

## Section 16140

## WIRING DEVICES

## PART 1 GENERAL

## 1.01 SECTION INCLUDES

## A. Specifications for wiring devices including:

1. Receptacles.
2. Wall switches.
3. Wall plates and cover plates.

## 1.02 REFERENCES

## A. American National Standards Institute/National Electrical Manufacturers Association (ANSI/NEMA):

1. NEMA WD1 - General Purpose Wiring Devices.
2. NEMA WD6 - Dimensional Requirements.

## B. Federal Specifications (WC-596F).

## C. American National Standards Institute/National Fire Protection Association (NFPA):

1. NFPA No. 70 - National Electrical Code (NEC), Articles 210 Branch Circuits, 250 Grounding and 410, Paragraphs 56, 57 and 58.

## 1.03 SUBMITTALS

## A. Submit the following under provisions of Section 01330 – Submittal Procedures:

1. Product Data: Manufacturer's product literature and specifications including dimensions, weights, certifications and instructions for handling, storage and installation.

## 1.04 DELIVERY, STORAGE AND HANDLING

## A. Pack and crate devices to permit ease of handling and protect from damage during shipping, handling and storage.

## PART 2 PRODUCTS

## 2.01 ACCEPTABLE MANUFACTURERS

- A. Bryant Electric
- B. Crouse-Hinds, Arrow Hart Division
- C. Hubbel Inc. Wiring Devices Division
- D. Leviton Manufacturing Company
- E. Pass & Seymour/Legrand.

## 2.02 MATERIALS AND EQUIPMENT

- A. Standards: Conform to NEMA WD1 for general requirements and NEMA WD6 for dimensional requirements.
- B. Manufacture devices to heavy-duty industrial specification grade with brown nylon bodies (orange for isolated-ground receptacles) back and side wiring provisions and green-colored grounding screws.
- C. Receptacles:
  - 1. Duplex-type receptacles: Rated 20 amps at 120 volts.
  - 2. Contacts: Brass or phosphor bronze.
  - 3. Receptacle grounding system: Extend to the mounting strap unless isolated ground is indicated or required.
  - 4. GFI or GFCI (ground fault circuit interrupter) receptacles: Provide feed-through type with test and reset button.
- D. Wall Switches:
  - 1. Toggle switches: Rated 20 amps at 120/277 volts AC rated for both resistive and inductive loads.
  - 2. Contacts: Silver cadmium oxide construction to prevent sticking, welding and excessive pitting.

- E. Cover Plates:
  - 1. In outdoor, corrosive and wet areas, provide cover plates of cast metal, gasketed with spring-loaded hinged covers and stainless steel hardware.
  - 2. All other plates: Type 316 stainless steel.

### PART 3 EXECUTION

#### 3.01 PREPARATION

- A. Verify that device boxes are correctly placed.
- B. Verify that the correct quantity, size and type of wires are pulled to each device box.
- C. Verify that wiring has been checked at both ends.
- D. Prepare wire ends for connection to devices.
- E. Inspect each wiring device for defects.

#### 3.02 INSTALLATION

- A. Install products in accordance with manufacturer's instructions.
- B. Install devices plumb and level.
- C. Install switches with OFF position down.
- D. Install receptacles with grounding pole on top.
- E. Connect wiring device grounding terminal to outlet box with bonding jumper.
- F. Connect wiring devices by wrapping conductors clockwise around screw terminals.
- G. Install cover plates on switch, receptacle and blank outlets in finished areas.
- H. Energize and test devices for proper operation.

END OF SECTION