

**SECTION 26 05 36**  
**WIREWAYS**

**PART 1 - GENERAL**

**1.1 DESCRIPTION**

- A. This section specifies the furnishing, installation, and connection of wireway systems for the radiology equipment.
- B. Radiology equipment and high voltage cables will be furnished by the Government.

**1.2 RELATED WORK**

- A. Section 26 05 11, REQUIREMENTS FOR ELECTRICAL INSTALLATIONS: General electrical requirements that are common to more than one section of Division 26.
- B. Section 26 05 33, RACEWAY AND BOXES FOR ELECTRICAL SYSTEMS: Conduits, fittings, and boxes for raceway systems.

**1.3 QUALITY ASSURANCE**

- A. Refer to Paragraph, QUALIFICATIONS, in Section 26 05 11, REQUIREMENTS FOR ELECTRICAL INSTALLATIONS.

**1.4 SUBMITTALS**

- A. Submit in accordance with Section 26 05 11, REQUIREMENTS FOR ELECTRICAL INSTALLATIONS.
- B. Shop Drawings:
  - 1. Clearly present sufficient information to determine compliance with the drawings and specifications.
  - 2. Show size and location of wireway components, feeders, panels and pullboxes, ductwork, and equipment provided by other trades, and radiology equipment items. Carefully coordinate with manufacturer's shop drawings. Shop drawing approval is required by the radiology equipment manufacturer's technical representative prior to fabrication and installation of the wireway.
- C. Certifications: Two weeks prior to final inspection, submit four copies of the following to the COTR:
  - 1. Certification that the materials are in accordance with the drawings and specifications.
  - 2. Certification by the contractor that the complete installation has been properly installed and tested.
  - 3. Certification by the contractor that the radiology equipment manufacturer's representative has approved the complete wireway installation.

**1.5 APPLICABLE PUBLICATIONS**

Publications listed below form a part of this specification to the extent referenced. Publications are referenced in the text by designation only.

- A. National Fire Protection Association (NFPA):
  - 70-08.....National Electrical Code (NEC)
  - 99-2005.....Health Care Facilities
- B. Underwriters Laboratories, Inc. (UL):
  - 884-2005 .....Underfloor Raceways and Fittings

**PART 2 - PRODUCTS****2.1 WIREWAY**

- A. General
  - 1. Factory fabricate, assemble, and fit: JIC approved.
  - 2. Material shall be steel.
  - 3. Size shall be as indicated on the Drawings.
  - 4. Coordinate dimensions of the straight lengths, elbows, junction boxes, and other components.
  - 5. Hot-dipped galvanized steel connections joiner plates on floor and ceiling cable wireway.
  - 6. Wireway bushings:
    - a. Cast aluminum.
    - b. Install when the radiology equipment is installed.
    - c. Split ring-type bushed nipples for the high voltage cables.
    - d. Smooth edges of the openings in the wireways for the bushings.
  - 7. Provide chase nipples, dividers, elbows, tees, conduit entry fittings, and other accessories, fittings, and components, as required for a complete installation.
  - 8. Protect cables at their egress from the wireways by mechanically securing them with fittings to the wireways.
  - 9. Where gasketed openings are required in floor wall or ceiling wireways, provide split covers with fastening devices on both sides of the cover.

**PART 3 - EXECUTION****3.1 SYSTEM INSTALLATION**

- A. Provide the wireways, barriers, boxes, and other equipment for the equipment and the final connections to the equipment in accordance with the details shown on the drawings, as required by the NEC and the manufacturer's shop drawings.

B. Equipment Grounding Conductors:

1. Install a continuous equipment grounding conductor in each wireway, from the source electrical equipment to the load served. The conductor shall be copper, sized as shown, and shall have green insulation. The conductor size shall at a minimum be equal to the size of the largest current-carrying conductor present at that point.
2. Bond all of the equipment grounding conductors in each enclosure.
3. Trough-type wireway sections shall be made electrically continuous by short bonding jumpers between adjacent sections. Jumpers shall be exothermically bonded to each raceway section. Jumpers shall be sized per radiology equipment manufacturer's requirements.
4. Provide not less than one 10 ft [3 M] equipment grounding conductor pigtail at each box or junction point where an item of equipment is connected.

C. Where conductors of different types share a common wireway component, install protective barriers between the high-voltage power cables, the low-voltage power conductors, and medical systems conductors.

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