

SECTION 16141 - WIRING DEVICES

GENERAL

1.1 SECTION INCLUDES

- A. Wall switches.
- B. Receptacles.
- C. Device plates.

1.2 RELATED SECTIONS

- A. Section 16130 - Boxes.

1.3 REFERENCES

- A. NEMA WD 1 - General Purpose Wiring Devices.
- B. NEMA WD 6 - Wiring Device Configurations.

1.4 SUBMITTALS

- A. Submit under provisions of Section 16010.
- B. Product Data: Provide manufacturer's catalog information showing dimensions, colors, and configurations.

1.5 REGULATORY REQUIREMENTS

- A. Conform to requirements of ANSI/NFPA 70.
- B. Furnish products listed and classified by Underwriters Laboratories, Inc. as suitable for purpose specified and shown.

PRODUCTS

2.1 WIRING DEVICES

- A. Leviton model numbers are listed below to establish configuration and type. Equal devices by other manufacturers listed herein will be accepted.
 - 1. Hubbell
 - 2. Pass & Seymour
 - 3. Bryant

2.2 WALL SWITCHES

- A. Description: style NEMA WD 1, heavy-duty, AC only general-use snap witch.
- B. Device Body: Ivory plastic with toggle handle.
- C. Voltage Rating: 120-277 volts, AC.
- D. Current Rating: 20 amperes.
- E. Model Number: Leviton CSB1-20I.

2.3 BOILER CUT-OFF SWIITCHES

- A. Description: Heavy-duty, AC only, double pole single throw snap switch.
- B. Device Body: Red plastic with toggle handle.
- C. Voltage Rating: 120-277 volts AC.
- D. Current Rating: 20 amperes.
- E. Model Number: Leviton 1122-2R

2.4 RECEPTACLES

- A. General Use:
 - 1. Description: NEMA WD 1; heavy-duty type, 125-volt grounded duplex receptacle.
 - 2. Device Body: Ivory, nylon face.
 - 3. Configuration: NEMA 5-20.
 - 4. Model number: Leviton CR20-I.
- B. Ground Fault:
 - 1. Description: UL 498, 544, 943; 125 volt, ground fault interrupt type duplex receptacle with TEST and RESET.
 - 2. Device Body: Ivory, Thermoplastic.
 - 3. Configuration: NEMA 5-20.
 - 4. Model Number: Leviton 6898-I.

2.5 WALL PLATES

- A. Decorative Cover Plate: Smooth nylon.
 - 1. Standard Devices: Ivory color.
 - 2. Boiler Cut-Off Switches: Red color, engraved: "EMERGENCY."

2.6 INS BOOTH CALL BUTTONS

- A. Acceptable Manufacturers:
 - 1. Allen-Bradley, Bulletin 800MB series
 - 2. Substitutions: Or approved equal.

- B. Description: NEMA Type 120 volt rated, 22.6mm square illuminated pushbutton station. Provide contact block and faceplate.
 - 1. Lamp source: LED
 - 2. Button Head Style: Flush head
 - 3. Nameplate legend:
 - a. Agriculture call button: Agriculture
 - b. Customs call button: Customs
 - c. INS call button: INS
 - 4. Head Lens Color:
 - a. Agriculture call button: Green
 - b. Customs call button: Amber
 - c. INS call button: Red

- C. Operation Sequence: Provide contact block/relay control to allow for maintained contact operation so that button is illuminated and contact is closed upon initial push and button light extinguishes and contact opens upon second push.

- D. Installation: Provide recessed box for wall mounting.

2.7 INS BOOTH EMERGENCY CALL BUTTON

- A. Acceptable Manufacturers:
 - 1. Allen-Bradley, Bulletin 800MR series
 - 2. Substitutions: Or approved equal.

- B. Description: NEMA Type 120 volt rated, 22.6mm round, non-illuminated pushbutton station. Provide contact block and faceplate.
 - 1. Button Head Style: Flush with extended collar
 - 2. Color of Button: Black

- C. Operation Sequence: Provide contact block/relay control to allow for maintained contact operation so that contact is closed upon initial push and button contact opens upon second push.

- D. Installation: Provide surface box to be mounted under countertop.

EXECUTION

3.1 EXAMINATION

- A. Verify outlet boxes are installed at proper height.

- B. Verify wall openings are neatly cut and will be completely covered by wall plates.
- C. Verify branch circuit wiring installation is completed, tested, and ready for connection to wiring devices.

3.2 PREPARATION

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

3.3 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 branch circuit equipment grounding conductor.
- F. Install decorative plates on switch, receptacle, and blank outlets in finished areas.
- G. Install galvanized steel plates on outlet boxes and junction boxes in unfinished areas, above accessible ceilings, and on surface mounted outlets.

3.4 INTERFACE WITH OTHER PRODUCTS

- A. Install wall switch 48 inches above finished floor.
- B. Install convenience receptacle 18 inches above floor, or as noted on the Drawings.

3.5 FIELD QUALITY CONTROL

- A. Inspect each wiring device for defects.
- B. Operate each wall switch with circuit energized and verify proper operation.
- C. Verify that each receptacle device is energized.
- D. Test each receptacle device for proper polarity.
- E. Test each GFCI receptacle device for proper operation.

3.6 ADJUSTING

- A. Adjust devices and wall plates to be flush and level.

END OF SECTION