

SECTION 16200

600 VOLT WIRE

PART 1 - GENERAL

1.1 GENERAL

- A. The provisions of Section 16010, General Requirements for Electrical Work apply to the Work of this Section.

1.2 CODES AND STANDARDS

- A. Products shall comply with the following codes and standards and shall be UL-listed and labeled:

ASTM B-3	Soft or Annealed Copper Wire
ASTM B-8	Concentric Lay Stranded Copper Conductors
NEMA WC-5	Thermoplastic Insulated Wire and Cable for the Transmission and Distribution of Electrical Energy.
UL 44	Rubber Insulated Wires and Cables
UL 83	Thermoplastic Insulated Wires and Cables

1.3 SUBMITTALS

- A. Manufacturer's product data sheets.

PART 2 - PRODUCTS

2.1 GENERAL

- A. All conductors shall be annealed copper in accordance with ASTM B-3.
- B. The jacket of all wire shall be printed with the following information:

1. Manufacturer
2. Size
3. Insulation type
4. Maximum voltage
5. UL label

- C. All insulation shall be rated 600 volt.

2.2 POWER WIRING

- A. Feeders and motor branch circuits shall be type THHN/THWN.
- B. All power wiring shall be stranded, Class B strand in accordance with ASTM B-8, minimum size #12 AWG.

2.3 BRANCH CIRCUITS

- A. All lighting and convenience receptacle branch circuit wiring shall be type THHN/THWN.
- B. Branch circuit wiring shall be solid or stranded conductor, minimum size #12 AWG.

2.4 CONTROL WIRING

- A. Wiring for control circuits shall be THHN/THWN.
- B. Control wiring shall be stranded, Class B strand in accordance with ASTM B-8, minimum size #14 AWG.

2.5 FIXTURE WIRE

- A. Where high temperature fixture wire is required it shall be silicone rubber type SF-2.

PART 3 - EXECUTION

3.1 GENERAL

- A. All wire shall be installed in accordance with Section 16060, Installation of Wire and Cable.

3.2 TESTING

- A. Control and Instrument Wiring - Control and instrument field wiring shall be visually inspected and tested for continuity to insure that all field wiring is installed in accordance with Contract Drawings and/or equipment manufacturers drawings. Verify all field conductors are properly identified with wire numbers.
- B. Low Voltage Power Wiring - All 480V and 208V power wiring shall be subjected to one minute 1000V megger test. Minimum insulation resistance shall be 50 megohms. Megger tests shall be performed between each phase (A-B, B-C, and C-A) and three phases tie together to ground.

END OF SECTION 16200