



DESIGN REQUIREMENTS

CABLE TRAYS FOR ELECTRICAL SYSTEMS

GENERAL INFORMATION

- 1.1 This section applies to cable trays utilized to support and route low voltage cables (telecom, security, A/V). No fire alarm cables will be permitted to be installed in cable trays.

DESIGN REQUIREMENTS

- 2.1 Support cable tray independently and directly from the building structural components. Strength of each support including fastenings to the structure shall be adequate to carry present and future load multiplied by a safety factor of at least four or 200 lbs., whichever is greater.
- 2.2 Install expansion connectors where cable tray crosses a building expansion joint and in cable tray runs that exceed 90 feet.
- 2.3 Where cable trays penetrate fire and smoke barriers including walls, partitions, floors, and ceilings, install firestopping at penetrations after cables are installed.
- 2.4 Ground and bond cable trays and ensure continuous electrical conductivity of cable tray system. Use tray as an equipment ground conductor for itself only, not for connected equipment. Discuss with CU the type and size of cable tray that is to be specified.

CONSTRUCTION REQUIREMENTS

- 3.1 Install per code and manufacturer specifications. Maintenance and operational items such as valves, hatches, junction boxes and access doors need to be accessible after installation of the cable trays.
- 3.2 Install signage as follows; Lettering: 4-inch high, black on yellow background with legend "WARNING! NOT TO BE USED AS WALKWAY, LADDER, OR SUPPORT FOR LADDERS OR PERSONNEL.

REFERENCE

- 4.1 The applicable CSI Specification Section is 260536.