

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

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## 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 through 1 AWG shall be rated VW-1

1.3.1.5 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

1.3.5 ICEA Standards: Type XHHW/XHHW-2 cable shall meet ICEA T-29-520 (210,000 Btu/hr) Flame Test

## **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 Article 310.15 of the

National Electrical Code®. The installation should not exceed the temperature ratings of the terminations and equipment.