

**SECTION 26 05 36
CABLE TRAY**

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Metallic Cable Tray
- B. Metal conduit
- C. Flexible metal conduit
- D. Fittings and conduit bodies

1.2 REFERENCES

- A. ANSI C80.1 –Electrical Rigid Steel Conduit
- B. ANSI C80.3 – Steel Electrical Metallic Tubing
- C. ANSI/NEMA FB 1 - Fittings, Metal Boxes, and Conduit Bodies for Conduit, Electrical Metallic Tubing, and Cable

1.3 SUBMITTALS

- A. Submit under provisions of Section 01 33 00.

1.4 QUALIFICATIONS

- A. Manufacturer: Company specializing in manufacturing products specified in this Section with a minimum of three (3) years of experience.

1.5 PROJECT RECORD DOCUMENTS

- A. Submit under provisions of Section 01 77 00.
- B. Accurately record actual routing of all cable trays and provide written record for the project.

1.6 DELIVERY, STORAGE, AND HANDLING

- A. Deliver, store, protect, and handle Products to site under provisions of Section 01 60 00.
- B. Accept cable trays on site. Inspect for damage.
- C. Protect cable trays from corrosion and entrance of debris by storing above grade, and provide appropriate covering.

1.7 PROJECT CONDITIONS

- A. Verify that field measurements are as shown on Drawings.
- B. Verify routing and termination locations of cable trays prior to rough-in.

1.8 WORK INCLUDES

- A. Provide all labor, materials, necessary equipment, and services to complete the Conduits, Fittings, and Supports work, as indicated on the drawings, as specified herein or both.

PART 2 PRODUCTS

2.1 CABLE TRAY REQUIREMENTS

- A. Metallic Cable Tray: Conform to NEMA VE 1.
- B. Ladder or Basket – Type Cable Tray:
 - 1. Description: NEMA VE 1, Class 12A, ladder type center hung tray designated to support 50 pounds per linear foot or as required for cable weight
 - 2. Material: Aluminum or Steel
 - 3. Inside Width: As indicated on drawings (24" wide minimum)
 - 4. Straight Section Rung Spacing: Six inches (6") on center
 - 5. Inside Depth: Four inches (4")
 - 6. Inside Radius of Fitting: Twelve inches (12")

7. Supports: The tray system shall be center hung and shall be supported on 4-foot centers by a single 3/8 inch threaded rod or as required for cable weight.
8. Provide all horizontal and vertical 90-degree elbows, tees, and crosses required by the layout shown on the drawings.
9. All edges of cable trays, fittings, and connectors shall be rounded and smooth to prevent injury to the cable during its installation.
10. Provide manufacturer's standard clamps, hangers, brackets, splice plates, reducer plates, blind ends, barrier strips, connectors, and grounding straps as required.

PART 3 EXECUTION

3.1 INSTALLATION

- A. Install in accordance with manufacturer's instructions and NEMA VE 1.
- B. Only cables and conductors for systems operating at 24 volts or less shall be installed in cable tray.
- C. Fire alarm system and voice alarm system cables shall not be installed in cable tray.
- D. Use expansion connectors where required.
- E. Install warning signs at 30 feet centers along cable tray, located to be visible.
- F. Support trays in accordance with Section 26 05 29.
 1. Provide supports at each connection point, at the end of each run, and at other points to maintain spacing between supports of 4 feet maximum.
- G. Provide firestopping using UL listed assemblies for all penetrations of rated walls.
 1. Use metallic sleeves with grounding type bushing on each end.
- H. Coordinate cable tray routing with ducts, piping, and work of other trades.
- I. All cables extending to/from cable tray from/to terminal cabinets, wiring gutters, outlets, devices, and other equipment shall be installed in approved conduits or conduit sleeves.
- J. Maintain adequate clearance between cable tray and piping.
- K. Maintain 12" clearance between cable tray and surfaces with temperatures exceeding 104°F.
- L. Ground and bond cable tray per NFPA 70 Article 392.
 1. Provide continuity between tray components.
 2. Use anti-oxidant compound to prepare aluminum contact surfaces before assembly.
 3. Connections to tray may be made using mechanical or exothermic connectors.

3.2 WARNING SIGNS

- A. Engraved Nameplates: 3/4 inch high black letters on yellow laminated plastic nameplate, engraved with the following wording shall be installed at locations shown on the engineer's plans:
 1. **WARNING: DO NOT USE CABLE TRAY AS WALKWAY, LADDER, OR SUPPORT! USE ONLY AS MECHANICAL SUPPORT FOR CABLES AND TUBING!**

END OF SECTION