SECTION 260520 – WIREWAY OVERHEAD DISTRIBUTION SYSTEM

In general Wireway Overhead Distribution Systems are not used. They may be practical in large rooms where rearrangement of lighting and/or power poles is likely.

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

A. This Section includes the following:

1. This Section specifies the pre-wired overhead distribution system for buildings and structures electrical systems under 600 volts.

2. Provide all labor, materials, and equipment as necessary to complete all work as indicated on the drawings, and as specified herein.

B. Related Sections include the following:

1. Applicable sections of Division 26 - Electrical

1.3 SUBMITTALS

A. Shop Drawings

1. Overhead distribution system layout, devices, equipment, and fittings.

2. Wireway overhead distribution system including all cable assemblies and connectors.

1.4 QUALITY ASSURANCE

A. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, Article 100, by a testing agency acceptable to authorities having jurisdiction, and marked for intended use.

B. Comply with NFPA 70, “National Electrical Code”
C. Furnish wire and cable that has been manufactured and factory tested in accordance with ASTM, ANSI, IPCEA, and NEMA.

PART 2 - PRODUCTS

2.1 WIREWAY OVERHEAD DISTRIBUTION SYSTEM

A. Furnish and install an overhead surface metal raceway distribution system as shown on drawing.

B. Raceway system shall include large header raceway for distribution circuits and lateral raceways which shall be pre-wired for lighting and power receptacles.

C. Wireway overhead distribution systems shall be Wiremold ODS5 or approved equal.

D. Header raceway shall be Wiremold 4000 series with fittings specifically designed for the purpose.

E. Lateral raceways shall be Wiremold ODS5 with base hole cut on 24 inch centers to accept pre-wired harness of 20 amp, 277 volt non-standard lighting receptacles and on 36 inch centers for pre-wired harness of 20 amp, 125 volt, non-standard power receptacles.

F. Harnesses

1. Lighting 4-wire conductors shall be no. 12 TW, colors brown, orange, gray, green, with pre-wired 20 amp, 277 volt, non-standard receptacles spaced on 24 inch centers. Alternate receptacles shall face in opposite directions.

2. 6-Wire conductors shall be no. 12 TW, colors brown, orange, blue, yellow, gray, green, with pre-wired 20 amp, 277 volt, non-standard receptacles spaced 24 inches on centers. Alternate receptacles shall face in opposite directions.

3. Power 3-wire conductors shall be no. 12 THW, colors black, white, green, with prewired 20 amp, 125 volt non-standard receptacles spaced 36 inches on centers.

G. Whips: Flexible Galvanized Steel Armored

1. Fixture whips, 277 volt. Connections between ODS5 lateral raceways and lighting fixtures shall be made with fixture whips designed for the purpose. Whips shall be available in 6 or 15 foot lengths, and wired with 3 no. 14 AWG THHN conductors and 1-bare copper ground wire.

2. Switching whip, 277 volt. Connections between ODS5 lateral raceways and switches shall be made with 18 foot long switching whip designed for the purpose. The whip shall be wired with 4 no. 12 AWG THHN conductors and 1-bare copper ground wire.

3. Jumper whips, 277 volt. Connections between an ODS5 lateral raceway and any other unit with an ODS5 277 volt non-standard receptacle shall be made with 18 foot long
jumper whips designed for the purpose. Whips shall be wired with 4 or 5 no. 12 AWG THHN conductors and one bare copper ground wire as shown on the plans.

4. Power whips, 125 volt. Connections between ODS5 lateral raceways and 15 or 20 amp, 125 volt general purpose receptacle outlets or equipment shall be made with power whips designed for the purpose. Whips shall be available in 6, 12 or 18 foot lengths and wired with 3 no. 12 AWG THHN conductors.

PART 3 - EXECUTION

3.1 Installation instructions shall be furnished by the manufacturer.

END OF SECTION 260520