

SECTION 26 01 30 - ELECTRICAL BOXES

PART 1 - GENERAL

1.1 WORK INCLUDED

- A. Boxes; including:
 - 1. Outlet boxes.
 - 2. Pull and junction boxes.
 - 3. Cabinets.

1.2 RELATED WORK SPECIFIED ELSEWHERE

- A. Submittals: Section 260000.
- B. Support Material: Section 260190.

PART 2 - PRODUCTS

2.1 MATERIAL AND FABRICATION

- A. Outlet Boxes:
 - 1. Pressed Steel Boxes: Knockout type, hot-dipped or electro-plate galvanized.
 - 2. Cast Iron Boxes: Hot-dipped or electro-plate galvanized with threaded hubs.
 - 3. Cast Iron Conduit Bodies: Hot-dipped or electro-plate galvanized with threaded hubs.
 - 4. Cast copper free aluminum conduit bodies with threaded hubs.
 - 5. Covers for Pressed Steel Boxes: Hot dipped or electro-plate galvanized.
 - 6. Outlet boxes manufactured in accordance with UL 514.
- B. Pull and Junction Boxes:
 - 1. Sheet steel, hot-dipped or electro-plate galvanized, or prime coated and a final coat of manufacturer's standard enamel or lacquer finish. Manufactured in accordance with UL 50.
 - a. Where exposed to weather, provide raintight hubs for conduits entering the boxes, top and sides only.
 - 2. Floor Boxes:
 - a. Single gang, similar to Hubbell #B-2536.
 - b. Covers:
 - 1) Combination, similar to Hubbell #S-2525.
 - 2) Duplex receptacle, similar to Hubbell #S-3925.
 - c. Carpet flange, similar to Hubbell #S-3075 thru #S-3079.
 - d. Hubs: Provide hubs as required to suit the conduit arrangement.

3. Pre-Cast Concrete Pull Boxes: As manufactured by Jensen Pre-Cast or Utility Vault and shown on drawings.
 4. High impact resistant PVC boxes: As manufactured by Carlon, Sedco, or R & G Sloan.
- C. Cabinets: Sheet metal, prime coat and final coat of manufacturer's standard enamel or lacquer finish. Manufactured in accordance with UL 50.
1. Control Cabinet: NEMA 1 enclosure, door with butt hinges and flush handle latches.
 - a. Provide with removable steel back panel.
 2. Terminal Cabinets: NEMA 1 enclosure, door with concealed hinges and spring catch type flush cylinder locks. Key locks alike, provide two keys with each lock.
 3. Provide engraved plastic nameplates with 1/2" minimum height letters indicating designation of control and terminal cabinets as shown on the drawings.
 - a. Secure nameplates with at least two screws or rivets. Cementing and adhesive installation not acceptable.

PART 3 - EXECUTION

3.1 USE

A. Outlet Boxes:

1. Ceiling Outlet Boxes: Not less than 4" octagonal by 2" deep.
2. FDD cast iron or cast aluminum device boxes and conduit bodies with metal covers for exposed conduit installation. Provide gasket for covers in wet areas.
3. Intercom, Microphone and TV Outlet Boxes: Not less than 4-11/16" square x 2-1/8" deep.
4. Provide floor boxes with quantity of gangs as required for power, communication or control as indicated. Use boxes with barriers where required. Provide carpet flanges in carpeted areas.

B. Pull and Junction Boxes:

1. Use sheet steel boxes NEMA Type 1 for indoor and NEMA Type 3R for outdoor installation, except as follows.
2. Use pre-cast concrete boxes for boxes flush in finish grade where requiring a nominal capacity greater than 144 cubic inches, where located in vehicular traffic areas, or where indicated.
3. Use polyvinyl chloride (PVC) boxes flush in finish grade when the nominal internal volume is less than or equal to 144 cubic inches or where indicated.
4. Use cast iron boxes for boxes flush in slab on grade.

3.2 INSTALLATION

- A. Provide 3/8" fixture studs in wall bracket and ceiling boxes.
- B. Provide covers suitable for the fixtures or devices used.
- C. Make outlet box covers flush with finished surfaces.
- D. Close unused open knockouts with knockout seals.

- E. Provide 1" deep plaster rings on recessed outlet boxes installed in areas where concrete will be exposed after construction is complete.
- F. Where boxes are concealed in exposed concrete unit masonry, use square cornered types or boxes fitted with rings of sufficient depth for the box to be recessed completely within cavity of block or tile. Install box to insure that ring fits an opening sawed out of the masonry, so that no mortar is required to fill between ring and construction.
- G. Provide a 6" base of compacted crushed rock under pre-cast concrete pull boxes.
- H. Adjust floor boxes so they are level with top of finished floors.
- I. Provide pull boxes and junction boxes in all branch circuit and feeder runs as indicated. Do not provide pull boxes unless they are indicated or required by the Electrical Code.

3.3 IDENTIFICATION

- A. Junction Boxes: Use permanent black marker, 2" high lettering, and on each cover plate indicate the power source and circuits contained within that junction box.

END OF SECTION 26 01 30