NEMA Installation Guide

for Nurse Call Systems (R2007)

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Foreword

These guidelines cover the proper physical installation of nurse call systems. This publication describes system types, the basic theory of operation, the use of ancillary devices, installation requirements, the isolation of circuits, system environmental considerations, inspection, testing, maintenance, and service.

The content will be helpful to those preparing for proficiency or certification in the design, installation, service, and maintenance of nurse call systems. Although it has been written primarily as a stand-alone guide, it can also serve as a text for apprentices and journeymen taking a class with a qualified instructor.

The publication emphasizes the installation of basic nurse call systems. For information on applying the myriad choices of systems or equipment available, the reader should follow the specific instructions provided by the manufacturers.

The information is presented as Authorized Engineering Information—a technical guide, as distinct from the mandatory requirements of a NEMA standard. This publication will be updated to keep abreast of new technology and the new requirements set forth in the referenced publications of other organizations.

This Installation Guide for Nurse Call Systems is published by the National Electrical Manufacturers Association (Signaling, Protection, and Communication Section -3SB).

About the NEMA Signaling, Protection, and Communication Section (3-SB):

The objective of the Section is to be the principal source of technical, training, and educational materials essential for the specification and manufacture of reliable life safety products, their installation, performance, and inspection.

The Section currently represents over 40 U.S., U.K., and Japanese manufacturers. The products are life safety/fire alarm products that provide early warning of an impending or actual fire or gaseous hazard as well as communications systems in health care facilities, such as hospitals, clinics, etc. The products detect, notify, and initiate control functions in case of hazard to life or property.

About the National Electrical Manufacturers Association (NEMA):

For more than 75 years, the National Electrical Manufacturers Association has been developing standards for the electrical manufacturing industry and is today one of the leading standards development organizations in the world. NEMA contributes to an orderly marketplace and helps ensure the public safety.

NEMA, with headquarters in Rosslyn, Virginia, has nearly 500 member companies, including large, medium, and small businesses. The organization is divided into eight divisions: Industrial Automation, Lighting Equipment, Electronics, Building Equipment, Insulating Materials, Wire and Cable, Power Equipment, and Diagnostic Imaging and Therapy Systems. Within these divisions are over 50 product-specific sections. The Signaling Section is one such section in the Electronics Division.

For more information on NEMA and the Signaling Section, go to www.nema.org and search for the “Signaling Section.”

Comments, questions, or recommendations are invited and should be addressed to:

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Section 1
GENERAL

1.1 SCOPE

This Publication, developed by the Health Care Communications Group of the Signaling, Protection, and Communications Section, provides technical information on basic nurse call systems and their installation. It will be continually expanded as new technologies are adapted to nurse call systems.

1.2 REFERENCES

Copies of the following standards, which are applicable to nurse call systems, may be obtained from the indicated organization:

ADA, Americans with Disabilities Act of 1990, Title III

American National Standards Institute
11 West 42nd Street
New York, NY 10036

ANSI/IEEE 602—1986, Electric Systems in Health Care Facilities

American Society for Hospital Engineering (ASHE)
840 North Lake Shore Drive
Chicago, IL 60611-2431

Building Officials and Code Administrators International, Inc. (BOCA)
4501 W. Flossmoor Road
Country Club Hills, IL 60477
National Building Code

Canadian Department of Communications
1241 Clyde Avenue
Ottawa, Ontario, Canada K2C1Y3
Industry Canada CS-03 Registration of Equipment

Canadian Standards Association
178 Rexdale Boulevard
Rexdale, Ontario, Canada M9W 1R3
UL1069, Hospital Signaling and Nurse Call Equipment
C22.2 No. 125-M1984 (Reaffirmed 1992) Equipment
Canadian Electrical Code Part 1 (C22.1199)
C22.2 No. 225—Telecommunication Equipment

Federal Communications Commission
1919 M Street, NW
Washington, DC 20554
“Code of Federal Regulations” Title 47, Part 15, Subpart B, Class A, Radio Frequency Devices
“Code of Federal Regulations” Title 47, Part 68, Connection of Terminal Equipment to the Network