

2. In all buildings of Use Group E up to and including the 12th grade; and

3. In all buildings required to have an automatic fire alarm system in accordance with N.J.A.C. 5:18-4.9, except hotels and multiple dwellings having an occupant load of less than 25 and having less than 10 dwelling units.

Amended by R.1987 d.247, effective June 15, 1987.

See: 18 N.J.R. 1225(a), 19 N.J.R. 1078(a).

#### Case Notes

Failure to install firearms and enclose open stairwells was violative of fire codes warranting issuance of abatement order. 111 Halstead Street v. Department of Community Affairs, 95 N.J.A.R.2d (CAF) 77.

Apartment building three and one-half stories high was required to have manual fire alarm system. 80-2 De Hart Place v. Department of Community Affairs, 95 N.J.A.R.2d (CAF) 61.

#### 5:18-4.11 Means of egress

(a) Every story utilized for human occupancy having an occupant load of 500 or less shall be provided with a minimum of two exits, except as provided in (b) below. Every story having an occupant load of 501 to 1,000 shall have a minimum of three exits. Every story having an occupant load of more than 1,000 shall have a minimum of four exits.

1. Each mezzanine with an occupant load of more than 50 and in which the travel distance to an exit exceeds 75 feet shall have access to at least two independent means of egress by November 6, 1990.

2. When more than one exit is required, an existing fire escape shall be accepted as providing one of the required means of egress unless judged to be dangerous for use under emergency exiting conditions.

3. Any new fire escapes shall be constructed and installed in accordance with the Uniform Construction Code Formal Technical Opinion No. FTO-3, dated March 1985.

i. Access to a fire escape shall be through a door, except that window access shall be permitted from single dwelling units or guestrooms in Use Groups R-1, R-2 and I-1 or when serving spaces having a maximum occupant load of 10 in other use groups.

4. In all buildings of Use Group E, up to and including the 12th grade, buildings of Use Group I, rooming houses and child care centers, ladders of any type are prohibited on all new and existing fire escapes used as a required means of egress.

5. All occupants shall have unobstructed access to all new and existing fire escapes without having to pass through a room subject to locking.

6. In all bed and breakfast homestays, every sleeping room shall be provided with an approved window having sill height of not more than 44 inches.

7. In dwelling units in basements or stories below grade in buildings of Use Group R-2 that are not equipped throughout with an automatic fire sprinkler system, there shall be at least two exits from each dwelling unit.

i. An approved window providing a clear opening of at least five square feet in area, a minimum net clear opening of 24 inches in height and 20 inches in width, and a sill height of not more than 44 inches above the finished floor, shall be acceptable as one of the required exits.

(b) In buildings having only one exit, the single exit condition shall be permitted to continue as follows:

1. In buildings of Use Group R-3;

2. In all buildings, in the story at the level of exit discharge when the occupant load of the story does not exceed 50 and the exit access travel distance does not exceed 75 feet;

i. Exception to (b)2 above: In buildings of Use Group I and in rooming houses and child care centers, regardless of Use Group, two means of egress shall be required.

3. In buildings of Use Groups R-1 and R-2, from floors that are not more than 16 feet above exterior grade.

i. In community residences for the developmentally disabled, the maximum occupant load, excluding staff, is 12.

4. In buildings of Use Groups R-1 and R-2, not more than two stories in height, from floors that are more than 16 feet above exterior grade, when there are not more than four dwelling units per floor and the exit access travel distance does not exceed 50 feet. The minimum fire resistance rating of the exit enclosure and of the opening protection shall be one hour.

i. In community residences for the developmentally disabled, the maximum occupant load, excluding staff, is 12.

5. In buildings of Use Group B or S-2, not more than two stories in height, which are not greater than 3000 square feet per floor, when the exit access travel distance does not exceed 75 feet. The minimum fire resistance rating of the exit enclosure and of the opening protection shall be one hour.

6. Open parking structures where vehicles are mechanically parked.

(c) In multi-level dwelling units in buildings of Use Groups R-1 or R-2, an exit shall not be required from each level of the dwelling unit provided that the following conditions are met:

1. The building in which such dwelling units are contained is of type 1 or type 2 construction and the travel

distance within the dwelling unit does not exceed 75 feet; or

2. The building in which such dwelling units are contained is not more than three stories in height and all third floor space is part of one or more dwelling units located in part on the second floor and no habitable room within any such dwelling unit shall have a travel distance that exceeds 50 feet from the outside of the habitable room entrance door to the inside of the entrance door to the dwelling unit.

(d) All rooms and spaces having an occupant load greater than 50 or in which the travel distance exceeds 75 feet shall have a minimum of two egress doorways.

1. The following are exceptions to (d) above:
  - i. Storage rooms having a maximum occupant load of 10;
  - ii. Classrooms having a maximum occupant load of 75 in buildings equipped throughout with an automatic fire suppression system;
  - iii. In buildings of Use Group I-2, any patient sleeping room or suite of rooms greater than 1,000 square feet shall have a minimum of two egress doorways.

(e) When buildings of Use Groups A-2 and A-3 have more than two individual rooms which can be used for separate functions and each room has an occupant load of more than 300, the required egress doors from such rooms shall lead directly outside or to an exit passageway.

1. Such passageways shall be completely enclosed by assemblies having a fire-resistance rating of not less than two hours.
2. Such passageways shall not be used for any other purpose and shall lead directly outside.

(f) The capacity of means of egress in each story shall be sufficient for the occupant load thereof.

1. The capacity per unit of egress width shall be computed in accordance with the Table 5:18-4.11(f)1 for the specified use groups.

Table 5:18-4.11(f)1  
CAPACITY PER UNIT EGRESS WIDTH

Use group	Without fire suppression system Number of occupants		With fire suppression system Number of occupants	
	Stairways	Doors, Ramps and Corridors	Stairways	Doors, Ramps and Corridors
A	75	100	113	150
B	60	100	90	150
E	75	100	113	150
F	60	100	90	150
H	—	—	60	100
I-1	60	100	90	100
I-2	22	30	35	45
I-3	60	100	90	150

Use group	Without fire suppression system Number of occupants		With fire suppression system Number of occupants	
	Stairways	Doors, Ramps and Corridors	Stairways	Doors, Ramps and Corridors
M	60	100	90	150
R	75	100	113	150
S	60	100	90	150

2. The unit of egress width for all approved types of means of egress parts and facilities shall be 22 inches with a credit of one half unit for each 12 inches width in addition to one or more 22 inch units. Fractions of a unit of width less than 12 inches shall not be credited.

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 5:18-4.11(f)3.

- i. With the exception of Use Group A occupancies, the occupant load may be increased to the total number of occupants for which exit capacity is provided as determined by (f)1 above provided the resulting total occupant load shall not exceed one occupant per five square feet of net floor area over the entire use.

Table 5:18-4.11(f)3  
Floor Area Per Occupant

Use	Occupant Load Factor in square feet per occupant
Assembly	
Fixed seating	Note 1
Tables and chairs	15 net
Chairs only	7 net
Dance floors	7 net
Standing space	5 net
Waiting space (Note 2)	3 net
Bowling centers	
Lanes	5 persons per assembly above
Other areas	
Business	100 gross
Educational	
Fixed seating	Note 1
Classrooms	20 net
Shops and vocational areas	50 net
Industrial	100 gross
Institutional	
Inpatient treatment	240 gross
Outpatient	100 gross
Sleeping rooms	120 gross
Library	
Reading room	50 net
Stack area	100 gross
Mercantile	
Grade floor or basement	30 gross
All other floors	60 gross
Storage, stock, shipping	300 gross
Parking garages	200 gross
Residential	200 gross
Storage areas, mechanical equipment room	300 gross

Note 1. The occupant load for that portion of an assembly area having fixed seats shall be determined by the number of fixed seats installed. Capacity of seats without dividing arms is one person per 18 inches. For booths, one seat equals 24 inches. One person is allowed for each fixed seat with dividing arms or fixed stand alone stool.

Note 2. Waiting space means that space in an assembly occupancy where persons are admitted to the building at times when seats are not available to them and are allowed to wait in a lobby or similar space until seats are available. Such use of the lobby or similar space shall not encroach upon the required clear width of exits.

(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.

(h) The length of a dead end corridor shall not exceed 35 feet.

1. The following are exceptions to (h) above:

i. The maximum length of a dead end corridor shall be 50 feet in buildings equipped throughout with an automatic fire alarm system installed in accordance with the New Jersey Uniform Construction Code.

ii. The maximum length of a dead end corridor shall be 70 feet in buildings equipped throughout with an automatic fire suppression system installed in accordance with the New Jersey Uniform Construction Code.

(i) All means of egress shall be provided with artificial illumination as follows:

1. All means of egress in other than buildings of Use Group R-3 shall be equipped with artificial lighting facilities to provide the intensity of illumination herein prescribed continuously during the time that conditions of occupancy of the building require that the exits be available. Lighting shall also be provided to illuminate the exit discharge in all buildings other than Use Groups F, H and S. In buildings of Use Group R-2, means of egress lighting, except that lighting within a dwelling unit, shall be wired on a circuit independent of circuits within any dwelling unit. The disconnecting means and overcurrent protection device shall not be located within a dwelling unit or such that access must be obtained by going through a dwelling unit.

2. The intensity of light at floor level shall be not less than one foot candle.

3. In buildings of Use Groups A and E used for the exhibition of motion pictures or other projections by means of directed light, the illumination of aisles may be reduced during such period of projection to not less than 0.2 foot candle.

i. The lighting of exits, aisles and auditoriums shall be controlled from a location inaccessible to unauthorized persons. Supplementary control shall also be provided in the motion picture projection room.

(j) Means of egress lighting shall be connected to an emergency electrical system conforming to NFPA 70 (National Electrical Code) to assure continued illumination for a duration of not less than one hour in case of primary power loss in all buildings, rooms, or spaces required to have more than one exit or exit access.

(k) In all buildings, rooms or spaces required to have more than one exit or exit access, all required means of egress shall be indicated with approved internally illuminated or self-luminous signs reading "Exit", visible from the exit access and, when necessary, supplemented by directional signs in the exit access indicating the direction and way of egress. All "Exit" signs shall be located at exit doors or exit access areas, so as to be readily visible.

1. Exceptions to (k) above:

i. Exit signs shall not be required in buildings of Use Groups I-1, R-2 and R-3 having a total occupant load, excluding staff, of 20 or less.

ii. Exit signs shall not be required when the second means of egress is a fire escape that is accessed directly from the individual sleeping rooms.

iii. Approved main exterior doors that are clearly identified as exits are not required to have "Exit" signs.

2. "Exit" signs shall have red or green letters at least six inches high and the minimum width of each stroke shall be three-quarter inch on a white background or in other approved distinguishable colors. If an arrow is provided as part of an "Exit" sign, the construction shall be such that the arrow direction cannot be readily changed. The word "Exit" shall be clearly discernible when the internally illuminated sign is not energized.

3. Each sign shall be illuminated by a source providing not less than five foot candles at the illuminated surface.

i. Exception to (k)3 above: Approved self-luminous signs which provide evenly illuminated letters shall have a minimum luminance of 0.06 foot lamberts.

4. All "Exit" signs shall be illuminated at all times when the building is occupied. To assure continued illumination for a duration of not less than one hour in case of primary power loss, the "Exit" signs shall be connected to an emergency electrical system.

i. Exception to (k)4 above: Approved self-luminous signs which provide continuous illumination independent of external power sources need not be connected to an emergency electrical system.

(l) Means of egress doors shall conform to the following:

1. All egress doors serving an occupant load greater than 50 shall swing in the direction of exit travel;

2. In building of Use Groups R-1 and R-2 all doors opening onto a passageway at grade or exit stair shall be self-closing or automatic closing by listed closing devices.

3. All dwelling unit, guest room or rooming unit corridor doors in buildings of Use Groups R-1, R-2, and I-1 shall be at least 1  $\frac{3}{8}$  inch solid core wood or approved equal with approved door closers and shall not have any glass panels, other than approved wire glass in metal frames. Corridor doors shall not be constructed of hollow core wood, shall not contain louvers and shall not be of panel construction. Doors shall fit both plumb and level in frames, and be reasonably tight fitting. All replacement doors shall be 1  $\frac{3}{4}$  inch solid core wood or approved equal, unless existing frame will accommodate only a 1  $\frac{3}{8}$  inch door.

i. Existing doors meeting the requirements of Federal Housing and Urban Development Rehabilitation Guidelines No. 8 or of Section 5 of Appendix B of the BOCA Basic/National Existing Structures Code, 1984 Ed. for a rating of 15 minutes or better shall be accepted as meeting the provisions of this requirement.

(1) Modifications made to existing doors to achieve the required rating shall be conducted in accordance with the Uniform Fire Code.

ii. Existing doors in buildings provided with approved, complete automatic suppression shall be required only to provide a smoke barrier; shall not contain louvers; shall fit plumb and level; and be reasonably tight fitting.

iii. In group homes with a maximum of 15 occupants, and which are protected with an approved automatic detection system, closing devices may be omitted.

4. Buildings of Use Group I-3 having remote power unlocking capability on more than 10 doors shall be provided with an emergency power source for such locks. Power shall be arranged to automatically operate upon failure of normal power within 10 seconds and for a duration of not less than one hour.

5. All required exit doors equipped with latching devices in buildings or portions thereof of Use Group A with an occupant load greater than 100 shall be equipped with approved panic hardware by November 6, 1990.

(m) Every required exit stairway having three or more risers and not provided with handrails or in which the existing handrails are judged to be in danger of collapsing when used under emergency exiting conditions, shall be provided with handrails for the full length of the run of steps on at least one side. All exit stairways more than 66 inches wide and subject to the maximum designed occupancy load shall have handrails on both sides. Where there are no handrails or where the existing handrails must be replaced in order to correct a hazardous condition, the handrails shall be designed and installed in accordance with the provisions of the New Jersey Uniform Construction Code.

(n) Every open portion of a stair, landing, or balcony which is more than 30 inches above the floor or grade below and not provided with guards or those in which the existing guards are judged to be in danger of collapsing when used under emergency exiting conditions, shall be provided with guards. Where there are no guards or where the existing guards must be replaced in order to correct a hazardous condition, the guards shall be designed and installed in accordance with the New Jersey Uniform Construction Code.

(o) In all buildings of Use Group R-1 and R-2 all transoms shall be either glazed with  $\frac{1}{4}$ " wire glass set in metal frames and permanently secured in the closed position or sealed with materials consistent with the corridor construction. Any other sash, grill or opening in a corridor, and any window in a corridor not opening to the outside air, shall be sealed with materials consistent with the corridor construction.

Amended by R.1987 d.247, effective June 15, 1987.

See: 18 N.J.R. 1225(a), 19 N.J.R. 1078(a).

Substantially amended.

Amended by R.1989 d.556, effective November 6, 1989.

See: 21 N.J.R. 2431(a), 21 N.J.R. 3453(a).

Changes made at (a)1 and (l)2, 3, and new 5.

Amended by R.1992 d.104, effective March 2, 1992.

See: 23 N.J.R. 3552(a), 24 N.J.R. 739(a).

Text on transoms added at (o).

Amended by R.1993 d.197, effective May 3, 1993.

See: 25 N.J.R. 393(a), 25 N.J.R. 1868(a).

Added (a)3, Table (f)3 and (g); occupant load specified at (f)3.

Amended by R.1995 d.59, effective March 6, 1995.

See: 26 N.J.R. 4249(a), 27 N.J.R. 891(a).

#### Case Notes

Owner of three-unit building would be required to bring her property into compliance with fire safety regulations. Iadipaoli v. Bureau of Housing Inspection, 96 N.J.A.R.2d (CAF) 115.

Unabated fire-safety and other violations warranted imposition of \$6,750 in penalties against landlord. 804 Ocean v. Community Affairs, 95 N.J.A.R.2d (CAF) 17.

#### 5:18-4.12 Interior finish

(a) The interior finish of walls and ceilings shall have a flame spread rating not greater than the class prescribed by Table 5:18-4.12(a).

1. The following are exceptions to (a) above:

i. The use of vinyl or paper wall coverings not exceeding  $\frac{1}{8}$ th of an inch in thickness which is applied directly to a noncombustible or fire retardant treated wood substrate shall not be regulated by this section.

ii. Interior trim which does not exceed 10 percent of the aggregate wall and ceiling area of any room or space shall not be regulated by this section.

iii. When an approved automatic fire suppression system is provided, interior finish of Class II or III materials shall be permitted where Class I or II materials, respectively, are required by this section.

iv. Exposed portions of structural members complying with the requirements for heavy timber construction in accordance with the Uniform Construction Code shall not be regulated by this section.

See: 18 N.J.R. 1225(a), 19 N.J.R. 1078(a).

Additions to table and (d) added.

Correction to rule, see 19 N.J.R. 1190(a).

Amended by R.1993 d.197, effective May 3, 1993.

See: 25 N.J.R. 393(a), 25 N.J.R.

Interior finish requirements include all use groups; educational facilities and hotels must meet requirements for enclosed rooms.

Table 5:18-4.12(a)

Interior Finish Requirements

Use Group	Exit Enclosures	Exit Access Enclosures	Rooms or Spaces
A †, E, I, R-1	I	II	III
All Other Use Groups	I	II	No Minimum

† See N.J.A.C. 5:18-4.16(a)2 for amusement buildings.

(b) The classification of interior finishes referred to herein corresponds to flame spread ratings determined by ASTM E84 as follows: Class I flame spread, 0-25; Class II flame spread, 26-75; Class III flame spread, 76-200. In all cases, the smoke developed rating determined by ASTM E84 shall not exceed 450.

(c) All existing interior finish materials which do not comply with the requirements of this section shall be removed or shall be treated with an approved fire retardant coating in accordance with the manufacturer's instructions to secure compliance with the requirements of this section.

(d) In buildings of Use Group I-3, interior furnishings, drapes, curtains, carpeting, decorations, bedding, etc. shall be flame retardant.

Amended by R.1987 d.247, effective June 15, 1987.

**5:18-4.13 Protection of interior stairways and other vertical openings**

(a) All interior stairways and other vertical openings connecting more than six floor levels shall be enclosed with approved assemblies having a fire resistance rating of not less than two hours with approved opening protectives.

(b) All interior stairways and other vertical openings connecting four to six floor levels shall be enclosed with approved assemblies having a fire resistance rating of not less than one hour with approved opening protectives.

(c) Interior stairways and other vertical openings connecting no more than three levels shall be enclosed with approved assemblies and opening protectives having a fire resistance as follows:

1. In Use Group A, a minimum 30 minute fire barrier shall be provided to protect all interior stairways and other vertical openings not exceeding three stories. Such fire barrier may be omitted:

i. When connecting the main floor and mezzanines; or

ii. When all the following conditions are met: