



Division 260519

Building Wire and Cable

DESIGN GUIDE

1 General

1.1 Introduction

- A. This section applies to the following:
 - 1. Building wire and cable
 - 2. Service entrance cable
 - 3. Wiring connectors and terminations

2 Materials

2.1 Building Wire

- A. Wire and cable shall be copper single conductor type with 600 volt insulation.
- B. Grounding conductors shall be copper, no exceptions.
- C. #14 wire and smaller shall be solid. Not allowed for branch circuit wiring, only signal.
- D. #12 wire and larger shall be stranded.
- E. Outer jackets of conductors shall be color coded as follows:
 - 1. 120/208V
 - a. Phase A – Black



- b. Phase B – Red
 - c. Phase C – Blue
 - d. Neutral – White
2. 277/480V
- a. Phase A – Brown
 - b. Phase B – Orange
 - c. Phase C – Yellow
 - d. Neutral – Gray
3. Insulated Ground Wires – Green

3 Execution

3.1 Installation in Raceways

- A. Wire and cable shall be run in raceways.
- B. Conduits installed with multiple branch circuits shall be installed with dedicated neutrals for each individual circuit.
- C. Use conductor not smaller than #12 for power and lighting circuits.
- D. Use conductor not smaller than #10 for exterior lighting circuits.

3.2 Wiring Connections and Terminations

- A. Stranded conductors shall not be terminated directly to wiring device screw terminals. Utilize compression plate at screw terminals on devices.
- B. The use of wire nuts is restricted to splices in wire #8 and smaller. Splices made in conductors larger than #8 shall be made with compression type connectors.



4 Appendix

4.1 Reserved for future.

