

## **Sterling Rope Co. Static Rope Care, Use, and Retirement Guidelines.**

### **Important Information About Your Ropes--Please Read**

This product has been manufactured specifically for rescue and/or work at height applications. These activities carry inherent risk. Therefore, only properly trained and experienced rope technicians should use this product. This rope is designed to be part of safety systems to aid in supporting personnel, fall restraint, or back up/belay systems. It is critical that you seek professional instruction on the proper use and handling of this product and all other equipment in any system employed.

The manufacturer and reseller of this rope are not liable in the case of misuse, improper application and/or handling of these products. The responsibility and risk in these cases lies with the user. The term static rope is a generic description. Static ropes do actually have some elongation. The Cordage Institute designates a "static rope" as having less than 6% elongation at 10% of minimum break strength (MBS) and a "low stretch rope" at between 6-10% elongation at 10% MBS. Some applications require a very low level of elongation to provide the most efficient system. Our HTP Static™ is designed for applications where a very low level of elongation is desired, while the low stretch nylon SuperStatic™ is more suitable for circumstances that could demand impact absorption.

**Use Guidelines:** Sterling Life Safety Rope Products are intended to be used as a link in a life safety chain. Depending upon rope type and size, this rope may be used for: Rescue, work positioning, fall arrest, belay systems, hauling systems, ascending, rappelling, emergency escape, interior search, or water/ice rescue throwlines and tag lines. Ropes that are certified to NFPA will have specific labeling for their designated rope classification. These classifications are: Escape, Light Use, General Use, and Throwline. These ropes are not designed for lead climbing; therefore care must be taken to avoid slack between the anchor and the load. A Sterling dynamic rope should be used if there is potential for generating high impact forces.

### **Caring For Your Ropes:**

**Inspection:** Product must be checked carefully, visually and by hand, prior to every use for signs of damage. During use, it is important to also check condition of all gear that will be employed into the safety system. A rope journal is recommended to log date, duration and type of use. If you have any questions about the safety of your rope, retire it. (See "Replacement")

**Uncoiling:** Uncoil your rope onto a tarp or clean surface. To properly uncoil your rope, hold the rope with one arm through the hank. Unflake three to four wraps from one side. Switch the rope to the other arm, unflake three to four wraps from the other side. Repeat. For uncoiling the rope from a spool, remove the rope from end to end allowing the spool to rotate freely; do not uncoil over the top of the flange, as this will introduce kinks into the rope.

**Replacement Criteria:** Ropes may be subject to irreparable damage during the first use. The rope must be retired immediately if any of the following are evident: excessive fraying, softness or stiffness; exposed cores; damage due to glazing or hard spots; or any lack of uniformity in diameter, color, texture. Retire the rope if it has been subjected to a shock load, excessive loading, if it has come in contact with any type of harmful chemicals, or extreme heat. When applicable; see the NFPA user information for suggested retirement criteria from NFPA. Fire Rescue ropes such as RIT™ Lines, search lines, and escape ropes are exposed to unknown levels of heat and fumes from burning debris. These ropes are your lifeline and should have a stringent level of retirement criteria. These ropes should be retired if they are exposed to excessive heat or are exposed to moderate heat levels on a consistent basis. Significant strength loss can occur at temperatures lower than the fiber melting points: 350F for nylon and polyester and 500F for aramid fibers.

**Service Life:** The working life of your rope depends upon the frequency and type of use. These are approximate timelines for average and proper use of rope products.

Extensive and/or weekly use: 3 to 6 months

Occasional Use: 1-2 Years

Seldom Use: 2-5 years

**Shelf Life:** The shelf life of any Sterling Rope Life Safety Rope or Cord Product in unused condition, stored properly in an environment not exposed to sunlight or hazardous materials will be a maximum of 10 years, with a maximum use life of 5 years. Actual working life of a rope should not exceed 5 years, if used, stored and cared for properly. The combined storage and usage lifetime must never exceed 10 years. If there is any question regarding the use, history, condition or integrity of your rope, retire it. Contact a Sterling Rope Representative with any questions or visit our website at [www.sterlingrope.com](http://www.sterlingrope.com)

**Effects of Chemicals:** Avoid contact with harsh chemicals; especially acids when using nylon products and alkalis when using polyester products. Damage by chemicals can be invisible to the eye. If you suspect contact with any harmful chemical, retire the rope.

**Sharp Edges:** The rope must be protected against sharp edges or anything that may cut the rope, internally or externally.

**System components:** All products used in conjunction with the rope in a fall arrest or rescue system must be compatible with the type of rope, its diameter and should comply with the respective standards for its use. All System Components must also be checked according to the manufacturers recommendations with each use and be free of damage, excessive wear or burrs.

You must understand safe working loads and the factors affecting system safety. The safe working load is the maximum load a rope is designed to sustain during normal use.

Sterling lists the safe working load of the ropes based on a 10:1 component safety factor. System Safety Factor must be used when the rope is in use as knots & bends will weaken the rope and other equipment may affect the breaking strength of the rope. The system safety factor should take into account all components of the system.

**Wet Ropes:** Wet or frozen ropes will be seriously weakened and may exhibit higher elongation characteristics. It is best not to use a wet rope. If a rope becomes wet, hang to dry away from direct sunlight.

**Storage and Transporting:** Store your ropes in a dry, dark and cool place. Transport in a rope bag or backpack. Protect from direct sunlight, chemicals, heat, and mechanical damage.

**Cleaning:** Wash in warm to hot water with a mild soap (such as Sterling's Wicked Good Rope Wash), rinse thoroughly and hang to dry in shade. Do not put in a dryer.

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