

## Section 1- Acceptable Manufacturers

- 1.01 Manufacturer: Subject to compliance with these specifications, cable tray systems shall be as manufactured by Cooper B-Line, Inc.

## Section 2- Cable Tray Sections and Components

- 2.01 General: Except as otherwise indicated, provide metal cable trays, of types, classes and sizes indicated; with splice plates, bolts, nuts and washers for connecting units. Construct units with rounded edges and smooth surfaces; in compliance with applicable standards; and with the following additional construction features. Cable tray shall be installed according to the latest revision of NEMA VE 2.
- 2.02 Materials and Finish: Straight section and fitting side rails and rungs shall be extruded from Aluminum Association Alloy 6063. All fabricated parts shall be made from Aluminum Association Alloy 5052.
- 2.03 Ladder Cable Trays shall consist of two longitudinal members (side rails) with transverse members (rungs) welded to the side rails. Rungs shall be spaced [6] [9] [12] inches on center. Rung spacing in radiused fittings shall be industry standard 9" and measured at the center of the tray's width. Each rung must be capable of supporting a 200 lb. concentrated load at the center of the cable tray over and above the cable load with a safety factor of 1.5.
- 2.04 Ventilated Trough Cable Trays shall consist of two longitudinal members (side rails) with a corrugated bottom welded to the side rails or rungs spaced 4" on center. The peaks of the corrugated bottom shall have a minimum flat cable bearing surface of 2<sup>3</sup>/<sub>4</sub>" and shall be spaced on 6" centers. To provide ventilation in the tray, the valleys of the corrugated bottom shall have 2<sup>1</sup>/<sub>4</sub>" x 4" rectangular holes punched along the width of the bottom.
- 2.05 Non-Ventilated Bottom Trough Cable Trays shall consist of two longitudinal members (side rails) with a corrugated bottom welded to the side rails or a solid sheet over rungs. The peaks of the corrugated bottom shall have a minimum flat cable bearing surface of 2<sup>3</sup>/<sub>4</sub>" and shall be spaced on 6" centers.
- 2.06 Cable tray loading depth shall be [3] [4] [5] [6] inches per NEMA VE 1.
- 2.07 Straight sections shall have side rails fabricated as I-beams. Straight sections shall be supplied in standard [12 foot] [24 foot] [10 foot (3 m)] [20 foot (6 m)] lengths.
- 2.08 Cable tray widths shall be [6] [9] [12] [18] [24] [30] [36] inches or as shown on drawings.
- 2.09 Splice plates shall be the Wedge-Lock design with 4 nuts and bolts per plate. The resistance of fixed splice connections between an adjacent section of tray shall not exceed 0.00033 ohm.
- 2.10 All fittings must have a minimum radius of [12] [24] [36] [48] inches.

## Section 3- Loading Capacities and Testing

- 3.01 Cable tray shall be capable of carrying a uniformly distributed load of \_\_\_\_\_ lbs./ft. on a \_\_\_\_\_ ft. support span with a safety factor of 1.5 when supported as a simple span and tested per NEMA VE 1 5.2. In addition to the uniformly distributed load the cable tray shall support 200 lbs. concentrated load at mid-point of span. Load and safety factors specified are applicable to both the side rails and rung capacities. Cable tray shall be made to manufacturing tolerances as specified by NEMA.
- 3.02 Upon request, manufacturer shall provide test reports in accordance with the latest revision of NEMA VE 1 or CSA C22.2 No. 126.