

SECTION 26 27 26 – WIRING DEVICES

PART 1 - GENERAL

1.1 THE REQUIREMENT

- A. The CONTRACTOR shall provide all wiring devices, plates, and nameplates in accordance with the Contract Documents.
- B. The requirements of Section 26 05 00 – Electrical Work, General apply to this Section.
- C. Single Manufacturer: Like products shall be the end product of one manufacturer in order to achieve standardization of appearance, operation, maintenance, spare parts, and manufacturer's services.

1.2 CONTRACTOR SUBMITTALS

- A. Furnish submittals in accordance with MASS Section 10.05 Article 5.6.
- B. Shop Drawings
 - 1. Complete catalog cuts of switches, receptacles, enclosures, covers, and appurtenances, marked to clearly identify proposed materials.
 - 2. Documentation showing that proposed materials comply with the requirements of NEC and UL.
 - 3. Documentation of the manufacturer's qualifications.

PART 2 - PRODUCTS

2.1 GENERAL

- A. All devices shall carry the UL label.
- B. General purpose duplex receptacles and toggle switch handles shall be brown everywhere except in finished rooms where they shall be ivory. Special purpose receptacles shall have a body color as indicated. Receptacles and switches shall conform to Federal Specifications W-C-596E and W-S-896E, respectively.

2.2 LIGHTING SWITCHES

- A. Local branch switches shall be toggle type, rated at 20 amps, 120-277 VAC, and shall be **General Electric Cat. No. GE-5951-1** for single pole, **GE-5953-1** for 3-way and **GE-5954-1** for 4-way, or similar types as manufactured by **Hubbell**, or equal.

2.3 GENERAL PURPOSE RECEPTACLES

- A. Duplex receptacles rated 120-volt, 20 amps shall be polarized 3-wire type for use with 3-wire cord with grounded lead and 1 designated stud shall be permanently grounded to the conduit system (NEMA 5-20R). Duplex 120-volt receptacles shall be **G.E. 5362, Hubbell 5362**, or equal. Single receptacles shall be **G.E. 4102, Hubbell 4102**, or equal.
- B. Ground-fault circuit interrupting receptacles (GFCI's) shall be installed at the locations indicated. GFCI's shall be rated 125-volt, 20 amps and shall be **Hubbell GF-5362**, or equal.
- C. Receptacles for hazardous locations shall be single gang receptacles with spring door. Receptacles shall have a factory sealed chamber. The receptacles shall have a delayed action feature requiring the plug to be inserted in the receptacle and rotated before the electrical connection is made. The receptacle shall not work with non-hazardous rated plugs. One plug shall be furnished with each receptacle. The receptacles shall be rated for 20 amps at 125 VAC. Hazardous location receptacles shall be **Appleton EFSB, Crouse-Hinds ENR**, or equal.
- D. Where indicated, hazardous location receptacles shall be provided with ground fault protection. Ground fault protection shall be **Appleton EFSR-GFI, Crouse-Hinds GFS 1**, or equal.

2.4 LOCKING RECEPTACLES

- A. Receptacles for all existing chemical feed pumps and all new sump pumps shall be locking receptacles. Provide matching plugs.
 - 1. Single-phase locking receptacles shall be **Pass & Seymour Turnlok L630-R receptacle** and **CRL630-P plug**, or equal.
 - 2. Three-phase locking receptacles shall be 250-volt, 20-amp, 4-wire, **Pass & Seymour Turnlok L1520-R receptacle** and **L1520-P plug**, or equal.

2.5 GENERATOR PLUG RECEPTACLES

- A. Generator Plug Receptacles: Generator plugs and receptacles shall be designed to supply power from portable equipment such as outdoor generator units. The devices shall be UL-listed for use outdoors and suitable for rough usage. The devices shall have the following features:
 - 1. Make first and break last neutral pin.
 - 2. Shell ground.
 - 3. Reverse service where the plug is energized and the receptacle is dead.
 - 4. Cable grip assembly.
 - 5. Arc snuffing chamber.
 - 6. Compressed neoprene bushing to prevent entrance of water.
 - 7. Suitable for use in cold weather down to -40F.
 - 8. Positive polarization.

9. Aluminum body and brass contacts.
10. Compliance with UL Standard 498, 1682, or 1686.
11. Rated for 600V AC.
12. 120V/240V single-phase units shall be 2-pole with a neutral and shell ground (3 pin).
13. 480V units shall be 3-pole with a neutral and shell round (5-pin).
14. Weather-tight spring door on receptacle.
15. Ring-threaded plug.
16. Suitable box as shown on the Contract Drawings.

B. Generator plug receptacle units shall be **Appleton Powertite**, or equal.

2.6 ENCLOSURES AND COVERS

- A. Surface mounted switches and receptacles shall be in FS or FD type cast device boxes.
- B. In finished areas, switch and receptacle boxes shall be provided with SUPER STAINLESS STEEL COVERS as manufactured by **Harvey Hubbell, Arrow Hart, Bryant**, or equal.
- C. In areas where cast boxes are used, switch and receptacle covers shall be **Crouse-Hinds Catalogue No. DS185 and WLRD-1, or Adalet No. WSL and WRD**, or equal.
- D. Receptacles in exterior locations shall be with s-hinged cover/enclosure marked "Suitable for Wet Locations when in use" and "UL Listed." There shall be a gasket between the enclosure and the mounting surface and between the hinged cover and mounting plate/base. The cover shall be **TayMac Specification Grade**, or equal.

2.7 NAMEPLATES

- A. Provide nameplates or equivalent markings on switch enclosures to indicate ON and OFF positions of each switch. ON and OFF for 3-way or 4-way switches is not acceptable. Provide receptacles for special purposes with nameplates indicating their use. Conform to requirements of Section 26 05 00 – Electrical Work, General.

PART 3 - EXECUTION

3.1 CONNECTION

- A. Securely fasten nameplates using screws, bolts, or rivets centered under or on the device, unless otherwise indicated.

3.2 GROUNDING

- A. Ground all devices, including switches and receptacles, in accordance with NEC, ART 250, and Section 26 05 26 – Grounding.
- B. Ground switches and associated metal plates through switch mounting yoke, outlet box, and raceway system.
- C. Ground flush receptacles and their metal plates through positive ground connections to outlet box and grounding system. Maintain ground to each receptacle by spring-loaded grounding contact to mounting screw or by grounding jumper, each making positive connection to outlet box and grounding system at all times.

3.3 FIELD TESTING

- A. Provide checkout, field, and functional testing of wiring devices in accordance with Section 26 05 00 – Electrical Work, General.
- B. Test each receptacle for polarity and ground integrity with a standard receptacle tester.

END OF SECTION 26 27 26