# XHHW/XHHW-2 Guide Specifications-Encore Wire Corporation

#### 26 05 19- WIRE AND CABLE TYPE XHHW/XHHW-2

#### PART 1 - GENERAL

#### 1.1 - SPECIFICATION INCLUDES

- 1.1.1 Cable Type: Type XHHW/XHHW-2 for use as services, feeders and branch circuits.
- 1.1.2 General Applications: Type XHHW/XHHW-2 cable may be used in the following general applications per the National Electrical Code®.
  - 1.1.2.1 In Conduit.
  - 1.1.2.2 In Cable Tray.
  - 1.1.2.3 For Services.
  - 1.1.2.4 For Feeders.
  - 1.1.2.5 For Branch Circuits.
  - 1.1.2.6 Wet or Dry Locations, 90°C and Gasoline and Oil Resistant II.

## 1.2 - SUBMITTALS

- 1.2.1 Product Data: Submit manufacturer's product data confirming that materials comply with specified requirements and are suitable for the intended application.
- 1.2.2 Installation Instructions: Manufacturer's installation instructions shall be included in submittal. Industry guides may supplement the manufacturer's instructions.

#### 1.3 REQUIREMENTS

- 1.3.1 Underwriters Laboratories: Type XHHW/XHHW-2 cable shall meet the following Underwriters Laboratories (UL) standards and listings and additional associated standards (where applicable).
  - 1.3.1.1 UL 44 UL Standard for Cross-linked polyethylene (XLPE) insulation Wires and Cables.
  - 1.3.1.2 UL listed Sunlight Resistant in sizes 6 AWG and larger in all colors.
  - 1.3.1.3 Sizes 1/0 AWG and larger listed for CT use.
  - 1.3.1.4 Sizes 14 AWG and larger shall be rated XHHW/XHHW-2.
  - 1.3.2 ASTM Standards: Type XHHW/XHHW-2 cable shall meet all applicable ASTM standards.
  - 1.3.3 Federal Specifications: Type XHHW/XHHW-2 cable shall meet Federal Specification A-A-59544.
  - 1.3.4 NEMA Standards: Type XHHW/XHHW-2 cable shall meet NEMA WC70/ICEA S-95-658.

#### **PART 2 - PRODUCTS**

#### 2.1 MANUFACTURER

2.1.1 Encore Wire Corporation, 1329 Millwood Road, McKinney, Texas, 75069. Web: http://www.encorewire.com

#### 2.2 CABLE CONSTRUCTION

- 2.2.1 Conductor: The conductor shall be soft annealed copper.
- 2.2.2 Insulation: The insulation shall be flame-retardant, moisture resistant, thermoset, Cross-linked polyethylene (XLPE).
- 2.2.4 Pre-Lubricated Insulation: On conductor sizes 14 and larger shall be Super Slick Elite™ or equivalent having integrated pre-lubrication such that the cable coefficient of friction is less than or equal to 0.17.

#### **PART 3 - INSTALLATION**

#### 3.1 INSTALLATION

- 3.1.1 Manufacturer's Instructions: Type XHHW/XHHW-2 cable shall be installed per the manufacturer's published installation instructions. Industry guides may supplement the manufacturer's instructions.
- 3.1.2 Field Support: Manufacturer shall provide, when requested, field engineering support for Type XHHW/XHHW-2 cable installation
- 3.1.3 Manufacturer: Type XHHW/XHHW-2 cable for circuits, feeders and services shall be supplied from a single manufacturer.
  - 3.1.4 Minimum Bend Radius: Bends in Type XHHW/XHHW-2 shall be made so that the cable will not be damaged.

# 3.2 SPECIFIC USES

3.2.1 Type XHHW/XHHW-2 cable may be used in conduit, raceways and cable trays for services, feeders and branch circuits as specified in the applicable section of the NEC®.

# 3.3 USES NOT PERMITTED

3.3.1 Type XHHW/XHHW-2 cable shall not be used in direct burial applications.

## 3.4 AMPACITY

3.4.1 The ampacity of Type XHHW/XHHW-2 cable shall be determined in accordance with Table 310.16 of the National Electrical Code®. The installation should not exceed the temperature ratings of the terminations and equipment.