SECTION 16190
SUPPORTING DEVICES

PART 1   GENERAL

1.1 WORK INCLUDED:
   A. Conduit and equipment supports.
   B. Fastening hardware.

1.2 COORDINATION
   A. Coordinate size, shape and location of concrete pads with Section 03300.

1.3 QUALITY ASSURANCE
   A. Support systems shall be adequate for weight of equipment and conduit, including wiring, they carry.

PART 2   PRODUCTS

2.1 MATERIAL
   A. Support Channel: Galvanized steel.
   B. Hardware: Corrosion resistant.

PART 3   EXECUTION

3.1 INSTALLATION
   A. Fasten hanger rods, conduit clamps, and outlet and junction boxes to building structure using expansion anchors, beam clamps, spring steel clips.
   B. Use toggle bolts or hollow wall fasteners in hollow masonry, plaster, or gypsum board partitions and walls; expansion anchors or preset inserts in solid masonry walls; self-drilling anchors or expansion anchor on concrete surfaces; sheet metal screws in metal studs; and wood screws in wood construction.
   C. Do not fasten supports to piping, ductwork, mechanical equipment, or conduit.
   D. Do not use powder-actuated anchors.
   E. Do not drill structural steel members.
   F. Fabricate supports from structural steel or steel channel, rigidly welded or bolted to present a neat appearance. Use hexagon head bolts with spring lock washers under all nuts.
   G. Install freestanding electrical equipment on a housekeeping pad, minimum 4" thick and 4" overhang.
   H. Install surface-mounted cabinets and panel boards with minimum of four anchors. Provide steel channel supports to stand cabinet ¾" off wall.
   I. Bridge studs top and bottom with channels to support flush-mounted cabinets and panel boards in stud walls.

END OF SECTION