

LDS Non-Metallic Surface Raceway

LP-SPEC-LDS-2

1. GENERAL

1.1 Scope

This specification covers a surface nonmetallic raceway system used for branch circuit wiring or data network, voice, video, and other low-voltage cabling. The nonmetallic raceway system shall consist of raceway, appropriate fittings, and accessories to complete installation per electrical drawings.

1.2 Classifications and Use.

Surface nonmetallic raceway is to be utilized in dry interior locations only as covered in Article 388 of the National Electrical Code, as adopted by the National Fire Protection Association and as approved by the American National Standards Institute. The Panduit LDS Raceway System is listed by Underwriter's Laboratories under File No.E95425.

1.3 Submittals

1.3.1 Shop Drawings

Submit drawings for approval showing the complete layout of all products that make up the complete system for each floor prior to installations with device type (power and data), locations, and circuits identified.

1.3.2 As Built Drawings

If variations from the approved shop drawings occur during the installation of the system, final, as built drawings, shall be submitted for each floor that has been altered.

2. PRODUCT

2.1 Manufacturer

The surface nonmetallic raceway system specified herein for branch circuit wiring or data network, voice, video, and other low-voltage cabling shall be the LDS System as manufactured by the Panduit Corporation. Systems of other manufacturers may be considered equal, if, in the opinion, and the written approval of the engineer, they meet all the performance standards specified herein.

2.2 Materials

The raceway and all system components must be UL Listed and exhibit nonflammable self-extinguishing characteristics, tested to comparable specifications of UL94V-0.

2.2.1 Raceway

The raceway shall be a one-piece design. Total width shall be 1.01" by 0.55" deep (LDS5) or 0.77" by 0.41" deep (LDS3) with an approximate wall thickness of .055". The raceway shall be available in 10' lengths.

The raceway (LDS) shall be a one-piece solid profile. The raceway shall have tamper resistant characteristics inherit with the design. The raceway shall be manufactured of rigid PVC compound. The raceway shall have a smooth texture, and be available in four colors; off-white, electrical ivory, white, and light gray.

2.2.2 Fittings

A full complement of fittings (LDS/LDP series) must be available including but not limited to flat, internal and external elbows, tees and entrance fittings, couplers, and end caps. The fittings shall provide a means for connecting to the raceway and shall be capable of maintaining a 1" minimum cable bend radius. Applicable fittings shall be of either cover only design (for low voltage cabling only), or base and cover design in order to maintain complete enclosure, and to eliminate mitering. The fittings

shall be manufactured from a rigid PVC (or ABS/PC) compound. The fittings shall have a matte texture and be available in four colors; off-white, electrical ivory, white, and light gray to match the raceway. They shall overlap the raceway to hide uneven cuts.

2.2.3 Accessories

Junction boxes and faceplates shall be available for mounting standard devices. The junction boxes shall be available in standard, deep, and extra deep versions. The faceplates shall allow for terminating of standard electrical devices, both duplex and rectangular styles. In addition there must be faceplates designed to accept Panduit communications modules for data terminations. The faceplates may accommodate up to 6 jacks and shall be modular in design to accept UTP, Coax, ST, SC, and Fiber-Jack type of connectors. They shall be available in off-white, electrical ivory, white, and light gray to match the raceway.

3. **Execution**

3.1 **Installation**

- 3.1.1 Prior to and during installation, refer to system layout drawing containing all elements of the system.
- 3.1.2 Work shall include furnishing all raceway and appropriate fittings and device plates to install a nonmetallic surface raceway system as indicated in the electrical drawings and in the specification. Installer shall comply with detailed manufacturer's instruction sheets, which accompany system components as well as system instruction sheets.



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