



Built for Life



Photo: Karl Kelley

PMI PMIROPE.COM 1-800-282-ROPE

ROPE PMI DYNAMIC™

ABOUT PMI

At PMI, Life Safety ropes have been our business since 1976. Our quality program is certified and continuously audited to ISO 9001, and the most comprehensive ISO quality standards. The ropes themselves are third party tested and certified through rigorous ISO and UIAA standards, and the performance data you see comes directly from those independent labs. As a company of climbers, cavers, and rescuers, we have good reason to be fully committed to creating high quality ropes that last.



PRODUCT DESCRIPTION

The rope you now hold in your hands represents the latest advances in dynamic climbing rope technology. What that means is that you can climb with the utmost confidence in your rope! Our dynamic ropes are of a kernmantle construction and provide a low impact force with high fall ratings that maximize the best outcomes for safety when used properly. Make sure you choose the best rope for your situation and obtain proper training before using your rope!

PMI Dynamic™ ropes have their own heartbeat! Get your finger on the pulse of the lifeline that will be there for you when you need it most!

FEATURES

This section provides technical information about our ropes. Read each section to see the features that apply to some or all of our PMI Dynamic™ ropes.

EXTRAORDINARY ENGINEERING

PMI Dynamic™ Ropes are engineered for low impact force, maximum number of falls, and minimum sheath slippage.

KERNMANTLE CONSTRUCTION

Kernmantle construction is the standard in life safety dynamic climbing ropes. This means that the sheath and the core of the rope are made independently of one another, so that the sheath provides protection of the core strands.

UNICORE® TECHNOLOGY

PMI Unicore® Technology is a revolutionary process applied during manufacturing that bonds the sheath and core together resulting in nearly zero slippage between them, even if the sheath is damaged. Not all dynamic ropes use Unicore® Technology, so check the label first.

ULTRADRY™

In our quest to engineer the ultimate dry rope, we went well beyond the sheath and deep into the core. PMI UltraDry™ ropes have the additional safety and performance elements of a hydrophobic core; aka waterproof. PMI UltraDry™ ropes actually float for hours - really. Every filament of core yarn undergoes a process to create an actual shield of polymerized molecules within the yarn.

Features continued on next page...



For more information about this or other PMI products, please contact us at:

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FEATURES (cont.)

This shield is then secured in place...resulting in a durable, resistant, protected yarn which is made into PMI UltraDry™ ropes. Not all dynamic ropes use UltraDry™ Technology, so check the label first.

MIDDLE MARK

Every PMI rope has a middle mark so you can find the middle of the rope with ease. If the black mark wears, you can easily mark the center again using only the PMI® Tec marker.

ID TAPE

This is the DNA of your rope and is what sets our high standard ropes apart from ropes that don't go through certification processes to ensure maximum safety and quality. The name, date, and place where the rope was made is printed on ID Tape that is woven into the core of the entire length of the rope. You should always climb on a rope with ID Tape and you can cut the end of your rope to find the ID Tape in the core of PMI ropes. It allows for complete traceability for each rope and meets CI 1801 requirements.

CHOOSING YOUR ROPE



TWIN ROPES

Used in pairs, Twin ropes are clipped together while still providing the advantage of having two ropes for those long rappels. Plus giving you the added bonus to share the load with



your partner on the approach. See the diagram to the left as an example of Twin rope use.



HALF ROPES

Half ropes are the perfect choice for those long routes where friction or sketchy gear placement demand an added safety measure. These give the added confidence on mixed routes, long descents, or where there is a likelihood of rope damage. See the diagram to the left as an example of Half rope use.



SINGLE ROPES

Single ropes are the most widely used among climbers. They are easy to clip and belay, and can be used in almost any situation. PMI offers Single ropes from 8.9 mm - 11 mm. See the diagram to the left to as an example of Single rope use.

ROPE SPECIFICATIONS

This section provides definitions and UIAA testing requirements for determining dynamic rope specifications. This technical information can help inform you in buying the best quality dynamic rope and you can be sure that PMI holds ourselves to these high standards with all of our ropes! The specifications for each rope can be found on the label of the hang tag that holds the instructions. If you have lost that information please

go to www.pmirope.com or call or e-mail PMI customer service at 1-888-764-1437, custserv@pmirope.com.

DIAMETER

Many climbers assume that a thin diameter also indicates lightweight - which has spurred some manufacturers to take some liberty in reporting diameters. It is also enticing to have a rope with a small diameter moniker and number of falls that compete with fatter ropes. Consider diameter in direct relation to weight if you want to know how many fibers are really in a rope. In general, thicker diameters, such as 9.4 mm and thicker, will wear longer.

MATERIALS

All PMI Dynamic™ ropes are made with nylon fibers for the core and the sheath.

WEIGHT

Weight is measured in grams per meter (g/m) and can be a good indicator of the actual diameter of a rope. When comparing ropes of similar diameter from different manufacturers, a rope that varies significantly in weight may actually be over (or under) sized in actual diameter. Oversized ropes can be incompatible with auxiliary equipment.

FALL RATING

The UIAA test consists of a severe factor 1.8 fall over a simulated 10 mm carabiner edge. Single and Half ropes must withstand a minimum of 5 successive drops while Twin ropes are tested in pairs and must hold a minimum of 12 drops. The number of actual drops a

rope withstands becomes its fall rating. Keep in mind that Falls Ratings for Single ropes are not directly comparable with fall ratings for Half and Twin ropes. Single ropes and Twin rope pairs are tested with an 80 kg (176 lb) test mass while Half rope is tested as a Single rope but with only a 55 kg (121 lb) test mass. Note that the field use is quite different from lab testing. While a higher fall rating is better, the actual figure should not be taken too literally and good judgment and consistent inspection practices should be used for retiring a rope (See "Retirement Criteria" Section).

IMPACT FORCE

The most important consideration in selecting a rope, Impact Force refers to the amount of energy that a rope transmits to the climber and to the protection at the moment the fall is arrested. Falls are as described under Fall Rating, above. A maximum of 12 kN (2,700 lb) force is permitted for a Single and Twin ropes. Impact force for Half ropes must be below 8 kN (1,800 lb). Consider impact force in relation to other test results. Ropes with a high fall rating and low impact force rating can be relied upon to absorb energy better, fall after fall.

ELONGATION UNDER LOAD

This test measures elongation for a rope under and 80 kg (176 lb) load - no drop, just a hang. Elongation must not exceed 8% (10% for Half ropes). The closer your rope is to the maximum, the greater its force absorption capability.

Rope Specifications continued on next page...

