



Life Safety Rope

Manufacturer's Instruction

CoastLine
CORDAGE GROUP

Warnings

- You could be killed or seriously injured if you do not read and understand this booklet before using the product.
- Specialized training and knowledge are required to use this product.
- You must thoroughly read, understand, and refer to all manufacturers instructions before and after each use of this product.
- Before using these ropes, the user is responsible for determining whether these life saving ropes are suitable for the intended use and their compatibility with all the hardware in use for the situation.
- Use and inspection of this product should only be carried out per the CoastLine Cordage Group Ltd instructions. Inspections should only be conducted by an individual deemed by the employer to be competent for all tasks required. Please note, that inspections should be conducted by qualified person before and after each use
- Do not make any alternations to the product in any shape or form. If any alterations are to be found on any of CoastLine Cordage Group Ltd products, this will immediately void the warranty. The exception in this circumstance would be cutting rope length from spools and or adding the identification and labeling information.
- CoastLine Cordage Group Ltd are not responsible or liable in any way for damages of any nature, injury or death resulting from direct or indirect incidents related to the use of its products.
- Please do contact CoastLine Cordage Group Ltd at 902-835-2253 for us to answer any additional questions regarding safety information and the use of this product.



Caution

About Your Personal Safety

- Your personal safety is essential for the intended use of this rope. You are responsible for your safety. CoastLine Cordage Group Ltd strives to build the most reliable, safest cordage products. With this said, it is entirely up to the user to be responsible for the use of this rope, safely!
- The individual decisions influence your personal safety you make. Please take the time to read and understand these instructions. Talk with your team members about the potential risks of not using this rope appropriately. Seek training you need for your application. The working at heights environment is a potentially dangerous one. We hope you take it as seriously as CoastLine Cordage Group Ltd does.
- Obtaining proper training, well-maintained equipment with a very high personal commitment to safety will dramatically reduce the risks and danger working at heights. Please do not be complacent. Inspect and record your rope and all relevant working at heights products. Your family, your teammates, and you will all appreciate your following this guide.
- Activities involving the use of life safety rope are inherently dangerous. Such activities include but are not limited to; ascending and descending fixed lines, hauling, positioning, and belaying.
- Individually you are responsible for your actions and decisions. If you do not accept this responsibility or in any way feel your judgment may be impaired, DO NOT use this rope. Do not use this product if the product is re-sold outside the original country of destination; the reseller shall provide instructions for use, maintenance, inspection, and repair in the native language in the Country in which the product is intended to be used.
- If your rope becomes wet, either from being in use or when cleaning, it shall be allowed to dry naturally and please keep away from any source of direct heat. This includes direct flame impingement or abrasion.
- Be aware of any dangers that may arise from the use of combinations of items of multiple pieces of equipment in which the safe function of any one item is affected by or interferes with the safe capacity of another.
- The user should be aware of any medical conditions that could directly affect the safety of the user in routine and emergency use.
- Connections should be used within the stated limitations and compatibility of the surrounding components.
- This rope may be directly tied to an anchorage of adequate width and edges that will not damage the rope or clipped directly to connectors.
- When used as a vertical lifeline, not more than one personal fall arres be attached at any given time .

Labelling

CoastLine Cordage Group Ltd is an ISO:9001-2015 certified company. Our Quality Assurance Policy meets all the requirements of ISO:9001-2015, NFPA 19 83-2017 and the PPE directive.

Ropes that are cut from a spool for re-distribution should be retrofitted with distinct external product markings as deemed necessary by the end user. This user should check for legibility of product marking.

CoastLine Cordage Group Ltd have place internal marketing tapes inside the core of the rope during manufacturing. These tapes identified CoastLine Cordage Group Ltd, Made in Canada, quarter (NFPA ropes only) and year of manufacture and limited standards information.

Rope Classifications

Ropes are classified according to the various standards to which they conform.

Cordage Institute 1801

Low Stretch - Ropes with 6-10% elongation at 10%

Static - Ropes with less than 6% elongation at 10% of Minimum Breaking Strength.

NFPA 1983-2017 - Please note that escape ropes are not considered life safety per NFPA's definition, but may, in fact, be used in life safety escape systems and as such are subject to all the conditions and criteria outlined in these instructions.

Escape - Single purpose, emergency self-escape (self-rescue) rope; not classified as a life safety rope. Escape ropes must be used only with a life safety harness or escape belt.

Fire Escape Rope - A single purpose emergency self-rescue rope used to escape an immediate hazardous environment involving fire or fire products; not classified as a life safety rope.

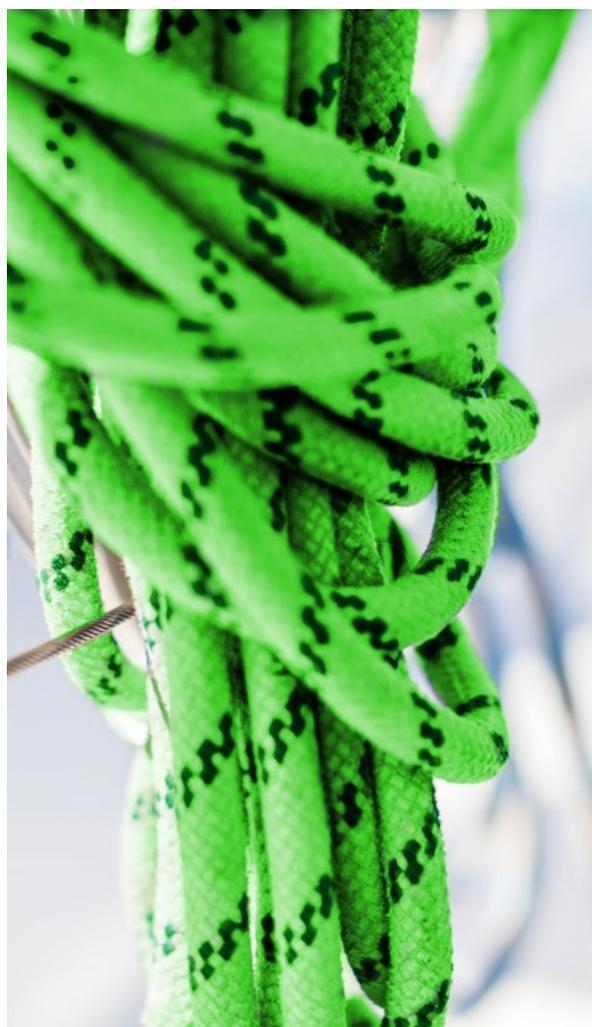
Escape Ropes must be used only with a life safety harness or escape belt.

Technical Use - Equipment product or manufactured systems designed for technical use loads, and escape based on design loads that are calculated and understood.

General Use - Equipment items or manufactured systems designed for general use loads, technical use loads, and escape based on design loads that are calculated and understood.

Use, Care, and Maintenance

Thank you for purchasing your new CoastLine Cordage Group Ltd rope. In using this rope, you assume the responsibility to learn and understand its capabilities and limitations before entering it into service and use it correctly and wisely. The following information is designed to support your efforts toward this goal. Please make sure you pay attention.



About Your Rope

This rope is a Life Safety Rope. Your life, your workmates may depend on it, time after time. CoastLine goes to great lengths to make the best rope in the world, maintain a high-quality assurance standard, and provide you with the maximum amount of information possible. The rest is up to you. Your safety is your responsibility. Please take it seriously. We at CoastLine do. Please arrive home safely.

CoastLine kernmantle static and low stretch ropes are designed and manufactured based on Cordage Institute Life Safety Rope standards. Static ropes will provide more stability and less elongation in ascending, raising, and lowering situations while low stretch ropes are more forgiving and offer lower peak forces during dynamic loading.

CoastLine Life Safety Ropes feature a braided sheath over a continuous core. All products of CoastLine are finely balanced to prevent spin under load and to provide consistent strength and elongation performance. The braided sheath offers protection to the inner load-bearing core from dirt and more importantly abrasion.

Please note that escape ropes are not considered life-safety per NFPA's definitions, but may be used in life safety escape systems and as such are subject to all of the conditions and criteria outlined in this instruction.

As a general guide, smaller diameter ropes are best used for rigging, personal escape, handlines and safety lines while larger diameters (10-12.5mm) have been developed for higher load applications that occur in professional work and rescue. The most substantial diameters, such as 16mm, offer the maximum strength and grip available.

Static and low stretch ropes are NOT dynamic ropes and should not be used in severe dynamic load situations without additional provision for force absorption. Doing so could cause serious injury to personnel and equipment. Ropes intended to be used as dynamic ropes should comply with Dynamic Rope standards such as UIAA 101, IRATA, SPRA.



Nylon Core Ropes

CoastLine Bulwark Safety X is a sturdy rope with minimal elongation that features a polyester sheath. This is a tough wearing static rope that stays round under use, offering a smooth, controlled rappel and minimal stretch or bounce while ascending. The nylon core results in superior breaking strength.

Perform a visual and tactile inspection on your rope to verify it is in a serviceable condition before and after each use. See "Inspecting Your Rope" Form. Ensure that everyone using the rope has the proper training and knowledge to do so and fully understands its performance capabilities and limitations as they relate to your application. Some sheath slippage may occur depending on the ropes construction and the devices being used with it.

CoastLine ropes may be terminated using accepted life safety knots such as the figure 8, bowline and alpine butterfly. Users must be trained and proficient in the use of knots to use them safely. Keep in mind when calculating and using system safety factors that knots reduce the strength of the rope to a degree around 25-20% dependent on the knot being utilized.

Protect your rope from anything that might damage it, such as abrasion, heat, and chemicals. A metal roller, a cloth pad, or other items should be placed between the rope and any sharp edges. Avoid contact between moving textiles (rope or webbing) and stationary textiles.

Friction between textiles can quickly melt through the fixed part. Do not expose rope to flame or high temperature, or direct flame impingement. Carry rope where it will be protected as the rope could melt or burn and fail if exposed to flame or high temperatures.

Be aware of hazards which may affect the performance of your rope such as extreme temperature, trailing or looping of lifeline over sharp edges, chemical reagents, electrical conductivity, cutting, abrasion, climactic exposure and pendulum falls. Pay attention to liquids, solids, gases, mists, or vapors of any chemical or other material that can deteriorate this rope.

The diameter of the rope you have selected will affect not only the minimum breaking strength, but also abrasion resistance, handling characteristics, weight per meter, and what auxiliary equipment you may be able to use. Be sure that any equipment you intend to use with this rope is in fact compatible.

Equipment designed for larger diameters may not grip or provide adequate friction; equipment designed for smaller diameters may jam or render the overall system unusable.

A wide variety of accessories may be safely used with these ropes. DO NOT USE any accessory with these ropes if you are not confident that it will be safe. Users should first seek out equipment that is tested and labeled to appropriate criteria including NFPA, CE, UIAA etc.

Proper training and practice using the items on the rope in a safe environment is necessary.

Always work with an appropriate safety factor. Keep in mind that the load ratio for individual pieces of equipment is different than a system safety factor. Applying a 600 load on a 9,000-capacity rope may be translated to represent at 15:1 component load ratio, but when the rope is rigged into a system with knots, bends and other equipment the system safety factor should be re-evaluated, taking into consideration the weakest point in the system. A system safety factor will generally be lower than load ratios of specific equipment within the system.

Additional information regarding life safety rope can be found in NFPA 1500 and NFPA 1983.

Training, education, and experience are essential to calculating and using appropriate safety factors and to using equipment safely. Establishing and evaluating the safety factor will differ with every situation and even throughout a given rope operations.

It is your responsibility to acquire the appropriate training and experience to understand and apply such subjective concepts.

Unpacking Your Rope

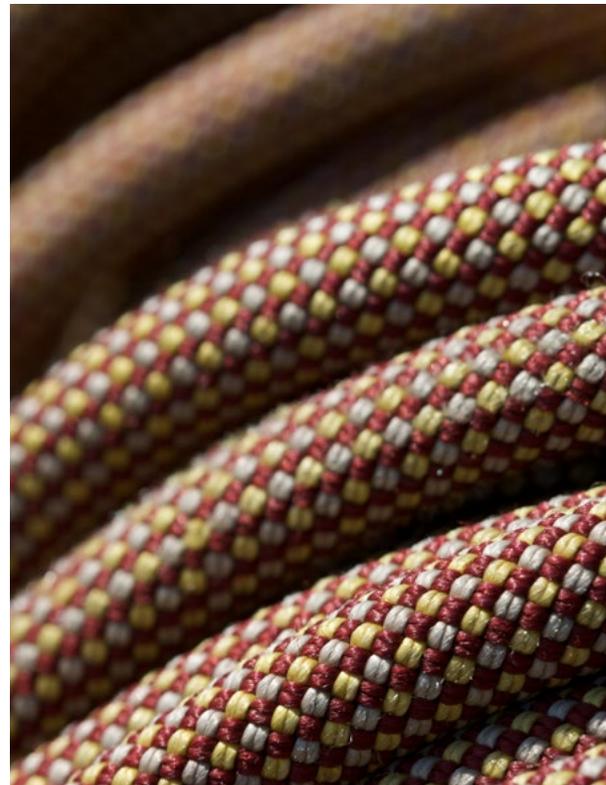
1. Open the box carefully, so as not to damage the rope.
2. Inspect your rope right away. Make sure that it is exactly what you ordered and that it is in the same excellent condition as when CoastLine shipped it.
3. Retain and keep the product labels and user instructions with the rope after removing them from your rope in the permanent rope record. Copy the label and user instructions and keep the copies with the rope.
4. Remove the coil from the box and unroll it. If on a spool, using a small broom handle as an axle makes it easier to unroll. Unwrapping coils from the sides will introduce kinks into your rope that likely will require free hanging the entire length of rope at once to untwist.
5. Take a moment to familiarize and educate yourself about your rope. Note such things as strength, diameter, elongation, length, and fibers.
6. Use your means of identifying the rope and begin a Rope Log for it. (CoastLine provides one with every rope.) Keep this and all the instructions and paperwork which came with the rope in a safe, conspicuous place where all potential users will see the warnings and information before using the rope. Keep the product label and user instructions/information after they are removed/separated from the rope and retain them in a permanent rope record; copy the product label and user instructions and keep these copies with the rope.
7. Please refer to the user instructions/information before and after each use. If the instructions/information are not followed, the user of this rope could suffer serious consequences!
8. Contact CoastLine Cordage Group Ltd IMMEDIATELY if you have any questions or concerns about your rope.

Maintaining Your Rope

Maintain a Rope Log for each rope and review it regularly. Include information such as date placed in service, dates, and conditions under which rope is used, results of rope inspections, and other information specific to your application.

Keep your rope clean using the guidelines provided in this booklet. Dirt rubbing into and against the fibers of your rope will deteriorate it.

Store your rope in a clean, dark, dry environment and not on a cement floor. Keep away from exposure to chemicals, noxious fumes, and other harmful agents.



Retiring Your Rope

IMMEDIATELY RETIRE any rope whose strength or integrity may have been compromised during use.

IMMEDIATELY RETIRE any rope which is subjected to uncontrolled or excessive impact loading.

IMMEDIATELY RETIRE any rope which is higher than ten years old calculated from the date of manufacture, regardless of history and usage.

IMMEDIATELY RETIRE any rope whose history and past usage you are uncertain about.

IMMEDIATELY RETIRE any rope that has been exposed to heat, direct flame, or excessive abrasion.

IMMEDIATELY RETIRE any rope that has visible damage.

IMMEDIATELY RETIRE any rope that has been exposed to liquids, solids, gases, mists, or vapors of any chemical or other material that can deteriorate rope.

IMMEDIATELY RETIRE any rope that does not pass inspection when inspected by a competent person following the inspection procedures in these instructions, both before and after each use.

IMMEDIATELY RETIRE and plan when there is any doubt about the safety or serviceability of the rope.

Life spans of static and low stretch ropes are a maximum of 10 years from the date of manufacture and are hugely dependent upon use, storage, and other variables.

CUT RETIRED ROPE into short lengths which will discourage future use, or set to destroy it entirely. A retired rope should not be stored, or maintained in such a way that it could inadvertently be used as a lifeline. In some cases, when only a single join or a small area of rope has been damaged, and the rest of the rope is still in reasonable condition, the user may choose to cut the compromised section out of the rope and continue to use the shorter rope in the lifeline applications. This is a judgment call, and such a decision is left to the user's discretions.



Inspecting Your Rope

Before You Start

Refer to these instructions for proper procedures before and after each use. All ropes should be inspected for wear and damage before each use by a competent person following the manufacturer's inspection procedures defined below. The rope must be inspected before and after each use. If it hasn't been inspected, please don't use it. Always inspect the entire length of the rope, even when you don't use all of it. Bear in mind that it is difficult to inspect wet rope. It's best to dry it first before the inspection takes place. Let one person complete the entire inspection of one rope. Don't put this job between two people as they might miss something very important. Regardless of use, inspection frequency should be once in every six months.

Shrinkage/Commissioning - It is important to soak a static rope before using it for the first time. This may sound a bit strange, but it actually makes perfect sense. Static ropes are not normally pre-shrunk, which means if they get wet they can irreversibly shrink by up to 5%. You should take this into account when planning what length of rope you need. By soaking a static rope in water and then drying it slowly before you first use it, you can eliminate this shrinkage. The process of soaking the rope tightens the sheath to the core, preventing sheath slippage. In addition, the process helps to remove any lubricants used during manufacturing and makes the sheath even easier to grip. Soak the rope in water for 24 hours. For best results, use distilled water and dry your rope away from direct sunlight.

Please note: Never dry a rope in direct sunlight or in a tumble dryer. If you are planning to use a static rope in wet conditions (e.g. canyoning, rain etc.), it makes sense to soak it again before you use it. This can prevent sheath slippage. Due to the hydrophilic characteristics of polyamide, the rope's sheath can soak up water, while the core remains dry. This moisture causes the sheath to swell and the bond between the damp sheath and the dry core may loosen, which can result in sheath slippage. By soaking a static rope in water before use, it allows both the core and the sheath to absorb water and retains the bond between them - significantly reducing sheath slippage.

How to Inspect Your Rope

LOOK AT ALL OF IT - Start at one end and look at every inch of the rope. Watch for signs that might indicate possible damage such as discoloration, chemical odors, abrasion, cuts or nicks in the outer sheath and visible differences in the diameter of the rope in one area about the rest of the rope.

WRAP IT IN SMALL LOOPS - Wrap the rope around your hand to form small loops at different random points along the ropes length. Look at these little circles as you make them, the consistency of the loop should be uniform throughout. If it is not, you might have a problem with the core of the rope.

FEEL THE ROPE - While you are looking at every inch of the rope, run it through your bare hands and feel it for changes that might indicate damage to the core. Modifications may include rope diameter, soft spots or very stiff parts of the rope.

WRITE IT ALL DOWN - Write the results of your inspection on the Rope Log included with your rope. Be sure to add anything you found in your review that might be or become a concern and document other relevant information about the rope such as an occurrence of uncontrolled or excessive loading, rope older than ten years, contact with harmful chemicals and history of use.

IF IN DOUBT, THROW IT OUT - If you are unsure about the integrity of a rope please don't use it. Consult CoastLine if you need help. Make a note on the Rope Log every time something happens to the rope including usage, inspection, cleaning, drying, modification or if problems are to be noted.

Please contact us if you have any questions regarding your life safety rope.

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