

## **SECTION 16050**

### **CONDUCTORS**

1. The Contractor shall furnish and install all conductors as specified herein and indicated in the drawings.
2. Except where otherwise indicated in the drawings or specified, no conductor shall be smaller than #12 AWG. All conductors shall be stranded.
3. Unless otherwise indicated, all conductors shall be of the moisture and heat resistant type (THHN) rated 600 volts insulation 90°C Cu.
4. All feeder and branch circuit conductors shall be color-coded as follows:

| <u>PHASE</u> | <u>120/208 V</u> | <u>277/480 V</u> |
|--------------|------------------|------------------|
| Ø A          | Black            | Brown            |
| Ø B          | Red              | Orange           |
| Ø C          | Blue             | Yellow           |
| Neutral      | White            | Gray             |
| Ground       | Green            | Green            |

Note: Isolated ground conductors shall be green with yellow stripes.

5. All building wires shall be of the UL approved types. The conductors shall not be over six months old. They shall also be suitable protected from weather or damage during their storage and handling and shall be in first-class condition when installed.
6. All conductors shall be continuous from outlet to outlet, and so splices shall be made except in the boxes. The conductors in the outlets shall be of sufficient length to allow making all the device connections without any strain.
7. All conductors #6 AWG in size or smaller shall be factory-finished in the desired identifying colors.
8. If not factory-finished in the desired color, all conductors #4 AWG in size or larger used in branch circuits shall be identified by using tape in the desired color the last twelve inches (12") of every length conductor.
9. When used for underground installation, all conductors or cables, regardless of the type, shall be protected by schedule 40 PVC conduits of the adequate size per NEC. They shall also be embedded in a concrete encasement of a minimum thickness of four inches (4") on all sides. All underground feeders or branch circuits shall be RHW-2, XLP 90°C Cu.
10. The Contractor shall provide a ground wire in all motor circuits for grounding purposes. He (she) shall size it according to the latest edition of the National Electrical Code.

## **CONDUCTORS**

11. The Contractor shall provide a #12 THHN green bonding jumper between the receptacles grounding terminal and the grounded outlet box for grounding continuity.

**END OF SECTION 16050**