

SECTION 26 05 33

CONDUIT FOR ELECTRICAL SYSTEMS

This document is intended to note the Owners Design Requirements (ODR) for the titled specification section. Design professional to review and integrate ODR into the project's technical specifications. This ODR document should not be viewed as a standalone technical specification.

PART 1 - GENERAL REQUIREMENTS

N/A

PART 2 - PRODUCTS AND MATERIALS

- ◆ Conduit applications
 - Rigid Steel conduit and fittings shall be used for all exterior conduits. All conduits shall be installed and rigidly supported using approved conduit hangers, unistrut, or all thread as required.
 - Exposed wiring trays or conduit within the building are expressly forbidden.
 - EMT conduit and fittings shall be used for conduit inside of walls or above the ceiling.
 - All electric conduits shall have a separate (green) ground wire. An equipment ground wire shall be pulled with all new circuits.
 - All abandoned conduits shall be removed back to source.
 - Steel flex cable is permitted in casework.
 - Provide flexible section in conduit when crossing an expansion joint.
- ◆ Conduit requirements
 - Minimum Conduit Size, Unless Otherwise Indicated:
 - Branch Circuits: 3/4 inch trade size.
 - Branch Circuit Homeruns: 3/4 inch trade size.
 - Control Circuits: 3/4 inch trade size.
 - Flexible Connections to Luminaires: 3/8 inch trade size.
 - Underground, Interior: 3/4 inch trade size.
 - Underground, Exterior: 1 inch trade size.
 - Data cabling: 1 inch trade size
- ◆ Electrical metallic tubing (emt)
 - Connectors and Couplings: Use steel compression only.
 - Do not use set-screw type connectors and couplings or malleable fittings
- ◆ Rigid polyvinyl chloride (pvc) conduit
 - Description: NFPA 70, Type PVC rigid polyvinyl chloride conduit complying with NEMA TC 2 and listed and labeled as complying with UL 651; Schedule 80 unless otherwise indicated.

PART 3 - EXECUTION

- ◆ Installation
- ◆ Install printed labels on the inside of electrical outlet covers indicating panel and circuit numbers.
 - Conduit Support:
 - Single overhead conduit runs shall be supported with a minimum 1/4" all-thread and a minerallac. Screw anchors shall be used in concrete and pan deck. Shot pins are not permitted.
 - For multiple overhead runs utilize trapeze method. Use trapeze hangers assembled from threaded rods and metal channel (strut) with accessory conduit clamps to support multiple parallel suspended conduits. Provide 25% spare room in trapeze for future.

- ◆ Identify conduits with colored 2" wide tape every 30 feet as indicated below:

<u>Service:</u>	<u>Color:</u>
Security Access Control System	Purple
Energy Monitoring and Control System	Navy Blue
Data Communications	Light Blue
Telephone	Black
Power	Yellow
Emergency Power	Red
Life Safety/Fire Alarm	White
Fiber Optics	Orange
Paging System	Brown
Tenant Advertising	Pink

END OF SECTION