



CITY OF PORTLAND, MAINE

DEPARTMENT OF PLANNING & URBAN DEVELOPMENT
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FAX # (207) 874-8716

DATE: 1/7/98

TIME: 11:45 am

TO: RICHARD GEORGE

FAX # 773-5120

COMPANY/BUSINESS:

McCarthy, Inc.

FROM: MICHAEL A. COLLINS

PHONE # (207)874-8300

EXT 8694

DIVISION:

INSPECTIONS

TOTAL # OF PAGES INCLUDING COVER SHEET: (6)

MESSAGE:

FYI

Plenum Rated CABLE
NMC

Inspection Services
P. Samuel Hoffses
Chief



Planning and Urban Development
Joseph E. Gray Jr.
Director

CITY OF PORTLAND

Richard George
McCarthy Inc.
P.O. Box 2009
Portland, Maine 04104-2009

January 7, 1998

RE: Maine Medical Center, 22 Bramhall Street
PROJECT # 3013

As per our conversation concerning the installation of phone, data, communication, fire alarm and all similar low-voltage systems shall comply with the following:

1. The above mentioned cables shall be plenum rated, to be installed in buildings over three stories; including commercial office spaces, hospitals, health care facilities, apartment complexes and similar structures.
2. This is to insure that the cables have low smoke-producing characteristics and shall have adequate fire-resistance.
3. Cables having a lesser rating, other than plenum, such as riser type, shall not be approved for installation in the City of Portland for these type of occupancies.
4. The Portland Fire Department also requires low-voltage systems in high rise type occupancies to be installed in a plenum rated method.

Compliance is mandatory , and shall be strictly enforced by this office. The following City and National Electric Codes shall apply.

CITY ELECTRICAL ORDINANCE:

Article 111, Division 1, Section 6-32
Article 111, Division 3, Section 6-66

NFPA-70
NEC 1996
Article 90-4
Article 800-6
Article 800-51(a)

Sincerely,

Michael A. Collins
Chief Electrical Inspector
City of Portland

cc: Michael Nugent, Manager
Tammy Munson, CEO
Lt. McDougall, PFD

25 & 35

New fees

4/28/97

CITY OF PORTLAND
IN THE CITY COUNCIL

AMENDMENT TO PORTLAND CITY CODE
CHAPTER 6, ARTICLE 111
RE: ELECTRICAL CODE

BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF PORTLAND, MAINE, IN CITY COUNCIL ASSEMBLES, AS FOLLOWS:

Article 111 is hereby amended as follows:

ARTICLE 111 ELECTRICAL CODE

DIVISION 1.
GENERALLY

Sec. 6.32 Adoption of the National Electric Code

There is hereby adopted for the purpose of regulating the construction, installation, alteration, repair, maintenance and removal of electric conductors and equipment installed within or on public and private buildings or other structures including mobile homes and recreational vehicles and other premises such as yard, carnival, parking and other lots and industrial substations; for the purpose of regulating the connection of such installations to a supply of electricity and for the purpose of regulating any other outside conductors on the premise, the National Electric Code ~~1993~~ ⁽¹⁹⁹⁶⁾ edition (as recommended by the National Fire Prevention Association), which is adopted and approved and made a part of this code as fully as if every word were printed herein; provided, however, that where there is a conflict between the rules and requirements of the National Electric Code, ~~1993~~ ⁽¹⁹⁹⁶⁾ edition, and the laws of this state or the ordinances of the City, such laws or ordinances shall control one (1) copy of the code have been and are now on file in the office of the City Clerk available for public use, inspection and examination during normal working hours. (1996)

State Law reference - Authority to adopt codes by reference 309-A
M.R.S.A. 3003

State Law references p Electrical installations, 30-A M.R.S.A. 4151
et seq.: electricians 2 M.R.S.A. 1101 et seq

6-32 AR.002 ELECTRICAL

DIVISION 3.
INSPECTION AND ENFORCEMENT

Sec.. 6 - 66 Duties of Electric Inspector generally

(a) After installation and upon request, the Electric Inspector shall examine all the work described on the permit to see that it is installed in accordance with the incorporated National Electric Code and the ordinances of the City.

(b) The Electric Inspector shall enforce the provisions of this article to the extent that wires, conduit, fixtures, equipment and other appliances used for light, heat, power transmission, et., shall be installed, constructed and guarded so as to reduce as far as practicable, the danger there from to life and property.

(c) When the Electric Inspector discovers an Electric installation where dangerous conditions exist, he or she shall issue an order in writing to the owner, setting forth the conditions found, and fixing a time limit within which the installation shall be put into a safe condition in accordance with the standards of the City's Electric Code.

(d) The Electric inspector shall have the authority to reject any work that is not completed either in accordance with any permit issued under this article or with any applicable code or ordinance, or in a workmanlike safe manner.

Sec.. 6 - 67 Right of entry to inspect

The Electric Inspector shall have the right during reasonable hours to enter in, an upon any premises, building or other place, in the discharge of his or her official duties for the purpose of making any inspection , reinspection or test of the installation of Electric wiring devices, appliances and equipment contained therein.

NOTICE

To All Electric Contractors

All hard wired smoke detectors installed in single and multi dwelling units, shall be both power and battery back-up type detectors. There shall be a smoke detector in each bedroom as well as the other required areas.

Any questions regarding this, will be answered by the Building Department and the City of Portland Fire Department.

Lt. Mc Dougal

90-4. Enforcement.

This *Code* is intended to be suitable for mandatory application by governmental bodies exercising legal jurisdiction over electrical installations and for use by insurance inspectors. The authority having jurisdiction for enforcement of the *Code* will have the responsibility for making interpretations of the rules, for deciding upon the approval of equipment and materials, and for granting the special permission contemplated in a number of the rules.

The authority having jurisdiction may waive specific requirements in this *Code* or permit alternate methods where it is assured that equivalent objectives can be achieved by establishing and maintaining effective safety.

This *Code* may require new products, constructions, or materials that may not yet be available at the time the *Code* is adopted. In such event, the authority having jurisdiction may permit the use of the products, constructions, or materials that comply with the most recent previous edition of this *Code* adopted by the jurisdiction.

800-6. Mechanical Execution of Work.

Communications circuits and equipment shall be installed in a neat and workmanlike manner. Cables shall be supported by the building structure in such a manner that the cable will not be damaged by normal building use.

(FPN): One way to determine accepted industry practice is to refer to nationally recognized standards such as *Commercial Building Telecommunications Wiring Standard*, ANSI/EIA/TIA 568-1991; *Commercial Building Standard for Telecommunications Pathways and Spaces*, ANSI/EIA/TIA 569-1990; and *Residential and Light Commercial Telecommunications Wiring Standard*, ANSI/EIA/TIA 570-1991.

800-51. Listing Requirements.

Communications wires and cables shall have a voltage rating of not less than 300 volts and shall be listed in accordance with (a) through (i) below. Conductors in communications cables, other than in a coaxial cable, shall be copper.

(FPN): See Section 800-4 for listing requirement for equipment.

(a) Type CMP. Type CMP communications plenum cable shall be listed as being suitable for use in ducts, plenums, and other spaces used for environmental air and shall also be listed as having adequate fire-resistant and low smoke-producing characteristics.

(FPN): One method of defining low smoke-producing cables is by establishing an acceptable value of the smoke produced when tested in accordance with the *Standard Method of Test for Fire and Smoke Characteristics of Wires and Cables*, NFPA 262-1994 (ANSI), to a maximum peak optical density of 0.5 and a maximum average optical density of 0.15. Similarly, one method of defining fire-resistant cables is by establishing maximum allowable flame travel distance of 5 ft (1.52 m) when tested in accordance with the same test.

(b) Type CMR. Type CMR communications riser cable shall be listed as being suitable for use in a vertical run in a shaft or from floor to floor and shall also be listed as having fire-resistant characteristics capable of preventing the carrying of fire from floor to floor.

(FPN): One method of defining fire-resistant characteristics capable of preventing the carrying of fire from floor to floor is that the cables pass the requirements of the *Standard Test for Flame Propagation Height of Electrical and Optical-Fiber Cable Installed Vertically in Shafts*, ANSI/UL 1666-1991.

(c) Type CMG. Type CMG general-purpose communications cable shall be listed as being suitable for general-purpose communications use, with the exception of risers and plenums, and shall also be listed as being resistant to the spread of fire.

(FPN): One method of defining resistant to the spread of fire is for the damage (char length) not to exceed 4 ft 11 in. (1.5 m) when performing the vertical flame test -- cables in cable trays, as described in *Test Methods for Electrical Wires and Cables*, CSA C22.2 No. 0.3-M 1985.

(d) Type CM. Type CM communications cable shall be listed as being suitable for general-purpose communications use, with the exception of risers and plenums, and shall also be listed as being resistant to the spread of fire.

(FPN): One method of defining resistant to the spread of fire is that the cables do not spread fire to the top of the tray in the vertical-tray flame test in the *Reference Standard for Electrical Wires, Cables and Flexible Cords*, ANSI/UL 1581-1991. Another method of defining resistant to the spread of fire is for the damage (char length) not to exceed 4 ft