# BOSTON FIRE DEPARTMENT Certificate of Occupancy Testing and Acceptance Criteria

The following list is made to show specifically what documentation the Boston Fire Department will require for the acceptance of fire protection systems. This list is made to be as complete as possible; however, it is not all inclusive. The Boston Fire Department reserves the right to request additional information if deemed necessary. Furthermore, it may be necessary for a Fire Department representative to be present during the testing phase of equipment acceptance. This will be determined on a case by case basis unless otherwise noted. The following information must be submitted directly to the Boston Fire Department before any Certificate of Occupancy will be issued.

- 1. Inspectional Services Department Permits to Install Fire Alarm and Fire Protective Systems (Sprinklers, Standpipes, Fire Pumps, Ansul, Clean Agent, etc.). (780 CMR Permits)
- 2. Boston Fire Department Permit to Install (*Fire Alarm, Ansul, Clean Agent, Sprinkler, etc.*). (BFPC 12.03 and 14.02) Also permits to demo, alter or construct and dumpster if applicable.
- 3. Contractor's Material and Test Certificate for Aboveground Piping. (NFPA 13)
- 4. Contractor's Material and Test for Underground Piping. (NFPA 13)
- 5. Contractor's Material and Test Certificate for Aboveground and Underground Piping for Standpipes. (NFPA 14)
- 6. Pump acceptance test data sheet for fire pumps. (NFPA 20) This standard requires that the acceptance should only be scheduled after the pump has gone through acceptance test by the installing contractor.
- 7. Electric generator and back up generator acceptance test. The results of the required tests may be recorded on the maintenance sheet that is included with the standard NFPA 110.
- 8. Record of Completion and test report for the fire detection and warning system. Items included but not limited to are the tamper and flow switches for the suppression system, pull stations, smoke detectors, heat detectors, etc. (NFPA 72) Installer or alarm service company must contact Internal Systems at (617) 343-2896 to schedule acceptance test. Include fire alarm document number on Record of Completion.
- 9. Flammability Certificates for all interior finishes (items include but are not limited to furniture coverings, rugs, paneling, couches, ceiling tiles, etc.) must be submitted and approved prior to installation to the BFD's Chemist Office, 1010 Mass. Ave., 4 Floor. Call Chemist Assistant at (617) 343-3527 for application process.
- 10. Smoke control/management testing and acceptance data should be submitted **prior** to Certificate of Occupancy application. The documentation shall include design philosophy (including code requirements), method of testing, data from testing, and written indication of system acceptance.
- 11. Certification (PE Seal and Signature) from the <u>Registered Professional Engineer</u>, or other legally recognized professional, responsible for the <u>construction documents</u> per 780 CMR, stating that the <u>fire protection systems</u> have been installed in accordance with applicable codes and standards, in accordance with the approved <u>construction documents</u> and that the record drawings indicate any deviations, if any.
- 12. Stairwell floor identification signs will be inspected. See the requirements of Boston Fire Prevention Code 11.05, 780 CMR and the International Building Code.
- 13. Fire Safety and Evacuation Plan (in narrative form). See 527 CMR 1.00, the State Fire Prevention Regulations, and for guidance purposes, the International Fire Code.
- 14. Facilities having any area within deemed as a "Place of Assembly" such as conference rooms, pool areas, dining halls etc with occupant capacity (over 49 persons) must also obtain a "Place of Assembly" permit from the Boston Fire Department as an additional requirement of the C of O acceptance criteria. (Requirement checklist for Places of Assembly may be found under the forms, permits, application and fees webpage.)

The standards in which the certificates can be found may be ordered by calling the National Fire Protection Association. The phone number for the NFPA is (617) 770-3000. The Boston Fire Department does not give out these forms. If you have any questions you may contact the Boston Fire Department, Fire Prevention Division at (617) 343-3034. Fax (617) 343-2133.



# Boston Fire Department Fire Prevention Division 1010 Massachusetts Avenue – 4<sup>th</sup> Floor Boston, MA 02118

Tel: 617-343-3772 Fax: 617-343-2197

## Place of Assembly Requirement Check List

In addition to your application where applicable one or more of the following may be required:

<ol> <li>Current Alarm Report or Record of Completion if new.</li> </ol>		
2	Current Sprinkler Report or NFPA Reports if new.	
3.	Name of monitor company – letter if different from alarm company.	
4.	Copy of kitchen hood system tag.	
5.	Contract with kitchen hood cleaning company.	
6.	Report of last hood cleaning.	
7.	Evacuation plans in narrative form.	
8.	Confirm fire extinguisher provided with up to date tag.	
9.	Flame certifications for interior finish.	
10.	Fire Escape report (due every 5 years).	
11.	Fire Pump yearly test report.	
 12.	3 Sets of Egress Plans per the requirements listed below.	

This information is required for new owners, a new business or a name change. Other reports may be required if it is a newly constructed building see our Certificate of Occupancy Guidelines

# Place of Assembly Plans Submittal Requirements

The Boston Fire Prevention Code (Section 27.02) requires that a permit from the Boston Fire Department be obtained to operate a "Place of Assembly". The egress plans that the Boston Fire Department requires should be prepared in accordance to the code of record. The current code is the 9<sup>th</sup> edition of 780 CMR (2015 IBC with MA amendments). The plans are to include at a minimum the following information [and must be kept at the premises at all times]:

- 1. A minimum of 24-inch by 36-inch sheets sealed by registered design professional (architect or engineer competent in the design of means of egress systems). The code of record that the egress analysis was performed in accordance with, a useable scale, and the use and occupancy classification as approved by ISD shall be notated on the plans prior to BFD intake. Places of assembly means of egress are required to comply with Section 1029.0.
  - 2. Current name and address of establishment as indicated by ISD records at the time of proposed event.
- 3. The occupant load for each floor and or space shall be calculated in accordance with CMR 780 Section 1004.0. This shall be done by a Massachusetts Registered Architect or Engineer competent in the design of building egress systems. The capacity stamp from ISD with their reviewer's initials shall be on the plans.
- 4. Location of all exits shall be labeled uniquely by floor and number or letter. For example, 1-A and 1-B could indicate the exits on the 1st floor. Designation 2-A and 2-B could indicate two exits on the 2nd floor. The plans shall clearly identify the occupancy's main exit, where required, also.
- 5. The plan shall clearly indicate that the main exit is able to accommodate ½ of the required exit capacity. Please note that all new and/or existing (as required by 780 CMR) A-2 Nightclubs shall conform to 780 CMR

Section 1029.2 and Section 430.5. Capacity of all other exits combined shall be at least ½ of the occupant load.

- 6. For each exit, the route to the outside of the building, not just outside the space in question, shall be clearly indicated. The effective width of each exit shall be dimensioned. The resulting width could be less than the actual width of the door if the door leads to a narrower hallway or set of stairs. This is particularly true if the exit leads to an adjacent space. The capacity of an egress component shall be calculated based on the effective width as dimensioned on the plan.
- 7. If a single location has different possible "set-ups", such as a restaurant (with tables) during the day and a bar at night (tables removed), then a separate egress plan is required for each use and an explanation of where the furniture has been relocated to is necessary.
- 8. The location of all seating shall be shown and the egress plan shall clearly indicate that all proper separation distances are in place to meet the aisle and access-way requirements of 780 CMR.
- 9. Each space with a unique use, such as standing, seating, dancing, and aisle width shall be clearly delineated. The total square footage of each space shall be indicated on the plans. Areas containing seating and their required aisles and aisle access-ways shall not be used for the calculation of standing space occupant load.
  - 10. It shall be shown that at least two exits are remotely spaced as required in 780 CMR.
- 11. The plan shall indicate whether or not the building is protected by an automatic sprinkler system and/or fire alarm system with or without emergency voice/alarm communication (EVAC) capabilities. If there are residential units in the building, the alarm system must activate the residential alarm, unless the residential portion is separated from the place of assembly in accordance with 780 CMR. Any extinguishing system that is separate from the sprinkler system, such as a kitchen hood extinguishing systems, shall activate the building alarmsystem.
- 12. Location of all fire alarm devices, exit signs, emergency lighting fixtures and panic hardware shall be indicated on the floor plans as well as the source of emergency power.
  - 13. Street name and side street names shall be placed on drawing at exit locations.

Application for place of assembly permits that are not accompanied by egress plans meeting these requirements will be *disapproved*. If upon inspection, the location set-up differs from the approved plans, the application will be *disapproved*.

The following are technical bulletins for assistance when preparing place of assembly plans.

#### A. Occupancy classification

Section 508.2 allows for 10% of an occupancy to be considered an accessory area. Accessory areas are required to be protected in accordance with the occupancy classification that is reflects. In following this logic, for restaurants and bars where standing area exceeds 10% of the occupant load then the occupancy has a higher than normal occupant load. Therefore, the standing (accessory) area conforms to the definition (780 CMR 202) of a nightclub and is to be protected as such when any other condition listed in Section 202 exists. For accessory standing areas that exceed 50 persons additional protections are then required.

#### B. Main Exits

a. New construction

Group A-2 Nightclub occupancies require a 72-inch main exit where the occupant load exceeds 50 persons (780 CMR Sections 430.5 and 1029.2). The intent is to increase egress flow during a fire event. Therefore, construction of the doors is required to be adjacent and clear to each other so that no architectural features such as astragals or mullions counteract the intent of increased flow.

#### b. Existing buildings

780 CMR Section 430.5 requires <u>all</u> Group A-2 Nightclub occupancies with an occupant load of 50 or more to be corrected to have the unimpeded 72-inch main exit.

Section 430.5.1 allows a registered professional, i.e., architect or engineer competent in the design of egress systems to evaluate whether the existing means of egress is capable of providing the existing occupant load with a safe means of egress. Said evaluation is to be done by performing acceptable calculations. Acceptable calculations include proving that the available egress width exceeds the required width significantly or performing a tenability analysis based on likely smoke production rate.

#### C. Standing areas

Standing areas are to be delineated on the plans and the resulting square footage shown. Standing areas are allowed to be calculated at 5 square foot per person (sfp) per the code; however, clear aisles are also required by the code. 5 sfp results in shoulder to shoulder occupation and when an area is fully loaded at this capacity there is no room for occupants to step into to begin egress. Therefore, clear aisles are required to be maintained in the standing area and aisle floor area is not allowed to be used when calculating the occupant load.

### D. Seating Areas

All furniture must be shown in seating layouts. Furniture varies in size and can affect the available space for the occupants significantly. For example, when using an occupant load factor of 15 square foot per person (sfp) over an unoccupied area a certain occupant load will be determined. However, if one then places very large furniture in that area, the remaining open/available area may no longer be sufficient to accommodate the calculated occupant load even at 5 sfp. The furniture could also block clear aisles and access to exits.



# Boston Fire Department -Fire Prevention Division 1010 Massachusetts Avenue – 4<sup>th</sup> Floor Boston, MA 02118

http://www.cityofboston.gov/fire Tel: 617-343-3772

#### Place of Assembly Guidelines

The following regulations and practices shall be followed at all places of assemblies. These are by no means all inclusive and owners and or managers at these facilities must have a full understanding of all fire safety laws and regulations so as to make safe as possible their establishments for use by the general public:

- A place of assembly (over 49 persons) must have permit from the Boston Fire Department and a certificate of inspection from I.S.D.
- Any change in venue name, activity, operation, location, ownership or use shall require a new Place of Assembly permit from the Boston Fire Department.
   Boston Fire Department Place of Assembly permits are not transferable
- Permits must be posted in a conspicuous place
- No overcrowding, the number of people must not exceed the number on the Boston Fire Department / I.S.D Permit
- Flammable certificate permits are required from the Boston Fire Department for all decorations, furnishings and interior finishes whether permanent or temporary. All furniture and decorations shall be approved by the Boston Fire Department Chemists Office. All furnishings and decorations added after issuance of the permit must be approved prior to use in the occupancy
- All means of egress including designated doors, windows, aisles, passageways, corridors, fire escapes
  and stairways which are part of the way of exit travel to a public way shall be kept unobstructed either
  by persons or things and shall be ready for use while such buildings are occupied
- Means of egress shall be lighted at night while the building is occupied
- · Doors shall swing in the direction of travel out of the place of assembly
- Furniture shall be arranged in accordance with the approved occupant/egress plans
- No open flames of any type (candles, cigarettes, etc.)
- · Emergency lights must be tested monthly by staff
- A current sprinkler and alarm report must be on site
- An evacuation / safety plan shall be on site and staff must be trained regularly
- Fire extinguishers shall be inspected annually
- Ansul systems shall be tested every 6 months
- Kitchen hoods are to be cleaned/inspected every 3 months or as per order of 527 CMR 1.00 c 50 with reference to NFPA 96

<u>Effective May 14, 2009</u> in accordance with Chapter 2 of the City of Boston Ordinances of 2008 establishing the requirements for the cleaning of commercial cooking hood and ventilation systems all inspections and cleaning on commercial hood and ventilation systems must be performed by certified cleaner or inspector who is registered with the Boston Fire Department. Each individual inspector and/or cleaner will have their own registration number. The registered list is available to the public on our website at <a href="http://www.cityofboston.gov/fire/">http://www.cityofboston.gov/fire/</a> listing the individuals name and place of employment. The commercial establishment may also verify their registration by asking the service provider to see a copy of their Boston Fire Department registration. Also available on our website referenced above are all of the Boston Fire Department requirements relating to the above mentioned ordinance, such as stickers and reports.

#### Reminder

- Your establishment's <u>egress plans</u> showing the occupant load, seating diagram and location of exits and of aisles leading thereto shall be submitted to the head of the fire department and an approved copy shall be kept on premises.
- The owner or operator of any business or activity located within a Place of Assembly classified as an A-1 or A-2 use group under 780 CMR, the State Building Code, shall make an <u>audible announcement</u> prior to the start of each program or performance that notifies occupants of the location of the exits to be used in case of a fire or other emergency.

Any questions regarding these or any other Place of Assembly issues please contact the Captain of the Special Occupancies @ 617-343-2022.



# Boston Fire Department Fire Prevention Division 1010 Massachusetts Avenue – 4<sup>th</sup> Floor Boston, MA 02118

Tel: 617-343-3772 Fax: 617-343-2197

For BFD Internal Use Only:	
Payment Received Date:	
Payment Number:	
Customer ID:	
Permit Number:	

# Place of Assembly Application

Completed Permit to be:	Mailed	E-mailed	Picked up
(To be completed by applicant) Inspection Type: Initial	Annual Other	Date:	Time
Business Name:			
Address:	<u> </u>	Zip:	Dist
Owner:		Telephone #:	
Fax:	E-mail Addre	ss:	
General Manager:		Manager on Duty:	
(For BFD use only:) Permits and Plans ISD Certificate of Inspection Posted	☐ Yes	No Capacity:	<u></u>
Place of Assembly Permit Posted	☐ Yes	No Capacity:	
Flammability Permits	□ No □ N/A Ty	pe: Decorations Furnishings	🗆 Interior 🔲 Finish
Egress Plan on Site Yes N	lo Layout of Furniture (	Consistent 🗌 Yes 🔲 No Evacuation	Training Yes No
Inspection Apparatus Access Unobstructed	Yes No	Sprinkler Heads 18" From Storage	Yes No N/A
F.D. Connection Visible and Capped	I ☐ Yes ☐ No ☐ N/A	Fire Escapes Clear and Operable	JYes □No □N/A
Emergency Lighting Operates	□Yes □No	Door Self Closers Operate Correctly	□Yes □ No
Exit Signs Visible & Lit	Yes No	Panic Hardware Operates Correctly	J <sup>Yes</sup> □ No □ N/A
Good General Housekeeping	Yes No		Yes No
Stairwells Clear/No Storage	☐ Yes ☐ No	Unmirrored Exits	□ <sub>Yes</sub> □ No _
Proper Flammable/Combustible Stor	age 🛮 Yes 🗀 No	Exits Unobstructed, Lead to Public Wa	y $\square_{\mathrm{Yes}} \square_{\mathrm{No}}$
Proper Stairwell Signage	□ No □ N/A		
Systems Date Alarm System Inspected		Panel Normal Yes No	] N/A
Date Sprinklers Inspected		Valves Open Yes No	] N/A
Date Last Pump Flow Test	<u>,,</u>	Pump Ready Yes No	J N/A
Pump Flows 150% Tyes T	No □N/A	Date Extinguishers Serviced	
Date Hood System Cleaned		Date Ansul System Inspected	
Abatement Issued    Yes	No	Abatement Numbers	
GF 65 Issued	No	If GF65 issued, why?	
Comments:			
Owners Representative Signature		Inspectors Initial	

#### **BOSTON FIRE DEPARTMENT**

CERTIFICATE OF OCCUPANCY
TESTING AND ACCEPTANCE CRITERIA

# Project Name:



One Federal Street, 18th Floor Boston, MA 02110



- 2. BFD Sprinkler Permit (Permit SPRK ) & ISD Electrical Permit (Permit No. EFA )
- 3. Contractor's Material & Test Certificate for Above Ground Piping
- 4. Fire Alarm and Emergency Communication System Record of Completion and Fire Alarm and Emergency Communication System Inspection and Testing Form
- 5. Flame Certificates
- 6. Sprinkler Final Affidavit and Fire Alarm/Fire Protection Affidavit
- 7. BFD Fire Alarm Installation Permit (Permit No. BFDF)
- 8. Fire Evacuation Plan
- 9. Building Fire Alarm Test Report (inspection should be within the past year)
- 10. Building Generator Test Reports (inspection should be within the past year)
- 11. Building Fire Pump Test Report (inspection should be within the past year)
- 12. Building sprinkler Test Report (inspection should be within the past year)