



Standard for

# Installing Exterior Lighting Systems

# NEIS



Published by  
National Electrical  
Contractors Association



Jointly developed with  
Illuminating Engineering Society  
of North America



# NECA/IESNA 501-2006

Standard for  
Installing Exterior  
Lighting Systems

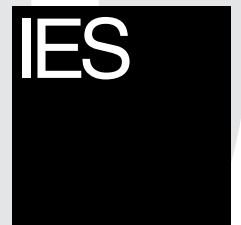
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*(This foreword is not a part of the standard)*

# 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:

Exterior lighting systems shall be installed in accordance with NECA/IESNA 501-2006, *Standard for Installing Exterior Lighting Systems* (ANSI).

Use of *NEIS* is voluntary, and the National Electrical Contractors Association (NECA) and the Illuminating Engineering Society of North America (IESNA) assume no obligation or liability to users of this publication. Existence of a standard shall not preclude any member or non member 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 instances go beyond the minimum safety requirements of the NEC. It is the responsibility of users of this publication to comply with state and local electrical codes when installing electrical products and systems.

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**NECA 501** Recommended Practice for Installing Exterior Lighting Systems

<b>Revision History</b>		
NECA/IESNA 501-2000	08/2000	First publication
NECA/IESNA 501-2006	09/2006	Reaffirmation

# 1. Scope

## 1.1 Products and Applications Included

This standard describes installation procedures for lighting systems commonly used in outdoor applications on and near commercial, institutional, industrial and storage buildings, including but not limited to the following:

1. Pole mounted spot lights, area lights, sports lights and floodlights
2. Illuminated bollards
3. Wall mounted sconces, wall bracket lights, and wall pack lights
4. Above ground mounted floodlights and spot lights
5. In ground floodlights and spot lights
6. Step lights and other lights recessed into exterior walls and other concrete surfaces
7. Canopy and soffit mounted surface lights
8. Landscape lighting
3. Lighting systems designed for marine, aviation, rail, transit, or other specialized applications
4. Lighting systems employed in petrochemical plants, power plants, or other applications where special environmental or regulatory conditions prevail
5. Underwater and submersible lighting
6. Portable lighting

## 1.2 Products and Applications Excluded

While this standard generally covers most industrial lighting systems, the following are specifically excluded:

1. Lighting systems for roadways, bridges or similar applications where special structural and/or civil engineering requirements prevail
2. Lighting systems integral to or embedded in roadway or advertising signing

## 1.3 Related Construction Materials

In addition to the luminaire(s), this standard also covers related construction materials, including lamps, conduit, wire, various special screws and clips, and other related components and parts.

## 1.4 Related Construction Work

In some cases, the electrical contractor may build reinforced concrete foundations, dig and backfill trenches, and other similar work often associated with outdoor lighting. None of these activities are covered by this standard, and contractors engaging in these activities should consult with the appropriate standard(s) for that type of construction.

## 1.5 Regulatory and Other Requirements

- a) All information in this publication is intended to conform to the National Electrical Code (ANSI/NFPA 70). It is recommended that all work be performed in accordance with NFPA 70E, *Standard for Electrical Safety in the Workplace*. Installers should always follow the NEC, applicable state and local codes, manufacturer's instructions, and contract documents when installing exterior lighting systems.