Reviewed for Code Compliance
Inspections Division
Approved with Conditions
Date: 09/02/15

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CODE STUDY

Date: July 22, 2015

To: Baxter Academy
79 Free St.
Portland, ME 04101

From: Nancy Barba

Re: 561 Congress Street Classrooms (SALT Institute)

Baxter Academy Code Study for 561 Congress Street
Note: Existing layout was reviewed Per NFPA 101, 2003 Edition, IBC 2003, and ADA Guidelines in 2008; for existing business use.

1. Maine State Internal Plumbing Code
   - Secondary School — *115 occupants* — *58 Male / 58 Female*
     - Water Closets
       - Male — 1 per 40 — *2 x needed*
       - Female — 1 per 30* — *4 x needed*
         *Total number of water closets for females shall be at least equal to the total number of water closets and urinals required for males.
     - Urinals
       - Male — 1 per 35 — *2 x needed*
     - Lavatories
       - Male — 1 per 40 — *2 x needed*
       - Female — 1 per 40 — *2 x needed*
     - Drinking Fountain
       - — 1 per 150 — *1x needed*
   - *Existing Space has 4 Water Closets, 0 Urinals, 3 Lavatories, and 0 Drinking Fountains*
     - *Also has a Kitchen Sink*
   - Need additional (2) Urinals, (3) Lavatories, (1) Drinking Fountain
   - *We would need to negotiate this with the CEO.*

2. NFPA 101, 2009 with IBC 2009 as cross-check
   - Building Classification: New Educational (E)
   - Construction Type: Type 2B (000)
   - **Table 7.3.1.2** Occupant Load Factor: 20 Net SF per person
     - *Total gross SF = 8094 SF*
     - *5 Classrooms*
       - *"Radio Room" 374 sf ~ 19 Occupants*
       - *"Photography" 336 sf ~ 17 Occupants*
       - *"Library + Conference" 317sf ~ 16 Occupants*
       - *"Classroom" 754 sf ~ 38 Occupants*
       - *"Writing" 379 sf ~ 19 Occupants*
     - *6 offices w/ 1 occupant each*
     - ***115 Maximum Occupant Load***

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- **14.2.3.2** Minimum Corridor Width. Exit access corridors shall have not less than 6' of clear width. **B= 44"**
- **14.2.5.2** 50' dead end corridor with sprinkler system **B= 50'**
- **14.2.5.3.1** 100' Common Path of Travel with sprinkler system **B= 100'**
- **14.2.6.3** 200' Travel Distance with sprinkler system **B=300'**
- **14.2.5.7** Aisles shall be not less than 30" wide **B= N/A**
- **Table 6.1.14.4.1** Required separation of occupancies
  - Educational & Storage, Low & Ordinary Hazzard
    - **2 hours with sprinkler system** **B= 1 hour**
  - Educational & Business
    - **1 hour with sprinkler system** **B= N/A**
- **14.2.11.1.1** Every room or space greater than 250 sf and used for classroom or other educational purposes or normally subject to student occupancy shall have not less than one outside window for emergency rescue
  - *Not required per 14.2.11.1.2 (1), Automatic Sprinkler System*
- **14.3.3.2 Interior Walls and Ceiling Finish**
  - Interior wall and ceiling finish materials complying with Section 10.2 shall be permitted as follows:
    - Exits — Class A **B= Class A or B**
    - Other than exits — Class A or Class B
    - Low-height partitions not exceeding 60 in. and used in locations other than exits — Class A, Class B, or Class C
  - **10.2.4.4* Light-Transmitting Plastics.** Light-transmitting plastics shall be permitted to be used as interior wall and ceiling finish if approved by the authority having jurisdiction.
  - **10.2.8.1** Unless specifically prohibited elsewhere in this *Code*, where an approved automatic sprinkler system is in accordance with Section 9.7, Class C interior wall and ceiling finish materials shall be permitted in any location where Class B is required, and Class B interior wall and ceiling finish materials shall be permitted in any location where Class A is required.
- **14.3.6 Corridors.** Corridors shall be separated from other parts of the story by walls having a **1-hour fire resistance** rating and **20 min fire rated doors** in accordance with Section 8.3, unless otherwise permitted by the following: **B= No Requirement**
  - (2) The following shall apply to buildings protected throughout by an approved, supervised automatic sprinkler system in accordance with Section 9.7:
    - (a) Corridor walls shall not be required to be rated, provided that such walls form smoke partitions in accordance with Section 8.4.
  - (3) Where the corridor ceiling is an assembly having a 1-hour fire resistance rating where tested as a wall, the corridor walls shall be permitted to terminate at the corridor ceiling.
  - (5) Lavatories shall not be required to be separated from corridors, provided that the building is protected throughout by an approved, supervised automatic sprinkler system in accordance with Section 9.7.
  - *If the corridor walls are smoke partitions then they do not need to be fire rated.*
- **14.7.4.2** Clothing and personal effects shall not be stored in corridors, unless otherwise permitted by the following:

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- (1) This requirement shall not apply to corridors protected by an automatic sprinkler system in accordance with Section 9.7.
- (3) This requirement shall not apply to storage in metal lockers, provided that the required egress width is maintained.
- *The coat rack next to the large classroom can be used*

- The artwork and teaching materials shall not exceed 50 percent of the wall area in a building that is protected throughout by an approved, supervised automatic sprinkler system