



## CHAPTER 10 DRUMS FOR DERRICK LOAD AND BOOM HOISTS

### §10-01 Requirements.

Drums for derrick load and boom hoists shall be contained on the same bed frame [*sic*] operated independently by one or more engines.

Each drum shall have a separate hand brake and clutch or power down mechanism in lieu of a clutch, as well as a positive dog on the drum and a dog on the brake pedal.

The hoisting mechanism shall be in full view and under the control of a licensed hoisting machine operator at all times.

## CHAPTER 11 ELEVATORS, ESCALATORS, PERSONNEL HOISTS AND MOVING WALKS

### §11-01 Rules for the Certification and Qualification of Private Elevator Inspection Agencies and for the Performance of Inspections and Filing of Inspection Reports for Elevators and Escalators by such Agencies.

(a) *Certificates of approval for agency directors.* (1) A Certificate of Approval for an agency director shall be the written authorization of the commissioner to an individual who shall be the responsible representative of an entity, who carries on her, his or its business as an independent contractor that witnesses tests and inspects elevators, escalators and related equipment. Each private elevator inspection agency shall have one or more directors who supervise the operations of the agency and hold a certificate of approval from the Department of Buildings.

(2) In order to be granted an agency director's certificate of approval, an applicant must:

(i) have a minimum of ten (10) years of experience within the last fifteen (15) years immediately preceding the date of the application for a Certificate of Approval, or a minimum of five (5) years experience within the last seven (7) years immediately preceding the date of the application for a Certificate of Approval if applicant is a New York State licensed Professional Engineer or Registered Architect, in the supervision of the assembly, installation, maintenance, repair, design or inspection of elevators; and

(ii) demonstrate to the commissioner's satisfaction, including performance on any written or oral tests the Commissioner may require, that the applicant is sufficiently familiar with the construction and maintenance of elevators, escalators and related equipment within the provisions of Subchapter 18 of Chapter 1 of Title 27 of the Administrative Code and Reference Standard 18; and

(iii) demonstrate to the commissioner's satisfaction that the applicant is of good moral character so as not to adversely impact upon his or her fitness to conduct a private elevator inspection agency; and

(iv) furnish payment to the Department for the actual cost of conducting a background investigation of the applicant.

(3) The applicant must complete such questionnaires and provide such supporting data as the commissioner may require including but not limited to a Private Elevator Inspection Qualification/Background form ("qualification/background form") provided by the Department of Buildings which describes, among other things, the applicant's required experience history as follows: job title or capacity of employment; license, if any; name and address of each employer; length of service for each employer; and any criminal convictions. The applicant shall then submit the completed qualification/background form to the Licensing Division.

(4) Prior to the department's issuance of a certificate of approval for the agency director, the applicant shall submit the following to the Licensing Division;

- (i) the completed qualification/background form and supporting data as the commissioner may require;
- (ii) the filing fee specified in §26-213(c)(a) of the Administrative Code and the actual cost of conducting a background investigation of the applicant;
- (iii) a copy of the inspection agency's general liability insurance policy for the amount of one million dollars (\$1,000,000), with coverage provided for the term of the certificate of approval naming the New York City Department of Buildings, Licensing Division as an additional insured on said insurance certificate;
- (iv) documentation indicating compliance with the provisions of the New York State Worker's Compensation Law; and

(iv) a current business address, which the applicant is responsible for keeping updated.

(5) After the applicant has complied with paragraphs 1 through 4 above, the department shall issue to the applicant an agency Director's Certificate of Approval. The preceding provisions notwithstanding, the commissioner may refuse to issue such a Certificate of Approval for any of the reasons specified as a grounds for revocation or suspension set forth in subsection (e) below. Each agency director shall supervise the operations of only one private elevator inspection agency.

(b) *Certificates of approval for agency inspectors.* (1) A Certificate of Approval for an inspector shall be the written authorization of the commissioner to an individual to conduct periodic inspections of elevators, escalators and related equipment and who shall be employed and supervised by a director who holds a Certificate of Approval from the Department of Buildings or who shall be employed by a person or entity who carries on her, his or its business as an independent contractor to witness tests and inspect elevators, escalators and related equipment. Every inspector employed by a private elevator inspection agency shall hold a certificate of approval from the Department of Buildings.

(2) In order to be granted an inspectors' certificate of approval, an applicant must:

- (i) have a minimum of five (5) years of satisfactory experience, within the last seven (7) years immediately preceding the date of application to a certificate of approval, in the assembly, installation, repair, design, or inspection of elevators, or as an elevator mechanic;
- (ii) demonstrate to the commissioner's satisfaction, including performance on any written or oral tests the Commissioner may require, that the applicant is sufficiently familiar with the construction and maintenance of elevators, escalators and related equipment within the provisions of Subchapter 18 of Chapter 1 of Title 27 of the Administrative Code and Reference Standard 18; and
- (iii) demonstrate to the commissioner's satisfaction that the applicant is of good moral character so as not to adversely impact upon his or her fitness to conduct elevator inspection; and
- (iv) complete a questionnaire and provide supporting data as the commissioner may require; and
- (v) furnish payment to the Department for the actual cost of conducting a background investigation of the applicant.

(3) The applicant must complete such questionnaires and provide such supporting data as the commissioner may require including but not limited to a Private Elevator Inspection Qualification/Background form ("qualification/background form") provided by the Department of Buildings which describes the applicant's required experience history as follows: job title or capacity of employment; license, if any; name and address of each employer; length of service for each employer; and any criminal convictions. The applicant shall then submit the completed qualification/ background form to the Licensing Division.

(4) Prior to the department's issuance of a certificate of approval for an agency inspector, the applicant shall submit the following to the Licensing Division:

- (i) the completed qualification/background form and supporting data as the commissioner may require;
- (ii) the filing fee specified in §26-213(c)(a) of the Administrative Code and the actual cost of conducting a background investigation of the applicant;
- (iii) a current business address, which the applicant is responsible for keeping updated.

(5) After the applicant has complied with paragraphs 1 through 4 above, the department shall issue to the applicant an agency inspector's certificate of approval. The preceding provisions notwithstanding, the commissioner may refuse to issue such a Certificate of Approval for any of the reasons specified as a grounds for revocation or suspension set forth in subsection (e) below. Private elevator inspectors who are employed by more than one private elevator inspection agency must have a certificate of approval for each agency by which they are employed. In such cases, an inspector shall submit a separate qualification/background form and pay a separate filing fee for each agency by which he or she is employed.

(c) *Department listings of private inspection agencies.* (1) Each private inspection agency shall furnish the

Department of Buildings, Licensing Division with a list of directors and inspectors, its certificate of approval numbers, a complete table of organization(s), including identification of persons or titles, and a current business address. This information shall be set forth on letterhead bearing the name and address of the private elevator inspection agency.

(2) Notification of any changes in the information required to be furnished to the Department by subsection (c)(1) shall be sent to the Licensing Division by certified mail within five (5) days of the change.

(3) All private inspection agencies must have a legal place of business within the City of New York. A post office box in New York City is not acceptable.

(d) *Renewal of Certificates.* (1) Every certificate of approval provided for in this section shall be renewed in person within thirty (30) days prior to its December 31 expiration date.

(2) Prior to the renewal of a certificate of approval for an agency director, the director shall submit the following to the Department of Buildings Licensing Division:

- (i) the renewal fee specified in §26-213(c)(a) of the Administrative Code; and
- (ii) a copy of the inspection agency's general liability insurance policy for the amount of one million dollars (\$1,000,000), with coverage provided for the renewal term of the director's certificate of approval, naming the New York City Department of Buildings, Licensing Division as an additional insured on said insurance certificate; and
- (iii) documentation indicating compliance with the provisions of the New York State Worker's Compensation Law; and
- (iv) documentation demonstrating to the commissioner's satisfaction that the applicant continues to be of good moral character so as not to adversely impact upon his or her fitness to conduct a private elevator inspection agency.

(3) Prior to the renewal of a certificate of approval for an agency inspector, the inspector shall submit to the Department of Buildings, Licensing Division:

- (i) the renewal fee specified in §26-213(c)(a) of the Administrative Code; and
- (ii) documentation demonstrating to the commissioner's satisfaction that the applicant continues to be of good moral character so as not to adversely impact upon his or her fitness to conduct elevator inspections.

(4) After the director or inspector has complied with the requirements stated above, the department shall issue a renewal of the director's or inspector's certificate of approval. The preceding provisions notwithstanding, the commissioner may refuse to issue a renewal of a director's or inspector's Certificate of Approval for any of the reasons specified as a grounds for revocation or suspension set forth in subsection (e) below.

(5) Agency directors and inspectors not renewing their certificates of approval by December first of each year shall be subject to the late fee specified §26-213(c)(b) of the Administrative Code. Those agency directors and inspectors not renewing their certificates of approval by January 1 shall be suspended until the applicable late fees are paid. In the event a director or inspector's certificate of approval has lapsed for a period of five (5) years or more, the director or inspector must submit to the Department and follow the procedures for a new application.

(e) *Suspension or revocation of agency directors' or inspectors' certificates.*

(1) The commissioner or his or her designee may suspend or revoke an Agency Director's or Inspector's Certificate of Approval or impose a fine not to exceed five thousand dollars upon a finding of any of the following:

- (i) fraud or deceit in obtaining a Certificate of Approval or renewal thereof;
- (ii) the making of a false or misleading statement on any form or report filed with the Department or failure to file a statement, report or form required by the law of [sic] the Department;
- (iii) the willful impeding or obstruction of the filing of a statement, report or form of another;
- (iv) fraudulent dealings;

- (v) negligence, incompetence, lack of knowledge of the Building Code, or disregard for the Building Code, as demonstrated in the performance of elevator inspections or the submission of any form or report filed with the Department;
  - (vi) exhibiting a practice of failing to timely or properly carry out the inspection of elevators;
  - (vii) engaging or assisting in any act that endangers the public safety and welfare;
  - (viii) failure to comply with or abide by an order of the commissioner;
  - (ix) in the case of an agency Director, delegating inspectorial duties to a person who the agency director knows or has reason to know is not qualified to inspect elevators;
  - (x) poor moral character that adversely impacts upon the individual's fitness to conduct a private elevator inspection agency or elevator inspections;
  - (xi) the conviction for a criminal offense where the underlying act arises out of that individual's professional dealings with the City of New York or with any other governmental entity;
  - (xii) engaging in any other conduct evidencing a willful or negligent failure to comply with provisions of federal, state or local law, or rules or regulations promulgated pursuant to statutory authority;
  - (xiii) one or more violations of any provisions of Title 26, Chapter One of [*sic*] Title 27, Chapter One of the Administrative Code or rules adopted pursuant to such provisions related to elevator inspections.
- (2) Where the commissioner or his or her designee, in his or her discretion, deems that there is probable cause to believe that the Certificate of Approval of the agency director and/or inspector should be suspended or revoked or that the director and/or inspector should be fined, unless otherwise provided, charges shall be preferred by the Department's IAD Unit and served by mail upon the appropriate party. The director and/or inspector shall be entitled to a hearing before the Office of Administrative Trials and Hearings, to be held in accordance with the provisions of Title 48 of the Rules of the City of New York, as provided by rules promulgated by the Department.
- (3) Where the commissioner or his or her designee, in his or her discretion, deems that there is probable cause to believe that the continued Certificate of Approval of the agency director and/or inspector will create a condition of imminent peril to public safety, the suspension or revocation shall be effective immediately pending a hearing to be held as soon as practicable in light of the circumstances before the Office of Administrative Trials and Hearings.
- (f) *Performance of inspections and filings of inspection reports.* (1) In compliance with Section 27-1000 of the Administrative Code, the mandated periodic inspection of every new and existing elevator, escalator and related equipment listed in the Building Code shall be performed by an inspector who holds a Certificate of Approval from the Department and who is supervised by a director who holds a Certificate of Approval from the Department.
- (2) The mandated periodic inspection must be performed between January 1 and September 15 of each year.
- (3) Each inspection or witnessed test of an elevator or escalator performed by an inspection agency shall be recorded on forms prescribed by the commissioner. Each such form shall confirm that the elevator, escalator and/or related equipment was inspected or the test was witnessed by the holder of a Certificate of Approval and shall be signed by the inspector who performed the inspection or witnessed the test, the agency director and building owner. Agency directors shall include their Certificate number on the form. The forms are to be completed legibly at the time of inspection. The completed and signed forms shall be forwarded to the building owner within five (5) calendar days after the inspection and to the Department's Elevator Division within fourteen (14) calendar days after the inspection.

- (4) After each inspection or test, the inspector shall affix the inspection date and his/her signature over a stamp identifying his/her private inspection agency and his/her Certificate of Approval number on the elevator car or escalator inspection certificate.
- (5) During inspection and after testing, all parts of the equipment shall be inspected to determine that they are in safe operating condition and that parts subject to wear have not worn to such an extent as to affect the safe operation of the installation.
- (6) If an inspection reveals that any elevator or escalator is unsafe or hazardous to life and safety, the device is to be taken out of service immediately by the inspection agency. The building owner shall be notified immediately. In addition, a copy of such notification shall be sent by certified mail to the Department of Buildings, Elevator Division within 24 hours.

**§11-02 Elevator and Escalator Violations Constituting a Condition Dangerous to Human Life and Safety.**

(a) *Dangerous conditions.* Any of the following elevator and escalator violations constitute a condition dangerous to human life and safety.

- (1) Elevator out-of-service when there is only one elevator in the building or building section.
- (2) Fireman service not functioning in premises.
- (3) Badly worn, defective, or damaged hoist cables and/or governors cables.
- (4) Defective hoistway doors.
- (5) Defective hoistway door interlocks.
- (6) Defective car door/gate.
- (7) Defective car door/gate switch.
- (8) Defective/missing vision panels.
- (9) Defective car safety devices.
- (10) Defective brake assembly.
- (11) Defective hoist machine.
- (12) Defective selector/assembly.
- (13) Missing top emergency covers.
- (14) Defective escalator fire shutters.
- (15) Defective escalator comb plates.
- (16) Defective escalator stop switch.
- (17) Excessive escalator skirt panel clearances.
- (18) Defective or non-functional safety switches.
- (19) Badly worn, defective, or damaged relays or controllers and/or selector.
- (20) Defective, badly worn, or damaged car safety device parts.
- (21) Defective car and/or counterweight buffers.
- (22) Any damaged, badly worn or defective equipment, which could result in elevator breakdown.

(b) *Civil penalties.* In the event any person fails to remove any of the violations listed in these rules, after having been served with a notice personally or by a certified mail indicating that removal of such condition exists and requiring such removal or compliance unless the removal of such condition is prevented by a labor dispute or is the result of vandalism beyond the control of the owner, he shall be liable for civil penalty of not less than one hundred fifty dollars per day commencing on the date of the service of such notice and terminating on the date that such removal or compliance has been substantially completed in addition to other penalties set forth in law. When service of such notice is made by mail to the owner, civil penalties as herein provided shall commence five days from the date of such mailing.

(c) *Discontinuance of action upon removal of violation.* Where a notice requiring removal of a violation listed in these rules has been issued, liability shall cease and the corporation counsel, on request of the commissioner, shall discontinue prosecution only if the removal or compliance so required has been completed or substantially completed within ten days after the service of such notice. The commissioner shall, upon good cause shown, grant additional time for such removal or compliance. In addition, the civil penalties shall be tolled from the date the owner certifies under oath, on [sic] a form prescribed by the commissioner, that the removal of the violation has been substantially completed. If subsequent inspection by the department shows a failure to have removed the violation, the civil penalties shall be deemed to have accrued as of the first day notice of violation has been served.

**§11-03 Cease Use Orders for Elevators, Personnel Hoists, Escalators and Moving Walks.**

A cease use order should be issued for all elevators, personnel hoists, escalators, and moving walks pursuant to §26-127 of the Administrative Code of the City of New York whenever an imminently hazardous condition exists. In addition, the device should be tagged as unsafe. This tag may not be removed without prior approval from the Department of Buildings. Such imminently hazardous conditions include but are not limited to:

- (a) Elevator running with an open hoistway door or car gate/door.
- (b) Elevator running with broken or non-functioning upper or lower final hoistway or machine limit switches.
- (c) Hoistway or car door vision glass and grille guard missing.
- (d) Unraveling or broken hoist, counterweight, governor or compensation cables.
- (e) Missing hoistway door or car door gibs.
- (f) Inoperable governor.
- (g) Elevator running with non-functioning interlock.
- (h) Emergency top exit cover missing (passenger elevator).
- (i) Side emergency exit door open (passenger elevator).
- (j) Emergency stop switch not working (automatic elevator, [*sic*] escalator or moving walk).
- (k) Directional switch not working (escalator or moving walk).
- (l) Other imminently hazardous conditions as observed by the inspector.

**§11-04 Separability.** If any of the provisions of these rules are found by a court of competent jurisdiction to be invalid or ineffective in whole or in part, the effect of such decision shall be limited to those provisions that are expressly stated in the decision to be invalid or ineffective, and all other provisions of these rules shall continue to be separately and fully effective.

**§11-05 Certification of Completion of Work after Issuance of Temporary Use Permit for an Elevator, Escalator and other Device, Except Amusement Devices, Listed in §§27-184(b) or 27-982 of the Administrative Code.**

- (a) Where the department has issued a temporary use permit pursuant to §27-188 of the Administrative Code for an elevator, escalator or other device listed in §27-185(b) and § 27-982 of the Code subject to the completion of alteration or installation work as specified by the department, a certified elevator inspection agency director, professional engineer or registered architect may certify to the department that such work has been completed in conformity with the requirements of Subchapter 18 of Chapter 1 of Title 27 and Reference Standard 18-1. The department shall issue an equipment use permit upon the satisfactory filing of such certification.
- (b) This section shall not apply to amusement devices.

**§11-06 Elevators, Escalators or Other Devices, Except Amusement Devices, Listed in §27-185(b) or §27-982 of the Administrative Code, Renewal of Temporary Use Permits and Fees.**

- (a) *Renewal of a temporary use permit for an elevator, escalator or other device, except amusement devices, listed in §27-185(b) or §27-982 of the Administrative Code.*
  - (1) A temporary use permit issued pursuant to §27-188 of the Administrative Code for an elevator, escalator or other device listed in §27-185(b) or §27-982 of the Code may be renewed subject to the following:
    - (i) Each renewal application shall be submitted on forms furnished by the department not later than five business days prior to the expiration date of the temporary use permit;
    - (ii) Such application shall state the reason for renewal and be accompanied by the required fee as set forth in subdivision (3) of this section; and
    - (iii) Such application shall be submitted on behalf of the owner and signed by the owner or its authorized representative.
  - (2) The commissioner will automatically renew a temporary use permit every thirty days for up to 120 days unless informed otherwise by the applicant. After 120 days, a renewal application must be filed and accompanied by the required fee.
  - (3) The department may require a department inspection prior to the issuance of a renewal.
  - (4) Each application for renewal shall be accompanied by a fee of \$100 per device.

- (b) *Failure to keep or be prepared for scheduled appointment.*
- (1) Scheduled appointments for the inspection or tests of an elevator, escalator or other device listed in §27-185(b) and §27-982 of the Code may be canceled provided that notice of cancellation is received by the department no later than 3 business days prior to the scheduled appointment.
  - (2) Where a department inspector arrives at the site of a scheduled inspection or test and is unable to perform the scheduled inspection or witness the test because the owner or its authorized representative has failed to keep or is unprepared for the scheduled appointment, then the department shall impose a fee for the missed appointment in the amount of \$200. The fee shall be due and payable within thirty days after the date of the missed appointment or prior to the scheduling of a new appointment, whichever is earlier.
- (c) *Pre-inspection clearance.* (1) An owner or its authorized [*sic*] representative may request the department to perform a pre-inspection clearance of an elevator, escalator or other device listed in §27-185(b) and §27-982 of the Administrative Code within five business days of the department's receipt of such request and payment of the required fees set forth in subdivision (2) of this section. The department reserved the right to schedule the requested pre-inspection clearance during non-regular or off-peak hours.
- (2) A request for a pre-inspection clearance shall be accompanied by a non-refundable fee in the amount of \$200 per device.
- (d) This section shall not apply to amusement devices.

## CHAPTER 12 EMERGENCY POWER SYSTEMS

### §12-01 Emergency Power System Requirements.

- (a) *Applicability.* – Pursuant to Article 11 of subchapter 6 of Chapter 1 of Title 27 of the Administrative (Building) Code, as enacted by Local Law 16 for the year 1984, these rules and regulations shall apply to emergency power systems associated with emergency fire protection equipment when required to be provided in new and existing buildings pursuant to applicable provisions of the Building Code, the Building Code Reference Standards and the Rules of the City of New York.
- (1) These rules shall not apply to occupant optional sources of emergency power that provide support for sources supplying emergency power to emergency fire protection equipment only in the event of failure of the sources of emergency power.
  - (2) These rules shall not apply to emergency power systems installed pursuant to plans approved prior to October 1, 1984 unless construction pursuant to any such plans had not begun prior to April 1, 1986.
  - (3) Subdivisions (h), (n) and (o) shall not apply to required emergency power systems for which applications were filed prior to September 9, 1998.
  - (4) Subdivision (p) shall not apply to required emergency power systems for which applications were filed prior to the effective date of this amendment.
- (b) *Definition* - As used in these rules, “emergency fire protection equipment” shall mean that equipment listed in Section 27-396.4 of the Administrative Code.
- (c) *General equipment requirements.* Emergency power systems shall have a power source and fuel supply sufficient to operate the following equipment:
- (1) *Fire pumps and booster pumps.* Manual, automatic special service pumps and sprinkler booster pumps.
    - (i) Overcurrent protection shall be provided at the emergency generator side of the power distribution system and shall be rated at least 150% of motor full load current.
    - (ii) Feeder conductors on the emergency generator side of the power distribution system shall be sized at least 125% of motor full load current.
    - (iii) Automatic transfer switches shall be located in the same room as the pumps and shall be an integral part of the pump controller.
  - (2) *Elevators.* Three elevators at one time, with manual transfer to all other elevators.
    - (i) The shaft arrangement shall permit any floor to be served by three elevators - only two of which may be in the same shaft.
    - (ii) It shall be possible to select from all of the elevators (with more than 25 feet travel) any combination of three cars for simultaneous operation in the emergency power mode, and to readily change this selection for firefighting or building evacuation purposes.

(iii) The selection of cars shall be accomplished manually from the elevator dispatcher's panel or from a satellite elevator panel if the main panel is not at, or adjacent to, the lobby Fire Command Station.

(iv) Interlocking shall be provided to prevent more than the intended number of cars from operating simultaneously in the emergency power mode.

(3) Alarm systems.

(4) Communication systems.

(5) Emergency lighting, if battery packs are not provided.

(6) Ventilating systems used for smoke venting or control.

(7) Stair pressurization.

(8) *Gas fired equipment.* The construction and installation of gas fired equipment shall comply with Article 16 of Subchapter 14 of Chapter 1 of Title 27 of the Administrative Code.

(9) *Fuel oil equipment.* Fuel oil equipment shall comply with Article 17 of Subchapter 14 of Chapter 1 of Title 27 of the Administrative Code

(d) *Responsibility.* The design of the emergency power system shall be the responsibility of the Licensed Professional Engineer or Registered Architect.

(e) *Engineering design.* - The emergency power systems shall be designed in accordance with generally accepted engineering practice, the Administrative (Electrical) Code and Bureau of Electrical Control Rules and Regulations.

(f) *Capacity.*

(1) The emergency generator fuel supply shall be sufficient to supply the total emergency power load for a period of at least six (6) hours.

(2) If battery packs are used for emergency lighting, they shall comply with the requirements of the Bureau of Electrical Control.

(g) *Automatic transfer switch features.*

(1) *Time delay on starting of alternate power source.* A time delay device may be provided to delay starting of the alternate source generator. The timer is intended to prevent nuisance starting of the alternate source generator with subsequent load transfer in the event of harmless momentary power dips and interruptions of the normal source. The time range must be short enough so that the generator can start and be on the line within 30 seconds of the onset of failure.

(2) *Time delay on transfer to alternate power.* An adjustable time delay device shall be provided for those transfer switches requiring "delayed automatic" operation. The time delay shall commence when proper alternate source voltage and frequency are achieved. The delay device shall prevent transfer to the alternate power source until after expiration of the preset delay.

(3) *Time delay on retransfer to normal power.* An adjustable timer with a bypass shall be provided to delay retransfer from the alternate source of power to the normal. This timer will permit the normal source to stabilize before retransfer to the load and help to avoid unnecessary power interruptions. The bypass shall permit automatic retransfer in the event that the alternate source shall fail and the normal source is available.

(4) *Test switch.* A test switch shall be provided on each automatic transfer switch that will simulate a normal power source failure to the switch.

(5) *Indication of switch position.* Two pilot lights, properly identified, shall be provided to indicate the transfer switch position.

(6) *Manual control of switch.* A means for the safe manual operation of the automatic transfer switch shall be provided.

(7) *Nonautomatic transfer device classification.* Nonautomatic transfer devices shall be approved for emergency electrical service.

(8) *Indication of switch position.* Pilot lights, properly identified, shall be provided to indicate the switch position.

(h) *Automatic Transfer Devices and Power Generation Feeders.*

(1) *New buildings.* - (i) All automatic transfer devices, emergency generators and emergency power generation feeders that serve required emergency fire protection equipment shall not be located in the same room as the main or primary electrical service equipment.

(ii) Any automatic transfer device that is not located at the load shall be located within an enclosed room or space that has a 2-hour fire resistance rated enclosure, and that complies with the New York City Electrical Code requirements for Electrical Closets and Switchboard Rooms or Areas. The enclosed room or space shall contain no equipment or water and/or steam piping other than sprinkler piping and equipment associated with the emergency fire protection equipment. Uninterrupted conduits not associated with the emergency generation system may pass through this room or space.

(2) *Existing buildings.* - (i) Emergency power generation feeders and automatic transfer devices that are required to be installed in existing buildings pursuant to Section 27-115 or 27-118(a) of the Administrative Code shall not be located in the same room as the main or primary electrical service equipment.

(ii) Any automatic transfer device that is not located at the load shall be remotely located or separated by 2-hour fire resistance rated construction from the emergency generator and any fuel burning equipment.

(i) *Ventilating Air.* Provision shall be made to provide air adequate to replenish engine combustion and adequate for rejection of engine generated heat.

(j) *Application.* The emergency power system shall be filed with the following application: Plumbing, Mechanical Equipment and Tank Installation; Miscellaneous B Form 8.

(k) *Certificate of Electrical Inspection.* A licensed electrician shall file an application for a Certificate of Electrical Inspection with the Bureau of Electrical Control for the Emergency Power System.

(l) *Registration.* Emergency power generation equipment shall be registered with the Department of Environmental Protection, Bureau of Air Resources, in accordance with the requirements of §24-109 of the Administrative Code.

(m) *Inspection and test.* Generator sets serving Emergency Power Systems shall be inspected and tested monthly under the supervision of any of the following:

(1) A Licensed Professional Engineer or Registered Architect.

(2) An electrician licensed by the Bureau of Electrical Control.

(3) An electrician holding a Special License (Maintenance, for a specific building only) from the Bureau of Electrical Control.

(4) The Fire Safety Director having a Certificate of Fitness from the Fire Department.

The Stationary Engineer or Assistant Stationary Engineer having a Certificate of Fitness from the Fire Department.

(n) Emergency generators installed indoors in new buildings shall be located within a room or space that has a two (2) hour fire resistance rating enclosure. The room or space shall contain no equipment or water and/or steam piping other than sprinkler piping, equipment and fuel tanks associated with the emergency generation systems, and shall be located away from areas that may be prone to flooding or damage from other natural causes.

Emergency generators installed indoors in existing buildings shall be located within a room or space that has a two (2) hour fire resistance rating enclosure.

For new and existing buildings, uninterrupted conduits not associated with the emergency generation system may pass through this room or space. Emergency generators within such room or space may supply occupant optional loads in addition to those of the emergency fire protection equipment provided the emergency fire protection equipment loads are given the highest priority. Load shedding or other means acceptable to the Commissioner shall be used to ensure that this priority assignment is maintained under all operational conditions. Multiple generators supplying emergency fire protection equipment loads only, or emergency fire protection equipment in combination with occupant optional loads as a common system, may have common fuel supplies and other common equipment and systems. Generators dedicated only to supplying emergency fire protection equipment loads may have fuel supplies, other equipment and systems in common with generators dedicated to occupant optional loads. The fuel system for the operation of the emergency power system supplying the emergency fire protection equipment loads shall consist of an on-site fuel oil system providing a minimum of six hours capacity at full load at all times except during loss of utility power. Occupant optional loads shall be shed and emergency fire protection equipment shall restore to utility power, if available, to comply with this requirement. Means shall be provided for automatic transfer to the fuel oil supply upon loss of gas supply where dual fuel generators are used.

(o) Water-cooled emergency generators shall not rely solely upon a single city water connection. The additional source of water for cooling may be obtained from:

(i) another water main connection;

(ii) a suction tank;

(iii) a gravity tank; or

(iv) any other system acceptable to the commissioner.

(p) Circuits for emergency lighting in any area required to be provided with emergency lighting shall be arranged so that loss of normal or emergency power supply shall not reduce the available lighting levels in any of such areas below the level required for emergency lighting by applicable provisions of the Administrative Code, Reference standards or Rules of the City of New York. This may be accomplished by means of a combination of

wiring arrangement and emergency power connection.

## CHAPTER 13 ADJUDICATIONS

### Subchapter A

#### §13-01 Environmental Control Board Adjudication.

(a) *Jurisdiction.* Any violation(s) of any provision of subchapter one, two or three of chapter one of Title 26 or chapter one of Title 27 of the New York City Administrative Code ("Administrative Code") or of the Zoning Resolution of the City of New York, or of other rules and regulations ("Rules") of the Department of Buildings may be adjudicated at the Environmental Control Board ("ECB") except those provisions of law which the Commissioner of the Department of Buildings ("Commissioner") is specifically prohibited from designating for prosecution at the ECB pursuant to §26-126.4 of the Administrative Code, as amended.

(b) *Schedule of Penalties.* The maximum penalties for violations of code and/or rule are those maximum penalties set forth in the Administrative Code.

(c) *Order to certify correction.*

(1) All ECB Notices of Violations ("NOV") shall include an order of the commissioner which requires the respondent to correct the condition constituting the violation ("order to correct") and to file a certification ("certification") with the department that the condition has been corrected. A first offender served with an order to correct may avoid a hearing and penalty if such certification is filed as set forth in §26-126.2 of the Administrative Code.

The following four violations cannot be certified as corrected prior to the ECB hearing and the respondent must appear at the hearing:

- (i) A violating condition cited as hazardous;
- (ii) A violating condition cited as a second (or multiple) offense;
- (iii) A violation for filing a false certification;
- (iv) A violation for failing to certify correction.

For the above four types of violations, the respondent must appear at the ECB hearing prior to the submission of the certification to the department's Administrative Enforcement Unit.

- (2) The required certification shall be completed on the form issued with the NOV or obtained from the department's Administrative Enforcement Unit, in accordance with the instructions contained therein.
- (3) In cases in which more than one violation of code and/or rule is listed on the same NOV, the respondent may submit a single certification covering one or all of the violating conditions. The respondent must appear at the ECB hearing for all violating conditions not certified as corrected.
- (4) The certification shall be signed by the respondent and notarized by a notary public or commissioner of deeds.
- (5) Respondent shall submit true and legible copies of any and all documentary proof of compliance along with the certification.
- (6) The completed certification must be returned to:  
New York City Department of Buildings  
Administrative Enforcement Unit,  
(address provided in the City's website, <http://www.nyc.gov>.)
- (7) A certification acceptable to the department must be received by the Administrative Enforcement Unit no later than close of business thirty-five days after service of the NOV has been effectuated.

(d) *Certificate of correction review procedures.*

- (1) The Administrative Enforcement Unit shall review all Certificates and accompanying documentation to determine their acceptability.
- (2) Notification shall be issued to the respondent if the Certification is accepted. If the respondent is a first offender with a non-hazardous violation and the Certification is accepted, the respondent shall be excused from appearing at the ECB hearing and shall not be subjected to penalty.
- (3) The Administrative Enforcement Unit shall notify those respondents who submit an unacceptable certification. This notification shall inform the respondent of the defect in his/her submission and the documentation required to correct these defects.
- (4) Corrected certifications must be received by the Administrative Enforcement Unit no later than the close of business thirty-five days after service of the NOV has been effectuated.
- (5) Failure to submit an acceptable certification for all violating conditions indicated on the NOV within this time period shall require the respondent to appear at a hearing at the ECB on the date indicated on the NOV.

(e) *Stipulations.*

- (1) The commissioner may offer a stipulation to the named respondent, for a non-hazardous, first offense violation, to extend the time for compliance upon such other terms and conditions as the commissioner may prescribe. Such extended time for compliance shall be calculated from the first return date indicated on the notice of violation.
- (2) No stipulation shall take effect until it is approved in writing by the ECB.

(f) *Modification clause and savings clause.*

- (1) Whenever circumstances, conditions, limitations, or surroundings are unusual, or are such as to render it impracticable to comply with all the foregoing requirements, the commissioner may waive or modify such provisions over which she/he has jurisdiction to such extent as the commissioner may deem necessary consistent with public safety.
- (2) If any clause, sentence, paragraph, section or part of this article shall be adjudged by any court of competent jurisdiction to be invalid, such judgment shall not effect, impair or invalidate the remainder thereof, but shall be confined in its operation to the clause, sentence, paragraph, section or part thereof directly involved in the controversy in which judgment shall have been rendered.

## **Subchapter B**

### ***Rules Governing Adjudication Procedures***

**§13-11 Purpose.** (a) These rules are instituted in order to establish guidelines for the adjudication procedures of the Department of Buildings (“the Department”). Pursuant to City Administrative Procedure Act City Charter §1048, all hearings concerning the following matters under the jurisdiction of the Department will be held before the Office of Administrative Trials and Hearings and governed by the rules of procedure utilized at that tribunal:

- (1) Welder License Revocation
- (2) Boiler Operating License Revocation
- (3) Hoisting Machine Operator License Revocation
- (4) Rigger License Revocation
- (5) Sign Hanger License Revocation
- (6) Oil-Burning Equipment Installer License Revocation
- (7) Concrete Testing Laboratory License Revocation
- (8) Exclusion from the Limited Supervisory Check of [*sic*] Registered Architects or [*sic*] Licensed Professional Engineers
- (9) Civil Service Employee Disciplinary Matters, subject to §1.3 herein
- (10) Sealing orders, pursuant to §26-127(e)(i) of the New York Administrative Code.
- (11) The suspension or revocation of the registration, or the limitation of registration, of persons required to be registered with the Department pursuant to Administrative Code §27-140.1.
- (12) The suspension or revocation of the authority of any Department licensee, certified inspection agency, or any other authorized representative of the Commissioner to conduct inspections of work or participate in any self-certification program under the jurisdiction of the Department, except that such proceedings relating to Master Plumbers, Master Fire Suppression Piping Contractors, and Master Electricians may be adjudicated at OATH only upon referral by the applicable license board pursuant to paragraph (b)(i) below.
- (13) The suspension or revocation of certificates of approval for private elevator inspection agencies, directors, and inspectors certified pursuant to §11-01 of Title 1 of the Rules of the

City of New York.

(b) (1) Notwithstanding the procedures set forth in §§13-12 through 13-21 of these rules, upon referral by the Master Electricians License Board (established pursuant to §27-3009 of the Administrative Code) or the Master Plumber/Master Fire Suppression Piping Contractor License Board (established pursuant to §26-144 of the Administrative Code)(either Board hereinafter referred to as the "Board") hearings concerning the following matters may be held before the Office of Administrative Trials and Hearings ("OATH") and be governed by the rules of procedure of such tribunal:

- (i) Master Plumbers License, pursuant to Administrative Code §26-151.
- (ii) Master Fire Suppression Piping Contractor License, pursuant to Administrative Code §26-151.
- (iii) Master Electrician License, pursuant to §27-3016 of the New York City Administrative Code.

(2) After conducting an adjudicative hearing on a matter referred to it by the Board, the Administrative law judge at OATH shall issue recommended findings of fact and a recommended decision, and forward such findings and recommended decision and the record of the proceedings to the chairperson of the Board. The chairperson shall provide copies of such findings and recommendation to members of the Board at least ten days before that meeting of the Board at which action on such recommendation is scheduled to be taken. The Board shall act on such recommendations at such meeting and forward such recommendations and record, together with its own comments, if any, to the Commissioner. If the Board fails to act on a matter referred to it by OATH at such meeting, the OATH findings and recommendations shall be deemed to be adopted in full by the Board and shall be forwarded by the chairperson to the Commissioner for review. The Commissioner shall make the final determination.

(c) New York City Department of Buildings adjudications regarding the fitness and discipline of agency employees will be conducted by the Office of Administrative Trials and Hearings. After conducting an adjudication and analyzing all testimony and other evidence, the hearing officer shall make written proposed findings of fact and recommend decisions, which shall be reviewed and finally determined by the Commissioner.

### §13-12 Definitions.

**Board.** The term "board" shall hereafter mean the Master Electricians License Board established pursuant to Administrative Code §27-3009 or the license board established pursuant to Administrative Code §26-144 which has jurisdiction over licensed master plumbers and licensed master fire suppression piping contractors.

**Chairperson.** The term "chairperson" shall mean the chairperson of the board or any other person authorized to act as chairperson. In any case where the chairperson is absent, another member of the board may act as chairperson.

**Charging panel.** The term "charging panel" shall mean the panel established pursuant to Administrative Code §26-144(c) to investigate complaints and any charges arising therefrom.

**Commissioner.** The term "commissioner" shall mean the Commissioner of Buildings of the City of New York, or any person or persons he or she lawfully appoints as designee.

**Hearing panel.** The term "hearing panel" shall hereafter mean the panel established pursuant to Administrative Code §26-151(b).

**Presiding member.** The term "presiding member" shall mean the person designated by the chairman to preside at investigations and hearings. In any case where the presiding member is absent, another member of the charging panel or hearing panel may act as the presiding member.

**Quorum.** The term "quorum" shall mean the number of charging panel or hearing panel members required to be present in order to conduct investigations and hearings and shall consist of a majority of the members of the charging panel or hearing panel.

**Respondent.** The term "respondent" shall hereafter mean the holder of an electrician's license, plumber's license, master fire suppression license, or any other person or entity who is the subject of a disciplinary proceeding as hereinafter provided.

### §13-13 Pre-Hearing Procedure.

(a) Prior to the commencement of formal proceedings the Commissioner or board may, in his or their discretion, schedule a respondent for a pre-investigatory conference, pursuant to §646 of the New York City Charter, to determine the propriety of either (a) preferring charges against the respondent, or (b) determining the respondent's fitness to qualify for or hold a license, as the case may be.

**§13-14 Commencement of Disciplinary Proceedings.** (a) A disciplinary proceeding shall be commenced by the filing of charges and specifications with the board. Such charges and specifications may be filed by the board itself, a member of the board, the Department of Buildings or any other governmental agency. Notwithstanding the foregoing, all such proceedings shall be prosecuted by the Department of Buildings.

(b) The charges and specifications shall contain the name of the respondent sought to be disciplined, reference to the provisions of law alleged to have been violated and the factual allegations underlying the charges. The chairperson may request individuals, at least two of whom shall be members of the board, to act as a charging panel with the approval of the board. The chairperson shall appoint one member of the charging panel to act as the presiding member. The charging panel shall review the charges and by a quorum approve, disapprove or where appropriate, modify them. The finding of the charging panel as to the sufficiency, definiteness or detail of the statement or its failure or refusal to furnish a more definite or detailed statement shall not be subject to judicial review.

(c) Unless otherwise provided by Title 26 of the New York City Administrative Code, if the charging panel approves or modifies the charges, a copy of the charges and specifications, together with a date, time and place for hearing, shall be personally delivered or mailed to the respondent at the respondent's place of business or usual place of abode.

(d) The chairperson may request three individuals, at least two of whom shall be members of the board, to act as a hearing panel with the approval of the board. The chairperson shall appoint one member of the hearing panel to act as the presiding member. None of the individuals appointed to the hearing panel shall be an employee of the Department of Buildings.

(e) Unless otherwise provided by Title 26 of the New York City Administrative Code, within ten calendar days if the charges are delivered personally, or within fifteen calendar days if the charges are mailed, said period accruing on the date of delivery or mailing as the case may be, the respondent shall file with the hearing panel a written statement denying, admitting or admitting with an explanation any or all of the charges and specifications. Where a respondent admits with an explanation, it shall not be necessary to provide that explanation until such time as the hearing panel requests it.

(f) Where the respondent is a licensee, if the respondent fails to appear at the hearing, the hearing panel may recommend to the Commissioner that the respondent's license be suspended until such time as the respondent appears.

(g) Notwithstanding the foregoing, if upon the filing of charges and specifications, or at any time thereafter, the Commissioner should determine that there exists a serious and immediate threat to persons or property by the conduct alleged, the respondent's license may be suspended immediately, provided, however, that in any such case the respondent shall have a right to a hearing at the next available hearing date following the date of suspension.

**§13-15 Disclosure.**

(a) Requests for a bill of particulars shall be made in writing and served upon the department advocate and directed to the presiding member of the hearing panel at least ten calendar days prior to the hearing. Such requests shall be granted only for good cause shown.

(b) Objections to such requests shall be submitted to the presiding member of the hearing panel at least five business days prior to the hearing. Such an objection, however, shall not be a prerequisite to the presiding member's decision to deny or limit such request.

**§13-16 Adjournments.** Requests for adjournments or extensions of time may be granted by the presiding member of the hearing panel for good cause shown.

**§13-17 Subpoenas.** (a) Subpoenas shall be submitted to the presiding member for signature any time prior to the scheduled hearing date, and shall be served by the party requesting the subpoena in the manner prescribed by the Civil Practice Law and Rules.

(b) The presiding member of the hearing panel may, for good cause shown, permit an adjournment for the purpose of permitting or making a motion in the Supreme Court to compel compliance with a subpoena.

(c) In any case where the holder of a license is subpoenaed but fails to appear, the hearing panel may recommend to the Commissioner that such license be immediately suspended.

**§13-18 Conduct of Hearings.**

(a) Hearings shall be conducted by at least a quorum of the members of the hearing panel.

(b) Oaths or affirmations shall be administered to all witnesses called to testify.

(c) Evidence shall first be proffered in support of the charges. The respondent shall have the right to object to

the evidence and to cross-examine witnesses.

- (d) When all of the evidence in support of the charges is presented to the hearing panel, the respondent may present evidence in rebuttal, which may also be subject to objections and cross-examination by an adverse party.
- (e) At any stage of the hearing the presiding member may permit members of the hearing panel to examine witnesses or review any other evidence.
- (f) The hearing panel may independently introduce its own exhibits or call and examine its own witnesses.
- (g) All objections shall be directed to the presiding member, who shall rule on them.
- (h) Hearsay evidence is admissible at the discretion of the presiding member, provided, however, that such evidence must be relevant to the charges.
- (i) Parties may be permitted to make opening and closing statements, and to submit written argument on the law and the facts at the conclusion of oral testimony.
- (j) Respondents may be represented by an attorney at all stages of the proceedings.

**§13-19 Board Initiated Investigatory Hearings.**

(a) Nothing contained herein shall be deemed a limitation of the board's statutory obligation pursuant to Administrative Code §§26-144(a), (c) and 27-3009(c) to conduct investigatory hearings. Such hearings shall not be governed by these rules of procedure.

**§13-20 Evidentiary Standard of Proof.**

(a) The burden of proof shall be on the party initiating the proceeding. The hearing panel shall utilize a preponderance of the evidence standard of proof with respect to any recommendation calling for the imposition of a fine, suspension or revocation of license.

**§13-21 Decisions, Determinations and Orders.** (a) Any decision, determination or order of the hearing panel shall be by a quorum. It shall be in the nature of a recommendation and shall be transmitted to the commissioner or his designee, and shall consist of findings of fact and conclusions of law. Hearing panel members who do not concur with the recommendation may submit a separate recommendation.

(b) A copy of the written recommendation of the hearing panel shall be delivered or mailed forthwith to each party.

(c) The decision, determination or order of the hearing panel shall not be binding until reviewed by the Commissioner or his or her designee, who in his or her discretion, may adopt, reject or modify said recommendation. The final decision, determination or order of the Commissioner shall then be promptly delivered or mailed to each party.

(d) Any decision, determination or order of the Commissioner or his or her designee may be reviewed as provided by law.

## CHAPTER 14 FEES

**§14-01 Addressing of Bills Whose Nonpayment May Result in the Placing of a Lien.**

All bills issued by the Department of Buildings for payment of fee for an inspection, reinspection, examination or service performed by the department or for payment of permit fee required by the department which may result in the placing of a lien shall be issued to the person designated as owner or agent to receive real property tax or water bills for the building. It will be mailed to the address of [sic] such person contained in one of the files compiled by the Department of Finance for the purpose of the assessment or collection of real property taxes or water charges, or it will be mailed to the address contained in the file compiled by the Department of Finance from real property transfer forms filed with the City Register [sic] upon the sale or transfer of real property.

**§14-02 [Repealed]**

**§14-03 Payment of Fees for Variances from the Restrictions on Times during which Construction Activities May Be Conducted.**

(a) *Applicability.* Pursuant to the provisions of §24-224 and §24-257 of the Administrative Code, the Department of Buildings, may, in the case of urgent necessity in the interest of public safety, issue a variance with respect to construction activities in any zone other than weekdays between the hours of seven a.m. and six p.m.

(b) *Variances.*

- (1) Such variance may be granted for an initial period of up to three days, and may be renewed for periods of three days or less while such urgent necessity continues.
- (2) Such variance shall be clearly marked on such permit and shall be prominently posted on the site of such construction activities by the permittee.
- (3) A copy of such marked permit shall be promptly forwarded to the Environmental Control Board.
- (4) In the case of an emergency, construction activities directly connected with the abatement of such emergency may be undertaken without a variance as herein provided for a period not to exceed twelve hours from the commencement of such construction, during which time application for a variance hereunder shall be made.
- (c) *Fees for after-hours variances.*
  - (1) The initial application fee for an after-hours variance shall be one hundred dollars.
  - (2) The renewal application fee for an after-hours variance shall be one hundred dollars.
  - (3) Also, for each day for which such variance is granted or renewed the fee shall be eighty dollars.

**§14-04 Fees Payable to the Department of Buildings.**

The department shall charge the following fees:

- (a) Issuance of a core certificate of completion, which indicates completion of the building structure, the elevator systems, stairs, and all fire safety systems..... one hundred dollars.
- (b) Issuance of a temporary place of assembly permit for occupancy as a place of assembly for a temporary event.....two hundred fifty dollars and, in addition, where the written request for such permit is received less than ten (10) business days prior to the scheduled event, an additional charge of one hundred dollars per day measured from the tenth business day prior to the scheduled event to and including the date of the receipt of the written request for such permit.
- (c) Each inspection of a temporary amusement device pursuant to reference standard RS 18-10.....one hundred dollars.
- (d) Issuance of letter of no objection to or classification of a specified occupancy of a premises, as follows:
  - 1-,2-, or 3-family homes.....twenty-five dollars;
  - all other premises.....one hundred dollars.
- (e) Filing of post-approval amendments to existing applications.....the greater of one hundred dollars or the fees for the additional scope or cost of work as calculated pursuant to Administrative Code §26-212.
- (f) Examination required by §26-01, subd. (c) for the issuance of Site Safety Manager certificates:..... three hundred and fifty dollars.
- (g) Examination required by §11-01, subd. (a)(2)(ii) for an Agency Director Certificate of Approval: .....three hundred and fifty dollars.
- (h) Examination required by §11-01, subd. (b)(2)(ii) for Elevator Agency Inspector Certificate of Approval:.....three hundred and fifty dollars.

**CHAPTER 15 FIRE PROTECTION**

**§15-01 Communication and Alarm Systems ("Mini-Class 'E' Systems") for Certain Buildings under 100 Feet in Height.**

(a) *Number of occupants.* The subject subsection (27-972(h)) of the Building Code states that a communication and alarm system, acceptable to the Commissioner of Buildings, shall be provided in buildings classified in occupancy group E, less than 100 feet in height, occupied or arranged to be occupied for an occupant load of more

than one hundred persons above or below the street floor or more than a total of five hundred persons in the entire building. The provisions regarding occupant load are to be interpreted to apply where one or more of the following prevail:

- (1) The sum of the occupants on all the floors below the street floor exceeds 100 persons; or
- (2) The sum of the occupants on all the floors above the street floor exceed 100 persons; or
- (3) A total of more than 500 persons in the entire building including the street floor.

*(b) Occupancy load.* Occupant load shall be determined by the existing certificate of occupancy. In the absence of such certificate of occupancy, the occupant load shall be the greater of the actual number of occupants or on the basis of 1 person per 100 square feet net floor area. Net floor area shall be all space within the building exterior walls, excluding the following areas:

- (1) areas enclosing stairs.
- (2) public corridors.
- (3) elevators and shafts.
- (4) rest rooms.
- (5) storage rooms.

(For example, a net floor area of 10,100 square feet is capable of an occupancy of 101 persons).

The Communication and Alarm System, acceptable to the Commissioner of Buildings, shall have the following capabilities and components:

*(c) Capabilities and components.* (1) Fire command station. A communications center, located in the lobby of the building on the entrance floor as part of the elevator control panel if such exists, or located in the immediate vicinity of the elevators if they exist, to provide:

(i) Individual two-way voice communication from the fire command station to a fire warden station on each floor and to the regularly assigned location of the fire safety director, to consist of a telephone handset or approved speaker microphone system or other approved voice communication system. Initiation of a call from the fire command station shall sound a loud and distinctive sound or an audible device, selectively on the entire floor which is being called or at all floors throughout the building, through the use of a general all call button. This call shall be immediately answered by the fire wardens of the floors involved.

(ii) Manual pull station located adjacent to the fire command station to transmit a fire alarm signal to the fire department via a central station of a franchised operating company.

(iii) Annunciation of associated fire safety systems at the fire command station is optional; however, such annunciation shall not be connected to the mini-class "E" system.

(iv) This system shall be a "supervised" system. A "supervised" system is one that is electrically monitored so that the occurrence of a single open or single ground fault condition of its wiring which prevents the required normal operation of the system or causes the failure of its primary (main) power supply source is indicated by a distinctive trouble signal.

(2) Fire Warden Station. A station located on each floor within view of the passenger elevator lobby if such exists; however, when an elevator lobby does not exist, the station shall be located in the path of egress to an exit stairway. The fire warden station shall have two-way communication with the Fire Command Station and:

(i) Shall consist of telephone handset or a speaker microphone system or other approved equivalent voice communication system.

(ii) The initiation of a call from a fire warden shall cause a loud and distinctive sound at the Fire Command Station and at the Fire Safety Director's Office, which call shall be immediately answered by the Fire Safety Director from the Fire Command Station.

(3) Fire Safety Director's Office. A station located within the building at the principal work location of the Fire Safety Director arranged the same as a warden's station. There shall be a two-way voice communication system to the Fire Command Station. A two-way voice communication system described above shall also be provided at the mechanical control center should one exist.

(4) General requirements.

(i) The components of the system shall require New York City Department of Buildings Material Equipment Acceptance ("M.E.A.") approval.

(ii) A. SOURCES OF ELECTRICAL POWER

Two sources of electrical power shall be provided as follows:

1. The primary source shall be generated electric power not exceeding 277/480 volts, supplied by utility company power, or isolated plant.
2. The secondary source shall be an emergency power system (as per Section 27-396 of the Building Code), an emergency generator and/or battery power.
3. One source of power shall be connected to the system at all times. The primary and secondary power sources shall be so arranged and controlled by automatic transfer switches and/or circuitry that when the primary source of power fails, the secondary source will be connected automatically to the fire alarm signal system. Intermediary devices between the system supply and the source of power, other than fused disconnect switches, transformers, fused cutouts and automatic transfer switches, are prohibited. Such disconnect switches, cutouts, transformers and automatic transfer switches shall supply only the fire alarm system and other systems covered by this reference standard. When the utility company requires the installation of metering current transformers, the system supply shall be connected on the load side of the current transformers. All installations shall comply with the applicable sections of the New York City Electrical Code.

The primary source of power and the secondary source (if said secondary source is an emergency power system or generator) shall each be provided with a means of disconnect from the fire alarm system. For buildings supplied at 120/208 volts, each disconnect shall consist of a fused cutout panel, utilizing cartridge fuses, with provision for interrupting the unfused neutral and all ungrounded conductors. The neutral shall be provided with a removable solid copper bar. The incoming service neutral shall be bonded to the metallic housing of the cutout panel on the line side of the removable bar. The fused cutout panel housing shall consist of a locked metallic cabinet with hinged door, painted fire department red, and permanently identified as to the system served. For buildings served at 265/460 volts, the primary and secondary service disconnects shall be fused disconnect switches (in lieu of fused cutout panels) in locked, red painted, permanently identified enclosures. The service voltage shall be transformed to 120/208 volts and a fused cutout panel provided within 5 feet of the transformer on the 120/208 volt side. The incoming supply connections shall comply with the New York City Electrical Code, and the fused cutout panel shall comply with the requirements specified herein before.

B. PRIMARY POWER SOURCE

The primary service to the fire alarm system shall be so arranged that the building source of supply can be disconnected without de-energizing the fire alarm supply. To accomplish this, the primary fire alarm supply shall be connected ahead of all building over current protection and/or switching devices.

C. SECONDARY POWER SOURCE

The secondary service to the fire alarm system shall be provided as follows:

1. If the building has a required emergency power system, the secondary source shall be the emergency power system, regardless of whether the primary source is utility company power or an isolated plant.
2. If the building has an emergency generator supplying power to any of the loads listed in Section 27-396.4 of the Building Code, the secondary source shall be the generator.
3. For all other buildings, the secondary source shall be a battery supply provided in accordance with Reference Standard 17-5 for storage batteries. The battery shall be designed for 24-hour supervisory operation of the system, followed by 15 minutes of total system load.

(iii). WIRING

A. Power Conductors (Above 75 volts) shall be:

1. Copper: THHN, THWN\THHN, TFFN, TFN, FEP, RHH, RHW-2, XHH, or XHHW minimum 600 volts; 90 C; for installation in rigid metallic conduit (RMC), intermediate metallic conduit (IMC) or electric metallic tubing (EMT).

2. Cable type MI, M.E.A. approved for fire alarm service.

B. Low Voltage Conductors (75 volts and less) shall be:

1. Copper: THHN, THWN\THHN, TFFN, TFN, FEP, RHH, RHW, XHH, or XHHW minimum 600 volts; 90 C; for installation in rigid metallic conduit (RMC), intermediate metallic conduit (IMC) or electric metallic tubing (EMT)
2. Minimum wire size No. 18 AWG.
3. Multi-conductor cables run in raceways, or exposed as described hereinafter, shall meet the following additional requirements:
  - (a) Type FPLP only; minimum insulation thickness 15 mils; minimum temperature 150 C; colored red.
  - (b) Red colored jacket overall; minimum thickness 25 mils.
  - (c) Cable printing as per UL1424; must bear additional description "ALSO CLASSIFIED NYC CERT. FIRE ALARM CABLE" legible without removing jacket.
- C. Installation of Conductors and Raceway shall be in accordance with the following:
  1. Power conductors shall not be installed in common raceways with low voltage conductors.
  2. Comply with applicable requirements of New York City Electrical Code, except where requirements are exceeded by this Reference Standard.
  3. Conductors other than M.I. cable shall be run in raceway, except as specifically described below.
  4. Multi-conductor cables may be installed without raceway protection where cable is protected by building construction. Where not protected by building construction, cables shall be located 8 feet or more above the finished floor and not subject to physical tampering or hazard. Locations within eight feet of the finished floor that are deemed as "protected by building construction" shall include raised floors, shafts, telephone and communication equipment rooms and closets, and rooms used exclusively for fire alarm system equipment.
  5. All wiring within mechanical and elevator equipment rooms shall be run in raceways.
  6. Raceways run within 8 feet of finished floor in garage areas, loading docks, mechanical rooms, and elsewhere where subject to mechanical damage, shall be rigid galvanized steel conduit only.
  7. Where wiring is required to be run in raceway, install conductors in rigid metallic conduit (RMC), intermediate metallic conduit (IMC) or electric metallic tubing (EMT), except that multi-conductor cables may also be run in surface metal raceway. Conductors for other electrical systems shall not be installed in raceways containing REFERENCE STANDARD 17 conductors.
  8. Where allowed to be run without raceway protection, multi-conductor cables shall be installed as follows:
    - (a) Cables shall not depend on ceiling media, pipes, ducts, conduits, or equipment for support; Cables must be supported independently from the building structure.
    - (b) Cables must be secured by cable ties, straps or similar fittings, so designed and installed as not to damage the cable. Cables must be secured in place at intervals not exceeding 5'-0" on centers and within 12" of every associated cabinet, box or fitting.
  9. Installation of raceways, boxes and cabinets shall comply with the following general requirements:
    - (a) Covers of boxes and cabinets shall be painted red and permanently identified as to their use.
    - (b) Penetrations of fire-rated walls, floors or ceilings shall be fire stopped.
    - (c) Within stairways, raceways within 8 feet of the floor shall not be installed so as to reduce or obstruct the stairway radius.
    - (d) Raceways or cables shall not penetrate top of any equipment box or cabinet.
  10. All conduits supplying 120-volt power to the fire alarm control unit and/or to outlying control cabinets, shall contain a green insulated grounding conductor sized in accordance with the New York City Electrical Code (#10 AWG minimum). The grounding conductor shall be connected to the ground bus or other suitable grounding terminal in each box and cabinet in which it enters. At the fuse cutout panel supplying the fire alarm system, provide a grounding electrode conductor sized and installed in accordance with the New York City Electrical Code (#10 AWG minimum).
  11. For cabinets whose 120 volt supply is not derived from the main fire alarm system cutout panel, provide green insulated separate grounding electrode conductors, sized and installed as per New York City Electrical Code (#10 AWG minimum). In steel-framed buildings, a connection to local steel structure will be acceptable.
  12. Splices and terminations of wires and cables shall be as follows:
    - (a) Permitted only in boxes or cabinets specifically approved for the purpose.
    - (b) Utilize mechanical connections specifically approved by U.L.486 A & C for the conductors, or if soldered, first joined so as to be mechanically and electrically secure prior to soldering and insulating. Temperature rating of completed splices shall equal or exceed the temperature rating of the highest rated conductor.
  13. Wiring for audible notification devices shall be arranged so that a loss of a portion of the wiring on a floor will not render more than 60% of the devices inoperative, and the devices shall be so connected to the circuitry (i.e. by means of alternate circuits) as to maintain at least partial audibility throughout the entire floor.
    - (iv) The name and telephone number of the central office company shall be displayed at the manual pull station.
    - (v) There shall be a Fire Safety Director on duty at all times that the premises is actually occupied by the number of persons specified in the opening paragraphs of these rules. The Director shall have a Certificate of Fitness issued by the New York City Fire Department.

(vi) Applications shall be filed and permits obtained as required by departmental memoranda concerning fire alarm systems.

**§15-02 Interior Fire Alarm and Signal System for Place of Assembly Used as a Cabaret and for Stages, Dressing Rooms and Property Rooms.**

(a) *Number of occupants.* Subdivisions 27-968(a)(10)(a) and (b) of the Building Code state that an interior fire alarm and signal system shall be provided in any room, place or space occupied or arranged to be occupied by 75 or more persons and in which either any musical entertainment, singing, dancing or other form of amusement is permitted in connection with the restaurant business or the business of directly or indirectly selling to the public food or drink, or where dancing is carried on and the public may gain admission, with or without payment of a fee, and food or beverages are sold, served, or dispensed, and any new or altered catering place as of April 4, 1979 having 300 or more persons. This does not apply to eating or drinking places which provide incidental musical entertainment, without dancing, either by mechanical devices, or by not more than three persons playing piano, organ, accordion or guitar or any stringed instrument or by not more than one singer accompanied by himself or a person playing piano, organ, accordion, guitar or any stringed instrument.

(b) *Occupant load.* The occupant load of a Place of Assembly shall be calculated by dividing the net floor area of the space by the appropriate figure in the following table:

	Occupancy	Net Floor Area per Occupancy (square feet)
(1)	Dance Floor	10
(2)	Dining Spaces	12
(3)	Standing Room (Audience) in all Places of Assembly	4
(4)	Seating Area (Audience) in all Places of Assembly	
(i)	Fixed Seats	Designed Number of Seats or Occupants
(i)	Movable Seats	10

(c) *Capabilities and components.*

(1) Fire Alarm System: shall be closed circuit, "electrically supervised", individually coded and connected to an approved franchise/central office alarm company.

A "supervised" system is one that is electrically monitored so that the occurrence of a single open or single ground fault condition of its wiring which prevents the required normal operation of the system or causes the failure of its primary (main) power supply source is indicated by a distinctive trouble signal.

(i) Manual fire alarm stations: shall be installed at each required natural path of egress from all levels from public assembly area.

(ii) Fire alarm gongs: shall be installed to provide adequate audibility throughout the Public Assembly area and all areas occupied in conjunction with the area at all levels including dressing rooms, rest rooms, coat rooms, etc. "Audibility" shall be loud and distinct under maximum sound system operation unless section 15-02(c)(2)(ii) is complied with.

(iii) Sprinkler waterflow device: shall be installed to indicate flow of water in the sprinkler system and shall be made part of the interior Fire Alarm by interconnecting the waterflow device to the interior Fire Alarm so that actuation of the waterflow device shall sound a distinctive coded alarm via the fire alarm gongs.

(2) General requirements.

(i) The components of the system shall require New York City M.E.A. approval.

(ii) A device may be installed to automatically turn off the sound system and psychedelic and special effects lighting when a manual fire alarm and/or sprinkler waterflow device is activated in all public assemblies that

require an interior fire alarm and signal system.

#### (iii) A. SOURCES OF ELECTRICAL POWER

Two sources of electrical power shall be provided as follows:

1. The primary source shall be generated electric power not exceeding 277/480 volts, supplied by utility company power, or isolated plant.
2. The secondary source shall be an emergency power system (as per Section 27-396 of the Building Code), an emergency generator and/or battery power.
3. One source of power shall be connected to the system at all times. The primary and secondary power sources shall be so arranged and controlled by automatic transfer switches and/or circuitry that when the primary source of power fails, the secondary source will be connected automatically to the fire alarm signal system. Intermediary devices between the system supply and the source of power, other than fused disconnect switches, transformers, fused cutouts and automatic transfer switches, are prohibited. Such disconnect switches, cutouts, transformers and automatic transfer switches shall supply only the fire alarm system and other systems covered by this reference standard. When the utility company requires the installation of metering current transformers, the system supply shall be connected on the load side of the current transformers. All installations shall comply with the applicable sections of the New York City Electrical Code.

The primary source of power and the secondary source (if said secondary source is an emergency power system or generator) shall each be provided with a means of disconnect from the fire alarm system. For buildings supplied at 120/208 volts, each disconnect shall consist of a fused cutout panel, utilizing cartridge fuses, with provision for interrupting the unfused neutral and all ungrounded conductors. The neutral shall be provided with a removable solid copper bar. The incoming service neutral shall be bonded to the metallic housing of the cutout panel on the line side of the removable bar. The fused cutout panel housing shall consist of a locked metallic cabinet with hinged door, painted fire department red, and permanently identified as to the system served. For buildings served at 265/460 volts, the primary and secondary service disconnects shall be fused disconnect switches (in lieu of fused cutout panels) in locked, red painted, permanently identified enclosures. The service voltage shall be transformed to 120/208 volts and a fused cutout panel provided within 5 feet of the transformer on the 120/208 volt side. The incoming supply connections shall comply with the New York City Electrical Code, and the fused cutout panel shall comply with the requirements specified in this rule.

#### B. PRIMARY POWER SOURCE

1. The primary service to the fire alarm system shall be so arranged that the building source of supply can be disconnected without de-energizing the fire alarm supply. To accomplish this, the primary fire alarm supply shall be connected ahead of all building over current protection and/or switching devices.
2. Partial systems such as strobe light control panels, partial fire alarm, automatic smoke/heat detection, and sprinkler alarm subsystems and/or other associated systems may be connected to an emergency supply riser panel via a tapped connection, and an identified, locked fused cutout box located within 5 feet of the tap. Where an emergency power system (E.P.S.) is provided in accordance with Section 27-396.4 of the Building Code, it shall be connected to the emergency supply riser. Where an E.P.S. is not available, the emergency supply riser shall be connected to a tap ahead of the service switch.

#### C. SECONDARY POWER SOURCE

The secondary service to the fire alarm system shall be provided as follows:

1. If the building has a required emergency power system, the secondary source shall be the emergency power system, regardless of whether the primary source is utility company power or an isolated plant.
2. If the building has an emergency generator supplying power to any of the loads listed in Section 27-396.4 of the Building Code, the secondary source shall be the generator.
3. For all other buildings, the secondary source shall be a battery supply provided in accordance with Reference Standard 17-5 for storage batteries. The battery shall be designed for 24-hour supervisory operation of the system, followed by 15 minutes of total system load.

#### (iv). WIRING

A. Power Conductors (Above 75 volts) shall be:

1. Copper: THHN, THWN\THHN, TFFN, TFN, FEP, RHH, RHW-2, XHH, or XHHW minimum 600 volts; 90 C; for installation in rigid metallic conduit (RMC), intermediate metallic conduit (IMC) or electric metallic tubing (EMT).

2. Cable type MI, M.E.A. approved for fire alarm service.

B. Low Voltage (75 volts and less) shall be:

1. Copper: THHN, THWN\THHN, TFFN, TFN, FEP, RHH, RHW, XHH, or XHHW minimum 600 volts; 90 C; for installation in rigid metallic conduit (RMC), intermediate metallic conduit (IMC) or electric metallic tubing (EMT)

2. Minimum wire size No. 18 AWG.

3. Multi-conductor cables run in raceways, or exposed as described hereinafter, shall meet the following additional requirements:

(a) Type FPLP only; minimum insulation thickness 15 mils; minimum temperature 150 C; colored red.

(b) Red colored jacket overall; minimum thickness 25 mils.

(c) Cable printing as per UL1424; must bear additional description "ALSO CLASSIFIED NYC CERT. FIRE ALARM CABLE" legible without removing jacket.

C. Installation of Conductors and Raceway shall be in accordance with the following:

1. Power conductors shall not be installed in common raceways with low voltage conductors.

2. Comply with applicable requirements of New York City Electrical Code, except where requirements are exceeded by this Reference Standard.

3. Conductors other than M.I. cable shall be run in raceway, except as specifically described below.

4. Multi-conductor cables may be installed without raceway protection where cable is protected by building construction. Where not protected by building construction, cables shall be located 8 feet or more above the finished floor and not subject to physical tampering or hazard. Locations within eight feet of the finished floor that are deemed as "protected by building construction" shall include raised floors, shafts, telephone and communication equipment rooms and closets, and rooms used exclusively for fire alarm system equipment.

5. All wiring within mechanical and elevator equipment rooms shall be run in raceways.

6. Raceways run within 8 feet of finished floor in garage areas, loading docks, mechanical rooms, and elsewhere where subject to mechanical damage, shall be rigid galvanized steel conduit only.

7. Where wiring is required to be run in raceway, install conductors in rigid metallic conduit (RMC), intermediate metallic conduit (IMC) or electric metallic tubing (EMT), except that multi-conductor cables may also be run in surface metal raceway. Flexible metallic conduit, not exceeding 36" in length, shall be permitted for final connections to initiating and notification devices. Conductors for other electrical systems shall not be installed in raceways containing REFERENCE STANDARD 17 conductors.

8. Where allowed to be run without raceway protection, multi-conductor cables shall be installed as follows:

(a) Cables shall not depend on ceiling media, pipes, ducts, conduits, or equipment for support; Cables must be supported independently from the building structure.

(b) Cables must be secured by cable ties, straps or similar fittings, so designed and installed as not to damage the cable. Cables must be secured in place at intervals not exceeding 5'-0" on centers and within 12" of every associated cabinet, box or fitting.

9. Installation of raceways, boxes and cabinets shall comply with the following general requirements:

(a) Covers of boxes and cabinets shall be painted red and permanently identified as to their use.

(b) Penetrations of fire-rated walls, floors or ceilings shall be fire stopped.

(c) Within stairways, raceways within 8 feet of the floor shall not be installed so as to reduce or obstruct the stairway radius.

(d) Raceways or cables shall not penetrate top of any equipment box or cabinet.

10. All conduits supplying 120-volt power to the fire alarm control unit and/or to outlying control cabinets, shall contain a green insulated grounding conductor sized in accordance with the New York City Electrical Code (#10 AWG minimum). The grounding conductor shall be connected to the ground bus or other suitable grounding terminal in each box and cabinet in which it enters. At the fuse cutout panel supplying the fire alarm system, provide a grounding electrode conductor sized and installed in accordance with the New York City Electrical Code (#10 AWG minimum).

\*12. For cabinets whose 120 volt supply is not derived from the main fire alarm system cutout panel, provide green insulated separate grounding electrode conductors, sized and installed as per New York City Electrical Code (#10 AWG minimum). In steel-framed buildings, a connection to local steel structure will be acceptable.

*\*"12." enacted but "11" probably intended.*

12. Splices and terminations of wires and cables shall be as follows:

(a) Permitted only in boxes or cabinets specifically approved for the purpose.

(b) Utilize mechanical connections specifically approved by U.L.486 A & C for the conductors, or if soldered, first joined so as to be mechanically and electrically secure prior to soldering and insulating. Temperature rating of completed splices shall equal or exceed the temperature rating of the highest rated conductor.

13. Wiring for audible and visual alarm notification devices shall be arranged so that a loss of a portion of the wiring on a floor will not render more than 60% of the devices of each type inoperative, and the devices shall be so connected to the circuitry (i.e. by means of alternate circuits) as to maintain at least partial audibility/visibility throughout the entire floor.

(v) The equipment shall be colored RED and enclosed in suitable housing permanently fastened to the structure at the appropriate locations. A diagonal white stripe one inch wide from upper left corner to lower right corner shall be painted or applied to sending stations. The stripe shall not render any lettering illegible or obliterate the station number.

(vi) The name and telephone number of the central office company shall be displayed at all manual pull stations and at all central office transmitters.

(vii) There shall be a fire guard on duty at all times that the Place of Assembly is open and functioning as a cabaret. The fire guard shall have a Certificate of Fitness issued by the New York City Fire Department.

(viii) Emergency Lighting and Sprinkler Systems shall be installed and maintained as required by law.

(ix) A Fire Alarm System in a Place of Assembly subject to this rule in a high rise (Class E) office building shall interface with Fire Alarm and Communication System required by Local Law No. 5/1973.

(x) Applications shall be filed and permits obtained as required by Departmental Memorandum.

### **§15-03 [Repealed]**

### **§15-04 Exemption of Certain Existing J-1 Residential Hotels from Certain Fire Safety Special Filing Requirements.**

(a) *Definition.* Existing J-1 Residential Hotel. An existing J-1 residential hotel is defined as a single room occupancy multiple dwelling, in which at least seventy-five (75) percent or more of the total number of occupied individual dwelling units:

(1) have had no more than two (2) separate tenancies for at least three (3) years preceding the date on which the application for residential hotel status is made or, preceding the date of submission of an annual certification as set forth below or

(2) have been used by a religious not-for-profit organization as a residency for its members who maintain residency for at least (1) year and have no more than two (2) separate tenancies for at least (1) year preceding the date on which the application for residential hotel status is made, provided that a fire safety plan for fire drill and evacuation procedures in accordance with the requirements of the Fire Commissioner shall be submitted to the Fire Department and the approval of the Fire Commissioner shall be obtained.

(b) *Details of exemptions.* This section shall exempt owners of existing "residential hotels", as that term is defined in §15-04(a), from J-1 fire safety special filing requirements of §§27-382(b), 27-384(b), 27-954(w), 27-989(b), 27-996.2(a)(2) of Article 26 of Subchapter 1 of Chapter 1 of Title 27 of the Administrative (Building) Code as enacted by Local Law 16 of 1984, effective March 17, 1984, as well as installation requirements set forth in the following sections:

(1) §27-382 (b) Power source-Exit lights.

(2) §27-384 (b) Power source-Exit signs.

(3) §27-954 (w) Required sprinklers.

(4) §27-989 (b) Elevator in readiness.

(5) §27-996.2 (a) (2) Firemen service operation in existing elevators.

(c) *Certification.*

(1) The certification of residential hotel status may be obtained only by the filing of an alteration application for residential hotel certification. Such application shall contain the supporting documentation required in §15-04(d) below. Certification of residential hotel status as defined in § [sic] 15-03(a) [sic] above shall be issued by the borough superintendent. Certification shall be valid for a period of one (1) year from the date of initial certification. Thereafter, the owner of the residential hotel shall engage a registered architect or licensed professional engineer to certify annually through the filing of a building notice application that the residential hotel is in compliance with the requirements of § [sic] 15-03(a) [sic] above.

(2) Owners of residential hotels shall keep a copy of their residential hotel certification on site at the hotel. Failure to timely renew a hotel's residential certification may result in the issuance of violations for the hotel's failure to comply with the requirements of Local Law 16 of 1984 and Local Law 16 of 1987 for a J-1 occupancy.

(d) *Supporting Documentation.* The following documentation shall be furnished by the owner in support of his or her application for certification of residential hotel status:

(1) Certificate of Occupancy or, if unavailable;

- (2) Occupancy and Arrangement Card from the Department of Housing Preservation and Development and Department of Housing Preservation and Development Computer Printout;
- (3) List all rooms occupied by tenants who have resided at the premises for six months or longer or who are in occupancy pursuant to a lease of six months or longer, together with the name of the tenant in each of the aforementioned rooms and copies of any and all existing leases for the period stated in § [sic] 15-03(a) [sic] of this section; and
- (4) For each dwelling unit in the premises subject to rent control or hotel stabilization, copies of the annual registration statement filed with the New York State Division of Housing and Community Renewal; and
- (5) Copies of any relevant documents filed by the owner with the Hotel Stabilization Association; and
- (6) Any other documentation deemed relevant by the borough superintendent, in his or her discretion.

(e) *Determination of J-2 Dormitory.*

- (1) A building owner may contend that his/her building is a dormitory and therefore as a J-2 occupancy need only provide stair and elevator signs, and if a high-rise building also remove locks on elevator and hoistway doors. To qualify as a dormitory, the building's current Certificate of Occupancy must indicate use as a dormitory. Where the Certificate of Occupancy indicates both dormitory and J-1 occupancy, those portions which are J-1 must comply with LL 16/84 requirements for J-1 occupancies.
- (2) When an owner seeks to amend his building's Certificate of Occupancy [sic] to provide for dormitory occupancy, he must submit an affidavit stating he will use the dormitory space only for sleeping accommodations of individuals on a month-to-month or longer-term basis (Adm. Code §27-265) and that the dormitory will be owned and operated by either a not-for-profit corporation or a school. Such amended Certificates of Occupancy shall provide that the dormitory may only be owned or operated by either a not-for-profit corporation or a school.

**§15-05 Filing and Approval of a Fire Safety Plan for Buildings Containing Transient Occupants Such as Hotels and Motels.**

(a) *Number of occupants.*

These rules and regulations shall apply to buildings or parts thereof classified in Article 11 of Subchapter 3 of Chapter 1 of [sic] Title 27 of the Administrative Code of the City of New York as occupancy group J-1, J-2 occupied or arranged to be occupied in whole or part by a transient occupancy. For the purpose of these rules and regulations, buildings or parts thereof which contain a total of more than 30 sleeping rooms or can accommodate a total of more than 30 lodgers, or contains more than 15 sleeping rooms, or can accommodate more than 15 lodgers above the first or ground story, used for living or sleeping purposes by the same person or persons for a period of ninety days or less shall be considered as being occupied by a transient occupancy. Such buildings shall include but are not limited to buildings occupied as hotels, motels, lodging houses, dormitories and single room occupancies. All such buildings occupied or arranged to be occupied in whole or part by a transient occupancy, regardless of the number of sleeping rooms or accommodations, over 75 feet in height, shall comply with these rules and regulations. The owner or other person having charge of such building shall file a Fire Safety Plan with the Fire Department indicating compliance with §15-05(b) within 30 days after the effective date of these rules and regulations. The owner or other person shall resubmit the revised Fire Safety Plan for approval within 30 days after receiving comments from the Fire Department. Upon approval, the Fire Safety Plan shall be immediately put into effect. The owner or other person having charge of such building shall comply with §§15-05(c)(1) to 15-04(c)(5) within 30 days of the effective date of these rules & regulations.

(b) *Details of fire safety plan.*

- (1) A fire safety plan for fire drill and evacuation procedures in accordance with the requirements of the Fire Commissioner shall be submitted to the Fire Department and the approval of the Fire Commissioner shall be obtained. The applicable parts of the fire safety plan shall be distributed to the building service employees. All employees of the building shall participate and cooperate in carrying out the provisions of the fire safety plan.
- (2) *Fire safety director and deputy fire safety director.*
  - (i) One employee shall be designated as fire safety director and a sufficient number of employees shall be designated as deputy fire safety directors. Such employees shall have a knowledge of the building's fire protection systems and shall have a certificate of fitness, in accordance with the requirements of the Fire Commissioner, qualifying him to conduct fire drills, evacuations and related activities such as organizing, training and supervising a fire brigade when required. In the absence of a fire safety director, when a fire safety director is required to be on duty in the building, such deputy fire safety director shall act as fire safety director.
  - (ii) As the building is continuously occupied, there shall be a fire safety director continuously on duty in the building with the required certificate of fitness. During fire emergencies, the primary responsibility of the fire safety director shall be the manning of the fire command post and the direction and execution of the evacuation as provided in the fire safety plan and to assist the Fire Department with his knowledge of the building's fire protection systems. Such activities shall be subject to the Fire Department control.
- (3) If sufficient personnel are available, as determined by the Fire Department, a fire brigade shall be organized.

(4) Fire drills shall be conducted, in accordance with the fire safety plan, at least once every three months on each shift. A written record of such drills shall be kept on the premises for a three year period and shall be readily available for inspection by the Fire Department.

(5) In buildings where compliance would cause practical difficulty or undue hardship, the Fire Commissioner may waive or modify the requirements of this subdivision and accept alternatives fulfilling the intent of these requirements consistent with public safety.

(c) *Signage.*

(1) *Elevator landings.* A sign shall be posted and maintained on every floor at the elevator landing. The sign shall read "IN CASE OF FIRE, USE STAIRS UNLESS OTHERWISE INSTRUCTED". The lettering shall be at least one-half inch block letters and of contrasting color from the background or as otherwise approved by the Commissioner of Buildings. Such lettering shall be properly spaced to provide good legibility. The sign shall also contain a diagram showing the location where it is posted and the location and letter identification of the stairs on the floor. The sign shall be at least eight inches by ten inches, located directly above a call button and securely attached to the wall or partition. The top of such sign shall not be above six feet from the floor level. The diagram on such sign may be omitted provided that signs containing such diagram are posted in conspicuous places on the respective floor. In such case, the sign at the elevator landing shall be at least two and one half inches by ten inches and the diagram signs shall be at least eight inches by ten inches.

(2) *Floor numbering.*

A sign shall be posted and maintained with each stair enclosure on every floor, indicating the number of the floor. The numerals and background shall be in contrasting colors. The sign shall be securely attached to the stair side of the door.

(3) *Stair and elevators.*

Each stair and each bank of elevators shall be identified by an alphabetic letter. A sign indicating the letter of identification for the elevator bank shall be posted and maintained at each elevator landing directly above or as part of the sign specified in §15-05(c)(1). The stair identification sign shall be posted and maintained on the occupancy side of the stair door. The letter on the sign shall be at least three inches high, of bold type and of contrasting color from the background. Such signs shall be securely attached.

(4) *Sign material.* Signs shall be of metal or other durable material.

(5) *Placing, size and content of signs.* A sign shall be posted and maintained on the inside of every door opening onto a public corridor giving access to a sleeping room. The sign shall contain a diagram showing the location where it is posted and the location and letter identification of the exit stairs on the floor. The diagram shall indicate the number of doors opening onto the public corridor which must be passed to reach each exit stair. The sign shall be at least eight inches by ten inches, located on the inside of the door and securely attached thereto. The top of such signs shall not be above six feet from the floor level. These signs are in addition to the signs required in §15-05(c)(1). These signs may contain such additional information as the Fire Department may require.

(6) *Additional sign requirements.* When floors or parts of floors are used as accessory to a J-1 and J-2 transient occupancy, "Elevator Landings" §15-05(c)(1), "Floor Numbering" §15-05(c)(2) and "Stairs and Elevators" §15-05(c)(3), shall be required.

#### **§15-06 Design of Composite Construction with Metal Decks or Lightweight Concrete.**

(a) Metal deck construction is to be approved strictly in accordance with Board of Standards and Appeals or MEA approval in all respects, with no interchangeability or equivalent materials authorized except as noted in these rules.

(b) When metal decks have been approved for use where a fire resistive floor or roof is required, equivalent materials may be authorized or interchanged for any of the components of the assembly by borough superintendents pursuant to §27-107 of the Administrative Code based on; [sic]

(1) Similar full scale tests conforming with A.S.T.M. E119-1988; or,

(2) A combination of small scale and/or half scale tests and engineering evaluation acceptable to the commissioner in conjunction with evaluation of full scale tests conforming with ASTM E119-1988 for a variety of assemblies of combination of materials, or

(3) A combination of small scale, half scale or full size tests representative of the actual fire exposure of the occupancy and engineering evaluations, all acceptable to the commissioner.

(c) When metal decks have been approved for use where a fire resistive floor or roof is required without any fire protection below the metal deck, they shall not be authorized in connection with composite beam design unless the approval specifies that the decks have been tested in accordance with both floor and beam requirements; or, alternately, fire protection is applied below the metal deck having the same thickness as that applied to the beam, for that width of slab acting as part of the composite beam, except that no such fire protection need be applied below the metal deck when the floor or roof slab and deck have a fire resistive rating at least equal to that of the supporting beams, efc of the concrete fill-in is equal to or greater than 3000 p.s.i..

- (d) Where the structural design is in accordance with load tests referred to in a board approval, the load carrying capacity can be accepted provided that design criteria for all structural elements are specified in the resolution of the board. Where the approval of the board simply makes general reference to other criteria, the following structural guidelines are to be adhered to, with respect to composite construction:
- (1) Concrete in the ribs of metal decks is to be completely excluded in flexural computations, in the composite T-beam design. However, it may be included for bond calculations (which is to be based on allowable stresses of 20 p.s.i.) as well as shear stresses for slab action exclusively.
  - (2) Slab designs shall be required to comply with all applicable requirements of Reference Standards RS 10-3, and RS 10-5A with structural calculations submitted in all cases in regard to n ratios (see §1102(b) of RS 10-3), fiber [*sic*] stresses, shear stresses, bond stresses, length-deep and/or deflection limitations, and shear connection loads.
  - (3) The capacity of shear connectors in lightweight concrete shall only be rated at 80 percent of the values specified in Table 1.11.4 of Reference Standard RS 10-5 for normal weight aggregate. When metal decks with ribs not exceeding 1 and 1/2 inches in depth are used, the capacity of the shear connectors is to be further reduced by 15 percent, so as to have a total rated capacity of 65 percent of the values stated in Table 1.11.4 when lightweight concrete is used in composite construction with metal decks, and 85 percent when normal aggregate is used in such construction, unless prequalified load tests pursuant to §27-599 warrant higher values. Shear connectors not listed in Table 1.11.4, or differing on length or size may not be used without specific Board Approval for specific loads.
  - (4) When metal decks having ribs exceeding 1 and 1/2 inches in height are employed with composite construction, prequalified load tests of the slab and beam, pursuant to §27-599, shall be required before any approval is granted.
  - (5) All welding on [*sic*] shear connectors shall be performed by licensed welders, except as otherwise authorized in an intradepartmental memorandum dated June 6, 1967.

#### **§15-07 Fire-Retarding of Entrance Halls, Stair Halls and Public Halls in Old Law Tenements and Converted Dwellings.**

- (a) *Intent.* The fire-retarding rules herewith set forth are approved by the Department of Buildings for old law tenements and converted dwellings where their entrance halls, stair halls and public halls are required, by §189, subdivisions 1 and 4, §238, subdivision 4, and §218, subdivisions 5 and 6, Multiple Dwelling Law, and by §27-2044, Housing Maintenance Code, to be fire-retarded in a manner approved by the Department of Buildings.
- (1) All entrance halls, stair halls and public halls, including service halls and stairs, shall be fire retarded to the extent required by the Multiple Dwelling Law and the Housing Maintenance Code.
  - (2) It is the intent that all wood structural members of partitions, ceilings and stair soffits shall be completely protected with fire-retarding materials where they may be exposed to fire in entrance, stair and public halls. To this extent these rules and regulations cover only general conditions and are not designed to cover specific or special cases. Where such may occur the owner is required to consult the Department of Buildings and receive instructions before work is started.
  - (3) Where existing dumbwaiter shafts are located in, or open on public halls which are required to be fire-retarded, such dumbwaiter shafts, when not constructed of fireproof or fire-retarding materials, shall be fire-retarded on the inner side, from the lowest story to the roof inclusive, in accordance with the requirements of §15-07(b)(1) or (b)(2), except in cellar where such shafts shall be enclosed with fireproof materials. All doors opening from such dumbwaiter shafts shall be self-closing, and doors and assemblies when of wood or other non-fireproof construction shall be lined on both sides with No. 26 U.S. gage [*sic*] metal, except in cellar where doors and assemblies shall have a fire-resistive rating [*sic*] of at least one (1) hour.
  - (4) It is not intended that these rules and regulations in themselves require plans to be filed. However, should any work involve structural changes, then plans are required to be filed in the Department of Buildings and such changes shall be subject to all other rules and regulations applicable thereto.
  - (5) Work shall not commence until satisfactory evidence has been submitted to the Department of Buildings that compensation insurance has been obtained in accordance with the provisions of the Workmen's Compensation Law.

It is the intent of §238, subdivision 4, Multiple Dwelling Law, that every entrance hall, public hall and stair hall in every old law tenement four stories or more in height shall be fire-retarded.

Every old law tenement three stories and a basement, or three stories, basement and cellar in height shall be deemed to be four stories when the main entrance from the grade is to the basement, and every entrance hall, public hall and stair hall in such building shall be fire-retarded.

In old law tenements where the entrance halls, public halls and stair halls are required to be fire-retarded, existing wood stairs shall be fire-retarded in conformity with the requirements of these rules and regulations, whether or not such halls had been fire-retarded in accordance with plans filed with and approved by the former Tenement House Department or Department of Buildings, prior to the enactment of subdivision 4 of §238 of the Multiple

Dwelling Law.

(b) *Partitions.* All existing partitions separating apartments from entrance halls, stair halls and public halls, or otherwise forming enclosing partitions of entrance halls, stair halls and public halls, shall be fire-retarded by any one of the following methods:

(1) *Metal lath and cement of gypsum mortar.* Completely remove all existing materials to face of studs or other structural members on hall side of partitions and recover with metal lath and two coats of cement or [*sic*] gypsum mortar. If cement mortar is used it shall be three-quarters inch (3/4") thick, if gypsum mortar is used it shall be one inch (1") thick. The second coat of mortar shall not be applied until the first coat has thoroughly set and in no case shall the second coat be applied on the same day that the first coat of mortar is applied.

In lieu of the above method, completely remove all combustible materials from plaster face of partitions on hall side and repair existing plaster. After inspection, cover existing plaster with herringbone or similar approved type metal lath with rigid rib reinforcement to provide good bond between new and existing plaster. Cover lath with two coats (scratch and brown) of cement or [*sic*] gypsum mortar as above.

The first coat of cement mortar (scratch) shall be composed of one (1) part of Portland cement to one and one-half (1 1/2) parts of sand, with additional volume of hydrated lime not greater than ten (10) percent of the volume of Portland cement. The second coat (brown) shall be composed of one (1) part of Portland cement to three (3) parts of sand, with additional volume of hydrated lime not greater than ten (10) percent of the volume of Portland cement.

The first coat (scratch) of gypsum mortar shall be composed of one (1) part of gypsum to one (1) part of sand. The second coat (brown) of gypsum mortar shall be composed of one (1) part of gypsum to one and one-half (1 1/2) parts of sand.

(2) *Plaster boards and gypsum mortar or stamped metal.* Completely remove all existing materials to face of studs or other structural members on hall side of partitions and recover with plaster boards or perforated rock lath three-eighths inch (3/8") thick, covered with two coats of gypsum mortar (scratch and brown) so that the aggregate thickness shall be at least one inch (1"), or in lieu thereof, recover same with plaster boards one-half inch (1/2") thick, covered with No. 26 U.S. gage [*sic*] stamped metal.

In lieu of the above method, completely remove all combustible material from plaster face of partitions on hall side and repair existing plaster. After inspection, plaster boards or perforated rock lath may be applied directly over the existing plaster face of partitions on hall side. Cover plaster boards or perforated rock lath with two coats of gypsum mortar as above, or plaster boards may be covered with No. 26 U.S. gage [*sic*] stamped metal.

(3) *Mineral wool.* Fill solidly between partition uprights, from underside of flooring to ceiling with mineral wool blown in place by the pneumatic method, packed solidly to fill all spaces and voids.

(4) *Brick, gypsum, etc.* Fill solidly between partition uprights from underside of flooring to ceiling with brick, gypsum, or other acceptable material packed solidly to fill all spaces and voids. Where brick, gypsum, or other masonry material is intended to be used, application must be filed before installation with the Department of Buildings for approval of strength of existing members intended to support the proposed masonry fire-retarding.

(5) *Other methods.* No other method may be used unless same is acceptable to the Department of Housing and Buildings.

(6) *Removal of windows in public hall partitions.* When windows in walls or partitions are removed, both sides of the openings shall be sealed with fire-retarding materials, except that wood lath and plaster may be used on the room side of the opening when the existing surface of the room is constructed of wood lath and plaster.

(7) *Electric meters.* Where direct current (DC) electric meters of public utility companies are present or installed on partitions of public halls the fire-retarding shall continue unbroken behind the meters or the meters shall be mounted on a heavy slate back or non-magnetic fireproof equivalent, such as transite, asbestos board, etc., against which fire-retarding finished up tightly.

(8) *Partitions in Class B converted dwellings.* Where fire-retarding is required in any Class B converted dwelling referred to in §15-07(a)(7), both sides of all enclosure partitions of entrance halls, stair halls and public halls throughout such building shall be fire-retarded in accordance with the method set forth in §§15-07(b)(1) or (b)(2) or said partitions shall be fire-retarded in accordance with the provisions of §§15-07(b)(3) or (b)(4).

(9) *Partitions in altered old law tenements.* In any old law tenement where the occupancy is increased on any story, the enclosing partitions of any entrance hall, stair hall or public hall on the story where the occupancy has been increased, shall be fire-retarded on both sides. Such requirements shall apply only to the walls of the entrance hall, stair hall or public hall adjoining the altered apartment. The enclosing partitions of such halls other than those adjoining the altered apartment and the partitions on any story where the occupancy has not been increased, shall be fire-retarded on the hall side. The method of fire-retarding shall be as set forth in §§15-07(b)(1) or (b)(2), or said partitions shall be fire-retarded in accordance with the provisions of §§15-07(b)(3) or (b)(4).

(10) *Newly constructed partitions.* In any entrance hall, stair hall or public hall where any partition or part thereof is newly constructed, and where the plaster has been removed from any partition or part thereof, such partition shall be fire-retarded on both sides.

(c) *Ceilings.* Any approved method for fire-retarding partitions shall be acceptable for fire-retarding ceilings,

provided that all existing materials are completely removed to face of joists. Mineral wool, brick gypsum or other masonry fill will not be accepted.

(1) Where any entrance hall, public hall or stair hall, or any portion thereof, in any part of any old law tenement or [sic] converted dwelling is required to be fire-retarded that portion of any ceiling directly underneath any such entrance hall, public hall or stair hall shall be fire-retarded. Where such ceiling is located in any store, apartment or other space it shall also be fire-retarded as required for partitions by §§15-07(b)(1) or (b)(2).

Where the above method is impractical due to the existing ceiling construction in any such store, apartment or other space, the Department of Buildings may permit the fire-retarding of such ceilings to be applied from above by removing the floor of any such entrance hall, public hall or stair hall and installing between the floor beams, and directly against ceiling below, a layer of heavy building paper over which there shall be placed a basket made of reinforced ribbed expanded metal lath weighing at least 3.4 pounds per square yard. Such basket shall be lined with Portland cement or gypsum mortar not less than one inch (1") in thickness. The building paper, metal lath and cement or gypsum mortar shall be carried at least halfway up on the side of beams. However, this method will not be accepted for the fire-retarding of any such ceiling located in a space used for a hazardous purpose or business, nor will it be accepted for fire-retarding of any such ceiling located in the cellar or for the fire-retarding of any ceiling located in any store, apartment or other space when such ceiling is constructed of wood or of wood and metal applied directly to the beams. In such cases the ceilings shall be fire-retarded according to the requirements of §§15-07(b)(1) or (b)(2).

(d) *Existing wood stairs.* Except where stairs of incombustible material are required in Class B converted dwellings as set forth in §15-07(a)(7), all wood railings, balustrades and newel posts shall be completely removed from every existing wood stairs and such stairs shall be provided with railings, balustrades and newel posts of metal or other hard incombustible material, of such size and secured in such manner to the existing stairs as may be approved by the Department of Buildings, except handrails may be of hardwood. Soffits and stringers of existing wood stairs shall be fire-retarded in accordance with the methods set forth in §§15-07(e) or (f).

(e) *Stair soffits.* The soffits of every stair in every entrance hall, public hall and stair hall, including any soffit extending beyond the enclosure partitions of any such hall, shall be fire-retarded. Any approved method for fire-retarding partitions shall be acceptable for fire-retarding stair soffits provided that all existing materials are completely removed to face of structural members of stair soffits.

(f) *Fascia-stair and well.* Fascia of outside stringer on rake of stairs, and well fascia at floor level, shall be fire-retarded their full depth to form complete seals with the soffits of stairs and ceilings of halls, respectively. Type of fire-retarding shall be one of those herein approved for ceilings of halls, or in lieu thereof, cover fascia with sheet asbestos not less than three-sixteenths inch (3/16") thick with joints well pointed over which there shall be an additional single layer of No. 26 U.S. gage [sic] stamped metal or cover fascia with a single layer of No.14 U.S. gage [sic] steel.

(g) *Fire-stopping.* All partitions required to be fire-retarded shall be fire-stopped with incombustible material at floors, ceilings and roofs. Fire-stopping over partitions shall extend from the ceilings to the underside of the flooring or roofing above. Fire-stopping under partitions shall extend from the underside of flooring to ceiling below. All [sic] spaces between floor joints (directly over and under partitions) shall be completely filled the full depth of joists. Any space from top of partition to underside of roof boarding shall be completely fire-stopped.

Fire-stopping shall be done with brick, cinder concrete, gypsum, metal lath and Portland cement or gypsum mortar, mineral wool, or other materials acceptable to the Department of Buildings.

(h) *Door openings.* Except as provided in §§15-07(h)(1) and (h)(2), all door openings into any public hall, entrance hall or stair hall which is required to be fire-retarded shall be equipped with self-closing protective assemblies having a fire-resistive rating of at least one hour.

(1) In old law tenements where the number of apartments is not being increased, existing wood doors opening into public halls, entrance halls or stair halls may remain provided such doors are made to be self-closing ("Butterfly" spring hinges are not acceptable) and, provided further, all glazed transoms and panels in every such door are glazed with wire glass. All such transoms shall be made stationary.

(2) Where, in any old law tenement, the number of apartments is being increased on one or more stories, door openings into public halls, entrance halls or stair halls on each story or stories shall be equipped with self-closing protective assemblies having a fire-resistive rating of at least one hour.

In such old law tenements existing wood doors opening into public halls, entrance halls or stair halls may remain on any story where there is no increase in the number of apartments, provided such doors and every transom and panel in same are made to conform to the requirements set forth in §15-07(h).

(3) All doors shall be properly fitted to their assemblies and there shall be no unnecessary space between doors and door bucks or saddles.

(i) *Materials.* All materials used in the process of fire-retarding shall be of a type and manufacture acceptable to the Department of Buildings.

The following shall be considered as minimum requirements:

(1) *Metal lath.* Metal lath shall weigh at least 30 pounds per square yard, except lath used over existing plaster which lath shall weigh at least 3.4 pounds per square yard and be reinforced with rigid ribs not less than three eighths inch (3/8") deep, spaced not more than eight inches (8") on center running full length of sheets. Where ribs exceed 4.8 inches on center, same shall have at least one intermediate one eighth inch (1/8") inverted rib running the full length of sheets.

Metal lath fastened to studs [*sic*] shall be attached at least six inch (6") [*sic*] intervals with 4-penny nails or one inch (1") roofing nails or No. 14 steel wire gage [*sic*] wire staples, and to wood joists by at least 6-penny nails, one and one-quarter inch (1 1/4") roofing nails, or one inch (1") No. 14 steel wire gage [*sic*] wire staples. When metal lath is applied over existing plastered surfaces, same shall be fastened with nails or staples of the same gage [*sic*] and such nails or staples shall have anchorage of at least one-half inch (1/2") in studs and three-quarters inch (3/4") in joists. Laps between the studs or joists shall be securely tied or laced. Stiffened metal lath on wood studs, or joists, shall be nailed or stapled at least at eight inch (8") intervals, and the laps between studs similarly tied or laced. Metal lath shall be galvanized or painted.

(2) *Plaster boards or perforated rock lath.* Plaster boards or perforated rock lath shall be of type and manufacture acceptable to the Department of Buildings. Each board shall bear the name of manufacturer [*sic*] and brand stamped thereon for inspection after erection.

Plaster boards or perforated rock lath nailed directly to wood studding or joists shall be fastened with one and one-eighth inches (1 1/8") wire nails of at least No. 13 steel wire gage [*sic*] with flat three-eighth inch (3/8") heads.

When such boards are applied over existing plastered surfaces, same shall be fastened with nails of the same gage [*sic*] and such nails shall have anchorage of at least one-half inch (1/2") in studs and three-quarters inch (3/4") in joists. The maximum space between nails shall be four inches (4"). The joints shall be broken at every other board. The wetting of such boards before plastering is forbidden.

(3) *Stamped metal.* Stamped metal shall be No. 26 U.S. gage [*sic*] (equivalent thickness .018 inches or 3/160 inches) with one inch (1") lapped seams. Size of sheets shall be not more than twenty-four inches by ninety-six inches (24" x 96"), having a selvage consisting of a half-round bead sufficient to create a one inch (1") overlap at both seams. Nailing shall be secured direct to studs or joists with 6-penny smooth box nails (two inches (2") or No. 12 1/2 gage [*sic*]) with nails on end seams spaced not more than three inches (3") apart. Nailing to plaster is forbidden and in all cases nails shall have anchorage of at least one-half inch (1/2") in studs and three-quarters inch (3/4") in joists. All beads at seams shall be chisel sealed, making a tight joint. All sheets shall be marked "26 U.S. Gage" [*sic*] for identification and inspection after erection.

(4) *Mineral wool.* Mineral wool shall be of a type and manufacture acceptable to the Department of Buildings. Holes shall be cut approximately three inches (3") in diameter through the wood lath and plaster near the ceiling, in the panels between each two adjacent studs. As an alternative, holes may be cut approximately three inches by six inches (3" x 6") on every second stud. Check each stud panel with weight and line to find out whether there is any obstruction. If any cross-bridging or other obstruction is encountered additional holes shall be cut until access has been gained to all open spaces within the stud panel in all specified partitions. Mineral wool shall then be blown into all spaces by the pneumatic method with air pressure sufficient to pack the insulation to a density acceptable to the Department of Buildings. Mineral wool for this work shall be in bags or containers marked with manufacturer's name and label specifying its type.

(5) *Other materials.* No other material may be used unless same is acceptable to the Department of Buildings.

(j) *Exceptions.* Where any portion of any entrance hall, stair hall or public hall has been previously fire-retarded under the supervision of this department, the former Tenement House Department or various former Department of Buildings, such fire-retarding will be accepted only to the extent that same has been previously approved, provided, however, that such entrance hall, stair hall or public hall is otherwise made to conform to all the requirements set forth in these rules.

#### **§15-08 Fire-Retarding of Cellar Ceilings in Old Law Tenements and Converted Dwellings.**

(a) *Intent.* The fire-retarding rules herewith set forth are approved by the Department of Buildings for the existing multiple dwellings where the ceilings of the cellar or other lowest story is required, by §85 and §240, subdivision 3, Multiple Dwelling Law, and by §27-2044, Housing Maintenance Code, to be fire-retarded in a manner approved by the Department of Buildings.

(1) It is the intent of the law to provide a continuous fire-retarded covering over the entire ceiling of the cellar, or other lowest story, so as to prevent fire communicating with upper stories of a multiple dwelling.

Where there is a space less than four feet six inches (4'-6") in height from the ground or floor level to the underside of the first tier of beams, such space shall be considered as an "air space" and not as a cellar. However,

when such space opens to a cellar where fire-retarding of the ceiling is required, then such space shall be separated from the cellar with a partition constructed of incombustible material in which there is provided self-closing door and assembly having a fire-resistive rating of at least one hour.

Where the ceiling of the cellar or other lowest story is required to be fire-retarded, all openings in such ceilings for stairways not located directly under a main stair, also openings in ceiling such as pipe shafts, vent shafts, unenclosed dumbwaiter shafts, disused flues, etc., shall be properly closed. (Private stairs within duplex apartments extending into cellar or basement are not required to be enclosed.)

New partitions erected to enclose existing stair referred to in the preceding paragraph shall be of incombustible materials. Existing partitions enclosing any such stair will be acceptable where same are of incombustible materials or where same are fire-retarded on both sides in accordance with the methods set forth in §15-07(b)(1) or (b)(2) and with materials conforming with the requirements of §15-07(i) of these rules and regulations. Door openings in such enclosure partitions shall be equipped with self-closing protective assemblies having fire-resistive ratings of at least one hour.

When existing shafts, including dumbwaiter shafts, extend below the ceiling a distance less than one-half (1/2) the height of the cellar, such shafts shall be considered as being part of the cellar ceiling and the enclosures of said shafts shall be fire-retarded in the same manner as required for cellar ceilings. All existing shafts, including dumbwaiter shafts, which extend below the ceiling a distance more than one-half (1/2) the height of the cellar shall be enclosed with incombustible materials. All shafts referred to in this paragraph shall have adequate cleanout at base consisting of fireproof [sic] self-closing door and assembly having a fire-rating of at least one hour.

Where new partitions or enclosures are erected in a cellar they shall be constructed of incombustible materials.

(2) *Wood girders, columns, posts, etc.* The fire-retarding material of ceiling of cellar or other lowest story shall be carried down and around all non-fireproof ceiling projections, such as wood girders, etc., which are less than six inches by six inches (6" x 6") in dimension.

The fire-retarding material also shall be turned down at least three inches (3") on all non-fire-retarding columns, posts, etc., which are less than six inches (6") in diameter.

(3) *Non-fire-retarded cellar partitions.* When non-fire-retarded partitions in cellar, or other lowest story, extend to the ceiling, the fire-retarding material of the ceiling shall be turned down at least three inches (3") on said partitions, or the partitions shall be cut off at top to permit the fire-retarding of the ceiling to be continuous.

Where, in any old law tenement three (3) stories and basement in height, there is also a cellar under the basement story, the ceiling of such cellar shall be fire-retarded; and also, in any such old law tenement, where the main entrance from the grade is to the first story that portion of the basement ceiling which is directly under the first story entrance hall, public hall and stair hall shall be fire-retarded.

In every old law tenement three (3) stories and basement in height with no cellar under the basement, where the main entrance from the grade is to the basement story, the ceiling of the basement story shall be fire-retarded throughout. In any such old law tenement where the main entrance from the grade is to the first story no such fire-retarding will be required.

(4) *Heating appliances.* The portion of the ceiling over any furnace, boiler or hot water heater shall be fire-retarded in accordance with the methods set forth in §§15-07(b)(1) or (b)(2), and such fire-retarding shall extend for a distance of at least four feet (4'-0") beyond the sides and rear, and eight feet (8'-0") in front of such furnace or boiler.

(5) It is not intended that these rules and regulations in themselves require plans to be filed. However, should any work involves structural changes, then plans are required to be filed in the Department of Buildings and such changes shall be subject to all other Rules and Regulations applicable thereto.

(6) Work shall not commence until satisfactory evidence has been submitted to the Department of Buildings that compensation insurance has been obtained in accordance with the provisions of the Workmen's Compensation Law.

(b) *Methods.* Cellar ceilings shall be fire-retarded according to any of the following methods:

Metal lath and cement or gypsum mortar conforming to §15-07(b)(1) of these rules.

Plaster boards and gypsum mortar or stamped metal conforming to §15-07(b)(2) of these rules and regulations.

No. 26 U.S. gage [sic] stamped metal over existing plastered ceiling, when erected without damage to the plaster. Furring strips are not required, but if used, they shall be metal covered on both sides and on face surface. Stamped metal shall not be applied until after existing plastered ceiling has been inspected and approved by an inspector of the Department of Housing and Buildings.

No other method may be used unless same are acceptable to the Department of Buildings.

(c) *Materials.* Materials used shall be in accordance with the provisions of §§15-07(i)(1), (i)(2) or (i)(3) of these rules and regulations.

Mineral wool, brick, gypsum or other masonry fill will not be accepted for fire-retarding cellar ceilings.

No other materials may be used unless same are acceptable to the Department of Buildings.

### **§15-09 Fire-Retarding of Cooking Spaces in all Multiple Dwellings.**

(a) *Intent.* The rules herewith set forth are approved by the Department of Buildings for the protection of cooking spaces under §§33 [*sic*] and 176 of the Multiple Dwelling Law.

As set forth in §33 of the Multiple Dwelling Law, nothing in these rules shall be construed as permitting fire-retarding partitions in fireproof multiple dwellings.

(b) *Multiple dwelling law.* Except when sprinkler heads are installed in conformity with subdivision (e) of this section, §33 of the Multiple Dwelling Law requires fire-retarding of cooking spaces in existing and newly constructed class A and class B multiple dwellings.

(c) *Ceilings and walls exclusive of doors.* Walls and ceilings shall be fire-retarded according to any of the following methods:

Metal lath and cement or gypsum mortar conforming to §15-07(b)(1) of these rules.

Plaster boards and gypsum mortar or stamped metal conforming to §15-07(b)(2) of these rules and regulations.

No. 26 U.S. gage [*sic*] stamped metal over existing plaster when erected without damage to the plaster. Furring strips are not required, but if used, they shall be metal covered on both sides and on face surface. Stamped metal shall not be applied until after existing plaster has been inspected and approved by an inspector of the Department of Buildings.

Materials used shall be in accordance with the provisions of §§15-07(i)(1), (i)(2) or (i)(3) of these rules and regulations.

No other methods or materials may be used unless same are acceptable to the Department of Buildings.

(d) *Combustible material.* In every cooking space, all combustible material immediately underneath or within one foot of any apparatus used for cooking or warming of food shall be fire-retarded in conformity with the applicable provisions of these rules or covered with asbestos at least three-sixteenths inch (3/16") in thickness and twenty-six gage [*sic*] metal or with fire-resistive material of equivalent rating. There shall always be at least two feet (2'-0") of clear space above such apparatus.

(e) *Sprinkler heads installed in ceilings of cooking spaces in lieu of fire-retarding the ceilings and walls.* Where sprinkler heads are installed in the ceilings of cooking spaces in lieu of fire-retarding the ceilings and walls, all of the provisions of §§15-09(a) through (f) inclusive, shall be complied with, except that it will not be required that the fire-retarding of the walls and ceilings of cooking spaces be complied with.

Before the installation of sprinkler heads is begun an application shall be filed with and approved by the Department of Buildings.

Sprinkler heads shall be of a type and manufacture approved by the Department of Buildings or previously approved by the Board of Standards and Appeals or by the Underwriters Laboratories Limited, and shall have fusible struts constructed to fuse at a temperature not higher than two hundred twelve degrees (212°) Fahrenheit. Every sprinkler head shall bear the year of manufacture clearly on its surface. No sprinkler head may be installed after December 31st of the year following the year of manufacture.

There shall be provided at least one (1) sprinkler head for every fifty-nine (59) square feet or fraction thereof of the floor area of the cooking space.

Sprinkler heads shall be connected with the water supply of the building through a pipe of at least one-half (1/2) inch inside diameter.

Where practicable, sprinkler heads shall be located in an upright position on top the sprinkler piping.

There shall be kept available on the premises at all times a sufficient supply of extra sprinkler heads and also a sprinkler wrench for use to replace promptly any fused or damaged sprinkler heads.

Any head which has opened or has been damaged shall be replaced immediately with a good sprinkler head.

Painting or kalsomining of sprinkler heads is prohibited.

(f) *Cooking spaces constructed after July 1, 1949.* Application and plans must be filed with and approved by the Department before any work is started in connection with the construction of any cooking space after July 1, 1949.

### **§15-10 Fire-Escapes, Fire Stairs and Fire Towers.**

(a) *Intent.* These rules have been approved by the Department to supplement the provisions of §53 of the Multiple Dwelling Law in relation to fire-escapes, fire-stairs, etc..

Where fire-escapes serve as a means of exit from other than multiple dwellings, such fire-escapes shall comply with the laws governing such occupancy.

The voluntary erection of fire-escapes on private residence buildings or business and residence buildings shall be

in conformity with these rules and regulations unless otherwise directed by the Borough Superintendent of the Department of Buildings.

It is the intent of these rules to cover only general conditions and they are not designed to cover specific or special cases. When such may occur the owner is required to consult the Department of Buildings and receive instructions before starting of work.

(1) *Fire-escapes on multiple dwellings requiring new certificate of occupancy.* Except as provided in §15-10(g)(2) re lodging houses, double-rung ladder type fire-escapes will not be accepted when a new Certificate of Occupancy is required.

(2) *Alterations for increased occupancy.* Where an alteration is made increasing occupancy on any story and a fire-escape is required such fire-escape shall conform to the provisions of §53 of the Multiple Dwelling Law and to the applicable provisions of these rules.

(b) *General provisions.*

(1) *Caution.* No fire-escapes shall be removed from any apartment without due precaution against leaving occupants without fire-escape protection as required by subdivision 9 of §53 of the Multiple Dwelling Law.

(2) *Entrance story, etc.-second means of egress.* Where the distance to safe landing, from the window sill of any apartment on any story, including the entrance story, is more than twelve feet (12'-0"), a balcony and sliding drop-ladder or other approved second means of egress shall be provided for such apartment. Safer egress to street or other safe place shall be provided from the termination of such means of egress.

(3) *Application blanks and plans.* Before the erection of new fire-escapes or alteration of existing fire-escapes upon any multiple dwelling, application must be filed with and approved by the Department of Buildings.

(4) *Projections beyond the building line.* Every part of fire-escapes or balconies erected on the fronts of multiple dwellings shall be at least ten feet (10') above the sidewalk when such fire-escapes or balconies project beyond the building line.

(c) *Illegal fire-escapes shall be removed.* All vertical ladder, wire, chain or cable fire-escapes if required as a means of egress shall be removed and replaced with a legal means of egress.

(d) *Acceptable existing means of egress on existing multiple dwellings.* Except as provided in §15-10(c), in any existing multiple dwelling any existing means of egress which was lawfully permitted prior to the time the Multiple Dwelling Law became effective may be continued as a legal means of egress as hereinafter enumerated. If located on the front or rear wall of the building and properly connected with stairs with proper openings. If located in an outer court at a point distant not more than thirty feet (30'-0") from the outer end of such court and provided such court is not less than five feet (5'-0") in width from wall to wall at any point between such fire-escape and the outer end of said court.

If located in an inner court whose least horizontal dimension is not less than fifteen feet (15'-0") measured from wall to wall.

If a party-wall balcony on the front or rear wall of the building and there are no doors or openings in the walls between the two buildings other than windows in fireproof air shafts.

If a party-balcony located in an outer court not more than fifteen feet (15'-0") in length measured from the outer end of such court to the innermost point thereof, and not less than five feet (5'-0") in width from wall to wall at any point between the fire-escape and the outer end of said court, and provided also that there are no doors or openings in the walls between the two buildings other than windows in fireproof air-shafts.

No fire-escape, however, shall be deemed sufficient unless all the following conditions are complied with:

All fire-escapes, whether a required means of egress or not, shall be maintained in good order, repair and structurally safe.

All parts shall be of iron or stone.

Except as provided in §15-10(bb) every apartment above the ground floor in each multiple dwelling shall have direct access to a legal fire escape without passing through a public hall.

Except party-wall balconies, all balconies shall be connected to each other by means of a stair or, when permitted, by double-rung ladders.

All fire-escapes, except party-wall balconies, shall have proper drop-ladders in guides from the lowest balcony of sufficient length to reach a safe landing place beneath.

All fire-escapes not on the street shall have a safe and adequate means of egress from the yard or court to the street or to the adjoining premises.

Prompt and ready access shall be had to all fire-escapes. Except as provided in §15-10(bb), such access shall be through a living room or private hall in each apartment or suit of rooms at each story above the ground floor and shall not include the window of a stairhall, nor shall any such egress be obstructed by sinks or other kitchen fixtures, or in any other way.

No existing fire-escape shall be extended or have its location changed except with the written approval of the Department of Buildings. Where an existing apartment in a tenement house erected prior to April twelfth, nineteen hundred and one, is located entirely on a court and has no rooms opening on the street or yard, fire-escapes

hereafter provided for such apartments may be located in courts under the same conditions as prescribed for existing fire-escapes in this subdivision.

When wire, chain cable or vertical ladder fire-escapes are permitted to remain on Multiple Dwellings under the provisions of subdivision 9 of §53, they shall be considered only as supplemental fire-escapes. Such fire-escapes shall be maintained in a safe condition of repair at all times and shall be subject to the applicable requirements of all laws and to these rules in relation to maintenance of existing fire-escapes.

Before a pending violation requiring the removal of such existing fire-escapes is superseded or cancelled, an inspection shall be made in accordance with the specific requirements as set forth in the preceding paragraph. Each of the owners of adjoining structures, commonly served by party-wall balconies serving as a required means of egress, shall maintain in good order and repair that portion of each such balcony which is on his property, and each such owner shall maintain egress normally unobstructed and unimpeded from each such balcony to and [sic] through his structure.

It shall be unlawful for the owner of a structure on which there is a party-wall balcony serving as a required means of egress from an adjoining structure, to remove such party-wall balcony or any portion thereof or to prevent, eliminate or obstruct egress from such party-wall balcony to and through his structure, unless and until such owner has had erected a legal fire-escape or other approved means of egress.

See also §15-10(bb).

(e) *Party-wall balconies.*

(1) *New party-wall balconies.* The erection of new party-wall balconies shall be subject to the discretion and jurisdiction of the Department of Buildings, provided, however, that there shall be no doors or openings in the wall between the buildings served by such balconies other than windows in fireproof airshafts. New party-wall balconies will not be permitted on adjoining frame multiple dwellings.

(2) *Existing party-wall balconies.* Party-wall balconies existing on any multiple dwelling shall afford safe egress, be kept in good order and repair, be constructed so as to be structurally strong and shall be maintained in conformity with all other applicable laws, rules and regulations. Such fire-escapes are acceptable on occupied multiple dwellings.

(f) *Party-wall fire-escapes.* The Department of Buildings may consent to the erection of party-wall fire-escapes on adjoining multiple dwellings, to which the occupants have safe, unobstructed access in common, when such party-wall fire-escapes are constructed and maintained in accordance with the law and these rules.

(1) Any existing party-wall fire-escape (stairways) connection with and used in common by a multiple dwelling and a non-multiple dwelling is acceptable when such fire-escape is maintained in good order and repair and affords safe egress.

(g) *Double-rung ladders.*

(1) Double-rung ladders will not be permitted on new fire-escapes.

(2) Any fire-escape existing prior to the enactment of the Multiple Dwelling Law on any multiple dwelling that does not require a certificate of occupancy resulting from an alteration, if structurally sound and in good condition and provided with existing ladders inclined at an angle not exceeding eighty (80) degrees and equipped with double-rung steps and which affords safe egress, shall be deemed to be a legal fire-escape.

When a Certificate of Occupancy is requested or required in connection with a lodging house which is equipped with a double-rung ladder fire-escape and such fire-escape is in good repair and adequate, except as to type, and only minor violations exist the correction of which will make the premises conform to all other law requirements, the existing double-rung ladder fire-escape may be accepted.

(3) Except as provided in §15-10(g)(2) re lodging houses, double-rung ladders are not acceptable when a new Certificate of Occupancy is to be issued.

(h) *Alteration of existing two-balcony fire-escapes on existing multiple dwellings.* When a building is not more than three (3) stories in height and provided with a balcony on each of the second and third stories, with connecting vertical ladders, and balconies not less than two feet five inches (2'-5") in width and of adequate length, the Department of Buildings may permit the removal of vertical ladders and replacing of the said ladders with regulation sixty (60) degree connecting stairs. Standards shall be one-half inch (1/2") round or square and height of rail at least two feet nine inches (2'-9") .

The stairs shall be not less than seventeen inches (17") wide with a passageway between string and wall or string and top rail of not less than fourteen inches (14"). In lieu of such passageway, the Department of Buildings will permit a drop-ladder to be installed and placed at each end of the lowest balcony in those cases where it is impractical to provide a passageway of such minimum width.

New brackets shall be provided where necessary.

The gateway shall be cut in the front rail with a drop-ladder and guides from second (2nd) story to safe landing.

Where fire-escapes are located at rear of building a gooseneck ladder shall be provided. The gooseneck ladder may be placed at an angle from the top floor balcony to the roof. When placed at an angle a minimum space of

twenty-four inches (24") shall be maintained between the strings and front top rail and a minimum space of fourteen inches (14") between the strings and the front bottom rail. There shall be a space of at least twenty-four inches (24") between the string of the gooseneck ladder and the frame of the window. Conditions may be found where this modification will not exactly apply. When such a condition is found it should be brought to the attention of the Department of Buildings for decision. When fire-escapes are at the front no gooseneck ladder shall be required. When access to such existing two-balcony fire-escape is solely by means of a window in a bathroom, the doors of such bathrooms shall be glazed with glass other than wire glass and all key or cylinder locks shall be removed from doors. In such bathrooms there shall be no fixtures located in front of the window opening to fire-escape. Such altered two-balcony fire-escape shall conform to all other requirements of law and these rules and regulations.

(i) *Accessibility of fire-escapes from apartments, rooms, kitchenettes and other spaces.* Prompt and ready access shall be had to all fire-escapes and, except as provided in §15-10(bb), such access shall be through a living room, kitchenette or private hall in each apartment or suite of rooms at each story above the ground floor.

Access to fire-escapes shall not include the window of a stairhall, nor shall any such egress be obstructed by sinks or other kitchen fixtures, or in any other way.

A clear space of at least twenty-one inches (21") must be maintained as a passageway between any fixtures and the side of an opening leading to fire escapes.

In any apartment which is occupied by a "family" as defined in §4(5) Multiple Dwelling Law, and in which one or more living rooms are rented to boarders or [*sic*] lodgers, every such room shall be directly accessible to a fire-escape without passing through a public hall, and for separately occupied living rooms access to fire-escapes shall be direct from such rooms without passing through a public hall or any other separately occupied room, except as may be permitted in §§66, 67 and 248 of the Multiple Dwelling Law.

(1) *Egress from apartments used for "Single Room Occupancy".* No room in any apartment shall be so occupied for "single room occupancy" unless each room therein shall have free and unobstructed access to each required means of egress from the dwelling without passing through any sleeping room, bathroom or water-closet compartment.

In apartments used for "single room occupancy" there shall be access to a second means of egress within the apartment without passing through any public stair or public hall. On and after July 1, 1957, every tenement used or occupied for single room occupancy in whole or part under the provisions of §248, Multiple Dwelling Law, and which does not have at least two means of egress accessible to each apartment and extending from the ground story to the roof, shall be provided with at least two means of egress, or, in lieu of such egress, every stair hall or public hall, and every hall or passage within an apartment, shall be equipped on each story with one or more automatic sprinkler heads approved by the department. Elevator shafts in such tenements shall be completely enclosed with fireproof or other incombustible material and the doors to such shafts shall be fireproof or shall be covered on all sides with incombustible material.

In apartments used for "single room occupancy" where access to a required means of egress is provided through a room such access to such room shall be through a clear opening at least thirty inches (30") wide extending from floor to ceiling and such opening shall not be equipped with any door frame, or with any device by means of which the opening may be closed, concealed or obstructed.

(j) *Window bars, gates, etc.* No iron bars, gates or other obstructing devices will be permitted on any window giving access to fire-escapes or where such window provides a secondary means of egress in case of fire on any story, including the ground floor, basement, cellar, etc.

Windows on grade level at sidewalk, yard or court, or at roof level of an adjoining building, may have bars, but at least, one window in any apartment or suite of rooms shall be without bars or obstructions of any kind in order to afford a second means of egress and such window shall conform to the provisions of §15-10(k).

(k) *Windows and doors to fire-escapes.* The window or door giving access to fire-escapes shall not be less than two feet (2') in width and the sill of the window shall not be more than three feet (3') above the floor. Window openings shall be not less than two feet six inches (2'-6") high in the clear.

(1) *Steel casement sash.* Steel casement sash opening outward onto any fire-escape balcony three feet six inches (3'-6") in width will be permitted, provided such sash is equipped with approved extension hinges so that, when opened, the sash will be flat against the wall, and further provided that there will be no adjusters on the sash as part of its equipment. Passageway of fourteen inches (14") clear width is required to be maintained between the sash or hinges and any portion of the fire-escape when the sash lies flat against the wall.

When casement sash is set at right angle to the fire-escape stairway a clear radial width of twenty inches (20") must be provided.

(2) *Wire screens and storm windows.* Wire screens are permitted on a door or window giving access to a fire-escape. Such screens may be of the rolling type, casement or of a type that slides vertically or horizontally in sections, providing that there shall be a clear unobstructed space two feet (2') in width and two feet six inches (2'-

6") in height when the screens are opened and further provided that no such screen shall be subdivided with muntins or other dividing or separating bars into spaces less than two feet (2') in width by two feet six inches (2'-6") in height.

Storm sash and storm doors are permitted on openings giving access to fire-escapes provided they are arranged so as to be easily and readily opened from the inside and do not obstruct or interfere with safe egress.

(l) *Egress from fire-escape balconies not to be obstructed.* Egress from fire-escape balconies must not be obstructed by signs, fixed awnings or any other obstruction.

(m) *Extension roofs used as means of egress or directly under fire-escape balcony.*

(1) *Hereafter erected extension roofs.* Where the roof of an extension hereafter erected is to be used as a means of egress from a fire-escape, or where a fire-escape balcony is located directly above said roof, such roof shall be of fireproof construction.

(2) *Existing extension roofs.* Except in converted dwellings where sprinklers may be installed, in every multiple dwelling where a fire-escape balcony is situated over and not more than eight feet (8') above a non-fireproof roof, or where a non-fireproof roof of an extension is to be used as egress from fire-escapes, the entire ceiling of said extension must be fire-retarded with metal lath and cement or gypsum mortar in the manner prescribed in §15-07(b)(1) and (i)(1) of these rules and regulations, or with one-half inch (1/2") approved plaster boards lined with No. 26 U.S. gage [sic] stamped metal. In buildings requiring the issuance of a Certificate of Occupancy as a result of being altered structurally, the only approved method shall be with cement or [sic] gypsum mortar and metal lath weighing not less than three (3.0) pounds per square yard which shall be applied directly to the beams or other structural members.

Where the roof of an existing extension is used as fire egress, a balcony shall be provided at the level of the roof and, if the distance between the said balcony and a safe landing is more than sixteen feet (16'-0"), a landing platform must be provided not more than ten feet (10'-0") from said safe landing and this landing platform and the balcony on the roof level must be connected by a regulation stairway. From the landing platform a drop-ladder in guides must be provided so as to reach the safe landing.

A balcony and drop-ladder in guides as per §15-10(r)(11) shall be provided for every two fire-escape stacks or fraction thereof using an extension roof for landing and fire egress.

(3) *Skylights on extensions.* Any existing skylights in said roof must be constructed of incombustible material whenever deemed necessary.

Where skylights exist or are hereafter constructed on the roof of an extension used as a means of egress from a fire-escape, they must not interfere with egress in any way and if in the line of said egress, they must be provided with a substantial guard-rail not less than three feet six inches (3'-6") high.

(n) *Egress to street required from fire-escapes located in yards and courts not extending to the street.* In an old law tenement or a converted dwelling where fire-escapes are located in a yard less than thirty feet (30'-0") in depth, or in a court which does not extend to such a yard or to the street, there shall be egress to the street by means of a fireproof [sic] passageway. In such multiple dwellings, where the yard is less than thirty feet (30'-0") in depth and where the consent of owner of the adjoining premises is obtained, in lieu of providing such fireproof [sic] passageway, a door or gate in a lot-line fence leading from such yard or court to the yard or court of the adjoining premises may be accepted, provided, however, that such door or gate provides adequate egress and is not locked or secured in any manner except by a readily [sic] accessible, easy to open hook or bolt.

Where fire-escapes are located in the yard of a new law tenement or of a multiple dwelling erected after April 18, 1929, access shall be provided from the street to the yard either in a direct line or through a court as provided in paragraph c of subdivision 2 of §238 and paragraph i of subdivision 2 of Section 27, Multiple Dwelling Law.

Where fire-escapes are located in a court of a new law tenement or of a multiple dwelling erected after April 18, 1929, and such court does not extend to the street, a fireproof passageway leading directly to the street shall be provided as required by paragraph b of subdivision 2 of §53, Multiple Dwelling Law.

All passageways required under these Rules shall be not less than seven feet (7'-0") in height and not less than three feet (3'-0") in width and shall at all times be kept clear and unobstructed. Doors and gates at the end of such passageways are prohibited, except that a door or gate equipped with an approved-type knob or panic bolt which shall be readily openable from the inside will be permitted at the building line. Doors and gates provided with keylocks or padlocks are prohibited.

(o) *Location for new fire-escapes.* No required fire-escape shall be permitted to be placed on an adjoining property without the written consent of the Department of Buildings. No fire-escape shall be erected within ten feet (10') of the termination of a duct. Fire-escapes for existing multiple dwellings shall be located as required by the department and arranged so as to provide legal egress for all rooms and apartments.

(1) *Fire-escapes in court (side yard).* Except as provided in §15-10(bb)(6) where an apartment has a street frontage and extends also to a yard, fire-escapes may be permitted to be placed in a court (side yard) if the court (side yard) is not less than seven feet (7'-0") wide. In any multiple dwelling where exterior structural conditions

are such as to prevent the erection of a fire-escape on the street front or yard, new fire-escapes may be permitted to be erected in a lot-line court (side yard) providing the lot-line court (side yard) extends from street to rear yard and is not less than three feet (3'-0") in width for its full length. Fire-escapes erected in such court may be three feet (3'-0") wide when the width of such court does not permit balconies three feet four inches (3'-4") in width.

The width of stairways and passageways and other arrangement details affected by the permitted reduction in the width of balconies will be determined and furnished to contractor by the Department upon request.

(2) Where an existing apartment in a tenement erected prior to April 12, 1901, is located entirely on a court and has no rooms opening on the street or yard, fire-escapes hereafter provided for such apartments may be located in courts under the same conditions as prescribed for existing fire-escapes in §15-10(d).

(p) *Materials.* All fire-escapes hereafter constructed shall consist of outside open balconies and stairways of iron, stone, or other approved materials. Wherever the term wrought iron is used in these rules it shall be deemed to include all other especially approved metals.

Cast iron will not be permitted to enter into the construction of fire-escapes.

The use of old material in the construction of new fire-escapes is prohibited.

Bolts used in the construction or repair of fire-escapes shall be machine bolts. The use of stove bolts is prohibited.

The strength and construction of stone balconies hereafter erected forming part of the fire-escape shall be subject to the approval of the Department of Housing and Buildings.

All structural steel used in the construction of fire-escapes shall be at least one-quarter (0.25) inch in thickness.

(q) *Types of fire-escapes.* There shall be two types of fire-escapes: "Type A" and "Type B". Except for brackets and braces as hereafter described, what is applicable to one type is equally applicable to the other whether or not it is so stated specifically.

(1) *Definition of "Type A" and "Type B" fire-escapes.* A "Type A" fire-escape [*sic*] is one which has a supporting bracket at each end of the balcony or platform.

A "Type B" fire-escape is one which has brackets not more than four feet (4') apart supporting the balcony or platform.

(2) Cantilever brackets will not be accepted for new fire-escapes on existing buildings.

(3) Details of other types of structural supports for fire-escapes must be submitted to and approved by the Department before being used in the construction of fire-escapes.

(4) "Type A" fire-escapes are not permitted on frame buildings, walls or hollow masonry constructions, on walls of solid masonry less than eight inches (8") in thickness nor on hollow walls of solid masonry unless complete construction details are submitted to and approved by the Department before the construction of fire-escapes.

(r) *Balconies.* All balconies, except those erected upon frame buildings and buildings having eight inch (8") brick walls, shall be not less than three feet four inches (3'-4") in width overall [*sic*] and may project into the public highway to a distance not greater than four feet (4') beyond the building line. Balconies erected upon frame buildings and buildings having eight inch (8") brick walls shall be thirty-six inches (36") in width. Balcony railings must be not less than two feet nine inches (2'-9") high.

(1) *Passageway.* Seventeen inches (17") in width is required between the strings of stairs and the wall, or between the strings of stairs and railings, clear of all projections to a height of six feet six inches (6'-6").

Fourteen inches (14") clear width is required between the hatchway railing and the window sill.

Seventeen inches (17") in width is required between the gooseneck ladder and the hatchway on the upper balcony.

(2) *Openings.* The openings for stairways in all balconies shall be not less than twenty-one inches (21") wide, and of such length as to provide at least six feet six inches (6'-6") clear headroom on all stairways at every tread, and shall have no covers of any kind.

A round, iron guard rail, three-quarter inch (3/4") in diameter shall be provided around all hatchways on all new balconies, and also, when necessary, around hatchways on existing balconies. Such guard rails shall be at least two feet six inches (2'-6") high and shall be properly braced at intervals of three feet (3') The brace from guard rail to the front top rail shall be so arranged to allow six feet six inches (6'-6") of headroom on the stairway. Openings are not permitted in the floor of the lowest balcony of any new fire-escapes. Egress must be from a gateway in the front of end rail.

(3) *Top rails.* New top rails must be one and three-quarters inches by one-half inch (1 3/4" x 1/2") wrought iron or steel. Angle iron top rails will not be accepted. Separate bolt ends must be one and one-half inches by one-half inch (1 1/2" x 1/2") at connection with top rails and secured to the same by two three-eighths inch (3/8") bolts well upset.

No welded connections, other than shop welding, for top rails, will be permitted.

Top rails must go through the wall. When the wall is of brick, stone or concrete they must be anchored on the inner face thereof by means of nuts and four-inch by four-inch by three-eighths inch (4" x 4" x 3/8") washers.

Where a masonry wall is eight inches (8") in thickness the washers shall be continuous and shall extend vertically from four inches (4") below the bracket anchorage to four inches (4") above the top rail.

Bolt ends must be at least three-quarters inch (3/4") in diameter.

Top rails must be anchored in the wall at least nine inches (9") from the window or door opening. On recess fire-escapes the top rails need not go through the wall, but must be hot leaded six inches (6") in brick or stone and at least twelve inches (12") from the outside face of the wall.

The front and return top rail, unless in one (1) piece, must be secured at the angle in the following manner: (1) with lap joint, by one-half inch (1/2") rivet and a strap of same dimension as the top rail, with one (1) three-eighths inch (3/8") rivet or bolt in each end of the strap; (2) with butt joint, by a triangular plate four inches by six inches by three-eighths inch (4" x 6" x 3/8") secured to each member of the top rail by two (2) three-eighths inch (3/8") rivets or bolts.

Top rails may be spliced with iron of the same dimensions as the rails with two (2) three-eighths inch (3/8") rivets or bolts on each side of the splice, or may be overlapped not less than eight inches (8") and secured by two (2) three-eighths inch (3/8") bolts or rivets.

Where front rails are not rigid they must be braced with outside braces. Said braces must be wrought iron not less than one and three-quarters inches by one-half inch (1 3/4" x 1/2") placed on edge. The braces must be properly spaced and secured to the extended brackets and top rails by three-eighths inch (3/8") rivets or bolts. Where brackets are extended to receive outside braces the extended portion must never less than two inches by one-half inch (2" x 1/2") and secured to the bracket by two (2) three-eighths inch (3/8") rivets or bolts.

Bow braces and overhead [*sic*] braces will not be accepted.

(4) *Bottom rails.* Bottom rails must be one and one-half inches by three-eighths inch (1 1/2" x 3/8") wrought iron and front rail of same must be secured to brackets by three-eighths inch (3/8") rivets or bolts. Return bottom rails must be leaded or cemented in the wall when the latter is of brick, or may be secured to the brackets when this is practicable. The [*sic*] bottom front and return rails must be connected at angles by at least one (1) three-eighths inch (3/8") rivet or bolt well burred. They may be spliced as in the [*sic*] case of top rails.

(5) *Standards.* Standards must be not less than one-half inch (1/2") round or square set vertically, riveted to the top and bottom rails, not more than six inches (6") apart on centers. Special designs must be submitted for any variation, and approved before work is begun.

(6) *Floor slats.* Floor slats must be of wrought iron one and one-half inches (1 1/2") in width and three-eighths inch (3/8") thick and placed not more than one and one-quarter inches (1 1/4") apart. In new balconies floor slats shall not project more than six inches (6") and in old balconies not more than eighteen inches (18"), beyond the end bracket and shall not be supported by the bottom rail. All floors must be well secured to the brackets by three-eighths inch (3/8") "U" or clamp bolts. Floor slats may be spliced with a four inch (4") splice plate [*sic*] three-eighths inch (3/8") thick, secured by three-eighths inch (3/8") countersunk or roundhead bolts or rivets on each side of the joint. The ends of the floor slats must not project over stairs so as to overhang the top tread more than one-half inch (1/2"). The ends of such floor slats shall not be cut or burned off so as to be jagged or uneven. The floor slats shall be in true alignment.

(7) *Battens.* Battens must be one and one-half inches by three-eighths inch (1 1/2" x 3/8") not more than three feet (3') apart, riveted to the slats by five-sixteenth inch (5/16") rivets and so spaced as to secure rigidity. No welded connections, other than shop welding, for top rails will be permitted.

Top rails must go through the wall. When the wall is of brick, stone or concrete they must be anchored on the inner face thereof by means of nuts and four-inch by four-inch by three-eighths inch (4" x 4" x 3/8") washers. Where a masonry wall is eight inches (8") in thickness the washers shall be continuous and shall extend vertically from four inches (4") below the bracket anchorage to four inches (4") above the top rail. Bolt ends must be at least three-quarters inch (3/4") in diameter.

Top rails must be anchored in the wall at least nine inches (9") from the window or door opening. On recess fire-escapes the top rails need not go through the wall, but must be hot leaded six inches (6") in brick or stone and at least twelve inches (12") from the outside face of the wall.

The front and return top rail, unless in one (1) piece, must be secured at the angle in the following manner: (1) with lap joint, by one-half inch (1/2") rivet and a strap of same dimension as the top rail, with one (1) three-eighths inch (3/8") rivet or bolt in each end of the strap; (2) with butt joint, by a triangular plate four inches by six inches by three-eighths inch (4" x 6" x 3/8") secured to each member of the top rail by two (2) three-eighths inch (3/8") rivets or bolts.

Top rails may be spliced with iron of the same dimensions as the rails with two (2) three-eighths inch (3/8") rivets or bolts on each side of the splice, or may be overlapped not less than eight inches (8") and secured by two (2) three-eighths inch (3/8") bolts or rivets.

Where front rails are not rigid they must be braced with outside braces. Said braces must be wrought iron not less than one and three-quarters inches by one-half inch (1 3/4" x 1/2") placed on edge. The braces must be properly spaced and secured to the extended brackets and top rails by three-eighths inch (3/8") rivets or bolts. Where brackets are extended to receive outside braces the extended portion must never be less than two inches by one-half inch (2" x 1/2") and secured to the bracket by two (2) three-eighths inch (3/8") rivets or bolts.

Bow braces and overhead [*sic*] braces will not be accepted.

(8) *Landings.* Landings at the head and foot of stairs shall be at least forty inches by twenty inches (40" x 20") except on the balcony on the top story where the gooseneck ladder is located such landing shall be not less than forty inches by thirty inches (40" x 30"). On the lowest balcony where the opening to drop-ladder is in the return rail at front of the lowest tread the landing must be at least forty inches by thirty-six inches (40" x 36").

(9) *Egress from lowest balcony.* The gateway in the rail must be of sufficient width to permit the proper installation of the drop-ladder and guide-rods.

When the opening to the drop-ladder is in the return rail and at front of the lowest step, the landing at the foot of the stairs must be at least three feet by three feet, four inches (3' x 3'-4")[sic].

Top rails must be well braced at the gateway.

(10) *Distance from lowest balcony to ground.* The distance from the lowest balcony to the ground or safe landing shall be not more than sixteen feet (16'-0") except that in existing multiple dwellings where due to structural conditions, such as plate glass store fronts, etc., it is not possible to erect such lowest balcony within sixteen feet (16'-0") of the ground, the Department of Buildings may permit such balcony to be erected at a height of not more than eighteen feet (18'-0") above the ground.

(11) *Termination of fire-escapes on extension roofs.* Where fire-escape stairs or ladders rest upon a fire-proof roof, no balcony need be provided at the foot of such stairs or ladders.

Where fire-escapes terminate on the roof of an existing extension, a guide-rod drop-ladder shall be provided at the level of the roof of such extension. Where the distance from such roof to a safe landing is more than sixteen feet (16'-0") an intermediate balcony not more than ten feet (10'-0") above a safe landing shall be provided, and such intermediate balcony shall be equipped with a guide-rod and drop-ladder and connected by means of a regulation stairway and balcony at the level of the extension roof.

Balconies, where required, must be anchored and constructed in a manner satisfactory to the Department of Buildings.

The roof of every extension used for egress, or upon which fire-escapes terminate, shall be fire-proof or fire-retarded according to the provisions of §15-10(m) of these Rules and Regulations.

(s) *Brackets and braces.*

(1) *"Type A".* All horizontal members of brackets and all cross beams shall be not less than four-inch (4") channels weighing not less seven and one-quarter (7.25) pounds to the linear foot.

The end bracket members shall enter the wall at a point not less than nine inches (9") from a door or window and shall be anchored on the inside face of the wall with an eight-inch by eight-inch by three-eighths inch (8" x 8" x 3/8") washer and a one-inch (1") bolt and nut. Where the wall is eight inches (8") in thickness the washer shall be continuous and shall extend across all brackets and cross beams. The bolt end shall be wrought iron not less than two inches by one-half inch (2" x 1/2") which shall be drawn out to form the necessary bolt end without welded connections. The bolt end shall be secured to the bracket with two (2) one-half inch (1/2") rivets. On eight-inch (8") walls the bolt end shall not be less than nine inches (9") long. On twelve-inch (12") walls the bolt end shall not be less than eleven inches (11") long. On sixteen-inch (16") walls the bolt end shall not be less than fifteen inches (15") long.

When the wall is eight inches (8") in thickness the bracket member shall enter the wall not less than seven inches (7").

When the wall is twelve inches (12") in thickness the bracket member shall enter the wall not less than eleven inches (11").

When the wall is sixteen inches (16") in thickness the bracket member shall enter the wall not less than fifteen inches (15").

The intermediate cross beams shall enter the wall not less than eight inches (8") except where they enter the wall under the window. In such case the cross beam shall enter the wall not less than four inches (4").

The member forming the hatchway opening shall be a four-inch (4") channel iron weighing not less than seven and one-quarter (7.25) pounds per foot. It shall be secured to the intermediate cross beam with a three-inch by three-inch by one-quarter inch (3" x 3" x 1/4") lug and two (2) one-half inch (1/2") rivets or bolts.

The front bottom member of the fire-escape shall be of the following size and weights:

<u>Length of Balcony</u>	<u>Weight of Channels</u>	<u>Size of Channels</u>
Up to 11 feet	9.0 pounds per foot	5 inches
Up to 13 feet	10.5 pounds per foot	6 inches
Up to 15 feet	12.25 pounds per foot	7 inches
Up to 17 feet	13.75 pounds per foot	8 inches

The bracket braces shall be angle iron not less than two and one-half inches by two and one-half inches by one-quarter inch (2 1/2" x 2 1/2" x 1/4"). The braces shall drop not less than twenty-four inches (24") from the top of the bracket and shall extend out to a point not less than three-quarters (3/4) of the length of the bracket.

Each member of the brace shall be secured to the bracket with two (2) one-half inch (1/2") rivets.  
The drop member of the brace shall be secured to the extended member with two (2) one-half inch (1/2") rivets.  
The heel of the brace shall be cut out one-half inch (1/2") to allow for the drainage of water.

Where, owing to cornices, water-tables and porticos, it is impossible to use the standard brackets, inverted brackets may be used. When inverted brackets are used they shall be constructed with an upright wall member and a diagonal member. The wall member shall be an angle iron not less than three inches by four inches by three-eighths inch (3" x 4" x 3/8") and the diagonal member shall be an angle iron not less than three inches by three inches by three-eighths inch (3" x 4" x 3/8").

Each member shall be secured to the bracket with two (2) one-half inch (1/2") rivets.

The wall members shall be secured to the wall with (2) one-inch (1") bolts which shall pass through the wall and be anchored on the inside face of the wall with a washer four inches by three-eighths inch (4" x 3/8") which shall extend across the two (2) bolts. A one-inch (1") nut shall secure the washer to the bolt. The bolts shall be placed sixteen inches (16") apart on centers. The four-inch (4") member of the wall brace shall bear against the wall and shall extend from the bracket to and above the top return rail of the balcony. The top return rail of the balcony shall be secured to the wall member of the brace with two (2) one-inch (1") rivets or nuts and bolts.

When inverted braces are used the bracket member shall enter the wall not less than four inches (4")

All other portions of "Type A" fire-escapes, except roof balconies, shall be constructed and erected as specified for the construction and erection of "Type B" fire-escapes.

(2) "Type B". The horizontal members of brackets shall consist of a one-piece wrought iron bar two inches by one-half inch (2" x 1/2") set so that the two inch (2") dimension is vertical.

Brackets shall be not more than four feet (4'-0") apart.

Welded brackets will not be accepted.

Angle iron brackets will not be accepted.

The top member of the bracket must be drawn out to form the necessary bolt end without welded connection.

Brackets shall be placed not less than eight inches (8") nor more than sixteen inches (16") below the window sill, except by special permission from this Department.

The top member of the bracket must go through the wall, and when the wall is of brick, must be anchored as specified for brackets in new buildings.

Brackets on buildings in course of erection must be built into the wall. They must be carried through the wall and turned down three inches (3") or the top member must be drawn out so as to form a bolt end one inch (1") in diameter and provided with nuts and with washers four inches by six inches (4" x 6") and three-eighths inch (3/8") in thickness, or where brackets on existing buildings or buildings in the course of erection pass through the walls under window or door openings, such brackets shall be anchored on the inside face of the wall with a four-inch by three-eighths inch (4" x 3/8") plate extending across the opening and bearing nine inches (9") on the inner face of each pier. In such case an additional one-half inch (1/2") bolt passing through wall and anchored to plate with one-half inch (1/2") nut shall be provided. If wall is recessed said bar must be shaped so as to bear on inner face of recessed wall and the ends of said bar to bear nine inches (9") on inner face of each pier. In addition a four-inch (4") steel channel stiffener must be provided to extend across the entire recessed portion. Blocking the recessed portion will not be permitted. Where walls are eight inches (8") in thickness the four-inch by three-eighths inch (4" x 3/8") plate must extend across and take in all brackets.

Special designs must be submitted for fire-escape framing other than standard and for masonry openings not included in above schedule.

Horizontal members of brackets must be braced with one-inch (1") square braces and shall rest on a shoulder. The braces shall be secured to the horizontal member with a rivet one-half inch (1/2") in diameter, at a point two-thirds (2/3) [sic] of the length of the horizontal member from the wall. The heel of the brace must be secured to the top member by a rivet of the same size.

The brace when entering the wall must be hot leaded in brick or stone three inches (3") and have a proper bearing on the face of the wall for at least eight inches (8").

If wedges are used to obtain full bearing against the wall, they must be of iron and well secured to the brace and must fill in solidly the space between brace and wall.

Anchorage in or bracing in terra cotta is not permitted.

Braces must drop at least one-third (1/3) of the length of the long brackets and must drop not less than eight inches (8") for short brackets.

Where a bracket is to receive additional weight on account of suspension rod for lower balconies, said bracket must be reinforced by an additional one-inch (1") square brace running from the end of the bracket parallel to the regulation brace.

Where it is impossible to brace the brackets in the manner described above, angle iron and tie rod supports must be used.

(3) *Anchorage for mullion windows, both "Type A" and "Type B".*

Masonry Span	Brackets	Anchorage Member
5'-0"	3'-6" long	6" channel 10.5 pounds or 6" x 4" x $\frac{9}{16}$ " angle
6'-0"	3'-6" long	7" channel 9.8 pounds or 6" x 4" x $\frac{11}{16}$ " angle
7'-0"	3'-6" long	8" channel 11.5 pounds or 7" channel 12.25 pounds
8'-0"	3'-6" long	8" channel 11.5 pounds
9'-0"	3'-6" long	8" channel 13.75 pounds
5'-0"	4'-0" long	8" channel 11.5 pounds or 6" x 4" x $\frac{3}{4}$ " angle
6'-0"	4'-0" long	8" channel 11.5 pounds
7'-0"	4'-0" long	8" channel 13.75 pounds
8'-0"	4'-0" long	8" channel 16.25 pounds
9'-0"	4'-0" long	8" channel 21.25 pounds

*Notes:*

- 1-Working stresses taken at 16,000 pounds per square inch.
- 2- Load taken at 100 pounds per sq. ft. and includes live and dead loads.
- 3- Loads on anchorage members due to bracket reaction placed for maximum bending moment produced in member.
- 4- Bearing plates of suitable size must be provided for brackets taking ladder load and for anchorage members.

6" x 4  $\frac{9}{16}$ " angle weighs 18.1 pounds per lin. ft.

6" x 4  $\frac{11}{16}$ " angle weighs 21.8 pounds per lin. ft.

6" x 4  $\frac{3}{4}$ " angle weighs 23.6 pounds per lin. ft.

Angle irons to support balconies where regulations braces cannot be used shall not be less than four inches by four inches by three-eighths inch (4" x 4" x  $\frac{3}{8}$ "). Tie rods shall not be less than one inch (1") in diameter and shall be anchored through the wall in the same manner as brackets.

The angle iron support in such cases shall be set so that the tie rods will pull toward the heaviest part of the webs. When it becomes necessary to shift a bracket from one location to another in order to carry the stairs, a new regulation two inch by one-half inch (2" x  $\frac{1}{2}$ ") bracket shall be installed.

No welded brackets, corroded brackets or brackets set flat with cast iron under-bracing will be accepted. Such brackets shall be replaced, whenever found, by a two-inch by one-half inch (2" x  $\frac{1}{2}$ ") regulation bracket.

However, when a two inch by one-half inch (2" x  $\frac{1}{2}$ ") bar bracket with cast iron under-bracing is found, said bracket may be permitted to remain if proper one inch (1") square under-bracing is provided.

(t) *Stairways.* All stairways shall be placed at an angle of not more than sixty (60) degrees with flat open steps not less than six inches (6") in width and twenty inches (20") in length and with a rise of not more than nine inches (9").

(1) *Treads.* Treads of such construction as may be approved by the Department from time to time will be permitted.

Flat iron bars forming treads must be one and one-half inches by three-eighths inch (1  $\frac{1}{2}$ " x  $\frac{3}{8}$ ") and spaced not more than three-quarters of an inch ( $\frac{3}{4}$ ") apart.

Bars forming treads must be secured to supporting angle irons by three-eighths inch ( $\frac{3}{8}$ ") rivets and these angle irons must be fastened to the strings by two (2) three-eighths inch ( $\frac{3}{8}$ ") rivets or bolts, well burred. Galvanized angle irons one and one-half inches by one and one-half inches by one-quarter inch (1  $\frac{1}{2}$ " x 1  $\frac{1}{2}$ " x  $\frac{1}{4}$ ") will be accepted but if not galvanized, said angle irons shall be one and one-half inches by one and one-half inches by three-eighths inch (1  $\frac{1}{2}$ " x 1  $\frac{1}{2}$ " x  $\frac{3}{8}$ "). In all cases the vertical legs of the angle irons must be set tightly against the strings so that there will be no intervening spaces.

All treads must be set level and must not overhang so as to interfere with foot room on the tread below.

(2) *Patented treads.* Patented treads approved by the Department of Buildings or previously approved by the Board of Standards and Appeals for new installations will be accepted by the Department of Buildings as legal for use in buildings under its jurisdiction. Five samples of approved treads to be furnished to the Department of Buildings (one delivered to each borough) as a permanent record.

(3) *Strings.* Where the strings of the stairs are adjacent to the front rails the strings must be securely fastened to

the top rails.

Strings must be braced by round bars three-quarters inch (3/4") in thickness, properly hot-leaded or secured by four inches by three-eighths inch (4" x 3/8") expansion bolts in brick or stone wall at height of not less than six feet six inches (6'- 6") [sic] in the clear above the floor of the balcony. Strings of stairways shall be four inches by three-eighths inch (4" x 3/8") wrought iron and shall rest on a bracket at the bottom and be bolted to a bracket at the top.

Welded strings, other than shop welded, will not be accepted.

(4) *Hand rails.* Hand rails must be of wrought iron, three-quarters inch (3/4") round or one and one-half inches by three-eighths inch (1 1/2" x 3/8") bar, well braced with intermediate braces not more than five feet (5'-0") apart, and of the same size and material as the hand rail, and secured to the strings with two (2) three-eighths inch (3/8") rivets at each end and at each brace; or handrails may be secured to the bottom rail of the upper balcony and top rail of the lower balcony by two (2) three-eighths inch (3/8") rivets at each end.

On all fire-escapes hereafter erected double hand rails must be provided for all stairways.

(u) *Drop-ladder.* A drop-ladder shall be provided from the lowest balcony and be of sufficient length to reach a safe landing place beneath. The drop-ladder shall be fifteen inches (15") in width, shall be placed in guides and shall be not more than sixteen feet (16'-0") in length.

Except in multiple dwellings hereafter erected or converted, where the distance from the lowest balcony to a safe landing place is more than sixteen feet (16'-0") but because of structural conditions, such as plate glass store fronts, etc., a balcony is not possible, the department may accept a drop-ladder in guides, if the distance from the floor of the lowest balcony to a safe landing place is not more than eighteen feet (18'-0")

No drop-ladder is required where the distance from the lowest balcony to a safe landing place does not exceed five feet (5'-0").

No drop-ladder will be permitted to land or terminate on a stoop or any part thereof unless the written approval of the Department of Buildings is obtained.

(1) *Guides.* All drop-ladders shall have guides provided with stops so that the ladders cannot be raised above the same. The [sic] drop-ladder must be suspended from a point directly over the opening in the rail of the balcony and arranged to slide in the guides so as to drop in position for use. All [sic] drop-ladders shall be provided with a shoe at the bottom.

The guides shall be constructed of one and one-half inches by one and [sic] one-half inches by one-quarter inch (1 1/2" x 1 1/2" x 1/4") angle iron, and shall be not less than twenty-one inches (21") apart.

(2) *Strings.* Strings of drop-ladders must be one and one-half inches by three-eighths inch (1 1/2" x 3/8") bar. No welded drop-ladders will be accepted unless shop welded.

(3) *Rungs.* The rungs must be five-eighths inch (5/8") in thickness, not over twelve inches (12") apart [sic] and must be riveted to the strings.

(v) *Gooseneck ladder.* The top balcony of every fire-escape shall be provided with a stair or with a gooseneck ladder leading from said balcony to and above the roof, except that no such stairs or gooseneck ladders will be required in the following locations or under the following conditions:

(1) On multiple dwellings with peak roofs having a pitch of more than twenty (20) degrees.

(2) Where fire-escapes are located on the fronts or in street courts of multiple dwellings facing upon the street. Where a multiple dwelling does not face upon the street, such as a multiple dwelling located at the rear of a lot upon which there is another building, every fire-escape on such multiple dwelling shall be provided with a stair or gooseneck ladder as required above, except where the roof of such building has a pitch more than twenty (20) degrees as stated in exception (1) above.

Except as provided in exceptions (1) and (2) above, every fire-escape on every hereafter erected or converted multiple dwelling, and every new fire-escape hereafter provided on every existing multiple dwelling shall be provided with a regulation stairway from the top balcony to the roof when such buildings exceed four (4) stories in height. In such multiple dwellings exceeding four (4) stories in height when due to special structural conditions which would not permit the erection of a stair from the top balcony to the roof or where the height from the top balcony to the roof may [sic] be such as to make the installation of a stair impractical, the Department of Buildings may accept a gooseneck ladder in lieu of a regulation stairway.

The top balcony of a fire-escape on every multiple dwelling not exceeding four (4) stories in height may be equipped with a gooseneck ladder.

(i) *Construction and location of gooseneck ladders.* The gooseneck ladder shall be fifteen inches (15") wide and shall be so located that it will not obstruct egress from the apartment or apartments on the top floor. The effective opening between the side of any window and the string of gooseneck ladder shall be not less than twenty-four inches (24")

The gooseneck ladder must be fourteen inches (14") from the front rail on existing balconies and twenty-one inches (21") on balconies hereafter erected.

(ii) *Strings.* The gooseneck ladder must be constructed with one piece of [sic] strings [sic] two inch by one-half inch (2" x 1/2") wrought iron.

Strings must be directly secured to the brackets or secured to a two inch by one-half inch (2" x 1/2") bar bearing on two (2) brackets and well secured to strings and brackets by three-eighths inch (3/8") bolts or rivets.

Strings must be spread at the parapet wall or roof to give a passageway of eighteen inches (18")

Strings must be tied through the wall by braces going through the parapet immediately above the roof, or, in the absence of the parapet wall, the said braces must go through the wall immediately below the ceiling of the top floor and be secured by three-quarters inch (3/4") bolts and four inches by four inches by three-eighths inch (4" x 4" x 3/8") washers.

The gooseneck ladder strings must extend thirty inches (30") above the roof level. Where there is a parapet, a gateway at the roof level shall be provided.

The strings of the gooseneck ladder must be secured to and braced at the roof.

(iii) *Rungs*. Rungs shall be of wrought iron five-eighths inch (5/8") thick, spaced not more than twelve inches (12") apart and shall be riveted through the strings.

The top rung of all gooseneck ladders shall be level with the roof.

(w) *Painting*. Section 53, Multiple Dwelling Law, required new fire-escapes to have two (2) coats of paint. The Department of Buildings will require these two (2) coats to be applied on contrasting colors, the first coat at the shop before erection, and the second coat applied after erection.

Existing fire-escapes shall be repainted whenever deemed necessary.

(x) *Exceptions*. Any deviations or exceptions from these rules other than those specifically mentioned herein shall be submitted to the Department of Buildings for approval. Consent and approval shall be in written form and bear the signature of the commissioner, deputy commissioner, superintendent or the person designated to sign such consent by the commissioner, deputy commissioner or superintendent.

(y) *Fire-escapes on frame buildings*. Fire-escapes shall be constructed as for brick or stone buildings with the following exceptions, and except also that balconies three feet (3'-0") wide will be acceptable to the department.

(1) *Brackets*. Horizontal members of brackets must be one and three-quarters inches by one-half inch (1 3/4" x 1/2") wrought iron set on edge; one inch (1") bolt end through a four inches by three-eighths inch (4" x 3/8") iron plate, long enough to take in all brackets, secured to and bearing directly on the inside of the studs. Spaces between the studs behind such plates shall be filled in solidly with timber secured to the studs.

The heel of bracket braces must rest against one and three-quarter inches by one and three-quarter inches by one-quarter inch [*sic*] high (1 3/4" x 1 3/4" x 1/4") angle iron extended across and well secured to studs.

(2) *Top rails*. Top rails shall be anchored by three-quarters inch (3/4") [*sic*] bolt ends, through a four inch by three-eighths inch (4" x 3/8") wrought iron plate spanning at least two (2) studs. Space behind plate and between studs shall be blocked solidly.

(3) *Bottom rails*. Bottom rails shall be secured to the siding in a substantial manner with two (2) one and one-quarter inch (1 1/4") No.14 wood screws, or may be secured to the brackets where practicable.

(4) *Stairways*. Stair braces shall be secured to the wall of the building by two (2) No. 14 wood screws.

(z) *Outside fireproof stairs*. Outside fireproof stairs shall be constructed according to approved plans and applications of the Department of Buildings. Such regulations that [*sic*] as govern the measurements of inside stairs shall be applied to outside fireproof stairways except that in multiple dwellings not exceeding three (3) stories and basement in height, fireproof stairway leading from a front porch roof which is fireproof to the fireproof floor of an unenclosed porch will be deemed an outside fireproof stairways and such stairways may be of the same width as the ordinary fire-escape stairs. Area covered by fireproof outside stairs must not encroach upon the minimum dimensions of yard and courts.

(aa) *Fire towers*. Fire towers shall be constructed according to approved plans and applications filed with the Department of Buildings.

(bb) *Egress*. Hotels and certain other class A and class B dwellings which are subject to the provisions of §67, Multiple Dwelling Law [*sic*].

(1) *Exceptions*. Any such multiple dwelling, altered or erected after April fifth, nineteen hundred forty-four, and which is required to conform to the provisions of articles one, two, three, four, five, eight, nine and eleven of Multiple Dwelling Law, shall not be required to conform to the provisions of §15-10(bb)(1)(i), (2), (3) and (4).

(i) Except in fireproof class A multiple dwellings erected under plans filed after January first, nineteen hundred twenty-five, and which were completed before December thirty-one, nineteen hundred thirty-three, and except as otherwise provided in paragraph (4) of subdivision (bb) of this section, in every such dwelling three (3) or more stories in height there shall be from each story at least two (2) independent means of unobstructed egress located remote from each other and accessible to each room, apartment or suite.

(2) *First means of egress*. The first means of egress shall be an enclosed stair extending directly to a street, or to a yard, court or passageway affording continuous, safe and unobstructed access to a street, or by an enclosed stair leading to the entrance story, which story shall have direct access to a street. The area of the dwelling immediately above the street level and commonly known as main floor, where the occupants are registered and the

usual business of the dwelling is conducted, shall be considered a part of the entrance story; and a required stair terminating at such main floor or its mezzanine shall be deemed to terminate at the entrance story. An elevator or unenclosed escalator shall never be accepted as a required means of egress.

(3) *Second means of egress.* The second means of egress shall be by an additional enclosed stair conforming to the provisions of §15-10(bb)(2), a fire-stair, a fire-tower or an outside fire-escape. In a non-fireproof dwelling when it is necessary to pass through a stair enclosure which may or may not be a required means of egress to reach a required means of egress, such stair enclosure and that part of the public hall or corridor leading thereto from a room, apartment or suite, shall be protected by one (1) or more sprinkler heads; in a fireproof dwelling only that part of the hall or corridor leading to such stair enclosure need be so protected.

(4) *Required second means of egress-impractical.* Where it is impractical in such existing dwellings to provide a second means of egress, the department may order additional alteration to the first means of egress and shafts, stairs and other vertical openings as the department may deem necessary to safeguard the occupants of the dwelling, may require the public halls providing access to the first means of egress to be equipped on each story with one (1) or more automatic sprinkler heads, and, in non-fireproof dwellings, may also require automatic sprinkler heads in the stair which serves as the only means of egress.

(5) *Public halls and corridors providing access to fire-escapes.* Public halls and corridors providing access to fire-escapes, existing and new, are acceptable when a direct and uninterrupted line to travel to the fire-escape is provided.

Public halls and corridors providing access to fire-escapes shall be fire-retarded or shall be equipped with automatic sprinkler heads. The fire-retarding and sprinkler installation shall be in conformity with the rules and regulations of this department and as required by §67 (3) of the Multiple Dwelling Law.

All openings which provide direct access to an existing fire-escape from a public hall or corridor shall be equipped with fireproof doors and assemblies with the doors self-closing or fireproof windows glazed with clear wire glass. Access to new fire-escapes from such halls or corridors shall be by means of fireproof doors and assemblies with doors self-closing. Doors providing access to fire-escapes from public halls or corridors may be glazed with clear wire glass.

(6) *Fire-escapes-existing and new.* Existing fire-escapes which are structurally strong and in good repair, having connecting stairways set at an angle or not more than sixty-five (65) degrees, may be accepted as a secondary means of egress.

Except as otherwise required herein, new and existing fire-escapes shall be provided with a safe landing and the termination shall lead directly to a street or to a passageway which provides access to a street.

When it is impractical to provide a termination for fire-escapes as specified in these Rules, the Department may accept a termination from such fire-escapes which leads to safety.

(7) *Supplementary means of egress.* A stair, fire-stair, fire-tower, or fire-escape which is supplementary to the egress requirements of §15-10(bb)(2), (3) and (4), need not lead to the entrance story or to a street, or to a yard or a court which leads to a street, provided the means of egress therefrom is approved by the department.

Fire-escapes which are supplementary to the required second means of egress, including fire-escapes of the inclined ladder and vertical ladder types, may remain on the dwelling if maintained in good order and repair, are structurally strong and safe and are provided with safe landing and the termination thereof leads to safety in a manner satisfactory to this Department.

(8) *Signs-supplementary means of egress.* Supplementary stairs, fire-stairs, fire-towers or fire-escapes which do not lead to the entrance story or to a street, or to a yard or court leading to a street, shall be clearly marked "NOT AN EXIT" in black letters at least four inches (4") high on a yellow background and at the termination of each such stair, fire-stair, fire-tower or fire-escape, there shall be a directional sign indicating the nearest means of egress leading to a street. All signs shall be constructed, located and illuminated in a manner satisfactory to the department.

(9) *Signs-general provisions.* Every means of egress shall be indicated by a sign reading "EXIT" in red letters at least eight inches (8") high on a white background, or vice versa, illuminated at all time during the day and night by a red light of at least twenty-five (25) watts or equivalent illumination. Such light shall be maintained in a keyless socket. On all stories where doors, openings or passageways giving access to any means of egress are not visible from all portions of such stories, directional signs shall be maintained in conspicuous locations, indicating in red on a white background, or vice versa, the direction of travel to the nearest means of egress. At least one sign shall be visible from the doorway of each room or suite of rooms. Existing signs and illumination may be accepted if, in the opinion of the department, such existing signs and illumination serve the intent and purpose of this subdivision.

(10) *Stairs, fire-stairs and fire-towers.* Stairs, fire-stairs and fire-towers hereafter provided shall be constructed according to plans and applications approved by the Department of Buildings.

(cc) *Egress: lodging houses.*

(1) *Arrangement.* There shall be at least two (2) means of unobstructed egress from each lodging-house story, which shall be remote from each other. The first means of egress shall be to a street either directly or by an enclosed stair having unobstructed direct access thereto. If the story is above the entrance story, the second means of egress shall be by an outside fire-escape constructed in accordance with the provisions of section fifty-three,

Multiple Dwelling Law, or by an additional enclosed stair. Such second means of egress shall be accessible without passing through the first means of egress.

(2) *Doors and windows.* All doors opening upon entrance halls, stair halls, other public halls or stairs, or elevator, dumbwaiter or other shafts, and the door assemblies, shall be fireproof with the doors made self-closing by a device approved by the department, and such doors shall not be held open by any device whatever. All openings on the course of a fire-escape shall be provided with such doors and assemblies or with fireproof windows and assemblies, with the windows self-closing and glazed with wire glass, such doors or windows and their assemblies to be acceptable to the department.

(3) *Aisles.* There shall be unobstructed aisles providing access to all required means of egress in all dormitories. Main aisles, approved as such by the department to provide adequate approaches to the required means of egress, shall be three feet (3'-0") or more in width, except that no aisles need be more than two feet six inches (2'-6") wide if it is intersected at intervals of not more than fifty feet (50'-0") by cross-over aisles at least three feet (3'-0") wide leading to other aisles or to an approved means of egress.

(4) *Signs.* Every required means of egress from the lodging-house part of the dwelling shall be indicated by a sign reading "EXIT" in red letters at least eight inches (8") high on a white background illuminated at all times during the day and night by a light at least twenty-five (25) watts or equivalent illumination. Such light shall be maintained in a keyless socket. On all lodging-house stories where doors, openings, passageways or aisles are not visible from all portions of such stories, and in other parts of the dwelling which may be used in entering or leaving the lodging-house part and in which a similar need exists, signs with easily readable letters at least eight inches (8") in height, and continuously and sufficiently illuminated by artificial light at all times when the natural light is not sufficient to make them easily readable, shall be maintained on conspicuous locations, indicating the direction of travel to the nearest means of egress. At least one (1) such sign shall be easily visible from the doorway of each cubicle.

(5) *Roof egress.* Access from the public hall at the top story to the roof shall be provided by means of a bulkhead or a scuttle acceptable to the department. Every such scuttle and the stair or ladder leading thereto shall be located within the stair enclosure.

(6) *Persons accommodated.* The number of persons accommodated on any story in a lodging house shall not be greater than the sum of the following components:

(i) Twenty-two (22) persons for each full multiple of twenty-two inches (22") in the smallest clear width of each means of egress approved by the department, other than a fire-escape.

(ii) Twenty (20) [*sic*] persons for each lawful fire-escape accessible from such story if it is above the entrance story.

(7) In view of the fact that §66, Subdivision 3 (formerly §13, subdivision m), Multiple Dwelling Law, required lodging houses to be sprinkled throughout, including the public halls, the department will accept existing double-rung ladder type fire-escapes on the condition that such fire-escapes are maintained in a good state of repair.

(dd) *Ladders leading to roof scuttles.* Ladders to roof scuttles as required under the provisions of §§187 and 233 of the Multiple Dwelling Law, shall be of incombustible material, not less than fifteen inches (15") wide, with strings not less than one and one-half inches by three-eighths inch (1 1/2" x 3/8"), with five-eighths inch (5/8") rungs not more than twelve inches (12") apart. Strings of such ladders shall be secured at top and bottom and ladder must be so arranged as to permit sufficient toe hold.

## **CHAPTER 16 INSPECTION OF EXISTING STRUCTURES DURING CONSTRUCTION OPERATIONS**

### **§16-01 Controlled Inspection of the Stability and Integrity of Existing Structures During Construction Operations**

(a)(1) All alterations to existing structures in which loads are transferred from one system of structural elements to another such as in the installation of columns or girders to replace existing bearing walls, the creation of openings or slots in existing bearing walls, girders or floors, or where the stability or integrity of a structural system is to be temporarily diminished, shall be conducted under controlled inspection.

(2) The Department of Buildings will not approve any plans or amendments thereto where work, as described in §16-01(a)(1), is to be performed unless a registered architect or professional engineer (hereinafter referred to as "controlled inspection architect or engineer") retained by the contractor or owner and approved by the registered architect or professional engineer seeking approval of such plans submits to the Department a Technical Report: Statement of Responsibility ("TR-1") or any similar document which the Department may use in the future whereby the controlled inspection architect or engineer assumes responsibility for the controlled inspection of the existing structure during construction operations to determine its stability and integrity.

(b)(1) The details of shoring, bracing or other construction required for such work and the phasing, staging, and sequence of such operation shall be:

- (i) Shown on the structural plans that are submitted to and approved by the Department or,
- (ii) Prepared in the form of shop or detail drawings by a registered architect or professional engineer authorized, retained, or hire by the owner, contractor, or sub-contractor, and reviewed by the registered architect or professional engineer who prepared the structural plans.
- (c) The controlled inspection architect or engineer shall retain a copy of the documents described in § 16-01(b) in his or her office and shall provide a copy to the contractor and/or owner to be kept at the construction site.
- (d) The controlled inspection architect or engineer shall determine the frequency of inspections needed and whether he or she should inspect the site personally or send a person under his or her direct supervision. At a minimum, the site must be inspected twice, once at a pre-construction meeting with the contractor and once during construction operations.
- (e)(1) The controlled inspection architect or engineer, for each job which requires the submission of a TR-1 pursuant to §16-01(a)(2), shall maintain a log in his or her office which includes the following information:
  - (i) address of the premises, job number, contractor name and address, and
  - (ii) date and time of each inspection including
    - (A) names of personnel who inspected the site, and
    - (B) any significant observations or instructions given relating to any of the following:
      - ((a)) deviations from the documents described in §16-01(b);
      - ((b)) anticipated field conditions;
      - ((c)) proper execution of the work;
      - ((d)) good engineering practice;
      - ((e)) safe job-site conditions;
      - ((f)) precautions taken to maintain safe conditions if work is stopped for any reason.
    - (iii) the date of and participants in any conversations with the controlled inspection architect or engineer occurring off-site and relating to any significant observations or instructions specified in §16-01 (e)(1)(ii)(B)((a)) through ((f)).
  - (f) The controlled inspection architect or engineer shall report unsafe conditions to the Department of Buildings and/or any other affected parties or agencies.
  - (g) Upon request of the Department, the controlled inspection architect or engineer shall make available for review by the Department documents described in §16-01(b) and the log described in §16-01(e).
  - (h) *Exemption of Frame Structures.* Frame structures shall be exempt from these rules and regulations except for the alteration of arches, rigid frames, trusses and the creation of openings exceeding 10 feet in length in bearing walls.

## **CHAPTER 17 TESTING LABORATORIES AND TESTING SERVICES**

### **§17-01 Acceptance of Testing Laboratories and Testing Services**

- (a) Applications for acceptance as a testing service or testing laboratory shall be submitted to the Commissioner of Buildings on forms provided by the Department.
- (b) Each laboratory shall have in responsible charge a Director who shall be qualified by education, experience, or other accreditation acceptable to the Commissioner for the scope of testing performed, who shall personally supervise the testing of materials or service equipment for acceptance by the Department of Buildings.
- (c) All technicians shall be qualified by education, experience, or other accreditation acceptable to the Commissioner to perform all tests they may be required to conduct under the supervision of the Director.
- (d) The laboratory shall furnish to the Department of Buildings a list of all personnel who are supervising and performing tests and their qualifications.
- (e) The laboratory shall furnish to the Department of Buildings a list of all the equipment used to perform tests, the manufacturer's name, when and by whom it was last calibrated.
- (f) The laboratory and its equipment may be inspected periodically by the Department of Buildings or competent independent agency acceptable to the Department. If such an agency is used, a certified copy of its report shall be submitted to the Department of Buildings.
- (g) The laboratory shall correct within 10 days any condition which, in the judgment of the Department of Buildings, may adversely affect the result of any test.
- (h) A list of acceptable laboratories or testing services will be maintained in the office of the Commissioner of Buildings and made available to the public.
- (i) The Department shall issue a serial numbered Certificate of Acceptance which shall be prominently displayed on the test premises. Such certificate shall bear the name of the lab or service, the name of the professionally qualified Director and the field or trade for which the laboratory has established its competence.
- (j) All test reports shall be presented in a form acceptable to the Department and bear the name of the laboratory or service and its acceptance number, the name of the Director who supervised the test, the names of all qualified personnel who performed the test, and the names of all witnesses.

- (k) The accepted laboratory or service shall prepare and submit to the Department a copy of the certificate or label bearing its name and acceptance number which it shall be required to affix to all shipments and deliveries of material or equipment when the laboratory is engaged by the manufacturer or producer to make periodic inspections or tests of the material or equipment in the course of manufacture or production.
- (l) Accepted laboratories and testing services shall be permitted to advertise the fact of their acceptance by the Department of Buildings of The City of New York for the testing of materials or equipment only in the field or trade for which they have established their competence.
- (m) Any violation of these rules or misrepresentation of facts in any required report or misrepresentation in advertising shall constitute cause for revocation or suspension of acceptance by the Commissioner.

## **CHAPTER 18 RESISTANCE TO PROGRESSIVE COLLAPSE UNDER EXTREME LOCAL LOADS**

### **§18-01 Considerations and Evaluation.**

(a) *General considerations.* Unless all members are structurally connected by joints capable of transferring 100% of the members' working capacity in tension, shear, or compression, as appropriate, without reliance on friction due to gravity loads, the layout and configuration of a building and the interaction between, or strength of, its members shall provide adequate protection against progressive collapse under abnormal load, where progressive collapse is interpreted as structural failure extending vertically over more than three stories, and horizontally over an area more than 1,000 square feet or 20 percent of the horizontal area of the building, whichever is less. These criteria shall be satisfied while the building is subjected to its own weight D plus a superimposed load of  $(1.0D + 0.25L)$ , where D is computed according to Article 2 of Subchapter 9 of Chapter 1 of Title 27 of the Administrative Code and according to Reference Standard RS 9-1 of the same Code and L is computed according to Article 3 of Subchapter 9 of Chapter 1 of Title 27 of the Administrative Code and according to Reference Standard RS 9-2 of the same Code without allowance for the live load reduction permitted in Article 4 of Subchapter 9 of Chapter 1 of Title 27 of the same Code. A wind load of  $0.2W$  shall be assumed to act in combination with  $1.0D + 0.25L$ , where W is computed according to Article 5 of Subchapter 9 of Chapter 1 of Title 27 of the Administrative Code and according to Reference Standard RS 9-5 of the same Code. These criteria shall be satisfied in accordance with structural analysis based on the Plastic Design or Ultimate Strength method, representing conditions at incipient failure and shall be considered as an independent check of a building designed in accordance with the usual procedures for Working Stress, Plastic Design, or Ultimate Strength design pursuant to Subchapters 9, 10, and 11 of Chapter 1 of Title 27 of the Administrative Code and all applicable Reference Standards thereto.

(b) *Methods of evaluation.*

Resistance to progressive collapse shall be determined by one of two methods:

- (1) *The Alternate Path Method.*
- (2) *The Specific Local Resistance Method.*

The specific local resistance method shall only be used if the alternate path method is not feasible.

(i) *The Alternate Path Method.*

Proof shall be provided, by analysis and/or physical simulation, that the following condition is satisfied while the building is subjected to the loads stipulated in the criteria:

(A) Should any one of the following combinations of structural elements at any one story lose its ability to carry load, there shall be no collapse of the structure more than one story above or below the element under consideration, or over a horizontal area in excess of that stipulated in the criterion:

- (a) Any single "wall panel or nominal length thereof."
- (b) Two adjacent "wall panels or nominal lengths thereof" forming an exterior corner to the building.
- (c) One or more elements forming a "nominal extent of flooring".
- (d) One column.
- (e) Any other one element of the structural subsystem which is judged to be vital to the building's stability.

(B) The following definitions specifically apply to Method (b)(1):

(a) The designation "wall panel or nominal length thereof" is the smaller of the following lengths as appropriate to the design in question:

- (1) The length between adjacent lateral supports.
- (2) The length between a free edge and the nearest lateral support.
- (3) A length equal to 2.25 times the clear height of the wall panel in those circumstances where the top and bottom attachment of the panel to the floor or roof will not fail under a force smaller than 3 kips [*sic*] per linear foot acting perpendicular to the wall in either direction.

(b) As used above, "lateral support" is considered to occur at:

- (1) A substantial partition perpendicular to the wall, provided that its attachments to the wall and the partition itself are capable of resisting and transmitting without failure a horizontal force of 3 kips [*sic*] per foot of clear

wall height in either direction in the plane [sic] of the partition. A partition may be considered substantial when that partition or a combination of such partitions, one above the floor and one below the floor and substantially in the same plane, is able to resist the following distributed force transmitted by the floor in the plane of the partition and in an upwards or downwards direction:

$$0.18 \frac{S}{b}(2b-S) \text{ kips [sic] per foot of clear span.}$$

where b is clear span and S is the clear spacing of partitions or the clear distance from a partition to an adjacent free edge of the floor.

(2) A strengthened vertical portion of the wall (not exceeding 1/3 story height in the horizontal direction) which will not fail under a load of 3 kips [sic] per linear foot of clear wall height acting perpendicular to the plane of the wall in either direction along the interface between the strengthened wall portion and the portion of the wall that lost its load carrying capacity.

(c) The term "nominal extent of floor" denotes the following:

(1) For a floor spanning in one direction, the extent is the clear span. In the perpendicular direction the extent is to be taken as the smaller of the following:

(i) The distance between adjacent "substantial" partitions arranged in the direction of floor span.

(ii) The distance between a free edge and the nearest "substantial" partition arranged in the direction of the floor span.

(iii) In the case where partitions are not "substantial" the extent is to be taken as 2.25 times the clear span.

(2) For a floor spanning in two directions the extent shall be taken as the area bounded by the clear spans in both directions.

(ii) Specific local resistance methods.

Any single element essential to the stability of the structure, together with its structural connections, shall not fail under the loads stipulated in this criterion after being subjected to a load equivalent to that caused by a uniform static pressure of 720 psf. This pressure shall be applied in the most critical manner to the face of the element and to the face of all space dividers supported by the element or attached to it within the particular story. In those cases where the stability of the element depends upon the lateral support provided by the attached space dividers, these space dividers, or a portion of these space dividers which can provide adequate lateral support, must also satisfy requirements of this paragraph.

## CHAPTER 19 MASTER PLUMBERS AND LICENSED FIRE SUPPRESSION PIPING CONTRACTORS

### § 19-01 Examination, License and Conduct of the Business of Master Plumbers and Master Fire Suppression Piping Contractors.

(a) *Applicability.* This rule shall be applicable to the examination, licensure and conduct of the businesses of master plumber and 1 master fire suppression piping contractor.

(b) *Applications.* Any person desiring to obtain a license from the Commissioner of Buildings to engage in the business or trade of Master Plumber or Master Fire Suppression Piping Contractor shall file an application as required by §§26-145 and 148 of the Administrative Code.

(c) *Qualifications.* Every person applying for a Master Plumber's license or Master Fire Suppression Piping Contractor's license shall pass an examination and otherwise meet the qualifications of §§26-145,146 and 148 of the Administrative Code.

*\*(e) Issuance of licenses, plates and renewals - fees.*

*\*\* (e) enacted but "(d)" probably intended.*

(1) Upon the certification that an applicant has satisfactorily passed a written and a practical examination, the Commissioner of Buildings shall issue to the applicant a Master Plumber's license or Master Fire Suppression Piping Contractor's license together with a plate and seal upon the following conditions:

(i) Payment of a certificate fee pursuant to § 26-147 of the Administrative Code and

(ii) Representation by the applicant, subject to verification by the Department of Buildings, that the applicant has an established "place of business" within the City of New York, and

(iii) Payment of "licensed plumber" or "licensed fire suppression piping contractor's license" plate and seal fees as required by §26-147 of the Administrative Code, for which the Department of Buildings shall issue a plate for use at the premises designated by the applicant as his or her "place of business."

(iv) For purposes of renewal of said license, thirty to sixty calendar days prior to the license's expiration date, the applicant shall present to the Department of Buildings, in such manner as the Commissioner may require, proof that the applicant has satisfactorily completed a seven hour continuing education course approved by the Department of Buildings within two years prior to the renewal date, as required by § 26-150.1 of the Administrative Code, and such identification and other documentation supporting his or her right to renewal as the Commissioner may require. All applicants for renewal shall be of good moral character at the time of renewal. The applicant for renewal shall pay the renewal fee required by §26-147 of the Administrative Code. The license plate and seal shall be renewed every two years.

(2) Where the plate or seal has been lost, and an affidavit is submitted to this effect, a new plate or seal shall be issued by the Commissioner of Buildings upon an application and payment of a fee as required by §26-147 of the Administrative Code.

*(f) Place of business regulated.*

(1) A "place of business" shall mean the location of a plumbing establishment or fire suppression piping establishment where a Licensed Master Plumber or Licensed Master Fire Suppression Piping Contractor conducts his or her business. A plumbing or fire suppression piping establishment may be conducted by a Licensed Master Plumber or Licensed Master Fire Suppression Piping Contractor under a trade name, or by a partnership or corporation, or other business association duly authorized to conduct a plumbing or fire suppression piping business.

(2) The "place of business" is the location of the office and shop of a plumbing or fire suppression piping establishment where the office and shop are at the same location.

(3) The "place of business" where the location of the office portion of a plumbing or fire suppression piping establishment is different from the shop portion, shall be the place where the office portion is located.

(4) The "place of business" where no plumbing or fire suppression piping shop exists shall be the location of the office from where the Licensed Master Plumber or Licensed Fire Suppression Piping Contractor conducts his or her business.

(5) The office portion of a plumbing or fire suppression piping establishment which is located at a different location than the shop portion, shall be the place of calling of the plumbing or licensed fire suppression piping establishment, where business mail and telephone calls are normally received, where customers and salesmen are interviewed and where the records of the business are kept.

(6) All the limitations and restrictions for the use of "Contractor's Establishment" as required by the Zoning Resolution shall apply to the "place of business" of a plumbing or fire suppression piping establishment where the office portion and the shop portion are at the same location.

(7) All the limitations and restrictions for the use of "Office" as required by the Zoning Resolution shall apply to the office portion of a plumbing or fire suppression piping establishment where its location is different than the shop location. The shop location must comply with the limitation and restrictions for the use of "Contractor's Establishment" as required by the Zoning Resolution.

(8) All the limitations and restrictions for the use of "Office" as required by the Zoning Resolution shall apply to the office of a business where no plumbing or fire suppression piping shop exists.

*(g) Master plumber's and master fire suppression piping contractor's license plates regulated.*

(1) The use of the license by the holder thereof shall be in accordance with §§26-138 and 26-141 of the Administrative Code.

(2) Only one plate and seal shall be issued to a Licensed Master Plumber or Licensed Master Fire Suppression Piping Contractor for a "place of business" the location of which is in a district permitted by the Zoning Resolution. (See §§19-01(f)(6), (7) and (8)).

(3) A Licensed Master Plumber or Licensed Master Fire Suppression Piping Contractor conducting a business shall display prominently to the public in the window of the "place of business" designated in his or her application or on a sign securely attached to the said premises, his or her full name with words "Licensed Plumber" or "Licensed Master Fire Suppression Piping Contractor" immediately thereunder. If the business is conducted under a trade name, or by a co-partnership or corporation, such trade name or co-partnership or corporation name shall be placed immediately above the full name or names of the licensee(s) conducting the business as provided by §26-148(f) of the Administrative Code.

(4) The plate shall be kept prominently displayed to the public at the "place of business" designated in the application. The plate shall not be transferred to another address without notifying the Commissioner of Buildings and receiving his or her written approval thereof, nor shall it be transferred to or displayed in connection with any trade name, co-partnership or corporation of which the holder of such plate may become a partner or officer. Where the license is used by the holder thereof for or on behalf of a partnership, corporation or other business association as provided by §26-138 of the Administrative Code, documents shall be filed with the Commissioner of the Department of Buildings to indicate the control or voting capital stock of such partnership, corporation or other business association.

(5) A person retiring from the business or trade as a Master Plumber or Master Fire Suppression Piping Contractor or, in the event of the decease of a Master Plumber or Master Fire Suppression Piping Contractor, his or her legal representative shall immediately surrender the plate and license to the Commissioner of Buildings in accordance with §26-148(h) of the Administrative Code.

(6) A Licensed Master Plumber or Licensed Master Fire Suppression Piping Contractor to whom a plate has been issued and any corporation or partnership with which he or she is associated shall not loan, rent, sell, or transfer the privileges of such license and plate to any person for the performance of plumbing work in accordance with §26-138 of the Administrative Code.

(h) *Revocation, suspension, or cancellation of license.* The Commissioner of Buildings may at any time revoke or suspend the license of a Master Plumber or Master Fire Suppression Piping Contractor for cause as provided for by §26-151 of the Administrative Code.

#### **§19-02 Continuing Education Requirements for Master Plumbers and Licensed Master Fire Suppression Piping Contractors.**

(a) *Applicability.* This rule shall be applicable to the applicants seeking departmental approval to provide continuing education courses for master plumbers and master fire suppression piping contractors, as set forth in Administrative Code §26-150.1.

(b) The content of courses and qualifications of course providers shall be approved in accordance with the following. Course providers seeking approval by the Department of Buildings shall submit proposals in writing to the Department that include the following:

(i) Identification of the class(es) of licensees for which the proposed course(s) will be taught;

(ii) A proposed curriculum appropriate for the type(s) and class(es) of licensees to which the course(s) will be taught. All curricula shall include but not be limited to:

- (a) Business practices;
- (b) Relevant building code provisions, rules, policy and procedure notices, and reference standards enacted or promulgated by the Department in the twenty-four months prior to the individual course date(s);
- (c) Department of Environmental Protection Water Rules;
- (d) Department of Buildings filing and inspection requirements made effective by the Department in the twenty-four months prior to the individual course date(s);
- (e) Safety/hazardous materials;
- (f) New technology;
- (g) Integrity/anti-corruption standards; and
- (h) Other subjects identified by the Commissioner.

(iii) A schedule detailing the courses' proposed cost(s) to individuals and/or groups wishing to enroll;

(iv) A listing of the courses' proposed availability;

(v) A detailed statement of the proposed provider's qualifications, including but not limited to instruction staff qualifications, other jurisdictions in which the provider has been approved to provide continuing education courses (if any), the composition of its governing authority, an identification of its administrative resources (physical and human), and documentation that demonstrates financial viability;

(vi) A detailed statement of the proposed provider's procedures for confirming the identity of individuals taking any course(s) and for the issuance of a fraud-resistant document demonstrating that a licensee attended the course(s); and

(vii) Such other items as the Commissioner of Buildings may deem appropriate and necessary.

(c) The Department of Buildings shall notify applicants of their approval in writing. Departmental approval of courses and providers shall expire on December thirty-first of every other year. Applicants for approval shall therefore submit applications on or before the first of November of the year approval is to expire.

### **§19-03 Exemptions from Inspection and Testing Requirements.**

(a) *Applicability.* This rule shall be applicable \*to all plumbing and gas piping jobs for which inspection and testing is required pursuant to Administrative Code §27-919.

*\*\*"to" not enacted but probably intended.*

(b) Every new plumbing and gas piping system and every part of an existing system that has been altered, except for alterations involving ordinary repairs, shall, upon notification provided to the Department pursuant to Administrative Code §27-920, be tested and inspected to determine compliance with Administrative Code requirements as set forth in Administrative Code §27-922. However, for jobs involving minor plumbing work as defined in paragraph (c) of this section, the Department may accept written certification from a licensed Master Plumber that the job was performed in compliance with the requirements of the Administrative Code and any other relevant rules and regulations of the Department in lieu of the notification and inspection requirements set forth in Administrative Code §§27-920 and 27-922.

(c) For the purposes of this section, "minor plumbing work" is defined as any of the following:

(i) The removal of a domestic plumbing system not connected to a fire suppression system, or the removal of a portion of such system;

(ii) The relocation of up to two plumbing fixtures that are a distance of no more than ten (10) feet from the original fixture, and within the same room, except in health care facilities, subject to paragraph (d) (i) below;

(iii) The installation, replacement or repair of a garbage grinder or back flow preventer and the replacement or repair of a sump pump, subject to paragraph (d) (i) below;

(iv) The replacement of closet bends or shower bodies, subject to paragraph (d) (i) below;

(v) The replacement of gas water heater or gas fired boilers with capacity of 350,000 BTU or less where the existing appliance gas cock is not moved, subject to paragraph (d) (ii) below; or

(vi) The repair or replacement of any non-gas, non-fire suppression plumbing not longer than 10 feet inside a building, or connected piping previously repaired or replaced under this provision.

(d) Written certification that minor plumbing work conforms to applicable laws, rules, and regulations, as permitted pursuant to paragraph (b) of this section, shall be submitted in such a form and in such a manner as the Commissioner may require. Master Plumbers submitting such certification must provide such information as the Commissioner may require, including but not limited to:

(i) Where the certification is for the relocation of up to one plumbing fixture, installation, replacement or repair of a garbage grinder, back flow preventer, or sump pump, or for the replacement of closet bends or shower bodies, a statement that any roughing and/or venting was done in compliance with code requirements.

(ii) Where the certification is for replacement of gas water heater or gas fired boilers with capacity of 350,000 BTU or less and the existing appliance gas cock is not moved, a statement that the chimney has been inspected.