

# Rope Differentiation: Static / Low Stretch / Dynamic Ropes

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## 1. Introduction

This recommendation was written first in Sonthofen 1999. At this time canyoning rescue operations were an increasingly frequent rescue activity.

Before this, low stretch ropes/static ropes were typically only white or black and it was easy to differentiate between dynamic ropes and low stretch/static ropes.

Rope manufacturers began producing low stretch ropes for canyoning in a range of different colors and markings and the danger of confusion between dynamic ropes and low stretch ropes/static ropes has increased.

## 2. Recommendation

ICAR Commission for Terrestrial Rescue strongly recommends that rescue teams who have dynamic and low stretch or static ropes available for use in their rescue operations:

- Should implement a reliable and simple system to clearly differentiate between dynamic ropes and low stretch or static ropes

And

- Such a system should be well known and easily recognised by all team members when working in technical rescues.

### 3. Explanatory notes

Using a low stretch/static rope instead of a dynamic rope can increase risks in technical rescue when it is necessary to absorb energy in a dynamic way e.g. lead climbing.

The use of dynamic ropes in rope based rescues may introduce excessive stretch issues which can negatively affect control and increase impact risks when working with longer lengths.

If the use of low stretch ropes certified to the UIAA Safety Label Standard 107 is possible, then this is a possible solution for differentiation and it helps to reduce errors in rope selection and inappropriate use.

### 4. Glossary

UIAA Safety Label Standard 107 (2018)	Describes the method that the sheath/mantle of low stretch ropes is to be marked.
Dynamic Ropes	These are ropes that would typically be used in lead climbing situations. In Europe these ropes would meet the EN892 standard.
Static Ropes	North America: Static and Low Stretch are defined by the CI 1801 Standard.
Low Stretch Ropes	North America: Static and Low Stretch are defined by the CI 1801 standard. Europe: CE/EN 1891 is applicable to Class A and B ropes.

### 5. References

UIAA (2018), Low Stretch Ropes UIAA Standard 107v4

Accessed on August 16, 2018 via

[https://www.theuiaa.org/documents/safety-standards/107\\_Low%20Stretch%20Rope\\_2018.pdf](https://www.theuiaa.org/documents/safety-standards/107_Low%20Stretch%20Rope_2018.pdf)

History of Revisions	
issued	1999 Cingov (SK)
revised	2000 Chamonix (F)
revised	2005 Cortina (I)
revised	2017 Soldeu (AND)
revised	2018 Chamonix (F)