

STANDARD FOR
TELECOMMUNICATIONS CABLE
AIRCORE, POLYOLEFIN INSULATED, COPPER CONDUCTOR
TECHNICAL REQUIREMENTS

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ICEA STANDARD FOR
AIRCORE, POLYOLEFIN INSULATED, COPPER CONDUCTOR
TELECOMMUNICATIONS CABLE
TECHNICAL REQUIREMENTS

SECTION 1 GENERAL

- 1.1 PURPOSE: The purpose of this Standard is to establish generic technical requirements that may be referenced by individual telecommunications cable specifications covering products intended for normal outside plant use. The parameters covered provide material, construction, and performance requirements that are applicable to aircore, polyolefin insulated and jacketed cables of all pair counts, including a variety of shield and jacket combinations and optional compartmental screening.

Because this Standard does not cover all details of individual cable design, it cannot be used as a single document for procurement of product. It is intended to be used in conjunction with an individual product specification that provides complete design details for the specific cable type and designates the applicable performance requirements. Such individual cable specifications may be prepared either by the user or the manufacturer. The specification designated for procurement is at the option of the user.

- 1.2 SCOPE: This Standard covers mechanical and electrical requirements for aircore, polyolefin insulated, copper conductor telecommunications cable. It provides alternative choices for type of insulation, core assembly, color code, sheath design (shielding materials, single or double jackets, and jacket thickness), and screened or non-screened core.

These cables are traditional outside plant (OSP) cables having a nominal mutual capacitance at 1 kHz of 83 nF/mile, with attenuation and crosstalk characterized at discrete frequencies up to 6.3 MHz. For cables characterized above 6.3 MHz, refer to ICEA S-99-688, Broadband Twisted Pair Cable, Aircore, Polyolefin Insulated, Copper Conductor.

This Standard is arranged in Sections. Each covers one specific area of cable requirement and may be referenced as complete Sections or as individual paragraphs.

Sections of this Standard where the user may specify a particular option are listed below:

- 2.1 Conductor Size
- 3.2 Insulation Type
- 4.1.3 Core Layup
- 4.3 Spare Pairs
- 4.5.2 Undulated Core