SECTION 26 05 33: RACEWAY & BOXES

1. GENERAL
   A. Minimum conduit ¾ inch
   B. Die-cast fittings are not allowed for EMT conduit.
   C. Aluminum fittings are not acceptable with rigid steel conduit.
   D. Use compression connectors for EMT conduit where installed in wet, dirty and dusty environments.
   E. Wiring for lighting circuits to be run separate from receptacle circuits and power feeders.
   F. Surface Raceway:
      1. Minimum size is WireMold 700-series
      2. All material and color to be specified; where not otherwise specified, use white, which is preferred color
      3. Manufacturers:
         • WireMold
         • Hubbell
   G. Plastic boxes for outlets are not allowed.
   H. Floor Boxes:
      1. Gasketed type
      2. UL listed to meet scrub water exclusion requirements
      3. Provide with ADA covers
   I. During design review, coordinate with FM Operations the locations to allow for proper servicing and access to other equipment.

2. APPLICATIONS
   A. Following is a summary of raceway types and applications:
   B. Aluminum conduit and Intermediate Metal Conduit (IMC) are not allowed.
   C. Metal Clad Cable (Type MC): Refer to section 26_05_10 — Conductors and Cable
   D. Surface Raceway: interior dry locations, for branch circuit feeders, control circuits, fire alarm, telecommunications, audiovisual, building automation and security systems run exposed on walls and ceilings.
### E.

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<th>TYPE</th>
<th>APPLICATION(S)</th>
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| Galvanized Steel RMC & PVC coated RMC | - Power circuits above 600 volts run above ground or exposed in building  
- Exposed exterior and outdoor locations and building roofs for power feeders, controls and low-voltage wiring systems  
- Underground conduit penetrations up through concrete floor slabs for power feeders, controls & low-voltage wiring systems  
- Exposed areas subject to impact damage  
- PVC-coated within lab areas where exposed to chemicals  
- PVC-coated conduit color to be consistent throughout the project |
| Fiberglass-Reinforced Epoxy (FRE) | - In lab areas where exposed to chemicals  
- Exposed exterior and outdoor locations, building roofs for power feeders, controls & low-voltage wiring systems |
| Electrical Metallic Conduit (EMT) | - Interior dry locations for power feeders, branch circuit feeders and control circuits  
- Homeruns for MC cable branch circuit wiring back to panelboards  
- Interior dry locations for fire alarm, telecommunications, audiovisual, building automation and security systems |
| Flexible Metallic Conduit (FMT) | - Interior dry locations for final connections (36” or less) to vibrating equipment, light fixtures, and other equipment  
- Within plenums or other spaces used for environmental air; provide grounding conductor |
| Flexible Non-Metallic Conduit (Liquid-tight) | - Exterior and interior damp and wet locations for final connections (36” or less) to vibrating equipment, light fixtures and other equipment; provide grounding connector  
- Do not use in plenums or other spaces used for environmental air |
Non-Metallic Conduit  
(PVC Schedule 40 & Schedule 80)

- Schedule 40: In-slab locations, underground locations, concrete encased, for low and medium-voltage power feeders, branch circuit feeders, control circuits, telecommunications and fire alarm circuits.
- Schedule 80: underground locations, direct-buried, for irrigation and low voltage control and security system wiring.

Surface Raceway

- Interior dry locations, for branch circuit feeders, control circuits, fire alarm, telecommunications, Audiovisual, building automation and security systems run exposed on walls and ceilings.

3. **OUTLET & JUNCTION BOXES**
   
   A. **Concealed Dry Locations:**
      1. Sheet metal boxes. Provide flush mounting outlet box in finished areas; provide hinged enclosure for large pull boxes.
   
   B. **Exposed Dry Locations:** Provide hinged enclosure for large pull boxes.