

Portland Fire Department

Commercial Interior and Change of Use Permit Application

Applicant: **Jon Meade Design**
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Project Architect: Joe Hemes
 HEMESphere Design LLC
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Proposed Use of Structure: Concrete counter top, sinks, benches, stair treads and other architectural forms
 NFPA Industrial Use-General Purpose
 IBC Factory F-2

Square footage: 2,400 SF of space enclosed with new partitions within an existing metal building

Existing and Proposed fire protection of structure: Existing sprinkler system to remain

Detection System: As required

Life Safety Plan: See plans in Application

NFPA LIFE SAFETY 101 CODE SUMMARY

Jon Meade Design is proposing to add partitions inside an existing metal building located at 299 Presumpscot Street, to create a 2,400 SF space with an egress door and a garage door. The building is two adjacent metal buildings, with the southerly building a Storage Use by the Owner, David McClees and the northerly building is currently vacant, with Grimes Studio a Business Use planning on starting work soon. Jon Meade Design is a concrete manufacturing company and is a Factory/Industrial Use.

Chapter 40 Industrial Use

- 40.1.2 Multiple Occupancies see 6.1.14 Separated Occupancies
 - Table 6.1.14.4.1 Factory- Business 2 hour- reduced to 1 hour with automatic sprinkler
 - Factory- Storage 1 hour
- 40.1.4.1 General Industrial Occupancy
- 40.1.7 Occupant Load – Table 7.3.1.2 general use 100 sf/occupant
2,400 sf / 100 sf per occupant = 24 occupants
- 40.2.4 Number of Means of Egress
 - 40.2.4.1.2 A single means of egress shall be permitted provided the exit can be reached within the common path of travel
 - Table 40.2.5 General Industrial Occupancy
 - Dead End Corridor -50 ft N/A
 - Common Path of Travel with sprinkler 100 feet- OK with 85 feet shown.
- 40.2.6 Travel Distance to Exits
 - Table 40.2.6 protected with Automatic Sprinkler 250 feet.—OK max is 85 feet shown.
- 40.2.9.2 Emergency Lighting- will be provided
- 40.2.10 Marking Means of Egress- an illuminated exit sign will be provided
- 40.3.3 Interior Finish- Class A, B or C
 - Note floors are existing concrete, walls are gypsum board.
- 40.3.4 Fire alarm system to be provided

Jon Meade Design 299 Presumpscot Street, Portland

International Building Code (IBC) 2009 CODE SUMMARY

Jon Meade Design is proposing to add partitions inside an existing metal building located at 299 Presumpscot Street, to create a 2,400 SF space with an egress door and a garage door. Jon Meade Design is a concrete manufacturing company and is a Factory/Industrial Use. There is an existing sprinkler system. The adjacent warehouse area is F

Section 306.3 Factory Industrial F-2

Section 503 General Building Height and Area Restrictions

Type II (B) unprotected	Allowable Area 23,000 sf, Allowable Height 55 feet, 3 stories
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Proposed Existing Building Infill Area	
1 st floor	2,400 SF concrete factory

Table 508 Required Separation of Occupancies
F-2 to adjacent occupancy B Business (Grimes) requires a 1 hour fire rating

Section 601 Fire Resistance Rating Requirements

For Type 2 (B):

Primary Structural Frame	0 hours
Bearing Walls exterior	0 Hours
Bearing Walls interior	0 Hours
Non-bearing partitions	0 hours
Floor Construction	0 hours
Roof Construction	0 hours

Section 602 Fire Resistance Rating for exterior walls based on separation
Greater than 30 feet 0 hours

Section 1003 General Means of Egress

1003.2 Means of egress shall have 7'-6" ceiling height.

1004.1.1 Maximum Floor Area Allowances Per Occupant

Industrial Areas- 100 SF Gross/per occupant

Proposed Building

1st floor 2,400 SF/ 100 = 24 occupants

1005.1 Minimum Egress Width

1st floor 24 occupants x .2 inch = 4.8 inches Entrance door shall be 3 feet wide.

1015.1 Spaces with One Exit or Exit Access Doorway

Occupancy F– maximum occupant load 49. Proposed occupancy is 24 under this maximum

1016.1 Exit Access Travel Distance

Occupancy F-2 – maximum 400 feet with sprinkler system. Proposed travel is 85 feet

1018.1 Corridors Fire Resistive Rating

N/A This is one room with less than 30 occupants.

1020.2 Exterior exit door provided.

1022 Exit Enclosures

Interior exit stairways shall be enclosed with fire barriers constructed in accordance to Section 707. The Exit Stairway shall be 1 hour rated (less than 4 stories)

1023 Exit Passageways

36" width is acceptable for this occupant load