

SECTION 26 05 33**BOXES FOR ELECTRICAL SYSTEMS****PART 1 - GENERAL****1.1 REFERENCE DOCUMENTS**

- A. Comply with Division 1 - General Requirements and related documents.
- B. Comply with all of the Division 26 sections as applicable.
- C. Refer to other Divisions for coordination of work with other portions of work.

1.2 DESCRIPTION

- A. Work Included: Provide outlet boxes for the installation of wiring devices, lighting fixtures, and power and control connections.
- B. Related work specified in other section:
 - 1. 26 00 00 - Electrical
 - 2. 26 27 26 - Wiring Devices
 - 3. 26 51 01 – Interior Lighting
 - 4. 26 05 23 - Control-Voltage Electrical Power Cables

1.3 QUALITY ASSURANCE

- A. The equipment supplied and installed shall meet the requirements of the National Electrical Code and all applicable local codes and ordinances.
- B. All equipment supplied shall be Underwriter's Laboratories Inc. listed and so labeled.

1.4 SUBMITTALS

- A. Samples: Provide samples upon specific request.
- B. Product Data: Submit manufacturer's product data giving complete description for sizes employed, material types, and electrical ratings.

1.5 MANUFACTURERS

- A. Listed with Materials.
 - 1. Appleton Electric Company
 - 2. Raco
 - 3. Steel City
 - 4. Crouse Hinds

5. Hubbell
6. Raceway Components
7. Legrand/Wiremold

PART 2 - PRODUCTS

2.1 MATERIALS

- A. Flush Mounted Outlet Boxes: Standard, stamped galvanized steel with factory conduit knockouts, one piece and welded construction:
 1. Series 4S and 4S0 square boxes with covers.
 2. Series M1, M2, M3 - 250 and Series M1, M2, M3 - 350 masonry boxes with covers.
 3. Series 2G and GC-5075 switch boxes with covers.
 4. Series OCR concrete rings with Series OCP and OCP-3/8 back plates.
 5. Series 40 and 40D octagonal boxes with raised covers.
 6. Series SX expandable bar hangers.
- B. Surface Mounted Outlet Boxes: Cast metal with threaded hubs. Type FS and FD of form suited to the application.
- C. Fire Rated, Flush, Poke-Thru Devices: Legrand Evolution #6AT, #8AT, or #10AT.
- D. Floor Outlet Boxes: Legrand Evolution #EFB6, #EFB8, or #EFB10 cast flush floor boxes, fully adjustable with flush service fitting, and carpet flange (if required).

PART 3 - EXECUTION

3.1 INSPECTION

- A. Examine building structure to which outlet boxes are to be secured for defects which affect the execution and quality of work.
- B. Do not start work until defects are corrected.

3.2 PREPARATION

- A. Carefully measure and lay out exact locations in conference with the Construction Manager.
- B. Owner may change outlet box locations a distance of 5 feet before rough-in without additional cost.

3.3 INSTALLATION

- A. In dry walls for single and two gang outlets provide 4S and 4D boxes; for 3 or more outlets use masonry boxes.

- B. In poured concrete floors, provide cast flush floor boxes complete with service fittings and carpet flanges (if required).
- C. In block and masonry walls provide masonry boxes of depths required for wall thickness.
- D. In poured concrete and plastered walls provide 4S and 4D boxes for single gauge outlets and 2G and 3G-5075 boxes for multiple ganged outlets.
- E. In concrete ceiling provide OCR rings.
- F. In other ceilings provide 40 and 40D boxes. Omit covers if standard canopy and device plates entirely cover the ceiling opening.
- G. In exposed work, exterior of the building, in wet locations, and flush in non-waterproofed walls below grade provide FS and FD boxes.
- H. Submit for approval special boxes for special devices and applications. Size according to device and application in accordance with NEC.
- I. Install outlet boxes finished to within 1/8 inch of finished surfaces.
- J. Install center of box at heights above finished floor:
 - 1. Wall Switches: 45 Inches
 - 2. Convenience Outlets: 18 Inches
 - 3. Telephone/Data Outlets: 18 Inches
 - 4. Wall Telephone Outlets: 45 Inches
 - 5. Boxes Indicated Above Counters: 4 Inches above backsplash and trim, unless otherwise indicated.
- K. Install wall switch outlet boxes on the strike side of doors as finally hung.
- L. Group outlet on circuits with homeruns as indicated on the Drawings.
- M. Do not provide through-the-wall and back-to-back boxes unless specifically noted on the drawings.
- N. Provide standard manufactured plugs in unused openings of boxes.
- O. Provide boxes at the terminal of conduit runs to outlets and devices.
- P. Provide plaster rings and covers where required by the building structure.
- Q. In brick finished walls, locate to work brick in a brick course where possible, and to permit conduits and raceways to enter from the rear without cutting brick, where possible.
- R. Provide 3/8-inch studs and lighting fixture outlet boxes where shop drawings of fixtures require and elsewhere as may be required for fixtures.

- S. Rigidly attach to structure and ceiling supporting members in suspended ceilings to avoid cutting mechanical ceiling members.
- T. Center outlet in paneling and in other Architectural features.
- U. Locate light fixture outlets in uniform relation with ceiling tiles.
- V. Label all junction boxes with circuit information as to its use for special system equipment. Use an indelible marker to mark information on cover.
- W. Floor boxes and Poke-Thru's shall be provided with a minimum of, one (1) 3/4" conduit for power, and (1) 1" conduit for data. Exact quantity of devices, conduits, and conduit dimensions shall be as required by the Owner, Technology, and A/V Consultants. Contractor shall select appropriate floor boxes and Poke-Thru's sized per the requirements of the Owner, Technology, and A/V Consultants, prior to purchase or installation, then furnish each item with all required accessories and conduits accordingly. Finish colors and materials shall be as selected by the Interior Designer and Architect.

3.4 CLEANING

- A. Clean surfaces to be painted.

END OF SECTION