PART 1 GENERAL

1.1 RELATED DOCUMENTS

- A. The requirements of the General Conditions, Supplementary Conditions and the following specification sections apply to all Work herein:
 - 1. Section 26 00 10 General Requirements
 - 2. Section 26 00 20 Scope of Work
 - 3. Section 26 05 19 Electrical Conductors 600 Volts
 - 4. Section 26 05 26 Grounding and Bonding
 - 5. Section 26 05 33 Raceways and Boxes
 - 6. Section 26 08 13 Testing

1.2 SUMMARY

A. Furnish and install all wiring devices as specified herein, as indicated on the Drawings and as required for complete and operating systems.

1.3 **REFERENCE STANDARDS**

- A. Each wiring device and all components shall be designed, manufactured and tested in accordance with the latest applicable industry standards including the following:
 - 1. NEMA WD1 General Purpose Wiring Devices
 - 2. NEMA WD5 Specific Purpose Wiring Devices
 - 3. NFPA 70 National Electrical Code (NEC)
- B. All equipment and material to be furnished and installed on this Project shall be UL or ETL listed, in accordance with the requirements of the authorities having jurisdiction, and suitable for its intended use on this Project.

1.4 SUBMITTALS

- A. The following submittal data shall be furnished according to the General Conditions and Section 26 00 10 and shall include, but not be limited to:
 - 1. Wiring Devices complete with physical dimensions, materials, connector details, voltage and current ratings, installation details, etc.
 - 2. Provide Samples of each general use receptacle, switch, wall plate and coverplate intended for use on this Project.
 - 3. Multioutlet Strips complete with physical dimensions, materials, connection details, voltage and current ratings, installation details, fittings, etc.
 - 4. Provide a 3'-0" Sample of a typical multioutlet strip including outlets, wiring, and fittings.
- B. All items or equipment listed above with asterisks (*) shall be certified by the manufacturer using Manufacturer Certification "MCA" as set forth in Section 26 00 10. See Section 26 00 10 for certification requirements.

1.5 WARRANTY

A. Comply with the requirements of the General Conditions and Section 26 00 10.

PART 2 PRODUCTS

2.1 ACCEPTABLE MANUFACTURERS

- A. If it complies with these Specifications, wiring devices manufactured by one of the following manufacturers will be acceptable:
 - 1. Line voltage switches, plug receptacles, wall plates and coverplates:
 - a. Arrow-Hart (Crouse-Hinds)

- b. Hubbell
- c. Leviton
- d. Pass & Seymour/Legrand
- 2. Outdoor receptacle coverplates:
 - a. Hubbell
 - b. Raco
 - c. Taymac
 - d. Intermatic
- 3. Wall dimmers:
 - a. Leviton
 - b. Lightolier
 - c. Lutron
 - d. Pass & Seymour/Legrand
 - e. Prescolite
- 4. Occupancy Sensor Wall Switches:
 - a. Hubbell
 - b. Leviton
 - c. Sensor Switch
 - d. Watt Stopper
- 5. Multioutlet strips:
 - a. Panduit
 - b. Walker
 - c. Wiremold Series G-3000

2.2 GENERAL

- A. The color of all wiring devices, wall plates and coverplates constructed of plastic shall be as designated by the Architect.
- B. The finish of all metallic wall plates and coverplates shall be as designated by the Architect.

2.3 LINE VOLTAGE SWITCHES

- A. Indoor line voltage switches, unless otherwise specified on the Drawings, shall be flush mounted, "Specification Grade" quiet type rocker handle switches with back and side wire capability (no "push wire" devices allowed), similar and approved equal to the following Pass & Seymour/Legrand catalog numbers:
 - 1. Load of 20 amps or less, single pole, 120/277 Volts: Pass & Seymour/Legrand 2621 Decorator Series.
 - 2. Load of 20 amps or less, three (3) way, 120/277 Volts: Pass & Seymour/Legrand 2623 Decorator Series.
- B. Where ganged with wall dimmers, line voltage switches shall be linear slide switch type, one (1) pole, 120/277 Volts Lutron Model No. NT-1PS or three (3) way, 120/277 Volts Lutron Model No. NT-3PS, as indicated on the Drawings.
- C. Line voltage, surface mounted "Industrial Extra Heavy Duty Specification Grade" quiet type toggle switches with back and side wire capability (no "push wire" devices allowed), unless otherwise specified on the Drawings, shall be similar and approved equal to the following Pass & Seymour/Legrand catalog numbers:
 - 1. Load of 20 amps or less, single pole, 120/277 Volts (where located in damp locations, exposed to the weather or surface mounted): Pass & Seymour/Legrand PS20AC1.
 - 2. Load of 20 amps or less, three (3) way, 120/277 Volts (where located in damp locations, exposed to the weather or surface mounted): Pass & Seymour/Legrand PS20AC3.

2.4 PLUG RECEPTACLES

- A. Indoor plug receptacles, unless otherwise specified on the Drawings, shall be flush mounted, "Heavy Duty Specification Grade" with back and side wire capability (no "push wire" devices allowed), and similar and approved equal to the following Pass & Seymour/Legrand catalog numbers:
 - 1. Load of 15 amps or less, 125 Volts, duplex: Pass & Seymour/Legrand 26252.
 - 2. 20 amps, 125 Volts, duplex (individual circuit): Pass & Seymour/Legrand 26352.
 - 3. Load of 15 amps or less, 125 Volts, single: Pass & Seymour/Legrand 26261.

- 4. 20 amps, 125 Volts, single (individual circuit): Pass & Seymour/Legrand 26361.
- 5. 20 amps, 125 Volts, duplex with ground fault interrupter. Pass & Seymour/Legrand 2095.
- 6. Special outlet numbers shall be as noted on the Drawings.
- B. Indoor surface mounted or outdoor plug receptacles, unless otherwise specified on the Drawings, shall be "Hard Use Specification Grade" with back and side wired capability (no "push wire" devices allowed), similar and approved equal to the following Pass & Seymour/Legrand catalog numbers:
 - 1. Load of 15 amps or less, 125 Volts, duplex: Pass & Seymour/Legrand 5262
 - 20 amps. 125 Volts. duplex (individual circuit): Pass & Seymour/Legrand 5362
 - Load of 15 amps or less, 125 Volts, single: Pass & Seymour/Legrand 5261
 - Load of 15 amps of less, 125 voits, single. Pass & Seymour/Legrand 5261
 20 amps, 125 Volts, single (individual circuit): Pass & Seymour/Legrand 5361
 - 20 amps, 125 Volts, single (individual circuit). Lass & Seymour/Legrand 3501
 20 amps, 125 Volts, duplex with ground fault interrupter: Pass & Seymour/Legrand 2095.
 - Special outlet number shall be as noted on the Drawings.

2.5 FLUSH COVERPLATES

A. Provide matching nylon coverplates for all indoor flush mounted wiring devices including multiple gang common coverplates where required.

2.6 SURFACE MOUNTED COVERPLATES

A. Coverplates for surface mounted boxes shall be of the galvanized type and shall be designed to fit the boxes to which they are installed.

2.7 EXPOSED, EXTERIOR, AND WET LOCATION COVERPLATES

- A. Coverplates for exposed, exterior, and wet locations shall be of the cast metal type with gaskets and covers and shall be designed to fit the boxes to which they are installed.
- B. Coverplates for outdoor plug receptacles shall be suitable "for use in wet locations" in accordance with NEC 406.9(B)(1). All outdoor plug receptacles shall be listed and shall be identified as "Extra Duty" per ANSI/UL 514D.

2.8 WALL DIMMERS

- A. Wall dimmers shall be similar and approved equal to the following:
 - 1. 600 watt, one pole, 125 Volts incandescent Lutron Model No. NT-600.
 - 2. 1000 watt, one pole, 125 Volts incandescent Lutron Model No. NT-1000.
 - 3. 1500 watt, one pole, 125 Volts incandescent Lutron Model No. NT-1500.
- B. Special dimmer numbers shall be as noted on the Drawings.

2.9 OCCUPANCY SENSOR WALL SWITCHES

- A. Passive-Infrared (PIR) Type: Adjustable time delay up to 30 minutes, 180-degree field of view, with a minimum coverage area of 900 square feet.
- B. Adaptive Technology and Dual Technology (Ultrasonic and PIR) Type: Adjustable time delay up to 30 minutes, 180-degree field of view, with a minimum coverage area of 900 square feet.

2.10 MULTIOUTLET STRIPS

- A. Multioutlet strips shall be furnished and installed where indicated on the Drawings. Each strip assembly shall consist of a two (2) piece surface metal raceway for distribution of power services as shown on the plans.
- B. Each strip assembly shall be complete with all fittings and accessories as required to provide a safe and properly functioning installation and as specified herein.

- C. The two (2) piece surface metal raceway shall consist of a base section with 1/2" and 3/4" knockouts throughout its length (maximum 12" on center) and a cover section. The overall cross section dimension of the raceway shall be 1-1/2" x 2-3/4" (nominal).
- D. The raceway shall be manufactured of cold rolled steel and shall be painted in accordance with the Architect/Engineer's finish selection. Coordinate color with Architect/Engineer. Provide a 2'-0" Sample including all devices and fittings.
- E. Provide all necessary fittings including tees, couplings, wire clips, blank end fittings and transition connectors to allow connection of conduit service.
- F. Provide standard NEMA 5-15R duplex receptacles, 12" on center, throughout the length of the raceway, with appropriate device brackets and cover plates.
- G. Circuiting indicated on the Drawings shall be routed throughout the length of the raceway, with each receptacle connected to alternating circuits.
- H. The surface metal raceway shall meet all requirements of the National Electrical Code and be UL listed to UL-5.

PART 3 EXECUTION

3.1 INSTALLATION

- A. Where more than one flush switch, receptacle and/or dimmer occurs in the same location, they shall be set in gangs under one common wall plate. Dimmer cooling fins shall not be removed.
- B. Switches and/or dimmers shall be installed in boxes in a uniform position so that the same direction will open and close the circuits throughout the Project.
- C. All wiring devices shall be installed plumb and aligned in the same plane of the wall, floor or ceiling in which they are mounted.
- D. See Section 26 05 33 titled "Raceways and Boxes" for mounting height requirements.
- E. Provide barriers between adjacent switches and or dimmers where the voltage between conductors exceeds 300 Volts.
- F. Furnish and install line voltage switches where indicated on the Drawings for the control of certain circuits.
- G. Furnish and install plug receptacles where indicated on the Drawings.
- H. Furnish and install multi-outlet strips where indicated on the Drawings.

3.2 FACTORY TESTING

A. All wiring devices shall be tested in accordance with the latest applicable industry standards.

3.3 FIELD TESTING

A. Refer to Section 26 08 13 for additional testing requirements for wiring devices.

END OF SECTION