

Development Services

From Concept to Construction

Phone: 503-823-7300 Email: bds@portlandoregon.gov 1900 SW 4th Ave, Portland, OR 97201

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APPEAL SUMMARY

Status: Decision Rendered

Appeal ID: 15714	Project Address: 5515 SE 17th Ave
Hearing Date: 8/23/17	Appellant Name: Zac Horton
Case No.: B-001	Appellant Phone: 503-484-9654
Appeal Type: Building	Plans Examiner/Inspector: Renay Radtke-Butts
Project Type: commercial	Stories: 3 Occupancy: R-2 Construction Type: V-B
Building/Business Name:	Fire Sprinklers: Yes - throughout
Appeal Involves: Erection of a new structure	LUR or Permit Application No.: 16-284114-CO
Plan Submitted Option: pdf [File 1]	Proposed use: Apartments

APPEAL INFORMATION SHEET

Appeal item 1

Code Section 2014 OSSC Section 705.8.6.2 - Vertical exposure for buildings on separate lots.

Requires Part of section referenced:
When the roof of the new building is at a lower elevation from the existing building, the roof construction of the new building shall have a fire-resistance rating of not less than 1 hour for a minimum distance of 10 feet from the exterior wall facing the new building. The entire length and span of the supporting elements for the fire-resistance rated roof assembly shall also have a fire-resistance rating of not less than 1 hour. The roof protections are required where the distance between the buildings or structures is less than 15 feet.

Proposed Design We are not proposing an alternative to the design requirement of code section 705.8.6.2, rather a review of the interpretation of this code section.

The difference in code interpretation between this office and City of Portland staff is related specifically as to where the 10 feet is measured from. Sketches have been provided to illustrate both cases.

Currently, City of Portland staff is interpreting the distance to begin from the new building wall, while we interpret it to be measured from the wall of the existing building wall.

Code Language:

The language of the code is in our opinion clear that in this situation the 10 feet is to be measured from the existing building "10 feet from the exterior wall facing the new building"... See Sketch 'A'. This is a reasonable interpretation, as it ensures that taller building is protected by the new building roof assembly when it is within 10 ft. of the lower roof.

City staff is interpreting the 10 feet to be measured from the new building wall. See Sketch 'B'. This is counter to the propose of the code in the following ways, which is generally intended in this case

to protect the adjacent building wall from fire penetrating the roof of the new lower structure. If interpreted to be measured from the new lower building, this could result in a case where the roof of the lower building could be required to have a protection that is at its furthest 25 ft. from the adjacent other structure. This is a common and consistent theme (5 ft separation distance) throughout the OSSC. It is also unreasonable to consider that the State would require a 1-hour protection up to 25 ft.

Also, per the commentary within a State of Oregon (State Appeal ID#: 2017-01 ST) it notes that the provisions are intended to be a companion to 705.8.6.1, including the exceptions. We have highlighted this area of the attached appeal for reference, which is at the bottom of page 2 and top of page 3.

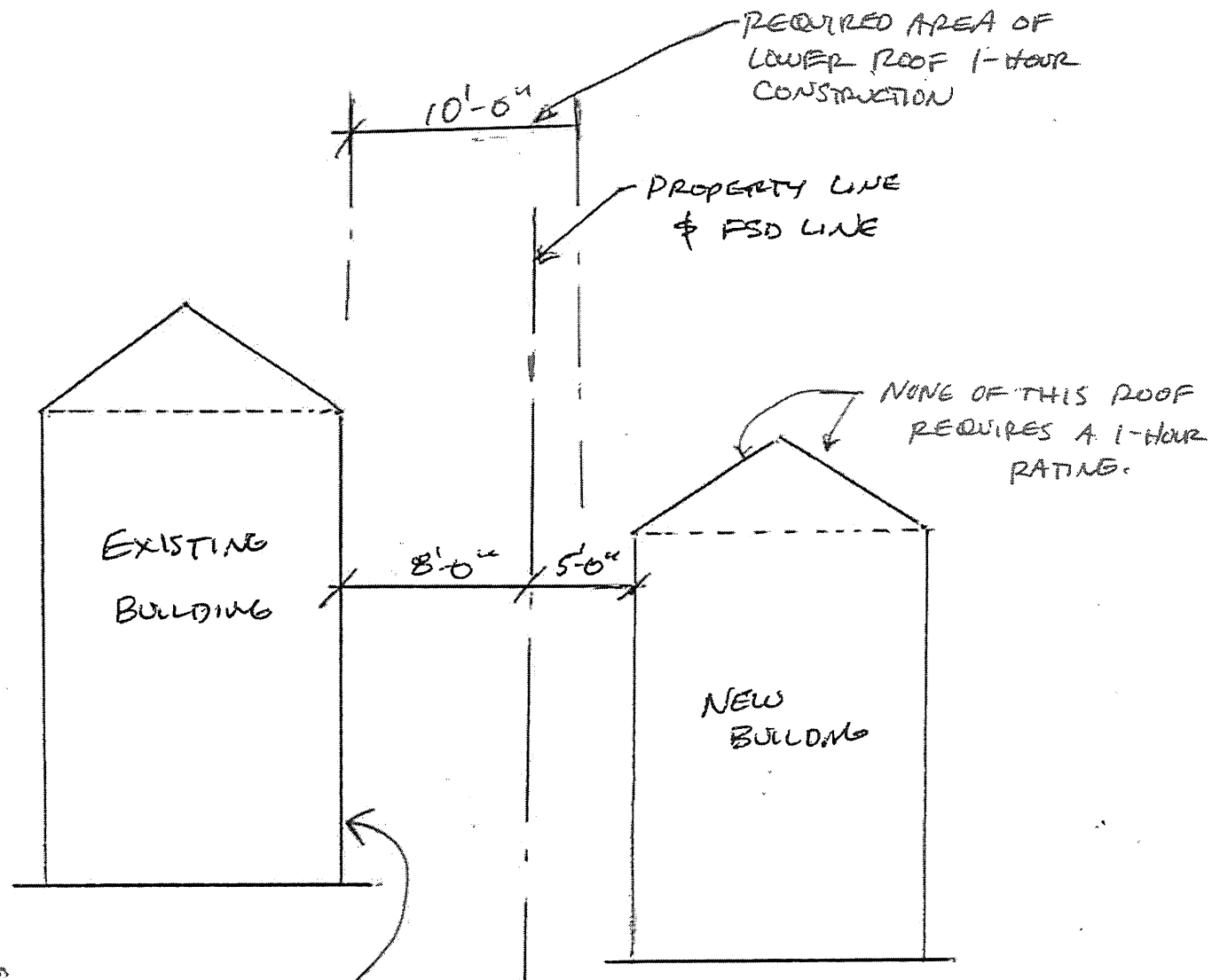
Reason for alternative We feel our interpretation of the code is correct, and our new building does not require a 1-hour protection at any part of the roof due to any requirement of Section 705.8.6.2.

APPEAL DECISION

Point of origin of ten foot measurement for determination of roof protection due to vertical exposure for buildings on separate lots: Denied. Proposal does not provide equivalent Fire / Life Safety protection.

Appellant may contact John Butler (503-823-7339) with questions.

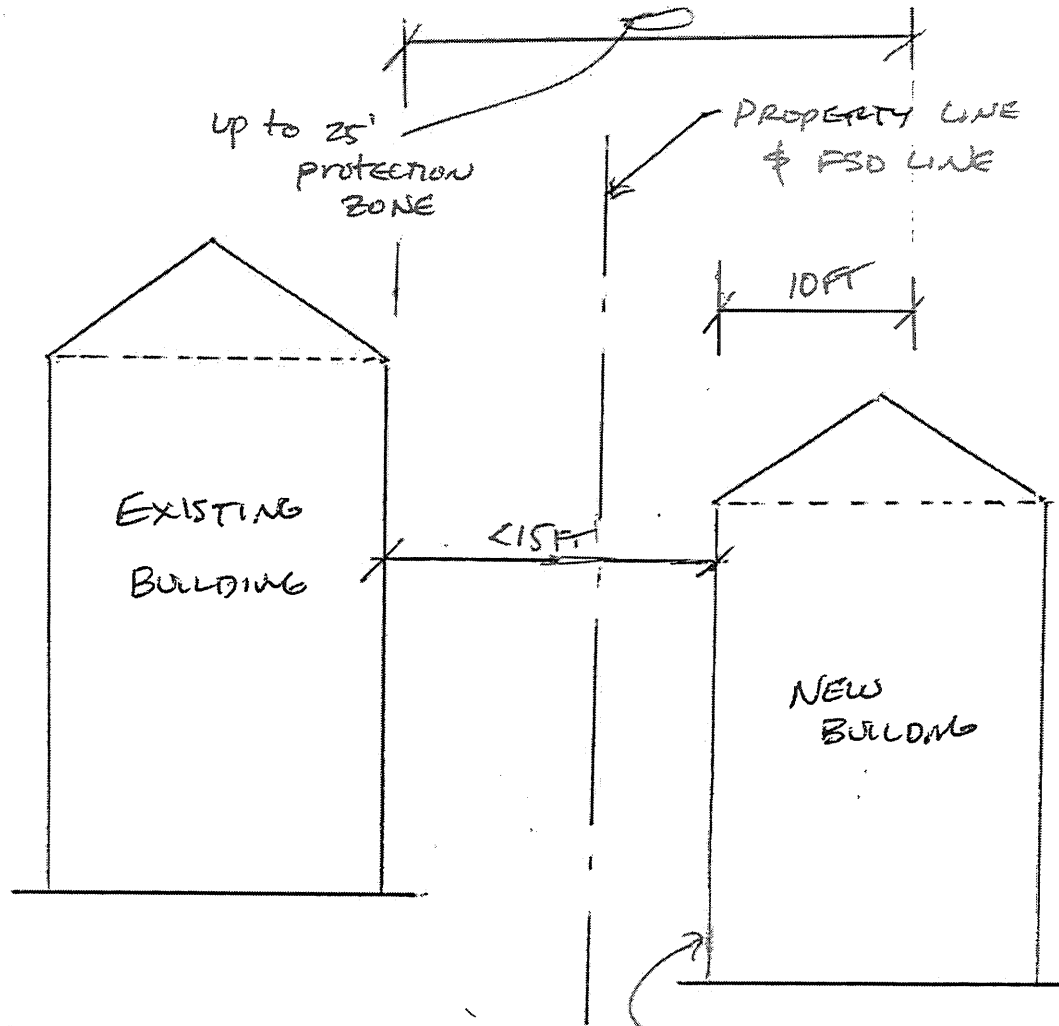
Pursuant to City Code Chapter 24.10, you may appeal this decision to the Building Code Board of Appeal within 180 calendar days of the date this decision is published. For information on the appeals process and costs, including forms, appeal fee, payment methods and fee waivers, go to www.portlandoregon.gov/bds/appealsinfo, call (503) 823-7300 or come in to the Development Services Center.



10 feet from the EXTERIOR
Wall facing the NEW
BUILDING.

EMERU INTERP.

SKETCH 'A'



SKETCH 'B'

CITY OF PORTLAND INTERP.

IF ONE IS TO INTERP
THIS WAY AS WHERE
TO BEGIN MEASURING
THE 10' DISTANCE.



Oregon

Kate Brown, Governor

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
bcd.oregon.gov

February 13, 2017

VIA ELECTRONIC MAIL (josh@kozdevelopment.com)

Joshua Scott
Koz Development
1208 Tenth Street, Suite 201
Snohomish, WA 98290

State Appeal No.: 2017-01 ST
Opening Protection – Vertical Exposure for Buildings on Separate Lots

RE: Appeal of Decision by Building Official (ORS 455.475)
Koz Development v. Portland Bureau of Development Services

Application of Oregon Structural Specialty Code (OSSC) Section 705.8.6.2 Vertical
Exposure for Buildings on Separate Lots.

Dear Mr. Scott:

This letter is a final decision for the appeal you filed with the Building Codes Division (BCD) on December 30, 2016. The appeal is related to the protection of openings in the exterior walls of a new building, where the exterior walls are less than 15 feet from a building on an adjacent lot, and the openings are located below the rooflines of the adjacent building. The proposed building will be located at [REDACTED].

Please note: **BCD is overturning the decision of the building official** as detailed below.

BACKGROUND:

On November 30, 2016 the Portland Bureau of Development Services Appeal Decision 14284 denied your request to install non-rated openings in an exterior wall. The exterior wall will be located less than 15 feet from an existing building on an adjacent lot. The openings in question will be located below the roofline of the adjacent structure. The jurisdiction is citing OSSC section 705.8.6.2.

BCD received this application of appeal under Oregon Revised Statutes (ORS) 455.475. The appeal sought relief from the Portland Bureau of Development Services original citation, and met the administrative requirement of Oregon Administrative Rule (OAR) 918-008-0120.

APPEAL:

The appeal requests that BCD overturn the local jurisdiction's decision requiring protection of all openings in an exterior wall, where those openings are located below the roofline of an adjacent structure with a separation distance of less than 15 feet.

Feb 15

The appeal asserts that OSSC 705.8.6.2 only requires openings in an exterior wall of a new building to be protected when those openings are located in an exterior wall where:

- The exterior wall is less than 15 feet from an existing structure on an adjacent lot; and
- The openings are less than 15 feet vertically above the roof of the existing building; and
- The openings are above the roof of the adjacent structure.

The appeal application states:

“The intent of vertical exposure for buildings on separate lots relates to exposure vertically above neighboring buildings. The rating and opening restrictions below the roofline are addressed by OSSC Table 705.8. It is our contention that the additional requirements placed on the structure by OSSC 705.8.6.2 should only apply to those openings ABOVE the neighboring buildings, not all openings below a point 15’ above the neighboring roofline (even including the openings below the roofline) as currently interpreted.”

APPLICABLE CODE AND STATUTE REQUIREMENTS:

See Attached – Appendix A

DISCUSSION:

OSSC Table 705.8 provides the general allowable areas of openings in exterior walls based on fire separation distance and protection afforded to the opening. OSSC Section 705.8.6.2 provides specific requirements for openings in an exterior wall of a new building based on the proximity of an existing structure and vertical separation of the opening in relation to the adjacent roof. This section requires opening protection of a minimum $\frac{3}{4}$ hour when openings are less than 15 feet vertically above the roof of the existing building or structure when the two structures are separated by less than 15 feet. Both parties agree that the proposed structure is less than 15 feet from existing adjacent structures and that those openings above the level of the adjacent roof, but less than 15 feet above the adjacent roof are required to be protected. The disagreement, and the reason for the appeal, is whether those openings below the roofline of the existing adjacent structure are also required to be protected.

In order to address the issue and differences in interpretation it is necessary to analyze why OSSC Section 705.8.6.2 was adopted. This section is an Oregon amendment that was proposed and adopted as a companion to OSSC Section 705.8.6.1 which applies to buildings on the same lot while the amendment addresses buildings on separate lots.

For structures on the same lot, the 2014 OSSC only requires additional protection for those openings that are in the “vertical exposure zone” above the adjacent roof line, consistent with the code amendment proponent’s intent. This provision is based on a fire exposure from the roof of the lower building and the code provides an exception for the opening protection when the lower roof assembly of the adjacent building has, with some specific requirements, a fire-resistive rating on not less than 1-hour.

* [For buildings on separate lots, when a new structure is constructed with a roof elevation less than that of the existing adjacent structure within 15 feet, the roof of the new building must have a fire

resistance rating of not less than 1-hour for a minimum distance of 10 feet from the exterior wall facing the new building; thus, insuring some degree of protection for an existing adjacent structure. The intent in both cases is to protect the facing exterior wall of the taller structure from a fire plume in the event that a fire breaches the roof of the shorter structure. The fire resistive rating of the lower roof negates the requirement for protected openings facing the lower roof. If the intent of the code were to require all openings in the exterior wall to be protected there would be no reason for the exception to the opening protection when the lower roof is one-hour fire resistive construction as provided in the companion OSSC Section 707.8.6.1.

DECISION:

OSSC 705.8.6.2 is not applicable to openings in an exterior wall when those openings are located below the roof level of the adjacent building or structure. However, such openings are subject to the requirements of OSSC Table 705.8.

Based on the above findings, **BCD overturns the jurisdiction's decision that the openings in the exterior walls of the proposed building that are located below the roofline of the adjacent structures are subject to the opening protection requirements of OSSC Section 705.8.6.2.**

Sincerely,

Signature on File

Rex Turner
Structural Program Chief
Oregon Building Codes Division
503-373-7755
Rex.L.Turner@oregon.gov

cc: Terry Whitehill, Assistant Building Official, City of Portland, Bureau of Development Services
Richard Rogers, Chief Building Official, Building Codes Division
Brett Salmon, Manager, Policy & Technical Services, Building Codes Division

*Note: Address of the permitted location was removed to protect the privacy of a party not involved in the appeal.

APPENDIX A

APPLICABLE CODE AND STATUTE REQUIREMENTS:

OSSC 202:

FIRE SEPARATION DISTANCE. The distance measured from the building face to one of the following:

1. The closest interior *lot line*;
2. To the centerline of a street, an alley or *public way*; or
3. To an imaginary line between two buildings on the property.

The distance shall be measured at right angles from the face of the wall.

OSSC 705.8.6.1

Vertical exposure. For buildings on the same lot, opening protectives having a fire protection *rating* of not less than $\frac{3}{4}$ -hour shall be provided in every opening that is less than 15 feet (4572 mm) vertically above the roof of an adjacent building or structure based on assuming an imaginary line between them. The opening protectives are required where the *distance* between the buildings or structures is less than 15 feet (4572 mm).

Exceptions:

1. Opening protectives are not required where the lower roof assembly of the adjacent building or structure has a *fire-resistance rating* of not less than 1-hour for a minimum distance of 10 feet (3048 mm) from the *exterior wall* facing the imaginary line and the entire length and span of the supporting elements for the fire-resistance rated roof assembly has a *fire-resistance rating* of not less than 1-hour.
2. Buildings on the same lot and considered as portions of one building in accordance with Section 705.3 are not required to comply with Section 705.8.6.

OSSC 705.8.6.2:

Vertical exposure for buildings on separate lots. When a new building is to be erected adjacent to an existing building, all openings in the exterior wall of the new building are required to be not less than $\frac{3}{4}$ -hour when these openings are less than 15 feet (4572 mm) vertically above the roof of the existing building or structure. The opening protections are required where the distance between the buildings or structures is less than 15 feet (4572 mm). When the roof of the new building is at lower elevation from the existing building, the roof construction of the new building shall have a fire-resistance rating of not less than 1-hour for a minimum distance of 10 feet (3048 mm) from the exterior wall facing the new building. The entire length and span of the supporting elements for the fire-resistance rated roof assembly shall also have a fire-resistance rating of not less than 1 hour. The roof protections are required where the distance between the buildings or structures is less than 15 feet (4572 mm).

ref 415

OSSC TABLE 705.8
MAXIMUM AREA OF EXTERIOR WALL OPENINGS BASED ON
FIRE SEPARATION DISTANCE AND DEGREE OF OPENING PROTECTION

FIRE SEPARATION DISTANCE (feet)	DEGREE OF OPENING PROTECTION	ALLOWABLE AREA ^a
0 to less than 3 ^{b,c}	Unprotected, Nonsprinklered (UP, NS)	Not Permitted
	Unprotected, Sprinklered (UP, S) ⁱ	Not Permitted
	Protected (P)	Not Permitted
3 to less than 5 ^{d,e}	Unprotected, Nonsprinklered (UP, NS)	Not Permitted
	Unprotected, Sprinklered (UP, S) ⁱ	15%
	Protected (P)	15%
5 to less than 10 ^{a,f,j}	Unprotected, Nonsprinklered (UP, NS)	10% ^h
	Unprotected, Sprinklered (UP, S) ⁱ	25%
	Protected (P)	25%
10 to less than 15 ^{e,f,g}	Unprotected, Nonsprinklered (UP, NS)	15% ^h
	Unprotected, Sprinklered (UP, S) ⁱ	45%
	Protected (P)	45%
15 to less than 20 ^{f,g}	Unprotected, Nonsprinklered (UP, NS)	25%
	Unprotected, Sprinklered (UP, S) ⁱ	75%
	Protected (P)	75%
20 to less than 25 ^{f,g}	Unprotected, Nonsprinklered (UP, NS)	45%
	Unprotected, Sprinklered (UP, S) ⁱ	No Limit
	Protected (P)	No Limit
25 to less than 30 ^{f,g}	Unprotected, Nonsprinklered (UP, NS)	70%
	Unprotected, Sprinklered (UP, S) ⁱ	No Limit
	Protected (P)	No Limit
30 or greater	Unprotected, Nonsprinklered (UP, NS)	No Limit
	Unprotected, Sprinklered (UP, S) ⁱ	Not Required
	Protected (P)	Not Required

For SI: 1 foot = 304.8 mm.

UP, NS = Unprotected openings in buildings not equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1.

UP, S = Unprotected openings in buildings equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1.

P = Openings protected with an opening protective assembly in accordance with Section 705.8.2.

a. Values indicated are the percentage of the area of the exterior wall, per story.

b. For the requirements for fire walls of buildings with differing heights, see Section 706.6.1.

c. For openings in a fire wall for buildings on the same lot, see Section 706.8.

d. The maximum percentage of unprotected and protected openings shall be 25 percent for Group R-3 occupancies.

e. Unprotected openings shall not be permitted for openings with a fire separation distance of less than 15 feet for Group H-2 and H-3 occupancies.

f. The area of unprotected and protected openings shall not be limited for Group R-3 occupancies, with a fire separation distance of 5 feet or greater.

g. The area of openings in an open parking structure with a fire separation distance of 10 feet or greater shall not be limited.

h. Includes buildings accessory to Group R-3.

i. Not applicable to Group H-1, H-2 and H-3 occupancies.

j. For special requirements for Group U occupancies, see Section 406.3.2