-20.
Motion carried unanimously.

Break.

[Code Amendment Proposal #OSSC 10-22](#)

Catherine Heeb, City of Portland, discussed the proposal relating to stairway width requirements in **Section 1009.1 (Stairway width)** in Group E occupancies and requiring a width of 60 inches. She explained these provisions were in previous editions of the code, noting that while some width requirements were brought forward to this code, the stairway width requirement was not. She stated they would like to see this back in the code because they feel the stairs are being built too narrowly.

The committee discussed the background behind the previous requirement for stairway widths of 72 inches. They agreed that stairway widths are based on the occupancy load of the structure and specific width requirements should not be needed in the code.

Motion to disapprove code amendment proposal #OSSC 10-22.
Motion carried unanimously.

[Code Amendment Proposal #OSSC 10-28](#)

Katherine Bang, City of Portland, explained code proposals OSSC #10-28 and OSSC #10-29 both amend **Section 3202.2 (Encroachments above grade and below 8 feet in height)**, but provide two different options. She described the first proposal that eliminates all references to the public right-of-way and deletes most of the section. She explained that in Portland there are very few instances in which building in a public right-of way would be allowed by their land department.

Chief Rogers explained this is a unique chapter and **Section 3201.3 (Other laws)** provides that the provisions in the chapter must not be in violation of other laws and ordinances that pertain to public right-of-way requirements. He stated Portland can disallow the use of this section; however there are other jurisdictions in the state that use the requirements set forth in Section 3202.2 and for that reason the division would not support removing the sections suggested in the proposal.

The committee discussed this and agreed.

Motion to disapprove code amendment proposal #OSSC 10-28.
Motion carried unanimously.

[Code Amendment Proposal #OSSC10-29](#)

Katherine Bang, City of Portland, discussed the second code proposal suggested for **Section 3202.2.1 (Steps)**. She explained this is attempting to address another discrepancy in code regarding handrails. She stated this proposal has already been submitted to ICC and it was suggested that simply changing the title of the section to “Handrails” should be sufficient to address the proposal’s concerns.

The committee discussed their concerns with making this change to the code. They discussed various circumstances such as where there are a just few stairs, irregular stairs, or tripping hazards, and brainstormed adding definitions or changing the language in the section to address the concern.

Chief Rogers noted his concern with removing steps from this section, explaining it could be problematic because it requires the code reader to know to look back at the chapters that specifically deal with step requirements. He stated this change could have an impact on egress and public right-of-way across the state. He suggested Portland could address the issue with a local ordinance.

Shane Sumption, fire and life safety code specialist, explained the net effect of the proposal would be to reduce what is allowed in code for a projection.

Chair Dieter asked about the urgency for the change since it has been forwarded to ICC to consider, asking if it could be deferred until the next code cycle or whether there is a significant issue or reason why it needs to be addressed now.

Ms. Bang described a situation in Portland where they had trouble understanding the intent of the code sections.

Vice-chair Lampella stated he also was concerned about removing steps from this section.

Motion to disapprove code amendment proposal #OSSC 10-29.

Motion carried unanimously.

[Code Amendment Proposal #OSSC 10-35](#)

Catherine Heeb, City of Portland, discussed their proposal that would add a footnote under the primary structural frame requirements in Table 601 for Type III construction. She explained the footnote addresses fire rating requirements in exterior bearing walls in frame-built, steel framed Type III construction. Ms. Heeb described situations in Portland where columns are set back far enough that they are not considered part of the structural frame or exterior wall, and therefore are not getting fire-rated. She explained how Portland has been dealing with and enforcing these types of situations because the code does not specifically address it.

The committee discussed various code sections they felt may cover the requirements and concerns voiced by the representatives from the City of Portland, including Section 704.10 and the definition of an exterior wall in Section 1402. They also noted that it appears that contractors

have discovered an unintentional loophole in the code that is not addressed. The committee brainstormed how to address the problem.

Mr. McMullen asked the proponent about including the specific primary structural frame members of “columns, beams, and cantilevered elements” and whether they are intentionally limiting the scope and applicability of the footnote, since the definition of structural frame members included in Chapter 2 covers other additional members.

Ms. Heeb explained that the intention was to make sure cantilevers were included in the requirement listed in the footnote. She said it would be fine to remove the language “including columns, beams, and cantilevered elements” to allow more general coverage for structural members.

The committee discussed how the cantilevers could be more specifically addressed. They also discussed fire resistance ratings requirements for structural frames and non load bearing exterior walls and whether double requirements exist that provide both must have a two hour fire rating. They brainstormed ways to make the language and the requirement clearer in order to address the loophole and the cantilevered elements.

Mr. Bela suggested writing an additional, but separate amendment for exterior current wall and framing systems in order to address this problem. He warned of unintended consequences by amended code language during the committee without proper time to review the problem.

Chair Dieter noted that a figure or two describing the specific situations of concern would be helpful to assist the committee and make sure everyone is on the same page and understands the code principles. He agreed with Mr. Bela’s and other committee member’s comments regarding creating unintended consequences. He then asked the committee what they would like to do with this proposal.

Motion to approve code amendment proposal OSSC #10-35 as modified by removing the language “including columns, beams, and cantilevered elements.”

Discussion on the motion:

Vice-chair Lampella noted that even with the proposed change, he still thinks the code section is broken and needs some more work to clarify the requirements.

VOTE:

Aye- Mr. Riemenscheider

Nay- Chair Dieter, Vice-chair Lampella, Mr. Dykeman

Abstain- Mr. McMullen

Unanswered- Mr. Kitchin

1-3-1-1

Motion failed.

Motion to **TABLE** code amendment proposal #OSSC 10-35 to allow proponent to provide a fix.
Motion carried unanimously.

Lunch break.

[Code Amendment Proposal #OSSC 10-44](#)

Robert Rice, Southern Oregon Chapter of ICC, described the changes made to the proposals after his consultation with the NHBA and ICC. He explained the language now clarifies that the bracing in the truss space is intended to only occur at the braced panels not the entire wall line. He noted the language was changed throughout the code sections and figures in the proposal. He also explained a clarification was added that allows for some situations where blocking is not required. Mr. Rice also described the changes made to the figures, which provided a clarification in footnote A where gypsum board was originally excluded; the footnote now allows gypsum board for bracing in some areas of the state and provides requirements for its use. He noted this requirement already exists in the structural code, however this proposal refines and clarifies the requirements.

Mr. Sumption noted that approving this would replace the existing Oregon amendment for Section 2308.3.2.

Mr. Bela stated his objection to the change in the language from wall line to a braced wall and the change that allows the use of gypsum board in category C seismic areas.

The committee commended Mr. Rice for his work in addressing their concerns and working with stakeholders to provide a solution to this code section. They noted they would like to see Oregon match the national code in these requirements.

Motion to approve code amendment proposal #OSSC 10-44 as modified by the proponent's changes to the original proposal.

Motion carried unanimously.

[Code Amendment Proposal #OSSC 10-43](#)

Catherine Heeb, City of Portland, explained their housekeeping proposal which eliminates Chapter 11 ADAAG figures 39B and 39C, which depict handrail configurations that are not supported in the main code text.

The committee discussed the IBC code changes related to accessibility and the anticipated new ADAAG standard requirements, addressing the differences between the two codes. They talked about the different types of handrails and the new IBC requirements for Type I and Type II handrails.

Ms. Heeb clarified that the new accessibility language in the upcoming ADAAG standard for Chapter 11 would address this concern.

The committee asked for staff guidance on the process if the committee wanted to adopt these figures even though the national accessibility standards have not finished their final review and the 1992 edition is still adopted as part of the model code.

Chief Rogers explained there did not appear to be any conflict with adopting the newer provisions before it is adopted at the federal level.

Mr. Sumption stated committee member George McCart commented that he was concerned about eliminating these figures because it would limit the designs that would be available.

Vice-chair Lampella commented that the two different code requirements in IBC Chapter 11 and OSSC Chapter 11 need to be lined up to make sure everything is covered.

Mr. Sumption explained that staff could take a closer look to make sure the two chapters are appropriately aligned.

*The committee agreed to **TABLE** the proposal to allow BCD staff to research how this would work and align with both the model code Chapter 11 and the OSSC Chapter 11 requirements.*

[Code Amendment Proposal #OSSC 10-45](#)

Katherine Bang, City of Portland, explained the proposal which suggests amending the existing 2007 Oregon amendment for **Section 2902 (Number of fixtures)** to incorporate the newer portions of the model code into the section. She explained the model code language is more specific than portions of the Oregon amendment and provides better clarification expectation of the code requirements.

The committee discussed the proposal, specifically addressing the exceptions in the section, and reviewed the difference between Oregon language and model code language.

Mr. Sumption explained the historical reasons why Oregon did not go with model code language and used an Oregon amendment instead. He noted that when model code switched from the UBC to the IBC there was a dramatic increase in fixture requirements, and through an advisory group, it was decided that Oregon did not have the same problems with available fixtures in structures and would not adopt the additional fixture requirements.

Mr. Sumption went on to explain how the proposal would impact the existing Oregon requirements, noting that the occupant load calculation table would remain unchanged and would be carried forward to this code cycle. He noted that incorporating these model code requirements would likely not have a significant increase in the fixture requirements because of how Oregon code calculates occupant loads.

Vice-chair Lampella asked why exception 3 in model code Section 2902.2 was left out of the proposal if most of the model code requirements are being brought into Oregon code.

Ms. Bang explained it was not included because of the difference in determining occupancy loads in Oregon code versus the model code.

The committee discussed the changes in the code section and the addition of pay facilities in model code. They asked if BCD has statutory authority to write code that covers charging for the use of public restroom facilities.

Mr. Sumption stated staff could look into that and report back to the committee.

Motion to approve code amendment proposal #OSSC 10-45.

Motion carried unanimously.

[Code Amendment Proposal #OSSC 10-06](#)

John Rinier, City of Hillsboro Fire Department, discussed his code amendment proposal for **Section 1008.1.9.3 (Locks and latches)**. He explained the language in the proposal had been in the UBC since 1988 and was removed in 2000 when the three codes were combined into one. He feels it is necessary to clarify and provide a consistent interpretation of the *intent* of the code requirement, which is to not have two locking devices.

The committee discussed the proposal, clarifying the impact of the changes and how they would apply in the code. They talked about past practice and used examples to brainstorm how the code requirement would work. They also discussed free swinging doors, locking hardware, panic hardware, double keyed mechanisms, flush bolts, and thumb turn keys. The committee then discussed whether the proposal requires one operation or more in order to comply.

Motion to disapprove code amendment proposal #OSSC 10-06.

Motion carried unanimously.

Discuss Fire Code Committee's recommendations for Section 915, Emergency Responder Radio Coverage

Mr. McMullen stated the Fire Code Committee agreed that Appendix J and Section 510 of the fire code are too important to not incorporate into the code, even though they agreed it is not yet perfect. He explained the Fire Code Committee is going to suggest striking "all" before "new buildings" in Section 915 and add a reference to fire code official. He explained this change does two things: 1.) the requirement will apply to every building; and, 2.) it takes the burden of responsibility off the building official and puts it back on the shoulders of the fire code official. Mr. McMullen clarified this change takes the responsibility out of the structural code and puts it back into the fire code. He commented that he does not yet have the exact scoping language for the requirement, but the language will be available for this committee to review at an upcoming meeting.

Hugh Ellsworth, Port of Portland, discussed an upcoming project the Port will be undertaking, explaining he needed to know the code requirements in order to proceed.

John Caul, Oregon State Fire Marshal, clarified that the best procedure may be to work with Portland fire bureau as they progress through the process because there are not yet specific code requirements for the emergency radios.

Mr. Bela discussed the public meetings law and commented that he felt items on the committee's agenda needed to be listed more clearly.

(The committee returned to the review of code change proposals.)

Review public code change proposals

Gary Lampella temporarily removed himself as vice-chair in order to review some code amendment proposals submitted by OBOA. He noted he would not be participating in votes on these items.

[Code Amendment Proposal #OSSC 10-08](#)

Gary Lampella, OBOA, discussed the proposal relating to the sprinklering requirements of balconies and decks in **Section 903.3.1.2.1**. He explained the proposal removes the new model code language “provided there is a roof or deck above,” which was added to the code during the most recent code cycle. He noted that after consultation with many building officials in the state, there was agreement that a fire hazard still exists in balconies or decks that do not have roof or decks above them, especially in apartment buildings. Mr. Lampella stated this proposal simply reverts the language back to the existing Oregon standard for this section, which is more restrictive than the model code.

Mr. McMullen stated his support for this proposal, noting he just submitted a similar proposal to the Fire Code Committee last week.

Motion to approve code amendment proposal #OSSC 10-08.

Motion carried unanimously by the remaining committee members.

(Mr. Lampella did not vote on his code change proposal.)

[Code Amendment Proposal #OSSC 10-09](#)

Gary Lampella, OBOA, briefly discussed the code amendment proposal and determined to withdraw the proposal to allow the fire service the opportunity to appropriately address this section.

Proposal withdrawn by proponent.

[BCD Amendment Proposal #OSSC 10-46](#)

Mr. Sumption reviewed the division’s proposal for **Section 906 (Portable fire extinguishers)** which suggests adding the language “...provided in occupancies and locations as required by the fire code official...” after “...shall be...” in the first paragraph and then deleting the remainder of Section 906 from the building code in its entirety. He explained that the fire services currently deals with this not the building official.

Mr. Lampella described building officials’ practices regarding fire extinguisher requirements.

Mr. Caul noted the fire service was concerned about placing undue burden on the building officials with this change, but noted that from conversations on the subject, it appears many of the state’s building officials already practice this requirement.

The committee discussed the proposal and reviewed the current code requirements and the practices of building officials.

Andy Dykeman noted that for large building projects it may be a while until the fire code official gets an opportunity to walk through the building. He suggested changing the language to read "... as required by the fire *code*" rather than the fire code official.

The committee agreed they preferred the language "as required by the fire code" rather than the fire code official.

(Mr. Lampella returned to his position as vice-chair of the committee.)

Motion to approve BCD's code amendment proposal #OSSC 10-46 with the added change to fix the language to refer to the fire code rather than the fire code official.

Motion carried unanimously.

[Code Amendment Proposal #OSSC 10-01](#)

Chief Rogers discussed this proposal which suggests renaming the Oregon Structural Specialty Code to the Oregon Building Code. He explained that the name of the code is dictated by statutory requirements in ORS 455.010 and, therefore, cannot be changed. He noted the statute also denotes that the Oregon Building Code is all encompassing and includes all the specialty codes, including the electrical, plumbing, residential, mechanical, boiler, elevator, and so forth.

Motion to disapprove code amendment proposal #OSSC 10-01.

Motion carried unanimously.

[Code Amendment Proposal # OSSC 10-02](#)

Chief Rogers discussed this proposal which suggests adding a 10 pound snow load test requirement to the code. He explained that UL 793 already has this requirement, noting that since the standard referenced in code already requires this, additional language may not needed in the code.

Motion to disapprove code amendment proposal #OSSC 10-02.

Motion carried unanimously.

Chair Dieter adjourned the meeting at 3:03 p.m.

Note: The below list is provided for the reader's reference and contains frequently used acronyms found in the meeting summary.

Frequently Used Acronyms:

ADA	Americans with Disabilities Act	IBC	International Building Code
ADAAG	ADA Accessibility Guidelines	ICC	International Code Council
ASCE	American Society of Civil Engineers	NHBA	National Homebuilders Association
ASTM	American Society for Testing and Materials	OBOA	Oregon Building Officials Association
BCD	Building Codes Division	OSFM	Oregon Office of the State Fire Marshal
CISCA	Ceilings and Interior Systems Construction Association	OSSC	Oregon Structural Specialty Code
		UBC	Uniform Building Code
		UL	Underwriters Laboratories