

SECTION 26 2726 - WIRING DEVICES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.
- B. University IT/IS Standards for Telecommunications devices.

1.2 SUMMARY

- A. Section Includes:
 - 1. Receptacles, general purpose.
 - 2. Receptacles with integral GFCI.
 - 3. USB Charger receptacles.
 - 4. AFCI receptacles.
 - 5. Twist-locking receptacles.
 - 6. Isolated-ground receptacles.
 - 7. Tamper-resistant receptacles.
 - 8. Weather-resistant receptacles.
 - 9. Pendant cord-connector devices.
 - 10. Cord and plug sets.
 - 11. Wall box dimmers.
 - 12. Wall box dimmer/sensors.
 - 13. Wall box occupancy/vacancy sensors.
 - 14. Toggle Switches.
 - 15. Floor service outlets.
 - 16. Associated device plates.

1.3 DEFINITIONS

- A. AFCI: Arc Flash Circuit Interrupter.
- B. EMI: Electromagnetic interference.
- C. GFCI: Ground-Fault Circuit Interrupter.
- D. Pigtail: Short lead used to connect a device to a branch-circuit conductor.
- E. RFI: Radio-frequency interference.

1.4 ADMINISTRATIVE REQUIREMENTS

- A. Coordination:

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1. Receptacles for University-Furnished Equipment: Match plug configurations.
2. Cord and Plug 2(t)-13h12.3(en)-1.1(i)-8.1()-1.1(M-12.1(PMt)-1.1(c)-8(h (t)-13h eu)-12.32i)3.1(pm)-24.4(er

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- d. Dual USB charging ports 3.0 A (min.), 5 VDC dual USB charging ports.
 - e. Compatible with USB 2.0 devices.
 - f. Tamper resistant.
- D. Tamper-Resistant, Duplex, Convenience Receptacles, 125 V, 20 A: Comply with NEMA WD 1, ~~NEMA~~WD 6 Configuration 5-20R, ANSI C-73, and UL 498.

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- b. Pass & Seymour; AF20TR.
- c. Leviton; AFTR2

2.5 **(future use)**

A.

2.6 RECEPTACLES FOR SPECIAL EQUIPMENT

- A. Specialized Receptacles: Comply with NEMA WD 1, NEMA WD 6 for standard configurations and UL 498.
- B. Products: Subject to compliance with requirements, provide one of the following:
 - 1. Hubbell.
 - 2. Pass & Seymour.
 - 3. Leviton.

2.7 HAZARDOUS (CLASSIFIED) LOCATION RECEPTACLES

- A. Wiring Devices for Hazardous (Classified) Locations: Comply with NEMA FB 11 and UL 1010.
 - 1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 - a. Crouse-Hinds.
 - b. EGS/Appleton Electric.
 - c. Killark; Division of Hubbell Inc.

2.8 TWIST-LOCKING RECEPTACLES

- A. Single Convenience Receptacles, 125 V, 20 A: Comply with NEMA WD 1, NEMA WD

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- b. Equipment grounding contacts shall be connected only to the green grounding screw terminal of the device and with inherent electrical isolation from mounting strap. Isolation shall be integral to receptacle construction and not dependent on removable parts.

2.9 PENDANT CORD-CONNECTOR DEVICES

A. Description:

1. Matching, locking-type plug and receptacle body connector.
2. NEMA WD 6 Configurations L5-20P and L5-20R, heavy-duty grade, and FS W-C-596.
3. Body: Nylon, with screw-open, cable-gripping jaws and provision for attaching external cable grip.
4. External Cable Grip: Woven wire-mesh type made of high-strength, galvanized-steel wire strand, matched to cable diameter, and with attachment provision designed for

1. Lutron Electronics.

B. LED Dimmer Switches: Modular; 0 – 10 VDC Dimmer/Sensor compatible with 3rd party LED drivers; dimmer-driver combination capable of consistent dimming with low end not greater than 1% of full brightness, with integral, quiet, continuously adjustable slide-to-off with single-pole or three-way switching. Comply with UL 1472

1. Operating Environment: Operating temperature 32-104 degrees F with a relative humidity (non-condensing) of 0% to 95%.

C. Occupancy Switches:

1. Description: Line Voltage type, 120/230/277 VAC, adjustable time delay 1, 5, 15, or 30 minutes, 180-degree field of view, UL Listed.

2. Sensor: Passive infrared (PIR) with ambient light detection learning mode with a minimum PIR coverage area of 30 ft. x 30 ft.

3. Operating Environment: Operating temperature 32-104 degrees F with a relative humidity (non-condensing) of 0% to 95%.

D. Finish: Color to be coordinated with the Architect from Manufacturer's standard colors.

E. Warranty: 5 Years.

2.13 WALL BOX OCCUPANCY/VACANCY SENS32J 0 Tc 0 9a35 0 9a35 0 9a35 0 CUY

1. Products: Subject to compliance with requirements, provide one of the following:

a. Single Pole:

- 1) Hubbell; HBL1221.
- 2) Pass & Seymour; CSB20AC1.
- 3) Leviton; 1221

b. Two Pole:

- 1) Hubbell; HBL1222.
- 2) Pass & Seymour; CSB20AC2.
- 3) Leviton; 1222

c. Three Way:

- 1) Hubbell; HBL1223.
- 2) Pass & Seymour; CSB20AC3.
- 3) Leviton; 1223

d. Four Way:

- 1) Hubbell; HBL1224.
- 2) Pass & Seymour; CSB20AC4.
- 3) Leviton; 1224

C. Pilot-Light Switches, 20 A:

1. Products: Subject to compliance with requirements, provide one of the following:

- a. Hubbell; HBL1201PL for 120 and 277 V.
- b. Pass & Seymour; PS20AC1RPL for 120 V, PS20AC1RPL7 for 277 V.
- c. Leviton; 1201-PL

2. Description: Single pole, with neon-lighted handle, illuminated when switch is "off."

D. Key-Operated Switches, 120/277 V, 20 A:

1. Products: Subject to compliance with requirements, provide one of the following :

- a. Hubbell; HBL1221L.
- b. Pass & Seymour; PS20AC1-L.
- c. Leviton; 1221-2L

2. Description: Single pole, with factory-supplied key in lieu of switch handle. Provide six (6) spare keys.

2.16 WALL PLATES

A. Single and combination types shall match corresponding wiring devices.

1. Plate-Securing Screws: Metal with head color to match plate finish.
2. Material for Finished Spaces:

- a. Shall be same manufacturer as device
 - b. Offices and administrative areas: Painted steel, color selected by Architect from specified selections.
 - c. Laboratories, kitchens, food preparation: 0.035-inch- (1-mm-) thick, satin-finished, Type 302 stainless steel.
- 3. Material for Unfinished Spaces: Galvanized steel.
 - 4. Material for Damp Locations: Cast aluminum with spring-loaded lift cover, and listed and labeled for use in wet and damp locations.
 - 5. Receptacles dedicated for use with computers: Use engraved white plastic, self adhesive label with 0.188" high black-filled lettering on face of plate to read "COMPUTER ONLY".
- B. Wet-Location, Weatherproof-in-use Cover Plates: NEMA 250, complying with Type 3R, weather-resistant, die-cast aluminum with lockable cover.

2.17 FLOOR SERVICE FITTINGS

- A. Coordinate fittings with floor boxes as described in Section 26 0533.
- B. Type: Modular, flush-type, dual-service units suitable for wiring method used.
- C. Compartments: Barrier separates power from voice and data communication cabling.
- D. Service Plate: Rectangular die-cast aluminum with satin finish.
- E. Power Receptacle: NEMA WD 6 Configuration 5-20R, unless otherwise indicated.
- F. Voice and Data Communication Outlet: Comply with University IT/IS Department Standards.

2.18 FINISHES

- A. Device Color:
 - 1. Wiring Devices Connected to Normal Power System: Ivory, White, Blue, Gray, and Brown as selected by Architect or required by NFPA 70 or device listing.
 - 2. Dedicated outlets: Grey.
 - 3. Wiring Devices Connected to Essential Power System: Red.
 - 4. Isolated-Ground Receptacles: Ivory with Orange triangle.
 - 5. UPS: Blue.
 - 6. Switched devices: Green.
 - 7. Temporary devices: Black.
- B. Wall Plate Color: Match device color.

PART 3 - EXECUTION

3.1 INSTALLATION

- A. Comply with NECA 1, including mounting heights listed in that standard, unless otherwise indicated.

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