Code Review - NFPA 101 (Life Safety) 2009

1"=1'

Chapter 6 - Classification of Occupancy
Section 6.1.12.1 - This facility is classifie There is no sprinkler system in the current building and is not expected to be provided. This project will add a floor to a 1,648 square foot portion of the existing industrial building to d the existing space into two floors. Access to the lower (existing) floor will remain off Anderson Access to the upper (new) level will be from the parking lot in the rear of the building. SUMMARY 6.1.12.1 - Thi 6.2.2.3 - The s no fire alarm system in the curre will be added to this tenant space This facility is classified as an "Industrial Occupancy". The contents shall be classified as Ordinary Hazard contents shall be classified as Ordinary Hazard contents. current t building. part of this contents. project, 2

SCALE

3/4"=1'

Section 7.2.1 - Doors shall comply with this section.

Table 7.2.2.2.1.1(a) - The stairs shall comply with this table for dimensional requirements.

Section 7.2.2.4.1 - Handrails shall be on both sides of stairs and comply with this section.

Section 7.2.2.4.5 - Guardrails shall comply with this section.

Table 7.3.1.2 - Occupant Load

Industrial tenant space: 1,648 s.f. / 100 s.f. = 17 people

Section 7.4.1.1 - For an occupant load of 17 people, 2 exits are required.

Note: Chapter 40 allows spaces with one means of egress, but only if the exit can be reached within the common path of travel (50'). This space does not comply, therefore 2 means of egress are required.

Section 7.5.1.3.2 - The exits shall be separated by a minimum of 1/2 the overall diagonal of the space (see Sheet T1.1, Egress Plan).

Section 7.5.4.1 - Accessible means of egress are not required as this is not a public building. Furthermore, due to the exterior terrain, an accessible ramp would be cost prohibitive and interfere access to other tenants or vehicle access. with

7.6 - Common Path Limit = 50'; Dead-End Limit = 50'; Travel Distance Limit =

Features of Fire Protection

SCALE

Table

Chapter 8 - Features of Fire Table 8.2.1.2 - The building to be Type II (000). \dot{s} existing, but t based on site evaluation, the construction type $\dot{\mathbf{s}}$ assumed

Note: Although f this tenant space. Industrial Occupancies

1/2"=1'

Section

9.7.4.1

fire

extinguishers

in

spaces,

one

will

be

provided

for

Building Services and Fire Protection Equipment
4.1 - Portable fire extinguishers shall be provided.

SCALE

Section 40.1.4.1.1 - Building is defined as "General Industrial Occupancy".

Section 40.2.4.1.1 - Two means of egress are required. Section 40.2.4.1.2 allows spaces with one means of egress, provided they can be reached within the Common Path of Travel distance (50'). This space does not comply with that section and two means of egress are required.

Table 40.2.5 - Common Path of Travel = 50' (max.) / Dead-End Corridors = 50' (max.)

Table 40.2.6 - Maximum travel distance to exit = 200'

Section 40.2.9 - Emergency lighting shall be illuminated.

Section 40.2.10 - Exit signs shall be provided (see Egress Plan for locations).

Section 40.3.4.1. - A fire alarm is required in Industrial occupancies if the occupant load of the building is greater than 100. The existing building has an occupant load of 123, and with the addition of the floor in this project, the total occupant load is 140 people. Therefore, an alarm system is required. However, since the building is existing the fire alarm system will be installed in the area of work only. Set alarm is required.

Section 40.3.5 - The current space is not protected with an automatic sprinkler system.

1/4"=1'

divide on Street. Code Review SUMMARY /- IBC 2012

This project consists of three areas, an 2,489 square foot loading dock (shared with adjacent tenant), a 8,623 square foot storage / warehouse space, and an 1,852 square foot retail space. The storage space will be used for storing and ageing beer, while the retail space will be used for tasting/purchasing beer and other promotional items. Although the retail area is defined as Assembly in NFPA (due to over 50 occupants), there is more definition of "Assembly" in the IBC code. It could be argued that the retail space is an A-2 occupancy. However, drink consumption is not the main intent of this space. The main 309.1). Therefore, this space is classified as a Retail space. The remainder is defined as a Storage occupancy. This tenant space has been classified as a "Non-separated, Mixed-Use" space. There is an existing sprinkler system throughout the space that shall be maintained per NFPA 25.

There is an existing fire alarm system throughout the remainder of this building, but not in this current tenant space. The system will be expanded to include this tenant space.

PORT - CITY Architecture

65 NEWBURY STREET PORTLAND, ME 04101 207.761.9000

Classificatio

Section . - Use and Occupancy (6.1 - This building is cl

306.1 classified as 'Factory Industrial F-1 Moderate-Hazard Occupancy".

Chapter 5 - General Building Heights and Areas

Table 503 - This building is considered to be Type II (B) construction and is allowed 2 stories at 15,500 square feet each (Note: The building is existing and has 2 stories at 6,994 each, and might be subject to Building Area modifications per Section 506).

Table 602 Section 60 Types of Construction

602.3 fire separation distance

Protection

space

egress

The construction type ance is eq equal to, or greater than 10', no fire ratings are required. Type II B.

Features

Section 705.8 - When the fire-separation distance is over 15', the maximum allowable area of exterior wall openings shall be 25%. With the added openings of this project, the openings in the front wall are 19%, in the side wall are 10%, and in the rear wall are 13%. **Section 705.8.5** - Openings in exterior walls must be separated vertically by 36" minimum. The windows on the front elevation are 3'-9" apart even though this building falls under Exception #1 for this section and is only 2 stories above the grade plane.

Figures 706.6 - There are no openings in the adjacent wall above the roof.

Figure 903.2 - A sprinkler system is not required as there are no fire areas in excess of 12,000 square feet, the building is less than three stories, and less than 24,000 square feet in total area. **Section 906** - Portable fire extinguishers are required. **Section 907.2.4** - A fire alarm system is not required. Although this building is two stories in height, the building is under the 500 person occupant load (above the level of exit discharge) requirement. (Note: A fire alarm system is required under the NFPA code. See Section 40.3.4.1). Chapter 9 -Fire Protection Systems

Chapter Table 10 1004.1.1 Means of Egress

- Occupant Load

Industrial area (existing): 12,340 square feet / 100 s.f. = 124 people)

Note: This is an existing space and is currently an Industrial area that will remain. The 12,340 s.f. is a gross area. There are numerous closets, restrooms, ect... and the 124 people is a maximum number.

Note: Total square footage is 1,648 s.f.

Total Occupant Load = 140 people

Section 1005.1 - The egress width per occupant is .3" for stairs and .2" for other components.

Section 1007.1 - Accessible means of egress are not required. Although this floor is "new" A fall under Exception 1, according to 35.151 of 2010 ADA, since this is a ADA does not apply.

Section 1000. are not required. Although this floor is "new" does not f 2010 ADA, since this is not for the use of a public entity,

Section 1008.1.1 Doors shall have a minimum clear width of 32"
Section 1009.1 - Stairways shall be 44" minimum.
Section 1009.4.2 - Stairways shall have 7" maximum risers and 1

minimum.
7" maximum risers and 11" minimum treads

Section Section 1009.12 - Stairways shall have handrails on both sides of stairways.
1011.1 - Exit signs will be provided (see Egress Plan for locations).
1013.1 - Guards will be provided at all levels 30" above grade.
1014.2.1 - This tenant space has separate means of egress from othe

Section 1014.2.1 - This tenant space has separate means of egress from other tenants.

Section 1014.3 - The common path of travel for an F-1 area is 75' (unsprinkled).

Section 1015.1 - Two exits have been provided for this space. Although this code allows one means of egress (Common Path of Travel under 75' and Occupant Load under 50), the NFPA code has a maximum Common Path of Travel of 50'. Therefore, this space does not meet the requirements for one means of egress and two are provided.

Section 1015.1 - The active of 50'.

Therefore, this space does not meet the requirements for one means of egress and two are provided.

Section 1015.2.1 - Th space. exits from shall be placed a minimum of 1/2 of the diagonal of each

10

SCALE

20

1/8"=1'

SCALE

Table 1016.1 - The maximum exit travel distance shall be 200'. **Section 1018.4** - The maximum dead end length is 20'. **Section 1022.1** - The stair up the to roof is a convenience stair of the transfer of the stair of the transfer of the stair of the transfer of the stair of t convenience stair only not required to have a y and is not part of a means fire-separation rating.

> **EXISTING 3 WYTHE BRICK TENANT** SEPARATION (EXTENDING PAST ROOF DECK) NOTE: THIS BUILIDING IS NOT SPRINKLED ALL STAIRS TO HAVE T' RISERS (MAX. AND II' TREADS (MIN.) GUARDRAILS TO BE LIMIT OPENINGS TO $\frac{1}{2}$ ェ 8 OCCUPANTS ■ 42" HIGH 4" MAX. 110 CD HORN / STROBE STAIRS TO HAVE 1/2" DIA HANDRAILS ON BOTH SIDES OF STAIR AT 34" ABOVE THE LEADING EDGE OF THE TREADS AND EXTEND 12" (HORIZ) PAST THE TOP AND BOTTOM OF THE STAIR. FIRE EXTINGUISHER EMERGENCY LIGHT
> (INCL IN ALT #1) EMERGENCY LIGHTING / **PULL STATION** LIGHTING **EMERGENCY** TENANT / INDUSTI 1,648 sq 33'-0" (1/2 OF 110 T TRIAL AREA 8 F.A. STROBE HORN / STROBE UPPER LEVEL EGRESS PLAN (NEW) 15 CD 4 TRAVEL DIST TO EXIT: 67'-10" MAX. TRAVEL DIST ALLOWED : 200' EMERGENCY LIGHT 9 OCCUPANTS ITØ (ALLOWED) SCALE: 1/4" = 1'-0" HORN / STROBE EMERGENCY LIGHTING F.A. PULL STATION 110 CD



PERMIT SET NOT FOR CONSTRUCTION -

ANDERSON STREET

219 Anderson Street Portland, Maine **INDUSTRIAL**

DATE 9/19/14 DESCRIPTION
PERMIT SET

09-19-2014

EGRESS PLAN /

Drawing Scale

AS NOTED

Checked By Drawn By

ACH, LAS

ion of PORT CITY ARCHITECTURE