

SECTION 26 27 26 - WIRING DEVICES

PART 1 - GENERAL

1.1. SUMMARY:

- A. Section includes electrical wiring devices, such as receptacles, wall switches and dimmer switches; multi-outlet surface raceway assemblies and device plates.
- B. Related Sections:
 - 1. Section 01701 - Building Systems Identification and Labeling

1.2. QUALITY ASSURANCE

- A. Comply with governing codes and regulations; handle, store and install materials in accordance with manufacturer's instructions.

1.3. GENERAL DESIGN GUIDELINES:

- A. Pre-Manufactured Furniture And Assemblies: Wiring devices incorporated into pre-manufactured assemblies, such as office partitions and furniture, shall comply with the requirements noted herein.
- B. Multi-outlet surface raceway assemblies are only allowed in laboratory spaces except as approved otherwise in writing by Brown Project Manager.
- C. Receptacles and wiring devices shall be heavy-duty, commercial specification grade type.
- D. Specify on Project drawings the color and type of wiring devices and cover plates.
- E. Emergency Outlets: All outlets and switches connected to Emergency or Standby power circuits shall be red with red color plates.
- F. Wiring device faceplates:
 - 1. Stainless steel
 - 2. Colored plates: unbreakable nylon; Plastic plates are not acceptable.
 - 3. Weatherproof Cover Plate: Gasketed cast metal plate with hinged and gasketed device cover.
 - 4. Wet locations with connected cords: gasketed, "weathertight when in use" cover plates and gasketed device cover.
 - 5. Specify jumbo size plates for outlets installed in masonry walls.
- G. Wiring device mounting boxes shall be metallic; plastic or non-metallic boxes are not acceptable.
- H. All receptacles in bathrooms, on the building exterior, within mechanical rooms, utility vaults and other wet locations, or within 6 feet of sinks shall be GFCI type.
- I. Mounting heights for wiring devices shall be as follows, with heights to center of outlet boxes:
 - 1. Wall switches and dimmers - 48" Aff.
 - 2. Wall Receptacles - 18" Aff.
 - 3. Counter and bench receptacles – 42" Aff

1.4. RECEPTACLES:

- A. Wiring devices used for convenience receptacles shall be minimum 20-amp, 125 volt, NEMA 5-20R, heavy-duty general use rated, with back and side wiring.
- B. Specialty-use receptacle ratings as required for the application.
- C. Duplex receptacles equipped with ground fault circuit interrupters or arc-fault circuit interrupters shall be commercial-duty, feed through type.

1.5. SWITCHES:

- A. Switches used for lighting and switching of branch circuit loads shall be minimum 20-amp, 120/277 volts rated, NEMA type WD 1, Heavy-Duty AC only, general-use snap switch with back and side wiring.
- B. Locator Light: Lighted handle type switch; red color handle when used.

1.6. DIMMER SWITCHES:

- A. Wall-mounted dimmer switches shall be minimum 600 watt rated, NEMA WD 1 Type II, solid-state type, suitable for the lamp type being controlled (incandescent, fluorescent, LED), with flicker noise control.
- B. Manufacturers:
 - 1. Lutron
 - 2. Substitutions: Not permitted

1.7. MULTIOUTLET SURFACE RACEWAY ASSEMBLY (Where Allowed):

- A. Multi-outlet Surface Raceway Assembly: Sheet metal channel with fitted cover, suitable for use as multi-outlet assembly. Furnish with manufacturer's standard fittings, accessories, outlet and device boxes, and connectors.
- B. Provide multichannel Surface Raceway when routing power and low-voltage communications wiring and devices; the systems shall be physically separated by a metal barrier: Provide each raceway section with separate covers.
- C. Size: Series 2000 minimum for "plugmold" applications; series 700 for restoration work, series 4000 for laboratory applications.
- D. Receptacles: Furnish covers and accessories to accept convenience receptacles specified in this Section. Receptacle Spacing: Project specific.
- E. Manufacturers:
 - 1. Wiremold
 - 2. Hubbell

1.8. FLOOR BOXES:

- A. Floor boxes for combination receptacles and telecommunications jacks; provide fire-rated assemblies equal to floor fire ratings.
- B. Covers and floor plates to be brass or stainless steel in exposed high traffic areas; plastic allowed in conference rooms.
- C. Manufacturers:

1. Hubbell

PART 2 – PRODUCTS

Not Used

PART 3 - EXECUTION

3.1 INSTALLATION

- A. All devices shall be free of paint.
- B. Label each wiring device faceplate (receptacles and switches) with source panel and circuit number; labels to be machine-labeled.
- C. Connect wiring device grounding terminal to outlet box with bonding jumper and branch circuit equipment grounding conductor.
- D. Wiring devices shall be securely installed with the ears of the device yoke mated flush to the building finish. In locations where device ears do not mate to the building finish, UL listed spacers may be used to ensure the device is properly fastened to the box.
- E. When more than two circuit conductors are present in an outlet box, the conductors shall be “pig-tailed” so that removal of the device at some future date does not interrupt the continuity of the remainder of the circuit.
- F. Install receptacles with grounding pole on top or to the left when looking at it.
- G. Connect wiring devices using screw terminals: push-in connections are not acceptable.
- H. Install wall dimmers to achieve full rating specified and indicated after derating for ganging as instructed by manufacturer.
- I. Do not share neutral conductor on load side of dimmers.
- J. Test for proper operation; restore or replace damaged components and finishes.

END OF SECTION