# PREASSEMBLED AERIAL CABLE CROSS-LINKED POLYETHYLENE INSULATION (XHHW-2) THREE CONDUCTOR, 600 VOLT

**SCOPE**:
This specification covers Aetna Insulated Wire's standard construction for three conductor preassembled, aerial cables, cross-linked insulated as Type XHHW-2 per NEC, cabled and bound to a supporting messenger.

**PRODUCT SPECIFICATIONS AND RATINGS:**
i) UL 44 Thermoset-Insulated Wires and Cables
ii) ICEA S-95-658/NEMA WC70 Non-Shielded Power Cables 2000 V or Less
iii) ICEA P-79-561 Guide for Selecting Aerial Cable Messengers and Lashing Wires
iv) For product ratings see specific product data sheets

**APPLICATION**:
XHHW-2 is a recognized TYPE designation in NFPA70: National Electric Code Article 310 and as such these cables are suitable for use as permitted in the code. All cables manufactured under this specification are suitable for use in circuits not exceeding 600 volts. The cable may be used wet or dry at conductor temperatures of 90°C continuous, 130°C emergency overload and 250°C short circuit. These cables are specifically for the transmission and distribution of electrical energy when cables are required to be suspended in an aerial power system. Design of the system, proper cable selection and installation parameters should follow the ICEA Guide for Selecting Aerial Cable Messengers and Lashing Wires.

**CONSTRUCTION DATA**:
**Conductors** - The conductors consist of uncoated soft, copper strands meeting the requirements of ASTM B3. Unless otherwise specified the conductor shall be supplied as Class B compressed per ASTM B8.

**Insulation** - The insulation is flame-retardant cross-linked polyethylene (XLP). It is extruded concentrically over the conductor to the wall thickness and requirements of Type XHHW-2 per the National Electric Code and as specified in the governing specifications listed.

**Conductor Coding** - Phase identification is provided by a number code.

**Messenger** - The messenger is galvanized steel per ASTM Specification A475 or copper clad steel per ASTM B228. The messenger is sized per ICEA P-79-561.

**Assembly** - The required number of conductors will be twisted together. The messenger is laid straight, not part of the twisted group but paralleled against the group and firmly bound to the group by means of a polyethylene coated rectangular shaped galvanized steel binding strap. A 5 ft. length of messenger is left out at both ends of each length.

**AVAILABLE OPTIONS:**
a) CPE jacket or (-40°C) PVC jacket or LLD Polyethylene jacket.
b) Aetna 3742 non-halogen, flame resistant, low smoke, low corrosion, non toxic jacket.
c) Stainless steel messenger/stainless binder
d) Jacketed messenger.

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