SECTION 26 2726 WIRING DEVICES

PART 1 GENERAL

1.01 SUBMITTALS

- A. See Section 26 0510 General Electrical Requirements, for submittal procedures.
- B. Product Data: Provide manufacturer's catalog information showing dimensions, colors, and configurations.
- C. Manufacturer's Installation Instructions: Indicate application conditions and limitations of use stipulated by product testing agency. Include instructions for storage, handling, protection, examination, preparation, and installation of product.

PART 2 PRODUCTS

2.01 GENERAL:

A. Different type devices shall match in color. Receptacles, light switches, low voltage switches, wall mounted occupancy sensors, etc. shall be the same color with the same type of trim or cover. Provide submittals data indicating this color prior to purchasing.

2.02 WALL SWITCHES

- A. All Wall Switches: AC only, quiet operating, general-use snap switches with silver alloy contacts, complying with NEMA WD 1 and NEMA WD 6, and listed as complying with UL 20; types as indicated on the drawings.
 - 1. Wiring Provisions: Terminal screws for side wiring and screw actuated binding clamp for back wiring with separate ground terminal screw.

2.03 RECEPTACLES

- A. All Receptacles: Self-grounding, complying with NEMA WD 1 and NEMA WD 6, and listed as complying with UL 498; types as indicated on the drawings.
 - 1. Wiring Provisions: Terminal screws for side wiring or screw actuated binding clamp for back wiring with separate ground terminal screw.
- B. Convenience Receptacles:
 - 1. Tamper Resistant Convenience Receptacles: Industrial specification grade, 20A, 125V, NEMA 5-20R, listed and labeled as tamper resistant type; single or duplex as indicated on the drawings.
- C. GFCI Receptacles:
 - 1. GFCI Receptacles General Requirements: Self-testing, with feed-through protection and light to indicate ground fault tripped condition and loss of protection; listed as complying with UL 943, class A.
 - 2. Tamper Resistant GFCI Receptacles: Industrial specification grade, duplex, 20A, 125V, NEMA 5-20R, rectangular decorator style, listed and labeled as tamper resistant type.

2.04 WALL PLATES

- A. General:
 - 1. Size: Plates shall be jumbo size, except as noted on plans or specified herein.
 - 2. Finish: Satin Stainless Steel, except as noted on plans or specified herein. Covers for data outlets shall be stainless as well. All wall mounted switches, receptacles, and data shall have shall have stainless covers including occupancy sensors, dimming switches, etc. Decora style covers may be required for multi-gang wall boxes, all stainless steel.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Review Architectural elevations prior to rough in. Electrical drawings are primarily a circuiting guide and indicated general locations. Check Architectural sheets for exact box placement.
- B. Verify that wall openings are neatly cut and will be completely covered by wall plates.

- C. Verify that final surface finishes are complete, including painting.
- D. Verify that branch circuit wiring installation is completed, tested, and ready for connection to wiring devices.
- E. Verify that conditions are satisfactory for installation prior to starting work.

3.02 PREPARATION

- A. Provide extension rings to bring outlet boxes flush with finished surface.
- B. Clean dirt, debris, plaster, and other foreign materials from outlet boxes.

3.03 INSTALLATION

- A. Coordinate locations of outlet boxes provided under Section 26 0537 as required for installation of wiring devices provided under this section.
- B. Install wiring devices in accordance with manufacturer's instructions.
- C. Where required, connect wiring devices using pigtails not less than 6 inches long. Do not connect more than one conductor to wiring device terminals.
- D. Connect wiring devices by wrapping conductor clockwise 3/4 turn around screw terminal and tightening to proper torque specified by the manufacturer. Where present, do not use push-in pressure terminals that do not rely on screw-actuated binding.
- E. Unless otherwise indicated, connect wiring device grounding terminal to branch circuit equipment grounding conductor and to outlet box with bonding jumper.
- F. Install wiring devices plumb and level with mounting yoke held rigidly in place.
- G. Install wall switches with OFF position down.
- H. Install vertically mounted receptacles with grounding pole on top and horizontally mounted receptacles with grounding pole on left.
- Install wall plates to fit completely flush to wall with no gaps and rough opening completely covered without strain on wall plate. Repair or reinstall improperly installed outlet boxes or improperly sized rough openings. Do not use oversized wall plates in lieu of meeting this requirement.
- J. Install blank wall plates on junction boxes and on outlet boxes with no wiring devices installed or designated for future use.
- K. Install receptacles with grounding pole on bottom.
- L. Connect wiring device grounding terminal to branch circuit equipment grounding conductor.
- M. Install wall plates on switch, receptacle, and blank outlets.
- N. Install decorative plates on switch, receptacle, and blank outlets in finished areas.
- O. Connect wiring devices by wrapping conductor around screw terminal.
- P. Use jumbo size plates for outlets installed in masonry walls.
- Q. Install plates with all edges in contact with the finished wall.
- R. Install galvanized steel plates on outlet boxes and junction boxes in unfinished areas, above accessible ceilings, and on surface mounted outlets.
- S. Mount all plates vertically unless otherwise noted.
- T. Where two or more devices are shown adjacent, they shall be mounted in ganged boxes and covered with one faceplate.
- U. Install protective rings on active flush cover service fittings.
- V. Where outlets of different levels are shown adjacent, they shall be installed in one vertical line. Outlets shown back to back on a common wall shall be offset a minimum of 10 inches to dampen sound transmission through the wall.
- W. On all walls with 1 hour or greater fire rating, "back to back" outlets shall be installed a minimum of 24 inches apart. Mount with stud between outlets for gypboard constructed partitions.

- X. Where outlets are installed in unfinished block or tile partitions they shall be installed at the points in the tile to permit the face plate to cover the rough opening. The horizontal and vertical locations indicated may be altered to permit above installation. Contractor shall check the Architectural drawings to prevent conflicts when shifting locations.
- Y. Provide GFI receptacles where located within 6' of a water source, and as shown on plans.

3.04 FIELD QUALITY CONTROL

- A. Inspect each wiring device for damage and defects.
- B. Operate each wall switch and wall dimmer with circuit energized to verify proper operation.
- C. Operate each wall switch with circuit energized and verify proper operation.
- D. Verify that each receptacle device is energized.
- E. Test each receptacle device for proper polarity prior to final inspection.
- F. Test each GFCI receptacle for proper tripping operation according to manufacturer's instructions.
- G. Correct wiring deficiencies and replace damaged or defective wiring devices.

3.05 ADJUSTING

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

3.06 CLEANING

A. Clean exposed surfaces to remove dirt, paint, or other foreign material and restore to match original factory finish.

END OF SECTION