

KMIII: PERFORMANCE DATA

KMIII meets or exceeds the requirements of NFPA 2500, Standard for Operations and Training for Technical Search and Rescue Incidents and Life Safety Rope and Equipment for Emergency Services, and/or European Standard Personal Protective Equipment for the Prevention of Falls from Height EN 1891 : 1998 for Low Stretch Kernmantle and for ropes >11mm the American National Standard for Arboricultural Operations-Safety Requirements Ref. ANSI Z 133-2017*.

KMIII Low Stretch Kernmantle Rope							
Product Name	5/16"	3/8"	10mm	10.5mm	7/16"	1/2"	5/8"
NFPA Test Results							
Diameter	9.0mm	9.5mm	10mm	10.5mm	11mm	13mm	14.5mm
Approved Class	Escape Rope	Technical Use	Technical Use	Technical Use	Technical Use	General Use	General Use
Min. Tensile (kN)	22.6	28.0	30.9	32.1	33.3	43.3	56.8
CE Test Results per EN1891							
Average Diameter (mm)	8.8	9.6	10.0	10.7	11.0	12.9	14.8
Sheath Slippage	0.3%	0.0%	0.3%	0.4%	0.3%	0.5%	0.5%
Elongation	3.5%	1.8%	2.0%	2.0%	2.1%	1.8%	1.5%
Sheath % of Mass	47.0%	43.8%	47.5%	48.0%	55.5%	47.4%	47.4%
Core % of Mass	53.0%	56.2%	52.5%	52.0%	45.5%	52.6%	52.6%
Mass/Length (g/m)	58.0	60.0	75.0	86.0	91.0	116.9	149.0
Static Strength w/o termination	>18.0kN Pass	>22kN Pass	>22kN Pass	>22kN Pass	>22kN Pass	>22kN Pass	>22kN Pass
Static Strength w/ termination	=12kN Pass	=15kN Pass	=15kN Pass	=15kN Pass	=15kN Pass	=15kN Pass	=15kN Pass
Approved Type	B	A	A	A	A	A	A
Sheath Material	Polyester						
Core Material	Nylon						
Shrinkage	<5%						

NFPA Test Results per



Test Results per APAVE Certification Test

Notified body for EU type Examination
0082 APAVE Exploitation France 6 Rue du Général Audran, 92412 COURBEVOIE cedex, France

Notified body for production control under module D
0598 SGS FIMKO OY- Takomotie 8- Helsinki - 00380 Finland
0408 TUV Austria Services GmbH, Deutschstrasse 10, A-1230 Vienna

*Use according to ANSI Z133-2017 requires arborist climbing lines (i.e. lines designated to support the climber while aloft in a tree or attached to a crane) to have a minimum diameter of 1/2 inch (12.7mm) with the following exception: In arboricultural operations not subject to regulations that supersede Z133.1, a line of not less than 7/16 inch (11mm) diameter - like the line present in this product - may be used, provided the employer can demonstrate it does not create a safety hazard for the arborist and the arborist has been instructed in its use.

This set of user information explicitly meets life safety rope requirement of NFPA 2500.

KEEP THESE INSTRUCTIONS FOR FUTURE REFERENCE!

Retain them with a permanent rope record! Make a copy and keep it with the rope! The same holds true for the product label!

REFER TO THESE INSTRUCTIONS BEFORE AND AFTER EVERY USE! PLEASE ALSO REFER TO THE USER INSTRUCTIONS ACCORDING TO EUROPEAN STANDARDS (EN), which accompany the rope, for more details. IF YOU DO NOT FOLLOW THESE INSTRUCTIONS AND THE USER INSTRUCTIONS. ACCORDING TO EN, THIS MAY LEAD TO DAMAGE TO PROPERTY AND/OR PERSONS. YOU MAY SUFFER SERIOUS INJURIES OR EVEN DEATH!

Additional information on life safety rope can be found in NFPA 1500, NFPA 1858 and NFPA1983, incorporated in the 2022 edition of NFPA2500. Also ASTM F1740 (Standard Guide for Inspection of Nylon, Polyester, or Nylon/Polyester Blend, or Both Kermantle Rope) can be referenced as well.

USE CRITERIA

The rope must be inspected visually before and after every use to check completeness, usable condition and proper operation. The rope may only be used if all of the following conditions are met.

- The rope must not be visually damaged.
- The rope has not been exposed to heat, direct flame impingement or abrasion.
- The rope has not been subjected to any impact loads. Ropes that have been damaged or affected by a fall must be withdrawn from use immediately!
- The rope has not been exposed to liquids, solids, gases, mists, or vapors of chemicals or any other material that can deteriorate the rope.
- The rope passes inspection by a qualified person following the inspection procedures given below both before and after each use.

Do not use ropes whose previous usage history is unknown to you. If the rope does not meet all of the conditions above or if there is the slightest doubt about the safety or serviceability of the rope, do not use the rope! Remove it from service!

TEUFELBERGER Fiber Rope Corp. recommends KM III be used with NFPA or CE approved hardware and related equipment. The hardware shall be suitable for the diameter of rope being used. If used in a fall arrest system, a full body harness is the only acceptable body holding device. Refer to NFPA 1983 and 1670 for proper anchor securing methods. Any angle in an anchor system will increase the load on anchors and other elements of the system. For safety 90 degrees is the maximum preferred angle, 120 degrees should never be exceeded (unless in a redirect angle).

INSPECTION PROCEDURES

In inspecting the rope before and after every use use your senses: inspect it visually from all sides, make a tactile check, even smell of the rope.

- Feel along a seemingly intact rope (tactile check) in order to detect any hidden core damage that might have been caused by frequent bending or local overloading.
- If there is visible damage to the sheathing, the rope must not be used under any circumstances.
- If the rope shows swellings, discoloring or other unusual changes, we recommend withdrawing the rope.
- Check the rope end sewing for worn or torn sewing thread
- After every use, the equipment should be checked for abrasion and cuts.

If the rope does not pass inspection, remove it from service and destroy it. If there is the slightest doubt, the product must be withdrawn or inspected by an expert.

MAINTENANCE PROCEDURES AND RETIREMENT CRITERIA

In addition, the equipment must be inspected by the manufacturer or an expert complying precisely with these instructions, and replaced if necessary at least every 12 months. Records shall be kept of this inspection. Use the enclosed inspection sheet (which is either a separate sheet or part of the user instructions according to EN standards).

This inspection must comprise:

- Inspection of the general condition: age, completeness, dirt, correct composition.
- Inspection of the labels: Present? Legible? Year of production visible? - You may refer to the copy of the

labels in the permanent rope record.

- Inspection of the individual parts for mechanical damage such as cuts, cracks, notches, abrasion, deformation, ribbing, curling, squashing.
- Inspection of all individual parts for damage caused by heat or chemicals, such as fusion or hardening.
- Inspection of the metal parts for corrosion and deformation.
- Inspection of the completeness of the end connections, seams, knots.

Here, too, if there is the slightest doubt, the product must be withdrawn or inspected by an expert. Only the manufacturer is permitted to carry out repairs.

IMPORTANT INFORMATION REGARDING USE

Protect the rope from abrasion! Do not expose the rope to flame or high temperature!

The rope could melt or burn and fail if exposed to flame or high temperature!

Protect the rope from heat!

ADDITIONAL INFORMATION ON PRODUCT MARKING

In addition to the markings described in the User Instructions according to EN1891 the following information can be found on the product label (outer marking):

USA: Country of manufacturer

Elongation at 1.35 kN (300 lbf)

Elongation at 2.7 kN (600 lbf)

Elongation at 4.4 kN (1000 lbf)

THIS ROPE MEETS OR EXCEEDS THE

LIFE SAFE ROPE REQUIREMENTS

OF NFPA 2500 Standard for

Operations and Training for

Technical Search and Rescue

Incidents and Life Safety Rope

and Equipment for Emergency

Services. CLASS: Varies by

Diameter-See Label for details

MINIMUM BREAKING STRENGTH:

xx kN

DIAMETER: xxx mm

Type of fiber(s): xxx

The escape rope should only be used with a life safety harness or escape belt.

The following information can be found on the marking tape inside the rope (inner marking):

Information according to EN1891 and Information according to NFPA2500 (1983).2022

UL Certified

UND. LAB@Underwriters Laboratories

TEUFELBERGER FIBER ROPE

manufacturer

Year and quarter of manufacture