

SECTION 16132

SURFACE NONMETALLIC RACEWAYS

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Surface raceway including base, cover, boxes, fittings, etc.

1.2 RELATED SECTIONS

- A. Section 16123 - Building Wire and Cable.
- B. Section 16140 - Wiring Devices.

1.3 REFERENCES

- A. NECA (INST) - NECA Standard of Installation; National Electrical Contractors Association.
- B. NEMA WD 6 - Wiring Devices - Dimensional Requirements; National Electrical Manufacturers Association.
- C. NFPA 70 - National Electrical Code.

1.4 SUBMITTALS

- A. Submit under provisions of Section 01300.
- B. Product Data: Provide standard details and installation instructions.

PART 2 PRODUCTS

2.1 MANUFACTURER

- A. Provide products offered by Carlon, 25701 Science Park Drive, Cleveland, Ohio 44122. ASD. Tel: outside of Ohio; (800) 321-1970, within Ohio; (216) 464-3400, TDD: (216) 831-5918. Fax: (216) 831-5579.
 - 1. Substitutions will not be acceptable.

2.2 MATERIALS

- A. White polyvinyl chloride (PVC) meeting UL 94 V-0 requirements.

B. Suitable for field painting.

2.3 PRODUCTS

- A. Provide "Single-Channel and Multi-Channel Surface Raceway System".
- B. Provide protection for power, low voltage, and data and communication wiring in a 1, 2, or 3 channel configuration.
- C. Recognized by NEC Article 352-B for Surface Nonmetallic Raceway.
- D. UL listed for electrical wiring up to 300 volts; comply with UL-5A. UL File numbers: "MC Standard Raceway", UL E140972, "MC Boxes and Fittings", UL E140971.
- E. Finished surfaces are protected with blue plastic film.
- F. Provide all fittings required to form a complete, integrated surface raceway system.
- G. Receptacles and other devices: Specified elsewhere in Division 16.

2.4 FABRICATION

- A. Fabricate raceway from precision extruded polyvinyl chloride plastic.
- B. Fabricate raceway with the following cross sectional areas:
 - 1. Center channel: 5.4 square inches.
 - 2. Chamfered: 1.4 square inches.
 - 3. Square: 2.4 square inches.
 - 4. Extension: 5.3 square inches.
 - 5. Cove, center: 2.2 square inches.
 - 6. Cove, edges: 0.6 square inch.
 - 7. Series 10: 0.239 square inch.
 - 8. Series 30: 0.716 square inch.
 - 9. Series 80: 0.867 square inch.
 - 10. Series 90: 1.183 square inches.
 - 11. Premier: 6.287 square inches.
- C. Raceway Covers:

1. "MC Cove": Single base and a single removable snap fit cover.
2. "MC Base": Single base and four removable snap-on covers.
3. "Premier": Single base and single removable snap-on covers.

D. Boxes:

1. Device yoke: Snap into raceway and allow installation of NEMA standard devices.
2. Device back box: Snap into device yoke to allow separation of wiring system.
3. Transition lid adapter: Location posts to allow proper alignment of device yoke to achieve additional depth by attaching box lid with screws.

E. Premier Multi-Channel Fittings:

1. Internal and external elbow: Molded fitting cover which snaps onto main base.
2. Flat elbows and flat tees: Molded fitting cover which snaps onto main base.
3. Cable retainers: Snaps into main base.
4. Adapters: Allows transition to "Single Channel (SC) Raceway Systems."
5. Dividers: Allows one-channel system to be divided into two-through-four channels.

F. Prestige Multi-Channel Fittings:

1. Internal and external elbow: Molded-in coupling for connection into main base.
2. Flat elbows and flat tee: Attaches to main base by means of slide-in coupling.
3. Cable retainers: Snaps into main base.
4. Adapters: Allows transition to "Single Channel (SC) Raceway Systems."
5. Crossover bridge: Allow capability of routing cabling and wiring between outer channels.

2.5 MULTI-CHANNEL RACEWAY

A. Provide the following, where indicated on the drawings:

1. "Series 120" raceway.
2. "Series 130" raceway.
3. "Series 140" raceway.
4. "Series 160" raceway.
5. "Series 170" raceway.

6. "Series 190" raceway.
7. "Series 500" raceway (Premier).
8. "Series 10" (single channel).
9. "Series 30" (single channel).
10. "Series 80" (single channel).
11. "Series 90" (single channel).

PART 3 EXECUTION

3.1 EXAMINATION

- A. Verify that dimensions are correct and substrates are in proper condition to receive raceway. Do not proceed with installation until unsatisfactory conditions have been corrected.

3.2 INSTALLATION

- A. Install in accordance with the manufacturer's instructions, NFPA 70, and NECA standard.
- B. Install cover seals between adjoining sections of covers for a neat, aesthetic appearance.
- C. Install base, cover, boxes, fittings, accessories, etc., as necessary for a complete system.

3.3 ADJUST AND CLEAN

- A. Remove temporary plastic protective film after completion of work by other trades, and adjust prior to substantial completion of the project.

END OF SECTION