(Portions of text and tables not shown are unaffected by the errata)

1<sup>st</sup> through 11<sup>th</sup> PRINTING (This Errata Posted April 22, 2022)

# CHAPTER 39 POWER AND LIGHTING DISTRIBUTION

#### E3905.4.3 Utilization equipment.

Outlet and device boxes that enclose devices or utilization equipment shall have a minimum internal depth that accommodates the rearward projection of the equipment and the size of the conductors that supply the equipment. The internal depth shall include that of any extension boxes, plaster rings, or raised covers. The internal depth shall comply with all of the applicable provisions that follow.

#### Exception: Utilization equipment that is listed to be installed with specified boxes.

- 1. Large equipment. Boxes that enclose devices or utilization equipment that projects more than  $1^{7/8}$  inches (48 mm) rearward from the mounting plane of the box shall have a depth that is not less than the depth of the equipment plus 1/4 inch (6.4 mm).
- 2. Conductors larger than 4 AWG. Boxes that enclose devices or utilization equipment supplied by conductors larger than 4 AWG shall be identified for their specific function.
- 3. Conductors 8, 6, or 4 AWG. Boxes that enclose devices or utilization equipment supplied by 8, 6, or 4 AWG conductors shall have an internal depth that is not less than 2<sup>1</sup>/<sub>16</sub> inches (52.4 mm).
- 4. Conductors 12 or 10 AWG. Boxes that enclose devices or utilization equipment supplied by 12 or 10 AWG conductors shall have an internal depth that is not less than 1<sup>3</sup>/<sub>16</sub> inches (30.2 mm). Where the equipment projects rearward from the mounting plane of the box by more than 1 inch (25.4 mm), the box shall have a depth that is not less than that of the equipment plus <sup>1</sup>/<sub>4</sub> inch (6.4 mm).
- 5. Conductors 14 AWG and smaller. Boxes that enclose devices or utilization equipment supplied by 14 AWG or smaller conductors shall have a depth that is not less than 15/16 inch (23.8 mm).

Exception: Utilization equipment that is listed to be installed with specified boxes.

(Portions of text and tables not shown are unaffected by the errata)

1<sup>st</sup> through 10<sup>th</sup> PRINTING (This Errata Posted: December 5, 2018)

## CHAPTER 39 POWER AND LIGHTING DISTRIBUTION

## TABLE E3905.12.1 MAXIMUM NUMBER OF CONDUCTORS IN METAL BOXES<sup>a</sup>

BOX DIMENSIONS (inches trade size and type)	MAXIMUM CAPACITY (cubic inches)	MAXIMUM NUMBER OF CONDUCTORS <sup>2</sup>						
		18 Awg	16 Awg	14 Awg	12 Awg	10 Awg	8 Awg	6 Awg
4 × 2 <sup>1</sup> / <sub>8</sub> square	30.3	20	17	15	13	12	10	6
4 <sup>11</sup> / <sub>16</sub> × <sup>41</sup> / <sub>4</sub> <u>1<sup>1</sup>/<sub>4</sub></u> square	25.5	17	14	12	11	10	8	5
$4^{11}/_{16} \times {}^{11}/_{2} = 11/_{2} \text{ square}$	29.5	19	16	14	13	11	9	5
4 <sup>11</sup> / <sub>16</sub> × 2 <sup>1</sup> / <sub>8</sub> square	42.0	28	24	21	18	16	14	8

(Portions of text and tables not shown are unaffected by the errata)

1<sup>st</sup> through 10<sup>th</sup> PRINTING (04-15-2014)

## CHAPTER 39 POWER AND LIGHTING DISTRIBUTION

**Section E3908.12 Equipment grounding conductor size.** Copper...Where ungrounded <del>connectors conductors are increased in size....</del>

(Portions of text and tables not shown are unaffected by the errata)

### 1<sup>st</sup> and 2<sup>nd</sup> PRINTING (SEPTEMBER 14, 2009)

## CHAPTER 39 POWER AND LIGHTING DISTRIBUTION

#### **FIGURE E3901.4**

