

NFPA®

1983

**Standard on
Life Safety Rope
and Equipment for
Emergency Services**

2017



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NFPA® 1983

Standard on

Life Safety Rope and Equipment for Emergency Services

2017 Edition

This edition of NFPA 1983, *Standard on Life Safety Rope and Equipment for Emergency Services*, was prepared by the Technical Committee on Special Operations Protective Clothing and Equipment and released by the Correlating Committee on Fire and Emergency Services Protective Clothing and Equipment. It was issued by the Standards Council on November 11, 2016, with an effective date of December 1, 2016, and supersedes all previous editions.

This document has been amended by one or more Tentative Interim Amendments (TIAs) and/or Errata. See “Codes & Standards” at www.nfpa.org for more information.

This edition of NFPA 1983 was approved as an American National Standard on December 1, 2016.

Origin and Development of NFPA 1983

The Technical Committee on Protective Equipment for Fire Fighters (later renamed Technical Committee on Fire Service Protective Clothing and Equipment) began work on this standard in 1982 in answer to requests from the fire service to establish requirements for rope used by the fire service to perform rescues. During the development of the standard, harnesses and hardware used with the rope in rescue operations were included. The work was completed in the spring of 1984 and submitted to NFPA for official adoption. The first edition was issued on June 6, 1985.

The Subcommittee on Life Safety Ropes began revision of the 1985 edition in late 1987 and turned over its proposals to the Technical Committee in December 1988. The Technical Committee completed its work on the document in April 1989, and it was submitted for the Annual Meeting 1990 cycle. The second edition was issued on July 20, 1990.

During 1993, NFPA restructured the manner in which committees were organized, and all standing subcommittees were eliminated. Within the Technical Committee on Fire Service Protective Clothing and Equipment, the former standing subcommittees were reorganized as task groups to address specific technical issues, and the technical committee assumed the entire responsibility for NFPA 1983.

In October 1994, just after the revisions for the third edition were completed, the Standards Council appointed the Technical Correlating Committee on Fire and Emergency Services Protective Clothing and Equipment to oversee all fire and emergency services protective clothing and equipment issues. The existing Technical Committee on Fire Service Protective Clothing and Equipment had ceased to exist in May 1995, and seven new technical committees, each responsible for a different segment of the fire and emergency services protective clothing and equipment spectrum, were now in place. The future responsibility for NFPA 1983 would now rest with the new Technical Committee on Special Operations Protective Clothing and Equipment, operating under the Technical Correlating Committee on Fire and Emergency Services Protective Clothing and Equipment.

The third (1995) edition of NFPA 1983 was a complete revision of the document. The document was reformatted to present the certification requirements, the product labeling and user information requirements, the design requirements, the performance requirements, and the testing requirements in separate chapters. A different approach was taken to life safety rope and the various items used in conjunction with the rope. While the life safety rope remained as the key subject of the document, other items used in conjunction with the rope were addressed as system components.

The 1995 edition also included new criteria for personal escape rope to cover a type of life safety rope carried by fire fighters/rescuers and used only for fire fighter/rescuer escape or self-rescue in critical entrapment situations where the rope would provide the only viable means of escape. There were also new criteria, in addition to the harness requirements, for two types of belts: one intended for use to position a fire fighter on a ladder and a second type for escape/self-rescue using a life safety rope. Definitions were expanded to provide better understanding of terms. The testing requirements were greatly expanded to provide the criteria with which to evaluate performance and to determine pass/fail.

The 1995 edition was acted on by the membership of the Association at the Annual Meeting in Denver, Colorado, on May 24, 1995, and was issued with an effective date of August 11, 1995.

The fourth (2001) edition of NFPA 1983 added a new type of rope — a throwline, which is a floating rope intended to be thrown to a person in water or used as a tether for rescuers during water rescue incidents. New requirements for pulleys and portable anchors were also added to the 2001 edition as new items of system components. The former terminology for one-person and two-person load classifications was changed to a simpler load classification based on the weight that the rope or system is designed to support.

In the 2001 edition, testing methods for descent control devices were modified to provide more accurate testing for the three types of descenders. Other testing modifications were made throughout Chapter 6 to clarify testing methods and improve reproducibility of testing results. Also included were new requirements for improved product quality assurance through manufacturers being registered as compliant with the ISO and accreditation of certification laboratories. Annual product evaluation, testing, and recertification were also added. All three of those new criteria were directed to raise the bar for product and certification quality and to provide a better level of safety for the end users.

Throughout the 2001 edition, modifications to existing text were made in the continuing attempt to make the document clearer, less ambiguous, and easier to use by both manufacturers and certification organizations. This process continues during every revision cycle, and the input received from document users is helpful in fixing many of these issues.

The 2001 edition was acted on by the Association membership at the Fall Meeting in Orlando, Florida, on November 15, 2000, and was issued with an effective date of February 9, 2001.

For the fifth (2006) edition of NFPA 1983, the title of the document was changed to *Standard on Life Safety Rope and Equipment for Emergency Services*, to reflect the broader audience for this type of equipment. The 2006 edition continued to refine design and performance criteria and test methods. The former approach of system components was changed to all items being independent and tested according to the type of use to which they could be subjected. Labeling requirements were specified for items that can have detachable components to better advise the user to be sure that all components are assembled properly in order to safely use the equipment.

Throughout the 2006 edition document, modifications to existing text were made in the continuing attempt to make the document clearer, less ambiguous, and easier to use by both manufacturers and the certification organizations. This process continues during every revision cycle and the input received from document users has been very helpful in fixing many of these issues.

The 2006 edition was issued by the NFPA Standards Council on January 27, 2006, with an effective date of February 16, 2006.

The 2012 (sixth) edition of NFPA 1983 featured editorial changes, new definitions, and current terminology. Several new performance requirements were added to Chapter 7, including those for litters, escape webbing, fire escape webbing, victim extrication devices, escape systems, fire escape rope, manufacturer-supplied eye termination, moderate elongation laid life saving rope, belay devices, and escape anchor devices. The related test methods for those items were added to Chapter 8.

For the 2017 (seventh) edition, the Technical Committee has completely reorganized the document and matched up the requirements in Chapters 5, 6, and 7 to make it easier for the user to follow and understand. They also have made corresponding changes in Chapter 1 to the scope and purpose of the standard. This reorganization marked the first step in developing the proposed standard NFPA 1858, a selection, care, and maintenance document that will complement NFPA 1983.

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This Committee shall also have primary responsibility for documents on station/work uniform garments that are not of themselves primary protective garments but can be combined with a primary protective garment to serve dual or multiple functions.

Additionally, this Committee shall have primary responsibility for documents on the selection, care, and maintenance of special operations protective clothing and equipment by fire and emergency services organizations and personnel.

Contents

Chapter 1 Administration	1983- 9	6.9 Life Safety Harnesses.	1983- 43
1.1 Scope.	1983- 9	6.10 Belts.	1983- 43
1.2 Purpose.	1983- 9	6.11 Victim Extrication Devices.	1983- 43
1.3 Application.	1983- 9	6.12 End-to-End Straps.	1983- 44
1.4 Units.	1983- 10	6.13 Multiple Configuration Straps.	1983- 44
Chapter 2 Referenced Publications	1983- 10	6.14 Belay Devices.	1983- 44
2.1 General.	1983- 10	6.15 Carabiners and Snap Links.	1983- 44
2.2 NFPA Publications.	1983- 10	6.16 Descent Control Devices.	1983- 45
2.3 Other Publications.	1983- 10	6.17 Escape Anchors.	1983- 45
2.4 References for Extracts in Mandatory Sections. (Reserved)	1983- 11	6.18 Litters.	1983- 45
Chapter 3 Definitions	1983- 11	6.19 Portable Anchors.	1983- 45
3.1 General.	1983- 11	6.20 Pulleys.	1983- 45
3.2 NFPA Official Definitions.	1983- 11	6.21 Rope Grabs and Ascending Devices.	1983- 45
3.3 General Definitions.	1983- 11	6.22 Other Auxiliary Equipment.	1983- 45
Chapter 4 Certification	1983- 14	6.23 Escape Systems.	1983- 46
4.1 General.	1983- 14	6.24 Fire Escape Systems.	1983- 46
4.2 Certification Program.	1983- 14	6.25 Manufactured Systems.	1983- 46
4.3 Inspection and Testing.	1983- 15	Chapter 7 Performance Requirements	1983- 46
4.4 Recertification.	1983- 16	7.1 Life Safety Rope Performance Requirements.	1983- 46
4.5 Manufacturer's Quality Assurance Program. ..	1983- 16	7.2 Escape Rope Performance Requirements.	1983- 46
4.6 Hazards Involving Compliant Product.	1983- 16	7.3 Escape Webbing Performance Requirements.	1983- 47
4.7 Manufacturers' Investigation of Complaints and Returns.	1983- 18	7.4 Fire Escape Rope Performance Requirements.	1983- 47
4.8 Manufacturers' Safety Alert and Product Recall Systems.	1983- 18	7.5 Fire Escape Webbing Performance Requirements.	1983- 47
Chapter 5 Labeling and Information	1983- 19	7.6 Throwline Performance Requirements.	1983- 47
5.1 Life Safety Rope.	1983- 19	7.7 Moderate Elongation Laid Life-Saving Rope Performance Requirements.	1983- 47
5.2 Escape Rope.	1983- 20	7.8 Manufacturer-Supplied Eye Termination Performance Requirements.	1983- 48
5.3 Escape Webbing.	1983- 21	7.9 Life Safety Harness Performance Requirements.	1983- 48
5.4 Fire Escape Rope.	1983- 21	7.10 Belt Performance Requirements.	1983- 49
5.5 Fire Escape Webbing.	1983- 22	7.11 Victim Extrication Device Performance Requirements.	1983- 49
5.6 Throwlines.	1983- 23	7.12 End-to-End Strap Performance Requirements.	1983- 50
5.7 Moderate Elongation Laid Life-Saving Rope.	1983- 23	7.13 Multiple Configuration Strap Performance Requirements.	1983- 50
5.8 Manufacturer-Supplied Eye Termination.	1983- 24	7.14 Belay Device Performance Requirements.	1983- 50
5.9 Life Safety Harnesses.	1983- 26	7.15 Carabiner and Snap-Link Performance Requirements.	1983- 50
5.10 Belts.	1983- 27	7.16 Descent Control Device Performance Requirements.	1983- 51
5.11 Victim Extrication Devices.	1983- 28	7.17 Escape Anchor Device Performance Requirements.	1983- 51
5.12 End-to-End Straps.	1983- 29	7.18 Litter Performance Requirements.	1983- 51
5.13 Multiple Configuration Straps.	1983- 30	7.19 Portable Anchor Performance Requirements.	1983- 51
5.14 Belay Devices.	1983- 31	7.20 Pulley Performance Requirements.	1983- 51
5.15 Carabiners and Snap Links.	1983- 31	7.21 Rope Grab and Ascending Device Performance Requirements.	1983- 52
5.16 Descent Control Devices.	1983- 32	7.22 Other Auxiliary Equipment Performance Requirements.	1983- 52
5.17 Escape Anchors.	1983- 33	7.23 Escape System Performance Requirements. ..	1983- 52
5.18 Litters.	1983- 34	7.24 Fire Escape System Performance Requirements.	1983- 52
5.19 Portable Anchors.	1983- 35	7.25 Manufactured System Performance Requirements.	1983- 53
5.20 Pulleys.	1983- 36	Chapter 8 Test Methods	1983- 53
5.21 Rope Grabs and Ascending Devices.	1983- 37	8.1 Sample Preparation Procedures.	1983- 53
5.22 Other Auxiliary Equipment.	1983- 38		
5.23 Escape Systems.	1983- 39		
5.24 Fire Escape Systems.	1983- 40		
5.25 Manufactured Systems.	1983- 41		
Chapter 6 Design and Construction Requirements	1983- 42		
6.1 Life Safety Rope.	1983- 42		
6.2 Escape Rope.	1983- 42		
6.3 Escape Webbing.	1983- 42		
6.4 Fire Escape Rope.	1983- 42		
6.5 Fire Escape Webbing.	1983- 42		
6.6 Throwlines.	1983- 42		
6.7 Moderate Elongation Laid Life-Saving Rope.	1983- 42		
6.8 Manufacturer-Supplied Eye Termination.	1983- 43		

8.2	Rope Breaking and Elongation Test.	1983– 53	8.14	Escape Descent Control Device and Systems	
8.3	Static Test.	1983– 54		Drop Test.	1983– 64
8.4	Drop Test.	1983– 56	8.15	Elevated Temperature Rope Test.	1983– 64
8.5	Carabiner and Snap-Link Tensile Test.	1983– 58	8.16	Flame Resistance Test.	1983– 65
8.6	Manner of Function Tensile Test.	1983– 58	8.17	Heat Resistance Test.	1983– 65
8.7	Breaking Strength Test.	1983– 59	Annex A	Explanatory Material	1983– 66
8.8	Corrosion Resistance Test.	1983– 61	Annex B	Guide to Revised Chapter Order	1983– 73
8.9	Floatability Test.	1983– 62	Annex C	Informational References	1983– 77
8.10	Product Label Durability Test.	1983– 62	Index		1983– 78
8.11	Holding Test.	1983– 63			
8.12	Litter Strength Test.	1983– 63			
8.13	Payout Test.	1983– 63			

NFPA 1983

Standard on

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2017 Edition

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NOTICE: An asterisk (*) following the number or letter designating a paragraph indicates that explanatory material on the paragraph can be found in Annex A.

A reference in brackets [] following a section or paragraph indicates material that has been extracted from another NFPA document. As an aid to the user, the complete title and edition of the source documents for extracts in mandatory sections of the document are given in Chapter 2 and those for extracts in informational sections are given in Annex C. Extracted text may be edited for consistency and style and may include the revision of internal paragraph references and other references as appropriate. Requests for interpretations or revisions of extracted text shall be sent to the technical committee responsible for the source document.

Information on referenced publications can be found in Chapter 2 and Annex C.

Chapter 1 Administration

1.1 Scope.

1.1.1 This standard shall specify minimum design, performance, testing, and certifications requirements for life safety rope, escape rope, water rescue throwlines, life safety harnesses, belts, victim extrication devices, litters, escape webbing, escape systems, and auxiliary equipment for emergency services personnel.

1.1.2 This standard shall specify requirements for *new* life safety rope, escape rope, water rescue throwlines, life safety harnesses, belts, manufacturer-supplied eye terminations, moderate elongation laid life safety rope, belay devices, and auxiliary equipment.

1.1.3 This standard shall not specify requirements for any accessories that could be attached to the certified product but are not necessary for the certified product to meet the requirements of this standard.

1.1.4 This standard shall not specify requirements for any utility rope.

1.1.5 This standard shall not specify requirements for any rope or associated equipment designed for mountain rescue, cave rescue, lead climbing operations, or where expected hazards and situations dictate other performance requirements.

1.1.6* This standard shall not specify requirements for any rope or equipment for fall protection pertaining to employees of general industry or the construction and demolition industry.

1.1.7 This standard shall not be construed as addressing all of the safety concerns associated with the use of compliant life safety rope or associated equipment. It shall be the responsibility of the persons and organizations that use compliant life safety rope or associated equipment to establish safety and health practices and determine the applicability of regulatory limitations prior to use.

1.1.8 This standard shall not be construed as addressing all of the safety concerns, if any, associated with the use of this standard by testing facilities. It shall be the responsibility of the persons and organizations that use this standard to conduct testing of life safety rope to establish safety and health practices and determine the applicability of regulatory limitations prior to using this standard for any designing, manufacturing, and testing.

1.1.9 Nothing herein shall restrict any jurisdiction or manufacturer from exceeding these minimum requirements.

1.2 Purpose.

1.2.1* The purpose of this standard shall be to establish minimum levels of performance for life safety rope, escape rope, water rescue throwlines, life safety harnesses, belts, manufacturer-supplied eye terminations, moderate elongation laid life safety rope, belay devices, and auxiliary equipment for emergency services personnel.

1.2.2 Controlled laboratory tests used to determine compliance with the performance requirements of this standard shall not be deemed as establishing performance for all situations to which this equipment could be exposed.

1.2.3 This standard is not intended to serve as a detailed manufacturing or purchase specification, but shall be permitted to be referenced in purchase specifications as minimum requirements.

1.3 Application.

1.3.1 This standard shall apply to the design, performance, testing, and certification of new emergency services life safety rope, escape rope, water escape webbing, fire escape rope, fire escape webbing, throwlines, life safety harnesses, belts, victim extrication devices, end-to-end straps, multiple configuration straps, manufacturer-supplied eye terminations, moderate elongation laid life saving rope, belay devices, carabiners, escape anchors, litters, portable anchors, pulleys, rope grab and

ascending devices, escape systems, fire escape systems, manufactured systems, and other auxiliary equipment.

1.3.2 This standard shall not apply to rope or equipment for use where specific situations dictate other performance requirements such as mountain rescue, cave rescue, lead climbing operations, recreational use, and industrial fall protection for general industry and the construction and demolition industry.

1.3.3 This edition of NFPA 1983 shall not apply to any life safety rope or system components manufactured to previous editions of this standard.

1.3.4* This standard shall not apply to rope or equipment for operations where personnel are required to work above anchor points.

1.3.5 This standard shall not apply to use requirements for life safety rope and associated life safety rope equipment because those requirements are specified in NFPA 1500.

1.3.6 The requirements of this standard shall not apply to any accessories that might be attached to any life safety rope or associated life safety rope equipment.

1.4 Units.

1.4.1 In this standard, values for measurement are followed by an equivalent in parentheses, but only the first stated value shall be regarded as the requirement.

1.4.2 Equivalent values in parentheses shall not be considered as the requirement, as these values are approximate.

Chapter 2 Referenced Publications

2.1 General. The documents or portions thereof listed in this chapter are referenced within this standard and shall be considered part of the requirements of this document.

2.2 NFPA Publications. National Fire Protection Association, 1 Batterymarch Park, Quincy, MA 02169-7471.

NFPA 1500, *Standard on Fire Department Occupational Safety and Health Program*, 2013 edition.

2.3 Other Publications.

2.3.1 AATCC Publications. American Association of Textile Chemists and Colorists, P.O. Box 12215, Research Triangle Park, NC 27709.

AATCC 135, *Dimensional Changes in Automatic Home Laundering of Woven and Knit Fabrics*, 2010.

2.3.2 ASTM Publications. ASTM International, 100 Barr Harbor Drive, P.O. Box C700, West Conshohocken, PA 19428-2959.

ASTM B117, *Standard Practice for Operating Salt Spray (Fog) Apparatus*, 2011.

ASTM D4966, *Standard Test Method for Abrasion Resistance of Textile Fabrics (Martindale Abrasion Tester Method)*, 2012 e1.

ASTM D6413/D6413M, *Standard Test Method for Flame Resistance of Textiles (Vertical Test)*, 2015.

ASTM D7138, *Standard Test Method to Determine Melting Temperature of Synthetic Fibers*, 2016.

ASTM E794, *Standard Test Method for Melting and Crystallization Temperatures by Thermal Analysis*, 2012.

ASTM F1772, *Standard Specification for Climbing Harnesses*, 2012.

ASTM F1956, *Standard Specification for Rescue Carabiners*, 2013.

ASTM F2436, *Standard Test Method for Measuring the Performance of Synthetic Rope Rescue Belay Systems Using a Drop Test*, 2014.

ASTM F2821, *Standard Test Methods for Basket Type Rescue Litters*, 2015.

ASTM F2894, *Standard Test Method for Evaluation of Materials, Protective Clothing and Equipment for Heat Resistance Using a Hot Air Circulating Oven*, 2014.

2.3.3 Cordage Institute Publications. The Cordage Institute, 994 Old Eagle School Road, Suite 1019, Wayne, PA 19087.

CI 1801, *Low Stretch and Static Kernmantle Life Safety Rope*, 2007.

CI 1805, *3-Strand Life Safety Rope, Moderate Stretch*, 2008.

2.3.4 ISO Publications. International Organization for Standardization, ISO Central Secretariat, BIBC II, Chemin de Blandonnet 8, CP 401, 1214 Vernier, Geneva, Switzerland.

ISO Guide 27, *Guidelines for corrective action to be taken by a certification body in the event of misuse of its mark of conformity*, 1983.

ISO 9001, *Quality management systems — requirements*, 2008.

ISO 9001, *Quality management systems — requirements*, 2015.

ISO 17011, *General requirements for accreditation bodies accrediting conformity assessment bodies*, 2004.

ISO/IEC 17021, *Conformity assessment — Requirements for bodies providing audit and certification of management systems*, 2011.

ISO/IEC 17025, *General requirements for the competence of testing and calibration laboratories*, 2005.

ISO/IEC 17065, *Conformity assessment — Requirements for bodies certifying products, processes, and services*, 2012.

ISO 22159, *Personal equipment for protection against falls — Descending devices*, 2007.

2.3.5 SAE International Publications. Society of Automotive Engineers, 400 Commonwealth Drive, Warrendale, PA 15096-0001.

SAE AMS-2175A, *Castings, Classification and Inspection of*, 2010.

2.3.6 UL Publications. Underwriters Laboratories Inc., 333 Pfingsten Road, Northbrook, IL 60062-2096.

ANSI/UL 913, *Standard for Intrinsically Safe Apparatus and Associated Apparatus for Use in Class I, II, and III, Division 1, Hazardous (Classified) Locations*, 2006, revised 2013.

2.3.7 U.S. Government Publications. U.S. Government Publishing Office, 732 North Capitol Street, NW, Washington, DC 20401-0001.

MIL-83420M, *Military Specification: General Specification for Flexible Wire Rope for Aircraft Control*, 1 April 2005.

2.3.8 Other Publications.

Merriam-Webster's Collegiate Dictionary, 11th edition, Merriam-Webster, Inc., Springfield, MA, 2003.

2.4 References for Extracts in Mandatory Sections. (Reserved)

Chapter 3 Definitions

3.1 General. The definitions contained in this chapter shall apply to the terms used in this standard. Where terms are not defined in this chapter or within another chapter, they shall be defined using their ordinarily accepted meanings within the context in which they are used. *Merriam-Webster's Collegiate Dictionary*, 11th edition, shall be the source for the ordinarily accepted meaning.

3.2 NFPA Official Definitions.

3.2.1* Approved. Acceptable to the authority having jurisdiction.

3.2.2* Authority Having Jurisdiction (AHJ). An organization, office, or individual responsible for enforcing the requirements of a code or standard, or for approving equipment, materials, an installation, or a procedure.

3.2.3 Labeled. Equipment or materials to which has been attached a label, symbol, or other identifying mark of an organization that is acceptable to the authority having jurisdiction and concerned with product evaluation, that maintains periodic inspection of production of labeled equipment or materials, and by whose labeling the manufacturer indicates compliance with appropriate standards or performance in a specified manner.

3.2.4* Listed. Equipment, materials, or services included in a list published by an organization that is acceptable to the authority having jurisdiction and concerned with evaluation of products or services, that maintains periodic inspection of production of listed equipment or materials or periodic evaluation of services, and whose listing states that either the equipment, material, or service meets appropriate designated standards or has been tested and found suitable for a specified purpose.

3.2.5 Shall. Indicates a mandatory requirement.

3.2.6 Should. Indicates a recommendation or that which is advised but not required.

3.2.7 Standard. An NFPA standard, the main text of which contains only mandatory provisions using the word "shall" to indicate requirements and which is in a form generally suitable for mandatory reference by another standard or code or for adoption into law. Nonmandatory provisions are not to be considered a part of the requirements of a standard and shall be located in an appendix, annex, footnote, informational note, or other means as permitted in the NFPA Manuals of Style. When used in a generic sense, such as in the phrase "standards development process" or "standards development activities," the term "standards" includes all NFPA Standards, including Codes, Standards, Recommended Practices, and Guides.

3.3 General Definitions.

3.3.1 Adjusting Device. See 3.3.18.1.

3.3.2 Ascending Device. See 3.3.18.2.

3.3.3 Attachment Point.

3.3.3.1* Load-Bearing Attachment Point. Point on a harness, victim extrication device, or escape belt that is used for connection to an anchor system that will provide full support and fall arrest for the designed load.

3.3.3.2* Positioning Attachment Point. Point on a harness or belt that is used for connection to an anchor system that will support a person's weight for work at height.

3.3.4 Auxiliary Equipment. Equipment items that are load bearing and designed to be utilized with life safety rope and harness.

3.3.5 Belay Device. See 3.3.18.3.

3.3.6 Belay System. A belay device and any other components required for the belay device to function.

3.3.7 Belt. An equipment item configured as a device that fastens around the waist only and designated as a ladder belt or an escape belt.

3.3.7.1* Escape Belt. A compliant equipment item that is intended for use by the wearer only as an emergency self-rescue device.

3.3.7.2 Ladder Belt. A compliant equipment item that is intended for use as a positioning device for a person on a ladder.

3.3.8 Block Creel Construction. See 3.3.63.1.

3.3.9 Buckle. A load-bearing connector that is an integral part of an auxiliary equipment item and used to connect two pieces of webbing.

3.3.10 Carabiner. An auxiliary equipment system item consisting of a load-bearing connector with a self-closing gate used to join other components.

3.3.11 Certification/Certified. A system whereby a certification organization determines that a manufacturer has demonstrated the ability to produce a product that complies with the requirements of this standard, authorizes the manufacturer to use a label on listed products that comply with the requirements of this standard, and establishes a follow-up program conducted by the certification organization as a check on the methods the manufacturer uses to determine compliance with the requirements of this standard.

3.3.12 Certification Organization. An independent, third-party organization that determines product compliance with the requirements of this standard with a labeling/listing/follow-up program.

3.3.13 Compliant. Certified as meeting or exceeding all applicable requirements of this standard.

3.3.14 Continuous Filament Fiber. See 3.3.30.1.

3.3.15 Corrosion. A condition exhibiting any signs of deterioration, including pitting or loss of metal.

3.3.16 Descent Control Device. See 3.3.18.4.

3.3.17 Design Load. See 3.3.44.1.

3.3.18 Device.

3.3.18.1 Adjusting Device. An auxiliary equipment system component; a connector device that allows adjustment to be made to a piece of equipment.

3.3.18.2* Ascending Device. A type of rope grab; auxiliary equipment; a friction or mechanical device utilized to allow ascending a fixed line.

3.3.18.3 Belay Device. An auxiliary equipment item used to catch a falling load by grabbing the rope.

3.3.18.4 Descent Control Device. An auxiliary equipment item; a friction or mechanical device utilized with rope to control descent.

3.3.18.4.1 Escape Descent Control Device. An auxiliary equipment system component; a friction or mechanical device utilized with escape line to control descent.

3.3.18.5* Escape Anchor Device. An auxiliary equipment device that connects to the structure and supports an escape line.

3.3.18.6 Rope Grab Device. An auxiliary equipment device used to grasp a life safety rope for the purpose of supporting loads; includes ascending devices.

3.3.18.7 Victim Extrication Device. A device designed to be secured about the body of a victim in a harness-like manner to provide support in a head-up or horizontal configuration for the purpose of lifting and transporting the victim with a life safety rope.

3.3.19 Diameter (Rope). See 3.3.63.2.

3.3.20 Elongation. The increase in length, expressed in a percent of the original gauge length, that occurs in a sample of new rope when tested as specified herein.

3.3.21 End-to-End Straps. Straps with end connection points meant to be loaded in end-to-end fashion, including, but not limited to, pick-off straps, load-releasing straps, and vertical lifting straps.

3.3.22 Escape. Immediate self-rescue of a single fire or emergency services person from a life-threatening emergency situation, generally above ground, using system components or manufactured systems designed for self-rescue escape.

3.3.23 Escape Anchor Device. See 3.3.18.5.

3.3.24 Escape Belt. See 3.3.7.1.

3.3.25 Escape Descent Control Device. See 3.3.18.4.1.

3.3.26 Escape Rope. See 3.3.63.3.

3.3.27 Escape System. A system designed to provide a means of escape from an immediately hazardous environment, above grade, and intended only for emergency self-rescue.

3.3.27.1 Fire Escape System. A system designed to be used for the purpose of self-rescue from an immediately hazardous environment involving elevated temperatures.

3.3.27.2 Non-Fire Escape System. A system designed to be used for the purpose of self-rescue from an immediately hazardous environment.

3.3.28 Escape Webbing. See 3.3.75.1.

3.3.29 Fall Factor. A measure of fall severity calculated by dividing the distance fallen by the length of rope used to arrest the fall. (See A.1.3.4.)

3.3.30 Fiber.

3.3.30.1 Continuous Filament Fiber. Fiber of indefinite or unmeasurable length.

3.3.30.2 Virgin Fiber. Fiber that is new and previously unused.

3.3.31 Fire Escape Rope. See 3.3.63.3.1.

3.3.32 Fire Escape System. See 3.3.27.1.

3.3.33 Fire Escape Webbing. See 3.3.75.2.

3.3.34 Follow-Up Program. The sampling, inspections, tests, or other measures conducted by the certification organization on a periodic basis to determine the continued compliance of labeled and listed products that are being produced by the manufacturer to the requirements of this standard.

3.3.35* General Use. One designation of equipment item or manufactured systems designed for general-use loads, technical-use loads, and escape based on design loads that are calculated and understood.

3.3.36 Hardware. Nonfabric components of protective clothing or equipment including, but not limited to, those made of metal or plastic.

3.3.37 Harness. See 3.3.40, *Life Safety Harness*.

3.3.38 Impact Load. See 3.3.44.2.

3.3.39 Ladder Belt. See 3.3.7.2.

3.3.40 Life Safety Harness. An equipment item; an arrangement of materials secured about the body used to support a person.

3.3.41 Life Safety Rope. See 3.3.63.4.

3.3.42 Line. See Generic term for rope or webbing.

3.3.43 Litter. An apparatus, also called a stretcher, designed to secure, protect and transport a patient vertically or horizontally.

3.3.44 Load.

3.3.44.1* Design Load. The load for which a given piece of equipment or manufactured system was engineered for under normal static conditions.

3.3.44.2* Impact Load. Sudden application of a force, which causes kinetic energy and momentum to be converted into other forms of energy.

3.3.44.3* Proof Load. The application of force to a material as a nondestructive test to verify the performance of that material.

3.3.45 Load-Bearing Attachment Point. See 3.3.3.1.

3.3.46 Load-Bearing Connector. An auxiliary equipment system component; a device used to join other system components including, but not limited to, carabiners, rings, quick links, and snap links.

3.3.47 Lot.

3.3.47.1 Manufacturer's Lot. An identifiable series of products that can be the same as or a subset of a production lot; used by the manufacturer for quality control or identification purposes.

3.3.47.2 Production Lot. An identifiable series of products manufactured with identical design specifications and identical materials and produced without any alterations to technique or procedure.

3.3.48 Manufactured System. Preassembled system sold as a unit by the manufacturer and tested as a complete assembly.

3.3.49 Manufacturer. The entity that directs and controls any of the following: compliant product design, compliant product manufacturing, or compliant product quality assurance; or the entity that assumes the liability for the compliant product or provides the warranty for the compliant product.

3.3.50* Manufacturer-Supplied Eye Termination. A point of fixed or permanent connection to compliant escape line, life safety rope, throwline, or moderate elongation laid rope, other than a knot, provided by the manufacturer for the purpose of connecting a load to a compliant product.

3.3.51 Manufacturer's Lot. See 3.3.47.1.

3.3.52 Melt. A response to heat by a material resulting in evidence of flowing or dripping.

3.3.53 Minimum Breaking Strength (MBS). The result of subtracting three standard deviations from the mean result of the lot being tested using the formula in 8.2.5.2.

3.3.54 Moderate Elongation Laid Life Saving Rope. See 3.3.63.4.1.

3.3.55* Multiple Configuration Load Straps. Straps with end connection points that can be configured in multiple loading, including, but not limited to, end-to-end, basket, and choker configurations.

3.3.56 Non-Fire Escape System. See 3.3.27.2.

3.3.57* Portable Anchor. A manufactured device with rigid arms, legs, or both designed to support human loads.

3.3.58 Positioning Attachment Point. See 3.3.3.2.

3.3.59* Product Label. A label or marking affixed to a product by the manufacturer that provides general information, warnings, instructions for care and maintenance, and other information.

3.3.60 Production Lot. See 3.3.47.2.

3.3.61 Proof Load. See 3.3.44.3.

3.3.62 Ring. An auxiliary equipment system component; an ungated load-bearing connector.

3.3.63 Rope. A compact but flexible, torsionally balanced, continuous structure of fibers produced from strands that are twisted, plaited, or braided together and that serve primarily to support a load or transmit a force from the point of origin to the point of application.

3.3.63.1* Block Creel Construction. Rope constructed without knots or splices in the yarns, ply yarns, strands or braids, or rope.

3.3.63.2 Diameter (Rope). The length of a straight line through the center of the cross section of the rope.

3.3.63.3 Escape Rope. Rope dedicated solely for the purpose of supporting people during emergency self-escape (self-rescue) not classified as a life safety rope.

3.3.63.3.1 Fire Escape Rope. Rope dedicated solely for the purpose of supporting people during emergency self-rescue (self-escape) from an immediately hazardous environment involving fire or fire products; not classified as a life safety rope.

3.3.63.4 Life Safety Rope. Rope dedicated solely for the purpose of supporting people during rescue, fire-fighting, other emergency operations, or during training evolutions.

3.3.63.4.1 Moderate Elongation Laid Life Saving Rope. Rope dedicated solely for the purpose of supporting people during rescue at fire-fighting operations or training evolutions.

3.3.63.5 Throwline. A floating rope that is intended to be thrown to a person during water rescues or as a tether for rescuers entering the water.

3.3.64 Rope Grab Device. See 3.3.18.6.

3.3.65 Sample. The element, item, component, or composite that is conditioned for subsequent testing. An amount of the material, product, or assembly to be tested that is representative of the item as a whole. (See also 3.3.69, *Specimen*.)

3.3.66 Self-Destructive Action. Interaction of materials in a manner that leads to deterioration.

3.3.67 Snap Link. An auxiliary equipment system component; a self-closing, gated, load-bearing connector.

3.3.68 Software. Flexible textile components of protective clothing or equipment, including, but not limited to, end-to-end straps and multiple configuration straps.

3.3.69 Specimen. The conditioned element, item, component, or composite that is tested. Specimens are taken from samples. (See also 3.3.65, *Sample*.)

3.3.70* Standard Deviation. A parameter that indicates the way in which a probability function is centered around its mean.

3.3.71* Technical Use. One designation of an equipment item or manufactured systems designed for technical-use loads, and escape based on design loads that are calculated and understood.

3.3.72 Victim Extrication Device. See 3.3.18.7.

3.3.73 Virgin Fiber. See 3.3.30.2.

3.3.74 Waist. The area above the hips and below the xiphoid process.

3.3.75 Webbing. Woven material in the form of a long strip; can be of flat or tubular weave.

3.3.75.1 Escape Webbing. Webbing dedicated solely for the purpose of supporting people during emergency self-escape (self-rescue).

3.3.75.2 Fire Escape Webbing. Webbing dedicated solely for the purpose of supporting people during emergency self-escape (self-rescue) from an immediately hazardous environment involving fire or fire products.

Chapter 4 Certification

4.1 General.

4.1.1 The process of certification for product as being compliant with NFPA 1983 shall meet the requirements of Section 4.1, General; Section 4.2, Certification Program; Section 4.3, Inspection and Testing; Section 4.4, Recertification; Section 4.5, Manufacturer's Quality Assurance Program; Section 4.6, Hazards Involving Compliant Product; Section 4.7, Manufacturers' Investigation of Complaints and Returns; and Section 4.8, Manufacturers' Safety Alert and Product Recall Systems.

4.1.2 All product labeled as being compliant with this standard shall meet or exceed all applicable requirements specified in this standard and shall be certified.

4.1.3 All certification shall be performed by a certification organization that meets at least the requirements specified in Section 4.2, Certification Program, and that is accredited for personal protective equipment in accordance with ISO/IEC 17065, *Conformity assessment — Requirements for bodies certifying products, processes, and services*. The accreditation shall be issued by an accreditation body operating in accordance with ISO 17011, *General requirements for accreditation bodies accrediting conformity assessment bodies*.

4.1.4 Manufacturers shall not claim compliance with portions or segments of the requirements of this standard and shall not use the NFPA name or the name or identification of this standard, NFPA 1983, in any statements about their respective products unless the products are certified as compliant to this standard.

4.1.5 All compliant products shall be labeled and listed.

4.1.6 All compliant products shall also have a product label that meets the requirements specified in Chapter 5, Labeling and Information.

4.1.7* The certification organization's label, symbol, or identifying mark shall be part of the product label, shall be attached to the product label, or shall be immediately adjacent to the product label.

4.1.8 The certification organization shall not issue any new certifications to the 2012 edition of NFPA 1983 on or after the NFPA effective date for the 2017 edition, which is effective date.

4.1.9 The certification organization shall not permit any manufacturer to continue to label any protective ensembles or ensemble elements that are certified as compliant with the 2012 edition of NFPA 1983 after [effective date, plus 12 months].

4.1.10 The certification organization shall require manufacturers to remove all certification labels and product labels indicating compliance with the 2012 edition of NFPA 1983 from all protective ensembles and ensemble elements that are under the control of the manufacturer on [effective date, plus

12 months], and the certification organization shall verify this action is taken.

4.2 Certification Program.

4.2.1* The certification organization shall not be owned or controlled by manufacturers or vendors of the product being certified.

4.2.2 The certification organization shall be primarily engaged in certification work and shall not have a monetary interest in the product's ultimate profitability.

4.2.3 The certification organization shall be accredited for personal protective equipment in accordance with ISO/IEC 17065, *Conformity assessment — Requirements for bodies certifying products, processes, and services*. The accreditation shall be issued by an accreditation body operating in accordance with ISO 17011, *General requirements for accreditation bodies accrediting conformity assessment bodies*.

4.2.4 The certification organization shall refuse to certify products to this standard that do not comply with all applicable requirements of this standard.

4.2.5* The contractual provisions between the certification organization and the manufacturer shall specify that certification is contingent on compliance with all applicable requirements of this standard.

4.2.5.1 The certification organization shall not offer or confer any conditional, temporary, or partial certifications.

4.2.5.2 Manufacturers shall not be authorized to use any label or reference to the certification organization on products that are not compliant with all applicable requirements of this standard.

4.2.6* The certification organization shall have laboratory facilities and equipment available for conducting proper tests to determine product compliance.

4.2.6.1 The certification organization laboratory facilities shall have a program in place and functioning for calibration of all instruments, and procedures shall be in use to ensure proper control of all testing.

4.2.6.2 The certification organization laboratory facilities shall follow good practice regarding the use of laboratory manuals, form data sheets, documented calibration and calibration routines, performance verification, proficiency testing, and staff qualification and training programs.

4.2.7 The certification organization shall require the manufacturer to establish and maintain a quality assurance program that meets the requirements of Section 4.5, Manufacturer's Quality Assurance Program.

4.2.7.1* The certification organization shall require the manufacturer to have a product recall system as specified in Section 4.8, Manufacturers' Safety Alert and Product Recall Systems, as part of the manufacturer's quality assurance program.

4.2.7.2 The certification organization shall audit the manufacturer's quality assurance program to ensure that the quality assurance program provides continued product compliance with this standard.

4.2.8 The certification organization and the manufacturer shall evaluate any changes affecting the form, fit, or function of

the compliant product to determine its continued certification to this standard.

4.2.9* The certification organization shall have a follow-up inspection program of the manufacturer's facilities of the compliant product with at least two random and unannounced visits per 12-month period to verify the product's continued compliance.

4.2.9.1 As part of the follow-up inspection program, the certification organization shall select sample compliant product at random from the manufacturer's production line, from the manufacturer's in-house stock, or from the open market.

4.2.9.2 Sample product shall be evaluated by the certification organization to verify the product's continued compliance in order to assure that the materials, components, and manufacturing quality assurance systems are consistent with the materials, components, and manufacturing quality assurance that were inspected and tested by the certification organization during initial certification and recertification.

4.2.9.3 The certification organization shall be permitted to conduct specific testing to verify the product's continued compliance.

4.2.9.4 For products, components, and materials where prior testing, judgment, and experience of the certification organization have shown results to be in jeopardy of not complying with this standard, the certification organization shall conduct more frequent testing of sample product, components, and materials acquired in accordance with 4.2.9.1 against the applicable requirements of this standard.

4.2.10 The certification organization shall have in place a series of procedures, as specified in Section 4.6, Hazards Involving Compliant Product, that address reports of situations in which a compliant product is subsequently found to be hazardous.

4.2.11 The certification organization's operating procedures shall provide a mechanism for the manufacturer to appeal decisions. The procedures shall include the presentation of information from both sides of a controversy to a designated appeals panel.

4.2.12 The certification organization shall be in a position to use legal means to protect the integrity of its name and label. The name and label shall be registered and legally defended.

4.3 Inspection and Testing.

4.3.1 For both initial certification and recertification of compliant products, the certification organization shall conduct both inspection and testing as specified in this section.

4.3.2 All inspections, evaluations, conditioning, and testing for certification or for recertification shall be conducted by a certification organization's testing laboratory that is accredited in accordance with the requirements of ISO/IEC 17025, *General requirements for the competence of testing and calibration laboratories*.

4.3.2.1 The certification organization's testing laboratory's scope of accreditation to ISO/IEC 17025, *General requirements for the competence of testing and calibration laboratories*, shall encompass testing of personal protective equipment.

4.3.2.2 The accreditation of a certification organization's testing laboratory shall be issued by an accreditation body operat-

ing in accordance with ISO 17011, *General requirements for accreditation bodies accrediting conformity assessment bodies*.

4.3.3 A certification organization shall be permitted to utilize conditioning and testing results conducted by a product or component manufacturer for certification or recertification provided the manufacturer's testing laboratory meets the requirements specified in 4.3.3.1 through 4.3.3.5.

4.3.3.1 The manufacturer's testing laboratory shall be accredited in accordance with the requirements of ISO/IEC 17025, *General requirements for the competence of testing and calibration laboratories*.

4.3.3.2 The manufacturer's testing laboratory's scope of accreditation to ISO 17025/IEC, *General requirements for the competence of testing and calibration laboratories*, shall encompass testing of personal protective equipment.

4.3.3.3 The accreditation of a manufacturer's testing laboratory shall be issued by an accreditation body operating in accordance with ISO 17011, *General requirements for accreditation bodies accrediting conformity assessment bodies*.

4.3.3.4 The certification organization shall approve the manufacturer's testing laboratory.

4.3.3.5 The certification organization shall determine the level of supervision and witnessing of the conditioning and testing for certification or recertification conducted at the manufacturer's testing laboratory.

4.3.4 Sampling levels for testing and inspection shall be established by the certification organization and the manufacturer to ensure a reasonable and acceptable reliability at a reasonable and acceptable confidence level that products certified to this standard are compliant, unless such sampling levels are specified herein.

4.3.5 Inspection by the certification organization shall include a review of all product labels to ensure that all required label attachments, compliance statements, certification statements, and other product information are at least as specified for the products identified in Section 5.1, Product Label Requirements.

4.3.6 Inspection by the certification organization shall include an evaluation of any symbols and pictorial graphic representations used on product labels or in user information, as permitted in Chapter 5, to ensure that the symbols are clearly explained in the product's user information package.

4.3.7 Inspection by the certification organization shall include a review of the user information required by Chapter 5 to ensure that the information has been developed and is available.

4.3.8 Inspection by the certification organization for determining compliance with the design requirements specified in Chapter 6 shall be performed on whole or complete products.

4.3.9 Testing to determine product compliance with the performance requirements specified in Chapter 7 shall be conducted by the certification organization in accordance with the specified testing requirements of Chapter 8.

4.3.9.1 Testing shall be performed on specimens representative of materials and components used in the actual construction of the compliant product.

4.3.9.2 The certification organization also shall be permitted to use sample materials cut from a representative product.

4.3.10 The certification organization shall accept from the manufacturer, for evaluation and testing for certification, only product or product components that are the same in every respect to the actual final product or product component.

4.3.11 The certification organization shall not allow any modifications, pretreatment, conditioning, or other such special processes of the product or any product component prior to the product's submission for evaluation and testing by the certification organization.

4.3.12 The certification organization shall not allow the substitution, repair, or modification, other than as specifically permitted herein, of any product or any product component during testing.

4.3.13 The certification organization shall not allow test specimens that have been conditioned and tested for one method to be reconditioned and tested for another test method unless specifically permitted in the test method.

4.3.14 Any change in the design, construction, or material of a compliant product shall necessitate new inspection and testing to verify compliance to all applicable requirements of this standard that the certification organization determines can be affected by such change. This recertification shall be conducted before labeling the modified product as being compliant with this standard.

4.3.15 The manufacturer shall maintain all design and performance inspection and test data from the certification organization used in the certification of the manufacturer's compliant product. The manufacturer shall provide such data, upon request, to the purchaser or authority having jurisdiction.

4.4 Recertification.

4.4.1 All products that are labeled as being compliant with this standard shall undergo recertification in accordance with Table 4.4.1.

4.4.1.1 This recertification shall include inspection and evaluation to the design requirements and testing to the performance requirements as required by this standard on all manufacturers' compliant product models.

4.4.1.2 Any change that affects the compliant product performance under design or performance requirements of this standard shall constitute a different model.

4.4.1.3 For the purpose of this standard, models shall include each unique pattern, style, or design of the compliant products.

4.4.2 Samples of manufacturer's models and components for recertification shall be acquired from the manufacturer or component supplier during random and unannounced visits as part of the follow-up program specified in 4.2.9.

4.4.2.1 For recertification, the certification organization shall acquire at least one complete compliant product.

4.4.2.2 The certification organization shall also acquire a sufficient quantity of components to be tested for recertification as required by 4.4.3.

4.4.3 Compliant products and components shall be inspected, evaluated, and tested as specified in 4.4.3.1 and 4.4.3.2. Inspec-

tion, evaluation, and testing performed as part of the follow-up program shall be permitted to be used for recertification to avoid duplication.

4.4.3.1 One sample of each compliant product shall be inspected and evaluated to the design requirements specified in Chapter 6.

4.4.3.2 One sample of each compliant product and component shall be tested for overall performance as specified in Chapter 7.

4.4.4 The manufacturer shall maintain all design, inspection, performance, and test data from the certification organization produced during the recertification of the manufacturer's models and components. The manufacturer shall provide such data upon request to the purchaser or to the authority having jurisdiction (AHJ).

4.5 Manufacturer's Quality Assurance Program.

4.5.1 The manufacturer shall provide and operate a quality assurance program that meets the requirements of this section and that includes a product recall system as specified in 4.2.7.1, and Section 4.8, Manufacturers' Safety Alert and Product Recall Systems.

4.5.2 The operation of the quality assurance program shall evaluate and test compliant product production to the requirements of this standard to assure production remains in compliance.

4.5.3 The manufacturer shall be registered to ISO 9001, *Quality management systems — requirements*.

4.5.3.1 Registration to the requirements of ISO 9001, *Quality management systems — requirements*, shall be conducted by a registrar that is accredited for personal protective equipment in accordance with ISO/IEC 17021, *Conformity assessment — Requirements for bodies providing audit and certification of management systems*. The registrar shall affix the accreditation mark on the ISO registration certificate.

4.5.3.2 The scope of the ISO registration shall include at least the design and manufacturing systems management for the type of personal protective equipment being certified.

4.5.4* Any entity that meets the definition of *manufacturer* specified in Section 3.3, General Definitions, and therefore is considered the "manufacturer," but does not manufacture or assemble the compliant product, shall meet the requirements specified in this Section 4.5.

4.5.5* Where the manufacturer uses subcontractors in the construction or assembly of the compliant product, the locations and names of all subcontractor facilities shall be documented and the documentation shall be provided to the manufacturer's ISO registrar and to the certification organization.

4.6 Hazards Involving Compliant Product.

4.6.1* The certification organization shall establish procedures to be followed where situation(s) are reported in which a compliant product is subsequently found to be hazardous. These procedures shall comply with the provisions of ISO 27, *Guidelines for corrective action to be taken by a certification body in the event of misuse of its mark of conformity*, and as modified herein.

Table 4.4.1 Recertification Schedule

Product	Test	Time
All component product	Corrosion testing	Initial cert only
All component product	Product label durability tests	Initial cert only
Throwlines	Rope breaking	Every year
Throwlines	Floatability	Every year
Life safety harness	Static	Alternating years with drop test
Life safety harness	Drop	Alternating years with static test
Belt	Static	Alternating years with drop test
Belt	Drop	Alternating years with static test
Carabiners and and snap-link	All	Every 2 years
Rope grab devices	All	Every 2 years
Descent control devices — auto stop	Holding test	Every year
Descent control devices — auto stop	Manner of function	Every year
Descent control devices — non-auto stop	All	Every 2 years
Portable anchor	All	Initial cert only
Pulley	All	Every 2 years
Multiple configuration and end-to-end straps	Breaking strength	Every year
Manufactured systems	All	Every year
Escape systems	All	Every year
Life safety rope	Diameter, rope breaking, and elongation	Every year
Life safety rope fibers	Melting and crystallization temperatures by thermal analysis	Every year
Escape rope	Diameter, rope breaking, and elongation	Every year
Fire escape rope	Elevated rope temperature test	Every year
Escape rope fibers	Melting and crystallization temperatures by thermal analysis	Every year
Escape webbing	Perimeter, rope breaking, and elongation	Every year
Fire escape webbing	Elevated rope temperature test	Every year
Escape webbing fibers	Melting and crystallization temperatures by thermal analysis	Every year
Fire escape webbing	Elevated rope temperature test	Every year
Moderate elongation laid life-saving rope	Diameter, rope breaking, and elongation	Every year
Moderate elongation laid life life-saving rope fibers	Melting and crystallization temperatures by thermal analysis	Every year
Victim extrication devices	Static	Every 2 years
Litters	Litter strength test — vertical	Alternating years with horizontal
Litters	Litter strength test — horizontal	Alternating years with horizontal
Load-bearing textiles used in victim extrication devices	Melting and crystallization temperatures by thermal analysis	Every year
Thread used in victim extrication devices	Melting and crystallization temperatures by thermal analysis	Every year
Webbing components	Melting and crystallization temperatures by thermal analysis	Every year
Thread components	Melting and crystallization temperatures by thermal analysis	Every year
Load-bearing textiles used in belts with optional flame resistance	Flame resistance	Every year
Load-bearing textiles used in belts with optional flame resistance	Heat resistance	Every year
Hardware installed in belts with optional flame resistance	Heat resistance	Every year
Thread used in belts with optional flame resistance	Thread heat resistance	Every year
Load-bearing textiles used in life safety harnesses with optional flame resistance	Flame resistance	Every year
Load-bearing textiles used in life safety harnesses with optional flame resistance	Flame resistance	Every year
Hardware installed in life safety harnesses with optional flame resistance	Heat resistance	Every year
Thread used in life safety harnesses with optional flame resistance	Thread heat resistance	Every year
Manufacturer-supplied eye termination	Breaking strength	Every year
Manufacturer-supplied eye termination	Thread melting	Every year
Belay devices	Manner of function	Every two years

4.6.2* Where a report of a hazard involved with a compliant product is received by the certification organization, the validity of the report shall be investigated.

4.6.3 With respect to a compliant product, a hazard shall be a condition or create a situation that results in exposing life, limb, or property to an imminently dangerous or dangerous condition.

4.6.4 Where a specific hazard is identified, the determination of the appropriate action for the certification organization and the manufacturer to undertake shall take into consideration the severity of the hazard and its consequences to the safety and health of users.

4.6.5 Where it is established that a hazard is involved with a compliant product, the certification organization shall determine the scope of the hazard including products, model numbers, serial numbers, factory production facilities, production runs, and quantities involved.

4.6.6 The certification organization's investigation shall include, but not be limited to, the extent and scope of the problem as it might apply to other compliant products or compliant product components manufactured by other manufacturers or certified by other certification organizations.

4.6.7 The certification organization shall also investigate reports of a hazard where compliant product is gaining widespread use in applications not foreseen when the standard was written, such applications in turn being ones for which the product was not certified, and no specific scope of application has been provided in the standard, and no limiting scope of application was provided by the manufacturer in written material accompanying the compliant product at the point of sale.

4.6.8 The certification organization shall require the manufacturer of the compliant product, or the manufacturer of the compliant product component if applicable, to assist the certification organization in the investigation and to conduct its own investigation as specified in Section 4.7, Manufacturers' Investigation of Complaints and Returns.

4.6.9 Where the facts indicating a need for corrective action are conclusive and the certification organization's appeal procedures referenced in 4.2.11 have been followed, the certification organization shall initiate corrective action immediately, provided there is a manufacturer to be held responsible for such action.

4.6.10 Where the facts are conclusive and corrective action is indicated, but there is no manufacturer to be held responsible, such as when the manufacturer is out of business or the manufacturer is bankrupt, the certification organization shall immediately notify relevant governmental and regulatory agencies and issue a notice to the user community about the hazard.

4.6.11* Where the facts are conclusive and corrective action is indicated, the certification organization shall take one or more of the following corrective actions:

- (1) Notification of parties authorized and responsible for issuing a safety alert when, in the opinion of the certification organization, such a notification is necessary to inform the users.
- (2) Notification of parties authorized and responsible for issuing a product recall when, in the opinion of the certification organization, such a recall is necessary to protect the users.

- (3) Removal of the mark of certification from the product.
- (4) Where a hazardous condition exists and it is not practical to implement 4.6.11(1), 4.6.11(2), or 4.6.11(3); or the responsible parties refuse to take corrective action, the certification organization shall notify relevant governmental and regulatory agencies and issue a notice to the user community about the hazard.

4.6.12 The certification organization shall provide a report to the organization or individual identifying the reported hazardous condition and notify that organization or individual of the corrective action indicated, or that no corrective action is indicated.

4.6.13* Where a change to an NFPA standard(s) is felt to be necessary, the certification organization shall also provide a copy of the report and corrective actions indicated to NFPA and shall also submit either a Public Input for a proposed change to the next revision of the applicable standard or a proposed Temporary Interim Amendment (TIA) to the current edition of the applicable standard.

4.7 Manufacturers' Investigation of Complaints and Returns.

4.7.1 Manufacturers shall provide corrective action in accordance with ISO 9001, *Quality management systems — requirements*, for investigating written complaints and returned products.

4.7.2 Manufacturers' records of returns and complaints related to safety issues shall be retained for at least 5 years.

4.7.3 Where the manufacturer discovers, during the review of specific returns or complaints, that a compliant product or compliant product component can constitute a potential safety risk to end users that is possibly subject to a safety alert or product recall, the manufacturer shall immediately contact the certification organization and provide all information about its review to assist the certification organization with the investigation.

4.8 Manufacturers' Safety Alert and Product Recall Systems.

4.8.1 Manufacturers shall establish a written safety alert system and a written product recall system that describes the procedures to be used in the event that it decides, or is directed by the certification organization, to either issue a safety alert or to conduct a product recall.

4.8.2 The manufacturers' safety alert and product recall system shall provide the following:

- (1) The establishment of a coordinator and responsibilities by the manufacturer for the handling of safety alerts and product recalls
- (2) A method of notifying all dealers, distributors, purchasers, users, and NFPA about the safety alert or product recall that can be initiated within a 1-week period following the manufacturer's decision to issue a safety alert or to conduct a product recall, or after the manufacturer has been directed by the certification organization to issue a safety alert or conduct a product recall
- (3) Techniques for communicating accurately and understandably the nature of the safety alert or product recall and in particular the specific hazard or safety issue found to exist
- (4) Procedures for removing product that is recalled and for documenting the effectiveness of the product recall
- (5) A plan for repairing, replacing, or compensating purchasers for returned product

Chapter 5 Labeling and Information

5.1 Life Safety Rope.

5.1.1 Life Safety Rope Label Requirements.

5.1.1.1 Each life safety rope item shall have a product label.

5.1.1.2 Where life safety rope is an integral and nonseparable piece of a manufactured system and that manufactured system is certified as compliant with this standard, the life safety rope shall be required to have at least the continuous identification tape specified in 5.1.1.13.

5.1.1.3 The life safety rope product label shall be permitted to be a hang tag affixed to each individual life safety rope or shall be permitted to be printed on a sheet that is inserted and sealed in the packaging that immediately contains the life safety rope.

5.1.1.4 All letters shall be at least 2 mm ($\frac{5}{64}$ in.) high.

5.1.1.5 All worded portions of the required product label shall at least be in English.

5.1.1.6 Symbols and other pictorial graphic representations shall be permitted to be used to supplement worded statements on the product label(s).

5.1.1.7 The certification organization's label, symbol, or identifying mark shall be printed on the product label. All letters shall be at least 2.5 mm ($\frac{3}{32}$ in.) high.

5.1.1.8* Each life safety rope shall have the following compliance statement on the product label:

**MEETS THE LIFE SAFETY ROPE REQUIREMENTS
OF NFPA 1983, STANDARD ON LIFE SAFETY ROPE
AND EQUIPMENT FOR EMERGENCY
SERVICES, 2017 EDITION.
CLASS: _____-USE ROPE**

5.1.1.9 The class designation of the life safety rope that is required in 5.1.1.8 to be stated on the product label shall be as determined by the certification organization in accordance with Section 7.1.

5.1.1.10 In addition to the compliance statement specified in 5.1.1.8, at least the following information shall be provided on the product label:

**MINIMUM BREAKING STRENGTH: _____ kN
DIAMETER: _____ mm
Type of fiber(s) _____**

5.1.1.11 The minimum breaking strength (MBS) value of the life safety rope, which is required in 5.1.1.10 to be stated on the product label, shall be permitted to be any value greater than the actual "pass" requirement value determined by the certification testing in accordance with 7.1.1 or 7.1.2, as applicable, but shall not be greater than the calculated MBS.

5.1.1.12 The diameter of the life safety rope, which is required in 5.1.1.10 to be stated on the product label, shall be as determined by the certification organization in accordance with 7.1.3 or 7.1.4, as applicable.

5.1.1.13* In addition to the compliance statement specified in 5.1.1.8, each life safety rope shall also be marked for its full length by insertion of a continuous identification tape(s). At

least the following statement and information shall be printed on the tape not less than every 1 m (39 in.):

MEETS REQUIREMENTS FOR LIFE SAFETY ROPE OF NFPA 1983.

[Certification organization's label, symbol, or identifying mark]
[Name of manufacturer]
[Year and quarter of manufacture (not coded)]

5.1.1.14 In addition to the compliance and information statements in 5.1.1.8 and 5.1.1.10, at least the following information shall also be printed on the product label(s) where all letters shall be at least 2 mm ($\frac{5}{64}$ in.) high.

- (1) Manufacturer's name, identification, or designation
- (2) Manufacturer's address
- (3) Country of manufacture
- (4) Manufacturer's product identification
- (5) Model, style, lot, or serial number
- (6) Elongation at 1.35 kN (300 lbf)
- (7) Elongation at 2.7 kN (600 lbf)
- (8) Elongation at 4.4 kN (1000 lbf)

5.1.2 Life Safety Rope User Information.

5.1.2.1 The manufacturer of life safety rope that is certified as being compliant with this standard shall furnish the purchaser with at least use criteria, inspection procedures, maintenance procedures, and retirement criteria for the product.

5.1.2.2 The manufacturer shall provide information for the user to consider prior to reusing life safety rope, including that the rope be considered for reuse only if all of the following conditions are met:

- (1) Rope has not been visually damaged.
- (2) Rope has not been exposed to heat, direct flame impingement, or abrasion.
- (3) Rope has not been subjected to any impact load.
- (4) Rope has not been exposed to liquids, solids, gases, mists, or vapors of any chemical or other material that can deteriorate rope.
- (5) Rope passes inspection when inspected by a qualified person following the manufacturer's inspection procedures both before and after each use.

5.1.2.3 The manufacturer shall provide information for the user regarding not using the life safety rope and removing the rope from service if the rope does not meet all of the conditions in 5.1.2.2, if the rope does not pass inspection, or if there is any doubt about the safety or serviceability of the rope.

5.1.2.4 The manufacturer shall provide information for the user regarding at least the following issues:

- (1)* Inspecting the rope periodically according to the manufacturer's inspection procedure
- (2) Removing the rope from service and destroying it if the rope does not pass inspection or if there is any doubt about the safety or serviceability of the rope
- (3) Protecting the rope from abrasion
- (4) Not exposing the rope to flame or high temperature and carrying the rope where it will be protected as the rope could melt or burn and fail if exposed to flame or high temperature
- (5) Keeping the product label and user instructions/information after they are removed/separated from the rope and retaining them in the permanent rope record; copying

- the product label and user instructions/information and keeping the copies with the rope
- (6) Referring to the user instructions/information before and after each use
 - (7) Cautioning that, if the instructions/information are not followed, the user could suffer serious consequences

5.1.2.5 The manufacturer shall provide information for the user that additional information regarding moderate elongation laid life-saving rope can be found in NFPA 1500 and NFPA 1983.

5.1.2.6 The manufacturer of life safety rope that is certified as being compliant with this standard shall furnish the purchaser with a sample of suggested records to be maintained by the purchaser or user of life safety rope and a list of items that the records need to contain.

5.2 Escape Rope.

5.2.1 Escape Rope Label Requirements.

5.2.1.1* Each escape rope item shall have a product label.

5.2.1.2* Where escape rope is an integral and nonseparable piece of a manufactured system and that manufactured system is certified as compliant with this standard, the escape rope shall be required to have at least the continuous identification tape specified in 5.2.1.12.

5.2.1.3 The escape rope product label shall be permitted to be a hang tag affixed to each escape rope or shall be permitted to be printed on a sheet that is inserted and sealed in the packaging that immediately contains the escape rope.

5.2.1.4 All letters shall be at least 2.0 mm ($\frac{5}{64}$ in.) high.

5.2.1.5 All worded portions of the required product label shall at least be in English.

5.2.1.6 Symbols and other pictorial graphic representations shall be permitted to be used to supplement worded statements on the product label(s).

5.2.1.7 The certification organization's label, symbol, or identifying mark shall be printed on the product label. All letters shall be at least 2.5 mm ($\frac{3}{32}$ in.) high.

5.2.1.8 Each escape rope shall have the following compliance statement on the product label.

**MEETS THE ESCAPE ROPE REQUIREMENTS OF
NFPA 1983, STANDARD ON LIFE SAFETY ROPE AND
EQUIPMENT FOR EMERGENCY SERVICES,
2017 EDITION.**

5.2.1.9* In addition to the compliance statement specified in 5.2.1.8, at least the following information shall be provided on the product label.

MINIMUM BREAKING STRENGTH: _____ kN
DIAMETER: _____ mm
Type of fiber(s) _____

5.2.1.10 The MBS value of the escape rope, which is required in 5.2.1.9 to be stated on the product label, shall be permitted to be any value greater than the actual "pass" requirement value determined by the certification testing in accordance with 7.2.1, but shall not be greater than the calculated MBS.

5.2.1.11 The diameter of the escape rope, which is required in 5.2.1.9 to be stated on the product label, shall be as determined by the certification organization in accordance with 7.2.2.

5.2.1.12* In addition to the compliance statement specified in 5.2.1.8, each escape rope shall also be marked for its full length by insertion of a continuous identification tape(s). At least the following statement and information shall be printed on the tape not less than every 1 m (39 in.):

**MEETS REQUIREMENTS FOR ESCAPE ROPE
OF NFPA 1983.**

[Certification organization's label, symbol, or identifying mark]

[Name of manufacturer]

[Year and quarter of manufacture (not coded)]

5.2.1.13 In addition to the compliance and information statements in 5.2.1.8 and 5.2.1.9 at least the following information shall also be printed on the product label(s) where all letters shall be at least 2 mm ($\frac{5}{64}$ in.) high.

- (1) Manufacturer's name, identification, or designation
- (2) Manufacturer's address
- (3) Country of manufacture
- (4) Manufacturer's product identification
- (5) Model, style, lot, or serial number
- (6) Elongation at 1.35 kN (300 lb)
- (7) Elongation at 2.7 kN (600 lb)
- (8) Elongation at 4.4 kN (1000 lb)

5.2.2 Escape Rope User Requirements.

5.2.2.1 The manufacturer of escape rope, escape webbing, fire escape rope, and fire escape webbing that are certified as being compliant with this standard shall furnish the purchaser with at least use criteria, inspection procedures, maintenance procedures, and retirement criteria for the product.

5.2.2.2 The manufacturer shall provide information for the user regarding at least the following issues:

- (1) Using the rope only with a life safety harness or escape belt
- (2) Inspecting the rope periodically according to the manufacturers' inspection procedure
- (3) Removing the rope from service and destroying it if the rope does not pass inspection or if there is any doubt about the safety or serviceability of the rope
- (4) Protecting the rope from abrasion
- (5) Not exposing the rope to flame or high temperature and carrying the rope where it will be protected as the rope could melt or burn and fail if exposed to flame or high temperature
- (6) Keeping the product label and user instructions/information after they are removed/separated from the rope for future reference
- (7) Referring to the user instructions/information before and after each use
- (8) Cautioning that, if the instructions/information are not followed, the user could suffer serious consequences

5.2.2.3 The manufacturer shall provide information for the user that additional information regarding escape rope, escape webbing, fire escape rope, and fire escape webbing can be found in NFPA 1500 and NFPA 1983.

5.2.2.4 The manufacturer of escape rope, escape webbing, fire escape rope, and fire escape webbing that is certified as being compliant with this standard shall furnish the purchaser with a

sample of suggested records to be maintained by the purchaser or user of escape rope, escape webbing, fire escape rope, and fire escape webbing and a list of items that the records need to contain.

5.3 Escape Webbing.

5.3.1 Escape Webbing Label Requirements.

5.3.1.1 Escape webbing shall meet the labeling requirements in 5.2.1, excluding 5.2.1.8, 5.2.1.9, 5.2.1.10, 5.2.1.11, and 5.2.1.12.

5.3.1.2 Each escape webbing shall have the following compliance statement on the product label:

**MEETS THE ESCAPE WEBBING REQUIREMENTS OF
NFPA 1983, STANDARD ON LIFE SAFETY ROPE AND
EQUIPMENT FOR EMERGENCY SERVICES,
2017 EDITION.**

5.3.1.3* In addition to the compliance statement specified in 5.3.1.2, at least the following information shall be provided on the product label:

MINIMUM BREAKING STRENGTH: _____ kN

PERIMETER: _____ mm

Type of fiber(s) _____

5.3.1.4 The perimeter of the escape webbing, which is required in 5.3.1.3 to be stated on the product label, shall be as determined by the certification organization in accordance with 7.3.2.

5.3.1.5 In addition to the compliance statement specified in 5.3.1.3, each escape webbing shall also be marked for its full length by insertion of a continuous identification tape(s). At least the following statement and information shall be printed on the tape not less than every 1 m (39 in.):

**MEETS REQUIREMENTS FOR ESCAPE WEBBING
OF NFPA 1983.**

[Certification organization's label, symbol, or identifying mark]

[Name of manufacturer]

[Year and quarter of manufacture (not coded)]

5.3.1.6 The MBS value of the escape webbing, which is required in 5.3.1.3 to be stated on the product label, shall be permitted to be any value greater than the actual "pass" requirement value determined by the certification testing in accordance with 7.3.1, but shall not be greater than the calculated MBS.

5.3.2 Escape Webbing User Information.

5.3.2.1 The manufacturer of escape webbing that is certified as being compliant with this standard shall furnish the purchaser with at least use criteria, inspection procedures, maintenance procedures, and retirement criteria for the product.

5.3.2.2 The manufacturer shall provide information for the user regarding at least the following issues:

- (1) Using the webbing only with a life safety harness or escape belt
- (2) Inspecting the webbing periodically according to the manufacturers' inspection procedure
- (3) Removing the webbing from service and destroying it if the webbing does not pass inspection or if there is any doubt about the safety or serviceability of the webbing

- (4) Protecting the webbing from abrasion
- (5) Not exposing the webbing to flame or high temperature and carrying the webbing where it will be protected as the webbing could melt or burn and fail if exposed to flame or high temperature
- (6) Keeping the product label and user instructions/information after they are removed/separated from the webbing for future reference
- (7) Referring to the user instructions/information before and after each use
- (8) Cautioning that, if the instructions/information are not followed, the user could suffer serious consequences

5.3.2.3 The manufacturer shall provide information for the user that additional information regarding escape webbing can be found in NFPA 1500 and NFPA 1983.

5.3.2.4 The manufacturer of escape webbing that is certified as being compliant with this standard shall furnish the purchaser with a sample of suggested records to be maintained by the purchaser or user of escape webbing and a list of items that the records need to contain.

5.4 Fire Escape Rope.

5.4.1 Fire Escape Rope Label Requirements.

5.4.1.1* Each fire escape rope item shall have a product label.

5.4.1.2* Where fire escape rope is an integral and nonseparable piece of a manufactured system and that manufactured system is certified as compliant with this standard, the fire escape rope shall be required to have at least the continuous identification tape specified in 5.4.1.12.

5.4.1.3 The fire escape rope product label shall be permitted to be a hang tag affixed to each fire escape rope or shall be permitted to be printed on a sheet that is inserted and sealed in the packaging that immediately contains the fire escape rope.

5.4.1.4 All letters shall be at least 2.0 mm ($\frac{3}{64}$ in.) high.

5.4.1.5 All worded portions of the required product label shall be at least in English.

5.4.1.6 Symbols and other pictorial graphic representations shall be permitted to be used to supplement worded statements on the product label(s).

5.4.1.7 The certification organization's label, symbol, or identifying mark shall be printed on the product label. All letters shall be at least 2.5 mm ($\frac{3}{32}$ in.) high.

5.4.1.8 Each fire escape rope shall have the following compliance statement on the product label:

**MEETS THE FIRE ESCAPE ROPE REQUIREMENTS OF
NFPA 1983, STANDARD ON LIFE SAFETY ROPE AND
EQUIPMENT FOR EMERGENCY SERVICES,
2017 EDITION.**

5.4.1.9* In addition to the compliance statement specified in 5.4.1.8, at least the following information shall be provided on the product label:

MINIMUM BREAKING STRENGTH: _____ kN

DIAMETER: _____ mm

Type of fiber(s) _____

5.4.1.10 The MBS value of the fire escape rope, which is required in 5.4.1.9 to be stated on the product label, shall be permitted to be any value greater than the actual “pass” requirement value determined by the certification testing in accordance with 7.2.1, but shall not be greater than the calculated MBS.

5.4.1.11 The diameter of the fire escape rope, which is required in 5.4.1.9 to be stated on the product label, shall be as determined by the certification organization in accordance with 7.2.2.

5.4.1.12* In addition to the compliance statement specified in 5.4.1.8, each fire escape rope shall also be marked for its full length by insertion of a continuous identification tape(s). At least the following statement and information shall be printed on the tape not less than every 1 m (39 in.):

**MEETS REQUIREMENTS FOR FIRE ESCAPE
ROPE OF NFPA 1983.**

[Certification organization's label, symbol, or identifying mark]
[Name of manufacturer]
[Year and quarter of manufacture (not coded)]

5.4.1.13 In addition to the compliance and information statements in 5.4.1.8 and 5.4.1.9, at least the following information shall also be printed on the product label(s) where all letters shall be at least 2 mm ($\frac{5}{64}$ in.) high.

- (1) Manufacturer's name, identification, or designation
- (2) Manufacturer's address
- (3) Country of manufacture
- (4) Manufacturer's product identification
- (5) Model, style, lot, or serial number
- (6) Elongation at 1.35 kN (300 lb)
- (7) Elongation at 2.7 kN (600 lb)
- (8) Elongation at 4.4 kN (1000 lb)

5.4.2 Fire Escape Rope User Information.

5.4.2.1 The manufacturer of fire escape rope that is certified as being compliant with this standard shall furnish the purchaser with at least use criteria, inspection procedures, maintenance procedures, and retirement criteria for the product.

5.4.2.2 The manufacturer shall provide information for the user regarding at least the following issues:

- (1) Using the rope only with a life safety harness or escape belt
- (2) Inspecting the rope periodically according to the manufacturers' inspection procedure
- (3) Removing the rope from service and destroying it if the rope does not pass inspection or if there is any doubt about the safety or serviceability of the rope
- (4) Protecting the rope from abrasion
- (5) Not exposing the rope to flame or high temperature and carrying the rope where it will be protected as the rope could melt or burn and fail if exposed to flame or high temperature
- (6) Keeping the product label and user instructions/information after they are removed/separated from the rope for future reference
- (7) Referring to the user instructions/information before and after each use
- (8) Cautioning that, if the instructions/information are not followed, the user could suffer serious consequences

5.4.2.3 The manufacturer shall provide information for the user that additional information regarding fire escape rope can be found in NFPA 1500 and NFPA 1983.

5.4.2.4 The manufacturer of fire escape rope that is certified as being compliant with this standard shall furnish the purchaser with a sample of suggested records to be maintained by the purchaser or user of fire escape rope and a list of items that the records need to contain.

5.5 Fire Escape Webbing.

5.5.1 Fire Escape Webbing Label Requirements.

5.5.1.1 Fire escape webbing shall meet the labeling requirements in 5.2.1, escape rope, excluding 5.2.1.8, 5.2.1.9, 5.2.1.10, 5.2.1.11, and 5.2.1.12.

5.5.1.2 Each fire escape webbing shall have the following compliance statement on the product label:

**“MEETS THE FIRE ESCAPE WEBBING REQUIREMENTS
OF NFPA 1983, STANDARD ON LIFE SAFETY ROPE AND
EQUIPMENT FOR EMERGENCY SERVICES,
2017 EDITION.”**

5.5.1.3* In addition to the compliance statement specified in 5.5.1.2, at least the following information shall be provided on the product label:

MINIMUM BREAKING STRENGTH: _____ kN

PERIMETER: _____ mm

Type of fiber(s) _____

5.5.1.4 The perimeter of the fire escape webbing, which is required in 5.5.1.3 to be stated on the product label, shall be as determined by the certification organization in accordance with 7.5.2.

5.5.1.5 In addition to the compliance statement specified in 5.5.1.2, each fire escape webbing shall also be marked for its full length by insertion of a continuous identification tape(s). At least the following statement and information shall be legibly printed on the tape not less than every 1 m (39 in.).

**MEETS REQUIREMENTS FOR FIRE ESCAPE WEBBING
OF NFPA 1983.**

[Certification organization's label, symbol, or identifying mark]
[Name of manufacturer]
[Year and quarter of manufacture (not coded)]

5.5.1.6 The MBS value of the escape webbing, which is required in 5.5.1.3 to be stated on the product label, shall be permitted to be any value greater than the actual “pass” requirement value determined by the certification testing in accordance with 7.5.1, but shall not be greater than the calculated MBS.

5.5.2 Fire Escape Webbing User Information.

5.5.2.1 The manufacturer of fire escape webbing that is certified as being compliant with this standard shall furnish the purchaser with at least use criteria, inspection procedures, maintenance procedures, and retirement criteria for the product.

5.5.2.2 The manufacturer shall provide information for the user regarding at least the following issues:

- (1) Using the webbing only with a life safety harness or escape belt
- (2) Inspecting the webbing periodically according to the manufacturers' inspection procedure
- (3) Removing the webbing from service and destroying it if the webbing does not pass inspection or if there is any doubt about the safety or serviceability of the webbing
- (4) Protecting the webbing from abrasion
- (5) Not exposing the webbing to flame or high temperature and carrying the webbing where it will be protected as the webbing could melt or burn and fail if exposed to flame or high temperature
- (6) Keeping the product label and user instructions/information after they are removed/separated from the webbing for future reference
- (7) Referring to the user instructions/information before and after each use
- (8) Cautioning that, if the instructions/information are not followed, the user could suffer serious consequences

5.5.2.3 The manufacturer shall provide information for the user that additional information regarding fire escape webbing can be found in NFPA 1500 and NFPA 1983.

5.5.2.4 The manufacturer of fire escape webbing that is certified as being compliant with this standard shall furnish the purchaser with a sample of suggested records to be maintained by the purchaser or user of fire escape webbing and a list of items that the records need to contain.

5.6 Throwlines.

5.6.1 Throwline Label Requirements.

5.6.1.1* Each throwline item shall have a product label.

5.6.1.2 Where a throwline is an integral and nonseparable piece of a manufactured system and that manufactured system is certified as compliant with this standard, the throwline shall be required to have at least the continuous identification tape specified in 5.6.1.12.

5.6.1.3 The throwline product label shall be permitted to be a hang tag affixed to each individual throwline or shall be permitted to be printed on a sheet that is inserted and sealed in the packaging that immediately contains the throwline.

5.6.1.4 All letters shall be at least 2 mm ($\frac{5}{64}$ in.) high.

5.6.1.5 All worded portions of the required product label shall at least be in English.

5.6.1.6 Symbols and other pictorial graphic representations shall be permitted to be used to supplement worded statements on the product label(s).

5.6.1.7 The certification organization's label, symbol, or identifying mark shall be printed on the product label. All letters shall be at least 2 mm ($\frac{5}{64}$ in.) high.

5.6.1.8* Each throwline shall have the following compliance statement on the product label:

**ROPE MEETS THE THROWLINE REQUIREMENTS OF
NFPA 1983, STANDARD ON LIFE SAFETY ROPE AND
EQUIPMENT FOR EMERGENCY SERVICES,
2017 EDITION.**

5.6.1.9 In addition to the compliance statement specified in 5.6.1.8, at least the following information shall be provided on the product label.

MINIMUM BREAKING STRENGTH: _____ kN

DIAMETER: _____ mm

Type of fiber(s) _____

5.6.1.10 The MBS value of the throwline, which is required in 5.6.1.9 to be stated on the product label, shall be permitted to be any value greater than the actual "pass" requirement value determined by the certification testing in accordance with 7.6.1, but shall not be greater than the calculated MBS.

5.6.1.11 The diameter of the throwline, which is required in 5.6.1.8 to be stated on the product label, shall be as determined by the certification organization in accordance with 7.6.2.

5.6.1.12 In addition to the compliance statement specified in 5.6.1.8, each throwline shall also be marked for its full length by insertion of a continuous identification tape(s). At least the following statement and information shall be printed on the tape not less than every 1 m (39 in.):

MEETS REQUIREMENTS FOR THROWLINE OF NFPA 1983.

[Certification organization's label, symbol, or identifying mark]

[Name of manufacturer]

[Year and quarter of manufacture (not coded)]

5.6.1.13 In addition to the compliance and information statements in 5.6.1.8 and 5.6.1.9, at least the following information shall also be printed on the product label(s) where all letters shall be at least 2 mm ($\frac{5}{64}$ in.) high:

- (1) Manufacturer's name, identification, or designation
- (2) Manufacturer's address
- (3) Country of manufacture
- (4) Manufacturer's product identification
- (5) Model, style, lot, or serial number

5.6.2 Throwline User Information. The manufacturer of a throwline that is certified as being compliant with this standard shall furnish the purchaser with at least use criteria, inspection procedures, maintenance procedures, and retirement criteria for the product.

5.7 Moderate Elongation Laid Life-Saving Rope.

5.7.1 Moderate Elongation Laid Life-Saving Rope Label Requirements.

5.7.1.1 Each moderate elongation laid life-saving rope shall have a product label.

5.7.1.2 The moderate elongation laid life-saving rope product label shall be permitted to be a hang tag affixed to each rope or shall be permitted to be printed on a sheet that is inserted and sealed in the packaging that immediately contains the moderate elongation laid life-saving rope.

5.7.1.3 All letters shall be at least 2 mm ($\frac{5}{64}$ in.) high.

5.7.1.4 All worded portions of the required product label shall be at least in English.

5.7.1.5 Symbols and other pictorial graphic representations shall be permitted to be used to supplement worded statements on the product label(s).

5.7.1.6 The certification organization's label, symbol, or identifying mark shall be printed on the product label. All letters shall be at least 2.5 mm ($\frac{3}{32}$ in.) high.

5.7.1.7 Each moderate elongation laid life-saving rope shall have the following compliance statement on the product label:

MEETS THE MODERATE ELONGATION LAID LIFE-SAVING ROPE REQUIREMENTS OF NFPA 1983, STANDARD ON LIFE SAFETY ROPE AND EQUIPMENT FOR EMERGENCY SERVICES, 2017 EDITION.

5.7.1.8 In addition to the compliance statement specified in 5.7.1.7, at least the following information shall be provided on the product label:

MINIMUM BREAKING STRENGTH: ____ kN
DIAMETER: ____ mm
Type of Fiber(s): _____.

5.7.1.9 The MBS value of the moderate elongation laid life-saving rope, which is required in 5.7.1.8 to be stated on the product label, shall be permitted to be any value greater than the actual "pass" requirement value determined by the certification testing in accordance with 7.7.1, but shall not be greater than the calculated MBS.

5.7.1.10 The diameter of the moderate elongation laid life-saving rope, which is required in 5.7.1.8 to be stated on the product label, shall be as determined by the certification organization in accordance with 7.7.2.

5.7.1.11 In addition to the compliance statement specified in 5.7.1.7, each moderate elongation laid life-saving rope shall also be marked for its full length by insertion of a continuous identification tape(s). At least the following statement and information shall be printed on the tape not less than every 1 m (39 in.):

MEETS REQUIREMENTS FOR MODERATE ELONGATION LAID LIFE-SAVING ROPE OF NFPA 1983.

[Certification organization's label, symbol, or identifying mark]

[Name of manufacturer]

[Year and quarter of manufacture (not coded)]

5.7.1.12 In addition to the compliance and information statements specified in 5.7.1.7, 5.7.1.8, and 5.7.1.11, at least the following information shall also be printed on the product label(s) where all letters shall be at least 2 mm ($\frac{3}{64}$ in.) high:

- (1) Manufacturer's name, identification, or designation
- (2) Manufacturer's address
- (3) Country of manufacture
- (4) Manufacturer's product identification
- (5) Model, style, lot, or serial number
- (6) Elongation at 1.35 kN (300 lbf)
- (7) Elongation at 2.7 kN (600 lbf)
- (8) Elongation at 4.4 kN (1000 lbf)

5.7.2 Moderate Elongation Laid Life-Saving Rope User Information.

5.7.2.1 The manufacturer of moderate elongation laid life-saving rope that is certified as being compliant with this standard shall furnish the purchaser with at least use criteria, inspection procedures, maintenance procedures, and retirement criteria for the product.

5.7.2.2 The manufacturer shall provide information for the user to consider prior to reusing moderate elongation laid life-

saving rope, including that the rope be considered for reuse only if all of the following conditions are met:

- (1) Rope has not been visually damaged.
- (2) Rope has not been exposed to heat, direct flame impingement, or abrasion.
- (3) Rope has not been subjected to any impact load.
- (4) Rope has not been exposed to liquids, solids, gases, mists, or vapors of any chemical or other material that can deteriorate rope.
- (5) Rope passes inspection when inspected by a qualified person following the manufacturer's inspection procedures both before and after each use.

5.7.2.3 The manufacturer shall provide information for the user regarding not using the moderate elongation laid life-saving rope and removing the rope from service if the rope does not meet all of the conditions in 5.7.2.2, if the rope does not pass inspection, or if there is any doubt about the safety or serviceability of the rope.

5.7.2.4 The manufacturer shall provide information for the user regarding at least the following issues:

- (1) Inspecting the rope periodically according to the manufacturer's inspection procedure
- (2) Removing the rope from service and destroying it if the rope does not pass inspection or if there is any doubt about the safety or serviceability of the rope
- (3) Protecting the rope from abrasion
- (4) Not exposing the rope to flame or high temperature and carrying the rope where it will be protected as the rope could melt or burn and fail if exposed to flame or high temperature
- (5) Keeping the product label and user instructions/information after they are removed/separated from the rope and retaining them in the permanent rope record; copying the product label and user instructions/information and keeping the copies with the rope
- (6) Referring to the user instructions/information before and after each use
- (7) Cautioning that if the instructions/information are not followed, the user could suffer serious consequences

5.7.2.5 The manufacturer shall provide information for the user that additional information regarding victim extrication devices can be found in NFPA 1500 and NFPA 1983.

5.7.2.6 The manufacturer of moderate elongation laid life-saving rope that is certified as being compliant with this standard shall furnish the purchaser with a sample of suggested records to be maintained by the purchaser or user of moderate elongation laid life-saving rope and a list of items that the records need to contain.

5.8 Manufacturer-Supplied Eye Termination.

5.8.1 Manufacturer-Supplied Eye Termination Label Requirements.

5.8.1.1 Each manufacturer-supplied eye termination shall have a product label.

5.8.1.2 The manufacturer-supplied eye termination product label shall be permitted to be a hang tag affixed to each manufacturer-supplied eye termination or shall be permitted to be printed on a sheet that is inserted and sealed in the packaging that immediately contains the manufacturer-supplied eye termination.