

NFPA 101-2009 LIFE SAFETY ANALYSIS SUMMARY:

CONSTRUCTION TYPES

- Existing Building:**
 - Type 2 (000) – Steel frame with concrete floor system. Interior and exterior CMU and brick perimeter walls and stairwell walls, with metal stud interior partitions and 5/8" fire code drywall.
- Fully Sprinklered:**
 - Yes, supervised system per NFPA 13 with standpipes in stair towers.

Classification of Occupancy and Hazard of Contents:

- Existing educational use.
- Classrooms: 20 s.f. net
- Shops, Laboratories, and Vocational Rooms: 50 s.f. net
- Library Stack Areas: 100 s.f. net
- Library Reading Rooms: 50 s.f. net
- Offices: 100 s.f. net
- Storage Use: 500 s.f. net

SEPARATION MEANS OF EGRESS

- Exit Access Corridors:**
 - Corridor partitions designed to resist the passage of smoke
 - No closer required at corridor doors per Maine SFM

Means of Egress Components

- Doors:**
 - Per 7.2.1.2.2 door widths shall be measured at the narrowest point of the door opening.
 - Per 7.2.1.2.4 doors and means of egress shall not be less than 32" wide.
- Stairs:**
 - Dimensional requirements per 7.2.2.2.
 - Existing stairs are 5'-6" wide.
 - Capacity for stairways wider than 44", 7.3.3.2 capacity is 248 people per stair

CHAPTER 15 – EXISTING EDUCATIONAL OCCUPANCIES

- Per 15.1.2.2.2 - Non-Simultaneous Occupancy: In the case of an assembly occupancy type suitable for use only by the school occupant load and, therefore, not subject to simultaneous occupancy. The same egress capacity shall be permitted to serve both sections.
- Per 15.1.7.1 – Occupant load shall be determined on the basis of table 7.3.1.2.
- Per 15.2.2.3 – Stairs: Stairs complying with 7.2.2 shall be permitted.
- Per 7.2.1.2 – The requirements of 7.2.2-Stairs and 7.1-General Means of Egress shall not apply to the following (2) approved existing, non-compliant stairs.
- Per 7.2.2.1.1 (2) existing stair shall be permitted to remain in use provided they meet the requirements for existing stair showing table 7.2.2.1.1(v).
- Occupant load per 15.1.7.2, the occupant load of an educational occupancy or a portion thereof shall be permitted to be modified from that specified if the necessary aisles and exits are provided.
- Per 15.2.3.2 – Minimum Corridor Width: Exit access corridors shall have not less than 6' clear width.
- Per 15.2.4 – Number of Exits: Not less than two separate exits shall be as follows: (1) provided on every story, (2) accessible from every part of every story and mezzanine.
- Per 15.2.5.2 – No dead end corridor shall exceed 50'.
- Per 15.2.5.3.1 – Common path of travel shall not exceed 100' in a building protected throughout by an approved, supervised automatic sprinkler system in accordance with Section 9.7.
- Per 15.2.5.4 – Every room or space larger than 1,000 s.f. or with an occupant load of more than 50 persons shall comply with the following: (1) minimum of two exit access doors, (3) the doors shall be permitted to open onto a common corridor provided that such corridor leads to separate exits located in opposite directions.
- Per 15.2.5.5 (2) – For student occupancy, one room shall be permitted to intervene between a normally occupied student room and an exit access corridor.
- Per 15.2.5.4 (3) – Approved exit arrangement shall be permitted to continue in use.
- Per 15.2.6.3 – Travel distance shall not exceed 200' in educational occupancies protected throughout by an approved automatic sprinkler system in accordance with Section 9.7.
- Per 15.2.6.4 – Approved existing travel distances shall be permitted to continue in use.
- Per 15.4.3 – Flexible Plan and Open Plan Buildings.
- Per 15.4.3.2 – Each room occupied by more than 300 persons shall have two or more means of egress entering into separate atmospheres.
- Per 15.3.6-Corridors: (2)(a) corridor walls shall not be required to be rated provided that such walls form smoke partitions in accordance with Section 8.4.
- Per 15.3.6-(2)(b) corridors the provisions of 8.4.3.5 related to self-closing doors shall not apply to normally occupied classrooms when the building is protected throughout by an approved automatic sprinkler system.
- Per 15.7.4.3 (2) – Artwork and teaching material shall not exceed 50% of the wall area in a building that is protected throughout by an approved automatic sprinkler system.

TRAVEL DISTANCE = 156 LINEAR FEET

TRAVEL DISTANCE = 200 LINEAR FEET

152'-0" SEPARATION BETWEEN EXITS
EXISTING CORRIDOR

FIRST FLOOR FIRE ALARM

EXISTING STAIRS

EXISTING CRS/LABS

EXISTING STAIRS

EXISTING

EXISTING

EXISTING

EXISTING

OPEN PLAN EDUCATIONAL A302

PREP ROOM A303a

SCIENCE CLASSROOM A303

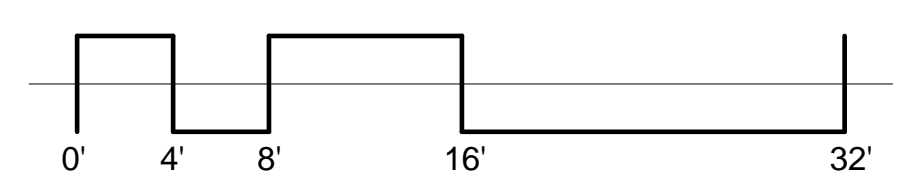
OPEN PLAN EDUCATIONAL A301d

CORRIDOR A301a

CORRIDOR A301b

CORRIDOR A301c

CODE PLAN - THIRD FLOOR
3/32" = 1'-0"



REV.	DESCRIPTION	DATE
1	REVISION #1	APRIL 25, 2014
0	ISSUED FOR CONSTRUCTION	APRIL 18, 2014

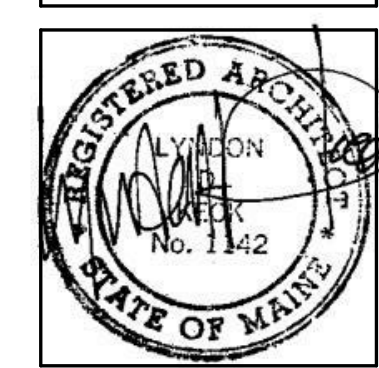
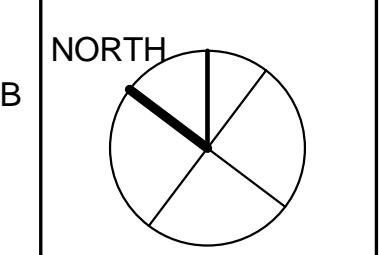


49 DARTMOUTH STREET
PORTLAND, MAINE 04101
207-775-1059
www.pdtarchts.com

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Minor Interior Renovations at 196 Allen Avenue for
CASCO BAY HIGH SCHOOL
196 Allen Avenue, Portland Maine



JOB NO. 14036

DRWN. CHK Checker

SCALE: As indicated

ISSUE STATUS CONSTRUCTION
ISSUE DATE APRIL 18, 2014

TITLE

THIRD FLOOR CODE PLAN

SHEET A003

SMOKE AND FIRE RATINGS OF PARTITIONS

- EXIST 1-HOUR FIRE BARRIER
- NEW / EXIST SMOKE PARTITION

OCCUPANT LOAD AT EXIT ACCESS COMPONENTS

- # CUMULATIVE LOAD FROM A SINGLE ROOM OR SPACE
- # CUMULATIVE LOAD AT END OF AN EXIT ACCESS CORRIDOR
- EXTENT OF MAJOR RENOVATIONS (FOR CODE PURPOSES ONLY)

FIRE SAFETY EQUIPMENT

- FIRE ALARM/STROBE (EXISTING)
- STROBE (EXISTING)
- STANDPIPE (EXISTING)
- HOSE CABINET (EXISTING)
- FIRE EXTINGUISHER (EXISTING)