



BULLETIN: 2009-1

SUBJECT: Subchapter 4 Retrofit Requirements for Nightclubs

REFERENCE: N.J.A.C. 5:70-4.1(b) 2, N.J.A.C. 5:70-4.7(a),
N.J.A.C. 5:70-4.9(a) 9, N.J.A.C. 5:70-4.11(f) 3, and
N.J.A.C. 5:70-4.11(g) 1 and 2

ISSUE DATE: March 6, 2009

This Bulletin is intended to provide guidance concerning the retrofit requirements for nightclubs as required by Subchapter 4, which are to be completed by February 5, 2009.

The New Jersey Uniform Construction Code defines a nightclub as follows, "Use Group A-2 (Nightclubs)": This Use Group shall include all buildings and spaces of public assembly, designed for use as dance halls, nightclubs, and eating and/or drinking establishments, and similar occupancies, in which the established maximum permitted occupant load exceeds the number of seats provided by more than 30 percent or which affords less than 12 square feet net area per occupant. For purposes of determining the net area per occupant, only the actual public assembly room or rooms shall be considered. For purposes of applying the requirements of this chapter, the nightclub shall include all rooms, lobbies, and other spaces connected thereto with a common means of egress and entrance.

Two key points need to be looked at in determining whether or not an assembly space is a nightclub. The Fire Official must review the space for either of the two conditions listed below:

1. The first consideration is when the maximum occupant load exceeds the amount of seats by 30%. For example, if the maximum occupant load of the building is calculated at 15 square foot net per person totaling 500 occupants, the number of seats provided would need to be at least 350 or more. If there are less than 350 seats, the space would be considered a nightclub.

2. The second part to consider is whether the net square footage affords less than 12 square foot per person. The Fire Official must verify the occupant load for each assembly space. To determine this, any area which is non-occupiable space must be deducted from the square footage calculations, only the actual occupiable space should be used in the square footage calculations. Some examples of non-occupiable spaces would include: thickness of walls, coat rooms, entertainment stages or platforms, closets, fireplaces, pool tables, bathrooms or bars and the serving areas behind a bar. The Fire Official must start with the gross area of the building and deduct the non-occupiable spaces or areas to determine the net floor area.

When determining the total occupant load of the nightclub for the examples above you must include all rooms, lobbies and other spaces that share a common means of entrance and egress. The Fire Official must verify the net occupant load for each room or space that may be occupied if the same entrance or exit are shared.

Once it is determined that a building or portion thereof is a nightclub, the applicable retrofit provisions will be based upon any of following: 1) the location of the nightclub in the building; 2) the maximum permitted occupancy of the nightclub; or 3) the square footage of the building or area in use. The applicable portions of Subchapter 4 include fire suppression, automatic fire alarms and means of egress.

I. Fire Suppression

N.J.A.C. 5:70-4.7

(a) All buildings of Use Group A-2 (nightclubs) or portions thereof when separated in accordance with (l) below shall be equipped throughout with an automatic fire suppression system installed in accordance with the New Jersey Uniform Construction Code where any of the conditions in (a) 1, 2 or 3 below exist:

1. The A-2 (nightclub) Use or portion thereof is located on a floor other than the level of exit discharge. For purposes of applying this paragraph, the level of exit discharge shall be defined as having all exits discharging not more than five feet above, nor more than two feet below, the adjacent grade:

2. The building or portion thereof has an occupant load of 300 or more:

i. Voluntarily limiting the occupant load in a space that will accommodate a greater number shall not be permitted for purposes of determining whether suppression is required. The nightclub space itself may be reduced to a size such that the occupant load calculated in accordance with Table 5:70-4.11(f)3 at N.J.A.C. 5:70-4-11(f)3 is fewer than 300. If this option is chosen, then the following conditions shall apply:

- (1) The nightclub space shall be separated from the other portions of the building through the use of one hour fire resistance rated assemblies constructed in accordance with the building subcode of the Uniform Construction Code (N.J.A.C. 5:23-3.14);
- (2) Opening protectives constructed in accordance with the building subcode shall be required for all openings between accessory use areas and the nightclub space. For purposes of applying these requirements, accessory use areas shall include, but not be limited to, all back of house spaces, storage rooms, offices, kitchens and coatrooms. Accessory use areas shall not include any assembly spaces;
- (3) No openings shall be permitted between any non-accessory use areas and the nightclub;
- (4) The separated, non-accessory portions of the building shall not contain any assembly uses; and
- (5) The means of egress serving any separated, non-accessory portions of the building and the means of egress serving the nightclub shall be totally independent of one another.

(A) Exception: Means of egress shared between a nightclub and a separated, non-accessory space shall be permitted for nightclubs located in buildings of Use Group R-1; or

3. The building or portion thereof exceeds 5,000 square feet.

4. The automatic fire suppression system shall be tied to the performance sound system and to the house lights in such a way that activation of the

fire suppression system mutes the performance sound system and restores the intensity of illumination to that required by N.J.A.C. 5:70-4.11(i)2.

If the nightclub use meets any of the above conditions, an automatic fire suppression system is required to be installed in the building or nightclub use unless it meets the provisions of section 2. In order to accept a reduced occupant load under section (a)2, the business or building owner must apply for and receive construction permits under the Uniform Construction Code and a new Certificate of Occupancy, indicating the new occupant load shall be provided. Physically reducing the occupant load will not exempt the use from other retrofit provisions as detailed below, unless the new occupant load is under the listed thresholds.

Section (l) requires that the use requiring suppression be completely separated from the remaining portions of the building by a minimum of a one hour fire resistive construction, otherwise the entire building must be provided with the required suppression.

It is important to note that activation of the fire suppression system immediately mutes the sound system and brings house lights back up to the minimum required levels for egress. This would include any permanently installed sound systems as well as any sound equipment brought in by outside performers.

Monitoring of the fire suppression system will be accomplished by using one of the methods listed in N.J.A.C. 5:70-4.7(k), as required by the Fire Official. Further guidance on system monitoring is provided in Bulletin 2006-02.

II. Automatic Fire Alarms

N.J.A.C. 5:70-4.9

(a) An automatic fire alarm system shall be installed as required below in accordance with the New Jersey Uniform Construction Code.

9. In all buildings or portions thereof of Use Group A-2 (nightclubs) with an occupant load of 100 or more that are not otherwise required to have an automatic fire suppression system.

- i. If the alarm is activated by smoke detectors, it shall be activated by either two cross-zoned smoke detectors within a single area or a single smoke detector monitored by an alarm verification zone or an approved equivalent method and the smoke detectors shall be of a type designed to reduce the possibility of false notifications based on the conditions present in the area protected.

- ii. The automatic fire alarm system shall be tied to the performance sound system and to the house lights in such a way that activation of the fire suppression system mutes the performance sound system and restores the intensity of illumination to that required by N.J.A.C. 5:70-4.11(i)2.

Nightclubs with an occupancy of 100 up to 299 persons, are required to have an automatic fire alarm system installed as required above. This would include any premises that reduced its occupant load using N.J.A.C. 5:70-4.7(2)i.

It is important to note that activation of the fire alarm system immediately mutes the sound system and brings house lights back up to the minimum required levels for egress. This would include any permanently installed sound systems as well as any sound equipment brought in by outside performers.

Monitoring of the fire alarm system will be accomplished by using one of the methods listed in N.J.A.C. 5:70-4.7(k), as required by the Fire Official. Further guidance on system monitoring is provided in Bulletin 2006-02.

III. Means of Egress

N.J.A.C. 5:70-4.11

(f)3 The maximum permitted occupant load of a given space shall be determined by dividing the floor area for a given use by the occupant load factor in Table 5:70-4.11(f)3.

- i. Except in Use Group A-2 (nightclubs), the occupant load may be equal to the total number of occupants for whom exit capacity is provided by (f)1 above. The resulting total occupant load shall not exceed one occupant per five square feet of net floor area over the entire use.

(g) All buildings of Use Group A with an occupant load of 100 or more shall be provided with a main entrance capable of serving as the main exit with an egress capacity for at least one-half the total occupant load. The remaining exits shall be capable of providing two-thirds of the total required exit capacity.

1. For Use Group A-2 (nightclubs), the main exit and at least one remaining exit shall be placed a distance apart equal to one-half the length of the maximum overall diagonal distance of the area served in buildings not equipped throughout with an automatic fire sprinkler system and one-third the maximum overall diagonal distance of the area served in building or portions thereof that are equipped throughout with an automatic fire sprinkler system.
2. Use Group A-2 (nightclub) buildings or portions thereof with an occupant load of more than 300 shall have a main entrance capable of serving as the main exit with an egress capacity for at least two-thirds of the total occupant load. The remaining exits shall also be capable of providing two-thirds of the total required exit capacity.

As we have seen many times, overcrowding and insufficient and improperly placed exits have contributed to many of the fatalities and injuries associated with fires in places of assembly. These provisions are intended to ensure a safe occupant load is in place and that there are sufficient and properly placed exits available for use.

For example, (g)1 provides for a space with a diagonal distance of 300 feet, that the main entrance and at least one exit must be at least 150 feet apart in a nightclub without an automatic fire suppression system; at least 100 feet apart in nightclubs provided with automatic fire suppression.

Section (g)2 would require a nightclub with an occupancy of 600 to have a main entrance/exit capable of handling 400 people and the remaining exits in the nightclub must also accommodate at least 400 people.

Please note: It is reasonable for an establishment to take up to six or more months to comply with the newly mandated requirements; therefore, consideration should be given to allow the establishment sufficient time to comply with a violation of these retrofit requirements. During this period of time the business will need to perform design work, apply for permits, select and hire a contractor and complete the work including obtaining any necessary Uniform Construction Code inspections and approvals. It is recommended that the Fire Official follow the process closely and grant appropriate extensions of time as needed.

Any questions regarding this bulletin should be directed to the Division of Fire Safety, Bureau of Fire Code Enforcement at 609-633-6132.