SECTION 16130

BOXES

PART 1  GENERAL

1.01  SUMMARY

A.  Section Includes:

1.  Wall and ceiling outlet boxes.

2.  Floor boxes.

3.  Pull and junction boxes.

B.  Related Sections:

1.  Section 16110 - Raceways

2.  Section 16510 - Lighting fixtures

1.02  REFERENCES

A.  Where appropriate, refer to current ANSI and NEMA standards.


PART 2  PRODUCTS

2.01  OUTLET BOXES

A.  Sheet Metal Outlet Boxes:

1.  Galvanized steel, 4” square minimum with a 2” box depth minimum and with plaster ring.

B.  Cast Boxes:

1.  Cast ferroalloy, deep type with gasketed cover, threaded hubs.

2.02  FLOOR BOXES

A.  Floor Boxes For Cast-In-Place Concrete Floors:

1.  Fully adjustable, cast iron or formed galvanized steel.

2.  Box specifics shall be coordinated with project requirements.

2.03  PULL AND JUNCTION BOXES

A.  Sheet Metal Boxes:

B. Sheet Metal Boxes Over 12” In Any Dimension (cabinet shall comply with requirements of 16160.2.01.B.1.)

C. Boxes For Outdoor And Wet Locations:
   1. Flat flanged, surface mounted, UL listed as raintight, galvanized cast iron box and cover with neoprene gasket and stainless steel cover screws.

D. Boxes For Buried Flush Grade Locations:
   1. Flat flanged, UL listed as watertight, galvanized cast iron, aluminum or PVC box and cover with neoprene gaskets.

2.04 BOX EXTENSIONS

A. Prohibited on new construction.

B. One extension is permitted on remodel work to extend existing installations. Where more than one box is needed to flush out installation, provide a large (i.e. 6”x6”) box to flush out the existing box and nipple over to a new box.

PART 3 EXECUTION

3.01 BOX LOCATIONS

A. Require electrical boxes to accommodate wire pulling, splices, taps, equipment connections and code compliance.

B. Coordinate access doors as required to provide access to boxes in hard ceilings and similar inaccessible areas.

C. Provide cast box (with threaded hubs) in high traffic areas (surface installations), as specified by owner.

3.02 OUTLET BOX INSTALLATIONS

A. Back to back outlet boxes are not permitted. Separate boxes a minimum of 6” in standard walls and a minimum of 2 feet in acoustical walls.

B. Require knockout closures for unused openings.

C. Specify that blank cover plates be used in all unused boxes.

D. For multiple device installations, specify multi-gang boxes. Sectional boxes are not permitted. Require barrier separation of different voltage conductors in the same box.

E. Thoroughly coordinate casework and backsplash heights with mounting heights of boxes.

F. Specify recessed outlet boxes in finished areas, supported from interior partition studs. Supports are to be stamped steel stud bridges for hollow stud walls and adjustable steel channel fasteners for flush ceiling outlet boxes.
G. Provide back supports for boxes in metal stud walls.

3.03 PULL AND JUNCTION BOX INSTALLATION

A. Wherever possible, locate pull and junction boxes above accessible ceilings in finished areas.

B. Specify that pull or junction boxes shall be supported independently of conduit.

C. In flush grade outdoor applications, unit shall be adequately supported against settling or tipping. Where heavy traffic or poor soil compaction exists, cast box in a concrete base which provides 6” of cover around and under the box.

END OF SECTION