SECTION 16030

BOXES

1. All outlets, junctions, pull boxes, and fittings shall be galvanized or plated, and shall be installed in a plumb, rigid and satisfactory manner with an alignment tolerance of 1/16".

2. The ceiling outlets in slabs and metal-pan constructions shall consist of 4" octagonal concrete ring with 2½" minimum depth and ¾" K.O. to fit the conduit; include cover with knock-outs. When so advisable, 4" x 4" or larger outlet boxes equipped with a canopy cover may be used instead of the octagonal boxes. The ceiling outlets shall be provide3d with a ⅜" fixture stud when necessary to support the fixtures. The outlet boxes shall be flush with the ceiling surface. A 4" x 4" x 2⅛" box with a cover shall be used in hung ceilings.

3. The wall outlets for lighting fixtures shall consist of 4" octagonal boxes, 2½" in depth (or 4"x4"x 2⅛" boxes) with canopy covers with ⅜" fixture studs and K.O. to fit the conduits.

4. The wall outlet boxes for convenience outlets, switches, and other devices shall measure 4"x4"x 2⅛" minimum with K.O. to fit the conduits. The outlet boxes shall be equipped with raised covers of the required height and gang to bring them flush with the finished wall surface. The installation of raised covers on the boxes prior to the pouring of the concrete to be plastered will be strictly prohibited. In all cases, the raised covers shall be installed after the forms are removed and shall have the same depth as the plaster thickness. If several switches are indicated in adjacent positions, they will be ganged together in an outlet box of the proper size, and only one switch plate will be installed, unless otherwise indicated. If emergency power (red) and normal power (ivory) switches are indicated in adjacent position, they shall not be ganged together; use individual outlet boxes. All wall outlets shall be located at the height indicated in the plans.

5. Wall outlet boxes for electric ranges receptacles shall measure 5"x 5" x 2⅛" with 1"ø knock outs to fit the conduits.

6. Where outlets at different levels are shown adjacent, they shall be installed in one vertical line if possible.

7. The boxes for other outlets (like dryers, special purpose outlets, etc.) shall be of the size and type recommended by the manufacturer of the device. The raised covers shall be of the required size and gang to bring them flush with the finished wall surface. When located on columns or over doors, they shall be set symmetrically to the columns or doors.

8. The contractor shall provide suitable approved junctions or pull boxes when so deemed desirable for the insertion of conductors, or when so indicated. All junctions or pull boxes not over 150 cu. in. in size shall be constructed similarly to the outlet boxes of not less than #12 gauge steel sheet. All junctions or pull boxes over 150 cubic inches in size shall be constructed as same as specified for the panel-boards cabinets, except that the covers will have the same thickness as the boxes secured by screws or bolts instead of hinges.

9. All junctions and pull boxes must be accessible after the completion of the building.

10. The contractor shall provide a #12 (minimum) THHN green bonding jumper to every outlet or junction box for grounding continuity. It shall be connected to the electrical device grounding terminal and to the conduit grounding conductor.

END OF SECTION 16030