

## SECTION 16140 - WIRING DEVICES

### PART 1 - GENERAL

#### 0.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

#### 0.2 SUMMARY

- A. This Section includes receptacles, connectors, switches, and finish plates.

#### 0.3 DEFINITIONS

- A. GFCI: Ground-fault circuit interrupter.

#### 0.4 QUALITY ASSURANCE

- A. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, Article 100, by a testing agency acceptable to authorities having jurisdiction.
- B. Comply with NEMA WD 1.
- C. Comply with NFPA 70.

#### 0.5 COORDINATION

- A. Receptacles for Owner-Furnished Equipment: Match plug configurations.

### PART 2 - PRODUCTS

#### 0.1 MANUFACTURERS

- A. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
  - 1. Wiring Devices:
    - a. Bryant Electric, Inc.
    - b. Eagle Electric Manufacturing Co., Inc.
    - c. GE Company; GE Wiring Devices.
    - d. Hubbell, Inc.; Wiring Devices Div.

- e. Killark Electric Manufacturing Co.
  - f. Leviton Manufacturing Co., Inc.
  - g. Pass & Seymour/Legrand; Wiring Devices Div.
  - h. Pyle-National, Inc.; an Amphenol Co.
2. Multioutlet Assemblies:
- a. Airey-Thompson Co.
  - b. Wiremold.
3. Poke-through, Floor Service Outlets and Telephone/Power Poles:
- a. American Electric.
  - b. Hubbell, Inc.; Wiring Devices Div.
  - c. Pass & Seymour/Legrand; Wiring Devices Div.
  - d. Square D Co.
  - e. Wiremold.

## 0.2 RECEPTACLES

- A. Straight-Blade Receptacles: Specification grade.
- B. GFCI Receptacles: Feed-through type, with integral NEMA WD 6, Configuration 5-20R duplex receptacle arranged to protect connected downstream receptacles on same circuit. Design units for installation in a 2-3/4-inch- deep outlet box without an adapter.
- C. Isolated-Ground Receptacles: Equipment grounding contacts connected only to the green grounding screw terminal of the device with inherent electrical isolation from mounting strap.
  - 1. Devices: Listed and labeled as isolated-ground receptacles.
  - 2. Isolation Method: Integral to receptacle construction and not dependent on removable parts.

## 0.3 SWITCHES

- A. Snap Switches: General-duty, quiet type.

## 0.4 WALL PLATES

- A. Single and combination types match corresponding wiring devices.
  - 1. Plate-Securing Screws: Metal with head color to match plate finish.
  - 2. Material for Finished Spaces: 0.04-inch- thick, Type 302, satin-finished stainless steel.
  - 3. Material for Unfinished Spaces: Smooth plastic.

#### 0.5 FLOOR SERVICE FITTINGS

- A. Type: Modular, flush-type, dual-service units suitable for wiring method used.
- B. Type: Modular, pop-up, dual-service units suitable for wiring method used.
- C. Type: Modular, above-floor, dual-service units suitable for wiring method used.
- D. Compartmentation: Barrier separates power and signal compartments.
- E. Housing Material: Die-cast aluminum, satin finished.
- F. Power Receptacle: NEMA WD 6, Configuration 5-20R, gray finish, unless otherwise indicated.
- G. Signal Outlet: Blank cover with bushed cable opening, unless otherwise indicated.

#### 0.6 MULTIOUTLET ASSEMBLIES

- A. Components of Assemblies: Products from a single manufacturer designed for use as a complete, matching assembly of raceways and receptacles.
- B. Raceway Material: Metal, with manufacturer's standard finish.
- C. Wire: No. 12 AWG.

#### 0.7 FINISHES

- A. Color: White, unless otherwise indicated or required by Code.

### PART 3 - EXECUTION

#### 0.1 INSTALLATION

- A. Install devices and assemblies plumb and secure.
- B. Install wall plates when painting is complete.
- C. Arrangement of Devices: Unless otherwise indicated, mount flush, with long dimension vertical, and grounding terminal of receptacles on top. Group adjacent switches under single, multigang wall plates.
- D. Protect devices and assemblies during painting.
- E. Adjust locations at which floor service outlets and telephone/power service poles are installed to suit arrangement of partitions and furnishings.

## 0.2 IDENTIFICATION

- A. Comply with Division 16 Section "Basic Electrical Materials and Methods."
  - 1. Switches: Where three or more switches are ganged, and elsewhere as indicated, identify each switch with approved legend engraved on wall plate.
  - 2. Receptacles: Identify panelboard and circuit number from which served. Use machine-printed, pressure-sensitive, abrasion-resistant label tape on face of plate and durable wire markers or tags within outlet boxes.

## 0.3 CONNECTIONS

- A. Connect wiring device grounding terminal to branch-circuit equipment grounding conductor.
- B. Isolated-Ground Receptacles: Connect to isolated-ground conductor routed to designated isolated equipment ground terminal of electrical system.
- C. Tighten electrical connectors and terminals according to manufacturers published torque-tightening values. If manufacturers torque values are not indicated, use those specified in UL 486A and UL 486B.

## 0.4 FIELD QUALITY CONTROL

- A. Test wiring devices for proper polarity and ground continuity. Operate each device at least six times.
- B. Test GFCI operation with both local and remote fault simulations according to manufacturer's written instructions.
- C. Replace damaged or defective components.

## 0.5 CLEANING

- A. Internally clean devices, device outlet boxes, and enclosures. Replace stained or improperly painted wall plates or devices.

END OF SECTION 16140