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Standard for Buried Telecommunication
Wire, Filled, Polyolefin Insulated, Copper
Conductor Technical Requirements

**STANDARD FOR
BURIED TELECOMMUNICATIONS WIRE
FILLED, POLYOLEFIN INSULATED, COPPER CONDUCTOR
TECHNICAL REQUIREMENTS**

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ACRONYMS, ABBREVIATIONS AND SYMBOLS

ANSI	American National Standards Institute
ASTM	American Society for Testing and Materials
ASQC	American Society for Quality Control
AWG	American Wire Gauge
°C	Degrees of Temperature, Celsius scale, Centigrade
CM	UL Listing designation for General Purpose Communication Cable
CMG	UL Listing designation for General Purpose Communication Cable
CMR	UL Listing designation for Riser Communication Cable
CMX	UL Listing designation for Communication Cable, Limited Use
dc	Direct Current
EIA	Electronic Industries Association
ELFEXT	Equal Level Far-End Crosstalk
FCC	Federal Communications Commission
f	Variable representing any frequency in the applicable range
°F	Degrees of Temperature, Fahrenheit scale
ft	foot or feet
ICEA	Insulated Cable Engineers Association
in	inch
ISO	International Organization for Standardization
lb	pounds
lbf	pounds of force
NEXT	Near-End Crosstalk
psi	pounds per square inch
PVC	Polyvinyl chloride
UL	Underwriters Laboratories
α	Attenuation

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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 normal outside plant use. 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. It is intended to be used 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 filled, polyolefin insulated, copper conductor, buried telecommunications wire. It provides alternative choices for type of insulation, type of filling compound, sheath design (shielding materials, single or double jackets, and jacket type and thickness) and armoring.

Buried wire is used to extend buried telephone plant from the distribution cable to the subscriber.

- 1.3 **OPTIONS AND INFORMATION:** This Standard is arranged in Sections covering specific areas of wire requirements and may be referenced as complete Sections or as individual paragraphs.

Paragraphs of this specification where the user may specify a particular option are listed below:

- 3.2 Insulation Type
- 4.4.1 Filling Compound Type
- 4.5 Flooding Compound
- 4.7 Rip Cord(s)
- 5.1 Shielding System
- 6.1 Inner Jacket
- 6.2.1 Outer Jacket (Material Type)
- 6.3 Armoring Systems
- 7.13 Fusing Coordination Test
- 8.6 Flammability Test
- 9.1 Identification and Marking
- 9.3 Packaging