

**Buildings** 

ISSUER: Keith L. Wen, R.A.

Assistant Commissioner Code & Zoning Interpretation

This Bulletin rescinds 14 Memoranda, 3 Directives, 1 PURPOSE:

> TPPN, and 3 Letters pertaining to the electrical which were issued by the Department but are no longer applicable under

current Codes and Local Laws.

**SUBJECT(S):** Rescinding a Directive, Memoranda, a TPPN, and Letters

**September 20, 2023** 

#### RESCINDED DOCUMENTS

Directive 5 of 1979, Directive 37 of 1967, Directive 9 of 1975

Memo 10/4/89, Memo 4/14/77, Memo 11/13/75, Memo 4/27/71, Memo 2/11/87, Memo 2/19/81, Memo 1/20/87, Memo 4/10/91, Memo 1/6/67, Memo 3/17/81, Memo 5/11/78, Memo 12/27/79, Memo 7/22/86, Memo 12/12/83

**TPPN #3/87** 

Letter 8/4/88, Letter 3/28/88, Letter 2/18/88

#### BACKGROUND

The Department of Buildings periodically reviews published Buildings Bulletins (BB), Policy and Procedure Notices (Technical, Operational, Legal, Administrative, OTCR) and the various Directives, Executive Orders, Memoranda and Letters issued in the past to ensure their continued consistency with current Departmental practice and to verify that new laws and regulations are incorporated into these documents.

The above listed Directives, Memoranda, TPPN, and Letters are rescinded effective immediately and are attached therein

The rescinded documents will appear on the Department's website with the watermark **RESCINDED**. Because this review is ongoing, documents not specifically listed in this Bulletin may be addressed in future Bulletins. Watermarked Memoranda, Directives, Executive Orders and through accessed the online version of this Bulletin https://www1.nyc.gov/site/buildings/codes/building-bulletins.page



#### DEPARTMENT OF BUILDINGS

CHARLES M. SMITH, Jr., R.A., Communication

Issuance # 20

GEORGE E. BERGER, P.E.
Assistant Commissioner
Building Construction

TECHNICAL
POLICY AND PROCEDURE NOTICE # 3 /87

TO:

BOROUGH SUPERINTENDENTS

FROM:

George E. Berger, P.E. Assistant Commissioner

DATE:

June 16, 1987

SUBJECT:

Emergency Lighting Compliance Procudures

As Per Section 27-381 (C26-605.1) and

27-382 (C26-605.2)

The owners of the buildings who must comply with Emergency Lighting Compliance, shall not be required to file any application (BN, Misc., etc.,) with the borough offices.

The following procedure is established for compliance:

When an electrical contractor files an application with the Bureau of Electrical Control to do the electrical work he must do any one of the following:

1. If the design is done by a professional engineer or a registered architect, the electrical contractor must submit with the application, a letter with the appropriate seal and signature from a professional engineer or a registered architect stating that the emergency lighting as designed, complies with the requirements of the Building Code.

2. If the design is done by a licensed electrical contractor, he must write in the comments field of the application, the following: "I certify that the design and installation as indicated on this application complies with the requirements of the Building Code".

The Bureau of Electrical Control will issue a certificate of electrical inspection to the electrical contractor or owner only after the above requirements are complied with.

George E. Berger, P.H.
Assistant Commissioner

GEB:NTP:lg

cc: Executive Staff

BIAC

American Institute of Architects

N.Y. Society of Professional Engineers

Real Estate Board

DEPARTMENT OF BUILDINGS

EXECUTIVE OFFICES 60 HUDSON STREET, NEW YORK, NY 10015

CHARLES M SMITH, Jr. R.A., Commissioner

GEORGE E. BERGER. P.E. Assistant Commissioner **Building Construction** 

TO:

William Morris, Director

Administrative Enforcement Unit

FROM:

George E. Berger, P.E.

Assistant Commissioner

DATE:

October 4, 1989

SUBJECT:

Installation of Electrical Conduit Under

Bureau of Electrical Control Permit

An electrical work in the building requires a permit from the Bureau of Electrical Control of the Department of Buildings.

Drilling holes in floors and walls and attaching cables and conduits to walls and ceiling are permitted under the above subject permit. No other permit from the Department of Buildings shall be required. However, all penetrations in the fire rated construction shall be properly firestopped pursuant to Section 27-345.

GEB:NTP:lq

cc: Commissioner C. Smith, Jr., R.A. Deputy Commissioner C. Dennis, P.E. Deputy Commissioner S. O'Brien

Borough Superintendents

Director R. Sanchez-Gomez, BEC

## HOUSING AND DEVELOP ENT ADMINISTRATION DEPARTMENT P BUILDINGS

DEPARTMENTAL MEMORAND M

DATE: April 14, 1977

- 10:

Borough Sujerintendents

FROM:

Director of Operations, Irving E. Minkin, P.E.

SUBJECT: .

EMERGENCY LIGHTING IN PLACES OF ASSEMBLY Supplement to Directive No. 1 of 1977

In accordance with agreement arrived at with the Bureau of Gas and Electricity, in order to assure compliance with the electrical aspects of Section C26-801.18 and the pertiner provisions of the Electrical Code, the attached C & E Directive No. 3 of 1977 shall be considered a part of this supplement.

- 1. The Department of Buildings will require that all plans filed for places of assembly, wherein emergency lighting is mandatory as set forth in Section C26-801.18 of the Administrative Code and Directive 1 of 1977 shall demonstrate compliance with the lighting levels specified in Section C26-801.18 of the Administrative Code. The applicant shall be required to note the number of lights, wattage, spacing and the height above floor in the location plan for emergency lighting.
- 2. A certificate of Electrical Inspection for emergency lighting will be required prior to the issuance of a new Place of Assembly permit. The certificate issued by the Bureau of Gas & Electricity will bear the stamp described in item 3 of G & E Directive No. 3 of 1977 and is to be furnished by the contractor, owner or operator of the place of assembly.
- 3. Where battery packs are used to supply power for emergency lighting, inspections by this department shall include the testing of the batteries or verification of the testing log.

External wiring of battery packs is not permitted and observance of such illegal wiring shall be referred to the Bureau of Gas and Electricity.

Trving E. Minkin, P.E. Director of Operations

IEM:BGB:rmr

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## HOUSING AND DEVELOPMENT ADMINISTRATION DEPARTMENT OF BUILDINGS



#### DEPARTMENTAL MEMORANDUM

DATE:

November 13, 1975

TO:

Borough Superintendents

FROM:

Jeremich T. Walsh, P.E. Commissioner

SUBJECT:

Potential Illegal 3 Family Dwellings - Notification By Bureau of Gas & Electricity

This memorandum confirms a procedure set up with the Bureau of Gas & Electricity of the Department of Public Works concerning the above subject. The procedure will apply only when an application for an electrical certificate is filed with the Bureau of Gas & Electricity involving the installation of 3 or 4 electric meters.

The Borough Office will be notified by the Bureau of Gas & Electricity when such applications are filed. The Borough Superintendent will then arrange for an inspection of the referred building to determine if an additional dwelling unit is being added illegally. If warranted, violations are to be placed in the normal manner.

To evaluate the effectiveness of this procedure, a report is to be submitted by the 10th day of each month to Assistant Commissioner Parascandola indicating the number of referrals received and violations filed as a result thereof.

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cc: Deputy Comm. A. Jenkins Asst. Comm. Parascandola

T.V. Burke /

Jeremiah T. Walsh, P.E.
Commissioner

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#### DEPARTMENT OF BUILDINGS

EXECUTIVE OFFICES 60 HUDSON STREET, NEW YORK, NY 10013

CHARLES M. SMITH, Jt., R.A., Commissioner

August 4, 1988

GEORGE E. BERGER, P.E.
Assistant Commissioner
Building Construction

Mr. Marvin Fields
Engineering Coordinator
Board of Estimates
Bureau of Franchises
Office of Telecommunications
40 Worth Street - Room 716
New York, N.Y. 10013

#### Dear Mr. Fields:

The installation of cable television wires with 60 volts inside the exit stair enclosure was discussed at the meeting held on July 27, 1988.

Since the code does not permit this with any wires carrying power or signal voltage of more than 50, the department was asked to consider approval of cable television wire with 60 volts.

In discussion with Deputy Commissioner Cornelius Dennis and Mr. Sanchez, Director of Bureau of Electrical Control, 60 volt cable inside the exit stair enclosure, will be permitted provided the cable industry meets the following requirements:

- Junction boxes shall be flush with the ceiling and bottom of these boxes shall not be less than six(6) feet from the landing.
- Equipments shall not reduce the required stair and landing width and should not interfere with the opening of exit doors.
- 3. Cable riser shall be in metallic conduits.
- Plastic molding for horizontal run within the stair shall not be permitted.
- 5. Equipments shall not reduce the required fire resistance rating of stair enclosures.
- 6. All cable penetration into the stair enclosures shall be firestopped.
- Riser conduit penetrations in the landings of scissors stairs shall be firestopped.

8. The plastic molding in the corridors shall meet the toxicity requirements of Section 27-348(c) of the Building Code.

Very truly yours,

George E. Berger, P.E.

Assistant Commissioner

GEB:NTP:lg

Cc: Commissioner Charles M. Smith Jr., R.A.

Deputy Commissioner Cornelius F. Dennis, P.E.

Executive Engineer Irving Polsky, P.E.

Director of BEC, Robert Sanchez-Gomez

Borough Superintendents

HOUSING AND DEVELOPMENT ADMINISTRATION

DEPARTMENT OF GUILDINGS

#### DEPARTMENTAL MEMORANDUM

DATE: April 27, 1971

TO:

Borough Superintendents

FROM:

Director of Operations, T. V. Burke

SUBJECT:

Demolitions - Disconnect of Electric Services

When buildings are demolished under contract with the Department of Development, demolition permits may be issued without electrical disconnect letters from the utility companies, provided that a written and signed request is received from the Department of Development. The request shall be in form of sample attached.

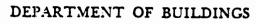
The Department of Development is assuming responsibility for cutoff of electrical service in a safe manner.

> Thomas V. Burke Director of Operations

TVB:JL:rmr

cc: Executive Staff

Director of Demolition, S.B. Feller



EXECUTIVE OFFICES 60 HUDSON STREET, NEW YORK, NY 10013

CHARLES M. SMITH, Jr., R.A., Commissioner 312-81.00

February 11, 1987

#### MEMORANDUM

TO:

BOROUGH SUPERINTENDENTS

FROM:

Charles M. Smith Jr.,

Commissioner

SUBJECT:

Locks on Elevator or Elevator Hoistway Doors

or Elevator Vestibules

This memorandum revises and clarifies the Departmental Memorandum of August 6, 1984.

Item 3C is an independent item and not an option to locks on elevator and elevator hoistway doors.

- (1) 3C Zero Clearance Vestibule on elevator landings provided with a vestibule (not to exceed 12 inches from the elevator or elevator hoistway door), a locking device is permitted to be installed exclusively on the vestibule doors. Such doors may be of swing type, vertical or horizontal slide doors.
- (2) Elevator Vestibule a locking device on vestibule doors may be permitted under the following conditions:
  - (a) The fire warden station or telephone to communicate with the lobby command station and building manager's office; or
  - (b) The locking devices are an approved fail safe type and released upon elevator recall or power failure; or
  - (c) At least one exit stair is located within the vestibule and vestibule doors are readily openable from the occupied side.

Item 5B is revised as follows:

(b) If consecutive vacant floors are to be locked, the locking devices shall be exclusively on vestibule doors meeting the requirements of Item 3C above.

# THE CITY OF NEW YORK DEPARTMENT OF BUILDINGS DIRECTIVE NO. 5 of 1979

#### DEPARTMENTAL MEMORANDUM

DATE: October 2, 1979

TO: Borough Superintendents

CORRECTED

FROM. Irwin Fruchtman, P.E., Commissioner

SUBJECT: ILLUMINATION - EMERGENCY LIGHTING FOR PLACES OF ASSEMBLY

- 1. This directive is issued for the purpose of establishing uniform guidelines for the above for compliance with C26-801.18 (Local Law 41 of 1978).
- 2. The requirement in this section of providing at least five (5) foot candles of illumination at the floor level applies at exit areas.
- 3. The exit area to be illuminated within the assembly space shall consist of the exit sign, the exit doorway, and a square at the threshold of the point of egress with a side whose dimension is double the width of the egress opening, or equal to the width of the corridor, (whichever is less). Light measurement should be on the horizontal.
- 4. This intensity of illumination shall not be diminished to less than two (2) foot candles at a level eighteen (18) inches above the floor at cross aisles.
- 5. The intensity of general illumination shall not be diminished to less than one (1.0) foot candle at a level eighteen (18) inches above the floor elsewhere.
- The lighting units shall be so arranged so as not to:
  - a. Introduce disorienting glare to the path of escape.
  - b. Dramatically alter the character and quality of illumination.
  - c. Present a hazard to the occupants and be protected as is necessary.
- 7. Illumination shall be so arranged that the failure of any single lighting unit, such as the burning out of an electric bulb, will not leave any area in darkness.
- 8. Exit lighting shall be on circuits that are separate from general lighting and power circuits, either taken off ahead of the main switch or connected to an emergency lighting power source when such is provided. However, an emergency lighting power source, if battery operated, may be recharged from the general lighting and power circuits.

## THE CITY OF NEW YORK DEPARTMENT OF BUILDINGS

#### DEPARTMENTAL MEMORANDUM

DATE: February 19, 1981

TO:

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BORGLIGH SUPERINTENDENTS

FROM:

Irwin Fruchtman, P.E., Commissioner

JBJECT:

EMERGENCY LIGHTING

The enclosed sketches PA-1, PA-2, and PA-3 illustrating typical emergency lighting types and locations for representative assembly spaces shall be accepted as being in conformance with Directive No. 5/79.

Amended PA plans, accurately and nearly drawn to scale and completely dimensioned to reflect the layout of the specific premises and location of the lighting in conformance with the enclosed illustrative sketches, can be filed by the owner.

Reinspections of premises where lighting was previously installed disclosing substantive deviations from the enclosures (whether or not pursuant to representations by architects or engineers that the observed layout conforms with law) are to result in violations being issued, requiring such additional lighting as necessary to bring the premises into compliance with the level of illumination required. However, no summonses, shall be issued from this violation during 1981, nor shall issuance of this violation in and of itself be the basis for denial of a PA permit during 1981.

Copies of the enclosures are to be given to all proprietors at the time of inspection, together with a copy of this memorandum, if a violation is warranted.

Irwin Frucheman, P.E.

Commissioner

CC:

Deputy Commissioner Minkin
Deputy Commissioner Parascandola
Assistant Commissioner Dennis
Executive Staff
BIAC
File



#### DEPARTMENT OF BUILDINGS

**EXECUTIVE OFFICES** 120 WALL STREET, NEW YORK, N.Y. 10005

IRWIN FRUCITMAN, P.E. Commissioner

PUBLIC ASSEMBLY DIVISION CHARLES GEORGE - SUPERVISOR - 643 7812

#### REQUIREMENTS FOR EMERGENCY LIGHTING

- 1) ARCHITECT TO AMEND P.A. PLAN TO SHOW WHERE UNITS ARE TO BE INSTALLED.
- 2) LICENSED ELECTRICIAN TO INSTALL UNITS WHERE INDICATED ON PLAN.
- 3) ELECTRICIAN TO ORTAIN CENTIFICATION FROM THE N.Y.C. ELECTRIC DEPARTMENT THAT UNITS COMPLY WITH ELECTRIC CODE.

OR

LICENSED ELECTRICIAN SUBMITS A LETTER STATING:

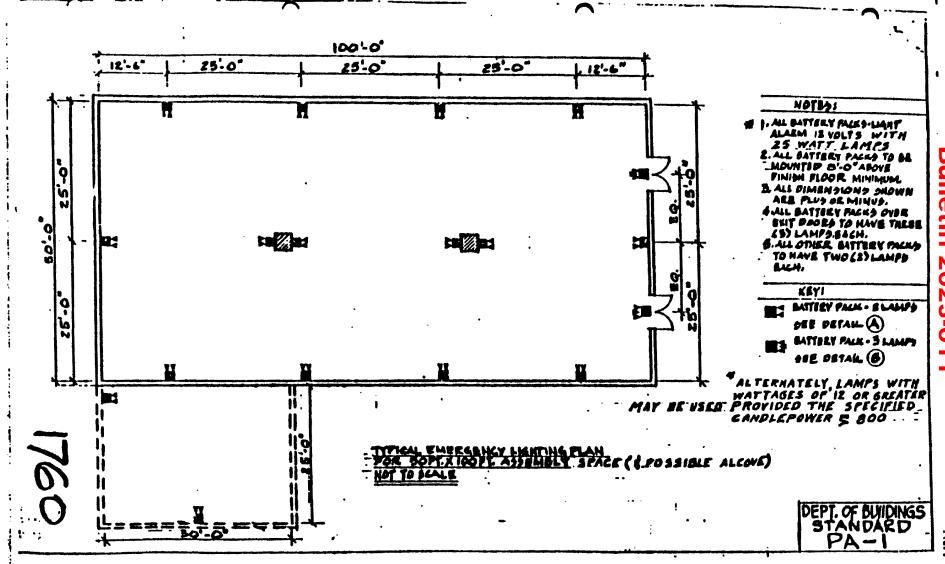
- 1) UNITS COMPLY WITH N.Y.C. ELECTRIC CODE
- 2) UNITS COMPLY WITH LOCAL LAW 41/78
- 3) PUTS HIS LICENSE # ON LETTER
- 4) HAS LETTER NOTOKIZED

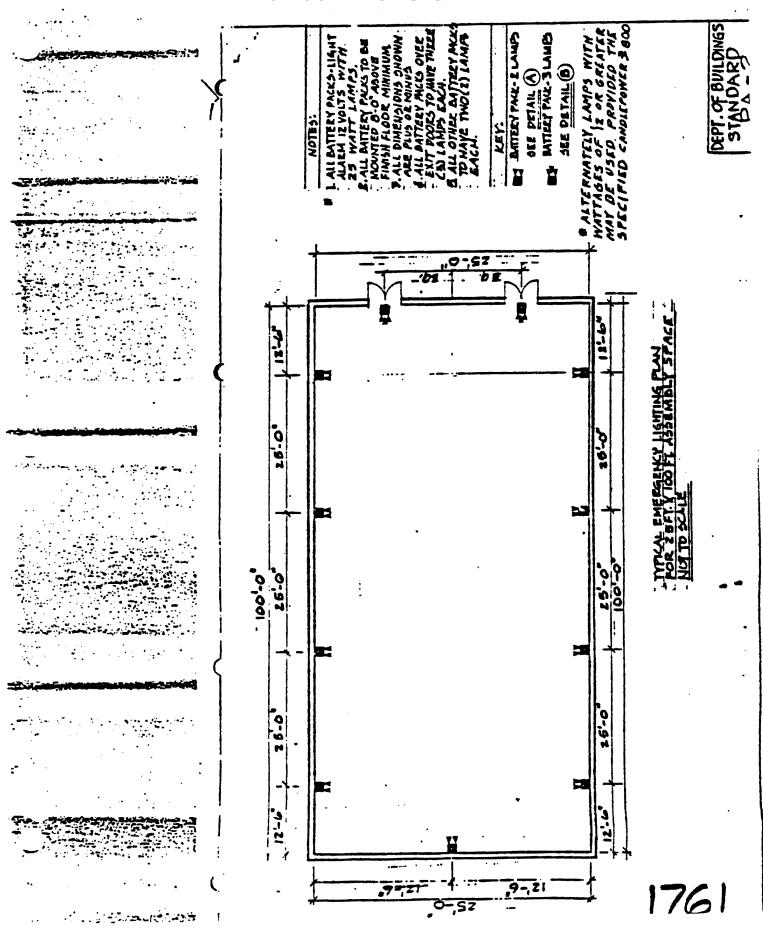
BORD OFFICES:

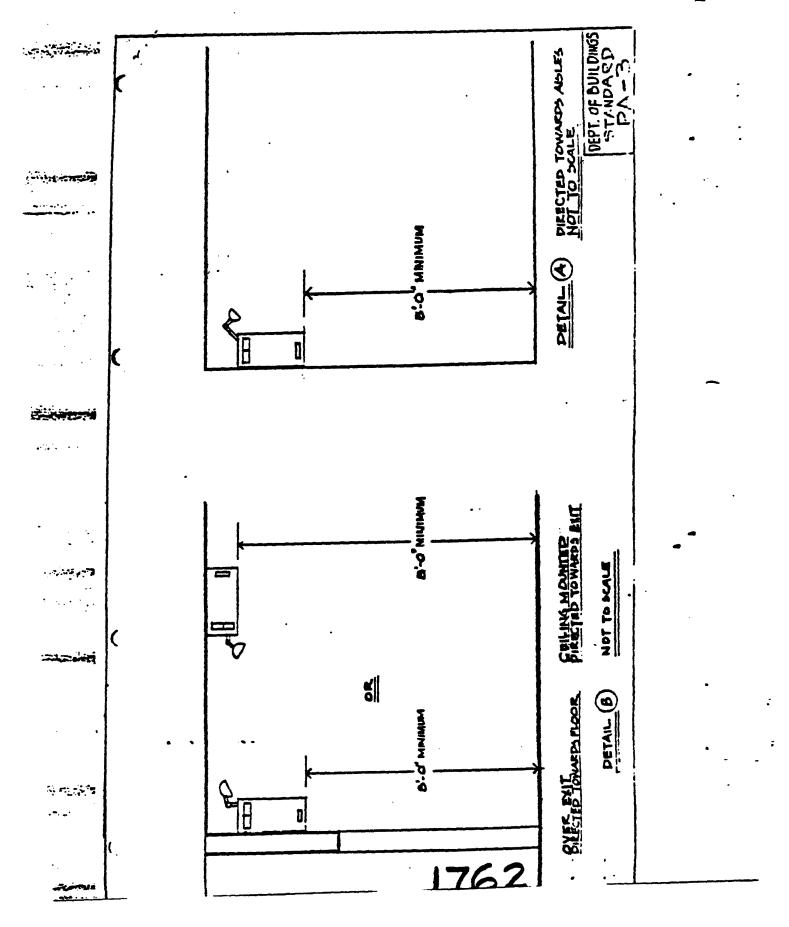
MANHATTAN

BROOKLYN

STATEM ISLAND







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9. Compliance with this directive shall be noted on the Public Assembly application plans filed after this date.

Irwin Fruchtman, P.E.

Commissioner



#### DEPARTMENT OF BUILDINGS

EXECUTIVE OFFICES
60 HUDSON STREET, NEW YORK, NY 10013

CHARLES M. SMITH, Jr., R.A., Commissioner 312-8100

January 20, 1987

TO:

BOROUGH SUPERINTENDENTS

FROM:

Charles M. Smith Jr.

Commssioner

SUBJECT:

"EMERGENCY LIGHTING IN EXITS AND ACCESS FACILITIES"

(Supersedes memorandum of February 19, 1986)

Professional Societies and Industry have brought to our attention the difficulty in measuring the required illumination at the floor level became of incapability of instrumentation, and diversity of resecting surfaces.

Therefore, the Departmental Memorandum dated February 19, 1986 is superseded as follows:

Illumination of at least two(2) foot candles measured at the floor level shall be maintained continuously in exits during occupancy as required by Section 27-381(a) [C26-605.1(a)]. Illumination in access facilities to such exits shall be not less than two(2) foot candles, average measured at 18 inches above the floor level which shall be maintained continuously during occupancy. However, the illumination shall not be less than that recommended in the I.E.S. Lighting Handbook 1981 Application Volume (Pages 2-45 and 2-46). Additionally the required illumination shall be remeasured if the reflective surfaces are changed.

A total of more than four (4) lights are required to be connected to an emergency power source or to storage battery equipment by Section 27-382 [C26-605.2(a)].

The following definitions shall apply:

The term "access facilities" shall mean a "corridor" or "public hallway" in multi-tenant floors; and in single tenant floors it shall mean the enclosed or unenclosed passage connecting the required floor exits and any passenger elevator serving floor to two required floor exits.

Multi-tenant floors. - Upon exiting the tenant's occupied side of the floor, the path of travel in the corridor or public hall shall be illuminated to the required exits. An illuminated path of travel shall also be provided from the elevator landing to at least 2 exits.

Single tenant floors. - The enclosed or unenclosed passage connecting the required floor exits shall be illuminated to the required exits. An illuminated path of travel shall also be provided from the elevator landing to at least 2 exits.

Also refer to the following definitions:

Corridor. - An enclosed public passage providing a means of access from rooms or spaces to an exit. (Pursuant to Subarticle 201.0 of the Article 2, Part II, Title C, Chapter 26 of the Administrative Code, enacted by Local Law 76, effective December 6, 1968).

Hallway. - a) The term "hallway" shall mean an enclosed hall or corridor leading to a stairway, fire tower or other required exit.

b) The term "public hallway" shall mean a corridor or hallway leading directly to a stairway, fire tower or other required exit, within a story of a structure which story is occupied by more than one tenant or lessee, or within a structure included in Section C26-235.0(a) (Public Buildings). (Pursuant to Section C26-81.0, Article 1, Title C, Chapter 26 of the Administrative Code, in effect for buildings constructed prior to December 6, 1968).

Exit. - A means of egress from the interior of a building to an open exterior space which is provided by the use of the following, either singly or in combination: Exterior door openings, vertical exits, exit passageways, horizontal exits, interior stairs, exterior stairs, or fire escapes; but not including access stairs, aisles, corridor doors or corridors.

CMS: IP: NTP: 1q

#### Distribution:

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ASS SERVICES - SALE BOOK

LIGHTING FOR SAFETY 2-45

leading toward accidents. Accidents may also be prompted by the delayed eye adaptation a person experiences when moving from bright surroundings into dark ones and vice versa. Some accidents which have been attributed to an individual's carelessness could have been partially due to difficulty in seeing from one or more of the above mentioned factors. The accidents might have been avoided through the use of good lighting principles.

Illuminance Levels. The lighting recommendations in Fig. 2-2 provide a guide for efficient visual performance rather than for safety alone: therefore, they are not to be interpreted as requirements for regulatory minimum illuminance levels.

Fig. 2-26 has been developed to list illuminance levels regarded as absolute minimums for safety alone. To assure these values are maintained, higher initial levels must be provided as required by the maintenance conditions. In those areas which do not have fixed lighting, localized illumination should be provided during occupancy by portable or material handling and vehicle mounted lighting equipment.

Other Factors. A visually safe installation must be free of excessive glare and of uncontrolled, large differences in luminances. Appropriate guioes to limiting glare and adaptation effects are given earlier in this Section in discussions of luminance ratios and visual comfort. Maximum luminance ratios are important to avoid temporarily noticeable reductions in visibility because of changes in eye adaptation when alternately looking at areas of widely different luminances.

Fig. 2-26. Illuminance Levels for Safety\*

Hazards Requiring Visual Detection Normalt Activity Leve: Illuminance Levels	Sligh:		High	
	Low	High	Low	Hign
Lux	5.4	11	22	54
Footcandles	0.5	1	2	5

Minimum sluminance for safety of peopla, absolute minimum at any time and at any location on any plane where safety is releted to seeing conditions.

Illumination Evaluation. Although the proper quality and quantity of illumination may be designed for safety in an area, it is necessary to know whether the design meets requirements. A standard procedure, titled "How to Make a Lighting Survey." has been developed in cooperation with the U.S. Public Health Service. This standard procedure is recommended for use in surveys of lighting for safety.

#### EMERGENCY LIGHTING

Consideration should be given to emergency lighting needs early in the planning stages of a building. Consultation between the owner and/or occupier of the premises, the architect, the lighting designer, the utility, and others concerned, should be arranged when, or perhaps before, the normal lighting planning is discussed. The installation contractor should be made aware of emergency lighting requirements at the earliest possible time.

**Definitions.** The following definitions are given for the terms used in this section:

Emergency lighting: Lighting provided for use when the power supply for the normal lighting fails, to insure that escape routes can be effectively identified and used.

Exit: A way out of the premises that is intended to be used at any time while the premises are occupied.

Emergency exit: A way out of the premises that is intended to be used only during an emergency.

Escape route: A route from a point inside the premises to an exit or emergency exit.

Normal lighting: All permanently installed electric lighting normally used when the premises are occupied.

Guides for the following are not provided here but are defined so that they are clearly excluded from this section.

Safety lighting: That part of emergency lighting that is provided to insure the safety of workers having to remain at work when the normal lighting fails.

Standby lighting: That part of emergency lighting that is sometimes provided to enable normal activities to continue.

Basic requirements for escape lighting are specified by federal codes and frequently are strengthened by local codes. The material that follows refers only to emergency lighting without regard for the type or location of the emergency

<sup>†</sup> Special conditions may raquire diffarent illuminance levels. In some cases higher levels may be required as for examole where security is a factor. In some other cases greatly reduced levels, including total parkness, may be necessary, specifically in situations involving manufacturing, handling, use, or drocessing of light-sensitive materials (notably in connection with photographic products). In these situations alternate methods of insuring sala operations must be relied upon.

Note: See specific application reports of the IES for guidelines to minimum illuminances for safety by area.

2-46 LIGHTING SYSTEM DESIGN CONSIDERATIONS

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power, which may be emergency motor driven generators, central battery systems, central inverter systems, unit inverters or unit equipment.

Emergency lighting is specified by the Life Safety Code (NFPA 101)<sup>15</sup> to be necessary in certain interiors where people work or meet, in order to enable them to leave the interior safely in the event that an emergency situation arises due to the failure of the normal power. References to that code, as well as any existing local codes, should be made at all times.

### Design Requirements for Emergency Lighting.

When the normal lighting of an occupied building fails, irrespective of the cause, the emergency lighting is required to fulfill the following functions:

- 1. Indicate clearly and unambiguously the escape routes.
- 2. Provide illumination and a comforting visual environment along the escape routes sufficient to facilitate safe movement along them toward and through the exits and emergency exits provided.
- 3. Permit ready identification of all fire alarm call points and firefighting equipment provided along the escape routes under emergency lighting conditions.

Escape Route Indication. Signs are required to be illuminated in time of emergency to insure that from any point within the premises an escape route can be easily identified and followed in an emergency.

All normal exits should be illuminated at all times when the premises are occupied. This lighting should, practically speaking, be external to the exit signs themselves.

Where direct sight of an exit or emergency exit is not possible, a directional sign or series of signs should be provided. They should be so placed that a person following them will be progressed toward the nearest exit or emergency exit.

Exit signs cannot be counted on to be visible to many people at distances of more than 30 meters (100 feet), and should not be expected to be visible at longer intervals on long escape routes.

Illumination of Exit Signs. Either of the following methods of illumination may be used:
(a) lamps external to the sign and (b) lamps contained within the sign. It is recommended that the method of illumination of exit signs

described under (b) be used within any area where the normal lighting may be dellocrately dimmed or extinguished. e.g., places of entertainment.

In the event of failure of the supply to the normal lighting, escape route signs should receive the power needed for illumination from the emergency lighting supply. Power for exit signs should be unswitched or have the switch accessible only to authorized personnel.

Visual Impact and Legibility of Internally Illuminated Signs. Impact and legibility of exit signs are dependent upon luminance, size, viewing distance, contrast, positioning and uniformity.

Luminance: Where codes exist, an illuminance of 54 lux (5 footcandles) on the face of the sign is usually specified. Illuminance is an inappropriate parameter for internally illuminated signs. Currently research is being done along this line, but a luminance of 7 to 10 candelas per square meser (2 to 3 footlamberts) on the lighted area of the sign seems to be a reasonable level and parameter, because it appears to be adequate under emergency lighting conditions, is measurable, and provides better contrast under normal light.

Size: Letters must have at least a 19-millimeter (4-inch) wide stroke and must be at least 150 millimeters (6 inches) high.

Viewing distance: In an emergency, an exit sign should not be expected to be useful at a distance greater than 30 meters (100 feet).

Contrast: Once other parameters have been met, this is a remaining important parameter. See luminance above. Transilluminated letters usually provide the best visibility. Color of letters is not an important point, so long as adequate light and contrast are provided. There seems to be little differentiation between dark letters on light background or illuminated (light) letters on dark or opaque background. Contrast is the important consideration.

Positioning: The location of the emergency exit sign will usually be determined by the desirable location under normal power conditions since, except for emergency exits, emergency exit signs mark the location of normal exit doors.

Uniformity: The exit sign face should be uniformly lighted, with a variation of not more than a factor of 2 above or below the average level over the lettered area.

All exit signs in a collective area should be of a similar color and design, as an aid to ready identification.

Externally Illuminated Exit Signs. Externally illuminated exit signs vary so greatly in

IES LIGHTING HENZEROK 1961 APPLICATION - OLUME

EMERGENCY LIGHTING 2-47

design. material. color and printing that standards are difficult to establish. NFPA 101 requires 54 lux (5 footcandles) on the face of the sign. However, consideration must be given to contrast, glare, veiling reflectance, as well as reliability of the emergency power source for the external light, but the minimum letter size must adhere to that given above.

#### Egress Route Emergency Illumination

Illuminance. The horizontal illuminance of any escape route should be not less than 1 per cent of the average provided by the normal lighting, with a minimum average of 5 lux [0.5 footcandle] at floor level.

Illuminance Uniformity. Illuminance uniformity is more easily achieved by using a greater number of lamps with lower light output than by employing a lesser number of more widely spaced units with higher light output.

A uniformity ratio (E<sub>max</sub>/E<sub>min</sub>) of up to 20:1 along the center line of an escape route is desirable for safe movement. A value of 40:1 should not be exceeded.

Visibility of Hazards. By itself, illuminance is not a sufficient criterion of visibility, since it refers only to the light falling on a surface and not the amount reflected back to the eye. Luminance is really the only relevant measure.

It is recommended that all potential obstructions or hazards on an escape route be light in color with contrasting surroundings. Such hazards include the nosings of stair treads, barriers and walls at right angles to the direction of movement.

In restricted areas such as corridors, light-colored decoration throughout is an advantage and, under emergency conditions, prominent vertical surfaces can assist considerably in defining the escape route.

Location of Egress Luminaires. A luminaire should be provided for each exit door and emergency exit door and at points where it is necessary to emphasize the position of potential hazards, sufficient to light that area to a level of 30 lux [3 footcandles].

The floor area to be so lighted should be a square at the threshold of the point egress that is double the width of the egress op equal to the width of the corridor, which is less. Illuminance measurement should be on the horizontal.

Examples of such areas are:

- 1. Intersection of corridors.
- Abrupt changes of direction of the egress path.
- 3. Staircases. Each flight of stairs should receive direct light.
- 4. Other changes of floor level that may constitute a hazard.
- Outside each exit and emergency exit, and close to it.

Additional lamps, as required, should be located so as to ensure that the lighting throughout the escape routes complies with the recommendations for minimum illuminance and illuminance uniformity given above.

Windowless offices occupied by less than five people normally should not require emergency lighting, provided proper escape route light exists in the corridor.

Handicapped people and other special situations could be an exception.

A room nominally occupied by five or more people and not otherwise requiring emergency light, should have an illuminance at the door equal to the egress route, or a glass paneled door. Under these circumstances, solid doors should be avoided.

Illumination of Fire Alarm Call Points and Fire Fighting Equipment. Fire alarm call points and fire fighting equipment provided along escape routes should be illuminated either by emergency lighting or by normal electric lighting or daylight at all times while the premises are occupied.

#### Length of Time an Emergency Lighting System Should Operate Without Recharging

The time required to evacuate a premise will depend upon its size and complexity but it should normally be possible to complete an orderly evacuation, even of the largest premises, in less than one and one half hours. An owner, architect, or engineer, may agree that a lesser time is acceptable.

With battery operated emergency lighting, adequate light must be provided without the battery voltage dropping below 87% per cent of rated voltage within the required time.

In an emergency, evacuation times may be considerably increased; for example, some of the escape routes may have been cut off, injured people may have to be found and possibly given on-the-spot medical treatment, etc. The time for which escape lighting is required to operate will.

The City of New York
Department of Buildings

#### DIRECTIVE 37-1967

To: Borough Superintendents

Date: October 13, 1967

FROM: Julius W. Schneider

Director of Operations

Subj.: Exit Signs in Factories

Section 272, Labor Law

Section 272 of the Labor Laws has been amended so as to require that exit signs required in factories be legible and visible in accordance with requirements established by the State of New York Board of Standards and Appeals, instead of in letters not less than 8 inches in height, and strike out provisions for red lights over such signs.

Section 666 of the New York City Charter stipulates that the New York City Board of Standards & Appeals shall have the power to make rules and regulations for enforcement of those provisions of the Labor Law which relate to buildings within the city, which shall take the place of the Industrial Code and of any rules and regulations of the Department of Labor of the State of New York relating to the same subject matter.

The requirements for exit signs in factories was reviewed with Chairman Glass, New York City Board of Standards & Appeals, and it was decided that pending any official promulgation or specific rules by the Board, that such exits signs shall continue to be required to have letters not less than 8 inches high, and shall continue to have red lights over such signs.

Signed

Julius Schneider Director of Operations



#### DEPARTMENT OF BUILDINGS

EXECUTIVE OFFICES
60 HUDSON STREET, NEW YORK, NY 10013

CHARLES M. SMITH, Jt, R.A., Commissioner

March 28, 1988

Mr. Peter F. Oddo, Jr.
Peter F. Oddo, Jr., Architect
3309 Richmond Avenue
Staten Island, N.Y. 10312

GEORGE E. BERGER, P.E.
Assistant Commissioner
Building Construction

RE: Emergency Exit Lights

Dear Mr. Oddo:

Your letter, dated March 15, 1988 to Commissioner Smith, has been forwarded to my office for review and response.

Section 27-381 requires exit lighting in exits and their access facilities in all occupancies. This section requires exit lighting in the path of egress and not in general occupied floor area. This section also exempts dwelling units in a multiple dwelling.

Whereas Section 27-382 requires emergency exit lighting in new buildings in all occupancies and in existing buildings in certain occupancy when more than four lights are required in a building. Furthermore this section does not require emergency exit lighting in existing buildings classified in occupancy group J-2.

Very truly yours,

George E Berger, P.E. Assistant Commissioner

GEB:NTP:lg

Commissioner Charles M. Smith Jr., R.A.
Deputy Commissioner Cornelius F. Dennis, P.E.
Deputy Commissioner Stewart P. O'Brien
Executive Engineer Irving Polsky, P.E.
Borough Superintendents

#### DEPARTMENT OF BUILDINGS

EXECUTIVE OFFICES
60 HUDSON STREET, NEW YORK, N.Y. 19013

RUDOLPH J. RINALDI. Commissioner

GEORGE C. SAKONA, P.E. Deputy Commissioner Technical Affairs (212) 312-8120

TO:

Borough Superintendents

FROM:

George C. Sakona, P.E.

Deputy Commissioner

DATE:

April 10, 1991

SUBJECT:

EMERGENCY EXIT LIGHTS IN NEW MULTIPLE DWELLINGS

The requirements of Section 27-381(a) regarding exit lighting are not applicable to dwelling units, however they are applicable to the exits and their access facilities (corridors and public halls) in buildings classified as J-2.

GCS:NTP:cn

#### THE CITTOT NEW TOR

### HOUSING AND DEVELOPMENT ADMINIST NATION

DIRECTIVE #9 of 1975

DEPARTMENTAL MEMORANDUM

DATE: August 28, 1975

TO:

Borough Superintendents

FROM:

Thomas V. Burke, P.E., Director of Operations

SUBJECT:

Local Law \$5/73 and Wire Insulation

The following wire insulations are to be acceptable for use where teflon, or its equivalent, is specified in Local Law \$5/73.

- 1. Teflon insulated copper conductors single or twisted pairs, shielded pairs or unshielded pairs made into a cable. These conductors to be made into a cable, covered with a fibreglass woven overwrap and an outer jacket of minimum 25 Mil Teflon. This outer jacket to be colored red and identified "For Fire Alarm Service". Rated for UL 1330 style.
- 2. Teflon insulated copper conductors single end or twisted pairs without further overwrap shall be installed in existing or new approved metallic raceways. The insulation shall conform to Mil. Spec. Wi6578 Type KK. minimum size wire guage is #16 Awg. The fill of conduit or E.M.T. shall conform to the N.Y.C. Electrical Code Article 5-530-47.0 Table 2.
- 3. Silicone rubber conductors with a glass braid overwrap in eable form and a suitable outer jacket of Silicone Rubber colored red and marked "For Fire Alarm Service". This cable is to be constructed to UL 1330 style characteristics, i.e., 600V, breakdown test, etc., and be approved for use.
- 4. When designed for elevator interlock use, Silicone Rubber wire will be designated "SF-2 Silicone Rubber, with a glass braid", and shall be approved by the Bureau of Gas and Electricity. SF-2 Şilicone Rubber with a glass braid shall be acceptable in addition to the conductors called for in Section B30-166.0 and conductor size shall conform to the requirements of Article 22 of the N.Y.C. Electrical Code.

- 5. When installing a cable system without a metallic raceway, approved non-metallic connectors shall be used where entering or terminating an a metal box or cabinet.
- 6. When installing single conductors or twisted pairs in a metal raceway, the conductors shall have a 6" sleeve or tape applied over the conductors grouped into a cable where visible at a pull box or termination cabinet. The tape or sleeve shall be heat shrinkable for a close fit and be red and marked "For Fire Alarm Service" in a contrasting color.

Director of Operations

The wire insulations specified above are acceptable to the Bureau of Gas and Electricity and the Fire Department as well as to the Department of Buildings.

TVB. IWS. ASP

ce: Comm. Walsh
Dep. Comm. Jenkins
Asst. Comm. Parascandola
Executive Staff
Fire Department
Industry

Bulle

Intradeparamental Memorandura

To: Borough Superintendents

Date: Jenuary 6, 1967

rom: Thomas V. Burke

Director of Building Construction

Subject: Electric Heating of Tenements

and Converted Dwellings. D26-3.10 Admin. Code

D26-2.2, subc. 4 Admin. Code

It is provided in section D26-3.10 Administrative Code, that centrally supplied heat be provided in tenements and converted dwellings.

In section D26-2.2, subdivision 4 of the Administrative Code, centrally supplied heat is defined as heat which is sufficient to maintain the minimum temperatures required by the provisions of the sanitary code and which is furnished from a central source of supply which is approved by the department as consistent with the requirements of safety and health.

The installation of electric heating equipment socquate to provide the required heat, shall be approved as in conformance with the foregoing provisions, provided:

- 1. The entire residential portion of the tenement or converted duclling was vecent during the installation of the electrical heating system.
- 2. The complete electrical heating system is installed throughout the building prior to occupancy, and is located entirely within the building.
- 3. A central control panel is provided where the service enters the building.
- 4. All wiring, heating fixtures end controls are provided by the owner.

Where the installation conforms to these requirements, electric meters may be installed for each apartment.

The conversion of existing central heating systems to electrical heating in tenaments and converted dwellings shall not be permitted except under the above conditions.

Electrical heating may be installed in new buildings end other buildings that are not tenements or converted dwellings.

Tnomas V. Burke

Director of Building

Construction

TVB/df

CC: Comm. Hoerdler

Dep. Comms. Ferro, Diamond

Asst. Comms. Unger, Narvaez, Debrot

Dir. of Ops. Schneider

Dir. of Housing Riley

Pir. of Investigations Colon

Spec. Asst. Meyer

Exec. Engr. Minkin

Sr. Engr Sekona Chi. Insp Constr.-Ops. Breiner Constr. Insp. L. Clerke

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#### ULPAKIMENT OF BUILDINGS

DEPARTMENTAL MEMORANDUM

DATE: March 17, 1981

TO:

BOROUGH SUPERINTENDENTS

FROM:

Deputy Commissioner Irving E. Minkin, P.E.

SUBJECT:

EMERGENCY LIGHTING

Commissioner Fruchtman's memorandum of February 19, 1981 which indicated typical emergency lighting types and locations which conform with the requirements of Local Law 41/78 with regard to emergency lighting (as detailed in Directive No. 5/79) is modified by the following:

- 1. All amended P.A. plans which were approved by the department prior to the date of said memo shall be reviewed in the course of inspections to ascertain whether the installation is in substantial compliance with the typical layouts referred to above.
- 2. If the requirements of the typical layouts are not substantially complied with, the P.A. permit is to be renewed nonetheless, but the Inspectors are to have the layouts brought to your attention for a determination asto whether the deviation requires additional units. If you determine additional units are required, a letter is to be sent to a responsible party, requiring such installation to be completed prior to the next annual P.A. inspection; and, advising the proprietor to file an amended P.A. plan reflecting the additional lighting to be installed in accordance with your determinations.
- 3. You should exercise your discretion to determine the degree of compliance with Local Law 41/78 with regard to the locations and spacing of lamps, but you should attempt to adhere to the requirements of the enclosures with the memorandum of February 19th, (2 lamps battery pack and 3 lamps battery pack. However, increased illumination levels with the existing number of lamps, or the like should be considered).

Irving E. Minkin, P.E. Deputy Commissioner

IEM:ap

cc:

Commissioner Pruchtman

Deputy Commissioner Parascandola Assistant Commissioner Dennis

Executive Staff

### THE CITY OF NEW YORK DEPARTMENT OF BUILDINGS

#### DEPARTMENTAL MEMORANDUM

DATE: May 11, 1978

TO: Borough Superintendents

FROM: Philip E. Olin, P. E., Acting Director of Operations

SUBJECT: Solar Energy Installations

#### A. Solar Domestic Hot Water Retrofit Installations

- 1. Generally, complex or extensive installations must be filed by a registered architect or a licensed professional engineer.
- 2. An exception to the requirement that a registered architect or licensed professional engineer be required to file the appropriate application (Building Notice, with P & D specification sheet) for a solar domestic hot water retrofit installation, may be authorized under the following conditions:
- a. The application is filed by either the owner or a licensed master plumber authorized by the owner.
- b. The area of the solar collectors is at least ten sq. ft. in area, but weighs not more than 200 lbs. including the supporting roof structure.
- c. The collectors are supported by at least four supporting members, with no supporting load or reaction greater than 50 lbs.
- d. The load distribution at the point of contact of the supporting members with the roof boards does not result in a load exceeding 25 psf.
- e. The collector material and immediate supports are to be of incombustible material.
- f. All plumbing work is done by a licensed master plumber, pursuant to a plumber's statement filed with either the Building Notice application or a Plumbing Repair Slip supplementing the Building Notice.

If any of the foregoing requirements in items a through d. are not complied with, then only an Alteration or Building Notice application filed by a licensed professional engineer or registered architect is acceptable.



#### DEPARTMENT OF BUILDINGS

EXECUTIVE OFFICES
60 HUDSON STREET, NEW YORK, NY 10013

CHARLES M. SMITH, Jr., R.A., Commissioner

Mr. David Mozur Cosentini Associates Two Pennsylvania Avenue New York, N.Y. 10121 February 18, 1988
GEORGE E. BERGER, P.E.
Assistant Commissioner
Building Construction

Re: 650 Madison Avenue Manhattan

Location of Automatic Transfer Switch

Dear Mr. Mozur:

Your request in a letter, dated February 8, 1988 to reconsider the location of automatic transfer switch as presently installed in the fire pump room has been reviewed by this office.

Rules 3-1.1.3 of the rules and regulations relating to emergency power systems, effective April 20, 1988 requires automatic transfer switch, ATS, to be an integral part of the pump controller. However, since Section 7-8.3 of NFPA 20-1987 allows ATS in a separate enclosure attached to the comptroller, this Department will accept this location for ATS provided ATS will be relocated within 90 days.

This approval shall set the precedent and the above rule will be revised accordingly.

Very truly yours,

George E. Berger, P.E.

Assistant Commissioner

GEB: NTP: 10



DEPARTMENT OF BUILDINGS

EXECUTIVE OFFICES
120 WALL STREET, NEW YORK, N.Y. 10005

IRWIN FRUCHTMAN, P.E. Commissioner 248-8811

December 27, 1979

Mr. James Carey
Bay City Metering Co., Inc.
266 West 37th Street
New York, N.Y. 10018

Re: Installation of Electric Meters

in Stairwells

Dear Mr. Carey:

Your letter, addressed to the Executive Engineer, dated December 11, 1979, inquiring as to the legality of the above, and offering fireproof enclosures, which would not encroach on egress, has been forwarded to me for reply.

Please be advised that although pipes and ducts protected in accordance with the requirements of Articles 13 and 17, and which do not reduce the required clearances of the enclosure may be permitted in stair enclosures by C26-604.8, subsection j of the Administrative Code, it is the determination of this department that electric meters may not be permitted.

You may consider this as your denial, if you wish to appeal to the Board of Standards and Appeals.

Sincerely,

Ipwin Fruchtman, P.E.,

Commissioner

IF:IP:gt

cc: Dep. Comm. Minkin

Exec. Engr.

The Borough Superintendents
Martin Burrell, P.E., Director
Bureau of Gas & Electricity

#### DEPARTMENT OF BUILDINGS

EXECUTIVE OFFICES
120 WALL STREET, NEW YORK, N.Y. 10005

CHARLES M. SMITH, Jr., R. A., Commissioner

July 22, 1986

GEORGE E. BERGER, P.E. Assistant Commissioner Building Construction Special Projects

Mr. John Esposito Vice President Ampak Electrical Construction Corporation 6319 14th Avenue Brooklyn, New York 11219

Re: Ceiling Fixtures

Dear Mr. Esposito:

Your letter dated July 7th, 1986 to Mr. Sanchez-Gomez of the Bureau of Electrical Control of this Department has been forwarded to this office for technical review.

Please be advised that all lighting fixtures installed in the suspended ceiling shall be done in accordance with the requirements of Section 5.3 of the Reference Standard RS 5-16 of the Building Code. The copy of this section and relevant figures are enclosed for your information.

All borough offices as well as the Bureau of Electrical Control is being advised of the above ruling.

This should resolve any misunderstanding on this matter, however, please feel free to contact my office should there be any outstanding question.

Very truly yours,

George E./Berger, P.E. Assistant Commissioner

Technical Review & Compliance

GEB:rmr

· · cc:

Executive Staff
Borough Superintendents

Director R. Sanchez-Gomez, ECB

### THE CITY OF NEW YORK DEPARTMENT OF BUILDINGS

#### DEPARTMENTAL MEMORANDUM

DATE: December 12, 1983

TO:

Borough Superinten, dents

FROM.

Joseph N. White/

SUBJECT:

Bureau of Electrical Control support on Department of Buildings Vacate Orders

Effective immediately, the Department of General Services, Bureau of Electrical Control and the Department of Buildings will interact in accordance with the following procedure:

Upon receipt of a written Stop Work Order, involving the illegal conversion of particular premises, duly issued by the Department of Buildings ("DOB"), the Bureau of Electrical Control ("BEC") will:

- A. Check its files to determine if there is an application for electrical work on file for that location. If an application is on file, BEC will notify the licensed electrical contractor to immediately cease work at that location until such time as the Stop Work Order is lifted by DOB.
- B. If there is no application for electrical work on file, BEC will send an inspector to verify if any electrical work is being or has been done at that location, and if so, BEC will proceed as follows:
  - If BEC determines that an extremely hazardous electrical condition exists, BEC will issue a violation to the owner and an immediate order to disconnect to the appropriate utility company.
  - 2. If BEC determines that the electrical condition is not extremely hazardous, BEC will:
    - a. Issue a violation to the owner for not causing an application to be filed by a licensed electrical contractor; and
    - b. Specify a reasonable time for the owner to cause an application to be properly filed by a licensed electrical contractor; and

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c. If the owner does not comply within the prescribed time, BEC will issue an order to disconnect to the appropriate utility company.

Note: BEC will expedite the usual timetable between the issuance of a notice of violation and the order to disconnect. If, two weeks after a notice of violation has been issued, no application has been filed, BEC will send the owner an order to appear at the offices of BEC (call to office) within ten days of the order. The "Order to Remedy" notice, which usually follows the notice of violation, will be omitted.) If the owner fails to appear in response to the call to office, BEC will issue an order to disconnect to the utility company. Utility companies, due to their involvement, scheduling and coordination usually require one (1) month from the notice for an actual disconnect. The complete timeframe from the violation to the disconnect of premises will take approximately 54 days, instead of the normal 86 days. When a multiple dwelling is involved, BEC will contact the appropriate City agencies to insure that the order to disconnect will not cut electrical service to the entire building.

- C. If the owner does comply by causing an application to be filed by a licensed electrical contractor and the Stop Work Order continues to be in effect, BEC will:
  - Advise the licensed electrical contractor that it cannot perform any electrical work at the location while the Stop Work Order is in effect and inform it that no certificate of inspection will be issued during this period; and
  - 2. Further inform the licensed electrical contractor that in the event it violates this order by continuing to perform electrical work at the location, the matter will be referred to the License Board for disciplinary action (license suspension, revocation, etc.) and it will be further subject to a criminal summons from the police department; and

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3) Further inform the licensed electrical contractor that BEC will not authorize utility companies to set meters or energize electrical service at that location until BEC received written notification from DOB that the Stop Work Order has been lifted.

It is understood that the Bureau has no ability to act in those instances when, upon inspection, it determines that no electrical work is being or has been done at the location, or when the work has already been completed by a licensed electrical contractor, with the appropriate application on file, who was not informed of the Stop Work Order.

This plan of cooperative action between DOB and BEC with respect to Stop Work Orders will be implemented as follows. The Borough Office of DOB which originates the Stop Work Order will promptly deliver to BEC a copy of the Stop Work Order and any revocation, removal, or termination thereof. BEC will promptly transmit to that Borough Office an acknowledgement of its receipt of such Stop Work Order. No Stop Work Order will be deemed received by BEC until such acknowledgement has been received by the originating Borough Office. All Stop Work Orders transmitted to BEC should be addressed to: Department of General Services, Bureau of Electrical Control, Att: Morris Kahme, Room 2337, Municipal Building, One Center Street, New York, New York 10007. All Stop Work Orders transmitted from a Borough Office of DOB will clearly indicate the person at that office to whom to acknowledgement should be sent and who is responsible for monitoring all information with respect to Stop Work Orders.

JMW:mh

cc: Executive Staff Martin Burrell Frank Puig Marion Harvey

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