



UL 1655

STANDARD FOR SAFETY

Community-Antenna Television Cables

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UL Standard for Safety for Community-Antenna Television Cables, UL 1655

Third Edition, Dated October 23, 2024

Summary of Topics

This new Third Edition of ANSI/UL 1655 dated October 23, 2024 incorporates editorial changes including renumbering and reformatting to align with current style.

The requirements are substantially in accordance with Proposal(s) on this subject dated August 2, 2024.

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UL 1655

Standard for Community-Antenna Television Cables

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Third Edition

October 23, 2024

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The most recent designation of ANSI/UL 1655 as an American National Standard (ANSI) occurred on October 23, 2024. 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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CONTENTS

INTRODUCTION

1	Scope	5
2	Units of Measurement	6
3	Referenced Publications	7

CONSTRUCTION

4	Materials	7
5	Center Conductor of Coaxial Members	8
6	Metal Coating of Center Conductor	10
7	Insulation	11
	7.1 Material and application	11
	7.2 Thicknesses	12
8	Coaxial Members	13
9	Electromagnetic Shields	13
10	Optical-Fiber Members	14
11	Binders	15
12	Communications Conductor	15
13	Core Wrap	15
14	Assembly of a Multiple-Member Cable	15
15	Overall Cable Jacket	16
	15.1 General	16
	15.2 Flexibility test	16
	15.3 Physical properties test	17
	15.4 Jacket	17
16	Metal Covering (Armor)	19
	16.1 General	19
	16.2 Smooth metal sheath	19
	16.3 Welded and corrugated metal sheath	20
	16.4 Extruded and corrugated metal sheath	20
	16.5 Interlocked armor	21
17	Jacket over Armor	22
18	Metallic Messenger	23

MANUFACTURING AND PRODUCTION TESTS

19	Production Line Testing (Spark and Dielectric)	23
	19.1 Alternative spark and dielectric voltage-withstand tests of all coaxial members	23

PERFORMANCE

20	Continuity Test of Center and Outer Conductors and Shields	24
21	D-C Resistance Test of Center Conductors	24
	21.1 Requirements	24
22	Cold Bend Test of the Complete Cable	29
23	Smoke and Flame Testing of Plenum Cables	29
24	Flame Testing of Riser Cables	30
25	VW-1 (Vertical-Specimen) Flame Test of Limited-Use Cables	30
26	Alternative Vertical-Tray Flame Tests of General-Purpose Cables	30
	26.1 Choice of test by the manufacturer	30
	26.2 Changes in construction	30

26.3	UL test	31
26.4	FT4/IEEE 1202 test.....	31
27	Sunlight-Resistance Test	31
28	Crushing Resistance Test of Center-Conductor Insulation	31
29	Crushing Test of Cable Marked for Direct Burial	32
30	Copper Sulphate Test of Zinc Coating on Steel Strip for and from Interlocked Steel Armor	33
31	Tension Test of Interlocked Steel or Aluminum Armor	35
32	Flexibility Test of Cable Having Interlocked Armor or a Smooth or Corrugated Metal Sheath ...	37
33	Durability Test of Ink Printing	38

MARKINGS

34	Intervals	38
35	Coding	38
36	Information on or in the Cable.....	38
37	Information on the Tag, Reel, or Carton	41
38	Multiple Markings	41
39	Date of Manufacture	42

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INTRODUCTION

1 Scope

1.1 This Standard states the construction, test, and marking requirements covering the safety of single and multiple coaxial and coaxial/optical-fiber cables for the distribution of radio frequency signals such as employed in a community antenna television system, and for supplying low-energy power at a potential not exceeding 60 volts to equipment directly associated with the signal distribution. These are power-limited cables and are of the following types for installation and use as the CATV cables specified in Article 820 and other applicable parts of the National Electrical Code (NEC), NFPA 70. Electrically nonconductive material separates each optical-fiber member from the rest of the cable.

a) PLENUM CABLES – Type CATVP (coaxial) and Type CATVP-OF (coaxial/optical-fiber). These cables are for installation as specified in Section 800.179(A) of the National Electrical Code, NFPA 70 in a duct, plenum, or other space used to transport environmental air without the cable being enclosed in raceway in that space.

b) RISER CABLES – Type CATVR (coaxial) and Type CATVR-OF (coaxial/optical-fiber). These cables are for installation as specified in Section 800.179(B) of the National Electrical Code, NFPA 70 in vertical runs in a shaft or for vertical runs that penetrate more than one floor.

c) GENERAL-PURPOSE CABLES – Type CATV (coaxial) and Type CATV-OF (coaxial/optical-fiber). These cables are general-applications commercial cables for use as specified in Section 800.179(C) of the National Electrical Code, NFPA 70.

d) LIMITED-USE CABLES – Type CATVX (coaxial) and Type CATVX-OF (coaxial/optical-fiber). These are limited use cables as specified in Section 800.179(D) of the National Electrical Code, NFPA 70.

1.2 This Standard does not specify the impedance or other signal-carrying characteristics of these cables. This Standard does not cover tests for the signal-carrying performance of these cables.

1.3 Armored cables are covered by interlocked metal strip or a smooth or corrugated metal sheath with or without a jacket over the armor. Cables for encasement in concrete, mortar, other masonry, plaster, or the like have metal armor and a jacket over the armor. Cables for direct burial in the earth (see markings in [1.8](#)) are subject to a 1000-pound crushing test. Cables for direct burial are not required to be armored. Cables for direct burial that are armored have a jacket over the armor. All other cables (unarmored, flat or round) have an overall jacket. Some overall jackets incorporate a nonmetallic messenger. A metallic messenger may be joined to the cable jacket by an interconnecting web.

1.4 Cables of a CATV type do not have a voltage rating.

1.5 Cables of materials that qualify for temperatures above 60 °C (140 °F) are marked with a temperature rating of 75, 90, 105, 125, 150, 200 °C or 250 °C (167, 194, 221, 257, 302, 392 °F or 482 °F). Temperature marking is not required for cables that qualify for a temperature rating of 60 °C (140 °F).

1.6 Cables that contain one or more electromagnetic shields in addition to the outer conductors of the coaxial members (these shields are identified as "additional" in [9.1](#)) are not required to be marked to indicate the presence of the additional shielding. A shielded cable that is marked has "shielded" on the tag and either on the overall cable jacket or legible through the jacket.

1.7 Cables that qualify for exposure to sunlight (720-hour sunlight-resistance test – see [27.1](#)) have the designation "sun res" or "sunlight resistant" on the tag and either on the overall cable jacket or legible through the jacket.