



# **NATIONAL FIRE PROTECTION ASSOCIATION**

The leading information and knowledge resource on fire, electrical and related hazards

## **NFPA Technical Committee on Special Operations Protective Clothing and Equipment First Draft Meeting Agenda NFPA 2500 (NFPA 1983, 1858) January 27<sup>th</sup>- 31<sup>st</sup>, 2020**

1. Meeting called to order at 8am
2. Introduction and welcome by NFPA staff
3. NFPA Committee training and presentations
4. Introduction of Committee members and guests
5. Approval of minutes from last meeting
6. Act on PIs
  - a. NFPA 1983
    - i. 1983/1858 task group report
    - ii. Escape anchor task group report
  - b. NFPA 1858
7. Old business
8. New business
  - a. Task groups for PC review
9. Next meeting
10. Adjourn

# TECHNICAL COMMITTEE ON SPECIAL OPERATIONS PROTECTIVE CLOTHING AND EQUIPMENT

Second Draft Meeting July 16-17, 2019

## MINUTES

1. Chair Jeremy Metz called the meeting to order at 8:00 a.m.
2. Members and guests introduced themselves.

### Members in Attendance:

Jeremy Metz, Chair  
Karen Lehtonen, Secretary  
Brian Beechner  
Richard Broccolo  
Rich Galtieri – By Phone  
Dan Hudson – By Phone  
Kim Klaren  
George Krause – By Phone  
Steve Legros  
Loui McCurley – By Phone  
Jim Murray  
Kim Schoppa  
Cedric Smith  
Beverly Stutts – By Phone  
Chris Farrell, NFPA Staff Liaison

### Guests in Attendance:

John Drewniak, Aqua Lung Military  
Josh Ingram, PBI  
Bill Fithian, SEI – By Phone  
Amanda Newsom, UL  
Matt Plunkett, Bullard  
John Rihn, MSA/Globe – By Phone

### **3. Opening Remarks**

Discussed membership updates and changes

NFPA 1951 update: Passed Correlating committee ballot, will be 2020 Edition

Was not open for NITMAM for 2019 annual meeting. Still needs to go through that process.

ERRS Project Update – will discuss further under new business

### **4. Review and Approval of Minutes from Previous Meeting**

The minutes of the September 18-19, 2018 meeting were approved.

### **5. Chris Farrell provided the NFPA Staff Liaison Report.**

### **6. NFPA 1952 Second Draft Action on Public Comments and creation of committee Second Revisions**

There were no public comments to act on. TC created second revisions.

**7. NFPA 1953 Second Draft Action on Public Comments and creation of committee Second Revisions**

TC acted on two public comments and created second revisions.

**8. New Business**

NFPA Consolidation Project (ERRS) update from Chris Farrell.

New consolidated documents will go out for public input September – November 2019

**9. Other items**

Update on Escape Anchor Task Group – General consensus is that no changes are required at this time (no TIA). Several items to be investigated for next edition (rewording of test method, addition of manner of function tests, other performance requirements, revision to labeling requirements). The task group will continue their work and have recommendations to present at the December 2019 task group meeting.

**10. Next Meeting**

January Committee Week: January 26 – February 1, 2020.  
Specific dates to be provided at a later date.  
Location TBD – NFPA will announce

November Committee Week: November 16 – 20, 2020  
Specific dates to be provided at a later date.  
Location TBD – NFPA will announce

Task Group meeting prior to January Committee Week, in December  
Meeting December 9-11, 2019. Travel in on morning of the 9<sup>th</sup>  
Location TBD – Chairman Metz will announce

**11. The meeting was adjourned at 11:15 p.m. on July 16, 2019.**

## Custom ERRS Group 1 Master Schedule

Process Stage	Process Step	Dates for TC	Dates for TC with CC
Public Input Stage (First Draft)	Public Input Closing Date*	11/15/2019	11/15/2020
	Final Date for TC First Draft Meeting	2/01/2020	2/01/2020
	Posting of First Draft and TC Ballot	4/27/2020	4/27/2020
	Final date for Receipt of TC First Draft ballot	5/07/2020	5/07/2020
	Final date for Receipt of TC First Draft ballot - recirc	5/12/2020	5/12/2020
	Posting of First Draft for CC Meeting		5/26/2020
	Final date for CC First Draft Meeting		6/09/2020
	Posting of First Draft and CC Ballot		6/30/2020
	Final date for Receipt of CC First Draft ballot		7/10/2020
	Final date for Receipt of CC First Draft ballot - recirc		7/14/2020
	<b>Post First Draft Report</b> for Public Comment	7/28/2020	7/28/2020
Comment Stage (Second Draft)	Public Comment Closing Date*	10/09/2020	10/09/2020
	Notice Published on Consent Standards (Standards that received no Comments) Note: Date varies and determined via TC ballot.		
	Appeal Closing Date for Consent Standards (Standards that received no Comments)		
	Final date for TC Second Draft Meeting	11/13/2020	11/13/2020
	Posting of Second Draft and TC Ballot	1/02/2021	1/29/2021
	Final date for Receipt of TC Second Draft ballot	2/08/2021	2/08/2021
	Final date for receipt of TC Second Draft ballot - recirc	2/12/2021	2/12/2021
	Posting of Second Draft for CC Meeting		2/19/2021
	Final date for CC Second Draft Meeting		3/05/2021
	Posting of Second Draft for CC Ballot		3/15/2021
	Final date for Receipt of CC Second Draft ballot		3/25/2021
	Final date for Receipt of CC Second Draft ballot - recirc		3/29/2021
	<b>Post Second Draft Report</b> for NITMAM Review	4/05/2021	4/05/2021
Tech Session Preparation (& Issuance)	<b>Notice of Intent to Make a Motion (NITMAM) Closing Date</b>	4/26/2021	4/26/2021
	<b>Posting of Certified Amending Motions (CAMs) and Consent Standards</b>	5/24/2021	5/24/2021
	Appeal Closing Date for Consent Standards		
	SC Issuance Date for Consent Standards		
Tech Session	Association Meeting for Standards with CAMs	6/24/2021	6/24/2021
Appeals and Issuance	Appeal Closing Date for Standards with CAMs		
	SC Issuance Date for Standards with CAMs		

TC = Technical Committee or Panel  
CC = Correlating Committee

As of 10/9/2019

# Address List No Phone

12/16/2019  
Chris Farrell  
FAE-SCE

## Special Operations Protective Clothing and Equipment Fire and Emergency Services Protective Clothing and Equipment

<b>Jeremy Metz</b> <b>Chair</b> West Metro Fire Rescue 433 South Allison Parkway Lakewood, CO 80226 <b>Alternate: Jon Saito</b>	<b>U 8/9/2011</b> <b>FAE-SCE</b>	<b>Karen E. Lehtonen</b> <b>Secretary</b> LION Group, Inc. 7200 Poe Avenue, Suite 400 Dayton, OH 45414 <b>Alternate: Ashley M. Scott</b>	<b>M 10/1/1999</b> <b>FAE-SCE</b>
<b>Jason L. Allen</b> <b>Principal</b> Intertek Testing Services 3933 US Route 11 Cortland, NY 13045-9715 <b>Alternate: Pamela A. Kavalesky</b>	<b>RT 9/30/2004</b> <b>FAE-SCE</b>	<b>Joseph Arrington</b> <b>Principal</b> San Antonio Fire Department 1443 Clementson Drive San Antonio, TX 78260-6279	<b>U 03/07/2013</b> <b>FAE-SCE</b>
<b>Richard J. Broccolo</b> <b>Principal</b> Orange County Fire Rescue 5013 Palmetto Park Drive Winter Garden, FL 34787 <b>Alternate: Brian J. Beechner</b>	<b>U 08/11/2014</b> <b>FAE-SCE</b>	<b>Paul Dacey</b> <b>Principal</b> W. L. Gore & Associates 105 Vieve's Way Elkton, MD 21921-3914	<b>M 10/29/2012</b> <b>FAE-SCE</b>
<b>Keith B. Dempsey</b> <b>Principal</b> City of Dalton Fire Department 2023 Dempsey Drive SE Dalton, GA 30721 <b>Alternate: Daniel Hudson</b>	<b>C 7/29/2005</b> <b>FAE-SCE</b>	<b>Richard Galtieri</b> <b>Principal</b> Port Of Seattle Fire Department 2400 170th Street Seattle, WA 98158	<b>U 04/03/2019</b> <b>FAE-SCE</b>
<b>Richard Garber</b> <b>Principal</b> Anne Arundel County Fire Department 1368 Stevens Street Manheim, PA 17545 <b>Lancaster County</b>	<b>E 08/08/2019</b> <b>FAE-SCE</b>	<b>Stephen J. Geraghty</b> <b>Principal</b> Fire Department City of New York 154 Greystone Road Rockville Centre, NY 11570 <b>Fire Department of New York</b> <b>Alternate: James E. Murray</b>	<b>U 3/21/2006</b> <b>FAE-SCE</b>
<b>Diane B. Hess</b> <b>Principal</b> PBI Performance Products, Inc. 9800D Southern Pine Boulevard Charlotte, NC 28273-5522	<b>M 4/1/1995</b> <b>FAE-SCE</b>	<b>Tricia L. Hock</b> <b>Principal</b> ASTM/Safety Equipment Institute (SEI) 1307 Dolley Madison Blvd., Suite 3A McLean, VA 22101 <b>Alternate: Dean D. Moran</b>	<b>RT 03/05/2012</b> <b>FAE-SCE</b>

# Address List No Phone

12/16/2019  
Chris Farrell  
FAE-SCE

## Special Operations Protective Clothing and Equipment Fire and Emergency Services Protective Clothing and Equipment

<b>Thomas Howard</b> <b>Principal</b> New York Division of Homeland Security & Emergency Services Office of Fire Prevention and Control 1220 Washington Ave Ext Albany, NY 12226-9801 <b>Alternate: Gregory Gould</b>	<b>E 03/05/2012</b> <b>FAE-SCE</b>	<b>Kim Klaren</b> <b>Principal</b> Fairfax County Fire & Rescue Department 5903 Amelia Street Springfield, VA 22150 <b>Alternate: Kimberly Schoppa</b>	<b>U 7/14/2004</b> <b>FAE-SCE</b>
<b>Stephen Legros</b> <b>Principal</b> City of Yuma Fire Department 1289 South 30th Avenue Yuma, AZ 85364-4230	<b>U 04/05/2016</b> <b>FAE-SCE</b>	<b>Loui McCurley</b> <b>Principal</b> PMI 3850 York Street Denver, CO 80205-3540 <b>Alternate: Jeffrey S. Bowles</b>	<b>M 7/17/1998</b> <b>FAE-SCE</b>
<b>Amanda H. Newsom</b> <b>Principal</b> UL LLC 12 Laboratory Drive PO Box 13995 Research Triangle Park, NC 27709-3995 <b>Alternate: Beverly Wooten Stutts</b>	<b>RT 08/08/2019</b> <b>FAE-SCE</b>	<b>H. Dean Paderick</b> <b>Principal</b> Special Rescue International 2697 International Parkway Parkway 4, Suite 198 Virginia Beach, VA 23452	<b>SE 4/1/1995</b> <b>FAE-SCE</b>
<b>John F. Rihn</b> <b>Principal</b> Globe Manufacturing/Mine Safety Appliances Company 1100 Cranberry Woods Drive Cranberry Township, PA 16066-5208 <b>Alternate: George R. Krause, II</b>	<b>M 08/08/2019</b> <b>FAE-SCE</b>	<b>Mark S. Saner</b> <b>Principal</b> VF Imagewear/Bulwark Protective Apparel 1701 North Lombard Street Oxnard, CA 93030	<b>M 08/17/2017</b> <b>FAE-SCE</b>
<b>Cedric Smith</b> <b>Principal</b> CMC Rescue, Inc. 6740 Cortona Drive Goleta, CA 93117 <b>Alternate: John McKently</b>	<b>M 04/08/2015</b> <b>FAE-SCE</b>	<b>Michael T. Stanhope</b> <b>Principal</b> TenCate/Southern Mills, Inc. 6501 Mall Boulevard PO Box 289 Union City, GA 30291-1519 <b>Alternate: Charles S. Dunn</b>	<b>M 7/1/1996</b> <b>FAE-SCE</b>
<b>Jay L. Tarley</b> <b>Principal</b> National Institute for Occupational Safety & Health 3 Troy Lane Fairmont, WV 26554-1463 <b>Alternate: Jeffrey D. Palcic</b>	<b>E 08/08/2019</b> <b>FAE-SCE</b>	<b>Craig P. Mignogno</b> <b>Voting Alternate</b> Columbus Firefighters Union, IAFF67 4849 North Galena Road Sunbury, OH 43074-9578 <b>Columbus Firefighters Union</b>	<b>L 10/18/2011</b> <b>FAE-SCE</b>

# Address List No Phone

12/16/2019

Chris Farrell

**FAE-SCE**

## Special Operations Protective Clothing and Equipment

## Fire and Emergency Services Protective Clothing and Equipment

<b>Brian J. Beechner</b>	<b>U 04/08/2015</b>	<b>Jeffrey S. Bowles</b>	<b>M 08/11/2014</b>
<b>Alternate</b> Orange County Fire Rescue Department 16607 Harbor Sailway Winter Garden, FL 34787 <b>Principal: Richard J. Broccolo</b>	<b>FAE-SCE</b>	<b>Alternate</b> PMI Denver 3850 York Street Denver, CO 80205-3540 <b>Principal: Loui McCurley</b>	<b>FAE-SCE</b>
<b>Charles S. Dunn</b>	<b>M 8/2/2010</b>	<b>Gregory Gould</b>	<b>E 03/05/2012</b>
<b>Alternate</b> TenCate Protective Fabrics/Southern Mills 6501 Mall Boulevard Union City, GA 30291-1519 <b>Principal: Michael T. Stanhope</b>	<b>FAE-SCE</b>	<b>Alternate</b> New York State Division of Homeland Security & Emergency Services-OFPC PO Box 351 Guilderland Center, NY 12085 <b>Principal: Thomas Howard</b>	<b>FAE-SCE</b>
<b>Daniel Hudson</b>	<b>C 10/23/2013</b>	<b>Pamela A. Kavalesky</b>	<b>RT 10/28/2008</b>
<b>Alternate</b> City of Dalton Fire Department 72 Boxer Lane Rock Spring, GA 30739 <b>Principal: Keith B. Dempsey</b>	<b>FAE-SCE</b>	<b>Alternate</b> Intertek Testing Services 3933 US Route 11 Cortland, NY 13045-9717 <b>Principal: Jason L. Allen</b>	<b>FAE-SCE</b>
<b>George R. Krause, II</b>	<b>M 8/9/2011</b>	<b>John McKently</b>	<b>M 8/9/2011</b>
<b>Alternate</b> Globe Manufacturing Company, Inc. 37 Loudon Road PO Box 128 Pittsfield, NH 03263 <b>Principal: John F. Rihn</b>	<b>FAE-SCE</b>	<b>Alternate</b> CMC Rescue, Inc. 6740 Cortona Drive Goleta, CA 93117 <b>Principal: Cedric Smith</b>	<b>FAE-SCE</b>
<b>Dean D. Moran</b>	<b>RT 03/05/2012</b>	<b>James E. Murray</b>	<b>U 3/2/2010</b>
<b>Alternate</b> ASTM/Safety Equipment Institute (SEI) 1307 Dolley Madison Boulevard McLean, VA 22101 <b>Principal: Tricia L. Hock</b>	<b>FAE-SCE</b>	<b>Alternate</b> Fire Department City of New York 28 Howton Avenue Staten Island, NY 10308 <b>Fire Department of New York</b> <b>Principal: Stephen J. Geraghty</b>	<b>FAE-SCE</b>
<b>Jeffrey D. Palcic</b>	<b>E 11/30/2016</b>	<b>Jon Saito</b>	<b>U 10/29/2012</b>
<b>Alternate</b> National Institute for Occupational Safety and Health 626 Cochrans Mill Road Pittsburgh, PA 15236 <b>Principal: Jay L. Tarley</b>	<b>FAE-SCE</b>	<b>Alternate</b> West Metro Fire Rescue 433 South Allison Parkway Lakewood, CO 80226 <b>Principal: Jeremy Metz</b>	<b>FAE-SCE</b>

# Address List No Phone

12/16/2019  
Chris Farrell  
**FAE-SCE**

## Special Operations Protective Clothing and Equipment

### Fire and Emergency Services Protective Clothing and Equipment

<b>Kimberly Schoppa</b>	<b>U</b> 08/17/2017	<b>Ashley M. Scott</b>	<b>M</b> 3/2/2010
<b>Alternate</b> Fairfax County Fire And Rescue 5903 Amelia Street Springfield, VA 22150 <b>Principal: Kim Klaren</b>	<b>FAE-SCE</b>	<b>Alternate</b> LION Group, Inc. 7200 Poe Avenue, Suite 400 Dayton, OH 45414 <b>Principal: Karen E. Lehtonen</b>	<b>FAE-SCE</b>
<b>Beverly Wooten Stutts</b>	<b>RT</b> 3/2/2010	<b>Chris Farrell</b>	07/13/2013
<b>Alternate</b> UL LLC 12 Laboratory Drive PO Box 13995 Research Triangle Park, NC 27709-3995 <b>Principal: Amanda H. Newsom</b>	<b>FAE-SCE</b>	<b>Staff Liaison</b> National Fire Protection Association One Batterymarch Park Quincy, MA 02169-7471	<b>FAE-SCE</b>





## Public Input No. 207-NFPA 2500-2019 [ Sections 2.2, 2.3 ]

### Sections 2.2, 2.3

#### 2.2 NFPA Publications.

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

NFPA 472, Standard for Competence of Responders to Hazardous Materials/Weapons of Mass Destruction Incidents, 2013 edition.

NFPA 1006, Standard for Technical Rescue Personnel Professional Qualifications, 2017 edition.

NFPA 1500, Standard on Fire Department Occupational Safety- and Health , Health and Wellness Program, 2013- 2018 edition.

NFPA 1561, Standard on Emergency Services Incident Management System and Command Safety, 2014 edition.

NFPA 1670, Standard on Operations and Training for Technical Search and Rescue Incidents, 2017 edition.

NFPA 1971, Standard on Protective Ensembles for Structural Fire Fighting and Proximity Fire Fighting, 2018 edition.

NFPA 1983, Standard on Life Safety Rope and Equipment for Emergency Services, 2017 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, *Test Method for Dimensional Changes in Automatic Home Laundering of Woven and Knit Fabrics After Home Laundering* , 2010 2018 .

##### 2.3.2 ANSI Publications.

American National Standards Institute, Inc., 25 West 43rd Street, 4th Floor, New York, NY 10036.

ANSI/CGA G7.1, *Commodity Specification for Air*, 2011.

##### 2.3.3 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 2018 .

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 2006 (Reapproved 2018) .

ASTM F1740, *Standard Guide for Inspection of Nylon, Polyester, or Nylon/Polyester Blend, or Both Kernmantle Rope*, 2012.

ASTM F1772, *Standard Specification for Climbing Harnesses for Rescue and Sport Activities* , - 2012 2017 .

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 (Reapproved 2019) .

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 2019 .

**2.3.4** Cordage Institute Publications.

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

CI 1202, *Terminology for Fiber Rope*, 2013.

CI 1801, *Low Stretch and Static Kernmantle Life-Safety Rope, 2007* 2017 .

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

**2.3.5** 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- Conformity assessment - requirements for accreditation bodies accrediting conformity assessment bodies*~~, 2004 2017 .

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 2017 .

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.

**2.3.6** SAE International Publications.

Society of Automotive Engineers, 400 Commonwealth Drive, Warrendale, PA 15096-0001.

SAE AMS-2175A, *Castings, Classification and Inspection of*, 2010 (Reapproved 2018) .

**2.3.7** 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.

**2.3.8** U.S. Government Publications.

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

FEMA National Response Framework, 2nd edition, 2013.

*FEMA National Urban Search and Rescue (US&R) Response System*, 2006.

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

U.S. Coast Guard National Search and Rescue Committee, *U.S. National Search and Rescue Plan*, 2007.

**2.3.9** Additional Publications.

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

National Cave Rescue Commission of the National Speleological Society — Cave Orientation Course.

**Statement of Problem and Substantiation for Public Input**

Updating standard names and edition years as applicable.

**Related Public Inputs for This Document**

Related Input	Relationship
<a href="#">Public Input No. 214-NFPA 2500-2019 [Section No. 24.4.2.2]</a>	
<a href="#">Public Input No. 215-NFPA 2500-2019 [Section No. 24.4.3.3]</a>	
<a href="#">Public Input No. 216-NFPA 2500-2019 [Section No. 28.10.4.2.1]</a>	
<a href="#">Public Input No. 217-NFPA 2500-2019 [Section No. 28.3.4 [Excluding any Sub-Sections]]</a>	

Public Input No. 218-NFPA 2500-2019 [Section No. 28.4.4.1 [Excluding any Sub-Sections]]

### **Submitter Information Verification**

**Submitter Full Name:** Beverly Stutts

**Organization:** UL LLC

**Street Address:**

**City:**

**State:**

**Zip:**

**Submission Date:** Wed Nov 13 14:31:15 EST 2019

**Committee:** FAE-SCE



## Public Input No. 132-NFPA 2500-2019 [ Section No. 2.3 ]

### 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~~ 2004 .

#### 2.3.2 ANSI Publications.

American National Standards Institute, Inc., 25 West 43rd Street, 4th Floor, New York, NY 10036.

ANSI/CGA G7.1, *Commodity Specification for Air*, 2011.

#### 2.3.3 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~~ 2018 .

ASTM D4966, *Standard Test Method for Abrasion Resistance of Textile Fabrics (Martindale Abrasion Tester Method)*, ~~2012-e1~~ 2016 .

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~~ 2018 .

ASTM F1740, *Standard Guide for Inspection of Nylon, Polyester, or Nylon/Polyester Blend, or Both Kernmantle Rope*, ~~2012~~ 2018 .

ASTM F1772, *Standard Specification for Climbing- Harnesses for Rescue and Sport Activities* , - ~~2012~~ 2017 .

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~~ 2019 .

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~~ 2019 .

#### 2.3.4 Cordage Institute Publications.

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

CI 1202, *Terminology for Fiber Rope*, 2013.

CI 1801, *Low Stretch- and / Static Kernmantle Life- Safety Rope*, ~~2007~~ 2018 .

CI 1805, *3-Strand Life Safety Rope, Moderate Stretch*, ~~2008~~ 2018 .

### 2.3.5 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 - Part 1: Requirements*,

2011

2015.

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.

### 2.3.6 SAE International Publications.

Society of Automotive Engineers, 400 Commonwealth Drive, Warrendale, PA 15096-0001.

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

### 2.3.7 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.

### 2.3.8 U.S. Government Publications.

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

FEMA National Response Framework, 2nd edition, 2013.

*FEMA National Urban Search and Rescue (US&R) Response System*, 2006.

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

U.S. Coast Guard National Search and Rescue Committee, *U.S. National Search and Rescue Plan*,  
2007.

### 2.3.9 Additional Publications.

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

National Cave Rescue Commission of the National Speleological Society — Cave Orientation Course.

## Statement of Problem and Substantiation for Public Input

Several referenced publications have had updates and require revisions to titles and publication dates.

## Submitter Information Verification

**Submitter Full Name:** Karen Lehtonen

**Organization:** LION Group, Inc.

**Street Address:**

**City:**

**State:**

**Zip:**

<b>Submittal Date:</b>	Mon Nov 11 14:36:31 EST 2019
<b>Committee:</b>	FAE-SCE



## Public Input No. 35-NFPA 2500-2019 [ Section No. 2.3.3 ]

### 2.3.3 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 2016.

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 F1740, *Standard Guide for Inspection of Nylon, Polyester, or Nylon/Polyester Blend, or Both Kernmantle Rope*, 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.

## Statement of Problem and Substantiation for Public Input

Updated revision / edition.

## Submitter Information Verification

**Submitter Full Name:** Cedric Smith

**Organization:** CMC Rescue, Inc.

**Street Address:**

**City:**

**State:**

**Zip:**

**Submission Date:** Thu Nov 07 16:56:54 EST 2019

**Committee:** FAE-SCE



## Public Input No. 36-NFPA 2500-2019 [ Section No. 2.3.4 ]

### 2.3.4 Cordage Institute Publications.

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

CI 1202, *Terminology for Fiber Rope*, 2013.

CI 1800, Test Methods for Life Safety Ropes and Accessory Cords for Life safety Applications, 2017

CI 1801, Performance Requirements for ~~Low Stretch and Static Kernmantle Life~~ ~~Static Life~~ Safety Rope, 2007 2017 .

CI 1805, *3-Strand Life Safety Rope, Moderate Stretch*, 2008 2018 .

### Statement of Problem and Substantiation for Public Input

The Cordage Institute has separated the performance requirements (CI 1801) and the test methods (CI 1800) and released independent standards. Other comments reflect updates to revision / edition dates of other referenced CI standards.

### Submitter Information Verification

**Submitter Full Name:** Cedric Smith

**Organization:** CMC Rescue, Inc.

**Street Address:**

**City:**

**State:**

**Zip:**

**Submittal Date:** Thu Nov 07 16:59:13 EST 2019

**Committee:** FAE-SCE





## Public Input No. 37-NFPA 2500-2019 [ Section No. 2.3.5 ]

### 2.3.5 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 2015 .

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.

## Statement of Problem and Substantiation for Public Input

Updated revision / edition.

## Submitter Information Verification

**Submitter Full Name:** Cedric Smith

**Organization:** CMC Rescue, Inc.

**Street Address:**

**City:**

**State:**

**Zip:**

**Submittal Date:** Thu Nov 07 17:12:04 EST 2019

**Committee:** FAE-SCE



## Public Input No. 38-NFPA 2500-2019 [ Section No. 2.3.8 ]

### 2.3.8 U.S. Government Publications.

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

FEMA National Response Framework, 2nd edition, 2013.

*FEMA National Urban Search and Rescue (US&R) Response System*, 2006.

MIL-DTL- 83420M, Military Specification: *General Specification for Flexible Wire Rope for Aircraft Control*,  
1-April-2005 1 March 2016

U.S. Coast Guard National Search and Rescue Committee, *U.S. National Search and Rescue Plan*, 2007.

### Statement of Problem and Substantiation for Public Input

Update to release date and title.

### Submitter Information Verification

**Submitter Full Name:** Cedric Smith

**Organization:** CMC Rescue, Inc.

**Street Address:**

**City:**

**State:**

**Zip:**

**Submittal Date:** Thu Nov 07 17:14:53 EST 2019

**Committee:** FAE-SCE



## Public Input No. 208-NFPA 2500-2019 [ Section No. 2.4 ]

### 2.4 References for Extracts in Mandatory Sections.

NFPA 1006, Standard for Technical Rescue Personnel Professional Qualifications, 2017 edition.

NFPA 1021, Standard for Fire Officer Professional Qualifications, 2014 edition.

NFPA 1521, Standard for Fire Department Safety Officer Professional Qualifications, 2015 edition.

NFPA 1561, Standard on Emergency Services Incident Management System and Command Safety, 2014 edition.

NFPA 1855, Standard on Selection, Care, and Maintenance of Protective Ensembles for Technical Rescue Incidents, 2018 edition.

NFPA 1983, Standard on Life Safety Rope and Equipment for Emergency Services, - ~~2017~~ 2022 edition.

### Statement of Problem and Substantiation for Public Input

Updating NFPA 1983 edition year

### Submitter Information Verification

**Submitter Full Name:** Beverly Stutts

**Organization:** UL LLC

**Street Address:**

**City:**

**State:**

**Zip:**

**Submittal Date:** Wed Nov 13 14:45:53 EST 2019

**Committee:** FAE-SCE



## Public Input No. 210-NFPA 2500-2019 [ Sections 24.1.1, 24.1.2, 24.1.3 ]

### Sections 24.1.1, 24.1.2, 24.1.3

#### 24.1.1 Scope.

##### 24.1.1.1

Chapters 24 through 28 shall specify minimum design, performance, testing, and certifications requirements for life safety rope, escape and fire escape rope, ~~water rescue~~ throwlines, ~~escape and fire escape webbing, moderate elongation laid life-saving rope, manufacturer-supplied eye terminations, life safety harnesses, belts, victim extrication devices, litters, escape webbing, escape systems, and auxiliary equipment for emergency services personnel.~~

##### 24.1.1.2 –

~~Chapters 24 through 28 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 end-to-end and multiple configuration straps, belay devices, carabiners, descent control devices, escape anchors, litters, portable anchors, pulleys, rope grab and ascending devices, other auxiliary equipment, escape and fire escape systems, and manufactured systems for emergency services personnel .~~

##### 24.1.1.3 2

Chapters 24 through 28 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.

##### 24.1.1.4 3

Chapters 24 through 28 shall not specify requirements for any utility rope.

##### 24.1.1.5 4

Chapters 24 through 28 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.

##### 24.1.1.6 5 \*

Chapters 24 through 28 shall not specify requirements for any rope or equipment for fall protection pertaining to employees of general industry or the construction and demolition industry.

##### 24.1.1.7 6

Chapters 24 through 28 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.

##### 24.1.1.8 7

Chapters 24 through 28 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.

##### 24.1.1.9 8

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

#### 24.1.2 Purpose.

**24.1.2.1 \***

The purpose of Chapters 24 through 28 shall be to establish minimum levels of performance for life safety rope, escape and fire escape rope, ~~water rescue throwlines, life safety harnesses, belts, escape and fire escape webbing, moderate elongation laid life-saving rope, manufacturer-supplied eye terminations, moderate elongation laid life safety rope, belay devices, and auxiliary equipment~~ life safety harnesses, belts, victim extrication devices, end-to-end and multiple configuration straps, belay devices, carabiners, descent control devices, escape anchors, litters, portable anchors, pulleys, rope grab and ascending devices, other auxiliary equipment, escape and fire escape systems, and manufactured systems for emergency services personnel.

**24.1.2.2**

Controlled laboratory tests used to determine compliance with the performance requirements of Chapters 24 through 28 shall not be deemed as establishing performance for all situations to which this equipment could be exposed.

**24.1.2.3**

Chapters 24 through 28 are not intended to serve as a detailed manufacturing or purchase specification, but shall be permitted to be referenced in purchase specifications as minimum requirements.

**24.1.3** Application.**24.1.3.1**

Chapters 24 through 28 shall apply to the design, performance, testing, and certification of new emergency services life safety rope, escape and fire escape rope, ~~water escape webbing throwlines, fire escape rope, and fire escape webbing, throwlines, life moderate elongation laid life-saving rope, manufacturer-supplied eye terminations, life safety harnesses, belts, victim extrication devices, end-to-end straps, and multiple configuration straps, manufacturer-supplied eye terminations, moderate elongation laid life-saving rope, belay devices, carabiners, descent control devices, escape anchors, litters, portable anchors, pulleys, rope grab and ascending devices, escape systems, other auxiliary equipment, escape and fire escape systems, and manufactured systems, and other auxiliary equipment~~.

**24.1.3.2**

Chapters 24 through 28 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.

**24.1.3.3**

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

**24.1.3.4 \***

Chapters 24 through 28 shall not apply to rope or equipment for operations where personnel are required to work above anchor points.

**24.1.3.5**

Chapters 24 through 28 shall not apply to use requirements for life safety rope and associated life safety rope equipment because those requirements are specified in NFPA 1500.

**24.1.3.6**

The requirements of Chapters 24 through 28 shall not apply to any accessories that might be attached to any life safety rope or associated life safety rope equipment.

**Statement of Problem and Substantiation for Public Input**

Revised to include all product categories given in the standard.

**Submitter Information Verification**

**Submitter Full Name:** Beverly Stutts

**Organization:** UL LLC

**Street Address:**

**City:**

**State:**

**Zip:**

**Submittal Date:** Wed Nov 13 15:31:20 EST 2019

**Committee:** FAE-SCE



## Public Input No. 39-NFPA 2500-2019 [ Section No. 24.1.3.5 ]

### 24.1.3.5

Chapters 24 through 28 shall not apply to use requirements for life safety rope and associated life safety rope equipment because those requirements are specified in NFPA 1500 and NFPA 1858 .

### Statement of Problem and Substantiation for Public Input

NFPA 1858 includes "equipment use" information.

### Submitter Information Verification

**Submitter Full Name:** Cedric Smith

**Organization:** CMC Rescue, Inc.

**Street Address:**

**City:**

**State:**

**Zip:**

**Submittal Date:** Thu Nov 07 17:20:24 EST 2019

**Committee:** FAE-SCE



## Public Input No. 212-NFPA 2500-2019 [ Section No. 24.2.3 ]

### 24.2.3

All certification shall be performed by a certification organization that meets at least the requirements specified in Section 24.3, 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~~ *Conformity Assessment - requirements for accreditation bodies accrediting conformity assessment bodies*.

### Statement of Problem and Substantiation for Public Input

Revising standard title to current title

### Related Public Inputs for This Document

Related Input	Relationship
<a href="#">Public Input No. 213-NFPA 2500-2019 [Section No. 24.3.3]</a>	
<a href="#">Public Input No. 214-NFPA 2500-2019 [Section No. 24.4.2.2]</a>	
<a href="#">Public Input No. 215-NFPA 2500-2019 [Section No. 24.4.3.3]</a>	

### Submitter Information Verification

**Submitter Full Name:** Beverly Stutts  
**Organization:** UL LLC  
**Street Address:**  
**City:**  
**State:**  
**Zip:**  
**Submission Date:** Wed Nov 13 15:53:13 EST 2019  
**Committee:** FAE-SCE





## Public Input No. 40-NFPA 2500-2019 [ Section No. 24.2.8 ]

### 24.2.8

The certification organization shall not issue any new certifications to the ~~2012 edition~~ 2017 edition of NFPA 1983 on or after the NFPA effective date for the ~~2017 edition~~ 2022 edition , which is effective date.

### Statement of Problem and Substantiation for Public Input

Revised dates based of the anticipated release date of the next edition of this standard.

### Submitter Information Verification

**Submitter Full Name:** Cedric Smith

**Organization:** CMC Rescue, Inc.

**Street Address:**

**City:**

**State:**

**Zip:**

**Submittal Date:** Thu Nov 07 17:23:18 EST 2019

**Committee:** FAE-SCE



## Public Input No. 211-NFPA 2500-2019 [ Sections 24.2.8, 24.2.9, 24.2.10 ]

### Sections 24.2.8, 24.2.9, 24.2.10

#### 24.2.8

The certification organization shall not issue any new certifications to ~~the 2012~~ the 2017 edition of NFPA 1983 on or after the NFPA effective date for ~~the 2017~~ the 2022 edition, which is effective date.

#### 24.2.9

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~~ the 2017 edition of NFPA 1983 after [effective date, plus 12 months].

#### 24.2.10

The certification organization shall require manufacturers to remove all certification labels and product labels indicating compliance with ~~the 2012~~ the 2017 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.

### Statement of Problem and Substantiation for Public Input

Revised to give current edition year and next edition year.

### Submitter Information Verification

**Submitter Full Name:** Beverly Stutts

**Organization:** UL LLC

**Street Address:**

**City:**

**State:**

**Zip:**

**Submittal Date:** Wed Nov 13 15:49:27 EST 2019

**Committee:** FAE-SCE



## Public Input No. 133-NFPA 2500-2019 [ Sections 24.2.9, 24.2.10 ]

### Sections 24.2.9, 24.2.10

#### 24.2.9

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

#### 24.2.10

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~~ life safety rope and equipment that are under the control of the manufacturer on [effective date, plus 12 months], and the certification organization shall verify this action is taken.

### Statement of Problem and Substantiation for Public Input

Incorrect terminology for the products this standard covers.

### Submitter Information Verification

**Submitter Full Name:** Karen Lehtonen

**Organization:** LION Group, Inc.

**Street Address:**

**City:**

**State:**

**Zip:**

**Submittal Date:** Mon Nov 11 14:50:45 EST 2019

**Committee:** FAE-SCE



## Public Input No. 41-NFPA 2500-2019 [ Sections 24.2.9, 24.2.10 ]

### Sections 24.2.9, 24.2.10

#### 24.2.9

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~~ 2017 edition of NFPA 1983 after [effective date, plus 12 months].

#### 24.2.10

The certification organization shall require manufacturers to remove all certification labels and product labels indicating compliance with the ~~2012 edition~~ 2017 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.

### Statement of Problem and Substantiation for Public Input

Revised date from 2012 to 2017 based on current edition of NFPA 1983.

### Submitter Information Verification

**Submitter Full Name:** Cedric Smith  
**Organization:** CMC Rescue, Inc.  
**Street Address:**  
**City:**  
**State:**  
**Zip:**  
**Submittal Date:** Thu Nov 07 17:26:32 EST 2019  
**Committee:** FAE-SCE



## Public Input No. 213-NFPA 2500-2019 [ Section No. 24.3.3 ]

### 24.3.3

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 Conformity Assessment - requirements for accreditation bodies accrediting conformity assessment bodies*.

### Statement of Problem and Substantiation for Public Input

Updating standard name to current

### Related Public Inputs for This Document

Related Input	Relationship
<a href="#">Public Input No. 212-NFPA 2500-2019 [Section No. 24.2.3]</a>	same standard reference
<a href="#">Public Input No. 214-NFPA 2500-2019 [Section No. 24.4.2.2]</a>	
<a href="#">Public Input No. 215-NFPA 2500-2019 [Section No. 24.4.3.3]</a>	

### Submitter Information Verification

**Submitter Full Name:** Beverly Stutts  
**Organization:** UL LLC  
**Street Address:**  
**City:**  
**State:**  
**Zip:**  
**Submission Date:** Wed Nov 13 16:10:22 EST 2019  
**Committee:** FAE-SCE



## Public Input No. 214-NFPA 2500-2019 [ Section No. 24.4.2.2 ]

### 24.4.2.2

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

### Statement of Problem and Substantiation for Public Input

Updating standard name to current name

### Related Public Inputs for This Document

Related Input	Relationship
<a href="#">Public Input No. 212-NFPA 2500-2019 [Section No. 24.2.3]</a>	same standard name update
<a href="#">Public Input No. 213-NFPA 2500-2019 [Section No. 24.3.3]</a>	same standard name update
<a href="#">Public Input No. 207-NFPA 2500-2019 [Sections 2.2, 2.3]</a>	same standard name update
<a href="#">Public Input No. 215-NFPA 2500-2019 [Section No. 24.4.3.3]</a>	

### Submitter Information Verification

**Submitter Full Name:** Beverly Stutts  
**Organization:** UL LLC  
**Street Address:**  
**City:**  
**State:**  
**Zip:**  
**Submittal Date:** Wed Nov 13 17:15:09 EST 2019  
**Committee:** FAE-SCE



## Public Input No. 215-NFPA 2500-2019 [ Section No. 24.4.3.3 ]

### 24.4.3.3

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

### Statement of Problem and Substantiation for Public Input

Updating standard name to current title

### Related Public Inputs for This Document

Related Input	Relationship
<a href="#">Public Input No. 207-NFPA 2500-2019 [Sections 2.2, 2.3]</a>	same standard name update
<a href="#">Public Input No. 212-NFPA 2500-2019 [Section No. 24.2.3]</a>	same standard name update
<a href="#">Public Input No. 213-NFPA 2500-2019 [Section No. 24.3.3]</a>	same standard name update
<a href="#">Public Input No. 214-NFPA 2500-2019 [Section No. 24.4.2.2]</a>	same standard name update

### Submitter Information Verification

**Submitter Full Name:** Beverly Stutts  
**Organization:** UL LLC  
**Street Address:**  
**City:**  
**State:**  
**Zip:**  
**Submittal Date:** Wed Nov 13 17:21:34 EST 2019  
**Committee:** FAE-SCE



**Public Input No. 5-NFPA 2500-2019 [ Section No. 24.5.1 [Excluding any Sub-Sections] ]**

A large, empty rectangular box with a thin border, intended for public input or comments.



All products that are labeled as being compliant with this standard shall undergo recertification in accordance with Table 24.5.1.

Table 24.5.1 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 and Fire 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 and Fire 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

Product	Test	Time
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 <u>2</u> years
<u>Other Auxiliary Equipment</u>	<u>All</u>	<u>Every 2 years</u>
<u>Escape Anchors</u>	<u>All</u>	<u>Every 2 years</u>
<u>Fire Escape Systems</u>	<u>All</u>	<u>Every 2 years</u>

### Statement of Problem and Substantiation for Public Input

Editorial, inadvertently omitted in 2017 edition

### Submitter Information Verification

**Submitter Full Name:** Beverly Stutts  
**Organization:** UL LLC  
**Street Address:**  
**City:**  
**State:**  
**Zip:**  
**Submission Date:** Fri Nov 01 17:09:25 EDT 2019  
**Committee:** FAE-SCE

**Public Input No. 134-NFPA 2500-2019 [ Section No. 25.1.1.8 ]****25.1.1.8\***

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

**MEETS THE LIFE SAFETY ROPE REQUIREMENTS  
OF NFPA 1983 2500 , STANDARD ON LIFE SAFETY ROPE  
AND EQUIPMENT FOR EMERGENCY  
SERVICES, 2017- 2021 EDITION.  
CLASS: \_\_\_\_\_-USE ROPE**

**Statement of Problem and Substantiation for Public Input**

The edition need to be revised.

Also, for discussion throughout this section. Should the standard be NFPA 1983 or NFPA 2500? How will this be addressed?

**Submitter Information Verification**

**Submitter Full Name:** Karen Lehtonen

**Organization:** LION Group, Inc.

**Street Address:**

**City:**

**State:**

**Zip:**

**Submittal Date:** Mon Nov 11 14:59:46 EST 2019

**Committee:** FAE-SCE

**Public Input No. 42-NFPA 2500-2019 [ Section No. 25.1.1.8 ]****25.1.1.8\***

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 2022 EDITION .  
CLASS: \_\_\_\_\_-USE ROPE**

**Statement of Problem and Substantiation for Public Input**

Updated edition to 2022 based on anticipated next edition release date

**Submitter Information Verification**

**Submitter Full Name:** Cedric Smith  
**Organization:** CMC Rescue, Inc.  
**Street Address:**  
**City:**  
**State:**  
**Zip:**  
**Submittal Date:** Thu Nov 07 17:37:27 EST 2019  
**Committee:** FAE-SCE



## Public Input No. 6-NFPA 2500-2019 [ Section No. 25.1.2.5 ]

### 25.1.2.5

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

### Statement of Problem and Substantiation for Public Input

Editorial, this paragraph is discussing life safety rope, not moderate elongation laid life-saving rope.

### Submitter Information Verification

**Submitter Full Name:** Beverly Stutts

**Organization:** UL LLC

**Street Address:**

**City:**

**State:**

**Zip:**

**Submittal Date:** Fri Nov 01 17:19:08 EDT 2019

**Committee:** FAE-SCE



## Public Input No. 79-NFPA 2500-2019 [ Section No. 25.1.2.5 ]

### 25.1.2.5

The manufacturer shall provide information for the user that additional information ~~regarding moderate elongation laid life-saving~~ regarding life safety rope can be found in NFPA 1500, 1858 and NFPA 1983.

### Statement of Problem and Substantiation for Public Input

Section applies to life safety rope, not moderate elongation laid life saving rope. Added NFPA 1858 as this standard provides pertinent reference information.

### Submitter Information Verification

**Submitter Full Name:** Cedric Smith

**Organization:** CMC Rescue, Inc.

**Street Address:**

**City:**

**State:**

**Zip:**

**Submittal Date:** Thu Nov 07 18:19:40 EST 2019

**Committee:** FAE-SCE

**Public Input No. 137-NFPA 2500-2019 [ Section No. 25.2.1.8 ]****25.2.1.8**

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- 2021 EDITION.**

**Statement of Problem and Substantiation for Public Input**

The edition needs to be revised.

**Submitter Information Verification**

**Submitter Full Name:** Karen Lehtonen

**Organization:** LION Group, Inc.

**Street Address:**

**City:**

**State:**

**Zip:**

**Submittal Date:** Mon Nov 11 15:03:01 EST 2019

**Committee:** FAE-SCE

**Public Input No. 43-NFPA 2500-2019 [ Section No. 25.2.1.8 ]****25.2.1.8**

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 2022 EDITION .**

**Statement of Problem and Substantiation for Public Input**

Updated edition to 2022 based on anticipated next edition release date

**Submitter Information Verification**

**Submitter Full Name:** Cedric Smith

**Organization:** CMC Rescue, Inc.

**Street Address:**

**City:**

**State:**

**Zip:**

**Submittal Date:** Thu Nov 07 17:39:47 EST 2019

**Committee:** FAE-SCE





## Public Input No. 78-NFPA 2500-2019 [ Section No. 25.2.2.3 ]

### 25.2.2.3

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, [NFPA 1858](#) and NFPA 1983.

### Statement of Problem and Substantiation for Public Input

Added NFPA 1858 as this standard provides pertinent reference information.

### Submitter Information Verification

**Submitter Full Name:** Cedric Smith

**Organization:** CMC Rescue, Inc.

**Street Address:**

**City:**

**State:**

**Zip:**

**Submittal Date:** Thu Nov 07 18:10:01 EST 2019

**Committee:** FAE-SCE



## Public Input No. 44-NFPA 2500-2019 [ Section No. 25.3.1.2 ]

### 25.3.1.2

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 2022 EDITION .**

### Statement of Problem and Substantiation for Public Input

Updated edition to 2022 based on anticipated next edition release date

### Submitter Information Verification

**Submitter Full Name:** Cedric Smith

**Organization:** CMC Rescue, Inc.

**Street Address:**

**City:**

**State:**

**Zip:**

**Submittal Date:** Thu Nov 07 17:41:02 EST 2019

**Committee:** FAE-SCE

**Public Input No. 140-NFPA 2500-2019 [ Sections 25.3.1.2, 25.3.1.3, 25.3.1.4, 25.3.1.5 ]****Sections 25.3.1.2, 25.3.1.3, 25.3.1.4, 25.3.1.5****25.3.1.2**

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- 2021 EDITION.**

**25.3.1.3\***

In addition to the compliance statement specified in 25.3.1.2, at least the following information shall be provided on the product label:

**MINIMUM BREAKING STRENGTH: \_\_\_\_\_ kN**

**PERIMETER: \_\_\_\_\_ mm**

**Type of fiber(s) \_\_\_\_\_**

**25.3.1.4**

The perimeter of the escape webbing, which is required in 25.3.1.3 to be stated on the product label, shall be as determined by the certification organization in accordance with 27.3.2.

**25.3.1.5**

In addition to the compliance statement specified in 25.3.1.3, 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)]**

**Statement of Problem and Substantiation for Public Input**

The editions need to be revised.

**Submitter Information Verification**

**Submitter Full Name:** Karen Lehtonen

**Organization:** LION Group, Inc.

**Street Address:**

**City:**

**State:**

**Zip:**

**Submission Date:** Mon Nov 11 15:05:55 EST 2019

**Committee:** FAE-SCE



## Public Input No. 80-NFPA 2500-2019 [ Section No. 25.3.2.3 ]

### 25.3.2.3

The manufacturer shall provide information for the user that additional information regarding escape webbing can be found in NFPA 1500- and- , NFPA 1858 and NFPA 1983.

### Statement of Problem and Substantiation for Public Input

Added NFPA 1858 as this standard provides pertinent reference information.

### Submitter Information Verification

**Submitter Full Name:** Cedric Smith

**Organization:** CMC Rescue, Inc.

**Street Address:**

**City:**

**State:**

**Zip:**

**Submission Date:** Thu Nov 07 18:22:40 EST 2019

**Committee:** FAE-SCE



## Public Input No. 45-NFPA 2500-2019 [ Section No. 25.4.1.8 ]

### 25.4.1.8

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 2022 EDITION .**

### Statement of Problem and Substantiation for Public Input

Updated edition to 2022 based on anticipated next edition release date

### Submitter Information Verification

**Submitter Full Name:** Cedric Smith

**Organization:** CMC Rescue, Inc.

**Street Address:**

**City:**

**State:**

**Zip:**

**Submittal Date:** Thu Nov 07 17:41:46 EST 2019

**Committee:** FAE-SCE



**Public Input No. 141-NFPA 2500-2019 [ Sections 25.4.1.8, 25.4.1.9, 25.4.1.10, 25.4.1.11, 25.4.1.12 ]**

**Sections 25.4.1.8, 25.4.1.9, 25.4.1.10, 25.4.1.11, 25.4.1.12**

**25.4.1.8**

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- 2021 EDITION.**

**25.4.1.9\***

In addition to the compliance statement specified in 25.4.1.8, at least the following information shall be provided on the product label:

**MINIMUM BREAKING STRENGTH: \_\_\_\_\_ kN**

**DIAMETER: \_\_\_\_\_ mm**

**Type of fiber(s) \_\_\_\_\_**

**25.4.1.10**

The MBS value of the fire escape rope, which is required in 25.4.1.9 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 27.2.1, but shall not be greater than the calculated MBS.

**25.4.1.11**

The diameter of the fire escape rope, which is required in 25.4.1.9 to be stated on the product label, shall be as determined by the certification organization in accordance with 27.2.2.

**25.4.1.12\***

In addition to the compliance statement specified in 25.4.1.8, 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)]**

## Statement of Problem and Substantiation for Public Input

The edition needs to be revised.

## Submitter Information Verification

**Submitter Full Name:** Karen Lehtonen

**Organization:** LION Group, Inc.

**Street Address:**

**City:**

**State:**

**Zip:**

**Submission Date:** Mon Nov 11 15:06:57 EST 2019

**Committee:** FAE-SCE



## Public Input No. 81-NFPA 2500-2019 [ Section No. 25.4.2.3 ]

### 25.4.2.3

The manufacturer shall provide information for the user that additional information regarding fire escape rope can be found in NFPA 1500, NFPA 1858 and NFPA 1983.

### Statement of Problem and Substantiation for Public Input

Added NFPA 1858 as this standard provides pertinent reference information.

### Submitter Information Verification

**Submitter Full Name:** Cedric Smith

**Organization:** CMC Rescue, Inc.

**Street Address:**

**City:**

**State:**

**Zip:**

**Submittal Date:** Thu Nov 07 18:24:18 EST 2019

**Committee:** FAE-SCE



## Public Input No. 46-NFPA 2500-2019 [ Section No. 25.5.1.2 ]

### 25.5.1.2

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 2022 EDITION .”**

### Statement of Problem and Substantiation for Public Input

Updated edition to 2022 based on anticipated next edition release date

### Submitter Information Verification

**Submitter Full Name:** Cedric Smith

**Organization:** CMC Rescue, Inc.

**Street Address:**

**City:**

**State:**

**Zip:**

**Submittal Date:** Thu Nov 07 17:42:40 EST 2019

**Committee:** FAE-SCE



**Public Input No. 143-NFPA 2500-2019 [ Sections 25.5.1.2, 25.5.1.3, 25.5.1.4, 25.5.1.5 ]****Sections 25.5.1.2, 25.5.1.3, 25.5.1.4, 25.5.1.5****25.5.1.2**

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- 2021 EDITION.”**

**25.5.1.3\***

In addition to the compliance statement specified in 25.5.1.2, at least the following information shall be provided on the product label:

**MINIMUM BREAKING STRENGTH: \_\_\_\_\_ kN**

**PERIMETER: \_\_\_\_\_ mm**

**Type of fiber(s) \_\_\_\_\_**

**25.5.1.4**

The perimeter of the fire escape webbing, which is required in 25.5.1.3 to be stated on the product label, shall be as determined by the certification organization in accordance with 27.5.2.

**25.5.1.5**

In addition to the compliance statement specified in 25.5.1.2, 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)]**

**Statement of Problem and Substantiation for Public Input**

The edition needs to be revised.

**Submitter Information Verification**

**Submitter Full Name:** Karen Lehtonen

**Organization:** LION Group, Inc.

**Street Address:**

**City:**

**State:**

**Zip:**

**Submittal Date:** Mon Nov 11 15:08:32 EST 2019

**Committee:** FAE-SCE



## Public Input No. 47-NFPA 2500-2019 [ Section No. 25.6.1.8 ]

### 25.6.1.8\*

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 2022 EDITION .**

### Statement of Problem and Substantiation for Public Input

Updated edition to 2022 based on anticipated next edition release date

### Submitter Information Verification

**Submitter Full Name:** Cedric Smith

**Organization:** CMC Rescue, Inc.

**Street Address:**

**City:**

**State:**

**Zip:**

**Submittal Date:** Thu Nov 07 17:43:24 EST 2019

**Committee:** FAE-SCE



## Public Input No. 7-NFPA 2500-2019 [ Section No. 25.6.1.8 ]

### 25.6.1.8 \*

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- 2022 EDITION.**

### Statement of Problem and Substantiation for Public Input

Eliminating word "rope" makes statement consistent with other rope labeling. Also updating standard year.

### Submitter Information Verification

**Submitter Full Name:** Beverly Stutts

**Organization:** UL LLC

**Street Address:**

**City:**

**State:**

**Zip:**

**Submittal Date:** Fri Nov 01 17:21:54 EDT 2019

**Committee:** FAE-SCE



**Public Input No. 147-NFPA 2500-2019 [ Sections 25.6.1.8, 25.6.1.9, 25.6.1.10, 25.6.1.11, 25.6.1.12 ]**

**Sections 25.6.1.8, 25.6.1.9, 25.6.1.10, 25.6.1.11, 25.6.1.12**

**25.6.1.8\***

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- 2021 EDITION.**

**25.6.1.9**

In addition to the compliance statement specified in 25.6.1.8, at least the following information shall be provided on the product label.

**MINIMUM BREAKING STRENGTH: \_\_\_\_\_ kN**

**DIAMETER: \_\_\_\_\_ mm**

**Type of fiber(s) \_\_\_\_\_**

**25.6.1.10**

The MBS value of the throwline, which is required in 25.6.1.9 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 27.6.1, but shall not be greater than the calculated MBS.

**25.6.1.11**

The diameter of the throwline, which is required in 25.6.1.8 to be stated on the product label, shall be as determined by the certification organization in accordance with 27.6.2.

**25.6.1.12**

In addition to the compliance statement specified in 25.6.1.8, 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)]**

## Statement of Problem and Substantiation for Public Input

The edition needs to be revised.

## Submitter Information Verification

**Submitter Full Name:** Karen Lehtonen

**Organization:** LION Group, Inc.

**Street Address:**

**City:**

**State:**

**Zip:**

**Submission Date:** Mon Nov 11 15:11:28 EST 2019

**Committee:** FAE-SCE



## Public Input No. 102-NFPA 2500-2019 [ New Section after 25.6.2 ]

### 25.6.2.1

The manufacturer shall provide information for the user that additional information regarding throwline can be found in NFPA 1858 and NFPA 1983.

.

### Statement of Problem and Substantiation for Public Input

Added section for consistency with other product categories.

### Submitter Information Verification

**Submitter Full Name:** Cedric Smith

**Organization:** CMC Rescue, Inc.

**Street Address:**

**City:**

**State:**

**Zip:**

**Submission Date:** Fri Nov 08 12:59:55 EST 2019

**Committee:** FAE-SCE



## Public Input No. 48-NFPA 2500-2019 [ Section No. 25.7.1.7 ]

### 25.7.1.7

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 2022 EDITION .**

### Statement of Problem and Substantiation for Public Input

Updated edition to 2022 based on anticipated next edition release date

### Submitter Information Verification

**Submitter Full Name:** Cedric Smith

**Organization:** CMC Rescue, Inc.

**Street Address:**

**City:**

**State:**

**Zip:**

**Submittal Date:** Thu Nov 07 17:44:17 EST 2019

**Committee:** FAE-SCE



**Public Input No. 148-NFPA 2500-2019 [ Sections 25.7.1.7, 25.7.1.8, 25.7.1.9, 25.7.1.10, 25.7.1.11 ]**

**Sections 25.7.1.7, 25.7.1.8, 25.7.1.9, 25.7.1.10, 25.7.1.11**

**25.7.1.7**

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, 2017-2021 EDITION.**

**25.7.1.8**

In addition to the compliance statement specified in 25.7.1.7, at least the following information shall be provided on the product label:

**MINIMUM BREAKING STRENGTH: \_\_\_kN**

**DIAMETER: \_\_\_mm**

**Type of Fiber(s): \_\_\_\_\_.**

**25.7.1.9**

The MBS value of the moderate elongation laid life-saving rope, which is required in 25.7.1.8 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 27.7.1, but shall not be greater than the calculated MBS.

**25.7.1.10**

The diameter of the moderate elongation laid life-saving rope, which is required in 25.7.1.8 to be stated on the product label, shall be as determined by the certification organization in accordance with 27.7.2.

**25.7.1.11**

In addition to the compliance statement specified in 25.7.1.7, 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)]**

## Statement of Problem and Substantiation for Public Input

The edition needs to be revised.

## Submitter Information Verification

**Submitter Full Name:** Karen Lehtonen

**Organization:** LION Group, Inc.

**Street Address:**

**City:**

**State:**

**Zip:**

**Submission Date:** Mon Nov 11 15:12:39 EST 2019

**Committee:** FAE-SCE



## Public Input No. 8-NFPA 2500-2019 [ Section No. 25.7.2.5 ]

### 25.7.2.5

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

### Statement of Problem and Substantiation for Public Input

This paragraph falls under requirements of moderate elongation laid life-saving rope, not victim extrication devices.

### Submitter Information Verification

**Submitter Full Name:** Beverly Stutts

**Organization:** UL LLC

**Street Address:**

**City:**

**State:**

**Zip:**

**Submittal Date:** Fri Nov 01 17:23:55 EDT 2019

**Committee:** FAE-SCE





## Public Input No. 87-NFPA 2500-2019 [ Section No. 25.7.2.5 ]

### 25.7.2.5

The manufacturer shall provide information for the user that additional information regarding victim extrication devices can be found in NFPA 1500, NFPA 1858 and NFPA 1983.

### Statement of Problem and Substantiation for Public Input

Added NFPA 1858 as this standard provides pertinent reference information.

### Submitter Information Verification

**Submitter Full Name:** Cedric Smith

**Organization:** CMC Rescue, Inc.

**Street Address:**

**City:**

**State:**

**Zip:**

**Submittal Date:** Fri Nov 08 12:12:13 EST 2019

**Committee:** FAE-SCE

**Public Input No. 150-NFPA 2500-2019 [ Section No. 25.8.1.7 ]****25.8.1.7**

Each manufacturer-supplied eye termination shall have the following compliance statement on the product label:

**MEETS THE MANUFACTURER-SUPPLIED EYE TERMINATION REQUIREMENTS OF NFPA 1983, STANDARD ON LIFE SAFETY ROPE AND EQUIPMENT FOR EMERGENCY SERVICES, 2017-2021 EDITION.**

**MBS: \_\_\_\_\_kN**

**Statement of Problem and Substantiation for Public Input**

The edition needs to be revised.

**Submitter Information Verification**

**Submitter Full Name:** Karen Lehtonen

**Organization:** LION Group, Inc.

**Street Address:**

**City:**

**State:**

**Zip:**

**Submittal Date:** Mon Nov 11 15:14:22 EST 2019

**Committee:** FAE-SCE

**Public Input No. 49-NFPA 2500-2019 [ Section No. 25.8.1.7 ]****25.8.1.7**

Each manufacturer-supplied eye termination shall have the following compliance statement on the product label:

**MEETS THE MANUFACTURER-SUPPLIED EYE TERMINATION REQUIREMENTS OF NFPA 1983, STANDARD ON LIFE SAFETY ROPE AND EQUIPMENT FOR EMERGENCY SERVICES, 2017 EDITION 2022 EDITION .**

MBS: \_\_\_\_\_ kN

**Statement of Problem and Substantiation for Public Input**

Updated edition to 2022 based on anticipated next edition release date

**Submitter Information Verification**

**Submitter Full Name:** Cedric Smith

**Organization:** CMC Rescue, Inc.

**Street Address:**

**City:**

**State:**

**Zip:**

**Submittal Date:** Thu Nov 07 17:45:06 EST 2019

**Committee:** FAE-SCE



## Public Input No. 28-NFPA 2500-2019 [ Sections 25.8.1.10, 25.8.1.11, 25.8.1.12 ]

### Sections 25.8.1.10, 25.8.1.11, 25.8.1.12

#### 25.8.1.10

Where the manufacturer of the life safety rope , escape rope , ~~or~~ fire escape rope, or throwline, and the manufacturer of the manufacturer-supplied eye termination are the same, the labeling for both the rope and the manufacturer-supplied eye termination shall be permitted to be combined, as long as all required product label information of the rope and of the manufacturer-supplied eye termination as given in 25.8.1.1 through 25.8.1.9 is included on the label.

#### 25.8.1.11

Where the manufacturer of the escape system, fire escape system, or manufactured system, and the manufacturer of the manufacturer-supplied eye termination are the same, the labeling for both the system and the manufacturer-supplied eye termination shall be permitted to be combined, as long as all required product label information of the ~~manufactured~~ system and of the manufacturer-supplied eye termination as given in 25.8.1.1 through 25.8.1.9 is included on the label.

#### 25.8.1.12

Where the manufacturer of the escape webbing and or fire escape webbing, and the manufacturer of the manufacturer-supplied eye termination are the same, the labeling for both the ~~escape~~ webbing and the manufacturer-supplied eye termination shall be permitted to be combined, as long as all required product label information of the ~~escape~~ webbing and of the manufacturer-supplied eye termination as given in 25.8.1.1 through 25.8.1.9 is included on label.

### Statement of Problem and Substantiation for Public Input

All types of ropes, webbings and systems inadvertently omitted in 2017 edition. Paragraph 5.8.1.10 revised to include throwline with other ropes, paragraph 5.8.1.11 revised to include escape and fire escape systems with manufactured systems, and paragraph 5.8.1.12 revised to include fire escape webbing with escape webbing.

### Related Public Inputs for This Document

Related Input	Relationship
Public Input No. 29-NFPA 2500-2019 [Sections 25.8.2.6, 25.8.2.7, 25.8.2.8, 25.8.2.9]	

### Submitter Information Verification

**Submitter Full Name:** Beverly Stutts  
**Organization:** UL LLC  
**Street Address:**  
**City:**  
**State:**  
**Zip:**  
**Submission Date:** Tue Nov 05 17:05:50 EST 2019  
**Committee:** FAE-SCE



## Public Input No. 29-NFPA 2500-2019 [ Sections 25.8.2.6, 25.8.2.7, 25.8.2.8, 25.8.2.9 ]

### Sections 25.8.2.6, 25.8.2.7, 25.8.2.8, 25.8.2.9

#### 25.8.2.6

Where the manufacturer of the life safety rope, escape rope, fire escape rope, or throwline, and the manufacturer of the manufacturer-supplied eye termination are the same, the user information/instructions for both the rope and the manufacturer-supplied eye termination shall be permitted to be combined, as long as all required user information/instructions of the rope and required user information/instructions of manufacturer-supplied eye termination as given in 25.8.2.1 through 25.8.2.5.1 are included in the user information/instructions.

#### 25.8.2.7

Where the manufacturer of the escape webbing or fire escape webbing, and the manufacturer of the manufacturer-supplied eye termination are the same, the user information/instructions for both the escape webbing and the manufacturer-supplied eye termination shall be permitted to be combined, as long as all required user information/instructions of ~~the escape webbing~~ the webbing and required user information/instructions of manufacturer-supplied eye termination as given in 25.8.2.1 through 25.8.2.5.1 are included in the user information/instructions.

#### 25.8.2.8

Where the manufacturer of the throwline and the manufacturer of the manufacturer-supplied eye termination are the same, the user information/instructions for both the throwline and the manufacturer-supplied eye termination shall be permitted to be combined, as long as all required user information/instructions of the throwline and required user information/instructions of manufacturer-supplied eye termination as given in 25.8.2.1 through 25.8.2.5.1 are included in the user information/instructions.

#### 25.8.2.9 –

Where the manufacturer of the manufactured system- escape system, fire escape system, or manufactured system, and the manufacturer of the manufacturer-supplied eye termination are the same, the user information/instructions for both the manufactured- system and the manufacturer-supplied eye termination shall be permitted to be combined, as long as all required user information/instructions of the manufactured system and required user information/instructions of the manufacturer-supplied eye termination as given in 25.8.2.1 through 25.8.2.5.1 are included in the user information/instructions.

### Statement of Problem and Substantiation for Public Input

Types of rope, fire escape webbing, escape systems, and fire escape systems were inadvertently omitted in 2017 edition. These revisions add these in to the appropriate paragraph. Separate paragraph for throwlines was deleted and throwlines were added to other ropes to be consistent with similar paragraphs given under labeling for eyes.

### Related Public Inputs for This Document

Related Input	Relationship
Public Input No. 28-NFPA 2500-2019 [Sections 25.8.1.10, 25.8.1.11, 25.8.1.12]	PI 28 relates to labeling and this PI relates to user information for eyes

### Submitter Information Verification

**Submitter Full Name:** Beverly Stutts  
**Organization:** UL LLC  
**Street Address:**  
**City:**  
**State:**  
**Zip:**  
**Submittal Date:** Tue Nov 05 17:57:24 EST 2019

**Committee:** FAE-SCE

**Public Input No. 152-NFPA 2500-2019 [ Sections 25.9.1.10, 25.9.1.11 ]****Sections 25.9.1.10, 25.9.1.11****25.9.1.10**

Where the life safety harness is certified as compliant with only the nonoptional requirements of the standard and is not certified with the optional flame resistance requirements, the following statement shall be printed legibly on the product label:

**MEETS THE LIFE SAFETY HARNESS REQUIREMENTS OF NFPA 1983, STANDARD ON LIFE SAFETY ROPE AND EQUIPMENT FOR EMERGENCY SERVICES,**

**~~2017~~ 2021 EDITION, CLASS \_\_\_\_\_. THIS HARNESS IS**

**NOT FLAME-RESISTANT!**

**DO NOT REMOVE THIS LABEL!**

**25.9.1.11**

Where the life safety harness is certified as compliant with nonoptional requirements of this standard and also certified as compliant with the optional flame resistance requirements specified in 26.9.2, and 27.9.6, the following statement shall be printed on the product label:

**MEETS THE LIFE SAFETY HARNESS REQUIREMENTS OF NFPA 1983 2500 , STANDARD ON LIFE SAFETY ROPE AND EQUIPMENT FOR EMERGENCY SERVICES, ~~2017~~ 2021 EDITION, AND THE OPTIONAL FLAME RESISTANCE REQUIREMENTS OF NFPA 1983, CLASS \_\_\_\_\_.**

**DO NOT REMOVE THIS LABEL!**

**Statement of Problem and Substantiation for Public Input**

The edition needs to be revised.

**Submitter Information Verification**

**Submitter Full Name:** Karen Lehtonen

**Organization:** LION Group, Inc.

**Street Address:**

**City:**

**State:**

**Zip:**

**Submittal Date:** Mon Nov 11 15:16:02 EST 2019

**Committee:** FAE-SCE

**Public Input No. 50-NFPA 2500-2019 [ Sections 25.9.1.10, 25.9.1.11 ]****Sections 25.9.1.10, 25.9.1.11****25.9.1.10**

Where the life safety harness is certified as compliant with only the nonoptional requirements of the standard and is not certified with the optional flame resistance requirements, the following statement shall be printed legibly on the product label:

**MEETS THE LIFE SAFETY HARNESS REQUIREMENTS OF NFPA 1983, STANDARD ON LIFE SAFETY ROPE AND EQUIPMENT FOR EMERGENCY SERVICES,**

**~~2017 EDITION~~ 2022 EDITION, CLASS \_\_\_\_\_. THIS HARNESS IS**

**NOT FLAME-RESISTANT!**

**DO NOT REMOVE THIS LABEL!**

**25.9.1.11**

Where the life safety harness is certified as compliant with nonoptional requirements of this standard and also certified as compliant with the optional flame resistance requirements specified in 26.9.2, and 27.9.6, the following statement shall be printed on the product label:

**MEETS THE LIFE SAFETY HARNESS REQUIREMENTS OF NFPA 1983, STANDARD ON LIFE SAFETY ROPE AND EQUIPMENT FOR EMERGENCY SERVICES, ~~2017 EDITION~~ 2022 EDITION, AND THE OPTIONAL FLAME RESISTANCE REQUIREMENTS OF NFPA 1983, CLASS \_\_\_\_\_.**

**DO NOT REMOVE THIS LABEL!**

**Statement of Problem and Substantiation for Public Input**

Updated edition to 2022 based on anticipated next edition release date

**Submitter Information Verification**

**Submitter Full Name:** Cedric Smith

**Organization:** CMC Rescue, Inc.

**Street Address:**

**City:**

**State:**

**Zip:**

**Submittal Date:** Thu Nov 07 17:46:28 EST 2019

**Committee:** FAE-SCE





## Public Input No. 103-NFPA 2500-2019 [ Section No. 25.9.2.2 ]

### 25.9.2.2

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

- (1) Inspecting the harness periodically according to the manufacturer's inspection procedure.
- (2) Removing the harness from service and destroying it if the harness does not pass inspection or if there is any doubt about the safety or serviceability of the harness.
- (3) For a life safety harness certified to only the nonoptional requirements of the standard, not exposing the harness to flame or high temperature and carrying the harness where it will be protected, as the harness could melt or burn and fail if exposed to flame or high temperature.
- (4) Maintaining the harness in accordance with the manufacturer's instructions where metal components are subject to corrosion or deterioration.
- (5) Repairing the harness only in accordance with the manufacturer's instructions.
- (6) Keeping the user instructions/information after they are separated from the harness and retaining them in a permanent record; copying the user instructions/information and keeping the copy with the harness.
- (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.

### Statement of Problem and Substantiation for Public Input

Existing section provides no guidance or consideration for metal components of a life safety harness.

### Submitter Information Verification

**Submitter Full Name:** Cedric Smith  
**Organization:** CMC Rescue, Inc.  
**Street Address:**  
**City:**  
**State:**  
**Zip:**  
**Submittal Date:** Fri Nov 08 13:07:31 EST 2019  
**Committee:** FAE-SCE



## Public Input No. 88-NFPA 2500-2019 [ Section No. 25.9.2.3 ]

### 25.9.2.3

The manufacturer shall provide information for the user that additional information regarding life safety harnesses can be found in NFPA 1500, NFPA 1858 and NFPA 1983.

### Statement of Problem and Substantiation for Public Input

Added NFPA 1858 as this standard provides pertinent reference information.

### Submitter Information Verification

**Submitter Full Name:** Cedric Smith

**Organization:** CMC Rescue, Inc.

**Street Address:**

**City:**

**State:**

**Zip:**

**Submittal Date:** Fri Nov 08 12:13:56 EST 2019

**Committee:** FAE-SCE

**Public Input No. 155-NFPA 2500-2019 [ Sections 25.10.1.10, 25.10.1.11 ]****Sections 25.10.1.10, 25.10.1.11****25.10.1.10**

Where the belt is certified as compliant with only the nonoptional requirements of the standard and is not certified with the optional flame resistance requirements, the following statement shall be printed on the product label:

**MEETS THE BELT REQUIREMENTS OF NFPA 1983, STANDARD ON LIFE SAFETY ROPE AND EQUIPMENT FOR EMERGENCY SERVICES, 2017-2021 EDITION, TYPE \_\_\_\_\_. THIS BELT IS NOT FLAME-RESISTANT! DO NOT REMOVE THIS LABEL!**

**25.10.1.11**

Where the belt is certified as compliant with nonoptional requirements of this standard and also certified as compliant with the optional flame resistance requirements specified in 26.10.2 and 27.10.7, the following statement shall be printed on the product label:

**MEETS THE REQUIREMENTS OF NFPA 1983, STANDARD ON LIFE SAFETY ROPE AND EQUIPMENT FOR EMERGENCY SERVICES, 2017-2021 EDITION, AND THE OPTIONAL FLAME RESISTANCE REQUIREMENTS OF**

**NFPA 1983, TYPE \_\_\_\_\_.**

**DO NOT REMOVE THIS LABEL!**

**Statement of Problem and Substantiation for Public Input**

The edition needs to be revised.

**Submitter Information Verification**

**Submitter Full Name:** Karen Lehtonen

**Organization:** LION Group, Inc.

**Street Address:**

**City:**

**State:**

**Zip:**

**Submittal Date:** Mon Nov 11 15:18:19 EST 2019

**Committee:** FAE-SCE

**Public Input No. 51-NFPA 2500-2019 [ Sections 25.10.1.10, 25.10.1.11 ]****Sections 25.10.1.10, 25.10.1.11****25.10.1.10**

Where the belt is certified as compliant with only the nonoptional requirements of the standard and is not certified with the optional flame resistance requirements, the following statement shall be printed on the product label:

**MEETS THE BELT REQUIREMENTS OF NFPA 1983, STANDARD ON LIFE SAFETY ROPE AND EQUIPMENT FOR EMERGENCY SERVICES, 2017 EDITION 2022 EDITION , TYPE \_\_\_\_\_ .  
THIS BELT IS NOT FLAME-RESISTANT! DO NOT REMOVE THIS LABEL!**

**25.10.1.11**

Where the belt is certified as compliant with nonoptional requirements of this standard and also certified as compliant with the optional flame resistance requirements specified in 26.10.2 and 27.10.7, the following statement shall be printed on the product label:

**MEETS THE REQUIREMENTS OF NFPA 1983, STANDARD ON LIFE SAFETY ROPE AND EQUIPMENT FOR EMERGENCY SERVICES, 2017 EDITION 2022 EDITION , AND THE OPTIONAL FLAME RESISTANCE REQUIREMENTS OF**

**NFPA 1983, TYPE \_\_\_\_\_ .**

**DO NOT REMOVE THIS LABEL!**

**Statement of Problem and Substantiation for Public Input**

Updated edition to 2022 based on anticipated next edition release date

**Submitter Information Verification**

**Submitter Full Name:** Cedric Smith

**Organization:** CMC Rescue, Inc.

**Street Address:**

**City:**

**State:**

**Zip:**

**Submittal Date:** Thu Nov 07 17:47:38 EST 2019

**Committee:** FAE-SCE



## Public Input No. 9-NFPA 2500-2019 [ Section No. 25.10.1.11 ]

### 25.10.1.11

Where the belt is certified as compliant with nonoptional requirements of this standard and also certified as compliant with the optional flame resistance requirements specified in 26.10.2 and 27.10.7, the following statement shall be printed on the product label:

**MEETS THE BELT REQUIREMENTS OF NFPA 1983, STANDARD ON LIFE SAFETY ROPE AND EQUIPMENT FOR EMERGENCY SERVICES, 2017-2022 EDITION, AND THE OPTIONAL FLAME RESISTANCE REQUIREMENTS OF**

**NFPA 1983, TYPE \_\_\_\_\_.**

**DO NOT REMOVE THIS LABEL!**

### Statement of Problem and Substantiation for Public Input

Word 'Belt' inadvertently omitted in 2017 Edition. Adding the word makes it consistent with 5.10.1.10 which is similar statement but for non-FR belts. Also updated edition year.

### Submitter Information Verification

**Submitter Full Name:** Beverly Stutts

**Organization:** UL LLC

**Street Address:**

**City:**

**State:**

**Zip:**

**Submittal Date:** Fri Nov 01 17:27:17 EDT 2019

**Committee:** FAE-SCE



## Public Input No. 89-NFPA 2500-2019 [ Section No. 25.10.2.3 ]

### 25.10.2.3

The manufacturer shall provide information for the user that additional information regarding belts can be found in NFPA 1500, NFPA 1858 and NFPA 1983.

### Statement of Problem and Substantiation for Public Input

Added NFPA 1858 as this standard provides pertinent reference information.

### Submitter Information Verification

**Submitter Full Name:** Cedric Smith

**Organization:** CMC Rescue, Inc.

**Street Address:**

**City:**

**State:**

**Zip:**

**Submittal Date:** Fri Nov 08 12:14:58 EST 2019

**Committee:** FAE-SCE

**Public Input No. 52-NFPA 2500-2019 [ Section No. 25.11.1.8 ]****25.11.1.8**

Each victim extrication device shall have the following compliance statement on the product label:

**MEETS THE VICTIM EXTRICATION DEVICE REQUIREMENTS OF NFPA 1983, STANDARD ON LIFE SAFETY ROPE AND EQUIPMENT FOR EMERGENCY SERVICES,**

**2017 EDITION 2022 EDITION , CLASS \_\_\_\_\_.**

**Statement of Problem and Substantiation for Public Input**

Updated edition to 2022 based on anticipated next edition release date

**Submitter Information Verification**

**Submitter Full Name:** Cedric Smith

**Organization:** CMC Rescue, Inc.

**Street Address:**

**City:**

**State:**

**Zip:**

**Submittal Date:** Thu Nov 07 17:48:26 EST 2019

**Committee:** FAE-SCE

**Public Input No. 158-NFPA 2500-2019 [ Sections 25.11.1.8, 25.11.1.9, 25.11.1.10 ]****Sections 25.11.1.8, 25.11.1.9, 25.11.1.10****25.11.1.8**

Each victim extrication device shall have the following compliance statement on the product label:

**MEETS THE VICTIM EXTRICATION DEVICE REQUIREMENTS OF NFPA 1983, STANDARD ON LIFE SAFETY ROPE AND EQUIPMENT FOR EMERGENCY SERVICES,**

**2017- 2021 EDITION, CLASS\_\_\_\_\_.**

**25.11.1.9**

In addition to the compliance and information statements in 25.11.1.8, 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

**25.11.1.10**

Where detachable components must be used with a victim extrication device for the device to be compliant with this standard, at least the following statement and information shall also be printed on the product label of the device. All labels shall be at least 2 mm ( $\frac{5}{64}$  in.) high. The detachable components shall be listed following the statement by type, identification, and how properly used.

**TO BE COMPLIANT WITH NFPA 1983, THE FOLLOWING ADDITIONAL COMPONENTS MUST BE USED**

**IN CONJUNCTION WITH THIS VICTIM**

**EXTRICATION DEVICE:**

**[The detachable component(s) shall be listed here.]**

**Statement of Problem and Substantiation for Public Input**

The edition needs to be revised.

**Submitter Information Verification**

**Submitter Full Name:** Karen Lehtonen

**Organization:** LION Group, Inc.

**Street Address:**

**City:**

**State:**

**Zip:**

**Submission Date:** Mon Nov 11 15:24:40 EST 2019

**Committee:** FAE-SCE





## Public Input No. 104-NFPA 2500-2019 [ Section No. 25.11.2.2 ]

### 25.11.2.2

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

- (1) Inspecting the victim extrication device periodically according to the manufacturer's inspection procedure
- (2) Removing the victim extrication device from service if the equipment does not pass inspection or if there is any doubt about the safety or serviceability of the equipment
- (3) Maintaining the victim extrication device in accordance with the manufacturer's instructions where metal components are subjected to corrosion or deterioration
- (4) ~~Returning the victim extrication device to the manufacturer or to a qualified inspection person/center if the equipment is dropped or impact-loaded~~
- (5) Not exposing any software component of the victim extrication device to flame or high temperature and carrying the equipment where it will be protected as it could melt or burn and fail if exposed to flame or high temperature
- (6) Repairing the victim extrication device only in accordance with the manufacturer's instructions
- (7) Keeping the user instructions/information after they are separated from the victim extrication device and retaining them in a permanent record; copying the user instructions/information and keeping the copy with the equipment
- (8) Referring to the user instructions/information before and after each use
- (9) Cautioning that, if the instructions/information are not followed, the user could suffer serious consequences

### Statement of Problem and Substantiation for Public Input

It is unlikely that the manufacturer will be able to service the equipment based on the nature of the event. Therefore mandating that it be returned to the manufacturer serves no purpose.

### Submitter Information Verification

**Submitter Full Name:** Cedric Smith  
**Organization:** CMC Rescue, Inc.  
**Street Address:**  
**City:**  
**State:**  
**Zip:**  
**Submission Date:** Fri Nov 08 13:12:27 EST 2019  
**Committee:** FAE-SCE



## Public Input No. 105-NFPA 2500-2019 [ New Section after 25.11.2.3 ]

### 25.11.2.4

The manufacturer shall provide information for the user that additional information regarding victim extrication devices can be found in NFPA 1858 and NFPA 1983.

### Statement of Problem and Substantiation for Public Input

Added section for consistency with other product categories.

### Submitter Information Verification

**Submitter Full Name:** Cedric Smith

**Organization:** CMC Rescue, Inc.

**Street Address:**

**City:**

**State:**

**Zip:**

**Submission Date:** Fri Nov 08 13:17:34 EST 2019

**Committee:** FAE-SCE



## Public Input No. 159-NFPA 2500-2019 [ Section No. 25.12.1.10 ]

### 25.12.1.10

Each end-to-end strap shall have the following compliance statement on the product label:

**MEETS THE END-TO-END STRAP REQUIREMENTS OF NFPA 1983, STANDARD ON LIFE SAFETY ROPE AND EQUIPMENT FOR EMERGENCY SERVICES,  
2017- 2021 EDITION.**

### Statement of Problem and Substantiation for Public Input

The edition needs to be revised.

### Submitter Information Verification

**Submitter Full Name:** Karen Lehtonen

**Organization:** LION Group, Inc.

**Street Address:**

**City:**

**State:**

**Zip:**

**Submittal Date:** Mon Nov 11 15:25:31 EST 2019

**Committee:** FAE-SCE

**Public Input No. 53-NFPA 2500-2019 [ Section No. 25.12.1.10 ]****25.12.1.10**

Each end-to-end strap shall have the following compliance statement on the product label:

**MEETS THE END-TO-END STRAP REQUIREMENTS OF NFPA 1983, STANDARD ON LIFE SAFETY ROPE AND EQUIPMENT FOR EMERGENCY SERVICES,  
2017 EDITION 2022 EDITION .**

**Statement of Problem and Substantiation for Public Input**

Updated edition to 2022 based on anticipated next edition release date

**Submitter Information Verification**

**Submitter Full Name:** Cedric Smith

**Organization:** CMC Rescue, Inc.

**Street Address:**

**City:**

**State:**

**Zip:**

**Submittal Date:** Thu Nov 07 17:49:15 EST 2019

**Committee:** FAE-SCE



## Public Input No. 107-NFPA 2500-2019 [ Section No. 25.12.2.3 ]

### 25.12.2.3

The manufacturer shall provide information for the user that additional information regarding end-to-end straps can be found in NFPA 1500, NFPA 1858 and NFPA 1983.

### Statement of Problem and Substantiation for Public Input

NFPA 1858 provides pertinent information and should be referenced.

### Submitter Information Verification

**Submitter Full Name:** Cedric Smith

**Organization:** CMC Rescue, Inc.

**Street Address:**

**City:**

**State:**

**Zip:**

**Submittal Date:** Fri Nov 08 13:26:50 EST 2019

**Committee:** FAE-SCE



## Public Input No. 161-NFPA 2500-2019 [ Section No. 25.13.1.10 ]

### 25.13.1.10

Each multiple configuration strap shall have the following compliance statement on the product label:

**MEETS THE MULTIPLE CONFIGURATION STRAP REQUIREMENTS OF NFPA 1983, STANDARD ON LIFE SAFETY ROPE AND EQUIPMENT FOR EMERGENCY SERVICES, ~~2017~~ 2021 EDITION.**

### Statement of Problem and Substantiation for Public Input

The edition needs to be revised.

### Submitter Information Verification

**Submitter Full Name:** Karen Lehtonen

**Organization:** LION Group, Inc.

**Street Address:**

**City:**

**State:**

**Zip:**

**Submittal Date:** Mon Nov 11 15:27:01 EST 2019

**Committee:** FAE-SCE



## Public Input No. 54-NFPA 2500-2019 [ Section No. 25.13.1.10 ]

### 25.13.1.10

Each multiple configuration strap shall have the following compliance statement on the product label:

**MEETS THE MULTIPLE CONFIGURATION STRAP REQUIREMENTS OF NFPA 1983, STANDARD ON LIFE SAFETY ROPE AND EQUIPMENT FOR EMERGENCY SERVICES, 2017 EDITION 2022 EDITION .**

### Statement of Problem and Substantiation for Public Input

Updated edition to 2022 based on anticipated next edition release date

### Submitter Information Verification

**Submitter Full Name:** Cedric Smith

**Organization:** CMC Rescue, Inc.

**Street Address:**

**City:**

**State:**

**Zip:**

**Submittal Date:** Thu Nov 07 17:50:04 EST 2019

**Committee:** FAE-SCE

**Public Input No. 32-NFPA 2500-2019 [ Section No. 25.13.1.11 ]****25.13.1.11**

In addition to the compliance statement specified in 25.13.1.10, the following information shall be provided on the product label:

**MINIMUM BREAKING STRENGTH OF \_\_\_ kN**

**MBS AND RATING ARE DETERMINED USING A BASKET (U) CONFIGURATION. IN ADDITION, THIS STRAP HAS A MINIMUM**

**BREAKING STRENGTH OF:**

\_\_\_\_\_ **kN IN A CHOKER CONFIGURATION**

\_\_\_\_\_ **kN WHEN PULLED END TO END.**

**Statement of Problem and Substantiation for Public Input**

Actual requirement of certified MBS on label was inadvertently omitted in 2017 Edition.

**Submitter Information Verification**

**Submitter Full Name:** Beverly Stutts

**Organization:** UL LLC

**Street Address:**

**City:**

**State:**

**Zip:**

**Submittal Date:** Thu Nov 07 13:27:20 EST 2019

**Committee:** FAE-SCE





## Public Input No. 90-NFPA 2500-2019 [ Section No. 25.13.2.3 ]

### 25.13.2.3

The manufacturer shall provide information for the user that additional information regarding multiple configuration straps can be found in NFPA 1500, [NFPA 1858](#) and NFPA 1983.

### Statement of Problem and Substantiation for Public Input

Added NFPA 1858 as this standard provides pertinent reference information.

### Submitter Information Verification

**Submitter Full Name:** Cedric Smith

**Organization:** CMC Rescue, Inc.

**Street Address:**

**City:**

**State:**

**Zip:**

**Submittal Date:** Fri Nov 08 12:42:59 EST 2019

**Committee:** FAE-SCE



## Public Input No. 163-NFPA 2500-2019 [ Section No. 25.14.1.2.1 ]

### 25.14.1.2.1

Each belay shall have the following compliance statement:

**MEETS NFPA 1983 (2017- 2021 ED).**

### Statement of Problem and Substantiation for Public Input

The edition needs to be revised.

### Submitter Information Verification

**Submitter Full Name:** Karen Lehtonen

**Organization:** LION Group, Inc.

**Street Address:**

**City:**

**State:**

**Zip:**

**Submittal Date:** Mon Nov 11 15:36:57 EST 2019

**Committee:** FAE-SCE



## Public Input No. 55-NFPA 2500-2019 [ Section No. 25.14.1.2.1 ]

### 25.14.1.2.1

Each belay shall have the following compliance statement:

**MEETS NFPA 1983 (2017 ED 2022 ED ).**

### Statement of Problem and Substantiation for Public Input

Updated edition to 2022 based on anticipated next edition release date

### Submitter Information Verification

**Submitter Full Name:** Cedric Smith

**Organization:** CMC Rescue, Inc.

**Street Address:**

**City:**

**State:**

**Zip:**

**Submittal Date:** Thu Nov 07 17:50:46 EST 2019

**Committee:** FAE-SCE



## Public Input No. 127-NFPA 2500-2019 [ Section No. 25.14.1.2.3 ]

### 25.14.1.2.3

Each belay device shall display a “G” “G - 2.67 kN MAX” for general use or “T” “T - 1.33 kN MAX” for technical use. The designation “G” or “T” shall be designated in accordance with 26.14.1.2.

### Statement of Problem and Substantiation for Public Input

Belay devices are unique in their performance requirement as they are designed to arrest a falling load while mitigating rope damage and other potential injury causing variables (system extension and peak impact force). Since the only variable in the test method is the mass, it is important to convey this to the end user. If the belay device were to arrest a fall with a mass greater than that specified in the Procedure C test method, damage to the rope or excessive system extension and/or peak impact forces could occur.

### Related Public Inputs for This Document

Related Input	Relationship
<a href="#">Public Input No. 126-NFPA 2500-2019 [Section No. 27.14.1]</a>	links labeling to performance criteria

### Submitter Information Verification

**Submitter Full Name:** Cedric Smith  
**Organization:** CMC Rescue, Inc.  
**Street Address:**  
**City:**  
**State:**  
**Zip:**  
**Submittal Date:** Fri Nov 08 15:56:07 EST 2019  
**Committee:** FAE-SCE

**Public Input No. 164-NFPA 2500-2019 [ Section No. 25.14.1.9 ]****25.14.1.9**

Each belay device shall have the following compliance statement on the product label:

**MEETS THE BELAY DEVICE REQUIREMENTS OF NFPA 1983, STANDARD ON LIFE SAFETY ROPE  
AND EQUIPMENT FOR EMERGENCY SERVICES,  
~~2017~~ 2021 EDITION.**

**Statement of Problem and Substantiation for Public Input**

The edition needs to be revised.

**Submitter Information Verification**

**Submitter Full Name:** Karen Lehtonen

**Organization:** LION Group, Inc.

**Street Address:**

**City:**

**State:**

**Zip:**

**Submittal Date:** Mon Nov 11 15:37:45 EST 2019

**Committee:** FAE-SCE



## Public Input No. 56-NFPA 2500-2019 [ Section No. 25.14.1.9 ]

### 25.14.1.9

Each belay device shall have the following compliance statement on the product label:

**MEETS THE BELAY DEVICE REQUIREMENTS OF NFPA 1983, STANDARD ON LIFE SAFETY ROPE  
AND EQUIPMENT FOR EMERGENCY SERVICES,**

**2017 EDITION 2022 EDITION .**

### Statement of Problem and Substantiation for Public Input

Updated edition to 2022 based on anticipated next edition release date

### Submitter Information Verification

**Submitter Full Name:** Cedric Smith

**Organization:** CMC Rescue, Inc.

**Street Address:**

**City:**

**State:**

**Zip:**

**Submittal Date:** Thu Nov 07 17:51:24 EST 2019

**Committee:** FAE-SCE



## Public Input No. 91-NFPA 2500-2019 [ Section No. 25.14.2.3 ]

### 25.14.2.3

The manufacturer shall provide information for the user that additional information regarding auxiliary equipment can be found in NFPA 1500, NFPA 1858 and NFPA 1983.

### Statement of Problem and Substantiation for Public Input

Added NFPA 1858 as this standard provides pertinent reference information.

### Submitter Information Verification

**Submitter Full Name:** Cedric Smith

**Organization:** CMC Rescue, Inc.

**Street Address:**

**City:**

**State:**

**Zip:**

**Submission Date:** Fri Nov 08 12:44:26 EST 2019

**Committee:** FAE-SCE

**Public Input No. 166-NFPA 2500-2019 [ Section No. 25.15.1.2.1 ]****25.15.1.2.1**

Each carabiner and snap link shall have the following compliance statement:

**MEETS NFPA 1983 (2017- 2021 ED).**

**Statement of Problem and Substantiation for Public Input**

The edition needs to be revised.

**Submitter Information Verification**

**Submitter Full Name:** Karen Lehtonen

**Organization:** LION Group, Inc.

**Street Address:**

**City:**

**State:**

**Zip:**

**Submittal Date:** Mon Nov 11 15:39:29 EST 2019

**Committee:** FAE-SCE





## Public Input No. 57-NFPA 2500-2019 [ Section No. 25.15.1.2.1 ]

### 25.15.1.2.1

Each carabiner and snap link shall have the following compliance statement:

**MEETS NFPA 1983 (2017-ED 2022 ED ).**

### Statement of Problem and Substantiation for Public Input

Updated edition to 2022 based on anticipated next edition release date

### Submitter Information Verification

**Submitter Full Name:** Cedric Smith

**Organization:** CMC Rescue, Inc.

**Street Address:**

**City:**

**State:**

**Zip:**

**Submittal Date:** Thu Nov 07 17:52:09 EST 2019

**Committee:** FAE-SCE



## Public Input No. 167-NFPA 2500-2019 [ Section No. 25.15.1.9 ]

### 25.15.1.9

Each carabiner and snap link shall have the following compliance statement on the product label:

**MEETS THE [insert CARABINER OR SNAP LINK here] REQUIREMENTS OF NFPA 1983,  
STANDARD ON LIFE SAFETY ROPE AND EQUIPMENT FOR EMERGENCY  
SERVICES, 2017-~~2021~~ EDITION.**

### Statement of Problem and Substantiation for Public Input

The edition needs to be revised.

### Submitter Information Verification

**Submitter Full Name:** Karen Lehtonen

**Organization:** LION Group, Inc.

**Street Address:**

**City:**

**State:**

**Zip:**

**Submittal Date:** Mon Nov 11 15:43:07 EST 2019

**Committee:** FAE-SCE

**Public Input No. 58-NFPA 2500-2019 [ Section No. 25.15.1.9 ]****25.15.1.9**

Each carabiner and snap link shall have the following compliance statement on the product label:

**MEETS THE [insert CARABINER OR SNAP LINK here] REQUIREMENTS OF NFPA 1983,  
STANDARD ON LIFE SAFETY ROPE AND EQUIPMENT FOR EMERGENCY  
SERVICES, 2017 EDITION 2022 EDITION .**

**Statement of Problem and Substantiation for Public Input**

Updated edition to 2022 based on anticipated next edition release date

**Submitter Information Verification**

**Submitter Full Name:** Cedric Smith

**Organization:** CMC Rescue, Inc.

**Street Address:**

**City:**

**State:**

**Zip:**

**Submittal Date:** Thu Nov 07 17:52:43 EST 2019

**Committee:** FAE-SCE



## Public Input No. 92-NFPA 2500-2019 [ Section No. 25.15.2.3 ]

### 25.15.2.3

The manufacturer shall provide information for the user that additional information regarding carabiners and snap links can be found in NFPA 1500, [NFPA 1858](#) and NFPA 1983.

### Statement of Problem and Substantiation for Public Input

Added NFPA 1858 as this standard provides pertinent reference information.

### Submitter Information Verification

**Submitter Full Name:** Cedric Smith

**Organization:** CMC Rescue, Inc.

**Street Address:**

**City:**

**State:**

**Zip:**

**Submittal Date:** Fri Nov 08 12:45:33 EST 2019

**Committee:** FAE-SCE



## Public Input No. 169-NFPA 2500-2019 [ Section No. 25.16.1.2.1 ]

### 25.16.1.2.1

Each descent control device shall have the following compliance statement:

**MEETS NFPA 1983 (2017- 2021 ED).**

### Statement of Problem and Substantiation for Public Input

The edition needs to be revised.

### Submitter Information Verification

**Submitter Full Name:** Karen Lehtonen

**Organization:** LION Group, Inc.

**Street Address:**

**City:**

**State:**

**Zip:**

**Submittal Date:** Mon Nov 11 15:45:14 EST 2019

**Committee:** FAE-SCE



## Public Input No. 59-NFPA 2500-2019 [ Section No. 25.16.1.2.1 ]

### 25.16.1.2.1

Each descent control device shall have the following compliance statement:

**MEETS NFPA 1983 (2017-ED 2022 ED ).**

### Statement of Problem and Substantiation for Public Input

Updated edition to 2022 based on anticipated next edition release date

### Submitter Information Verification

**Submitter Full Name:** Cedric Smith

**Organization:** CMC Rescue, Inc.

**Street Address:**

**City:**

**State:**

**Zip:**

**Submittal Date:** Thu Nov 07 17:53:26 EST 2019

**Committee:** FAE-SCE



## Public Input No. 60-NFPA 2500-2019 [ Section No. 25.16.1.9 ]

### 25.16.1.9

Each descent control device shall have the following compliance statement on the product label:

**MEETS THE DESCENT CONTROL DEVICE OF NFPA 1983, STANDARD ON LIFE SAFETY ROPE AND EQUIPMENT FOR EMERGENCY SERVICES, 2017 EDITION 2022 EDITION .**

### Statement of Problem and Substantiation for Public Input

Updated edition to 2022 based on anticipated next edition release date

### Submitter Information Verification

**Submitter Full Name:** Cedric Smith

**Organization:** CMC Rescue, Inc.

**Street Address:**

**City:**

**State:**

**Zip:**

**Submittal Date:** Thu Nov 07 17:54:07 EST 2019

**Committee:** FAE-SCE



**Public Input No. 170-NFPA 2500-2019 [ Sections 25.16.1.9, 25.16.1.10, 25.16.1.11, 25.16.1.12 ]**

**Sections 25.16.1.9, 25.16.1.10, 25.16.1.11, 25.16.1.12**

**25.16.1.9**

Each descent control device shall have the following compliance statement on the product label:

**MEETS THE DESCENT CONTROL DEVICE OF NFPA 1983, STANDARD ON LIFE SAFETY ROPE AND EQUIPMENT FOR EMERGENCY SERVICES, 2017-2021 EDITION.**

**25.16.1.10**

In addition to the compliance statement specified in 25.16.1.9, at least the information required in 25.16.1.2.3 through 25.16.1.2.4 shall also be provided on the printed product label.

**25.16.1.11**

In addition to the compliance and information statements in 25.16.1.9 and 25.16.1.10, 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

**25.16.1.12**

Where detachable components must be used with the descent control device for the descent control device to be compliant with this standard, at least the following statement and information shall also be printed on the product label of the item. All letters shall be at least 2 mm ( $\frac{5}{64}$  in.) high. The detachable component(s) shall be listed following the statement by type, identification, and how properly used.

**TO BE COMPLIANT WITH NFPA 1983, THE FOLLOWING ADDITIONAL COMPONENTS MUST BE USED IN CONJUNCTION WITH THIS DESCENT CONTROL DEVICE:[The detachable component(s) shall be listed here].**

### Statement of Problem and Substantiation for Public Input

The edition needs to be revised.

### Submitter Information Verification

**Submitter Full Name:** Karen Lehtonen

**Organization:** LION Group, Inc.

**Street Address:**

**City:**

**State:**

**Zip:**

**Submission Date:** Mon Nov 11 15:46:09 EST 2019

**Committee:** FAE-SCE





## Public Input No. 93-NFPA 2500-2019 [ Section No. 25.16.2.3 ]

### 25.16.2.3

The manufacturer shall provide information for the user that additional information regarding descent control devices can be found in NFPA 1500, NFPA 1858 and NFPA 1983.

### Statement of Problem and Substantiation for Public Input

Added NFPA 1858 as this standard provides pertinent reference information.

### Submitter Information Verification

**Submitter Full Name:** Cedric Smith

**Organization:** CMC Rescue, Inc.

**Street Address:**

**City:**

**State:**

**Zip:**

**Submittal Date:** Fri Nov 08 12:46:31 EST 2019

**Committee:** FAE-SCE



## Public Input No. 245-NFPA 2500-2019 [ Section No. 25.17 ]

### 25.17 Escape Anchors.

#### 25.17.1 Escape Anchor Label Requirements.

##### 25.17.1.1

Each escape anchor shall have a product label.

##### 25.17.1.2

Each escape anchor shall have a product label stamped, engraved, or otherwise permanently marked with the portions of the product label information specified in 25.17.1.2.1 through 25.17.1.2.4.

##### 25.17.1.2.1

Each escape anchor shall have the following compliance statement:

**MEETS NFPA 1983 (~~2017~~ 2022 ED).**

##### 25.17.1.2.2

Each escape anchor shall display the mark or logo of the certification organization and the manufacturer's name or identifying mark.

##### 25.17.1.2.3

Each escape anchor shall display at least the minimum rated breaking strength prefaced by the letters "MBS." The MBS value stated on the product label shall be permitted to be any value greater than the actual "pass" requirement value determined by the certification testing, but shall not be greater than the calculated MBS.

##### 25.17.1.2.4

Each escape anchor shall display an "E" for escape-use items.

##### 25.17.1.3

The product label for the portions of the product label information not specified in 25.17.1.2.1 through 25.17.1.2.4 shall be permitted to be a hang tag affixed to each individual escape anchor or shall be permitted to be printed on a sheet that is inserted and sealed in the packaging that immediately contains the escape anchor.

##### 25.17.1.4

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

##### 25.17.1.5

Multi-label pieces shall be permitted to carry all statements and information required to be on the product label; however, all label pieces constituting the entire product label shall be located adjacent to each other.

##### 25.17.1.6

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

##### 25.17.1.7

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

##### 25.17.1.8

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.

##### 25.17.1.9

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

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

**2017 2022 EDITION.**

**25.17.1.10**

In addition to the compliance statement specified in 25.17.1.9, at least the information required in 25.17.1.2.3 and 25.17.1.2.4 shall also be provided on the printed product label.

**25.17.1.11**

In addition to the compliance and information statements in 25.17.1.9 and 25.17.1.10, 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

**25.17.2** Escape Anchor User Information.**25.17.2.1**

The manufacturer of an escape anchor 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.

**25.17.2.2**

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

- (1) Inspecting the escape anchor periodically according to the manufacturer's inspection procedure
- (2) Removing the escape anchor from service if the equipment does not pass inspection or if there is any doubt about the safety or serviceability of the equipment
- (3) Maintaining the escape anchor in accordance with the manufacturer's instructions where metal components are subjected to corrosion or deterioration
- (4) ~~Returning the escape anchor to the manufacturer or to a qualified inspection person/center if the equipment is dropped or impact-loaded~~
- (5) ~~Repairing the escape anchor only in accordance with the manufacturer's instructions~~
- (6) Keeping the user instructions/information after they are separated from the escape anchor and retaining them in a permanent record; copying the user instructions/information and keeping the copy with the equipment
- (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- this equipment can only be used within the scope of the user document. Use outside of the scope of this document could result in serious consequences

**25.17.2.3**

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

**25.17.2.4**

The manufacturer of an escape anchor 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 the escape anchor and a list of items that the records need to contain.

**25.17.2.5**

The manufacturer shall provide instruction on how the anchor shall be loaded. The instructions can be accomplished using illustrations. Illustrations all have a minimum height of 20mm (0.8in.)

**25.17.2.6**

The manufacturer shall provide guidance that the end user shall understand the capabilities and limitations of the equipment and shall use the equipment within those capabilities.

**25.17.2.7**

The manufacturer shall provide statement that training is necessary before use.

## Statement of Problem and Substantiation for Public Input

Revisions to labeling requirements to update to new edition year.

Language was deleted in 25.17.2.2 because (4) is covered in (2). Also (5) was deleted because no repair would be made to a escape anchor. It would be taken out of service. Revised wording in (6) to better clarify that the escape anchor should only be used how the manufacturer intends for it to be used.

Paragraph 25.17.2.5 was added because more information needs to be provide to the user on the proper use of the particular escape anchor. Illustrations provide an effective way to do that, but are not required. If they are used, however, they need to be of a minimum size.

Paragraph 25.17.2.6 was added because the manufacturer needs to provide guidance on the capabilities and LIMITATIONS of the escape anchor.

Paragraph 25.17.2.7 was added because it needs to be emphasized that the user should have training before using the escape anchor.

## Submitter Information Verification

**Submitter Full Name:** Beverly Stutts

**Organization:** UL LLC

**Affiliation:** Submitted on behalf of Sub-Group for Escape Anchor Label and User Guide Requirements, part of the NFPA 1983 Task Group

**Street Address:**

**City:**

**State:**

**Zip:**

**Submission Date:** Fri Nov 15 16:23:20 EST 2019

**Committee:** FAE-SCE

**Public Input No. 172-NFPA 2500-2019 [ Section No. 25.17.1.2.1 ]****25.17.1.2.1**

Each escape anchor shall have the following compliance statement:

**MEETS NFPA 1983 (2017- 2021 ED).**

**Statement of Problem and Substantiation for Public Input**

The edition needs to be revised.

**Submitter Information Verification**

**Submitter Full Name:** Karen Lehtonen

**Organization:** LION Group, Inc.

**Street Address:**

**City:**

**State:**

**Zip:**

**Submittal Date:** Mon Nov 11 15:50:36 EST 2019

**Committee:** FAE-SCE



## Public Input No. 61-NFPA 2500-2019 [ Section No. 25.17.1.2.1 ]

### 25.17.1.2.1

Each escape anchor shall have the following compliance statement:

**MEETS NFPA 1983 (2017 ED 2022 ED ).**

### Statement of Problem and Substantiation for Public Input

Updated edition to 2022 based on anticipated next edition release date

### Submitter Information Verification

**Submitter Full Name:** Cedric Smith

**Organization:** CMC Rescue, Inc.

**Street Address:**

**City:**

**State:**

**Zip:**

**Submittal Date:** Thu Nov 07 17:55:05 EST 2019

**Committee:** FAE-SCE



## Public Input No. 173-NFPA 2500-2019 [ Section No. 25.17.1.9 ]

### 25.17.1.9

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

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

**~~2017~~ 2021 EDITION.**

### Statement of Problem and Substantiation for Public Input

The edition needs to be revised.

### Submitter Information Verification

**Submitter Full Name:** Karen Lehtonen

**Organization:** LION Group, Inc.

**Street Address:**

**City:**

**State:**

**Zip:**

**Submittal Date:** Mon Nov 11 15:51:25 EST 2019

**Committee:** FAE-SCE

**Public Input No. 62-NFPA 2500-2019 [ Section No. 25.17.1.9 ]****25.17.1.9**

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

**MEETS THE ESCAPE ANCHOR REQUIREMENTS OF NFPA 1983, STANDARD ON LIFE SAFETY  
ROPE AND EQUIPMENT FOR EMERGENCY SERVICES,  
2017 EDITION 2022 EDITION .**

**Statement of Problem and Substantiation for Public Input**

Updated edition to 2022 based on anticipated next edition release date

**Submitter Information Verification**

**Submitter Full Name:** Cedric Smith

**Organization:** CMC Rescue, Inc.

**Street Address:**

**City:**

**State:**

**Zip:**

**Submittal Date:** Thu Nov 07 17:57:08 EST 2019

**Committee:** FAE-SCE





## Public Input No. 94-NFPA 2500-2019 [ Section No. 25.17.2.3 ]

### 25.17.2.3

The manufacturer shall provide information for the user that additional information regarding escape anchors can be found in NFPA 1500, [NFPA 1858](#), and NFPA 1983.

### Statement of Problem and Substantiation for Public Input

Added NFPA 1858 as this standard provides pertinent reference information.

### Submitter Information Verification

**Submitter Full Name:** Cedric Smith

**Organization:** CMC Rescue, Inc.

**Street Address:**

**City:**

**State:**

**Zip:**

**Submission Date:** Fri Nov 08 12:47:27 EST 2019

**Committee:** FAE-SCE



## Public Input No. 175-NFPA 2500-2019 [ Section No. 25.18.1.2.1 ]

### 25.18.1.2.1

Each litter shall have the following compliance statement:

**MEETS NFPA 1983 (2017- 2021 ED).**

### Statement of Problem and Substantiation for Public Input

The edition needs to be revised.

### Submitter Information Verification

**Submitter Full Name:** Karen Lehtonen

**Organization:** LION Group, Inc.

**Street Address:**

**City:**

**State:**

**Zip:**

**Submittal Date:** Mon Nov 11 15:53:21 EST 2019

**Committee:** FAE-SCE



## Public Input No. 63-NFPA 2500-2019 [ Section No. 25.18.1.2.1 ]

### 25.18.1.2.1

Each litter shall have the following compliance statement:

**MEETS NFPA 1983 (2017 ED 2022 ED ).**

### Statement of Problem and Substantiation for Public Input

Updated edition to 2022 based on anticipated next edition release date

### Submitter Information Verification

**Submitter Full Name:** Cedric Smith

**Organization:** CMC Rescue, Inc.

**Street Address:**

**City:**

**State:**

**Zip:**

**Submittal Date:** Thu Nov 07 17:57:54 EST 2019

**Committee:** FAE-SCE



## Public Input No. 176-NFPA 2500-2019 [ Section No. 25.18.1.9 ]

### 25.18.1.9

Each litter shall have the following compliance statement on the product label:

**MEETS THE LITTER REQUIREMENTS OF NFPA 1983, STANDARD ON LIFE SAFETY ROPE AND EQUIPMENT FOR EMERGENCY SERVICES, 2017-2021 EDITION.**

### Statement of Problem and Substantiation for Public Input

The edition needs to be revised.

### Submitter Information Verification

**Submitter Full Name:** Karen Lehtonen

**Organization:** LION Group, Inc.

**Street Address:**

**City:**

**State:**

**Zip:**

**Submittal Date:** Mon Nov 11 15:54:21 EST 2019

**Committee:** FAE-SCE



## Public Input No. 64-NFPA 2500-2019 [ Section No. 25.18.1.9 ]

### 25.18.1.9

Each litter shall have the following compliance statement on the product label:

**MEETS THE LITTER REQUIREMENTS OF NFPA 1983, STANDARD ON LIFE SAFETY ROPE AND EQUIPMENT FOR EMERGENCY SERVICES, 2017 EDITION 2022 EDITION .**

### Statement of Problem and Substantiation for Public Input

Updated edition to 2022 based on anticipated next edition release date

### Submitter Information Verification

**Submitter Full Name:** Cedric Smith

**Organization:** CMC Rescue, Inc.

**Street Address:**

**City:**

**State:**

**Zip:**

**Submittal Date:** Thu Nov 07 17:58:33 EST 2019

**Committee:** FAE-SCE



## Public Input No. 95-NFPA 2500-2019 [ Section No. 25.18.2.3 ]

### 25.18.2.3

The manufacturer shall provide information for the user that additional information regarding litters can be found in NFPA 1500- and-, NFPA 1858 and NFPA 1983.

### Statement of Problem and Substantiation for Public Input

Added NFPA 1858 as this standard provides pertinent reference information.

### Submitter Information Verification

**Submitter Full Name:** Cedric Smith

**Organization:** CMC Rescue, Inc.

**Street Address:**

**City:**

**State:**

**Zip:**

**Submittal Date:** Fri Nov 08 12:48:12 EST 2019

**Committee:** FAE-SCE



## Public Input No. 178-NFPA 2500-2019 [ Section No. 25.19.1.2.1 ]

### 25.19.1.2.1

Each portable anchor shall have the following compliance statement:

**MEETS NFPA 1983 (2017- 2021 ED).**

### Statement of Problem and Substantiation for Public Input

The standard number and edition need to be revised.

### Submitter Information Verification

**Submitter Full Name:** Karen Lehtonen

**Organization:** LION Group, Inc.

**Street Address:**

**City:**

**State:**

**Zip:**

**Submittal Date:** Mon Nov 11 16:02:59 EST 2019

**Committee:** FAE-SCE



## Public Input No. 65-NFPA 2500-2019 [ Section No. 25.19.1.2.1 ]

### 25.19.1.2.1

Each portable anchor shall have the following compliance statement:

**MEETS NFPA 1983 (2017 ED 2022 ED ).**

### Statement of Problem and Substantiation for Public Input

Updated edition to 2022 based on anticipated next edition release date

### Submitter Information Verification

**Submitter Full Name:** Cedric Smith

**Organization:** CMC Rescue, Inc.

**Street Address:**

**City:**

**State:**

**Zip:**

**Submittal Date:** Thu Nov 07 17:59:22 EST 2019

**Committee:** FAE-SCE



**Public Input No. 179-NFPA 2500-2019 [ Section No. 25.19.1.9 ]****25.19.1.9**

Each portable anchor shall have the following compliance statement on the product label:

**MEETS THE PORTABLE ANCHOR REQUIREMENTS OF NFPA 1983, STANDARD ON LIFE SAFETY  
ROPE AND EQUIPMENT FOR EMERGENCY SERVICES,  
2017- 2021 EDITION.**

**Statement of Problem and Substantiation for Public Input**

The edition needs to be revised.

**Submitter Information Verification**

**Submitter Full Name:** Karen Lehtonen

**Organization:** LION Group, Inc.

**Street Address:**

**City:**

**State:**

**Zip:**

**Submittal Date:** Mon Nov 11 16:05:44 EST 2019

**Committee:** FAE-SCE



## Public Input No. 66-NFPA 2500-2019 [ Section No. 25.19.1.9 ]

### 25.19.1.9

Each portable anchor shall have the following compliance statement on the product label:

**MEETS THE PORTABLE ANCHOR REQUIREMENTS OF NFPA 1983, STANDARD ON LIFE SAFETY ROPE AND EQUIPMENT FOR EMERGENCY SERVICES,**

**2017 EDITION 2022 EDITION .**

### Statement of Problem and Substantiation for Public Input

Updated edition to 2022 based on anticipated next edition release date

### Submitter Information Verification

**Submitter Full Name:** Cedric Smith

**Organization:** CMC Rescue, Inc.

**Street Address:**

**City:**

**State:**

**Zip:**

**Submittal Date:** Thu Nov 07 18:00:06 EST 2019

**Committee:** FAE-SCE

**Public Input No. 182-NFPA 2500-2019 [ Section No. 25.20.1.2.1 ]****25.20.1.2.1**

Each pulley shall have the following compliance statement:

**MEETS NFPA 1983 (2017- 2021 ED).**

**Statement of Problem and Substantiation for Public Input**

The edition needs to be revised.

**Submitter Information Verification**

**Submitter Full Name:** Karen Lehtonen

**Organization:** LION Group, Inc.

**Street Address:**

**City:**

**State:**

**Zip:**

**Submittal Date:** Mon Nov 11 16:10:16 EST 2019

**Committee:** FAE-SCE



## Public Input No. 67-NFPA 2500-2019 [ Section No. 25.20.1.2.1 ]

### 25.20.1.2.1

Each pulley shall have the following compliance statement:

**MEETS NFPA 1983 (2017 ED 2022 ED ).**

### Statement of Problem and Substantiation for Public Input

Updated edition to 2022 based on anticipated next edition release date

### Submitter Information Verification

**Submitter Full Name:** Cedric Smith

**Organization:** CMC Rescue, Inc.

**Street Address:**

**City:**

**State:**

**Zip:**

**Submittal Date:** Thu Nov 07 18:00:53 EST 2019

**Committee:** FAE-SCE



## Public Input No. 183-NFPA 2500-2019 [ Section No. 25.20.1.9 ]

### 25.20.1.9

Each pulley shall have the following compliance statement on the product label:

**MEETS THE PULLEY REQUIREMENTS OF NFPA 1983, STANDARD ON LIFE SAFETY ROPE AND EQUIPMENT FOR EMERGENCY SERVICES, 2017-2021 EDITION.**

### Statement of Problem and Substantiation for Public Input

The edition needs to be revised.

### Submitter Information Verification

**Submitter Full Name:** Karen Lehtonen

**Organization:** LION Group, Inc.

**Street Address:**

**City:**

**State:**

**Zip:**

**Submittal Date:** Mon Nov 11 16:11:16 EST 2019

**Committee:** FAE-SCE



## Public Input No. 68-NFPA 2500-2019 [ Section No. 25.20.1.9 ]

### 25.20.1.9

Each pulley shall have the following compliance statement on the product label:

**MEETS THE PULLEY REQUIREMENTS OF NFPA 1983, STANDARD ON LIFE SAFETY ROPE AND EQUIPMENT FOR EMERGENCY SERVICES, 2017 EDITION 2022 EDITION .**

### Statement of Problem and Substantiation for Public Input

Updated edition to 2022 based on anticipated next edition release date

### Submitter Information Verification

**Submitter Full Name:** Cedric Smith

**Organization:** CMC Rescue, Inc.

**Street Address:**

**City:**

**State:**

**Zip:**

**Submittal Date:** Thu Nov 07 18:01:28 EST 2019

**Committee:** FAE-SCE



## Public Input No. 96-NFPA 2500-2019 [ Section No. 25.20.2.3 ]

### 25.20.2.3

The manufacturer shall provide information for the user that additional information regarding pulleys can be found in NFPA 1500, [NFPA 1858](#), and NFPA 1983.

### Statement of Problem and Substantiation for Public Input

Added NFPA 1858 as this standard provides pertinent reference information.

### Submitter Information Verification

**Submitter Full Name:** Cedric Smith

**Organization:** CMC Rescue, Inc.

**Street Address:**

**City:**

**State:**

**Zip:**

**Submittal Date:** Fri Nov 08 12:49:18 EST 2019

**Committee:** FAE-SCE



## Public Input No. 185-NFPA 2500-2019 [ Section No. 25.21.1.2.1 ]

### 25.21.1.2.1

Each rope grab and ascending device shall have the following compliance statement:

**MEETS NFPA 1983 (2017- 2021 ED).**

### Statement of Problem and Substantiation for Public Input

The edition needs to be revised.

### Submitter Information Verification

**Submitter Full Name:** Karen Lehtonen

**Organization:** LION Group, Inc.

**Street Address:**

**City:**

**State:**

**Zip:**

**Submittal Date:** Mon Nov 11 16:13:10 EST 2019

**Committee:** FAE-SCE





## Public Input No. 69-NFPA 2500-2019 [ Section No. 25.21.1.2.1 ]

### 25.21.1.2.1

Each rope grab and ascending device shall have the following compliance statement:

**MEETS NFPA 1983 (2017-ED 2022 ED ).**

### Statement of Problem and Substantiation for Public Input

Updated edition to 2022 based on anticipated next edition release date

### Submitter Information Verification

**Submitter Full Name:** Cedric Smith

**Organization:** CMC Rescue, Inc.

**Street Address:**

**City:**

**State:**

**Zip:**

**Submittal Date:** Thu Nov 07 18:02:03 EST 2019

**Committee:** FAE-SCE



## Public Input No. 186-NFPA 2500-2019 [ Section No. 25.21.1.9 ]

### 25.21.1.9

Each rope grab and ascending device shall have the following compliance statement on the product label:

**MEETS THE [insert ROPE GRAB OR ASCENDING DEVICE here] REQUIREMENTS OF NFPA 1983, STANDARD ON LIFE SAFETY ROPE AND EQUIPMENT FOR EMERGENCY SERVICES, 2017- 2021 EDITION.**

### Statement of Problem and Substantiation for Public Input

The edition needs to be revised.

### Submitter Information Verification

**Submitter Full Name:** Karen Lehtonen

**Organization:** LION Group, Inc.

**Street Address:**

**City:**

**State:**

**Zip:**

**Submittal Date:** Mon Nov 11 16:14:38 EST 2019

**Committee:** FAE-SCE



## Public Input No. 70-NFPA 2500-2019 [ Section No. 25.21.1.9 ]

### 25.21.1.9

Each rope grab and ascending device shall have the following compliance statement on the product label:

**MEETS THE [insert ROPE GRAB OR ASCENDING DEVICE here] REQUIREMENTS OF NFPA 1983, STANDARD ON LIFE SAFETY ROPE AND EQUIPMENT FOR EMERGENCY SERVICES, 2017 EDITION 2022 EDITION .**

### Statement of Problem and Substantiation for Public Input

Updated edition to 2022 based on anticipated next edition release date

### Submitter Information Verification

**Submitter Full Name:** Cedric Smith

**Organization:** CMC Rescue, Inc.

**Street Address:**

**City:**

**State:**

**Zip:**

**Submittal Date:** Thu Nov 07 18:02:41 EST 2019

**Committee:** FAE-SCE



## Public Input No. 116-NFPA 2500-2019 [ Section No. 25.21.2.2 ]

### 25.21.2.2

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

- (1) Inspecting the rope grab or ascending device periodically according to the manufacturer's inspection procedure
- (2) Removing the rope grab or ascending device from service if the equipment does not pass inspection or if there is any doubt about the safety or serviceability of the equipment
- (3) Maintaining the rope grab or ascending device in accordance with the manufacturer's instructions where metal components are subjected to corrosion or deterioration
- (4) ~~Returning the rope grab or ascending device to the manufacturer or to a qualified inspection person/center if the equipment is dropped or impact-loaded~~
- (5) Repairing the rope grab or ascending device only in accordance with the manufacturer's instructions
- (6) Keeping the user instructions/information after they are separated from the rope grab or ascending device and retaining them in a permanent record; copying the user instructions/information and keeping the copy with the equipment
- (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

### Statement of Problem and Substantiation for Public Input

It is unlikely that the manufacturer will be able to service the equipment based on the nature of the event. Therefore mandating that it be returned to the manufacturer serves no purpose

### Submitter Information Verification

**Submitter Full Name:** Cedric Smith  
**Organization:** CMC Rescue, Inc.  
**Street Address:**  
**City:**  
**State:**  
**Zip:**  
**Submission Date:** Fri Nov 08 13:40:16 EST 2019  
**Committee:** FAE-SCE



## Public Input No. 97-NFPA 2500-2019 [ Section No. 25.21.2.3 ]

### 25.21.2.3

The manufacturer shall provide information for the user that additional information regarding rope grabs and ascending devices can be found in NFPA 1500, [NFPA 1858](#) and NFPA 1983.

### Statement of Problem and Substantiation for Public Input

Added NFPA 1858 as this standard provides pertinent reference information.

### Submitter Information Verification

**Submitter Full Name:** Cedric Smith

**Organization:** CMC Rescue, Inc.

**Street Address:**

**City:**

**State:**

**Zip:**

**Submittal Date:** Fri Nov 08 12:50:09 EST 2019

**Committee:** FAE-SCE



## Public Input No. 188-NFPA 2500-2019 [ Section No. 25.22.1.2.1 ]

### 25.22.1.2.1

Each load-bearing hardware auxiliary equipment item shall have the following compliance statement:

**MEETS NFPA 1983 (2017- 2021 ED).**

### Statement of Problem and Substantiation for Public Input

The edition needs to be revised.

### Submitter Information Verification

**Submitter Full Name:** Karen Lehtonen

**Organization:** LION Group, Inc.

**Street Address:**

**City:**

**State:**

**Zip:**

**Submittal Date:** Mon Nov 11 16:16:11 EST 2019

**Committee:** FAE-SCE



## Public Input No. 71-NFPA 2500-2019 [ Section No. 25.22.1.2.1 ]

### 25.22.1.2.1

Each load-bearing hardware auxiliary equipment item shall have the following compliance statement:

**MEETS NFPA 1983 (2017 ED 2022 ED ).**

### Statement of Problem and Substantiation for Public Input

Updated edition to 2022 based on anticipated next edition release date

### Submitter Information Verification

**Submitter Full Name:** Cedric Smith

**Organization:** CMC Rescue, Inc.

**Street Address:**

**City:**

**State:**

**Zip:**

**Submittal Date:** Thu Nov 07 18:03:27 EST 2019

**Committee:** FAE-SCE



## Public Input No. 189-NFPA 2500-2019 [ Section No. 25.22.1.9 ]

### 25.22.1.9

Each auxiliary equipment item shall have the following compliance statement on the product label.

**THIS [insert name of equipment item here] MEETS THE AUXILIARY EQUIPMENT REQUIREMENTS OF NFPA 1983, STANDARD ON LIFE SAFETY ROPE AND EQUIPMENT FOR EMERGENCY SERVICES, 2017-2021 EDITION.**

### Statement of Problem and Substantiation for Public Input

The edition needs to be revised.

### Submitter Information Verification

**Submitter Full Name:** Karen Lehtonen

**Organization:** LION Group, Inc.

**Street Address:**

**City:**

**State:**

**Zip:**

**Submittal Date:** Mon Nov 11 16:17:04 EST 2019

**Committee:** FAE-SCE





## Public Input No. 72-NFPA 2500-2019 [ Section No. 25.22.1.9 ]

### 25.22.1.9

Each auxiliary equipment item shall have the following compliance statement on the product label.

**THIS [insert name of equipment item here] MEETS THE AUXILIARY EQUIPMENT REQUIREMENTS OF NFPA 1983, STANDARD ON LIFE SAFETY ROPE AND EQUIPMENT FOR EMERGENCY SERVICES, 2017 EDITION 2022 EDITION .**

### Statement of Problem and Substantiation for Public Input

Updated edition to 2022 based on anticipated next edition release date

### Submitter Information Verification

**Submitter Full Name:** Cedric Smith

**Organization:** CMC Rescue, Inc.

**Street Address:**

**City:**

**State:**

**Zip:**

**Submittal Date:** Thu Nov 07 18:04:04 EST 2019

**Committee:** FAE-SCE



## Public Input No. 117-NFPA 2500-2019 [ Section No. 25.22.2.2 ]

### 25.22.2.2

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

- (1) Inspecting the auxiliary equipment periodically according to the manufacturer's inspection procedure.
- (2) Removing the auxiliary equipment from service if the equipment does not pass inspection or if there is any doubt about the safety or serviceability of the equipment.
- (3) Maintaining the auxiliary equipment in accordance with the manufacturer's instructions where metal components are subjected to corrosion or deterioration.
- (4) ~~Returning the auxiliary equipment to the manufacturer or to a qualified inspection person/center if the equipment is dropped or impact-loaded.~~
- (5) Not exposing the software of the auxiliary equipment to flame or high temperature and carrying the equipment where it will be protected as it could melt or burn and fail if exposed to flame or high temperature.
- (6) Repairing the auxiliary equipment only in accordance with the manufacturer's instructions.
- (7) Keeping the user instructions/information after they are separated from the auxiliary equipment and retaining them in a permanent record; copying the user instructions/information and keeping the copy with the equipment.
- (8) Referring to the user instructions/information before and after each use.
- (9) Cautioning that, if the instructions/information are not followed, the user could suffer serious consequences.

### Statement of Problem and Substantiation for Public Input

It is unlikely that the manufacturer will be able to service the equipment based on the nature of the event. Therefore mandating that it be returned to the manufacturer serves no purpose

### Submitter Information Verification

**Submitter Full Name:** Cedric Smith  
**Organization:** CMC Rescue, Inc.  
**Street Address:**  
**City:**  
**State:**  
**Zip:**  
**Submission Date:** Fri Nov 08 13:41:56 EST 2019  
**Committee:** FAE-SCE



## Public Input No. 98-NFPA 2500-2019 [ Section No. 25.22.2.3 ]

### 25.22.2.3

The manufacturer shall provide information for the user that additional information regarding auxiliary equipment can be found in NFPA 1500, NFPA 1858 and NFPA 1983.

### Statement of Problem and Substantiation for Public Input

Added NFPA 1858 as this standard provides pertinent reference information.

### Submitter Information Verification

**Submitter Full Name:** Cedric Smith

**Organization:** CMC Rescue, Inc.

**Street Address:**

**City:**

**State:**

**Zip:**

**Submittal Date:** Fri Nov 08 12:51:06 EST 2019

**Committee:** FAE-SCE



## Public Input No. 239-NFPA 2500-2019 [ Sections 25.23, 25.24 ]

### Sections 25.23, 25.24

#### 25.23 Escape Systems.

##### 25.23.1 Escape Systems Label Requirements.

###### 25.23.1.1

Each escape system shall have a product label.

###### 25.23.1.2

Each escape system load-bearing hardware item shall have a product label stamped, engraved, or otherwise permanently marked with the portions of the product label information specified in 25.23.1.2.1 and 25.23.1.2.2.

###### 25.23.1.2.1

Each load-bearing escape system component shall have the following compliance statement:

**MEETS NFPA 1983 (2017- 2022 ED).**

###### 25.23.1.2.2

Each load-bearing hardware escape system component shall display the manufacturer's name or identifying mark.

###### 25.23.1.3

The product label for the portions of the product label information not specified in 25.23.1.2.1 shall be permitted to be a hang tag affixed to each individual equipment item or shall be permitted to be printed on a sheet that is inserted and sealed in the packaging that immediately contains the escape system.

###### 25.23.1.4

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

###### 25.23.1.5

Multi-label pieces shall be permitted to carry all statements and information required to be on the product label; however, all label pieces constituting the entire product label shall be located adjacent to each other.

###### 25.23.1.6

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

###### 25.23.1.7

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

###### 25.23.1.8

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.

###### 25.23.1.9

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

**MEETS THE ESCAPE SYSTEM REQUIREMENTS OF NFPA 1983, STANDARD ON LIFE SAFETY ROPE AND EQUIPMENT FOR EMERGENCY SERVICES, 2017- 2022 EDITION. DO NOT DISASSEMBLE. DO NOT USE IN FIRE OR HIGH TEMPERATURE.**

**25.23.1.10**

In addition to the compliance statement in 25.23.1.9, 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

**25.23.1.11**

Where detachable components must be used with the escape system item for the escape system to be compliant with this standard, at least the following statement and information shall also be printed on the product label of the item. All letters shall be at least 2.5 mm ( $\frac{3}{32}$  in.) high. The detachable component(s) shall be listed following the statement by type, identification, and how properly used.

**TO BE COMPLIANT WITH NFPA 1983, THE FOLLOWING ADDITIONAL COMPONENTS MUST BE USED IN CONJUNCTION WITH THIS [insert type of escape system here]:[The detachable component(s) shall be listed here.]**

**25.23.2** Escape Systems User Information.**25.23.2.1**

The manufacturer of an escape system 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.

**25.23.2.2**

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

- (1) Inspecting the escape system periodically according to the manufacturer's inspection procedure
- (2) Removing the escape system from service if the equipment does not pass inspection or if there is any doubt about the safety or serviceability of the equipment
- (3) Maintaining the escape system in accordance with the manufacturer's instructions where metal components are subjected to corrosion or deterioration
- (4) ~~Returning~~ Taking the escape system to the manufacturer or to a qualified inspection person/center ~~out of service~~ if the equipment is ~~dropped or impact-loaded~~ subjected to an impact load
- (5) Not exposing the software of the escape system to flame or high temperature and carrying the equipment where it will be protected as it could melt or burn and fail if exposed to flame or high temperature
- (6) Repairing the escape system only in accordance with the manufacturer's instructions
- (7) Keeping the user instructions/information after they are separated from the escape system and retaining them in a permanent record; copying the user instructions/information and keeping the copy with the equipment
- (8) Referring to the user instructions/information before and after each use
- (9) Cautioning that, if the instructions/information are not followed, the user could suffer serious consequences

**25.23.2.3**

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

**25.23.2.4**

The manufacturer of an escape system 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 the escape system and a list of items that the records need to contain.

**25.23.2.5**

The compliant configuration(s) used in the payout test shall be described.

**25.24** Fire Escape Systems.

## 25.24.1 Fire Escape System Label Requirements.

### 25.24.1.1

Each fire escape system shall have a product label.

### 25.24.1.2

Each fire escape system load-bearing hardware item shall have a product label stamped, engraved, or otherwise permanently marked with the portions of the product label information specified in 25.11.2.1 through 25.11.2.3.

#### 25.24.1.2.1

Each load-bearing fire escape system component shall have the following compliance statement:

**MEETS NFPA 1983 (2017 2022 ED).**

#### 25.24.1.2.2

Each load-bearing hardware fire escape system component shall display the manufacturer's name or identifying mark.

### 25.24.1.3

The product label for the portions of the product label information not specified in 25.24.1.2.1 shall be permitted to be a hang tag affixed to each individual equipment item or shall be permitted to be printed on a sheet that is inserted and sealed in the packaging that immediately contains the fire escape system.

### 25.24.1.4

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

### 25.24.1.5

Multi-label pieces shall be permitted to carry all statements and information required to be on the product label; however, all label pieces comprising the entire product label shall be located adjacent to each other.

### 25.24.1.6

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

### 25.24.1.7

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

### 25.24.1.8

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.

### 25.24.1.9

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

**MEETS THE FIRE ESCAPE SYSTEM REQUIREMENTS OF NFPA 1983, STANDARD ON LIFE SAFETY ROPE AND EQUIPMENT FOR EMERGENCY SERVICES, 2017 EDITION 2022 EDITION . DO NOT DISASSEMBLE.**

### 25.24.1.10

In addition to the compliance statement in 25.24.1.9, 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

**25.24.1.11**

Where detachable components must be used with the fire escape system item for the fire escape system to be compliant with this standard, at least the following statement and information shall also be printed on the product label of the item. All letters shall be at least 2.5 mm ( $\frac{3}{32}$  in.) high. The detachable component(s) shall be listed following the statement by type, identification, and how properly used.

**TO BE COMPLIANT WITH NFPA 1983, THE FOLLOWING ADDITIONAL COMPONENTS MUST BE USED IN CONJUNCTION WITH THIS FIRE ESCAPE SYSTEM:**

**[The detachable component(s) shall be listed here.]**

**25.24.2** Fire Escape Systems User Information.**25.24.2.1**

The manufacturer of a fire escape system 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.

**25.24.2.2**

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

- (1) Inspecting the fire escape system periodically according to the manufacturer's inspection procedure
- (2) Removing the fire escape system from service if the equipment does not pass inspection or if there is any doubt about the safety or serviceability of the equipment
- (3) Maintaining the fire escape system in accordance with the manufacturer's instructions where metal components are subjected to corrosion or deterioration
- (4) ~~Returning~~ Taking the fire escape system to the manufacturer or to a qualified inspection person/center ~~out of service~~ if the equipment is dropped or impact-loaded  
~~Not exposing the software components of the fire escape system to flame or high temperature and carrying the equipment where it will be protected as it could melt or burn and fail if exposed to flame or high temperature~~
- (5) subjected to an impact load
- (6) Carrying the equipment, where feasible, in a location where it will be protected from exposure to flame and high temperatures to avoid degradation of the materials.
- (7) Repairing the fire escape system only in accordance with the manufacturer's instructions
- (8) Keeping the user instructions/information after they are separated from the fire escape system and retaining them in a permanent record; copying the user instructions/information and keeping the copy with the equipment
- (9) Referring to the user instructions/information before and after each use
- (10) Cautioning that, if the instructions/information are not followed, the user could suffer serious consequences

**25.24.2.3**

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

**25.24.2.4**

The manufacturer of a fire escape system 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 the fire escape system and a list of items that the records need to contain.

**25.24.2.5**

The compliant configuration(s) used in the payout test shall be described.

**Statement of Problem and Substantiation for Public Input**

Revisions to 25.23.1.2.1, 25.23.1.9, 25.24.1.2.1, and 25.24.1.9 to reflect new edition year.

Language added to compliance statement for escape systems to make it clear to any user that the system should not be used in areas with elevated temperatures or fire.

Reworded 25.23.2.2 (4) and 25.24.2.2.(4) to make it clear that if a system has subjected to an impact load that it

should be taken out of service. The impact-loaded system should not be sent back to the manufacturer for repair but rather should be taken out of service.

Requirement given in 5.24.2.2(5) for fire escape system is currently identical to requirement given in 25.23.2.2.(5) for escape systems, which doesn't make sense because a fire escape system is expected to be exposed to high temperatures and flame. Therefore, this was reworded to actually address appropriate handling for fire escape system.

### Submitter Information Verification

**Submitter Full Name:** Beverly Stutts  
**Organization:** UL LLC  
**Affiliation:** on behalf of Sub-Group for System Requirements, part of the NFPA  
1983 Task Group for Escape Anchors  
**Street Address:**  
**City:**  
**State:**  
**Zip:**  
**Submittal Date:** Fri Nov 15 15:06:20 EST 2019  
**Committee:** FAE-SCE





## Public Input No. 73-NFPA 2500-2019 [ Section No. 25.23.1.2.1 ]

### 25.23.1.2.1

Each load-bearing escape system component shall have the following compliance statement:

**MEETS NFPA 1983 (2017-ED 2022 ED ).**

### Statement of Problem and Substantiation for Public Input

Updated edition to 2022 based on anticipated next edition release date

### Submitter Information Verification

**Submitter Full Name:** Cedric Smith

**Organization:** CMC Rescue, Inc.

**Street Address:**

**City:**

**State:**

**Zip:**

**Submittal Date:** Thu Nov 07 18:04:46 EST 2019

**Committee:** FAE-SCE



## Public Input No. 74-NFPA 2500-2019 [ Section No. 25.23.1.9 ]

### 25.23.1.9

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

**MEETS THE ESCAPE SYSTEM REQUIREMENTS OF NFPA 1983, STANDARD ON LIFE SAFETY ROPE AND EQUIPMENT FOR EMERGENCY SERVICES, 2017 EDITION 2022 EDITION . DO NOT DISASSEMBLE.**

### Statement of Problem and Substantiation for Public Input

Updated edition to 2022 based on anticipated next edition release date

### Submitter Information Verification

**Submitter Full Name:** Cedric Smith

**Organization:** CMC Rescue, Inc.

**Street Address:**

**City:**

**State:**

**Zip:**

**Submittal Date:** Thu Nov 07 18:05:35 EST 2019

**Committee:** FAE-SCE



## Public Input No. 118-NFPA 2500-2019 [ Section No. 25.23.2.2 ]

### 25.23.2.2

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

- (1) Inspecting the escape system periodically according to the manufacturer's inspection procedure
- (2) Removing the escape system from service if the equipment does not pass inspection or if there is any doubt about the safety or serviceability of the equipment
- (3) Maintaining the escape system in accordance with the manufacturer's instructions where metal components are subjected to corrosion or deterioration
- (4) ~~Returning the escape system to the manufacturer or to a qualified inspection person/center if the equipment is dropped or impact-loaded~~
- (5) Not exposing the software of the escape system to flame or high temperature and carrying the equipment where it will be protected as it could melt or burn and fail if exposed to flame or high temperature
- (6) Repairing the escape system only in accordance with the manufacturer's instructions
- (7) Keeping the user instructions/information after they are separated from the escape system and retaining them in a permanent record; copying the user instructions/information and keeping the copy with the equipment
- (8) Referring to the user instructions/information before and after each use
- (9) Cautioning that, if the instructions/information are not followed, the user could suffer serious consequences

### Statement of Problem and Substantiation for Public Input

It is unlikely that the manufacturer will be able to service the equipment based on the nature of the event. Therefore mandating that it be returned to the manufacturer serves no purpose

### Submitter Information Verification

**Submitter Full Name:** Cedric Smith  
**Organization:** CMC Rescue, Inc.  
**Street Address:**  
**City:**  
**State:**  
**Zip:**  
**Submission Date:** Fri Nov 08 13:43:12 EST 2019  
**Committee:** FAE-SCE



## Public Input No. 99-NFPA 2500-2019 [ Section No. 25.23.2.3 ]

### 25.23.2.3

The manufacturer shall provide information for the user that additional information regarding escape systems can be found in NFPA 1500, NFPA 1858, and NFPA 1983.

### Statement of Problem and Substantiation for Public Input

Added NFPA 1858 as this standard provides pertinent reference information.

### Submitter Information Verification

**Submitter Full Name:** Cedric Smith

**Organization:** CMC Rescue, Inc.

**Street Address:**

**City:**

**State:**

**Zip:**

**Submittal Date:** Fri Nov 08 12:51:56 EST 2019

**Committee:** FAE-SCE



## Public Input No. 227-NFPA 2500-2019 [ Section No. 25.24.1.2 ]

### 25.24.1.2

Each fire escape system load-bearing hardware item shall have a product label stamped, engraved, or otherwise permanently marked with the portions of the product label information specified in 25.14 24 .1. 2.4 1 through 25.14 24 .1. 2.3 2 .

#### 25.24.1.2.1

Each load-bearing fire escape system component shall have the following compliance statement:

**MEETS NFPA 1983 (2017 ED).**

#### 25.24.1.2.2

Each load-bearing hardware fire escape system component shall display the manufacturer's name or identifying mark.

### Statement of Problem and Substantiation for Public Input

Correcting paragraph number references. 2017 Edition references wrong paragraphs.

### Submitter Information Verification

**Submitter Full Name:** Beverly Stutts

**Organization:** UL LLC

**Street Address:**

**City:**

**State:**

**Zip:**

**Submittal Date:** Thu Nov 14 17:48:23 EST 2019

**Committee:** FAE-SCE



## Public Input No. 75-NFPA 2500-2019 [ Section No. 25.24.1.2.1 ]

### 25.24.1.2.1

Each load-bearing fire escape system component shall have the following compliance statement:

**MEETS NFPA 1983 (2017 ED 2022 ED ).**

### Statement of Problem and Substantiation for Public Input

Updated edition to 2022 based on anticipated next edition release date

### Submitter Information Verification

**Submitter Full Name:** Cedric Smith

**Organization:** CMC Rescue, Inc.

**Street Address:**

**City:**

**State:**

**Zip:**

**Submittal Date:** Thu Nov 07 18:06:21 EST 2019

**Committee:** FAE-SCE



## Public Input No. 76-NFPA 2500-2019 [ Section No. 25.24.1.9 ]

### 25.24.1.9

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

**MEETS THE FIRE ESCAPE SYSTEM REQUIREMENTS OF NFPA 1983, STANDARD ON LIFE SAFETY ROPE AND EQUIPMENT FOR EMERGENCY SERVICES, 2017 EDITION 2022 EDITION . DO NOT DISASSEMBLE.**

### Statement of Problem and Substantiation for Public Input

Updated edition to 2022 based on anticipated next edition release date

### Submitter Information Verification

**Submitter Full Name:** Cedric Smith

**Organization:** CMC Rescue, Inc.

**Street Address:**

**City:**

**State:**

**Zip:**

**Submittal Date:** Thu Nov 07 18:07:04 EST 2019

**Committee:** FAE-SCE



## Public Input No. 119-NFPA 2500-2019 [ Section No. 25.24.2.2 ]

### 25.24.2.2

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

- (1) Inspecting the fire escape system periodically according to the manufacturer's inspection procedure
- (2) Removing the fire escape system from service if the equipment does not pass inspection or if there is any doubt about the safety or serviceability of the equipment
- (3) Maintaining the fire escape system in accordance with the manufacturer's instructions where metal components are subjected to corrosion or deterioration
- (4) ~~Returning the fire escape system to the manufacturer or to a qualified inspection person/center if the equipment is dropped or impact-loaded~~
- (5) Not exposing the software components of the fire escape system to flame or high temperature and carrying the equipment where it will be protected as it could melt or burn and fail if exposed to flame or high temperature
- (6) Repairing the fire escape system only in accordance with the manufacturer's instructions
- (7) Keeping the user instructions/information after they are separated from the fire escape system and retaining them in a permanent record; copying the user instructions/information and keeping the copy with the equipment
- (8) Referring to the user instructions/information before and after each use
- (9) Cautioning that, if the instructions/information are not followed, the user could suffer serious consequences

### Statement of Problem and Substantiation for Public Input

It is unlikely that the manufacturer will be able to service the equipment based on the nature of the event. Therefore mandating that it be returned to the manufacturer serves no purpose

### Submitter Information Verification

**Submitter Full Name:** Cedric Smith  
**Organization:** CMC Rescue, Inc.  
**Street Address:**  
**City:**  
**State:**  
**Zip:**  
**Submission Date:** Fri Nov 08 13:43:54 EST 2019  
**Committee:** FAE-SCE





## Public Input No. 100-NFPA 2500-2019 [ Section No. 25.24.2.3 ]

### 25.24.2.3

The manufacturer shall provide information for the user that additional information regarding fire escape systems can be found in NFPA 1500, NFPA 1858, and NFPA 1983.

### Statement of Problem and Substantiation for Public Input

Added NFPA 1858 as this standard provides pertinent reference information.

### Submitter Information Verification

**Submitter Full Name:** Cedric Smith

**Organization:** CMC Rescue, Inc.

**Street Address:**

**City:**

**State:**

**Zip:**

**Submission Date:** Fri Nov 08 12:52:40 EST 2019

**Committee:** FAE-SCE



## Public Input No. 26-NFPA 2500-2019 [ Section No. 25.25.1 ]

### 25.25.1 Manufactured System Label Requirements.

#### 25.25.1.1

Each manufactured system shall have a product label.

#### 25.25.1.2

Each manufactured system load-bearing hardware item shall have a product label stamped, engraved, or otherwise permanently marked with the portions of the product label information specified in 25.44 25.1.2.1 through 25.44 25.1.2.3 4.

#### 25.25.1.2.1

Each load-bearing hardware manufactured system component shall display the manufacturer's name or identifying mark.

#### 25.25.1.3

The product label for the portions of the product label information not specified in 25.25.1.2-4 ~~shall~~ shall be permitted to be a hang tag affixed to each manufacturer system or shall be permitted to be printed on a sheet that is inserted and sealed in the packaging that immediately contains the manufactured system.

#### 25.25.1.4

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

#### 25.25.1.5

Multi-label pieces shall be permitted to carry all statements and information required to be on the product label; however, all label pieces comprising the entire product label shall be located adjacent to each other.

#### 25.25.1.6

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

#### 25.25.1.7

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

#### 25.25.1.8

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.

#### 25.25.1.9

Each manufactured system shall have the following compliance statement on the product label:

**MEETS THE MANUFACTURED SYSTEM REQUIREMENTS OF NFPA 1983, STANDARD ON LIFE SAFETY ROPE AND EQUIPMENT FOR EMERGENCY SERVICES, 2017 EDITION. DO NOT DISASSEMBLE.**

#### 25.25.1.10

In addition to the compliance statement specified in 25.25.1.9, at least the information required in 25.25.1.2.1 shall also be provided on the printed product label.

#### 25.25.1.11

In addition to the compliance and information statements in 25.25.1.9 and 25.25.1.10, 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

**25.25.1.12**

Where detachable components must be used with the manufactured system for the manufactured system to be compliance with this standard, at least the following statement and information shall also be printed on the product label of the item. All letters shall be at least 2 mm ( $\frac{5}{64}$  in.) high. The detachable component(s) shall be listed following the statement by type, identification, and how properly used.

**TO BE COMPLIANT WITH NFPA 1983, THE FOLLOWING ADDITIONAL COMPONENTS MUST BE USED IN CONJUNCTION WITH THIS MANUFACTURED SYSTEM:**

[The detachable component(s) shall be listed here].

**Statement of Problem and Substantiation for Public Input**

Correcting paragraph references. In 25.25.1.2, the references were for wrong product category and this corrects to correct paragraph references for manufactured systems. In 25.25.1.3., corrects and simplifies reference.

**Related Public Inputs for This Document**

Related Input	Relationship
<a href="#">Public Input No. 27-NFPA 2500-2019 [New Section after 25.25.1.2]</a>	all part of labeling for manufactured systems

**Submitter Information Verification**

**Submitter Full Name:** Beverly Stutts  
**Organization:** UL LLC  
**Street Address:**  
**City:**  
**State:**  
**Zip:**  
**Submittal Date:** Mon Nov 04 13:55:35 EST 2019  
**Committee:** FAE-SCE



## Public Input No. 27-NFPA 2500-2019 [ New Section after 25.25.1.2 ]

### TITLE OF NEW CONTENT

25.25.1.2.2 Each load-bearing manufactured system hardware item shall have the following compliance statement:

**MEETS NFPA 1983 (2022 ED).**

25.25.1.2.3 Each load-bearing manufactured system hardware item shall display at least the minimum rated breaking strength prefaced by the letters "MBS." The MBS value stated on the product label shall be permitted to be any value greater than the actual "pass" requirement value determined by the certification testing, but shall not be greater than the calculated MBS.

25.25.1.2.4 Each load-bearing manufactured system hardware item shall display a "T" for technical-use manufactured system or "G" for general-use manufactured system. The designation "T" or "G" shall be designated in accordance with 27.25.2 or 27.25.4.

### Statement of Problem and Substantiation for Public Input

These labeling requirements were inadvertently omitted in 2017 edition. They are included as labeling requirements for escape systems and fire escape systems and it was an oversight to not have them included as requirements for manufactured systems.

### Related Public Inputs for This Document

Related Input	Relationship
<u>Public Input No. 26-NFPA 2500-2019 [Section No. 25.25.1]</u>	

### Submitter Information Verification

**Submitter Full Name:** Beverly Stutts  
**Organization:** UL LLC  
**Street Address:**  
**City:**  
**State:**  
**Zip:**  
**Submittal Date:** Mon Nov 04 14:00:07 EST 2019  
**Committee:** FAE-SCE



## Public Input No. 77-NFPA 2500-2019 [ Section No. 25.25.1.9 ]

### 25.25.1.9

Each manufactured system shall have the following compliance statement on the product label:

**MEETS THE MANUFACTURED SYSTEM REQUIREMENTS OF NFPA 1983, STANDARD ON LIFE SAFETY ROPE AND EQUIPMENT FOR EMERGENCY SERVICES, 2017 EDITION 2022 EDITION . DO NOT DISASSEMBLE.**

### Statement of Problem and Substantiation for Public Input

Updated edition to 2022 based on anticipated next edition release date

### Submitter Information Verification

**Submitter Full Name:** Cedric Smith

**Organization:** CMC Rescue, Inc.

**Street Address:**

**City:**

**State:**

**Zip:**

**Submittal Date:** Thu Nov 07 18:07:53 EST 2019

**Committee:** FAE-SCE



## Public Input No. 120-NFPA 2500-2019 [ Section No. 25.25.2.2 ]

### 25.25.2.2

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

- (1) Inspecting the manufactured system periodically according to the manufacturer's inspection procedure
- (2) Removing the manufactured system from service if the equipment does not pass inspection or if there is any doubt about the safety or serviceability of the equipment
- (3) Maintaining the manufactured system in accordance with the manufacturer's instructions where metal components are subjected to corrosion or deterioration
- (4) ~~Returning the manufactured system to the manufacturer or to a qualified inspection person/center if the equipment is dropped or impact-loaded~~
- (5) Not exposing the software components of the manufactured system to flame or high temperature and carrying the equipment where it will be protected as it could melt or burn and fail if exposed to flame or high temperature
- (6) Repairing the manufactured system only in accordance with the manufacturer's instructions
- (7) Keeping the user instructions/information after they are separated from the manufactured system and retaining them in a permanent record; copying the user instructions/information and keeping the copy with the equipment
- (8) Referring to the user instructions/information before and after each use
- (9) Cautioning that, if the instructions/information are not followed, the user could suffer serious consequences

### Statement of Problem and Substantiation for Public Input

It is unlikely that the manufacturer will be able to service the equipment based on the nature of the event. Therefore mandating that it be returned to the manufacturer serves no purpose

### Submitter Information Verification

**Submitter Full Name:** Cedric Smith  
**Organization:** CMC Rescue, Inc.  
**Street Address:**  
**City:**  
**State:**  
**Zip:**  
**Submission Date:** Fri Nov 08 13:44:41 EST 2019  
**Committee:** FAE-SCE



## Public Input No. 101-NFPA 2500-2019 [ Section No. 25.25.2.3 ]

### 25.25.2.3

The manufacturer shall provide information for the user that additional information regarding manufactured systems can be found in NFPA 1500, [NFPA 1858](#), and NFPA 1983.

### Statement of Problem and Substantiation for Public Input

Added NFPA 1858 as this standard provides pertinent reference information.

### Submitter Information Verification

**Submitter Full Name:** Cedric Smith

**Organization:** CMC Rescue, Inc.

**Street Address:**

**City:**

**State:**

**Zip:**

**Submittal Date:** Fri Nov 08 12:53:18 EST 2019

**Committee:** FAE-SCE



## Public Input No. 240-NFPA 2500-2019 [ Section No. 26.17 ]

### 26.17 Escape Anchors.

#### 26.17.1 Escape Anchor Design Requirements.

##### 26.17.1.1

Escape anchors shall not be designed or constructed in a manner that allows self-destructive action.

##### 26.17.1.2

Escape anchors are intended for the sole use of the rescuer for personal escape or self-rescue, or for the rescue of a single firefighter .

##### 26.17.1.3

Load-bearing hardware shall be constructed of forged, machined, stamped, extruded, or cast metal material .

##### 26.17.1.4

Castings shall meet Class I, Grade A requirements of SAE AMS-2175A, *Castings, Classification and Inspection of*.

## Statement of Problem and Substantiation for Public Input

Adding "for the rescue of a single firefighter" because the hook doesn't care whose life it is used to save... If a person uses it to save self or someone else, it should be acceptable, as long as it's not being used to save two people at the same time, such as in a rescue attempt of a firefighter trying to rescue himself and a civilian. While highly unlikely, if it is to be used to rescue another firefighter who may be suffering from a medical condition and needs to be removed from an untenable location, then it should be considered. The firefighter in distress may not be able to use her own system and may need to be lowered to a safe location through the use of another responder's personal system. It may need to be controlled by the assisting responder and it may be required to be secured to assisting responder through the use of her escape anchor.

Revision from 'metal' to 'material' so that users are not limited to possibility of other materials used in the construction of current and future escape anchors. Standard should not limit the possibility of what other materials can be used in the design of current and future hooks. This escape anchor would still have to meet the testing and performance requirements which will in the end validate the chosen material. While metal is the current material of choice, there are other possible materials that someone could come up with in the future, such as an escape anchor made from carbon fiber, carbon nanotubes, or have a base material of metal coated with ceramics.

## Submitter Information Verification

**Submitter Full Name:** Beverly Stutts  
**Organization:** UL LLC  
**Affiliation:** submitted on behalf of Sub-Group for Design Requirements (given by Chris Botti), NFPA 1983 Task Group on Escape Anchors  
**Street Address:**  
**City:**  
**State:**  
**Zip:**  
**Submission Date:** Fri Nov 15 15:34:13 EST 2019  
**Committee:** FAE-SCE





## Public Input No. 237-NFPA 2500-2019 [ Sections 26.23, 26.24 ]

### Sections 26.23, 26.24

#### 26.23 Escape Systems.

##### 26.23.1 Escape System Design Requirements.

###### 26.23.1.1

The escape system shall be designed for escape or self-rescue.

###### 26.23.1.2

The escape system shall comprise a flexible lifeline (e.g., rope/webbing/cable); a descent control device and a connector from the system to the user not to include the harness; and a means of attaching the system to an anchoring point (e.g., an escape anchor) that is capable of supporting human loads. The individual components of the escape system shall meet the respective design requirements of the individual components as specified in this standard.

#### 26.24 Fire Escape Systems.

##### 26.24.1 Fire Escape System Design Requirements.

###### 26.24.1.1

The fire escape system shall be designed for the sole use of the rescuer for personal escape or self-rescue from an immediately hazardous environment involving elevated temperatures.

###### 26.24.1.2

The fire escape system shall comprise a flexible lifeline (e.g. rope/webbing/cable) ; a descent control device and a connector from the system to the user not to include the harness; and a means of attaching the system to an anchoring point (e.g., an escape anchor) that is capable of supporting human loads. The individual components of the fire escape system shall meet the respective design requirements of the individual components as specified in this standard.

### Statement of Problem and Substantiation for Public Input

Language revised for consistency for escape systems and fire escape systems. Language should be same except for inclusion of elevated temperatures for fire escape systems.

### Submitter Information Verification

**Submitter Full Name:** Beverly Stutts  
**Organization:** UL LLC  
**Affiliation:** with Sub-Group for Escape and Fire Escape Systems as part of NFPA 1983 Task Group for Escape Anchors  
**Street Address:**  
**City:**  
**State:**  
**Zip:**  
**Submission Date:** Fri Nov 15 13:59:45 EST 2019  
**Committee:** FAE-SCE



## Public Input No. 11-NFPA 2500-2019 [ Section No. 27.1.3 ]

### 27.1.3\*

Technical-use life safety rope shall be tested for size as specified in Section 29.1 of Cordage Institute Standard CI 1801, *Low Stretch and Static Kernmantle Life Safety Rope*, and shall have a diameter of 9.5 mm ( $\frac{3}{8}$  in.) or greater but less than or equal to 12.5 mm ( $\frac{1}{2}$  in.). For reporting purposes, the calculated diameter of all new life safety rope shall be rounded to the nearest 0.5 mm ( $\frac{1}{64}$  in.).

### Statement of Problem and Substantiation for Public Input

Inadvertently omitted in 2017 edition. Intent is to include 12.5 mm as maximum diameter allowed for technical use rope. Wording is correct for general use rope and this statement for technical use rope should be consistent.

### Submitter Information Verification

**Submitter Full Name:** Beverly Stutts

**Organization:** UL LLC

**Street Address:**

**City:**

**State:**

**Zip:**

**Submittal Date:** Fri Nov 01 17:36:25 EDT 2019

**Committee:** FAE-SCE



## Public Input No. 121-NFPA 2500-2019 [ Section No. 27.1.3 ]

### 27.1.3\*

Technical-use life safety rope shall be tested for size as specified in ~~Section 29~~ Section 7.1 of Cordage Institute Standard CI 1801, ~~Low Stretch and Static Kernmantle Life Safety Rope 1800~~, Test method for Life Safety Rope and Accessory Cords for Life Safety Applications, and shall have a diameter of 9.5 mm ( $\frac{3}{8}$  in.) or greater but less than or equal to 12.5 mm ( $\frac{1}{2}$  in.). For reporting purposes, the calculated diameter of all new life safety rope shall be rounded to the nearest 0.5 mm ( $\frac{1}{64}$  in.).

### Statement of Problem and Substantiation for Public Input

Test method is now prescribed by CI 1800

### Submitter Information Verification

**Submitter Full Name:** Cedric Smith

**Organization:** CMC Rescue, Inc.

**Street Address:**

**City:**

**State:**

**Zip:**

**Submission Date:** Fri Nov 08 13:59:47 EST 2019

**Committee:** FAE-SCE



## Public Input No. 190-NFPA 2500-2019 [ Sections 27.1.3, 27.1.4 ]

### Sections 27.1.3, 27.1.4

#### 27.1.3\*

Technical-use life safety rope shall be tested for size as specified in Section 29.1 of Cordage Institute Standard CI 1801, *Low Stretch- and / Static Kernmantle Life- Safety Rope*, and shall have a diameter of 9.5 mm ( $\frac{3}{8}$  in.) or greater but less than 12.5 mm ( $\frac{1}{2}$  in.). For reporting purposes, the calculated diameter of all new life safety rope shall be rounded to the nearest 0.5 mm ( $\frac{1}{64}$  in.).

#### 27.1.4\*

General-use life safety rope shall be tested for size as specified in Section 29.1 of Cordage Institute Standard CI 1801, *Low Stretch- and / Static Kernmantle Life- Safety Rope*, and shall have a diameter of 11 mm ( $\frac{7}{16}$  in.) or greater but less than or equal to 16 mm ( $\frac{5}{8}$  in.). For reporting purposes, the calculated diameter of all new life safety rope shall be rounded to the nearest 0.5 mm ( $\frac{1}{64}$  in.).

### Statement of Problem and Substantiation for Public Input

Correcting the title of the standard

### Submitter Information Verification

**Submitter Full Name:** Karen Lehtonen

**Organization:** LION Group, Inc.

**Street Address:**

**City:**

**State:**

**Zip:**

**Submittal Date:** Tue Nov 12 10:25:19 EST 2019

**Committee:** FAE-SCE



## Public Input No. 122-NFPA 2500-2019 [ Section No. 27.1.4 ]

### 27.1.4\*

General-use life safety rope shall be tested for size as specified in ~~Section 29~~ Section 7.1 of Cordage Institute Standard CI 1801, ~~Low Stretch and Static Kernmantle Life Safety Rope 1800, Test Method For Life Safety Rope and Accessory Cords for Life Safety Applications~~, and shall have a diameter of 11 mm ( $\frac{7}{16}$  in.) or greater but less than or equal to 16 mm ( $\frac{5}{8}$  in.). For reporting purposes, the calculated diameter of all new life safety rope shall be rounded to the nearest 0.5 mm ( $\frac{1}{64}$  in.).

### Statement of Problem and Substantiation for Public Input

Test method now prescribed in CI 1800

### Submitter Information Verification

**Submitter Full Name:** Cedric Smith

**Organization:** CMC Rescue, Inc.

**Street Address:**

**City:**

**State:**

**Zip:**

**Submittal Date:** Fri Nov 08 14:04:16 EST 2019

**Committee:** FAE-SCE



## Public Input No. 12-NFPA 2500-2019 [ Section No. 27.2.2 ]

### 27.2.2\*

Escape rope shall be tested for size as specified in Section 29.1 of Cordage Institute Standard CI 1801, *Low Stretch and Static Kernmantle Life Safety Rope*, and shall have a diameter of 7.5 mm ( $19/64$  in.) or greater, but less than or equal to 9.5 mm ( $3/8$  in.). For the purpose of reporting, the calculated diameter of all new escape rope shall be rounded to the nearest 0.5 mm ( $1/64$  in.).

### Statement of Problem and Substantiation for Public Input

Inadvertently omitted in 2017 edition. Intent is to include 9.5 mm as maximum diameter allowed for escape rope. Wording is correct for general use rope and diameter statement for all ropes should be consistent.

### Submitter Information Verification

**Submitter Full Name:** Beverly Stutts

**Organization:** UL LLC

**Street Address:**

**City:**

**State:**

**Zip:**

**Submittal Date:** Fri Nov 01 17:40:55 EDT 2019

**Committee:** FAE-SCE



## Public Input No. 123-NFPA 2500-2019 [ Section No. 27.2.2 ]

### 27.2.2\*

Escape rope shall be tested for size as specified in ~~Section 29~~ Section 7.1 of Cordage Institute Standard CI 1801, ~~Low-Stretch and Static Kernmantle Life Safety Rope 1800~~, Test Method for *Life Safety Rope and Accessory Cords for Life Safety Applications*, and shall have a diameter of 7.5 mm ( $\frac{3}{16}$  in.) or greater, but less than or equal to 9.5 mm ( $\frac{3}{8}$  in.). For the purpose of reporting, the calculated diameter of all new escape rope shall be rounded to the nearest 0.5 mm ( $\frac{1}{16}$  in.).

### Statement of Problem and Substantiation for Public Input

Test method now prescribed by CI 1800

### Submitter Information Verification

**Submitter Full Name:** Cedric Smith

**Organization:** CMC Rescue, Inc.

**Street Address:**

**City:**

**State:**

**Zip:**

**Submittal Date:** Fri Nov 08 14:08:18 EST 2019

**Committee:** FAE-SCE



## Public Input No. 191-NFPA 2500-2019 [ Section No. 27.2.2 ]

### 27.2.2\*

Escape rope shall be tested for size as specified in Section 29.1 of Cordage Institute Standard CI 1801, *Low Stretch- and / Static Kernmantle Life- Safety Rope*, and shall have a diameter of 7.5 mm ( $\frac{19}{64}$  in.) or greater, but less than 9.5 mm ( $\frac{3}{8}$  in.). For the purpose of reporting, the calculated diameter of all new escape rope shall be rounded to the nearest 0.5 mm ( $\frac{1}{64}$  in.).

### Statement of Problem and Substantiation for Public Input

Update to title of the standard.

### Submitter Information Verification

**Submitter Full Name:** Karen Lehtonen

**Organization:** LION Group, Inc.

**Street Address:**

**City:**

**State:**

**Zip:**

**Submittal Date:** Tue Nov 12 10:26:25 EST 2019

**Committee:** FAE-SCE





## Public Input No. 192-NFPA 2500-2019 [ Section No. 27.3.2 ]

### 27.3.2

Escape webbing shall be tested for size as specified in Section 29.1 of Cordage Institute Standard CI 1801, *Low Stretch- and - Static Kernmantle Life- Safety Rope*, and shall have a minimum perimeter of 25 mm (1 in.). For the purpose of reporting, the perimeter of all new escape webbing shall be rounded to the nearest 0.5 mm ( $\frac{1}{64}$  in.).

### Statement of Problem and Substantiation for Public Input

Update to title of the standard

### Submitter Information Verification

**Submitter Full Name:** Karen Lehtonen  
**Organization:** LION Group, Inc.  
**Street Address:**  
**City:**  
**State:**  
**Zip:**  
**Submittal Date:** Tue Nov 12 10:27:10 EST 2019  
**Committee:** FAE-SCE

**Public Input No. 124-NFPA 2500-2019 [ Section No. 27.4.2 ]****27.4.2\***

Fire escape rope shall be tested for size as specified in ~~Section 29~~ Section 7 .1 of Cordage Institute Standard CI 1801, ~~Low-Stretch and Static Kernmantle Life Safety Rope 1800~~, Test Method for Life Safety Rope and Accessory Cords for Life Safety Applications , and shall have a diameter of at least 7.5 mm ( $\frac{19}{64}$  in.) but less than 9 or equal to 9.5 mm ( $\frac{3}{8}$  in.). For the purpose of reporting, the calculated diameter of all new fire escape rope shall be rounded to the nearest 0.5 mm ( $\frac{1}{64}$  in.).

**Statement of Problem and Substantiation for Public Input**

Test method now prescribed by CI 1800

**Submitter Information Verification**

**Submitter Full Name:** Cedric Smith

**Organization:** CMC Rescue, Inc.

**Street Address:**

**City:**

**State:**

**Zip:**

**Submission Date:** Fri Nov 08 14:14:11 EST 2019

**Committee:** FAE-SCE



## Public Input No. 13-NFPA 2500-2019 [ Section No. 27.4.2 ]

### 27.4.2\*

Fire escape rope shall be tested for size as specified in Section 29.1 of Cordage Institute Standard CI 1801, *Low Stretch and Static Kernmantle Life Safety Rope*, and shall have a diameter of at least 7.5 mm ( $\frac{19}{64}$  in.) but less than or equal to 9.5 mm ( $\frac{3}{8}$  in.). For the purpose of reporting, the calculated diameter of all new fire escape rope shall be rounded to the nearest 0.5 mm ( $\frac{1}{64}$  in.).

### Statement of Problem and Substantiation for Public Input

Inadvertently omitted in 2017 edition. Intent is to include 9.5 mm as maximum diameter allowed for fire escape rope. Wording is correct for general use rope and diameter statement for all ropes should be consistent.

### Submitter Information Verification

**Submitter Full Name:** Beverly Stutts  
**Organization:** UL LLC  
**Street Address:**  
**City:**  
**State:**  
**Zip:**  
**Submittal Date:** Fri Nov 01 17:44:43 EDT 2019  
**Committee:** FAE-SCE



## Public Input No. 193-NFPA 2500-2019 [ Section No. 27.4.2 ]

### 27.4.2\*

Fire escape rope shall be tested for size as specified in Section 29.1 of Cordage Institute Standard CI 1801, *Low Stretch- and - Static Kernmantle Life- Safety Rope*, and shall have a diameter of at least 7.5 mm ( $19/64$  in.) but less than 9.5 mm ( $3/8$  in.). For the purpose of reporting, the calculated diameter of all new fire escape rope shall be rounded to the nearest 0.5 mm ( $1/64$  in.).

### Statement of Problem and Substantiation for Public Input

Revision of title of the standard.

### Submitter Information Verification

**Submitter Full Name:** Karen Lehtonen

**Organization:** LION Group, Inc.

**Street Address:**

**City:**

**State:**

**Zip:**

**Submittal Date:** Tue Nov 12 10:27:50 EST 2019

**Committee:** FAE-SCE



## Public Input No. 194-NFPA 2500-2019 [ Section No. 27.5.2 ]

### 27.5.2

Fire escape webbing shall be tested for size as specified in Section 29.1 of Cordage Institute Standard CI 1801, *Low Stretch- and / Static Kernmantle Life- Safety Rope*, and shall have a minimum perimeter of 25 mm (1 in.). For the purpose of reporting, the perimeter of all new escape webbing shall be rounded to the nearest ½ mm (1/64 in.).

### Statement of Problem and Substantiation for Public Input

Update to title of the standard

### Submitter Information Verification

**Submitter Full Name:** Karen Lehtonen  
**Organization:** LION Group, Inc.  
**Street Address:**  
**City:**  
**State:**  
**Zip:**  
**Submittal Date:** Tue Nov 12 10:28:40 EST 2019  
**Committee:** FAE-SCE



## Public Input No. 125-NFPA 2500-2019 [ Section No. 27.6.2 ]

### 27.6.2\*

Throwlines shall be tested for size as specified in ~~Section 29~~ Section 7.1 of Cordage Institute Standard CI 1801, *Low-Stretch and Static Kernmantle Life Safety Rope 1800, Test Method for Life Safety Rope and Accessory Cords for Life Safety Applications*, and shall have a diameter of 7 mm ( $\frac{19}{64}$  in.) or greater, but less than or equal to 9.5 mm ( $\frac{3}{8}$  in.). For the purpose of reporting, the calculated diameter of all new life safety rope shall be rounded to the nearest 0.5 mm ( $\frac{1}{64}$  in.).

### Statement of Problem and Substantiation for Public Input

Test method now prescribed by CI 1800

### Submitter Information Verification

**Submitter Full Name:** Cedric Smith

**Organization:** CMC Rescue, Inc.

**Street Address:**

**City:**

**State:**

**Zip:**

**Submittal Date:** Fri Nov 08 14:17:01 EST 2019

**Committee:** FAE-SCE



## Public Input No. 14-NFPA 2500-2019 [ Section No. 27.6.2 ]

### 27.6.2\*

Throwlines shall be tested for size as specified in Section 29.1 of Cordage Institute Standard CI 1801, *Low Stretch and Static Kernmantle Life Safety Rope*, and shall have a diameter of 7 mm ( $\frac{19}{64}$  in.) or greater, but less than or equal to 9.5 mm ( $\frac{3}{8}$  in.). For the purpose of reporting, the calculated diameter of all new life safety rope shall be rounded to the nearest 0.5 mm ( $\frac{1}{16}$  in.).

### Statement of Problem and Substantiation for Public Input

Inadvertently omitted in 2017 edition. Intent is to include 9.5 mm as maximum diameter allowed for throwlines. Wording is correct for general use rope and diameter statement for all ropes should be consistent.

### Submitter Information Verification

**Submitter Full Name:** Beverly Stutts

**Organization:** UL LLC

**Street Address:**

**City:**

**State:**

**Zip:**

**Submittal Date:** Fri Nov 01 17:46:51 EDT 2019

**Committee:** FAE-SCE



## Public Input No. 195-NFPA 2500-2019 [ Section No. 27.6.2 ]

### 27.6.2\*

Throwlines shall be tested for size as specified in Section 29.1 of Cordage Institute Standard CI 1801, *Low Stretch- and- / Static Kernmantle Life- Safety Rope*, and shall have a diameter of 7 mm ( $\frac{1}{4}$  in.) or greater, but less than 9.5 mm ( $\frac{3}{8}$  in.). For the purpose of reporting, the calculated diameter of all new life safety rope shall be rounded to the nearest 0.5 mm ( $\frac{1}{16}$  in.).

### Statement of Problem and Substantiation for Public Input

Update to title of the standard

### Submitter Information Verification

**Submitter Full Name:** Karen Lehtonen  
**Organization:** LION Group, Inc.  
**Street Address:**  
**City:**  
**State:**  
**Zip:**  
**Submittal Date:** Tue Nov 12 10:29:18 EST 2019  
**Committee:** FAE-SCE





## Public Input No. 1-NFPA 2500-2019 [ Section No. 27.8.1 ]

### 27.8.1

Manufacturer-supplied eye termination shall be tested for breaking strength as specified in Section 28.2 and shall meet one of the following criteria:

- (1) ~~It shall have a minimum breaking strength of not less than 85 percent of the certified rope's calculated minimum breaking strength, as determined by the certifying organization.~~

~~It shall have a minimum breaking strength of not less than~~

- (2) than 20 kN (4496 lbf) for technical use life safety rope.
- (3) It shall have a minimum breaking strength of not less than 40 kN (8992 lbf) for general use life safety rope.
- (4) It shall have a minimum breaking strength of not less than 13.5 kN (3034 lbf) for escape rope and fire escape rope.
- (5) It shall have a minimum breaking strength of not less than 13.5 kN (3034 lbf) for escape webbing and fire escape webbing.
- (6) It shall have a minimum breaking strength of not less than 13 kN (2923 lbf) for throwline.

### Additional Proposed Changes

File Name	Description	Approved
1983_PC_7_Hold.pdf	1983_PC_7_Hold	

### Statement of Problem and Substantiation for Public Input

NOTE: This Public Input appeared as "Reject but Hold" in Public Comment No. 7 of the F2016 Second Draft report for NFPA 1983. Regs. at 4.4.8.3.1.

Substantiation: The minimum requirement permits to have supplied eye termination with a minimum breaking strength of 85 percent 13,5 kN which seems too low in regards to all others textile components and ageing.

### Submitter Information Verification

**Submitter Full Name:** Tc On Fae-Sce  
**Organization:** NFPA TC on FAE-SCE  
**Street Address:**  
**City:**  
**State:**  
**Zip:**  
**Submittal Date:** Wed Oct 09 09:53:26 EDT 2019  
**Committee:** FAE-SCE



## Public Comment No. 7-NFPA 1983-2015 [ Section No. 7.8.1 ]

### 7.8.1

Manufacturer-supplied eye termination shall be tested for breaking strength as specified in Section 8.2 and shall meet one of the following criteria:

- (1) ~~It shall have a minimum breaking strength of not less than 85 percent of the certified rope's calculated minimum breaking strength, as determined by the certifying organization.~~
- (2) ~~It shall have a minimum breaking strength of not less than 20 kN (4496 lbf) for technical use life safety rope.~~
- (3) It shall have a minimum breaking strength of not less than 40 kN (8992 lbf) for general use life safety rope.
- (4) It shall have a minimum breaking strength of not less than 13.5 kN (3034 lbf) for escape rope.
- (5) It shall have a minimum breaking strength of not less than 13.5 kN (3034 lbf) for throwline.
- (6) It shall have a minimum breaking strength of not less than 13.5 kN (3034 lbf) for fire escape rope.

### Statement of Problem and Substantiation for Public Comment

The minimum requirement permits to have supplied eye termination with a minimum breaking strength of 85 percent 13,5 kN = 11,5 kN which seems too low in regards of all others textile components and ageing.

#### Related Item

Public Input No. 62-NFPA 1983-2015 [Chapter 7]

### Submitter Information Verification

**Submitter Full Name:** MATTHIEU RICHARD

**Organization:** ZEDEL

**Street Address:**

**City:**

**State:**

**Zip:**

**Submission Date:** Thu Nov 12 09:48:05 EST 2015

### Committee Statement

**Committee Action:** Rejected but held

**Resolution:** This material is held until next cycle to allow for Public Input because this represents a substantial change to the document and needs to have public review.

**Copyright Assignment**

I, MATTHIEU RICHARD, hereby irrevocably grant and assign to the National Fire Protection Association (NFPA) all and full rights in copyright in this Public Comment (including both the Proposed Change and the Statement of Problem and Substantiation). I understand and intend that I acquire no rights, including rights as a joint author, in any publication of the NFPA in which this Public Comment in this or another similar or derivative form is used. I hereby warrant that I am the author of this Public Comment and that I have full power and authority to enter into this copyright assignment.

By checking this box I affirm that I am MATTHIEU RICHARD, and I agree to be legally bound by the above Copyright Assignment and the terms and conditions contained therein. I understand and intend that, by checking this box, I am creating an electronic signature that will, upon my submission of this form, have the same legal force and effect as a handwritten signature



## Public Input No. 30-NFPA 2500-2019 [ Section No. 27.9.6.1 ]

### 27.9.6.1

Where harnesses are represented as being flame-resistant, materials ~~and hardware~~ shall be tested individually for flame resistance as specified in Section 28.16 and shall have an average char length of not more than 100 mm (4 in.), shall have an average afterflame of not more than 2.0 seconds, and shall not melt or drip.

### Statement of Problem and Substantiation for Public Input

Hardware should not be required to undergo the Flame Resistance testing; it is required to undergo the Heat Resistance testing. Requirement of hardware undergoing flame resistance testing was removed as part of a 2012 TIA. First Draft Report was correct, but somehow hardware was added back in during second draft and committee missed the edition.

### Related Public Inputs for This Document

Related Input	Relationship
<a href="#">Public Input No. 31-NFPA 2500-2019 [Section No. 27.10.7.1]</a>	

### Submitter Information Verification

**Submitter Full Name:** Beverly Stutts  
**Organization:** UL LLC  
**Street Address:**  
**City:**  
**State:**  
**Zip:**  
**Submittal Date:** Thu Nov 07 11:32:33 EST 2019  
**Committee:** FAE-SCE



## Public Input No. 31-NFPA 2500-2019 [ Section No. 27.10.7.1 ]

### 27.10.7.1

Where belts are represented as being flame-resistant, ~~hardware materials~~ shall be tested individually for flame resistance as specified in Section 28.16 and shall have an average char length of not more than 100 mm (4 in.), shall have an average afterflame of not more than 2.0 seconds, and shall not melt or drip.

### Statement of Problem and Substantiation for Public Input

Materials (for example, webbings) should be tested for flame resistance when evaluating belts with flame-resistance option and hardware should not be subjected to flame resistance testing. This was corrected in 2012 in an TIA, but then somehow correction was inadvertently missed in 2017 edition. The first and second drafts for 2017 edition showed "materials" marked through, with hardware remaining and committee did not realize error. This paragraph needs to be corrected to have materials subjected to the flame testing and not have hardware subjected to the flame testing.

### Related Public Inputs for This Document

Related Input	Relationship
<a href="#">Public Input No. 30-NFPA 2500-2019 [Section No. 27.9.6.1]</a>	both deal with flame resistance testing for product with flame resistant option

### Submitter Information Verification

**Submitter Full Name:** Beverly Stutts  
**Organization:** UL LLC  
**Street Address:**  
**City:**  
**State:**  
**Zip:**  
**Submittal Date:** Thu Nov 07 11:38:01 EST 2019  
**Committee:** FAE-SCE



## Public Input No. 82-NFPA 2500-2019 [ Section No. 27.12.3 ]

### 27.12.3

Permanently attached end-to-end and ~~multiple configuration strap~~ end strap product labels shall be tested for legibility as specified in Section 28.10 shall be legible, and shall not be torn or otherwise damaged.

### Statement of Problem and Substantiation for Public Input

This paragraph is for end-to-end straps only. The term 'multiple configuration' is not applicable here.

### Related Public Inputs for This Document

Related Input	Relationship
<a href="#">Public Input No. 83-NFPA 2500-2019 [Section No. 27.12.5]</a>	

### Submitter Information Verification

**Submitter Full Name:** Beverly Stutts  
**Organization:** UL LLC  
**Street Address:**  
**City:**  
**State:**  
**Zip:**  
**Submittal Date:** Thu Nov 07 19:09:53 EST 2019  
**Committee:** FAE-SCE



## Public Input No. 83-NFPA 2500-2019 [ Section No. 27.12.5 ]

### 27.12.5\*

All fiber and thread used for end-to-end ~~and multiple configuration~~ straps shall be tested for melting as specified in ASTM E794, *Standard Test Method for Melting and Crystallization Temperatures by Thermal Analysis*, and shall have a melting point of not less than 204°C (400°F).

### Statement of Problem and Substantiation for Public Input

This paragraph is for end-to-end straps only. The term "multiple configuration" does not belong here.

### Related Public Inputs for This Document

Related Input	Relationship
<a href="#">Public Input No. 82-NFPA 2500-2019 [Section No. 27.12.3]</a>	both regarding end-to-end straps and erroneously include multiple configuration straps

### Submitter Information Verification

**Submitter Full Name:** Beverly Stutts  
**Organization:** UL LLC  
**Street Address:**  
**City:**  
**State:**  
**Zip:**  
**Submittal Date:** Thu Nov 07 19:12:12 EST 2019  
**Committee:** FAE-SCE



## Public Input No. 84-NFPA 2500-2019 [ Section No. 27.13.3 ]

### 27.13.3

Permanently attached ~~end-to-end~~ and multiple configuration strap product labels shall be tested for legibility as specified in Section 28.10 shall be legible, and shall not be torn or otherwise damaged.

### Statement of Problem and Substantiation for Public Input

This paragraph is for multiple configuration straps only and should not include end-to-end straps.

### Related Public Inputs for This Document

Related Input	Relationship
<a href="#">Public Input No. 85-NFPA 2500-2019 [Section No. 27.13.5]</a>	

### Submitter Information Verification

**Submitter Full Name:** Beverly Stutts  
**Organization:** UL LLC  
**Street Address:**  
**City:**  
**State:**  
**Zip:**  
**Submittal Date:** Thu Nov 07 19:15:04 EST 2019  
**Committee:** FAE-SCE





## Public Input No. 85-NFPA 2500-2019 [ Section No. 27.13.5 ]

### 27.13.5

All fiber and thread used for ~~end-to-end and~~ multiple configuration straps shall be tested for melting as specified in ASTM E794, *Standard Test Method for Melting and Crystallization Temperatures by Thermal Analysis*, and shall have a melting point of not less than 204°C (400°F).

### Statement of Problem and Substantiation for Public Input

This paragraph is for multiple configuration straps only and should not include end-to-end straps.

### Related Public Inputs for This Document

Related Input	Relationship
<a href="#">Public Input No. 84-NFPA 2500-2019 [Section No. 27.13.3]</a>	both regarding multiple configuration straps and should not include end-to-end straps.

### Submitter Information Verification

**Submitter Full Name:** Beverly Stutts  
**Organization:** UL LLC  
**Street Address:**  
**City:**  
**State:**  
**Zip:**  
**Submittal Date:** Thu Nov 07 19:17:21 EST 2019  
**Committee:** FAE-SCE



## Public Input No. 126-NFPA 2500-2019 [ Section No. 27.14.1 ]

### 27.14.1

Technical use belay devices shall be tested for manner of function as specified in Section 28.6 without failure of the device or failure of the rope, with a belay system extension of less than 1 m (3.28ft), and with an impact force of less than 15 kN (3372 lbf)

### Statement of Problem and Substantiation for Public Input

Minimizing system extension and impact forces are important factors to mitigate with any belay device. Recommend specifying the same system extension and impact force requirements for both Technical and General Use Devices as these are upper limits on injury potential.

### Related Public Inputs for This Document

Related Input	Relationship
<a href="#">Public Input No. 127-NFPA 2500-2019 [Section No. 25.14.1.2.3]</a>	

### Submitter Information Verification

**Submitter Full Name:** Cedric Smith  
**Organization:** CMC Rescue, Inc.  
**Street Address:**  
**City:**  
**State:**  
**Zip:**  
**Submission Date:** Fri Nov 08 15:18:12 EST 2019  
**Committee:** FAE-SCE



## Public Input No. 234-NFPA 2500-2019 [ New Section after 27.18.2 ]

### 27.18.3

All fiber and thread used for litters shall be tested for melting as specified in ASTM E794, *Standard Test Method for Melting and Crystallization Temperatures by Thermal Analysis*, and shall have a melting point of not less than 204°C (400°F).

### Statement of Problem and Substantiation for Public Input

Requirement needs to be added to account for materials used in the construction of textile litters.

### Submitter Information Verification

**Submitter Full Name:** Andrew White

**Organization:** UL LLC

**Street Address:**

**City:**

**State:**

**Zip:**

**Submittal Date:** Fri Nov 15 11:48:44 EST 2019

**Committee:** FAE-SCE



## Public Input No. 238-NFPA 2500-2019 [ Sections 27.23, 27.24 ]

### Sections 27.23, 27.24

#### 27.23 Escape System Performance Requirements.

##### 27.23.1

Escape systems shall be tested for strength as specified in Section 28.7 and shall have a minimum tensile strength of at least 13.5 kN (3034 lbf) without failure.

##### 27.23.2

All metal hardware and hardware that includes metal parts shall be tested for corrosion resistance as specified in Section 28.8 and metals inherently resistant to corrosion including but not limited to stainless steel, brass, copper, aluminum, and zinc shall show no more than light surface-type corrosion or oxidation. Ferrous metals shall show no corrosion of the base metal. All hardware shall remain functional as specified in the manufacturer's operating instructions.

##### 27.23.3

All fiber and thread utilized in the construction of the escape systems and system components shall be tested for melting as specified in ASTM E794, *Standard Test Method for Melting and Crystallization Temperatures by Thermal Analysis*, and shall have a melting point of not less than 204°C (400°F).

##### 27.23.4

All escape system equipment and system component product labels shall be tested for legibility as specified in Section 28.10 shall be legible ~~and~~ and shall not be torn or otherwise damaged.

##### 27.23.5

Where the escape descent control device used in the escape system incorporates a passive or active breaking feature that creates friction between the device and the rope, the system shall be tested for average payout force as specified in Section 28.13- ~~and~~ and shall not ~~release the test torso and shall not~~ exceed 90 N (20 lbf).

##### 27.23.6

Escape systems shall be tested for maximum impact force as specified in Section 28.14 and shall have the maximum impact force not exceed 8.0 kN (1798 lbf), shall not damage the rope or device, and shall remain functional.

##### 27.23.7

Escape anchor used in escape system shall be tested for breaking strength as specified in Section 8.7 for escape anchors and shall have a minimum breaking strength of at least 13.5 kN (3034 lbf).

#### 27.24 Fire Escape System Performance Requirements.

##### 27.24.1

Fire escape systems shall be tested for strength as specified in Section 28.7 and shall have a minimum tensile strength of at least 13.5 kN (3034 lbf) without failure.

##### 27.24.2

All metal hardware and hardware that includes metal parts shall be tested for corrosion resistance as specified in Section 28.8 and metals inherently resistant to corrosion including but not limited to stainless steel, brass, copper, aluminum, and zinc shall show no more than light surface-type corrosion or oxidation. Ferrous metals shall show no corrosion of the base metal. All hardware shall remain functional as specified in the manufacturer's operating instructions.

##### 27.24.3

All escape system equipment and system component product labels shall be tested for legibility as specified in Section 28.10 and shall be legible, and shall not be torn or otherwise damaged.

**27.24.4**

Where the escape descent control device used in the fire escape system incorporates a passive or active breaking feature that creates friction between the device and the rope, the system shall be tested for average payout force as specified in Section 28.13- and and shall not release the test torso and shall not exceed 90 N (20 lbf).

**27.24.5**

Fire escape system rope and the manufactured supplied eye termination with fire escape rope shall be tested for high-temperature exposure as specified in Section 28.15. This test shall be conducted at two independent conditions and shall have a minimum time to failure of 45 seconds at 600°C (1112°F) while holding ~~4.33 kN~~ 136 kg (300 lb) and of 5 minutes at 400°C (752°F) while holding ~~4.33 kN~~ 136 kg (300 lb).

**27.24.6**

Fire escape system materials, labels, and hardware shall be tested individually for heat resistance as specified in Section 28.17 and shall not melt, drip, separate, or ignite; hardware items shall remain functional.

**27.24.7**

~~Sewing-~~ All fiber and sewing thread utilized in the construction of fire escape systems shall be tested for melting as specified in ASTM D7138, *Standard Test Method to Determine Melting Temperature of Synthetic Fibers*, Method 1, and shall have a melting point of not less than 260°C (500°F).

**27.24.8**

Escape systems shall be tested for maximum impact force as specified in Section 28.14 and shall have the maximum impact force not exceed 8.0 kN (1798 lbf), shall not damage the rope or device, and shall remain functional.

**27.24.9**

Escape anchor used in fire escape system shall be tested for breaking strength as specified in Section 8.7 for escape anchors and shall have a minimum breaking strength of at least 13.5 kN (3034 lbf).

**Statement of Problem and Substantiation for Public Input**

Revisions include making applicable requirements consistent for escape systems and fire escape systems and to incorporate testing of escape anchors. Revisions to 27.23.4. and 28.24.3 for label durability testing are editorial and revised for clarity. Revisions to 27.23.5 and 27.24.4 for payout testing are revised because a test torso is not used in payout testing. Revision to 27.24.7 to make sure that all fiber materials used in fire escape system are subjected to test to make sure no melting below 260C. Revision to 27.24.5 is to correct the units/conversion for the weight used in elevated temperature testing.

Addition of 27.23.7 and 28.24.9 is to address testing of non-certified escape anchors. Currently, escape anchors that are not certified do not have to individually undergo any performance testing. The only testing that includes the escape anchor is the system breaking strength, system heat resistance, and corrosion resistance. Breaking strength testing of the system does not necessarily test the anchor in its weakest configuration. Based on issues with escape anchors and test method, this requirement should be added to performance requirements of escape systems and fire escape systems to insure that all escape anchors, whether certified escape anchor or only escape anchor used in certified system, are subjected to appropriate anchor performance testing.

**Related Public Inputs for This Document**

Related Input	Relationship
Public Input No. 15-NFPA 2500-2019 [Section No. 27.24.4]	PI 15 and this proposal address removal of test torso in payout requirement
Public Input No. 219-NFPA 2500-2019 [Section No. 27.24.5]	both regarding proposal to fire escape systems PI 219 submitted by UL to replace term of fire escape rope with term lifeline in fire escape systems

**Submitter Information Verification**

**Submitter Full Name:** Beverly Stutts  
**Organization:** UL LLC

**Affiliation:** submitted on behalf of Sub-Group for System Requirements, which is part of NFPA 1983 Task Group on Escape Anchors

**Street Address:**

**City:**

**State:**

**Zip:**

**Submission Date:** Fri Nov 15 14:08:36 EST 2019

**Committee:** FAE-SCE



## Public Input No. 15-NFPA 2500-2019 [ Section No. 27.24.4 ]

### 27.24.4

Where the escape descent control device used in the fire escape system incorporates a passive or active breaking feature that creates friction between the device and the rope, the system shall be tested for average payout force as specified in Section 28.13- and and shall not ~~release the test torso and shall not~~ exceed 90 N (20 lbf).

### Statement of Problem and Substantiation for Public Input

A test torso is not used in this test. Inclusion of phrase was error in 2017 edition.

### Related Public Inputs for This Document

Related Input	Relationship
<a href="#">Public Input No. 238-NFPA 2500-2019 [Sections 27.23, 27.24]</a>	

### Submitter Information Verification

**Submitter Full Name:** Beverly Stutts  
**Organization:** UL LLC  
**Street Address:**  
**City:**  
**State:**  
**Zip:**  
**Submittal Date:** Fri Nov 01 17:49:39 EDT 2019  
**Committee:** FAE-SCE



## Public Input No. 219-NFPA 2500-2019 [ Section No. 27.24.5 ]

### 27.24.5

~~Fire escape system rope and~~ The lifeline and the manufactured supplied eye termination with ~~fire escape rope~~ the lifeline shall be tested for high-temperature exposure as specified in Section 28.15. This test shall be conducted at two independent conditions and shall have a minimum time to failure of 45 seconds at 600°C (1112°F) while holding 1.33 kN (300 lb) and of 5 minutes at 400°C (752°F) while holding 1.33 kN (300 lb).

### Statement of Problem and Substantiation for Public Input

For fire escape systems, the standard allows for rope that does not meet the diameter requirements of fire escape rope, as long as the rope meets all performance requirements of a fire escape system. Therefore, this paragraph should be re-worded to take out the term "fire escape rope" and replace with the term "lifeline" which is also the term used in the design requirements for a fire escape system. Additionally, using the term "lifeline" takes into account webbing that is also allowed to be used as long as the performance requirements of fire escape system are met.

### Related Public Inputs for This Document

Related Input	Relationship
<a href="#">Public Input No. 220-NFPA 2500-2019 [Section No. 28.15.1.1]</a>	
<a href="#">Public Input No. 238-NFPA 2500-2019 [Sections 27.23, 27.24]</a>	

### Submitter Information Verification

**Submitter Full Name:** Beverly Stutts  
**Organization:** UL LLC  
**Street Address:**  
**City:**  
**State:**  
**Zip:**  
**Submission Date:** Thu Nov 14 13:42:59 EST 2019  
**Committee:** FAE-SCE





## Public Input No. 128-NFPA 2500-2019 [ Section No. 28.2.3.1 ]

### 28.2.3.1

Specimens shall be as specified in Cordage Institute Standard CI 1801, *Low Stretch and Static Kernmantle Life Safety Rope 1800, Test Method for Life Safety Rope and Accessory Cords for Life Safety Applications*.

### Statement of Problem and Substantiation for Public Input

test methods are now prescribed by CI 1800

### Submitter Information Verification

**Submitter Full Name:** Cedric Smith

**Organization:** CMC Rescue, Inc.

**Street Address:**

**City:**

**State:**

**Zip:**

**Submittal Date:** Fri Nov 08 16:24:50 EST 2019

**Committee:** FAE-SCE



## Public Input No. 200-NFPA 2500-2019 [ Sections 28.2.3.1, 28.2.3.2 ]

### Sections 28.2.3.1, 28.2.3.2

#### 28.2.3.1

Specimens shall be as specified in Cordage Institute Standard CI 1801, *Low Stretch- and / Static Kernmantle Life- Safety Rope*.

#### 28.2.3.2

A minimum of five specimens shall be tested.

### Statement of Problem and Substantiation for Public Input

Revision to title of standard

### Submitter Information Verification

**Submitter Full Name:** Karen Lehtonen

**Organization:** LION Group, Inc.

**Street Address:**

**City:**

**State:**

**Zip:**

**Submittal Date:** Tue Nov 12 10:40:46 EST 2019

**Committee:** FAE-SCE



## Public Input No. 130-NFPA 2500-2019 [ New Section after 28.2.4 ]

### 28.2.4.1

Drum size for the minimum breaking strength test shall be 100 mm ( 4 inches).

### Statement of Problem and Substantiation for Public Input

CI standard 1800 specifies a minimum drum size of 4 inches but no maximum drum size, nor a D/d ratio as it relates to rope diameter. For testing and reporting consistency across test labs, a prescribed drum size is necessary.

### Submitter Information Verification

**Submitter Full Name:** Cedric Smith

**Organization:** CMC Rescue, Inc.

**Street Address:**

**City:**

**State:**

**Zip:**

**Submittal Date:** Fri Nov 08 16:44:53 EST 2019

**Committee:** FAE-SCE



## Public Input No. 129-NFPA 2500-2019 [ Section No. 28.2.4 ]

### 28.2.4\* Procedure.

Specimens shall be tested for elongation and minimum breaking strength in accordance with Sections 8 and 9 of Section 7 of Cordage Institute Standard CI 1801, *Low Stretch and Static Kernmantle Life Safety Rope 1800, Test Method for Life Safety Rope and Accessory Cords for Life Safety Applications* .

### Statement of Problem and Substantiation for Public Input

Test method now prescribed by CI 1800

### Submitter Information Verification

**Submitter Full Name:** Cedric Smith

**Organization:** CMC Rescue, Inc.

**Street Address:**

**City:**

**State:**

**Zip:**

**Submission Date:** Fri Nov 08 16:39:56 EST 2019

**Committee:** FAE-SCE



## Public Input No. 201-NFPA 2500-2019 [ Section No. 28.2.4 ]

### 28.2.4\* Procedure.

Specimens shall be tested for elongation and minimum breaking strength in accordance with Sections 8 and 9 of Cordage Institute Standard CI 1801, *Low Stretch- and - / Static Kernmantle Life- Safety Rope*.

### Statement of Problem and Substantiation for Public Input

Revision to title of standard.

### Submitter Information Verification

**Submitter Full Name:** Karen Lehtonen

**Organization:** LION Group, Inc.

**Street Address:**

**City:**

**State:**

**Zip:**

**Submittal Date:** Tue Nov 12 10:41:33 EST 2019

**Committee:** FAE-SCE



## Public Input No. 206-NFPA 2500-2019 [ Section No. 28.2.4 ]

### 28.2.4\* Procedure.

Specimens shall be tested for elongation and minimum breaking strength in accordance with Sections 8 and 9 of Cordage Institute Standard CI 1801, *Low Stretch and Static Kernmantle Life Safety Rope*.

The drum size should be specified or a diameter rope to diameter of drum size needs to be specified. The standard currently allows for any size drum of 4" or larger in diameter which could affect the rope's strength especially if high tech materials (such as technora) are used.

### Statement of Problem and Substantiation for Public Input

The rope's strength can be influenced by the drum size which can cause disagreements between testing facilities. If a drum size is specified or a diameter to diameter is specified, this eliminates any drum size issues and standardized the way everyone tests.

### Submitter Information Verification

**Submitter Full Name:** David Goncalves  
**Organization:** Teufelberger Fiber Rope Corp  
**Street Address:**  
**City:**  
**State:**  
**Zip:**  
**Submission Date:** Wed Nov 13 09:33:28 EST 2019  
**Committee:** FAE-SCE



## Public Input No. 86-NFPA 2500-2019 [ Section No. 28.3.1.2 ]

### 28.3.1.2

Each model of a belt, a life safety harness, or a victim extrication device shall be tested in accordance with Table 28.3.1.2, as appropriate for the product.

Table 28.3.1.2 Static Test Matrix

Test	Class II	Class III	Ladder Belt	Victim Escape Belt	Class II Extrication Device	Class III Extrication Device
Upright	YES	YES	YES	YES	YES	YES
Head down	NO	YES	NO	NO	NO	YES
Horizontal	NO	NO	YES	NO	NO	YES

### Statement of Problem and Substantiation for Public Input

The correct title for an escape belt is "Escape Belt" and not "Victim Escape Belt."

### Submitter Information Verification

**Submitter Full Name:** Beverly Stutts

**Organization:** UL LLC

**Street Address:**

**City:**

**State:**

**Zip:**

**Submittal Date:** Thu Nov 07 19:20:42 EST 2019

**Committee:** FAE-SCE



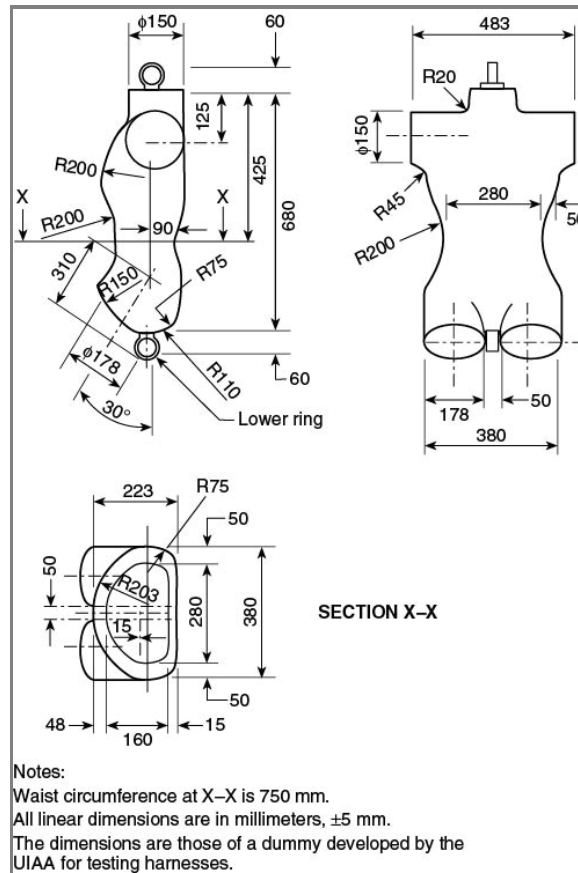
## Public Input No. 196-NFPA 2500-2019 [ Section No. 28.3.4 [Excluding any Sub-Sections]

]

The rigid test torso specified in Figure 1 of ASTM F1772, *Standard Specification for Climbing Harnesses for Rescue and Sport Activities*, shall be used with the following modifications, as shown in Figure 28.3.4:

- (1) The legs shall be  $310 \text{ mm} \pm 30 \text{ mm}$  (12 in.  $\pm$  1 in.) in length.
- (2) The distance between the inner thighs at the crotch shall be  $50 \text{ mm} \pm 5 \text{ mm}$  (2 in.  $\pm$   $\frac{1}{4}$  in.).

**Figure 28.3.4 Outline of the Test Torso.**



### Statement of Problem and Substantiation for Public Input

Update to the title of the standard.

### Submitter Information Verification

**Submitter Full Name:** Karen Lehtonen  
**Organization:** LION Group, Inc.  
**Street Address:**  
**City:**  
**State:**  
**Zip:**  
**Submission Date:** Tue Nov 12 10:32:57 EST 2019  
**Committee:** FAE-SCE





Public Input No. 2-NFPA 2500-2019 [ Section No. 28.3.4 [Excluding any Sub-Sections] ]

john@yatesgear.com

The rigid test torso specified in Figure 1

of

of *ASTM F1772, - Standard Specification for Climbing Harnesses - EN 364, - Personal protective equipment against falls from a height - Test methods*, shall be used, with the following modifications, as shown in Figure

28

8.3.4:

(1) The legs shall be

310 mm ± 30 mm (12 in. ± 1 in

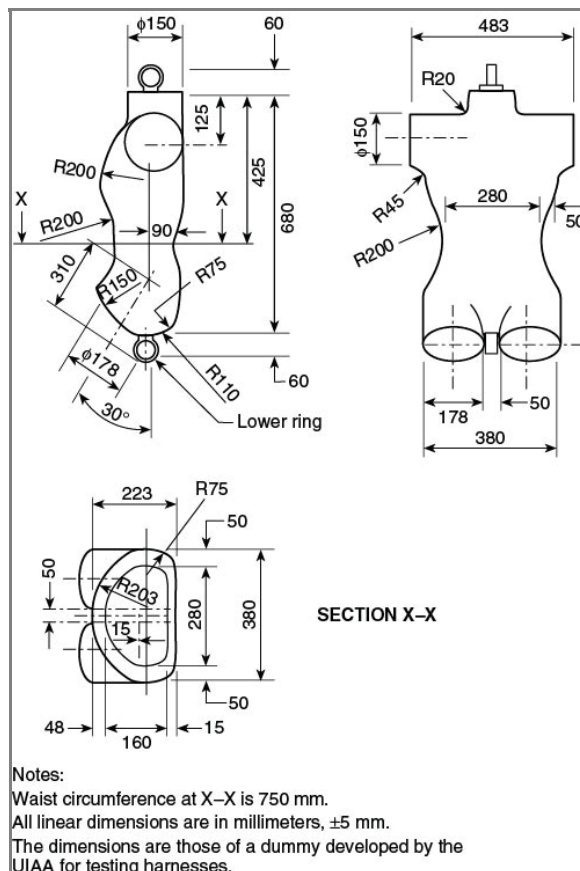
310 mm ± 30 mm (12 in. ± 1 in.) in length.

(2) The distance between the inner thighs at the crotch shall be

50 mm ± 5 mm (2 in. ± 1/4

50 mm ± 5 mm (2 in. ± 1/4 in.).

**Figure 28.3.4 Outline of the Test Torso.**



## Additional Proposed Changes

File Name	Description	Approved
EN_test_torso.jpg	EN Test Torso	

## Statement of Problem and Substantiation for Public Input

Justification: I recommend a change in the test torso that is used for harness testing in the NFPA 1983 standard. The Torso currently used is a modified (Longer Leg Section) version of the CE/EN test torso used in Europe for sport rock climbing seat harnesses. It was never intended to be used for testing industrial full body harnesses. The waist section is proportionally too small causing the waist portion of full body harnesses to be excessively loaded during testing. The EN test torso shown below is the test torso that 90% of the world uses for industrial full body harness testing. It evenly distributes the load over the harness being tested. The EN torso could be manufactured to meet the 136 kg test weight used by NFPA.

## Submitter Information Verification

**Submitter Full Name:** John Yates  
**Organization:** Yates Gear Inc  
**Affiliation:** CEO  
**Street Address:**  
**City:**  
**State:**  
**Zip:**  
**Submittal Date:** Wed Oct 09 12:45:25 EDT 2019  
**Committee:** FAE-SCE



**ANSI/ASSE Z359**  
100 kg



**CSA Z259**  
160 kg



**NFPA 1983**  
136 kg



**EN**  
100 kg



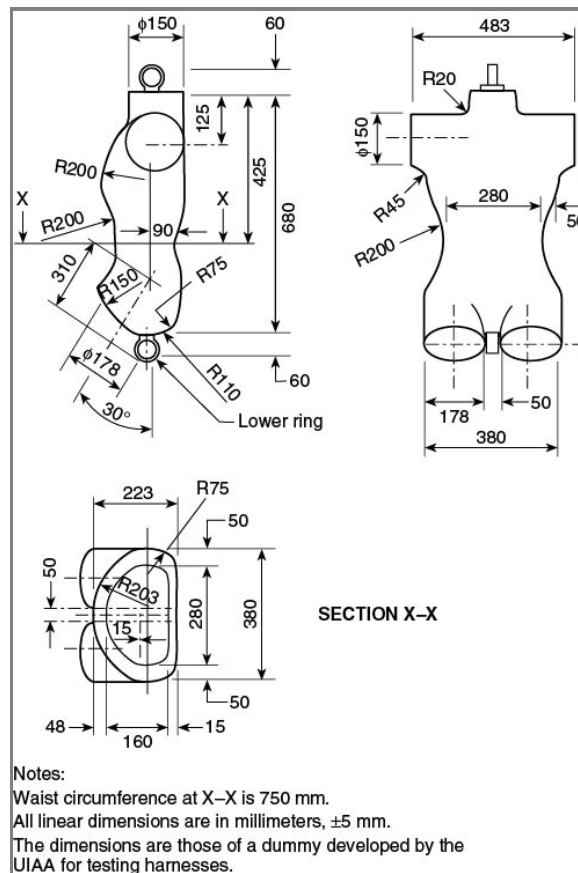
## Public Input No. 217-NFPA 2500-2019 [ Section No. 28.3.4 [Excluding any Sub-Sections]

]

The rigid test torso specified in Figure 1 of ASTM F1772, *Standard Specification for Climbing Harnesses for Rescue and Sport Activities*, shall be used with the following modifications, as shown in Figure 28.3.4:

- (1) The legs shall be  $310 \text{ mm} \pm 30 \text{ mm}$  (12 in.  $\pm$  1 in.) in length.
- (2) The distance between the inner thighs at the crotch shall be  $50 \text{ mm} \pm 5 \text{ mm}$  (2 in.  $\pm$   $\frac{1}{4}$  in.).

**Figure 28.3.4 Outline of the Test Torso.**



### Statement of Problem and Substantiation for Public Input

update to current standard name

### Related Public Inputs for This Document

Related Input	Relationship
<a href="#">Public Input No. 207-NFPA 2500-2019 [Sections 2.2, 2.3]</a>	same standard name update
<a href="#">Public Input No. 218-NFPA 2500-2019 [Section No. 28.4.4.1 [Excluding any Sub-Sections]]</a>	

### Submitter Information Verification

**Submitter Full Name:** Beverly Stutts

<b>Organization:</b>	UL LLC
<b>Street Address:</b>	
<b>City:</b>	
<b>State:</b>	
<b>Zip:</b>	
<b>Submittal Date:</b>	Wed Nov 13 17:31:47 EST 2019
<b>Committee:</b>	FAE-SCE



## Public Input No. 231-NFPA 2500-2019 [ Section No. 28.3.5.7 ]

### 28.3.5.7

The specified load for the type of device being tested shall be reapplied immediately over a period of 2 minutes +15/-0 seconds and held for 5 minutes +15/-0 seconds before release.

### Statement of Problem and Substantiation for Public Input

To clarify the rate or time period for the second loading of device.

### Submitter Information Verification

**Submitter Full Name:** Andrew White

**Organization:** UL LLC

**Street Address:**

**City:**

**State:**

**Zip:**

**Submission Date:** Fri Nov 15 10:49:14 EST 2019

**Committee:** FAE-SCE



## Public Input No. 236-NFPA 2500-2019 [ New Section after 28.3.12.2.1 ]

### 28.3.12.2.2

Where life safety harnesses include side d-rings designated by the manufacturer for use as positioning attachment points only, such side d-rings shall be tested as a pair using an appropriate spreader device.

### Statement of Problem and Substantiation for Public Input

Adding means to test side d-rings that are meant to be tested as positioning attachment points.

### Submitter Information Verification

**Submitter Full Name:** Andrew White

**Organization:** UL LLC

**Street Address:**

**City:**

**State:**

**Zip:**

**Submission Date:** Fri Nov 15 13:47:08 EST 2019

**Committee:** FAE-SCE



## Public Input No. 197-NFPA 2500-2019 [ Section No. 28.4.4.1 [Excluding any Sub-Sections] ]

The rigid test torso specified in Figure 1 of ASTM F1772, *Standard Specification for Climbing Harnesses for Rescue and Sport Activities*, shall be used with the following modifications, as shown in Figure 28.3.4:

- (1) The legs shall be 310 mm  $\pm$  30 mm (12 in.  $\pm$  1 in.) in length.
- (2) The distance between the inner thighs at the crotch shall be 50 mm  $\pm$  5 mm (2 in.  $\pm$  1/4 in.).

### Statement of Problem and Substantiation for Public Input

Update to title of the standard.

### Submitter Information Verification

**Submitter Full Name:** Karen Lehtonen  
**Organization:** LION Group, Inc.  
**Street Address:**  
**City:**  
**State:**  
**Zip:**  
**Submission Date:** Tue Nov 12 10:34:13 EST 2019  
**Committee:** FAE-SCE





## Public Input No. 218-NFPA 2500-2019 [ Section No. 28.4.4.1 [Excluding any Sub-Sections] ]

The rigid test torso specified in Figure 1 of ASTM F1772, *Standard Specification for Climbing Harnesses for Rescue and Sport Activities*, shall be used with the following modifications, as shown in Figure 28.3.4:

- (1) The legs shall be 310 mm ± 30 mm (12 in. ± 1 in.) in length.
- (2) The distance between the inner thighs at the crotch shall be 50 mm ± 5 mm (2 in. ± ¼ in.).

### Statement of Problem and Substantiation for Public Input

update to current standard name

### Related Public Inputs for This Document

Related Input	Relationship
<a href="#">Public Input No. 207-NFPA 2500-2019 [Sections 2.2, 2.3]</a>	same standard name update
<a href="#">Public Input No. 217-NFPA 2500-2019 [Section No. 28.3.4 [Excluding any Sub-Sections]]</a>	same standard name update

### Submitter Information Verification

**Submitter Full Name:** Beverly Stutts  
**Organization:** UL LLC  
**Street Address:**  
**City:**  
**State:**  
**Zip:**  
**Submission Date:** Wed Nov 13 17:35:22 EST 2019  
**Committee:** FAE-SCE



## Public Input No. 4-NFPA 2500-2019 [ Section No. 28.4.4.1 [Excluding any Sub-Sections]

]

The rigid test torso specified in Figure 1

of

of ASTM F1772, - Standard Specification for Climbing Harnesses EN 364, - Personal protective equipment against falls from a height - Test methods, shall be used, with the following modifications, as shown in Figure

28

8.3.4:

(1) The legs shall be

310 mm ± 30 mm (12 in. ± 1 in

310 mm ?} 30 mm (12 in. ?} 1 in .) in length.

(2) The distance between the inner thighs at the crotch shall be

50 mm ± 5 mm (2 in. ± 1/4

50 mm ?} 5 mm (2 in. ?} 1/4 in.);

### Additional Proposed Changes

File Name	Description	Approved
EN_test_torso.jpg	EN 364 test torso	

### Statement of Problem and Substantiation for Public Input

Justification: I recommend a change in the test torso that is used for harness testing in the NFPA 1983 standard. The Torso currently used is a modified (Longer Leg Section) version of the CE/EN test torso used in Europe for sport rock climbing seat harnesses. It was never intended to be used for testing industrial full body harnesses. The waist section is proportionally too small causing the waist portion of full body harnesses to be excessively loaded during testing. The EN test torso shown below is the test torso that 90% of the world uses for industrial full body harness testing. It evenly distributes the load over the harness being tested. The EN torso could be manufactured to meet the 136 kG test weight used by NFPA.

### Submitter Information Verification

**Submitter Full Name:** John Yates  
**Organization:** Yates Gear Inc  
**Affiliation:** ceo  
**Street Address:**  
**City:**  
**State:**  
**Zip:**  
**Submission Date:** Thu Oct 10 16:43:55 EDT 2019  
**Committee:** FAE-SCE



**ANSI/ASSE Z359**  
100 kg



**CSA Z259**  
160 kg



**NFPA 1983**  
136 kg



**EN**  
100 kg



## Public Input No. 241-NFPA 2500-2019 [ Section No. 28.4.4.2 ]

### 28.4.4.2

A drop tower shall be used and shall have an anchorage point that shall not have a deflection greater than 1 mm (0.04 in.) when a force of ~~10- 20~~ kN (2250 ~~lb~~ 4500 ~~lb~~ ) ~~is applied.~~ is applied and shall have a minimum natural frequency of 200 Hz when measured along the vertical axis of the anchorage..

### Statement of Problem and Substantiation for Public Input

Increase deflection requirement to a force above pass/fail thresholds. Incorporate a natural frequency requirement so that the structure does not influence accuracy of force measurement equipment. 20 kN and NF of 200 Hz are the same specifications used in the ANSI Z359 fall protection code (ref: Z359.7).

### Related Public Inputs for This Document

Related Input	Relationship
<a href="#">Public Input No. 243-NFPA 2500-2019 [New Section after 28.4.5.4]</a>	

### Submitter Information Verification

**Submitter Full Name:** Cedric Smith  
**Organization:** CMC Rescue, Inc.  
**Street Address:**  
**City:**  
**State:**  
**Zip:**  
**Submission Date:** Fri Nov 15 16:07:10 EST 2019  
**Committee:** FAE-SCE



## Public Input No. 232-NFPA 2500-2019 [ Section No. 28.4.4.3 [Excluding any Sub-Sections] ]

A test lanyard shall be used to connect the load-bearing attachment point(s) to the test mass and shall be fabricated from Type 302 stainless steel or stainless steel of similar properties , 7 × 19 aircraft cable construction in accordance with MIL-83420M, Military Specification: *General Specification for Flexible Wire Rope for Aircraft Control*.

### Statement of Problem and Substantiation for Public Input

Type 302 stainless steel is becoming increasingly hard to acquire for the construction of test lanyard. Adding this would allow for easier accessible materials with equivalent or very similar mechanical properties (such as Type 304 stainless steel ) to be used for constructing test lanyards. Both Type 302 and 304 have very similar ultimate tensile and yield tensile strengths. The brittleness and elongation are also very similar.

### Submitter Information Verification

**Submitter Full Name:** Andrew White  
**Organization:** UL LLC  
**Street Address:**  
**City:**  
**State:**  
**Zip:**  
**Submittal Date:** Fri Nov 15 11:06:44 EST 2019  
**Committee:** FAE-SCE



## Public Input No. 243-NFPA 2500-2019 [ New Section after 28.4.5.4 ]

### **28.4.5.4.1**

Alternatively, the test mass may be released from a distance required to obtain a peak impact force of 16 kN (3597 lbf).

A28.4.5.4.1 In instances where the specimen is manufactured using materials with low elongation properties, a 1m (39 in.) drop may yield excessively high impact forces. The drop distance may be adjusted as necessary to obtain a peak impact force of 16 kN (3597 lbf).

### **Statement of Problem and Substantiation for Public Input**

In instances where the specimen is manufactured using materials with low elongation properties, a 1m (39 in.) drop may yield excessively high impact forces. The drop distance may be adjusted as necessary to obtain a peak impact force of 16 kN (3597 lbf). These remarks are also proposed as a correlating appendix item.

### **Related Public Inputs for This Document**

<b>Related Input</b>	<b>Relationship</b>
<a href="#">Public Input No. 241-NFPA 2500-2019 [Section No. 28.4.4.2]</a>	test equipment linked with test procedure

### **Submitter Information Verification**

**Submitter Full Name:** Cedric Smith  
**Organization:** CMC Rescue, Inc.  
**Street Address:**  
**City:**  
**State:**  
**Zip:**  
**Submittal Date:** Fri Nov 15 16:14:55 EST 2019  
**Committee:** FAE-SCE



## Public Input No. 3-NFPA 2500-2019 [ Section No. 28.4.5.4 ]

### 28.4.5.4

The attachment point of the sample on the test mass shall be in a position that will allow it to fall freely a distance of 1 m (39 in.) to a free-hanging position without interference or obstruction or striking the floor, ground, or any other object during the test.

I propose a testing change to the NFPA standard would be to mimic the current testing that is used in ANSI/NFPA Z359.11-2014 which requires a drop test that produces a 3,600 lbf peak. load to the test torso and harness. The current NFPA requirements for drop testing is done by dropping a 300 lb torso 1 meter on a steel cable. This procedure has problems when testing fire harnesses constructed from Kevlar for fire retardant because un like nylon harnesses the peak loads seen on them are 2 to 3 times what is seen on nylon harnesses. We see peak loads on nylon harnesses tested to the NFPA 1983 standard in the 3,600-4000 lb ranges. Kevlar harnesses produce peak loads in th 7,000 - 9,000 lbf range.

This is the reason that the ANSI committee for Z359.11-2014 changed the testing criteria to test to a 3,600 lb peak load drop test not a measured distance that the torso and harness are dropped on the cable lanyard.

### Statement of Problem and Substantiation for Public Input

I propose a testing change to the NFPA standard would be to mimic the current testing that is used in ANSI/NFPA Z359.11-2014 which requires a drop test that produces a 3,600 lbf peak. load to the test torso and harness. The current NFPA requirements for drop testing is done by dropping a 300 lb torso 1 meter on a steel cable. This procedure has problems when testing fire harnesses constructed from Kevlar for fire retardant because un like nylon harnesses the peak loads seen on them are 2 to 3 times what is seen on nylon harnesses. We see peak loads on nylon harnesses tested to the NFPA 1983 standard in the 3,600-4000 lb ranges. Kevlar harnesses produce peak loads in th 7,000 - 9,000 lbf range.

This is the reason that the ANSI committee for Z359.11-2014 changed the testing criteria to test to a 3,600 lb peak load drop test not a measured distance that the torso and harness are dropped on the cable lanyard.

### Submitter Information Verification

**Submitter Full Name:** John Yates  
**Organization:** Yates Gear Inc  
**Affiliation:** ceo  
**Street Address:**  
**City:**  
**State:**  
**Zip:**  
**Submission Date:** Wed Oct 09 12:55:50 EDT 2019  
**Committee:** FAE-SCE

**Public Input No. 244-NFPA 2500-2019 [ Section No. 28.4.6 [Excluding any Sub-Sections]**

]

For each sample tested during the drop test series, the result of each drop test shall be individually reported for each ~~anchorage point~~ attachment point .

**Statement of Problem and Substantiation for Public Input**

"attachment point" is correct terminology

**Submitter Information Verification**

**Submitter Full Name:** Cedric Smith

**Organization:** CMC Rescue, Inc.

**Street Address:**

**City:**

**State:**

**Zip:**

**Submittal Date:** Fri Nov 15 16:21:34 EST 2019

**Committee:** FAE-SCE





## Public Input No. 225-NFPA 2500-2019 [ Section No. 28.4.9.2.2 ]

### 28.4.9.2.2

The second drop test shall ~~first~~ be conducted for each load-bearing attachment point with the test mass in a head-down position.

### Statement of Problem and Substantiation for Public Input

Word "first" is not needed here.

### Submitter Information Verification

**Submitter Full Name:** Beverly Stutts

**Organization:** UL LLC

**Street Address:**

**City:**

**State:**

**Zip:**

**Submittal Date:** Thu Nov 14 16:47:07 EST 2019

**Committee:** FAE-SCE



## Public Input No. 20-NFPA 2500-2019 [ Section No. 28.6.3.2 ]

### 28.6.3.2

A total of ~~five~~ three specimens shall be tested.

### Statement of Problem and Substantiation for Public Input

Since none of the products subjected to the Manner of Function Tensile Test require the calculation of the MBS, then the number of samples can be reduced from five to three to be consistent with number of samples required for other products that do not require an MBS calculation.

### Submitter Information Verification

**Submitter Full Name:** Beverly Stutts

**Organization:** UL LLC

**Street Address:**

**City:**

**State:**

**Zip:**

**Submittal Date:** Fri Nov 01 18:16:35 EDT 2019

**Committee:** FAE-SCE



## Public Input No. 17-NFPA 2500-2019 [ Section No. 28.6.3.3 ]

### 28.6.3.3

Each specimen shall be tested to both Procedure A and Procedure B.

### Statement of Problem and Substantiation for Public Input

Procedure B is no longer applicable for any product subjected to Manner of Function Tensile Test and therefore should be removed.

### Related Public Inputs for This Document

Related Input	Relationship
<a href="#">Public Input No. 18-NFPA 2500-2019 [Section No. 28.6.4.4]</a>	
<a href="#">Public Input No. 19-NFPA 2500-2019 [Section No. 28.6.5]</a>	

### Submitter Information Verification

**Submitter Full Name:** Beverly Stutts  
**Organization:** UL LLC  
**Street Address:**  
**City:**  
**State:**  
**Zip:**  
**Submittal Date:** Fri Nov 01 18:01:18 EDT 2019  
**Committee:** FAE-SCE



## Public Input No. 202-NFPA 2500-2019 [ Section No. 28.6.4.2.2 ]

### 28.6.4.2.2

The rope used for testing shall meet the static rope requirements of Cordage Institute Standard CI 1801, *Low Stretch- and / Static Kernmantle Life- Safety Rope.*

### Statement of Problem and Substantiation for Public Input

Revision to title of standard

### Submitter Information Verification

**Submitter Full Name:** Karen Lehtonen

**Organization:** LION Group, Inc.

**Street Address:**

**City:**

**State:**

**Zip:**

**Submittal Date:** Tue Nov 12 10:42:42 EST 2019

**Committee:** FAE-SCE



## Public Input No. 246-NFPA 2500-2019 [ New Section after 28.6.4.3.2 ]

### 28.6.4.3.3

8.6.4.3.3 In the case of items that are designed to slip under high load, the rope shall be knotted or the device otherwise blocked to prevent slippage.

### Statement of Problem and Substantiation for Public Input

This test method should also be allowed for procedure A in instances where items are designed to slip under high load.

### Submitter Information Verification

**Submitter Full Name:** Cedric Smith

**Organization:** CMC Rescue, Inc.

**Street Address:**

**City:**

**State:**

**Zip:**

**Submittal Date:** Fri Nov 15 16:25:56 EST 2019

**Committee:** FAE-SCE



## Public Input No. 18-NFPA 2500-2019 [ Section No. 28.6.4.4 ]

**28.6.4.4** – Procedure B.

**28.6.4.4.1** –

Using the same item and test set up as in Procedure A, the load shall then be re-applied to the device until the breaking point of the device.

**28.6.4.4.2** –

The force shall be applied at a rate of 25 mm/min  $\pm$  5 mm/min (1 in./min  $\pm$   $\frac{1}{4}$  in./min).

**28.6.4.4.3** \* –

In the case of items that are designed to slip under high load, the rope shall be knotted or the device otherwise blocked to prevent slippage.

### Statement of Problem and Substantiation for Public Input

Procedure B no longer requirement for any products subjected to Manner of Function Tensile Test and therefore should be removed.

### Related Public Inputs for This Document

Related Input	Relationship
<a href="#">Public Input No. 17-NFPA 2500-2019 [Section No. 28.6.3.3]</a>	both reference Procedure B
<a href="#">Public Input No. 19-NFPA 2500-2019 [Section No. 28.6.5]</a>	

### Submitter Information Verification

**Submitter Full Name:** Beverly Stutts  
**Organization:** UL LLC  
**Street Address:**  
**City:**  
**State:**  
**Zip:**  
**Submission Date:** Fri Nov 01 18:08:34 EDT 2019  
**Committee:** FAE-SCE



## Public Input No. 16-NFPA 2500-2019 [ Section No. 28.6.4.5.2 ]

### 28.6.4.5.2

A rope that is 300 cm  $\pm$  0.5 cm (118.11 in.  $\pm$  0.2 in.) shall be used between the bowline test-block contact and the most distal point of the gripping portion of the belay assembly.

### Statement of Problem and Substantiation for Public Input

This is a correction of conversion from centimeters to inches.

### Submitter Information Verification

**Submitter Full Name:** Beverly Stutts

**Organization:** UL LLC

**Street Address:**

**City:**

**State:**

**Zip:**

**Submission Date:** Fri Nov 01 17:56:08 EDT 2019

**Committee:** FAE-SCE



## Public Input No. 247-NFPA 2500-2019 [ Section No. 28.6.4.5.4 ]

### 28.6.4.5.4

A drop height of ~~60 cm~~ 100 cm  $\pm 0.5$  cm (~~23 39~~ 39 ~~in~~ in  $\pm 0.2$  in.) shall be used.

### Statement of Problem and Substantiation for Public Input

The origin of this criteria was intended to simulate a worst case scenario with regards to belay device competency: A mishap during an edge transition with minimal rope in the system. The 1 m drop distance on 3 m of rope is also specified in ASTM 2436 and is considered by many as a gold standard. The existing test method is not representative of most edge transitions at which anchors are located at ground level.

### Submitter Information Verification

**Submitter Full Name:** Cedric Smith  
**Organization:** CMC Rescue, Inc.  
**Street Address:**  
**City:**  
**State:**  
**Zip:**  
**Submission Date:** Fri Nov 15 16:30:40 EST 2019  
**Committee:** FAE-SCE





## Public Input No. 248-NFPA 2500-2019 [ Section No. 28.6.4.5.6 ]

### 28.6.4.5.6

The test mass for a general-use belay device shall be 280 kg- 272 kg (617 lb 600 lb ).

### Statement of Problem and Substantiation for Public Input

Changing the test mass to 600 lb will align with the design loads prescribed in chapter 6.

### Submitter Information Verification

**Submitter Full Name:** Cedric Smith

**Organization:** CMC Rescue, Inc.

**Street Address:**

**City:**

**State:**

**Zip:**

**Submittal Date:** Fri Nov 15 16:34:04 EST 2019

**Committee:** FAE-SCE



## Public Input No. 249-NFPA 2500-2019 [ New Section after 28.6.4.5.7.1 ]

### Impact force requirement

Impact force shall be no more than 15 kN (3372 lbf).

### Statement of Problem and Substantiation for Public Input

impact forced prescribed in chapter 7, but not addressed in chapter 8.

### Related Public Inputs for This Document

Related Input	Relationship
<a href="#">Public Input No. 250-NFPA 2500-2019 [New Section after 28.6.5.4.1]</a>	

### Submitter Information Verification

**Submitter Full Name:** Cedric Smith  
**Organization:** CMC Rescue, Inc.  
**Street Address:**  
**City:**  
**State:**  
**Zip:**  
**Submittal Date:** Fri Nov 15 16:37:31 EST 2019  
**Committee:** FAE-SCE



## Public Input No. 19-NFPA 2500-2019 [ Section No. 28.6.5 ]

**28.6.5** Report.

### **28.6.5.1**

The condition of the item and the rope shall be recorded after the deformation load has been applied.

### **28.6.5.2**

The minimum breaking strength shall be determined by subtracting three standard deviations from the mean results of samples from the same production lot and shall be reported to the nearest 1.0 kN (230 lbf). The minimum breaking strength shall be provided on the product label as specified in Section 25.1.

### **28.6.5.3** –

The standard deviation shall be calculated using the formula in 28.2.5.2.

### **28.6.5.3.1** –

Where the minimum breaking strength exceeds 111 kN (25,000 lbf) without failure, the average breaking strength shall be reported as >111 kN (>25,000 lbf). The product label required in 5.6.1.9 shall also indicate the minimum breaking strength as >111 kN (>25,000 lbf).

### **28.6.5.4** –

For Procedure C, the device shall be reported as technical use or general use.

### **28.6.5.4.2.1**

The extension of the belay system shall be recorded.

### **28.6.5.4.2.2**

Any damage to the rope, the belay device, or system components shall be recorded.

## Statement of Problem and Substantiation for Public Input

Procedure B is no longer applicable to any products subjected to the Manner of Function Tensile Test and therefore references to calculating MBS should be removed.

## Related Public Inputs for This Document

Related Input	Relationship
<a href="#">Public Input No. 18-NFPA 2500-2019 [Section No. 28.6.4.4]</a>	both reference Procedure B
<a href="#">Public Input No. 17-NFPA 2500-2019 [Section No. 28.6.3.3]</a>	both reference Procedure B

## Submitter Information Verification

**Submitter Full Name:** Beverly Stutts  
**Organization:** UL LLC  
**Street Address:**  
**City:**  
**State:**  
**Zip:**  
**Submission Date:** Fri Nov 01 18:11:06 EDT 2019  
**Committee:** FAE-SCE



## Public Input No. 250-NFPA 2500-2019 [ New Section after 28.6.5.4.1 ]

### reporting max impact force

Maximum impact force shall be recorded

### Statement of Problem and Substantiation for Public Input

impact forced prescribed in chapter 7, but not addressed in chapter 8.

### Related Public Inputs for This Document

Related Input	Relationship
<u>Public Input No. 249-NFPA 2500-2019 [New Section after 28.6.4.5.7.1]</u>	max impact force test requirement and reporting

### Submitter Information Verification

**Submitter Full Name:** Cedric Smith  
**Organization:** CMC Rescue, Inc.  
**Street Address:**  
**City:**  
**State:**  
**Zip:**  
**Submittal Date:** Fri Nov 15 16:39:22 EST 2019  
**Committee:** FAE-SCE



## Public Input No. 21-NFPA 2500-2019 [ Section No. 28.7.1.1 ]

### 28.7.1.1

This test shall apply to portable anchor devices, escape systems, fire escape systems, manufactured systems, end-to-end straps, multiple-configuration straps, escape anchors, pulleys, and other auxiliary equipment.

### Statement of Problem and Substantiation for Public Input

editorial; inadvertently omitted in 2017 edition.

### Submitter Information Verification

**Submitter Full Name:** Beverly Stutts

**Organization:** UL LLC

**Street Address:**

**City:**

**State:**

**Zip:**

**Submittal Date:** Mon Nov 04 12:59:27 EST 2019

**Committee:** FAE-SCE



## Public Input No. 223-NFPA 2500-2019 [ New Section after 28.7.1.7 ]

**28.7.1.8 Specific requirements for manufactured systems shall be as specified in 28.7.14.**

### Statement of Problem and Substantiation for Public Input

Test method for manufactured systems not clear in current edition. Section needs to be added to clarify requirements of manufactured systems.

### Related Public Inputs for This Document

Related Input	Relationship
<a href="#">Public Input No. 224-NFPA 2500-2019 [New Section after 28.7.13.5]</a>	

### Submitter Information Verification

**Submitter Full Name:** Beverly Stutts  
**Organization:** UL LLC  
**Street Address:**  
**City:**  
**State:**  
**Zip:**  
**Submittal Date:** Thu Nov 14 15:53:41 EST 2019  
**Committee:** FAE-SCE



## Public Input No. 235-NFPA 2500-2019 [ Section No. 28.7.4.4 ]

### 28.7.4.4

The force shall be reapplied immediately and shall be increased to the same maximum force as previously exerted and- at a rate of 25 mm/min  $\pm$  5 mm/min (1 in./min  $\pm$  1/4 in./min) and held for 1 minute +15/-0 seconds before release.

### Statement of Problem and Substantiation for Public Input

To clarify the rate for the second loading of device.

### Submitter Information Verification

**Submitter Full Name:** Andrew White

**Organization:** UL LLC

**Street Address:**

**City:**

**State:**

**Zip:**

**Submittal Date:** Fri Nov 15 12:21:13 EST 2019

**Committee:** FAE-SCE



## Public Input No. 229-NFPA 2500-2019 [ Section No. 28.7.5.3 ]

### **28.7.5.3 –**

~~During testing, where the rope breaks before the device and that breaking strength exceeds the designated use rating required for escape use, technical use, or general use, then pins shall be permitted to be used to determine minimum breaking strength.~~

### **Statement of Problem and Substantiation for Public Input**

This is not applicable for any of products subjected to the Breaking Strength Test. System breaking strength should be measured at break of first component, and use of rope is not applicable for other products subjected to this test.

### **Submitter Information Verification**

**Submitter Full Name:** Beverly Stutts

**Organization:** UL LLC

**Street Address:**

**City:**

**State:**

**Zip:**

**Submittal Date:** Thu Nov 14 18:14:20 EST 2019

**Committee:** FAE-SCE





## Public Input No. 230-NFPA 2500-2019 [ Section No. 28.7.8.7.1 ]

### 28.7.8.7.1

For Procedure B, the force specified in 27.19.3 for technical use and 27.19.4 for general use shall be applied and held for 2 minutes +15/-0 seconds , ~~using the lower of the actual to pass/fail~~ without failure .

### Statement of Problem and Substantiation for Public Input

The sentence in current form does not make sense. The portable anchor should be held at required load for two minutes without failure.

### Submitter Information Verification

**Submitter Full Name:** Beverly Stutts

**Organization:** UL LLC

**Street Address:**

**City:**

**State:**

**Zip:**

**Submittal Date:** Thu Nov 14 18:22:29 EST 2019

**Committee:** FAE-SCE



## Public Input No. 24-NFPA 2500-2019 [ New Section after 28.7.9.1 ]

### 8.7.9.1.1

If pulleys cannot be opened or disassembled, life safety rope with a diameter equal to or less than the maximum size of rope specified for the pulley and of sufficient strength shall be acceptable for testing.

### Statement of Problem and Substantiation for Public Input

On the occasions that a pulley is tested that is not capable of opening or being disassembled, a wire loop is unable to be used for testing. Therefore, a different means of pulling the sample for testing is required.

### Submitter Information Verification

**Submitter Full Name:** Andrew White

**Organization:** UL LLC

**Street Address:**

**City:**

**State:**

**Zip:**

**Submittal Date:** Mon Nov 04 13:33:27 EST 2019

**Committee:** FAE-SCE



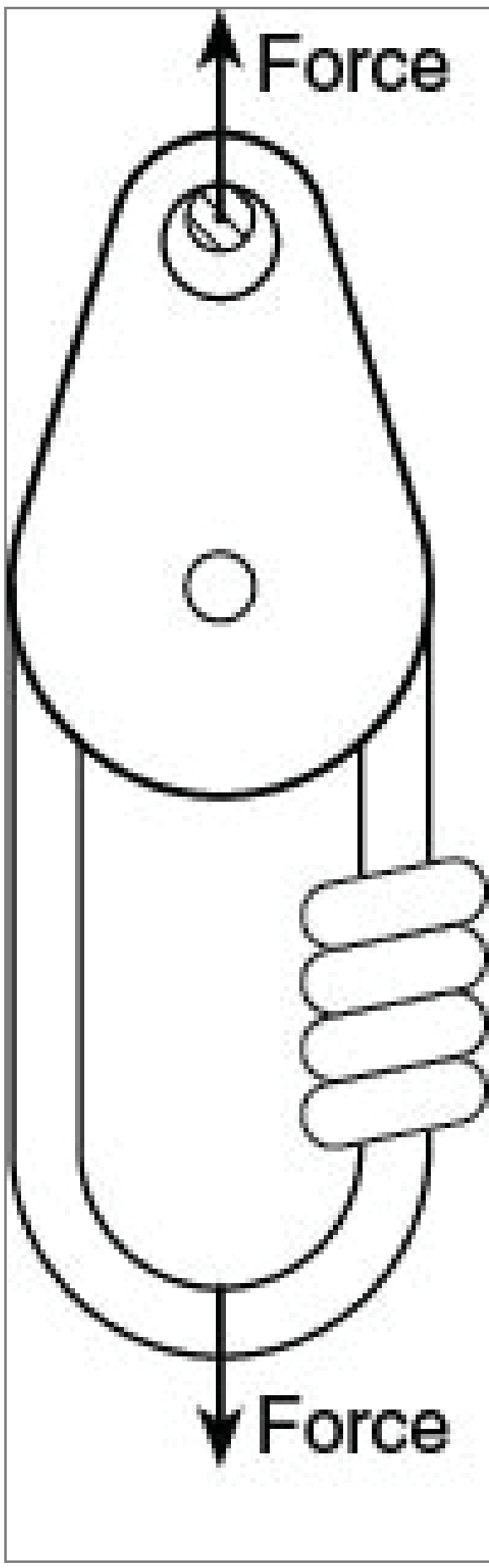
**Public Input No. 25-NFPA 2500-2019 [ Section No. 28.7.9.2 ]**

A large, empty rectangular box with a thin border, intended for public input or comments.

**28.7.9.2**

Tension shall be applied between the wire rope loop and a 12.5 mm  $\pm$  1 mm (½ in.  $\pm$  1/8 in. ) pin through the pulley carabiner hole as specified in Figure 28.7.9.2 until failure.

**Figure 28.7.9.2 Pulley Tensile Test.**



### Statement of Problem and Substantiation for Public Input

Want to add tolerance for pin size because none was given. A tolerance has been included for pin diameters in other sections.

### Submitter Information Verification

**Submitter Full Name:** Andrew White

**Organization:** UL LLC

**Street Address:**

**City:**

**State:**

**Zip:**

**Submittal Date:** Mon Nov 04 13:45:01 EST 2019

**Committee:** FAE-SCE



## Public Input No. 251-NFPA 2500-2019 [ Section No. 28.7.9.6 ]

### 28.7.9.6

The test load used for Procedure A shall be 5 kN 8 kN (1124 lbf 1798 lbf) for technical-use pulleys and 22 kN (4946 lbf) for general-use pulleys.

### Statement of Problem and Substantiation for Public Input

Existing force prescribed for procedure A for technical use is less than half of the required breaking force. Recommend changing the force requirement to 8 kN (1798 lbf) for procedure A for technical use as it will align it with the general use criteria. This is taking into consideration that pulleys are generally subjected to force multiplying configurations in the field.

### Submitter Information Verification

**Submitter Full Name:** Cedric Smith  
**Organization:** CMC Rescue, Inc.  
**Street Address:**  
**City:**  
**State:**  
**Zip:**  
**Submission Date:** Fri Nov 15 16:43:39 EST 2019  
**Committee:** FAE-SCE





## Public Input No. 22-NFPA 2500-2019 [ Section No. 28.7.10 ]

**28.7.10** Specific Requirements for Escape Systems, Fire Escape Systems, ~~System Components,~~ and Manufactured Systems.

**28.7.10.1**

Only Procedure B shall be conducted on fire escape systems, escape systems, and manufactured systems.

**28.7.10.2**

Where there are multiple load-bearing attachment points, Procedure B shall be repeated for each combination of load-bearing attachment points specified in the manufacturer's instructions.

**28.7.10.3**

The device shall be attached to the test machine at the load-bearing connecting point, in accordance with the manufacturer's instructions for use.

**28.7.10.4**

For all tests, the device shall be accompanied by all equipment required for use as described by the manufacturer's instructions for use.

**28.7.10.5**

Only the requirements specified in 28.7.6.1 shall be reported.

### Statement of Problem and Substantiation for Public Input

System Components term left over from previous editions, inadvertently missed during revisions for 2017 Edition.

### Submitter Information Verification

**Submitter Full Name:** Beverly Stutts

**Organization:** UL LLC

**Street Address:**

**City:**

**State:**

**Zip:**

**Submittal Date:** Mon Nov 04 13:08:39 EST 2019

**Committee:** FAE-SCE

**Public Input No. 23-NFPA 2500-2019 [ Section No. 28.7.10.1 ]****28.7.10.1**

Only Procedure B shall be conducted on fire escape systems  ~~, and escape systems, and manufactured systems .~~

**Statement of Problem and Substantiation for Public Input**

This statement is incorrect. Procedure A testing is required for Manufactured Systems.

**Submitter Information Verification**

**Submitter Full Name:** Beverly Stutts

**Organization:** UL LLC

**Street Address:**

**City:**

**State:**

**Zip:**

**Submittal Date:** Mon Nov 04 13:23:12 EST 2019

**Committee:** FAE-SCE



## Public Input No. 253-NFPA 2500-2019 [ New Section after 28.7.13.2 ]

### 8.7.13.2.1

Escape Anchors having the shape of a hook shall be tested for strength by applying the load in a straight line between the hook's point and the connection point unless a weaker configuration is identified in the manufacturer instructions.

A8.7.13.2.1 - Due to the unknown structural substrate that may be encountered when setting the hook, the weakest configuration shall cover the load case where the hook is supported at the tip and the load is applied along a line connecting the tip of the hook with the attachment point of the escape line.

### Statement of Problem and Substantiation for Public Input

Hooks are inherently weaker when loaded from the tip, versus the inside throat area. The intended use may be to load and otherwise fill the inside area of the hook, but field conditions may prevent doing so. Additional substantiation is provided in the proposed appendix item. With no change in the load path, it is important to realize that the MBS could vary greatly depending on how a hook is loaded.

### Submitter Information Verification

**Submitter Full Name:** Cedric Smith  
**Organization:** CMC Rescue, Inc.  
**Street Address:**  
**City:**  
**State:**  
**Zip:**  
**Submittal Date:** Fri Nov 15 16:48:44 EST 2019  
**Committee:** FAE-SCE



## Public Input No. 252-NFPA 2500-2019 [ Section No. 28.7.13.2 ]

### 28.7.13.2

Escape anchor devices with a single point of contact shall ~~be supported to prevent twisting where loaded~~ be loaded in such a way that the load is applied in the weakest configuration where used in accordance with the manufacturer's instructions. The support shall not prevent the device from deforming under load or from releasing from the structure due to deformation or breaking.

### Statement of Problem and Substantiation for Public Input

"supported to prevent twisting" conflicts with the intent of the test method and the follow up sentence which states "the support shall not prevent the device from deforming under load..."

### Submitter Information Verification

**Submitter Full Name:** Cedric Smith  
**Organization:** CMC Rescue, Inc.  
**Street Address:**  
**City:**  
**State:**  
**Zip:**  
**Submittal Date:** Fri Nov 15 16:46:22 EST 2019  
**Committee:** FAE-SCE



## Public Input No. 224-NFPA 2500-2019 [ New Section after 28.7.13.5 ]

### 28.7.14 Specific Requirements for Manufactured Systems

28.7.14.1 Where there are multiple load-bearing attachment points, Procedure B shall be repeated for each combination of load-bearing attachment points specified in the manufacturer's instructions.

28.7.14.2 The device shall be attached to the test machine at the load-bearing connecting point, in accordance with the manufacturer's instructions for use.

28.7.14.3 For all tests, the device shall be accompanied by all equipment required for use as described by the manufacturer's instructions for use.

28.7.14.4 Only the requirements specified in 28.7.6.1 shall be reported.

28.7.14.5 The test load used for Procedure A shall be 5 kN (1124 lbf) for technical-use manufactured systems and 13 kN (2923 lbf) for general-use manufactured systems.

### Statement of Problem and Substantiation for Public Input

Test method for manufactured systems not clear in current edition. Section added to clarify requirements of manufactured systems.

### Related Public Inputs for This Document

Related Input	Relationship
Public Input No. 223-NFPA 2500-2019 [New Section after 28.7.1.7]	both for manufactured systems breaking strength test method

### Submitter Information Verification

**Submitter Full Name:** Beverly Stutts  
**Organization:** UL LLC  
**Street Address:**  
**City:**  
**State:**  
**Zip:**  
**Submittal Date:** Thu Nov 14 15:58:45 EST 2019  
**Committee:** FAE-SCE



## Public Input No. 226-NFPA 2500-2019 [ Section No. 28.9.4.1 ]

### 28.9.4.1

Specimens shall be completely submerged to a minimum depth of 380 mm (15 in.) in a sufficiently sized vessel of fresh water at a temperature of  $21^{\circ}\text{C} \pm 3^{\circ}\text{C}$  ( $70^{\circ}\text{F} \pm 5^{\circ}\text{F}$ ) for a period of 24 hours +1/-0 hour.

### Statement of Problem and Substantiation for Public Input

Editorial revision, word "in" inadvertently omitted in 2017 edition.

### Submitter Information Verification

**Submitter Full Name:** Beverly Stutts

**Organization:** UL LLC

**Street Address:**

**City:**

**State:**

**Zip:**

**Submission Date:** Thu Nov 14 17:05:31 EST 2019

**Committee:** FAE-SCE



## Public Input No. 198-NFPA 2500-2019 [ Section No. 28.10.4.2.1 ]

### 28.10.4.2.1

Specimens shall be subjected to five cycles of laundering using Machine Cycle 1 and Wash Temperature V of AATCC 135, *Dimensional Changes in Automatic of Fabrics after Home Laundering of Woven and Knit Fabrics* .

### Statement of Problem and Substantiation for Public Input

Revision of title of standard.

### Submitter Information Verification

**Submitter Full Name:** Karen Lehtonen

**Organization:** LION Group, Inc.

**Street Address:**

**City:**

**State:**

**Zip:**

**Submittal Date:** Tue Nov 12 10:37:32 EST 2019

**Committee:** FAE-SCE



## Public Input No. 216-NFPA 2500-2019 [ Section No. 28.10.4.2.1 ]

### 28.10.4.2.1

Specimens shall be subjected to five cycles of laundering using Machine Cycle 1 and Wash Temperature V of AATCC 135, *Test Method for Dimensional Changes in Automatic Home Laundering of Woven and Knit Fabrics After Home Laundering* .

### Statement of Problem and Substantiation for Public Input

updating standard name to current name.

### Related Public Inputs for This Document

Related Input	Relationship
<a href="#">Public Input No. 207-NFPA 2500-2019 [Sections 2.2, 2.3]</a>	same standard name update

### Submitter Information Verification

**Submitter Full Name:** Beverly Stutts  
**Organization:** UL LLC  
**Street Address:**  
**City:**  
**State:**  
**Zip:**  
**Submission Date:** Wed Nov 13 17:25:48 EST 2019  
**Committee:** FAE-SCE



**Public Input No. 199-NFPA 2500-2019 [ Section No. 28.11.3.3 ]****28.11.3.3**

The rope used for testing shall meet the static rope requirements of Cordage Institute Standard CI 1801, *Low Stretch- and / Static Kernmantle Life- Safety Rope.*

**Statement of Problem and Substantiation for Public Input**

Revision of title of standard

**Submitter Information Verification**

**Submitter Full Name:** Karen Lehtonen

**Organization:** LION Group, Inc.

**Street Address:**

**City:**

**State:**

**Zip:**

**Submittal Date:** Tue Nov 12 10:38:36 EST 2019

**Committee:** FAE-SCE



## Public Input No. 233-NFPA 2500-2019 [ New Section after 28.12.6.2 ]

### 28.12.6.2.1

Deformation shall not be measured for litters constructed of textile materials.

### Statement of Problem and Substantiation for Public Input

Textile litters are not specifically addressed in regards to test requirements. While they can still be measure for breaking strength, there is no way to measure the deformation of a textile litter.

### Submitter Information Verification

**Submitter Full Name:** Andrew White

**Organization:** UL LLC

**Street Address:**

**City:**

**State:**

**Zip:**

**Submittal Date:** Fri Nov 15 11:30:45 EST 2019

**Committee:** FAE-SCE

**Public Input No. 254-NFPA 2500-2019 [ Section No. 28.12.6.2 ]****28.12.6.2**

~~Deformation-~~ Permanent deformation of the structural element shall be reported to the nearest 0.5 cm (0.2 in.).

**Statement of Problem and Substantiation for Public Input**

ASTM test method has been revised to clarify that it is permanent deformation that is measured.

**Submitter Information Verification**

**Submitter Full Name:** Cedric Smith

**Organization:** CMC Rescue, Inc.

**Street Address:**

**City:**

**State:**

**Zip:**

**Submittal Date:** Fri Nov 15 16:51:00 EST 2019

**Committee:** FAE-SCE



## Public Input No. 255-NFPA 2500-2019 [ Section No. 28.12.7.2 ]

### 28.12.7.2

~~Deformation~~ Permanent deformation of any structural element of more than 5 cm  $\pm$  0.5 cm (2 in.  $\pm$  0.2 in.) during testing shall constitute failure of the litter.

### Statement of Problem and Substantiation for Public Input

ASTM test method has been revised to clarify that it is permanent deformation that is measured.

### Submitter Information Verification

**Submitter Full Name:** Cedric Smith

**Organization:** CMC Rescue, Inc.

**Street Address:**

**City:**

**State:**

**Zip:**

**Submission Date:** Fri Nov 15 16:52:07 EST 2019

**Committee:** FAE-SCE



## Public Input No. 220-NFPA 2500-2019 [ Section No. 28.15.1.1 ]

### 28.15.1.1

This test shall apply to fire escape rope, fire escape webbing, and any lifeline used in a fire escape webbing system . This test shall also apply to manufacturer-supplied eye terminations for fire escape rope, fire escape webbing, and any lifeline used in a fire escape webbing system .

### Statement of Problem and Substantiation for Public Input

For fire escape systems, the standard allows for lifeline that is not necessarily a certified rope or webbing. Therefore, any lifeline and eye with lifeline that is used in a fire escape system should undergo the elevated temperature test.

### Related Public Inputs for This Document

Related Input	Relationship
<u>Public Input No. 219-NFPA 2500-2019 [Section No. 27.24.5]</u>	both dealing with lifeline used in fire escape systems

### Submitter Information Verification

**Submitter Full Name:** Beverly Stutts  
**Organization:** UL LLC  
**Street Address:**  
**City:**  
**State:**  
**Zip:**  
**Submittal Date:** Thu Nov 14 13:56:01 EST 2019  
**Committee:** FAE-SCE



## Public Input No. 228-NFPA 2500-2019 [ Section No. 28.17.1.2 ]

### 28.17.1.2

Modifications to this test method for testing webbing shall be as specified in 28.46 17 .8.

### Statement of Problem and Substantiation for Public Input

Correcting paragraph number reference. 2017 Edition references wrong paragraph.

### Submitter Information Verification

**Submitter Full Name:** Beverly Stutts

**Organization:** UL LLC

**Street Address:**

**City:**

**State:**

**Zip:**

**Submittal Date:** Thu Nov 14 17:56:47 EST 2019

**Committee:** FAE-SCE



## Public Input No. 221-NFPA 2500-2019 [ New Section after 30.16 ]

### TITLE OF NEW CONTENT

30.16.16 The organization shall determine if the system selected shall include certified fire escape rope, certified fire escape webbing, or a non-certified lifeline that met the requirements for the appropriate type system.

### Statement of Problem and Substantiation for Public Input

Standard needs to include information that non-certified rope and non-certified webbing is allowed in escape and fire escape systems as long as the requirements of the system are met. Otherwise, one would assume from this section that only certified rope or webbing can be used in certified system.

### Related Public Inputs for This Document

Related Input	Relationship
<a href="#">Public Input No. 222-NFPA 2500-2019 [New Section after A.30.16.13]</a>	

### Submitter Information Verification

**Submitter Full Name:** Beverly Stutts  
**Organization:** UL LLC  
**Street Address:**  
**City:**  
**State:**  
**Zip:**  
**Submittal Date:** Thu Nov 14 14:55:18 EST 2019  
**Committee:** FAE-SCE



## Public Input No. 203-NFPA 2500-2019 [ Section No. A.28.2.4 ]

### A.28.2.4

NFPA 1983 does not preclude a variety of rope construction as long as the construction types meet the performance requirements of the standard. The title of CI 1801, *Low Stretch- and- / Static Kernmantle Life Safety Rope*, indicates a particular type of rope construction; however, the elongation and breaking strength test methods contained in CI 1801 can be utilized for other types of rope construction.

The reference is not intended to limit the rope construction to the construction type mentioned in the title of CI 1801 or to any other single type of rope construction. The reference is only intended to refer to the testing methods for elongation and breaking strength specified in Sections 8 and 9 of CI 1801 for evaluating any rope construction type for compliance with NFPA 1983.

### Statement of Problem and Substantiation for Public Input

Revision of title of standard.

### Submitter Information Verification

**Submitter Full Name:** Karen Lehtonen  
**Organization:** LION Group, Inc.  
**Street Address:**  
**City:**  
**State:**  
**Zip:**  
**Submittal Date:** Tue Nov 12 11:04:34 EST 2019  
**Committee:** FAE-SCE





## Public Input No. 222-NFPA 2500-2019 [ New Section after A.30.16.13 ]

A.30.16.16 NFPA 1983 allows escape systems and fire escape systems to include rope and webbing that is not certified as long as it meets the performance requirements of the standard for that system. For non-certified lifeline used in a fire escape system, the lifeline and eye with lifeline must undergo the elevated temperature test, in addition to the other required system testing.

### Statement of Problem and Substantiation for Public Input

NFPA 1858 needs to include information that non-certified rope and non-certified webbing is allowed in escape and fire escape systems as long as the requirements of the system are met.

### Related Public Inputs for This Document

Related Input	Relationship
<a href="#">Public Input No. 221-NFPA 2500-2019 [New Section after 30.16]</a>	both regarding use of non-certified lifelines used in escape and fire escape systems

### Submitter Information Verification

**Submitter Full Name:** Beverly Stutts  
**Organization:** UL LLC  
**Street Address:**  
**City:**  
**State:**  
**Zip:**  
**Submittal Date:** Thu Nov 14 15:15:36 EST 2019  
**Committee:** FAE-SCE



## Public Input No. 10-NFPA 2500-2019 [ Section No. K.2 ]

### K.2 Chapter Order After Reorganization.

Table K.2 lists the revised order of the sections in Chapters 5-25 through 7-27 of NFPA 1983.

Table K.2 Chapter Order After Reorganization

Chapter 5 Label- Chapter 25 Label and Information		Chapter 6 Chapter 26 Design and Construction Requirements		Chapter 7 Chapter 27 Performance Requirements	
Section	Title	Section	Title	Section	Title
<b>Rope and Webbing Products</b>					
1	Life Safety Rope	1	Life Safety Rope	1	Life Safety Rope
2	Escape Rope	2	Escape Rope	2	Escape Rope
3	Escape Webbing	3	Escape Webbing	3	Escape Webbing
4	Fire Escape Rope	4	Fire Escape Rope	4	Fire Escape Rope
5	Fire Escape Webbing	5	Fire Escape Webbing	5	Fire Escape Webbing
6	Throwlines	6	Throwlines	6	Throwlines
7	Moderate Elongation Laid Life-Saving Rope	7	Moderate Elongation Laid Life-Saving Rope	7	Moderate Elongation Laid Life-Saving Rope
8	Manufacturer-Supplied Eye Termination	8	Manufacturer-Supplied Eye Termination	8	Manufacturer-Supplied Eye Termination
<b>Soft Goods</b>					
9	Life Safety Harnesses	9	Life Safety Harnesses	9	Life Safety Harnesses
10	Belts	10	Belts	10	Belts
11	Victim Extrication Devices	11	Victim Extrication Devices	11	Victim Extrication Devices
12	End-to-End Straps	12	End-to-End Straps	12	End-to-End Straps
13	Multiple Configuration Straps	13	Multiple Configuration Straps	13	Multiple Configuration Straps
<b>Auxiliary Equipment Hardware and Systems</b>					
14	Belay Devices	14	Belay Devices	14	Belay Devices
15	Carabiners and Snap Links	15	Carabiners and Snap Links	15	Carabiners and Snap Links
16	Descent Control Devices	16	Descent Control Devices	16	Descent Control Devices
17	Escape Anchors	17	Escape Anchors	17	Escape Anchors
18	Litters	18	Litters	18	Litters
19	Portable Anchors	19	Portable Anchors	19	Portable Anchors
20	Pulleys	20	Pulleys	20	Pulleys
21	Rope Grabs and Ascending Devices	21	Rope Grabs and Ascending Devices	21	Rope Grabs and Ascending Devices
22	Other Auxiliary Equipment	22	Other Auxiliary Equipment	22	Other Auxiliary Equipment
23	Escape Systems	23	Escape Systems	23	Escape Systems
24	Fire Escape Systems	24	Fire Escape Systems	24	Fire Escape Systems
25	Manufactured Systems	25	Manufactured Systems	25	Manufactured Systems

Note: Each .X has a .1 for Label Requirements and a .2 for User Information. So, for example, Life Safety Rope will have 5 25 .1.1 for Life Safety Rope Label Requirements and 5 25 .1.2 for Life Safety Rope User Information, and Belay Devices will have 5 25 .14.1 for Belay Devices Label Requirements and 5 25 .14.2 for Belay Devices User Information.

### Statement of Problem and Substantiation for Public Input

Revisions necessary to reflect new chapter numbers in new NFPA 2500 and to correct grammatical error.

### Submitter Information Verification

**Submitter Full Name:** Beverly Stutts

**Organization:** UL LLC

**Street Address:**

**City:**

**State:**

**Zip:**

**Submittal Date:** Fri Nov 01 17:31:31 EDT 2019

**Committee:** FAE-SCE



**Public Input No. 33-NFPA 2500-2019 [ Section No. K.3 ]**

A large, empty rectangular box with a thin border, intended for public input or comments.

**K.3** Table of Products by Test.

Table K.3 lists products by test.

Table K.3 Products by Test

Section	Product Type	Chapter 8 Reference, if Applicable	Test Name	
<b>Rope and Webbing Products</b>				
		-		Diameter
1	Life Safety Rope	§ 28.2	Rope Breaking and Elongation Test	
		§ 28.10	Product Label Durability Test	
		-		Melting and Crystallization Temperatures by Thermal Analysis
		-		Diameter
2	Escape Rope	§ 28.2	Rope Breaking and Elongation Test	
		§ 28.10	Product Label Durability Test	
		-		Melting and Crystallization Temperatures by Thermal Analysis
		-		Perimeter
3	Escape Webbing	§ 28.2	Rope Breaking and Elongation Test	
		§ 28.10	Product Label Durability Test	
		-		Melting and Crystallization Temperatures by Thermal Analysis
		-		Diameter
4	Fire Escape Rope	§ 28.2	Rope Breaking and Elongation Test	
		§ 28.10	Product Label Durability Test	
		-		Melting and Crystallization Temperatures by Thermal Analysis
		§ 28.15	Elevated Temperature Rope Test	
		-		Perimeter
5	Fire Escape Webbing	8.2	Rope Breaking and Elongation Test	
		8.10	Product Label Durability Test	
		-		Melting and Crystallization Temperatures by Thermal Analysis
		8.15	Elevated Temperature Rope Test	
		-		Diameter
6	Throwlines	§ 28.2	Rope Breaking and Elongation Test (breaking only)	
		§ 28.9	Floatability Test	

Section	Product Type	Chapter 8 Reference, if Applicable	Test Name	
		8 28 .10	Product Label Durability Test	
		-		Diameter
		8 28 .2	Rope Breaking and Elongation Test	
7	Moderate Elongation Laid Life-Saving Rope	8 28 .10	Product Label Durability Test	
		-		Melting and Crystallization Temperatures by Thermal Analysis
		8 28 .2	Rope Breaking and Elongation Test (breaking only)	
8	Manufacturer- Supplied Eye Termination	8 28 .8	Corrosion Resistance Test	
		-		Melting and Crystallization Temperatures by Thermal Analysis
<b>Soft Goods</b>				
		8 28 .3	Static Test	
		8 28 .4	Drop Test	
		8 28 .8	Corrosion Resistance Test	
9	Life Safety Harnesses	8 28 .10	Product Label Durability Test	
		-		Melting and Crystallization Temperatures by Thermal Analysis
		8 28 .16	Flame Resistance Test	
		8 28 .17	Heat Resistance Test	
		8 28 .3	Static Test	
		8 28 .4	Drop Test	
		8 28 .8	Corrosion Resistance Test	
10	Belts	8 28 .10	Product Label Durability Test	
		-		Melting and Crystallization Temperatures by Thermal Analysis
		8 28 .16	Flame Resistance Test	
		8 28 .17	Heat Resistance Test	
		8 28 .3	Static Test	
		8 28 .8	Corrosion Resistance Test	
11	Victim Extrication Devices	8 28 .10	Product Label Durability Test	
		-		Melting and Crystallization Temperatures by Thermal Analysis
		8 28 .7	Breaking Strength Test	
12	End-to-End Straps	8 28 .8	Corrosion Resistance Test	

Section	Product Type	Chapter 8 Reference, if Applicable	Test Name
		8 28 .10	Product Label Durability Test
			Melting and Crystallization Temperatures by Thermal Analysis
		8 28 .7	Breaking Strength Test
		8 28 .8	Corrosion Resistance Test
13	Multiple Configuration Straps	8 28 .10	Product Label Durability Test
			Melting and Crystallization Temperatures by Thermal Analysis
<b>Auxiliary Equipment Hardware and Systems</b>			
		8 28 .6	Manner of Function Tensile Test
14	Belay Devices	8 28 .8	Corrosion Resistance Test
		8 28 .10	Product Label Durability Test
		8 28 .5	Carabiner and Snap-Link Tensile Test
15	Carabiners and Snap Links	8 28 .8	Corrosion Resistance Test
		8 28 .10	Product Label Durability Test
		8 28 .6	Manner of Function Tensile Test
		8 28 .8	Corrosion Resistance Test
16	Descent Control Devices	8 28 .10	Product Label Durability Test
		8 28 .11	Holding Test
		8 28 .14	Escape Descent Control Device and Systems Drop Test
		8 28 .7	Breaking Strength Test
		8 28 .8	Corrosion Resistance Test
17	Escape Anchors	8 28 .10	Product Label Durability Test
		8 28 .17	Heat Resistance Test
18	Litters	8 28 .10	Product Label Durability Test
		8 28 .12	Litter Strength Test
		8 28 .7	Breaking Strength Test
19	Portable Anchors	8 28 .8	Corrosion Resistance Test
		8 28 .10	Product Label Durability Test
20	Pulleys	8 28 .7	Breaking Strength Test
		8 28 .8	Corrosion Resistance Test



Section	Product Type	Chapter 8 Reference, if Applicable	Test Name
21	Rope Grabs and Ascending Devices	8 28 .10	Product Label Durability Test
		8 28 .6	Manner of Function Tensile Test
		8 28 .8	Corrosion Resistance Test
		8 28 .10	Product Label Durability Test
		8 28 .7	Breaking Strength Test
22	Other Auxiliary Equipment	8 28 .8	Corrosion Resistance Test
		8 28 .10	Product Label Durability Test
		-	Melting and Crystallization Temperatures by Thermal Analysis
		8 28 .7	Breaking Strength Test
		8 28 .8	Corrosion Resistance Test
23	Escape Systems	8 28 .10	Product Label Durability Test
		-	Melting and Crystallization Temperatures by Thermal Analysis
		8 28 .13	Payout Test
		8 28 .14	Escape Descent Control Device and Systems Drop Test
		8 28 .7	Breaking Strength Test
24	Fire Escape Systems	8 28 .8	Corrosion Resistance Test
		8 28 .10	Product Label Durability Test
		-	Melting and Crystallization Temperatures by Thermal Analysis
		8 28 .13	Payout Test
		8 28 .14	Escape Descent Control Device and Systems Drop Test
25	Manufactured Systems	8 28 .15	Elevated Temperature Rope Test
		8 28 .16	Flame Resistance Test
		8 28 .17	Heat Resistance Test
		8 28 .7	Breaking Strength Test
		8 28 .8	Corrosion Resistance Test
		8 28 .10	Product Label Durability Test
		-	Melting and Crystallization Temperatures by Thermal Analysis

## Statement of Problem and Substantiation for Public Input

Revisions to indicate new chapter number for NFPA 1983 test methods.

## Submitter Information Verification

**Submitter Full Name:** Beverly Stutts

**Organization:** UL LLC

**Street Address:**

**City:**

**State:**

**Zip:**

**Submittal Date:** Thu Nov 07 13:37:14 EST 2019

**Committee:** FAE-SCE



## Public Input No. 209-NFPA 2500-2019 [ Chapter L ]

### Annex L Informational References

#### L.1 Referenced Publications.

The documents or portions thereof listed in this annex are referenced within the informational sections of this standard and are not part of the requirements of this document unless also listed in Chapter 2 for other reasons.

##### L.1.1 NFPA Publications.

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

NFPA 220, *Standard on Types of Building Construction*, -2015- 2018 edition.

NFPA 472, *Standard for Competence of Responders to Hazardous Materials/Weapons of Mass Destruction Incidents*, -2013- 2018 edition.

NFPA 473, *Standard for Competencies for EMS Personnel Responding to Hazardous Materials/Weapons of Mass Destruction Incidents*, 2013- 2018 edition.

NFPA 1006, *Standard for Technical Rescue Personnel Professional Qualifications*, 2017 edition.

NFPA 1407, *Standard for Training Fire Service Rapid Intervention Crews*, 2015 edition.

NFPA 1500, *Standard on Fire Department Occupational Safety, Health, and Health-Wellness Program*, 2013- 2018 edition.

NFPA 1561, *Standard on Emergency Services Incident Management System and Command Safety*, 2014 edition.

NFPA 1581, *Standard on Fire Department Infection Control Program*, 2015 edition.

NFPA 1670, *Standard on Operations and Training for Technical Search and Rescue Incidents*, -2017- 2022 edition.

NFPA 1982, *Standard on Personal Alert Safety Systems (PASS)*, -2013- 2018 edition.

NFPA 1983, *Standard on Life Safety Rope and Equipment for Emergency Services*, -2017- 2022 edition.

##### L.1.2 Other Publications.

###### L.1.2.1 ASSE Publications.

American Society of Safety Engineers, 520 N. Northwest Hwy, Park Ridge IL 60068.

ANSI/ASSE Z359, *Fall Protection Code*, -Version-3.0-, 2012.

###### L.1.2.2 ASTM Publications.

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

ASTM E794, *Standard Test Method for Melting and Crystallization Temperatures by Thermal Analysis*, 2012, reapproved 2018 .

ASTM F1730, *Guide for Throwing a Water Rescue Throwbag*, 1996, reaffirmed 2014.

ASTM F1740, *Guide for Inspection of Nylon, Polyester and/or Nylon/Polyester Blend Kernmantle Rope*, 1996, reaffirmed-2012 reapproved 2018 .

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

###### L.1.2.3 BOCA Publications.

Building Officials and Code Administrators International, 4051 W. Flossmoor Road, Country Club Hills, IL 60478-5795.

*National Building Code*, 1999.

**L.1.2.4** CENELEC Publications.

CENELEC, European Committee for Electrotechnical Standardization, CEN-CENELEC Management Centre, Avenue Marnix 17, 4th floor, B-1050 1000 Brussels.

EN 393 (ISO 12402-5), *Personal flotation devices — Part 5: Buoyancy aids (level 50) — Safety requirements*, 2006.

EN 395 (ISO 12402-4), *Personal flotation devices — Part 4: Lifejackets, performance level 100 — Safety requirements*, 2006.

EN 396 (ISO 12402-3), *Personal flotation devices — Part 3: Lifejackets, performance level 150 — Safety requirements*, 2006.

EN 399 (ISO 12402-2), *Personal flotation devices — Part 2: Lifejackets, performance level 275 — Safety requirements*, 2010 \_ 2006 .

**L.1.2.5** Cordage Institute Publications.

The Cordage Institute, 994 Old Eagle School Road, Suite 1019, Wayne, PA 19087-1866.

CI 1202, *Terminology for Fiber Rope*, 2013.

CI 1800, *Test Methods for Life Safety Rope and Accessory Cords for Life Safety Applications* , 2017.

CI 1801, *Low Stretch/Static Kernmantle Safety Rope*, - 2007 \_ 2017 .

CI 1805, *Standard: 3-Strand Life Safety Rope Moderate Stretch*, 2008 2018 .

**L.1.2.6** ICBO Publications.

International Conference of Building Officials, 5360 S. Workman Mill Road, Whittier, CA 90601-2298.

*Uniform Building Code*, 1997.

**L.1.2.7** 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/IEC 17065, *Conformity assessment — Requirements for bodies certifying products, processes, and services*, 2012.

**L.1.2.8** SBC Publications.

Southern Building Code Congress International, 900 Montclair Road, Birmingham, AL 35213.

*Standard Building Code*, 1999.

### **L.1.2.9** U.S. Government Publications.

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

FAA, *Aeronautical Information Manual*, April 3, 2014.

FEMA Disaster Assistance Policy DAP9523.19, 2007.

*FEMA National Urban Search and Rescue (US&R) Response System*, 2013. Available online at <http://www.fema.gov/urban-search-rescue>.

*DHS/FEMA Disaster Assistance Policy DAP9523.19*, 2007.

*DHS/FEMA National Urban Search and Rescue (US & R) Response System*, 2013. Available online at <http://www.fema.gov/urban-search-rescue>.

FEMA Earthquake Hazards Reduction Series 41, *Rapid Visual Screening of Buildings for Potential Seismic Hazards: A Handbook*, 2002.

FEMA National Response Framework, 2nd edition, May 2013.

H.R. 3858 (109th): Pets Evacuation and Transportation Standards Act of 2006.

National Search and Rescue Committee, *U.S. National Search and Rescue*, Plan, 2007.

National Search and Rescue Committee, *U.S. National Search and Rescue, Supplement to the International Aeronautical and Maritime Search and Rescue Manual*, 2000.

Title 21, Code of Federal Regulations, Part 7, Subpart C, "Recalls (Including Product Corrections) — Guidance on Policy, Procedures, and Industry Responsibilities."

Title 29, Code of Federal Regulations, Part 1910.120, "U.S. Federal OSHA Standard on Hazardous Waste Operations and Emergency Response (HAZWOPER)."

Title 29, Code of Federal Regulations, Part 1910.146, "Permit-Required Confined Spaces."

Title 29, Code of Federal Regulations, Part 1910.1030, "Blood-Borne Pathogens."

Title 29, Code of Federal Regulations, Part 1926, Subpart P, Appendix A, "Soil Classification."

Title 29, Code of Federal Regulations, Part 1926, Subpart P, Appendix B, "Excavations, Sloping and Benching."

Title 29, Code of Federal Regulations, Part 1926, Subpart P, Appendix C, "Timber Shorting for Trenches."

Title 29, Code of Federal Regulations, Part 1926.651, "Specific Excavation Requirements."

Title 29, Code of Federal Regulations, Part 1926.652, Subpart P, "Requirements for Protective Systems."

Title 29, Code of Federal Regulations, Part 1926.800, "Underground Construction."

Title 30, Code of Federal Regulations, Part 49.2, "Availability of Mine Rescue Teams."

Title 42, Code of Federal Regulations, Part 84, Subpart E, "Quality Control."

U.S. Army Corps Engineers, Urban Search and Rescue Program, Field Operations Guide, 6th edition, 2009.

### **L.1.2.10** Other Publications.

IMO/ICAO, *International Aeronautical and Maritime Search and Rescue Manual: Vol. I–III*, International Maritime Organization (IMO) and International Civil Aviation Organization (ICAO), London/Montreal, 2013.

Mountain Rescue Association, *Mountain Rescue Association Policies, POLICY 105 Personnel Guidelines*, 1999.

## **L.2** Informational References.

The following documents or portions thereof are listed here as informational resources only. They are not a part of the requirements of this document.

The following list provides additional sources for information on the operations and training of technical rescue incidents.

**L.2.1** NFPA Publications.

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

NFPA 101<sup>®</sup>, *Life Safety Code*<sup>®</sup>, 2015- 2018 edition.

NFPA 1600<sup>®</sup>, *Standard on Disaster/Emergency Management and Business Continuity/Continuity of Operations Programs*, 2016- *Continuity, Emergency, and Crisis Management*, 2019 edition.

NFPA 1620, *Standard for Pre-Incident Planning*, 2015 edition.

NFPA 1989, *Standard on Breathing Air Quality for Emergency Services Respiratory Protection*, 2013- 2019 edition.

NFPA 5000<sup>®</sup>, *Building Construction and Safety Code*<sup>®</sup>, 2015- 2017 edition.

**L.2.2** ICC Publications.

International Code Council, 500 New Jersey Avenue, NW, 6th Floor, Washington, DC 20001.  
([www.iccsafe.org](http://www.iccsafe.org))

*International Building Code*

*International Existing Building Code*

*International Fire Code*

*International Fuel Gas Code*

*International Mechanical Code*

*International Plumbing Code*

*International Residential Code*

**L.2.3** U.S. Government Publications.

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

Federal Emergency Management Agency, U.S. Fire Administration, *New Techniques in Vehicle Extrication*, FA-152, FEMA USFA, Emmitsburg, MD, September, 1994.

National Search and Rescue Committee, *Catastrophic Incident Search and Rescue Addendum to the National Search and Rescue Supplement to the International Aeronautical and Maritime Search and Rescue Manual*, Version 2.0, 2009.

National Search and Rescue Committee, *Land Search and Rescue Addendum to the National Search and Rescue Supplement to the International Aeronautical and Maritime Search and Rescue Manual*, Version 1.0, 2011.

U.S. Army Corp of Engineers, Urban Search & Rescue Program, *Urban Search & Rescue Shoring Operations Guide*, 3rd Edition, 2012.

U.S. Army Corp of Engineers, Urban Search & Rescue Program, *Structural Specialist Shoring Operations Guide*, 7th Edition, November 2012.

U.S. Department of Commerce, *NOAA Diving Manual*, Fifth Edition, Best Publishing Company, 2013.

U.S. Department of Homeland Security, National Incident Management System, 2008.

U.S. Department of Homeland Security, Science and Technology, *Field Guide for Building Stabilization and Shoring Techniques*, BIPS 08, October 2011.

U.S. Department of Labor, OSHA Technical Manual, available online at [http://www.osha.gov/dts/osta/otm/otm\\_toc.html](http://www.osha.gov/dts/osta/otm/otm_toc.html).

U.S. Department of Labor, OSHA Construction Resource Manual, available online at [http://www.osha.gov/Publications/Const\\_Res\\_Man/index.html](http://www.osha.gov/Publications/Const_Res_Man/index.html).

U.S. Navy, *U.S. Navy Diving Manual*, Commander, Naval Sea Systems Command, Version 6, April, 2008. Available online at [http://www.usu.edu/scuba/navy\\_manual6.pdf](http://www.usu.edu/scuba/navy_manual6.pdf).

**L.2.4** Other Resource Material.

- ADC, *Consensus Standards for Commercial Diving Operations*, 3rd edition, American National Standards Institute, New York, NY, 1991.
- Auerbach, Paul S., Editor, *Wilderness Medicine: Management of Wilderness and Environmental Emergencies*, 7th Edition, Elsevier, Inc., St. Louis, MO, 2015.
- Barsky, Steven M., *Diving in High Risk Environments*, 3rd edition, Dive Rescue International, Inc., Fort Collins, CO, 1999.
- Bechel, Les, and Ray, Slim, *River Rescue*, 2nd edition, Appalachian Mountain Books, Boston, 1989.
- Benkoski, M., Monticino, M., and Weisinger, J., "A Survey of the Search Theory Literature," *Naval Research Logistics*, 1991.
- Brown, G. J., and Crist, G. S. *Confined Space Rescue*. Thomson Delmar Learning, Publishers, Clifton Park, NY, 1999.
- Brown, Michael G., *Engineering Practical Rope Rescue Systems*, Delmar-Thompson Learning Publishers, Clifton Park, NY, 2000.
- CMC Rescue, *Confined Space Entry and Rescue: A Training Manual*, 2nd edition revised, CMC Rescue, Inc., Santa Barbara, CA, 2012.
- CMC Rescue, *Confined Space Entry and Rescue Field Guide*, 2nd Edition, CMC Rescue, Inc., Santa Barbara, CA, 2007.
- CMC Rescue, *CMC Rope Rescue Field Guide*, 4th Edition revised, CMC Rescue, Inc., Santa Barbara, CA, 2013.
- CMC Rescue Application for iPhone and android platforms, CMC Rescue, Inc., Santa Barbara, CA, 2011-2012.
- Cooper, D., Editor, *Fundamentals of Search and Rescue*. NASAR and Jones & Bartlett Publishers, Chantilly, VA, 2005.
- Cooper, D. C., *The application of search theory to land search: The adjustment of probability of area*, private publication, Cuyahoga Falls, OH, 2000.
- Cooper, D. C., and Frost, J. R., *Selected Inland Search Definitions*, published by the author, Cuyahoga Falls, OH, 2000.
- Cooper, D.C., Frost, J.R., and Robe, R.Q., *Compatibility of Land SAR Procedures with Search Theory*. Prepared for U.S. Department of Homeland Security, U.S. Coast Guard Operations, Potomac Management Group, Inc., Washington, D.C., 2003.
- Dive Rescue International, *Dive Rescue Specialist*, 4th Edition, Dive Rescue International, Fort Collins, CO, 2007.
- Dive Rescue International, *Public Safety Diving*, 2nd Edition, Dive Rescue International, Fort Collins, CO, 2011.
- Dive Rescue International, *Med-Dive*, 2nd Edition, Dive Rescue International, Fort Collins, CO, 2011.
- Dive Rescue International, *Ice Rescue*, 3rd Edition, Dive Rescue International, Fort Collins, CO, 2012.
- Dive Rescue International, *Ice Rescue Trainer*, 4th Edition, Dive Rescue International, Fort Collins, CO, 2012.
- Dive Rescue International, *Swift Water Rescue*, 2nd Edition, Dive Rescue International, Fort Collins, CO, 2013.
- Downey, Ray, *The Rescue Company*, Fire Engineering, Saddle Brook, NJ, 1992.
- Dunn, Vincent, *Collapse of Burning Buildings, A Guide to Fireground Safety*, Fire Engineering, New York, 1988.
- Fasulo, David J., *Self Rescue*, Chockstone Press, Evergreen, CO, 1996.
- Field, Ernest, K., Editor, *Mountain Search and Rescue Operations*, Grand Teton Natural History Association, Moose, WY, 1969.
- Frank, J., Editor, *CMC Rope Rescue Manual*, 4th edition revised, CMC Rescue, Inc., Santa Barbara, CA, 2013.
- Frost, J. R., Principles of search theory, part I: detection. *Response*, 17(2), pp. 1–7, 1999a.
- Frost, J. R., Principles of search theory, part II: effort, coverage, and POD. *Response*, 17(2), pp. 8–15, 1999b.
- Frost, J. R., Principles of search theory, part III: probability density distributions. *Response*, 17(3), pp. 1–10,



1999c.

Frost, J. R., Principles of search theory, part IV: optimal effort allocation. *Response*, 17(3), pp. 11–23, 1999d.

Frost, J. R., *What's missing from ground search theory*. Fairfax, VA, Soza and Company, Ltd., 1998.

Gargan, James B., *Trench Rescue*, 2nd edition, Mosby Lifeline, St. Louis, MO, 1996.

International Fire Service Training Association [IFSTA], *Fire Service Search and Rescue*, 7th edition, IFSTA, Fire Protection Publications, Stillwater, OK, 2005.

International Fire Service Training Association [IFSTA], *Principles of Vehicle Extrication*, 3rd edition, IFSTA, Fire Protection Publications, Stillwater, OK, 2010.

Hendricks, Walt "Butch," and Zaferes, Andrea, *Surface Ice Rescue*, Fire Engineering Books & Videos, Tulsa, OK, 1999.

Jackson, F., and Bielmaier, M., *Standard Operating Procedures and Guidelines Manual*, Dive Rescue International, Inc., Fort Collins, CO, 2002.

Jackson, F., Carney, J., and White, L., *Public Safety Diver Survival*, International Association of Dive Rescue Specialists, Fort Collins, CO, 2002.

Koester, R. J., *Lost Person Behavior: A Search and Rescue Guide on Where to Look – for Land, Air and Water*, dbS Productions, Charlottesville, VA, 2008.

Koester, R., Cooper, D., Frost, J., and Robe, Q., *Sweep Width Estimation for Ground Search and Rescue*, Prepared for U.S. Department of Homeland Security, U.S. Coast Guard Operations, Potomac Management Group, Inc., Washington, D.C., 2004.

Koopman, B. O., *Search and Screening: General Principles with Historical Applications*, Pergamon, New York, NY, 1980.

LaValla, P., Stoffel, R., and Jones, A. S. G., *Search Is an Emergency: A Text for Managing Search Operations*, 4th edition Revised, Emergency Response Institute, Olympia, WA, 1996.

Linton, S., Rust, D., and Orusa, S., *Diver Rescue Specialist Training Manual*, Dive Rescue Inc./International, Fort Collins, CO, 2008.

Lipke, R., *Technical Rescue Riggers Guide*, 2nd Edition. Conterra, Inc., Bellingham, WA, 2009.

Long, John, *Climbing Anchors*, Chockstone Press, Evergreen, CO, 1993.

Long, John, and Gaines, Bob, *More Climbing Anchors*, Chockstone Press, Evergreen, CO, 1996.

Lonsdale, Mark V., *SRT Diver*, Valore Books, Los Angeles, CA, 1999.

Maryland Fire and Rescue Institute, *Rescue Technician – Student Manual*, University of Maryland, College Park, MD, 1998.

Mickle, J. L., "The Mechanics of a Trench Cave-In," *Agri-book Magazine/Drainage Contractor*, 1991.

National Association for Search and Rescue. *Managing the Lost Person Incident*, 2nd edition, author, Chantilly, VA, 2007.

National Oceanic and Atmospheric Administration, *NOAA Manual*, 4th edition, U.S. Department of Commerce, Washington, DC, 2001.

Norman, John, *Fire Officer's Handbook of Tactics*, Fire Engineering, Saddle Brook, NJ, 1991.

NYS Office of Fire Prevention & Control, *Confined Space Awareness and Safety* (Lesson Plan and Student Manual), Albany, NY.

NYS Office of Fire Prevention & Control, *Confined Space Rescue* (Lesson Plan and Student Manual), Albany, NY.

O'Connell, J. *Emergency Rescue Shoring Techniques*, Pennwell Publishers, Tulsa, OK, 2005.

O'Connell, J. *Collapse Operations for First Responders*, Pennwell Publishers, Tulsa, OK, 2011.

Ohio Department of Natural Resources, Division of Watercraft, *River Rescue*, Instructional Materials Laboratory, Ohio State University, 1980.

Padgett, Allen, and Smith, Bruce, *On Rope*, 2nd edition, National Speleological Society, Huntsville, AL, 1998.

Parnell, J., Editor, *Manual of U.S. Cave Rescue Techniques*, National Cave Rescue Commission, Huntsville, AL, 2006.

Pendley, T. *Technical Rescue Field Operations*, Fourth Edition. Self Published, Peoria, AZ, 2003.

- Pendley, Tom, *The Essential Technical Rescue Field Operations Guide*, 4th Edition, Desert Rescue Research, Phoenix, AZ, 2011.
- Ray, Slim, *Swiftwater Rescue*, CFS Press, Asheville, NC, 1997.
- Raleigh, D. *Knots & Ropes for Climbers*. Stackpole Books, Mechanicsburg, PA, 1998.
- Rekus, John F., *Complete Confined Spaces Handbook*, Lewis Publishers, Boca Raton, FL, 1994.
- Roco Pocket Guide: Confined Space & Rope Rescue*, Roco Rescue, Inc., Baton Rouge, LA, 2011.
- Roop, M., Wright, R., and Vines, T., *Confined Space and Structural Rope Rescue*, Mosby, St. Louis, MO, 1998.
- Sargent, Chase N., *Confined Space Rescue*, Fire Engineering, Saddle Brook, NJ, 2000.
- Soza and Company, Ltd., and U.S. Coast Guard, *The Theory of Search: a Simplified Explanation*, revised edition, published by the authors, Fairfax, VA, 1998.
- Stanevich, R. L., and Middleton, D. C., "An Exploratory Analysis of Excavation Cave-in Fatalities," *Professional Safety*, 1988.
- Syrotuck, W. G., *Analysis of Lost Person Behavior: An Aid to Search Planning*, Syrotuck, J. A., Editor, Arner Publications, Westmoreland, NY, 1976.
- Taylor, A., and Cooper, D. C., *Fundamentals of Mantracking: The Step-by-Step Method*, 3rd edition, Skyhorse Publishing, 2014.
- Thrun, Robert, *Prusiking*, National Speleological Society, Huntsville, AL, 1973.
- United States Lifesaving Association, *Guidelines for Training & Standards of Aquatic Rescue Response Teams*, Huntington Beach, CA, 1996.
- Veasey, D., McCormick, L., Hilyer, B., Oldfield, K., and Hansen, S., *Confined Space Entry and Emergency Response*, McGraw Hill, Hightstown, NJ, 2002.
- Viking, *Diving in Contaminated Water Database Manual*, Trelleborg-Viking, Trelleborg, Sweden, 2001.
- Vines, T., and Hudson, S., *High Angle Rescue Techniques*, 4th Edition, Elsevier, St. Louis, MO, 2012.
- Worsing, Robert A., Jr., MD, *Basic Rescue and Emergency Care*, American Academy of Orthopaedic Surgeons, Park Ridge, IL, 1990.
- Young, Christopher S., and Wehgring, John, *Urban Search: Managing Missing Persons Searches in the Urban Environment*, dbS Productions, Charlottesville, VA, 2007.

**L.3** References for Extracts in Informational Sections. (Reserved)

## Statement of Problem and Substantiation for Public Input

Updates to standard names and edition years, as applicable.

## Submitter Information Verification

**Submitter Full Name:** Beverly Stutts  
**Organization:** UL LLC  
**Street Address:**  
**City:**  
**State:**  
**Zip:**  
**Submission Date:** Wed Nov 13 14:56:14 EST 2019  
**Committee:** FAE-SCE



## Public Input No. 204-NFPA 2500-2019 [ Section No. L.1.2.2 ]

### L.1.2.2 ASTM Publications.

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

ASTM E794, *Standard Test Method for Melting and Crystallization Temperatures by Thermal Analysis*, 2012\_2018 .

ASTM F1730, *Guide for Throwing a Water Rescue Throwbag*, 1996, reaffirmed 2014.

ASTM F1740, *Guide for Inspection of Nylon, Polyester and/or Nylon/Polyester Blend Kernmantle Rope*, 1996, reaffirmed 2012\_2018 .

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

### Statement of Problem and Substantiation for Public Input

Revision to standard revisions.

### Submitter Information Verification

**Submitter Full Name:** Karen Lehtonen

**Organization:** LION Group, Inc.

**Street Address:**

**City:**

**State:**

**Zip:**

**Submittal Date:** Tue Nov 12 11:08:47 EST 2019

**Committee:** FAE-SCE



## Public Input No. 205-NFPA 2500-2019 [ Section No. L.1.2.5 ]

### L.1.2.5 Cordage Institute Publications.

The Cordage Institute, 994 Old Eagle School Road, Suite 1019, Wayne, PA 19087-1866.

CI 1202, *Terminology for Fiber Rope*, 2013.

CI 1801, *Low Stretch/Static Kernmantle Safety Rope*, -2007 \_ 2018 .

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

### Statement of Problem and Substantiation for Public Input

Revision to edition of standard

### Submitter Information Verification

**Submitter Full Name:** Karen Lehtonen

**Organization:** LION Group, Inc.

**Street Address:**

**City:**

**State:**

**Zip:**

**Submittal Date:** Tue Nov 12 11:11:29 EST 2019

**Committee:** FAE-SCE