UL 83A

STANDARD FOR SAFETY

Fluoropolymer Insulated Wire

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UL Standard for Safety for Fluoropolymer Insulated Wire, UL 83A

Second Edition, Dated July 7, 2026

Summary of Topics

This new Second Edition of ANSI/UL 83A dated July 7, 2026 includes the following changes in requirements:

– Test temperature tolerance; 13.1.1, 16.2.1, 20.1.1, and 20.2.1.

– Terminology for oven; 22.2.

– Clarification of color coating test parameters; 23.3 and 23.4.

– Additional criteria for long term aging; 24.1.

– Addition of conductor corrosion test; 29.

– Laser Printing; 30.1.1.

– Low temperature marking methods; 30.7.1.

– Updates to Table A.1

– Updates to align with ULSE Style Manual

The revised requirements are substantially in accordance with Proposal(s) on this subject dated March 20, 2026, May 22, 2026, and June 5, 2026.

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JULY 7, 2026

ANSI/UL 83A-2026

UL 83A

Standard for Fluoropolymer Insulated Wire

First Edition – February, 2016

Second Edition

July 7, 2026

This ANSI/UL Standard for Safety consists of the Second Edition.

The most recent designation of ANSI/UL 83A as an American National Standard (ANSI) occurred on July 7, 2026. ANSI approval for a standard does not include the Cover Page, Transmittal Pages, and Title Page.

Comments or proposals for revisions on any part of the Standard may be submitted to ULSE at any time. Proposals should be submitted via a Proposal Request in the Collaborative Standards Development System (CSDS) at https://csds.ul.com.

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INTRODUCTION

1 Scope

1.1 This Standard specifies the requirements for 600 V, single-conductor, fluoropolymer-insulated wires and cables in accordance with NFPA 70®, *National Electrical Code®* (NEC®).

Note: See Annex A for the complete list of wire types covered by this Standard.

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1.2 Products for which this Standard provides requirements might have applications not described in the electrical code listed in 1.1.

2 Units of Measurement

2.1 Values stated without parentheses are the requirement. Values in parentheses are explanatory or approximate information.

3 Referenced Publications

3.1 Any undated reference to a code or standard appearing in the requirements of this standard shall be interpreted as referring to the latest edition of that code or standard.

3.2 The following publications are referenced in this Standard:

ASTM B3-13, *Standard Specification for Soft or Annealed Copper Wire*

ASTM B8-11, *Standard Specification for Concentric-Lay-Stranded Copper Conductors, Hard, Medium-Hard, or Soft*

ASTM B33-10(2014), *Standard Specification for Tinned Soft or Annealed Copper Wire for Electrical Purposes*

ASTM B160-10(2014), *Standard Specification for Nickel Rod and Bar*

ASTM B172-10(2015), *Standard Specification for Rope-Lay-Stranded Copper Conductors Having Bunch-Stranded Members, for Electrical Conductors*

ASTM B173-10(2015), *Standard Specification for Rope-Lay-Stranded Copper Conductors Having Concentric-Stranded Members, for Electrical Conductors*

ASTM B174-10(2015), *Standard Specification for Bunch-Stranded Copper Conductors for Electrical Conductors*

ASTM B355-11, *Standard Specification for Nickel-Coated Soft or Annealed Copper Wire*

IEC 60228 (2004-11), *Conductors of insulated cables*

NFPA 70®, *National Electrical Code®* (NEC®)

UL 1685, *Vertical-Tray Fire-Propagation and Smoke-Release Test for Electrical and Optical-Fiber Cables*

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