# GENERAL

## RELATED DOCUMENTS

### Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 specification sections, apply to work of this Section.

## DESCRIPTION OF WORK

### The extent of wiring device work is indicated by drawings and schedules. Wiring devices are defined as single discrete units of electrical distribution systems which are intended to carry, but not utilize electrical energy.

### **NOTE TO SPECIFIER: REVISE LIST OF WIRING DEVICES ACCORDING TO SPECIFIC PROJECT REQUIREMENTS.**

### Types of electrical wiring devices in this Section include the following:

#### Receptacles

#### Switches

#### Wall Plates

#### Dimmer Controls

#### Floor Outlets

## QUALITY ASSURANCE

### Manufacturers: Firms regularly engaged in manufacture of wiring devices of types, sizes, and ratings required, whose products have been in satisfactory use in similar service for not less then 3 years.

### Installer: Qualified with at least 2 years of successful installation experience on projects with electrical installation work similar to that required for this project.

## REFERENCES

### NEC Compliance: Comply with NEC as applicable to construction and installation of electrical wiring devices.

### UL Compliance and Labeling: Provide electrical wiring devices which have been UL listed and labeled.

### NEMA Compliance: Comply with NEMA standards for general and specific purpose wiring devices.

### NECA Compliance: Comply with NECA's "Standard of Installation."

* 1. SUBMITTALS

### Product Data: Submit manufacturer's data on electrical wiring devices.

# PRODUCTS

**NOTE TO SPECIFIER: REVISE LIST OF MANUFACTURERS AS REQUIRED FOR THE PROJECT.**

## Manufacturers: Subject to compliance with requirements, provide products of one of the following:

### Pass and Seymour (P&S) Corporation

### Cooper

### Hubbell, Inc.

### Leviton, Inc.

### Crouse Hinds

### Wiremold

### Lutron

## LIGHT SWITCHES

### General: Where shown on the drawings, furnish and install light switches indicated by the appropriate symbols. Unless noted otherwise, all light switches shall be rated for “extra heavy-duty use” or “industrial use” as applicable by manufacturer descriptions. ~~o~~

### Low voltage, digital light switches are not specified in this document. It is expected such devices are provided with digital lighting control package included with the project, where applicable. Digital lighting controls shall be manufactured by the same company that makes the digital lighting control system in use or being proposed for the project.

### Manual Switches: Catalog numbers shown below are based on P & S industrial, heavy-duty grade devices. Equal products will be accepted. Branch circuit switches shall be flush tumbler (rocker) type as follows:

#### Single Pole 20AC1 Series

#### Two Pole 20AC2 Series

#### Three-Way 20AC3 Series

#### Four-Way 20AC4 Series

#### Single Pole SW With Pilot 20-AC1-RPL Series

#### Switches for normal systems shall be gray, unless otherwise required by Architect.

#### Switches for emergency systems shall be as shown above, but red in color.

### Motion Sensing Switches: Catalog numbers shown below are based on Lutron devices. Equal products will be accepted. Provide different switch technologies as follows:

#### Wall Mounted Line Voltage Dual Technology Occupancy Sensing Switches: Lutron MS-A102 – 120/277 – Ivory. Features ‘vacancy’ and ‘occupancy’ operation modes, tamper resistant PIR lens, 900 sq. ft. (major motion) and 400 sq ft. (minor motion) coverage zones, nominal. Minimum load capacity of 6 amps of lighting load, 120-277V, no neutral wire required, with adjustable (5-30 min) timeout. Set for 15 min. timeout & vacancy mode, unless otherwise noted. Units using power pack are discouraged but where required mount power pack above accessible ceiling and provide all necessary wiring between switch and power pack.

#### Ceiling Mounted Line Voltage Dual Technology Occupancy Sensing Switches: Lutron LOS-CDT Series – 120/277 - Ivory. From 500 sq. ft. (180 deg field of view) to 2000 sq. ft. (360 deg field of view) coverage zones. Features threshold sensitivity adjustment, LED motion indicator, airflow compensation, and timer adjustments. Mounts available for suspended ceilings, drywall ceilings, and suspended (no ceiling) applications. Mount power pack above accessible ceiling. Provide all necessary wiring between power pack and occupancy sensor.

### Dimmer Switches: Provide dimmer switches according to the following (all catalog numbers are Lutron Nova T series, unless otherwise noted). At minimum, all dimmer switches shall be rated to accommodate the load shown to be switched on the Drawings. All dimmers shall be LED rated.

Incandescent Dimmers Catalog No.

120A Volt, 600 Watt, Single Pole NT-600

120 Volt, 1000 Watt, Single Pole NT-1000

120 Volt, 1500 Watt, Single Pole NT-1500

120 Volt, 2000 Watt, Single Pole NT-2000

Incandescent Low Voltage

Dimmers (for transformer

supplied low voltage lamps)

120 Volt, 600 VA (500W), Single Pole NTLV-600

120 Volt, 1000 VA (800W), Single Pole NTLV-1000

120 Volt, 1500 VA (1200W), Single Pole NTLV-1500

## RECEPTACLES

**NOTE TO SPECIFIER: RECEPTACLES ARE FIGURE 8 TYPE-CHANGE COLOR AS DESIRED. FOR HARD USE SPECIFICATION GRADE USE 26352 FOR RECTANGULAR TYPE AND 5352 FOR FIGURE 8 TYPE.**

### All receptacles shall be side and back wired, self-grounding of the type indicated on the drawings, or as follows. ~~S~~ Unless noted otherwise, all receptacles shall be UL listed ‘Federal’ grade (UL 498) and rated for “extra heavy-duty use” or “industrial use” as applicable by manufacturer descriptions. Catalog numbers shown below are based on Leviton industrial, heavy-duty grade devices. Equal products will be accepted. Receptacles shall be gray unless project specifications differ:

* + - 1. Duplex Convenience Receptacles 5362 Series

20A-125V (Grounding Type)

* + - 1. Duplex GFI Receptacle 5362 Series with indicator light

20A-125V

* + - 1. Weatherproof Duplex 5362 Series with indicator light and

GFI Receptacle 20A-125 Volt weatherproof wall plate

* + - 1. Hospital Grade Receptacle 5362 Series
      2. Hospital Grade GFI Receptacle 5362 Series 20A-125 Volt
      3. Emergency Duplex Receptacle 5362 Series

20 Amp, 125 Volt

* + - 1. Isolated Ground Receptacles 5362 Series with Orange Cover Plate

20A-125 Volt, Ground Wire shall be

routed back to main switchboard ground

or separately derived system ground in

accordance with NEC requirements**NOTE TO SPECIFIER: REVISE THE FOLLOWING PARAGRAPH TO ASSURE THAT ALL OF THE AREAS THAT NEED TO HAVE HOSPITAL GRADE RECEPTACLES ARE LISTED.**

* + - 1. USB Receptacles M58AA Series

20A-125 Volt

* + 1. Receptacles on emergency power shall be red in color. Cover plates for emergency outlets in these areas shall be engraved with panel and circuit no. designation per NEC. Engraving shall be 1/8" high, block style letters, with red filler on front side of cover plates.

## PLATES

**OR**

### Furnish and install wall plates for all wiring devices. Plates shall be Pass and Seymour Type 302 stainless steel. Oversize plates are not acceptable. Weatherproof switch plates shall be Crouse Hinds DS185 type or equal. Where switches and or receptacles are shown adjacent to each other, provide common plate for each group of devices.

## MULTI-OUTLET SURFACE ASSEMBLIES

**NOTE TO SPECIFIER: REVISE OR DELETE PARAGRAPH 2.5.1 AS REQUIRED. DELETE THIS PARGRAPHS IF MULTI-OUTLET SURFACE ASSEMBLIES OR POWER POLES ARE SPECIFIED ON THE DRAWINGS.**

### Provide two piece surface metal raceway assemblies manufactured by the Wiremold Company or Walker Parkersburg Products, complete including fittings, devices, end closures, conduit entrance fittings, elbows, and boxes. Except where specified otherwise on the drawings, provide Wiremold G-4000 Series or equal base cover and divider and provide accessory devices as noted on the drawings.

## FLOOR OUTLETS

**NOTE TO SPECIFIER: REVISE OR DELETE PARAGRAPHS 2.7.1 & 2.7.2 AS REQUIRED. DELETE THESE PARAGRAPHS IF THESE DEVICES ARE SPECIFIED ON THE DRAWINGS.**

### Flush Mounted Floor Boxes and Floor Outlets: Provide Steel City or equal No. 664 box, No. 664-CST cover, one 20A, 125V duplex receptacle, one 664RP receptacle faceplate, and one 664BP blank faceplate for each flush mounted floor convenience outlet. When carpet is indicated on the finish schedule, supply each floor box or outlet with an appropriate carpet flange.

### Poke-Thru Service Fittings: Provide Steel City poke-thru service fittings or approved equal complete with a FPT-400 series or equal fire rated insert suitable for the distribution of power, communications, and data wiring. Provide FPT-400 series or equal service fitting heads with faceplate types as noted on the drawings, or as required to meet specified project needs.

# EXECUTION

## INSTALLATION

### Install wiring devices as indicated in compliance with manufacturer's written instructions, applicable requirements of the NEC and NECA's "Standard of Installation," and in accordance with recognized industry practices to fulfill project requirements.

### Coordinate with other work including painting, electrical boxes and wiring work, as necessary to interface installation of wiring devices and other work.

### Testing: Test wiring devices for electrical continuity and proper polarity of connections. Test wiring devices to demonstrate compliance with requirements.

### All devices shall be located as shown on the drawings, except that where practicable, outlets shall be located in center of panels or trim or otherwise symmetrically located to conform with existing structural layout. Outlets incorrectly installed shall be corrected. Damaged items or damaged finishes shall be repaired or replaced at no expense to the Owner.

### Devices shall be set plumb or horizontal and shall extend to the finished surface of the walls, ceiling or floor, as the case may be, without projecting beyond the same.

### Devices shown on wood trim, cases or other fixtures shall be installed symmetrically; and, where necessary, shall be set with the long dimensions of the plate horizontal, or ganged in tandem.

### Where dimmer switches are shown adjacent to standard switches, both shall be installed in separate back boxes with adequate space between so that neither cover plate requires cutting.

### Where devices are shown near wall openings, coordinate location if corner guards are to be installed so that cover plates do not require cutting.

### Where devices are shown mounted adjacent to one another on the drawings, provide multi-gang faceplates to cover all devices.

### Where devices are shown mounted back-to-back in a wall, stagger locations to avoid sound and air migration between the spaces. Do not mount devices directly back-to-back with each other.

### Where devices are provided in ‘clean room’ type spaces, provide inserts within receptacles to minimize air flow through receptacle interior cavity into the space.

END OF SECTION 262726