



ANSI/ICEA S-76-474-2020  
Standard for Neutral Supported Power  
Cable Assemblies with Weather  
Resistant Extruded Insulation Rated

600 Volts  
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***Standard for Neutral Supported Power  
Cable Assemblies with Weather Resistant  
Extruded Insulation Rated 600 Volts***

*Published by*

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## Foreword

This standard publication, *Standard for Neutral Supported Power Cable Assemblies with Weather Resistant Extruded Insulation Rated 600 Volts*, was developed by the Insulated Cable Engineers Association, Inc. (ICEA)

ICEA standards and guides are adopted in the public interest and are designed to eliminate misunderstanding between the manufacturer and the user and to assist the user in selecting and obtaining the proper product for his particular need. Existence of an ICEA standard or guide does not in any respect preclude the manufacture or use of products not conforming to the standard or guide. The user of this standard is cautioned to observe any health or safety regulations and rules relative to the manufacture and use of the cable made in conformity with this standard.

Request for interpretation of this standard must be submitted in writing to:

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[www.icea.net](http://www.icea.net)

An official written interpretation will be provided. Suggestions for improvements gained in the use of this standard will be welcomed by the Association.

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## **Section 1 GENERAL**

### **1.1 SCOPE**

This standard applies to the materials, constructions, and testing of assemblies or single conductors intended for field lashing, of extruded dielectric insulated electric current carrying phase conductors and bare or covered neutral electrical conductors used as weather resistant wires and cables suspended from supporting structures for the overhead distribution of electrical energy.

This standard is intended to apply to the following multiplexed wire and cable constructions:

Neutral Supported Service Drop Cables, and  
Neutral Supported Secondary Distribution Cables.

The use of these service drop and secondary distribution cables is limited to circuits not exceeding 600 volts phase to phase, or 480 volts phase-to-ground, and to a normal service conductor temperature rating of 75 °C or 90 °C.

### **1.2 CONSTRUCTIONS**

Multiplexed cable assemblies are composed of one or more phase conductors assembled with a neutral conductor. The neutral conductor may be bare or covered with an extruded weather-resistant thermoplastic or thermoset polyethylene compound.

### **1.3 DESIGN OPTIONS**

The user of this standard should recognize that it covers many options of two or more conductor aerial assemblies or a single conductor intended for field assembly. The user should select the necessary options required for a complete description of the desired cable.

#### **1.3.1 Conductors**

See Section 2.

Metal – aluminum 1350, or annealed copper, coated or uncoated.

Size – aluminum 6 AWG to 477 kcmil; copper 8 AWG to 4/0 AWG

#### **1.3.2 Insulation**

See Section 3.

75 °C Rated – weather resistant low, linear low, medium, or high density polyethylene.

90 °C Rated – weather resistant low, linear low, medium, or high density crosslinked polyethylene.