

1-5-16

Westfield Building 2009 IBC/NFPA Code Review

17 Westfield Street, Portland, ME 04102

Project Description: Subdivision of existing 18,132 s.f. industrial building into (4) separate Factory F-1/F-2 tenant spaces. Installation of new automatic sprinkler system.

EXISTING CONDITIONS:

CBL: 076 A031001

Zone: I-L

Construction Type: IIB w/inactive sprinkler system

Total Building Area: 18,180 s.f. (no proposed change)

Building Height: 1 story, 19'-3" (no proposed change)

Existing Use Group: Factory F-1

Historic District? NO

2009 International Building Code Review

(with reference to NFPA 101 Life Safety Code)

Use Group:

Tenant 1: Brewery, Factory F-2 (IBC 306.3)

Tenant 2: Clothing Manufacturer, Factory F-1 (IBC 306.2)

Tenant 3: Coffee Roaster, Factory F-1 (IBC 306.2)

Tenant 4: Woodworking, Factory F-1 (IBC 306.2)

Allowable Heights and Areas: (IBC Table 503)

Allowable Height: Factory F-1: 55 feet/2 stories

Allowable Area: 46,500 s.f. including increase for automatic sprinkler system (table 503 & section 506.3)

Required Separation of Occupancies:

Factory F-1 to Factory F-2: 1 hour w/sprinkler system (IBC Table 508.4)

Occupancy Load:

	<u>Industrial Areas</u> (100 s.f./occ)	<u>Accessory Storage</u> (300 s.f./occ)	<u>Total Occ</u>
Tenant 1:	1000 s.f. = 10 occupants	7082 s.f. = 23 occupants	33 total occ.
Tenant 2:	998 s.f. = 10 occ	3000 s.f. = 10 occ	20 total occ.
Tenant 3:	400 s.f. = 4 occ	3000 s.f. = 10 occ	14 total occ.

Tenant 4:	100 s.f. = 1 occ	1500 s.f. = 5 occ	6 total occ.
Total Occupant Load			78 OCC.

Minimum Allowable Egress Door & Corridor Width: (IBC section 1005)

Tenant 1: $(0.2 * 33)/2 =$	3.3 inches minimum	64" provided
Tenant 2: $(0.2 * 25) =$	5 inches	32" provided
Tenant 3: $(0.2 * 14)/2 =$	1.4 inches	48" provided
Tenant 4: $(0.2 * 6)/2 =$	1.8 inches	48" provided

Required number of exits: (IBC section 1015)

Tenant 1:	2 exits req'd.	2 provided
Tenant 2:	1 exit req'd	1 provided
Tenant 3:	1 exit req'd	2 provided
Tenant 4:	1 exit req'd	2 provided

Common Path of Travel: (IBC section 1014.1, exception 1)
100 feet maximum

Exit Access Travel Distance: (IBC table 1016.1)

Factory F-1 sprinklered = 250' maximum
Factory F-2 sprinklered = 400' maximum

Required Plumbing Fixtures:

	<u>W/C</u>	<u>Ur</u>	<u>Lav</u>	<u>Ba/Sh</u>	<u>D/F</u>
Tenant 1:	3M/3W	0	4	0	1
Tenant 2:	2M/2W	0	2	0	1
Tenant 3/4: (shared facilities)	2M/2W	0	2	0	1