

City records permit # 05-04069-014 show this wall (highlighted in yellow) is a 2 hour fire barrier with UL DesU412 or U419 construction (steel stud with 2 layers Type X each side).

Deferred Submittal :: Manual fire alarm system that activates the occupant notification system in accordance with Section 907.5 shall be installed in Group A occupancies where the occupant load due to the assembly occupancy is 300 or more. 2014 OSSC 907.2.1

Doors serving rooms or spaces with an occupant load of 50 or more in Group A occupancy shall not be provided with a latch or lock unless it is panic hardware or fire exit hardware. (2014 OSSC 1008.1.10)
All door hardware to comply with 2014 OSSC 1008.1.9

EMERGENCY EGRESS LIGHTING REQUIRED
Per 2014 OSSC 1006.1 the means of egress, including the exit discharge, shall be illuminated at all times the building is occupied. Per 1006.3 an emergency electrical power system is required. The illumination levels are to be at levels specified by 1006.2/1006.3.1 with the performance of the system to be field inspected. Per 1011, the exit sign layout must be visible from all directions and indicate the direction of egress.

FIRE EXIT PLAN

SCALE: 1/8" = 1'-0"

Use and Occupancy Classification — Chapter 3

Group A, Assembly
Exterior: Wall Construction (CMU), Ground Floor Construction (Concrete Slab on Grade), Roof Construction (Wood Framed Roof, Trusses and Joists with Concrete Support Columns)
Type V-B Construction, sprinkled, 2-Hour Area Separation/Fire Wall

Building Heights and Area — Chapter 5

Mixed Use Occupancies: Section 508
Building West of fire wall is A-3 Occupancy.
Mixed Use, Non-separated Occupancies: Section 508.3
Use most restrictive allowable area, building height and Chapter 9 provisions.
No separation is required.
Occupancy is: A-3
Most Restrictive Occupancy is: A-3 (6,000 sq ft / 1 Story)
Allowable Building Height: per Table 503
Allowable: 40 feet
Fire Sprinkler System Increase (504.2): 60
Actual Building Height: 29'-6" from grade plane (average grade around building) to maximum height of highest roof

Stories Allowed: Tables 503 & 504.2
Allowed: 2 story
Actual: 1 story

Allowable Building Area: Tables 503 & 506

Base Allowable Area: $A_a = 6,000$ sq. ft.
Frontage Increase (506.2): $I_a = [(P-0.25) \times W]/30$
 $I_a = [276/472-0.25] \times 30/30 = 0.335$
Fire Sprinkler System Increase (506.3): $I_s = 3$, as per Section 506.3
Per Story Allowable Building Area: $A_p = A_a + [A_a \times I_s] + [A_a \times I_a]$
 $A_p = 6,000 + [6,000 \times 0.335] + [6,000 \times 3]$
 $A_p = 26,010$ sq. ft.
Total Allowable Building Area: $A_t = 26,010$ sq. ft. (west of fire wall)
Actual area: 14,672 sq. ft.

Type of Construction — Chapter 6

Construction Classification: Section 602
Type V-B Construction, 602.3
Non-Rated Exterior Bearing Walls, no other resistances required for building elements by Table 601.
Fire Separation Distance: Table 602
Exterior walls with a Fire Separation Distance less than 10 feet are required to be 1-hour rated.
Exterior walls with a Fire Separation Distance between 10 and 30 feet are not required to be rated.
Exterior walls with a Fire Separation Distance of more than 30 feet have no required rating.

Fire-Rated Construction — Chapter 7

Exterior Wall Openings Based on Fire Separation Distance: Table 705.8 & Section 705.8.1
Fire Separation Distances: Allowable Openings:
10-15 feet: 10% UP, NS
15-20 feet: 25% UP, NS
20-25 feet: 45% UP, NS
25-30 feet: 70% UP, NS
30+ feet: No Limit
Wall: F.S.D.: Allowable: Actual:
North Wall: 7'-0" 25% 10.5% (378 sq. ft. / 3,600 sq. ft.)
East Wall (fire wall): 0'-0" No openings
South Wall: 30'-0" No Limit
West Wall: 30'-0" No Limit

Fire Walls: Section 706
No Fire Walls Required. Existing 2-Hour Fire Wall to remain.

Separated Occupancies: Section 707.3.9
Building is viewed as A-3 Occupancy west of fire wall.

Fire Partitions: Section 708
No Fire Partitions Required

Smoke Barriers: Section 709
No Smoke Barriers Required

Smoke Partitions: Section 710
No Smoke Partitions Required

Horizontal Assemblies: Section 711
No Horizontal Assemblies Required

Fire Sprinkler System — Chapter 9

Building is fully-sprinkled NFPA-13.

Means of Egress — Chapter 10

Occupant Load: Section 1004
Assembly area: 7 net (4,207 ÷ 7 = 601 + 800 + 15 + 1 = 54 = total 656)
Lobby area: 15 net (1,993 ÷ 15 = 133 + 7 nursery = 140)
Kids area: 7 net (1,935 ÷ 35 + 1 = 56)
Offices and Ancillary Areas: (see plan)
TOTAL OCCUPANT LOAD: 863 persons

Common Path of Egress Travel: Section 1014.3 & Table 1015.1
Allowed: 100' (sprinkled)
Actual: 94'-0" from furthest point of Storage Room 13 (max)

Per Space Required Number of Exits: Section 1015
Two Exit Max Occupant Load, Group A: 49
2 exits are required if common path of egress exceeds allowable above.
3 exits are required if occupant load exceeds 1,000 (it does not).

Required Exit Separation (per Space & per Story): Section 1015.2
Required: 1/3 max overall diagonal, sprinkled (exception 2)

Exit Access Travel Distance: Section 1016 & Table 1016.2
Allowed (Group A, Sprinkled): 250 feet
Actual: 115 feet (max)

Corridors: Section 1018
Fire-resistance rating per Table 1018.1, (Group A, Sprinkled):
(Fire-resistance not required per Footnote c)

Number of Exits & Exit Configuration — Section 1021

Per Story Required Number of Exits: Section 1021.2
Min. Number of Exits per story: 2 per story, (except as modified in 1021.2 below)
Actual: 2 exits from all required areas.

Accessibility — Chapter 11

Parking Spaces: Table 1106.1
Total Parking Spaces: 135 (145 available)
Required Accessible Spaces: 5 (6 available)
Required "Wheelchair Only" Spaces: 1 (1 available)

Water Closets & Lavatories:
Comply with ICC A117.1

Interior Environment — Chapter 12

1203 and 1204: Refer to Mechanical drawings for ventilation compliance.
1204: Refer to Electrical drawings for lighting compliance

Plumbing — Chapter 29

Required Water Closets:
Number of fixtures required per Table 29-A:

Occupancy Type A-3:	4,207 sq. ft.	/ (7)	=	601 occupants
Platform:	800 sq. ft.	/ (15)	=	54 occupants
All Other Areas:				208 occupants
TOTAL:				863 occupants

TOTAL : 863 occupants
Total occupant load: 863 occupants
Occupants per gender: 432 occupants
Required Water Closets: 3.6 male/7.2 female = 11 total
Water Closets Provided: 4 male/4 female/3 family = 11 total

Total occupant load: 863 occupants
Occupants per gender: 432 occupants
Total Lav Required: 2 male/2 female = 4 total
Water Closets Provided: 2 male/3 female/2 family

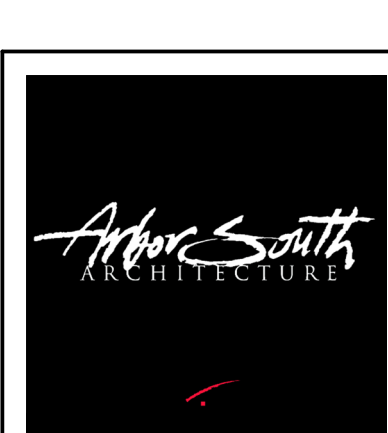
Drinking Fountains: Section 2903
One new fountain provided at Lobby.

Energy Conservation — 2014 Oregon Energy Efficiency Specialty Code

Per 101.4.2, Alterations shall conform, but existing elements to remain unaltered need not conform.
No changes to exterior envelope are proposed (new exterior wall at North storefronts shall comply with Energy Code).
North wall of auditorium shall be furried out and insulated to comply with Energy Code.
New mechanical and electrical (lighting) shall conform.

Per OEESC Table 502.1.1, Existing Roof (unchanged) is R-20ci
New North Wall (furried) is 0.17 outside air + 1.11 CMU + R13 insul + 0.56 gyp + 0.68 inside air = R 15.52 (U=0.064)
Unheated Slab (existing) is NR

Per Table 502.3 (new storefront)
Fixed Storefront is min U=0.45
Storefront Door is min U=0.46
SHGC is 0.40



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PROJECT
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INDEX
Fire Exit Plan
Code Analysis

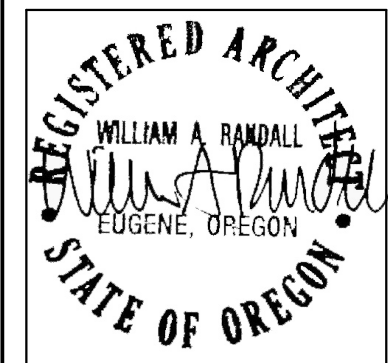
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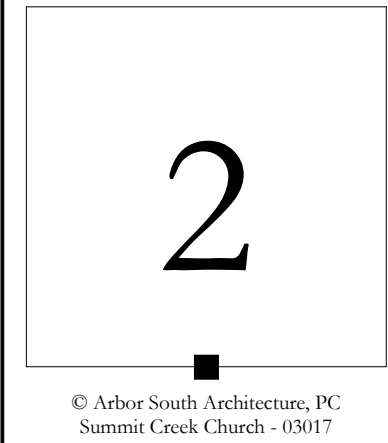
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REVISION
1 22 Nov 2017
2 7 Dec 2017
3 16 May 2018
4 14 June 2018



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