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**ICEA STANDARD FOR
DISTRIBUTION FRAME-WIRE
TECHNICAL REQUIREMENTS**

Published By

INSULATED CABLE ENGINEERS ASSOCIATION, INC.

Post Office Box 1568

Carrollton, GA 30112, U.S.A.

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Approved July 20, 2011 by
Insulated Cable Engineers Association, Inc.

Approved xxxx by
American National Standards Institute

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The user of this Standard is cautioned to observe any applicable health or safety regulations and rules relative to the manufacture and use of wire made in conformity with this Standard. This Standard hereafter assumes that manufacture, testing, installation, and maintenance of wires defined by this Standard will be performed only by properly trained personnel using suitable equipment and employing appropriate safety precautions.

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ACRONYMS, ABBREVIATIONS AND SYMBOLS

ac	Alternating Current
ANSI	American National Standards Institute
ASTM	American Society for Testing and Materials
AWG	American Wire Gauge
°C	Degrees of Temperature, Celsius scale
dc	Direct Current
EIA	Electronics Industry Alliance
EPA	Environmental Protection Agency
°F	Degrees of Temperature, Fahrenheit scale
ft	foot or feet
ICEA	Insulated Cable Engineers Association
IEC	International Electrotechnical Commission
ISO	International Organization for Standardization
in ²	square inch
kg	kilogram
km	kilometer
lb	pound
lbf	pound of force
m	meter
mm	millimeter
MPa	megapascal
μS	micro-Siemens
N	Newton
nF	nanofarad
NFPA	National Fire Protection Association
%	Percent
psi	pounds per square inch
PVC	Polyvinyl Chloride
RMS	Root-Mean-Square
TCLP	Toxicity Characteristics Leaching Procedure
UL	Underwriters Laboratories
°	degrees symbol, temperature or angle

DISTRIBUTION FRAME-WIRE 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 wire specifications covering products intended for cross-connecting the outside plant cable and the switching system terminations appearing on a distributing frame in the telecommunications central office. The parameters covered provide material, construction, and performance requirements.

Because this Standard does not cover all details of individual wire design, it cannot be used as a single document for procurement of product. This Standard is intended for use in conjunction with an individual product specification that provides complete design details for the specific wire type and designates the applicable performance requirements. Such individual wire 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 insulated, copper conductor, wires intended primarily for use as a telecommunications central office distribution frame wire. Depending upon the application, this Standard provides choices for materials.

The wires covered by this Standard are provided in singles, triples, one or two pair constructions. The wires are also provided with either a high stress or general purpose insulation.

Wires using high stress insulation should be used where user applications required use of a tougher insulating material. Wires using general purpose insulation should be used in normal user applications.