



**ANSI/NEMA OS 2-2013**

**Nonmetallic Outlet Boxes, Device Boxes,  
Covers, and Box Supports**

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## Foreword

The purpose of this standards publication is to provide a guide for the types and sizes of nonmetallic boxes and supports that are in general use. The standards present dimensional data needed for the safety and convenience of interchangeability with associated equipment. All items when properly installed and properly used contribute to safety.

Properly manufactured boxes and covers are, however, only one factor in minimizing the hazards, which may be associated with the use of electricity. The reduction of hazards involves the joint efforts of various equipment manufacturers, the system designer, the installer, and the user. Information is provided herein to assist users and others in the proper selection of boxes and covers.

The manufacturer has limited or no control over the following factors, which are vital to a safe installation:

- a. Environmental conditions
- b. System design
- c. Equipment selection and application
- d. Installation
- e. Operating practices
- f. Maintenance

This publication is not intended to instruct the user of the boxes and covers with regard to these factors, except insofar as suitable equipment to meet needs can be recognized in this publication.

These standards are necessarily limited to defining the construction requirements for the products covered herein. The publication has been promulgated with a view towards reducing the hazard to persons and property when boxes and covers conforming to these standards are properly selected and installed in accordance with the *National Electrical Code*®.

OS 2-2013 revises and supersedes OS 2-2008 and its revision OS 2-2008 (R2010).

This standard is reviewed with input obtained from independent testing laboratories and major consumer representatives. It is also reviewed periodically by the Outlet and Switch Box Section of NEMA so that it will be kept up to date with advancing technology. Comments are welcomed and should be sent to:

**Senior Technical Director, Operations  
National Electrical Manufacturers Association  
1300 North 17th Street, Suite 900  
Rosslyn, Virginia 22209**

This standard was developed by the Outlet and Switch Box Section. Section approval of the standard does not necessarily imply that all section members voted for its approval or participated in its development. At the time this standard was approved, the Outlet and Switch Box Section was composed of the following members:

2D2C, Inc.	Kitchener, ON Canada
Allied Moulded Products, Inc.	Bryan, OH
Arlington Industries, Inc.	Scranton, PA
Eaton Cooper B-Line	Highland, IL
Eaton Cooper Crouse-Hinds	Syracuse, NY
EGS Electrical Group	Skokie, IL
ERICO	Solon, OH
Hubbell Incorporated	Shelton, CT
IPEX USA LLC	Mississauga, ON Canada
Legrand/Pass & Seymour	Syracuse, NY
Sigma Electric Manufacturing Corporation	Garner, NC
Southwire Company	Carrollton, GA
Thomas & Betts	Memphis, TN
Wiremold/Legrand	West Hartford, CT

## Section 1 GENERAL

### 1.1 SCOPE

This standards publication covers those general-purpose nonmetallic outlet boxes, device boxes, covers, and supports that are widely used by the consumer. These items (covered by UL 514C) are designed to facilitate the pulling of wires, to protect and facilitate wiring splices and taps, to provide a means of mounting and protecting wiring devices, and to provide a connection for nonmetallic sheathed cable, nonmetallic tubing (loom), rigid nonmetallic conduit, and electrical nonmetallic tubing or other approved raceways.

This standard provides useful guidance for design and performance of certain aspects of nonmetallic floor boxes.

Excluded from this standards publication are the following: "conduit bodies" and similar types of boxes; cabinets or cutout boxes; floor boxes; flush device cover plates; boxes, plates, and covers designed for use with surface metal or surface nonmetallic raceway systems only; and boxes larger than 1650 cm<sup>3</sup> (100 cu. in.) in volume, except multiple gang device boxes.

### 1.2 NORMATIVE REFERENCES

The following publications are adopted in part, by reference in this publication, and are available from the organizations below. Unless otherwise noted, references are to the most recent edition.

#### **National Electrical Manufacturers Association**

1300 North 17th Street, Suite 900  
Rosslyn, VA 22209

NEMA OS 3                      *Selection and Installation Guidelines for Electrical Outlet Boxes*

#### **National Fire Protection Association**

1 Batterymarch Park  
Quincy, MA 02169

ANSI/NFPA 70                      *National Electrical Code*<sup>®</sup>

#### **Underwriters Laboratories LLC**

333 Pfingsten Road  
Northbrook, IL 60062

ANSI/UL 514C                      *Standard for Nonmetallic Outlet Boxes, Flush Device Boxes and Covers*

### 1.3 DEFINITIONS

**blank cover:** an outlet box cover having no knockouts or openings, other than those used to mount to a box. These covers complete the enclosure.

**blank/knockout cover:** an outlet box cover that contains a knockout which can be removed to accommodate a fitting for a pendant cord, etc. When left in place it may serve as a blank cover.