# ANSI/ICEA S-87-640-2016

# STANDARD FOR OPTICAL FIBER

## **OUTSIDE PLANT COMMUNICATIONS CABLE**

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#### FOREWORD

#### (This Foreword is not part of this Standard.)

This Standard provides information on specifying optical fiber cables for outdoor use in telecommunications applications.

The first edition of this Standard was approved by ICEA on March 4, 1992, and the second revision on September 15, 1999. A third revision was approved by ICEA on June 8, 2005. It was published by ICEA, but was not published as an ANSI-approved Standard. Revision 4 of this Standard, approved by ICEA on September 13, 2006, was a republication of revision 3. It was approved by The American National Standards Institute (ANSI) on December 8, 2006 and adopted by the Telecommunications Industry Association (TIA) as TIA-472D000-B in April 2007. The fifth revision was approved by ICEA on June 7, 2011 and by ANSI on January 17, 2012. The members of the ICEA Communications Cable Division Working Group who participated in the sixth edition of this standard were:

Jim Ryan, Chairman and Editor

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This issue replaces the previous issue of ANSI/ICEA S-87-640-2011, *Standard for Optical Fiber Outside Plant Communications Cable*. Major changes in this revision include the following:

- Addition of new fiber types
- Added 200 µm fiber coating option
- Redefined hybrid and composite cable
- Added additional ribbon types
- No fiber splices allowed in cable
- Clarified the residual fiber strain for greater than 100 to 200 kpsi fiber is a maximum of 17 % or proof test load
- Figure 8 galloping test now references IEC 60794-1-21 Method E26 standard
- Added jacket fungus resistance test.

This Standard contains eight annexes. Annexes C, D, and F are normative and are considered part of this Standard. Annex E is normative and considered part of this Standard when required by the customer. Annexes A, B, G, and H are informative and are not considered part of this Standard.

ICEA Standards are adopted in the public interest and are designed to eliminate misunderstanding between the manufacturer and user and to assist the user in selecting and obtaining proper products for a particular need. The existence of an ICEA Standard does not in any respect preclude the manufacture or use of products not conforming to this Standard.

The user of this Standard is cautioned to observe any applicable health or safety regulations and rules relative to the manufacture and use of cable made in conformity with this Standard. This Standard hereafter assumes that only properly trained personnel using suitable equipment will manufacture, test, install, and/or perform maintenance on cables defined by this Standard.

Requests for interpretation of this ICEA Standard must be submitted in writing (hard copy or email) to the Secretary of the Insulated Cable Engineers Association. The mailing address of ICEA Headquarters and a *Contact* link are shown on the ICEA web site - <u>www.icea.net</u>. An official written interpretation will be provided.

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## CONTENTS

SECTION	<u>P</u> /	AGE
PART 1	INTRODUCTION	1
1.1	Scope	1
1.2	General	3
1.3	Units	4
1.4	Definitions	4
1.5	References	5
1.6	Information to be Supplied by the User	5
1.7	Modification of this Standard	6
1.8	Quality Assurance	6
1.9	Safety Considerations	6
PART 2	OPTICAL FIBERS	8
2.1	General	8
2.2	Optical Fiber Classes	8
2.3	Optical Fiber Requirements	8
2.4	Optical Fiber Coating and Requirements	8
PART 3	OPTICAL FIBER CORE UNITS	11
3.1	General	11
3.2	Loose Buffer Tubes	11
3.3	Optical Fiber Bundles	12
3.4	Optical Fiber Ribbons	12
3.5	Tight Buffers	13
PART 4	CABLE AND COMPONENT ASSEMBLY AND IDENTIFICATIO	N 15
4.1	Cabling of Multi-Fiber and Composite Optical Cables	15
4.2	Identification of Fibers within a Unit	15
4.3	Identification of Units within a Cable	15
4.4	Identification of Conductors in Hybrid Cable	15
4.5	Strength Members	17

# CONTENTS (cont.)

SECTION	ļ	PAGE
Part 4:	(Continued)	
4.6	Assembly of Cables	17
4.7	Filling and Flooding Material	17
PART 5	COVERINGS	19
5.1	Binders	19
5.2	Core Wrap	19
5.3	Shielding, Armoring, or Other Metallic Coverings	19
5.4	Jackets	21
5.5	Jacket Repairs	25
5.6	Other Coverings	
5.7	Ripcords	26
PART 6	OTHER REQUIREMENTS	27
6.1	Identification and Date Markings	27
6.2	Optical Cable Identification and Other Markings	
6.3	Length Marking	
6.4	Cable Remarking	
6.5	Packaging, Packing, and Package Marking	29
PART 7	TESTING, TEST METHODS, AND REQUIREMENTS	31
7.1	Testing	31
7.2	Extent of Testing	31
7.3	Standard Test Conditions	31
7.4	Electrical Testing of Conductive Materials	
7.5	Construction, Color Code, and Identification	
7.6	Jacket Thickness Measurements	33
7.7	Jacket Material Density Measurement	33
7.8	Jacket Tensile Strength, Yield Strength, and Ultimate Elongatic	on Tests. 33
7.9	Jacket Material Absorption Coefficient Test	

# CONTENTS (cont.)

## **SECTION**

## **PAGE**

Part 7:	(Continued)	
7.10	Environmental Stress Crack Resistance Test	34
7.11	Jacket Shrinkage Test	35
7.12	Verification of Cable Length and Marking Accuracy	36
7.13	Cable and Component Dimensions	36
7.14	Ribbon Dimensions	37
7.15	Ribbon Twist Test	38
7.16	Ribbon Residual Twist Test	38
7.17	Ribbon Separability Test	39
7.18	Ripcord Functional Test	40
7.19	Material Compatibility and Cable Aging Test	40
7.20	Tight Buffer Strippability Test	42
7.21	Cable Low and High Temperature Bend Test	42
7.22	Cable External Freezing Test	43
7.23	Compound Flow (Drip) Test for Filled Cable	43
7.24	Cable Temperature Cycling Test	44
7.25	Hydrogen Evolution in Cable	44
7.26	Cable Sheath Adherence Test	45
7.27	Cyclic Flexing Test	45
7.28	Water Penetration Test	46
7.29	Cable Impact Test	47
7.30	Cable Tensile Loading and Fiber Strain Test	47
7.31	Cable Compression Loading Test	49
7.32	Cable Twist Test	50
7.33	Cable Lightning Damage Susceptibility Test	50
7.34	Mid-Span Buffer Tube Storage	51
7.35	Central Tube Cable Coupling	52
7.36	Oxidative Induction Time, OIT	52
7.37	Buffer Tube Kink Test	53
7.38	Jacket Fungus Resistance	54