

SECTION 26 27 26

WIRING DEVICES

PART 1 GENERAL

1.01 SUMMARY

- A. Section includes wall switches; wall dimmers; receptacles; multioutlet assembly; and device plates and decorative box covers.
- B. Related Sections:
 - 1. Division 26 - Raceway and Boxes for Electrical Systems: Outlet boxes for wiring devices.
 - 2. Division 26 - Floor Boxes for Electrical Systems: Service fittings for receptacles installed on floor boxes and poke-through receptacles.

1.02 REFERENCES

- A. National Electrical Manufacturers Association:
 - 1. NEMA WD 1 - General Requirements for Wiring Devices.
 - 2. NEMA WD 6 - Wiring Devices-Dimensional Requirements.

1.03 SUBMITTALS

- A. Division 01 - Submittal Procedures: Submittal procedures.
- B. Product Data: Submit manufacturer's catalog information showing dimensions, colors, and configurations.

1.04 QUALIFICATIONS

- A. Manufacturer: Company specializing in manufacturing products specified in this section with minimum five years documented experience.

PART 2 PRODUCTS

2.01 WALL SWITCHES

- A. Manufacturers:
 - 1. Arrow Hart Wiring Devices
 - 2. Hubbell
 - 3. Pass & Seymour
- B. Product Description: NEMA WD 1, Industrial, Heavy-Duty, specification grade, AC only general-use snap switch.
- C. Body and Handle: For emergency power color to be red.
- D. Indicator Light: Lighted handle type switch. Provide red color for emergency and green color for normal power circuits.
- E. Locator Light: Lighted handle type switch; clear color handle.

- F. Ratings:
 - 1. Voltage: 120-277 volts, AC.
 - 2. Current: 20 amperes.

2.02 WALL DIMMERS

- A. Manufacturers:
 - 1. Leviton
 - 2. Hubbell
 - 3. Pass & Seymour
 - 4. Lutron
- B. Product Description: NEMA WD 1, Type I semiconductor dimmer for incandescent lamps and electronic dimmer for fluorescent lamps. Coordinate ballast type or dimmable fluorescent lamps.
- C. Provide dimmer suitable for application. .
- D. Body and Handle: Plastic with linear slide. For emergency power color to be red.
- E. Voltage: 120/277 volts.
- F. Accessory Wall Switch: Match dimmer appearance.

2.03 RECEPTACLES

- A. Manufacturers:
 - 1. Leviton
 - 2. Hubbell
 - 3. Pass & Seymour
- B. Product Description: NEMA WD 1, Heavy-duty general use receptacle, plug tail type receptacle.
- C. Device Body: For emergency power color to be red.
- D. Configuration: NEMA WD 6, type as required per program.
- E. Convenience Receptacle: Type 5-20.
- F. GFCI Receptacle: Convenience receptacle with integral ground fault circuit interrupter to meet regulatory requirements.

2.04 WALL PLATES

- A. Device plates shall be Type 302 stainless steel for the number of gangs and type of openings necessary.
- B. Weatherproof Cover Plate: Gasketed cast metal hinged with hinged gasketed device cover. Provide in-use covers where required per program.

2.05 MULTIOUTLET ASSEMBLY

- A. Manufacturers:
 - 1. Leviton
 - 2. Hubbell

- 3. Pass & Seymour
- 4. Wiremold

- B. Multi-outlet Assembly: Non-metallic channel with fitted cover, suitable for use as multi-outlet assembly.
- C. Size: As required per program.
- D. Receptacles: Furnish covers and accessories to accept receptacles specified in this Section.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Division 01 - Administrative Requirements: Coordination and project conditions.
- B. Verify outlet boxes are installed at proper height.
- C. Verify wall openings are neatly cut and completely covered by wall plates.
- D. Verify branch circuit wiring installation is completed, tested, and ready for connection to wiring devices.

3.02 PREPARATION

- A. Clean debris from outlet boxes.
- B. Provide extension rings to bring outlet boxes flush with finished surface.

3.03 INSTALLATION

- A. Install devices plumb and level.
- B. Install switches with OFF position down.
- C. Install wall dimmers to achieve full rating specified after derating for ganging as instructed by manufacturer.
- D. Do not share neutral conductor on load side of dimmers.
- E. Install receptacles with grounding pole on top.
- F. Connect wiring device grounding terminal to branch circuit equipment grounding conductor.
- G. Connect wiring devices by wrapping solid conductor around screw terminal. Install stranded conductor for branch circuits 10 AWG and smaller. When stranded conductors are used in lieu of solid, use crimp on fork terminals for device terminations. Do not place bare stranded conductors directly under device screws.
- H. Install galvanized steel plates on outlet boxes and junction boxes in unfinished areas, above accessible ceilings, and on surface mounted outlets.
- I. Devices fed from normal power shall be in physically separated box from devices fed from emergency power.
- J. GFCI receptacles shall be wired so that operation of the GFCI protection does not affect downstream loads.

3.04 INTERFACE WITH OTHER PRODUCTS

- A. Coordinate locations of outlet boxes provided under Division 26 including mounting heights.
- B. Install wall switch 48 inches above finished floor.

- C. Install convenience receptacle 24 inches above finished floor, unless otherwise determined.
- D. Install convenience receptacle 6 inches above back splash of counter, unless otherwise determined.
- E. Install dimmer 48 inches above finished floor.
- F. Coordinate installation of wiring devices with poke-thru service fittings.
- G. Coordinate installation of wiring devices with floor box service fittings provided under Division 26.

3.05 FIELD QUALITY CONTROL

- A. Division 01 - Quality Requirements and Execution and Closeout Requirements: Field inspecting, testing, adjusting, and balancing.
- B. Inspect each wiring device for defects.
- C. Operate each wall switch with circuit energized and verify proper operation.
- D. Verify each receptacle device is energized.
- E. Test each receptacle device for proper polarity.
- F. Test each GFCI receptacle device for proper operation.

3.06 ADJUSTING

- A. Division 01 - Execution and Closeout Requirements: Testing and correction.
- B. Adjust devices and wall plates to be flush and level.

3.07 CLEANING

- A. Division 01 - Execution and Closeout Requirements: Final cleaning.
- B. Clean exposed surfaces to remove splatters and restore finish.

END OF SECTION