OVERLOADING

Do not overload rope. Sudden strains or shock loading can cause failure.

Avoid sudden strains or shock loads which can exceed breaking strength. Shock loading can cause failure of a rope normally strong enough to handle the load.

Working loads are not applicable when rope is subject to significant dynamic loading. Whenever a load is picked up, stopped, moved, or swung, there is an increased force due to dynamic loading. The more rapidly or suddenly such actions occur, the greater this increase force will be. In extreme cases, the force put on the rope may be two, three, or even more times the normal load involved.

Examples could be picking up a tow on a slack line or using a rope to stop a falling object. Users should be aware that dynamic effects are greater on a low- elongation rope such as manila than on a high- elongation rope such as nylon, and greater on shorter rope than on a longer one. Excessive dynamic loading of a high-elongation rope is equally dangerous, because of stored energy which will cause the rope to recoil dangerously if it breaks. When a working load has been used to select a rope, the load must be handled slowly and smoothly to minimize dynamic effects and avoid exceeding the provision for them. *If it is suspected that the rope has been shock loaded, then it should be retired.*

CHECKING THE ROPE FOR WEAR

Avoid using a rope that shows signs of aging and wear. If in doubt, destroy the used rope and termination. If there is a question, do the same. It is recommended that the user maintain a log of use for each rope, noting such things as shock loads, weights to which rope was subjected, number of uses, etc. This will help to determine when to retire the rope. The product should be inspected annually by a competent person authorized by the supplier.

Prior to reuse of the rope the following conditions need to be met for continued use: The rope have not been visibly damaged.

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 Ropes that have been damaged or affected by a fall must be withdrawn from use immediately!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!

For your records:

MFG. LOT NUMBER: _____

DATE OF MANUFACTURE: _____

USER NAME: _____

PURCHASE DATE: _____

DATE OF FIRST USE: _____

COMMENTS: _____

REMOVING ROPE FROM COILS AND REELS

Remove rope properly from coils or reels to prevent kinking.

If the rope is in a coil, then it should always be uncoiled from the inside as directed by the manufacturer.

If on a reel, then the rope should be removed by pulling it off the top while the reel is free to rotate. This can be accomplished by passing a pipe through the center of the reel and jacking both ends up in a horizontal position until the reel is free from the surface. To proceed in any other manner may cause kinks or hockels (strand distortion). If rope is cut to shorter lengths, then all markings must be repeated as on the original rope.

HANDLING ROPE

Never stand in line with rope under tension. If a rope or attachment fails, it can recoil with sufficient force to cause physical injury. Synthetic rope has higher recoil/snapback tendencies than natural fiber rope.

Reverse rope ends regularly, particularly when used in tackle. This permits even wearing and assures a longer useful life. When using tackle or slings, apply a steady even pull to get full strength from the rope.

The following is a sample log. A log such as this should be kept with this product and maintained by the user. In the log note the inspection of the Life Safety Ropes for worn or broken thread in the sewn termination as well as the rope's condition.

Purchase Date				Date of Manufacture		
User Name				Lot / Serial No.		
Equipment Description				Length		
Date	Type of Use	Condition	Inspection Date	Service Date	Service / Inspected By	Comments

Teufelberger

Together in Motion

Rescue Ropes

TEUFELBERGER Fiber Rope Corp.
848 Airport Road, Fall River, MA 02720
Tel - 800.333.6679

Life Safety Rope, Escape Rope, Fire Escape Rope, Throwline, and Moderate Elongation Laid Life Safety Rope hereafter is referred to, as a group, as **Rescue Ropes**.

Rescue Ropes meets or exceeds the life safety 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

Rescue Ropes are intended for use in rescue operation from above a victim or for rappelling. **Teufelberger Fiber Rope recommends Rescue Ropes used as Escape Ropes or Fire Escape Ropes used only with NFPA or CE approved Life Safety Harness or Escape Belt.** Should the risk of free fall arise, a dynamic rope is recommended for use; refer to EN892 for requirements. While using Rescue Ropes, anchoring points should always be above the user. Misuse of this product or use in conjunction with incorrect hardware and rappelling devices may cause serious injury or jeopardize the safety of the rescue operation. **Teufelberger Fiber Rope recommends Rescue Ropes be used with NFPA or CE approved hardware and related equipment, and the hardware shall be suitable for the diameter of rope being used.** Rescue Ropes should only be used by qualified personnel in life safety, rescue, and rappelling. Rescue Ropes should be inspected after and prior to each use. Refer to the user instructions before and after each use. Records must be kept that detail each use and the results of the inspections. It is recommended that the rope be used by the same person that maintains the history of that rope. Prior to any rescue operation, careful planning and situation analysis should take place to ensure safety.

TERMINATING

Systems using static kernmantle rope should incorporate reliable anchoring systems. Slack rope between the user and the anchoring point should be avoided due to the potential of injury.

The rope has not been exposed to heat, direct flame impingement, or abrasion.

The rope has not been exposed to liquids, solids, gases, mists, or vapors of any chemical or other material that can deteriorate the termination and rope.

The rope has not been subjected to any impact load.

The rope pass an inspection by a qualified person following the manufacturer's inspection procedure both before and after each use.

It is not possible to pre-determine an expected lifespan for a kernmantle rope. Accurate record keeping, with a careful inspection program, are the best methods for determining when to remove a rope from service.

No type of visual inspection can be guaranteed to determine accurately and precisely actual residual strength. When the fibers show wear in any given area, the rope should be downgraded or replaced.

Check the rope regularly for frayed strands and broken yarns. A pulled strand can snag on foreign objects during a rope operation. Check your rope carefully after each use for cuts, chaffing, hard spots, or any deterioration.

Both outer and inner rope fibers contribute to the strength of the rope. When either is worn, the rope is weakened. A heavily-used rope will often become compacted or hard which indicates reduced strength. The rope should be discarded if this condition exists.

ABRASION

Avoid all abrasive conditions.

Rope will be severely damaged if subjected to rough surfaces or sharp edges. Chocks, bits, winches, drums, and other surfaces must be kept in good condition and free of burrs and rust. Pulleys must be free to rotate and should be of proper size to avoid excessive wear. Restraining clamps and similar devices will damage and weaken the rope and should be used with extreme caution. Do not drag rope over rough ground. Dirt and grit picked up by the rope will work into the strands, cutting the inner fibers.

CHEMICALS

Avoid chemical exposure.

Rope is subject to damage by chemicals. Consult the manufacturer for specific chemical exposure, such as solvents, acids, and alkalis. Consult the manufacturer for recommendations when a rope will be used where chemical exposure (either fumes or actual contact) can occur.

STORAGE, CARE AND TRANSPORT OF ROPE

Rope should be stored clean, dry, out of direct sunlight, and away from extreme heat.

It is generally recommended that ropes be stored and transported in a rope bag designated for that use.

Cordage should be kept in a cool, dry, and well-ventilated area. It should be kept off the floor, on racks to provide ventilation underneath. Never store on a concrete or dirt floor, and under no circumstances should cordage and acid or alkalis be kept in the same area.

Do not store rope in direct sunlight. Synthetic rope (particularly polypropylene and polyethylene) may be severely weakened by prolonged exposure to ultraviolet (UV) rays. UV degradation is indicated by discoloration and the presence of broken filaments on the surface of the rope. Rope should be cleaned, to remove dirt or abrasive particles, in a mild detergent and cold water. Air dry out of direct sunlight. Washing can remove any coatings that may have been added to enhance the performance of the product.

HEAT

Avoid overheating.

Heat can seriously affect the strength of rope. When using rope where temperatures exceed 140° F (or if it is too hot to hold). Consult the manufacturer for recommendations as to the size and type of rope for the proposed continuous heat exposure conditions.

Additionally, do not expose the Rescue Ropes to high temperatures/heat and/or a flame, because if exposed it can melt and/or burn the rope causing a failure or significant reduction in strength.

Friction from slippage causes localized overheating which can melt or fuse synthetic fibers or burn natural fibers, resulting in severe loss of tensile strength. If rope has been stored at elevated temperatures over a long period of time it can fail under loads below its rated breaking strength. If the user has any doubts concerning the strength of a rope, then the rope should be retired.

Retain the product label(s) and user instructions after being removed from the rope, and create copies of both the label(s) and user instructions to maintain with the rope.

Retain copies of the product label(s) and instructions for use with the rope and Rescue Ropes. The copies must say "MEETS THE RESCUE ROPES(or Type of Rope) OF NFPA 2500, Standard for Operations and Training for Technical Search and Rescue Incidents and Life Safety Rope and Equipment for Emergency Services."

TEUFELBERGER Fiber Rope Corp. recommends Rescue Ropes and Ropes used with NFPA or CE approved hardware and related equipment, and the hardware shall be suitable for the diameter of rope used.

CAUTION: ***Heat can seriously affect the strength of synthetic ropes. The temperature at which 50% strength loss can occur in new and unused ropes is 350° F.***

WARNING

All synthetic rope under load will recoil if a fitting such as a chain, hook, cleat, bolt, pin, or ball-hitch and so forth should fail.

The snapback action can propel the fitting and the rope causing serious injury to persons or property anywhere in the vicinity. This danger can exist from failure of the fitting within the rope's safe working load. Check all fittings, bolts, shackles, connectors, pins, mountings, splices, and so forth before using.

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

Additional information on life safety rope and Rescue Ropes can be found in the NFPA 1500, NFPA 1858 and NFPA 1983, incorporated in the 2022 edition of NFPA 2500. Also ASTM F 1740 (*Standard Guide for Inspection of Nylon, Polyester, or Nylon/Polyester Blend, or Both Kernmantle Rope)* can be referenced as well.

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