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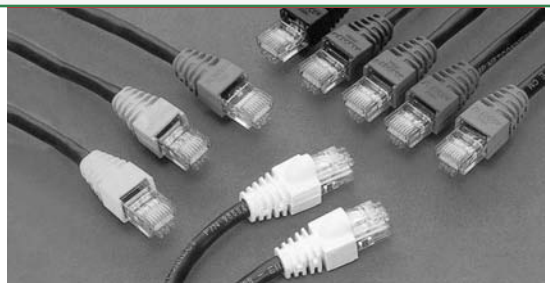

Standard for

Installing Commerical Building Telecommunications Cabling

NEIS

Published by
National Electrical
Contractors Association

Jointly developed with
BICSI®–
A Telecommunications Association

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(This foreword is not a part of the standard)

Foreword

*National Electrical Installation Standards™ (NEIS®)*are designed to improve communication among specifiers, purchasers, and suppliers of electrical construction services. They define a minimum baseline of quality and workmanship for installing electrical products and systems. *NEIS* are intended to be referenced in contract documents for electrical construction projects. The following language is recommended:

> Commercial building telecommunciations cabling shall be installed in accordance with NECA/BICSI 568-2006, *Standard for Installing Commercial Building Telecommunications Cabling* (ANSI).

In 1998, a large number of companies representing the telecommunications and electrical industry expressed concern over the lack of a standard for installation of telecommunications premises cabling systems. The National Electrical Contractors Association (NECA) asked BICSI®, A Telecommunications Association, to jointly undertake the task of developing the required standard. BICSI accepted the task and the project was assigned to BICSI/NECA Joint Technical Committee 1 for the Development of Telecommunications Cabling Installation Guidelines.

BICSI and NECA standards documents are developed within the Technical Committees of BICSI and NECA. Members of these committees serve voluntarily and without compensation. The companies they represent are not necessarily members of BICSI or NECA. The standards developed within these committees represent a consensus of the broad expertise on the subject. This expertise comes from within BICSI and NECA as well as from those outside that have an expressed interest. The viewpoint expressed at the time this standard was approved was from the contributors' experience and the state of the art at that time. Users are encouraged to confirm that they have the latest revision of the standard.

BICSI/NECA/JTC1 reviews its standards, at the minimum, every 5 years. At that time standards are reaffirmed, rescinded or revised according to the submitted updates. Updates to be included in the next revision should be sent to the committee chair or to BICSI/NECA/JTC1.

This standard has been prepared by BICSI/NECA/JTC1 under the joint jurisdiction of BICSI and NECA and approved by consensus ballot.

Use of *NEIS* is voluntary, and neither NECA nor BICSI assume any obligation or liability to users of this publication. Existence of a standard shall not preclude any member or nonmember of either organization from specifying or using alternate construction methods permitted by applicable regulations.

This publication is intended to comply with the edition of the *National Electrical Code®* (NEC®) in effect at the time of publication. Because they are quality standards, *NEIS* may in some cases go beyond the minimum safety requirements of the NEC. It is the responsibility of users of this publication to comply with state and local regulatory codes when installing electrical products and systems.

Suggestions for revisions and improvements to this standard are welcome. They should be addressed to:

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NECA Standards & Safety
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1. Scope

1.1 Products and Applications Included

A structured cabling system is a complete collective configuration of cabling and associated hardware on a premises which, when installed, provides a comprehensive telecommunications infrastructure. This infrastructure is intended to support a wide range of telecommunications services such as telephone and computer networks. Figure 1 illustrates an example of components that comprise a structured cabling system.

This Standard describes minimum requirements and procedures for installing the infrastructure for telecommunications including balanced twisted pair copper cabling and optical fiber cabling that transport telecommunications signals (e.g., voice, data, video). Installers should always follow applicable codes and manufacturers' instructions. This Standard is intended to be used in describing a "neat and workmanlike manner" as referenced by ANSI/NFPA 70, the National Electrical Code (NEC).

1.2 Regulatory and Other Requirements

a) All information in this publication is intended to conform to the National Electrical Safety Code (ANSI/IEEE C2) and National Electrical Code (ANSI/NFPA 70). Installers should always follow the NESC, NEC, applicable state and local codes, manufacturer's instructions, and contract documents when installing telecommunications cabling.

b) Only qualified persons familiar with telecommunications cabling should perform the work described in this publication. It is recommended that all work be performed in accordance with NFPA 70E, *Standard for the Electrical Safety in the Workplace.*

c) General requirements for installing electrical products and systems are described in the latest version of NECA 1, *Standard Practices for Good Workmanship in Electrical Contracting* (ANSI). Other *NEIS* provide additional guidance for installing particular types of electrical products and systems. A complete list of *NEIS* is provided in Annex B. The installation should follow the NEC, applicable state

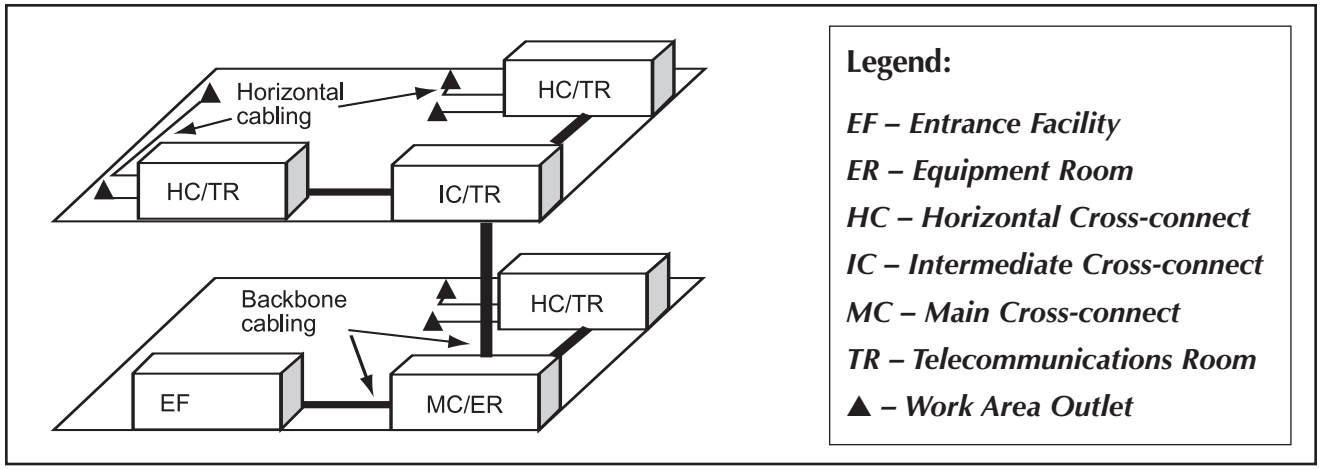

Figure 1—Example of structured cabling system