

CODE REVIEW

IBC 503: The Urban Incubator and Stimulator is a Type 1A construction building. According to IBC Table 503, the floor area for a Type 1A occupancy building is unlimited, and the maximum stories allowed is 11. This building is 43,567 sf, and 4 stories, and is therefore compliant with Table 503.

IBC 601: According to Table 601, the fire resistance rating for a Type 1A building must be 2-3 hours.

IBC 1004.1.1: Table 1004.1.1 determines the maximum floor area allowances per occupant based on function of space. According to this, the total maximum occupancy of the occupiable spaces are 1845 persons. [Individual spaces are listed in Occupancy Loads below]

IBC 1005.1: Using the factors given in Table 1005.1 Egress Width per Occupant Served, and given the added sprinkler system, the stairway egress width (inches per occupant) is 0.2 and other egress components' width (inches per occupant) is 0.15. The egress provided (5567 persons) is more than the maximum occupancy of the building (1845).

The first floor's required occupancy based on spaces is 569 persons, which requires 9.48' means of egress. There is now 33' of egress to serve 2,640 persons, which is more than required and complies with Table 1005.1.

The second floor's required occupancy based on area is 957 persons, which requires 15.94' means of egress. There is now 18.2' of egress to serve 1091 persons, which is more than required and complies with Table 1005.1.

The third floor's required occupancy based on area is 143 persons, which requires 2.38' means of egress. There is now 18.17' of egress to serve 1091 persons, which is more than required and complies with Table 1005.1.

The third floor's required occupancy based on area is 305 persons, which requires 2.94' means of egress. There is now 12.42' of egress to serve 745 persons, which is more than required and complies with Table 1005.1.

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2 1020.1.7 & 1020.1.7.1: According to this section, 50% of interior means of egress stairways are required to be enclosed because of the occupancy number for the floors it serves. The smokeproof enclosure stairway shall exit into a public way.

OCCUPANCY LOADS [OCCUPIABLE AREAS ONLY]

- 01. LOBBY: A3, ASSEMBLY STANDING
- AREA: 1600 sf OCCUPANCY: 320
- 02. CAFE/RESTAURANT: A2, ASSEMBLY UNCONCENTRATED AREA: 1273 sf OCCUPANCY: 85
- 03. KITCHEN: F1, KITCHENS, COMMERCIAL
- AREA: 410 sf OCCUPANCY: 3
- 04. STORAGE: S2, MERCANTILE
- AREA: 145 sf OCCUPANCY: 1
- 05. COMMUNITY SPACE: A2, ASSEMBLY UNCONCENTRATED AREA: 2418 sf OCCUPANCY: 162
- 06. MULTI-USE GALLERY 1: A3, ASSEMBLY UNCONCENTRATED
- AREA: 2938 sf OCCUPANCY: 196
- 07. GALLERY 2: A3, ASSEMBLY STANDING
- AREA: 1609 sf OCCUPANCY: 322
- 08. GALLERY 3: A3, ASSEMBLY STANDING AREA: 1909 sf OCCUPANCY: 382
- 09. EVENT SPACE: A3, ASSEMBLY UNCONCENTRATED
- AREA: 851 sf OCCUPANCY: 57
 10. STORAGE: S2, MERCANTILE
- AREA: 131 sf OCCUPANCY: 1
- 11. SEATING AREA: A3, ASSEMBLY UNCONCENTRATED
- AREA: 546 sf OCCUPANCY: 37
 12. KITCHEN: F1, KITCHENS, COMMERCIAL
- AREA: 430 sf OCCUPANCY: 3

MEANS OF EGRESS

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48-215 MATERIALS & ASSEMBLY SPRING 2017

INSTRUCTOR: DAMIANI

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