THE THALIA

Classification of Places of Assembly. From 780 CMR— 8th Edition
1. Assembly (General).
a. All places in which alcoholic or non-alcoholic beverages are sold, or offered for sale, to be consumed on the premises; any room or space used for public or private banquets, feasts, dances, socials, card parties, weddings or for lodge or meeting halls or rooms; skating rinks, gymnastics, public swimming pools, billiard, pool, bowling, and table tennis rooms; halls or rooms used for public or private catering purposes, funeral parlors, recreation rooms; broadcasting studios; private clubs and all other places of similar occupancy shall be classified as general places of assembly.
b. Toilet facilities for each sex shall be provided in the amount specified in 248 CMR 10.10(18): Table 1 for assembly.

2. Table 1: Minimum Facilities For Building Occupancy. from 248 CMR 10.00: Uniform State Plumbing Code

<table>
<thead>
<tr>
<th>Building Clarification</th>
<th>Use Group</th>
<th>Toilets</th>
<th>Urinals Males</th>
<th>Lavatories Each Sex</th>
<th>Drinking Water Station, with drain</th>
<th>Bath/Shower</th>
<th>Other Fixtures</th>
<th>Pertinent Regulations 248 CMR 10.10(19)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Theaters</td>
<td>A—1</td>
<td>1 per 30</td>
<td>1 per 60</td>
<td>50%</td>
<td>1 per 100</td>
<td>1 per 1000</td>
<td>1 service sink per floor</td>
<td>(b), (j), (n), (n), (p)</td>
</tr>
</tbody>
</table>

**OCCUPANCY LOAD CALCULATION**

FOR USE GROUP A: 1 MINIMUM FLOOR AREA ALLOWANCE PER OCCUPANT IN ACCORDANCE WITH 8-TH EDITION 780 CMR 1004 AND TABLE 1004.1.1 IS:

A) UNCONCENTRATED 15 SQUARE FEET PER OCCUPANT
B) CONCENTRATED 7 SQUARE FEET PER OCCUPANT.
C) STANDING SPACE 5 SQUARE FEET PER OCCUPANT.

THE USABLE FLOOR AREA IN ACCORDANCE WITH 780 CMR 1004 IS 3103.6 SF (EXCLUDED BATHROOMS, UTILITY ROOMS, HALLWAY ETC.).

**OCCUPANCY CAPACITY BY NUMBER OF TOILETS:**

ACCORDING TO 248 CMR NUMBER OF TOILETS FOR MALES AND FEMALES SHOULD BE ASSIGNED EQUALLY: 300/2 = 150
ACCORDING TO THE 248 CMR 10.00 TABLE 1. 1 TOILET REQUIRED PER 30 FEMALES AND 1 TOILET PER 60 MALES.
TOTAL OCCUPANCY LOAD CALCULATED: 150/30=5 = 5 TOILETS FOR FEMALES (PROVIDED 2 TOILETS + 1 HC BATHROOM)
150/60=2.5 = 3 TOILETS FOR MALES (PROVIDED 1 TOILET + 1 HC BATHROOM)

DESIGNED OCCUPANCY LOAD IS 210

**MEANS OF EGRESS**

IBC Section 1005.3.1 The capacity, in inches, of means of egress stairways shall be calculated by multiplying the occupant load served by such stairway by a means of egress capacity factor of 0.2 inch per occupant in buildings equipped throughout with an automatic sprinkler system installed... and an emergency voice/alarm communication system...

Width of stairs calculated as follows: 367 x 0.2 = 73.4" / 2 = 36.7"
Width of doors and corridors calculated as follows: 367 x .15 = 55.05" / 2 = 27.5" (note, this is too small, min door width must be 36" and corridor width 44")

According to IBC Section 1015 EXIST AND EXIT ACCESS DOORWAYS
2 means of egress are required for occupancy group A when the maximum occupant load exceeds 49.

According to IBC Section 1015.2.1 Exception 2 Where the building is equipped throughout with an automatic sprinkler... the separation distance of the exit doors or exit access doorways shall not be less than one-third the length of the maximum overall diagonal dimensions of the area served.
The max. overall diagonal is 102'—4" therefore, the min distance between doors is 36'—2".

According to IBC Section 1016 EXIST ACCESS TRAVEL DISTANCE for occupancy category A, the maximum travel distance for a building w/out automatic sprinklers is 200'—0", with automatic sprinklers, the maximum travel distance is 250'.

CALCULATIONS

RAV & Assoc., Inc
288 GREEN ST.
CAMBRIDGE, MASSACHUSETTS

Credential and Construction:
CLEAR SPACES & DOORS

LAVATORY CLEARANCES

1. MINIMUM 36" CLEAR SPACE IS PROVIDED IN FRONT OF THE FAUCET. THE CENTER OF THE FAUCET IS MINIMUM 24" ABOVE THE FINISHED FLOOR.

2. REQUIRED CLEAR SPACE ALONG WALLS OR COUNTERTOPS IS 18" MIN. AND DO NOT REQUIRE GRASPS.

3. LATCH IS A MINIMUM OF 6-1/2" HIGH.

4. ACCESSIBLE SINKS SHOWER OR BATHTUBS SHOULD BE CENTERED WITHIN SCALE."
**NOTES:**

**Carpentry:**

All required carpentry shall produce joints true, tight, with all members assembled in accordance with the dimensions and with all footings codes and regulations.

Carefully select all members, select individual pieces so that knots and defects will not interfere with nailing or proper nailing or making connections.

Lumber may be reconditioned by the engineer, whether or not it has been installed, for excessive nails, twist, break, check, weather damage, or other condition.

Do not drive dull, head, short nails, trimmers, headers, lintels, or other framing components.

Use only fured lumber for all wood blocks and members operated in or in contact with concrete.

Treat all wood less than two feet above finished grade or spanning with the preservative to a maximum distance of six inches from the ends. Provide all treatment in direct accordance with manufacturer's specifications.

In addition to all framing operations normal to fabrication and erection indicated on the drawings, install all blocking required for work of other trades.

Install all blocking full, producing all nailing surfaces on which structural members are to rest to be in good and even support.

Make, turning members slope cut or notch the ends as required to one uniform bearing surface.

Install all blocking required to support all corn of finish and to cut off all concealed spaces, joints, between ceilings, and between floors.

Fireblocks shall be two inches in thickness (minimum) by the full width of the opening being blocked.

No blocking shall be less than two inches in thickness (minimum) by the full width of the opening being blocked.

All stud walls at ceiling and floor levels.

In ALL cases, the area of blocking shall be equal to the area of the opening plus the area of the adjacent framing.

Install solid blocking between joists at all points of support and wherever the blocking is designated.

Make all studs single length, unsplayed, and platform framed. Frame all corners and intersections with three or more studs and all required bearing for wall framing.

ALL blocking shall be at least two inches thick, or furred, along the finish surfaces to any not more than 1/8" from the plane of surfaces of adjacent framing and finishing members.

Framing all furred, with egress dimensions perpendicular to supports and continuously glued at least two supports. All doors and windows must be installed with all necessary appurtenances and trim.

**Section A-A**

**Partition to Wall Connection Detail**

**Proposed Women's Bathroom and HC Bathroom**

**Proposed Single Men's Bathroom**

**Proposed HC Bathroom**

**Details**

288 Green St., Cambridge, Massachusetts

RAV & Associates, Inc.

11/27/18

12/31/18

12/31/18
WATER VALVE SHUTOFF IN STREET

PLUMBING PLAN
288 GREEN ST.
CAMBRIDGE, MASSACHUSETTS

RAV & Assoc., Inc.
21 HIGHLAND AVENUE
NEEDHAM, MASSACHUSETTS 02494

TELEPHONE: (781) 449-8200 FAX: (781) 449-8205

SCALE: 1" = 1'-0"

APPROVED: R.A.V. DATE: 10/24/2018
DESIGNED BY: R.A.V.

CHECKED BY: R.A.V.
DRAWING NO: P-1