

UIAA Safety Standard (UIAA = Union Internationale des Associations d'Alpinisme)



**Mountaineering
and Climbing
Equipment**

Dynamic Ropes

**UIAA
101**

July 2004

Foreword

This UIAA Safety Standard is only published in the English language, which is the master text. If anybody requires help in validating a translation into French, German, Italian or Spanish, the corresponding National Delegate of the UIAA Safety Commission should be contacted via the [UIAA Office](#) in Bern, Switzerland.

This UIAA Safety Standard is based on the European Standard EN 892 in order to prevent unnecessary multiplicity of standards. The EN Standards are in turn based on the former UIAA Safety Standards (the UIAA Safety Standards were the first standards for mountaineering and climbing equipment in the world). However, this UIAA Safety Standard has additional requirements above those in EN 892.

This UIAA Safety Standard does not cover Sharp Edge Resistant Dynamic Ropes, which are covered in UIAA 108.

Owing to copyright restrictions, this UIAA Safety Standard does not state the requirements of EN 892 to which it refers. Hence it is necessary to obtain a copy of EN 892. EN Standards can be purchased from various [Standards Institutions](#).

The UIAA Safety Standards are reviewed at intervals to see whether they meet the latest technical requirements and revised, if necessary.

The UIAA invites manufacturers of mountaineering and climbing equipment worldwide to become Trade Members of the UIAA Safety Commission. Trade Members can participate in discussions on standard requirements, test methods, and revisions thereof (see the [General Regulations for the UIAA Safety Label](#)).

A complete list of UIAA Safety Standards for mountaineering and climbing equipment can be found on the [UIAA Website](#).

The UIAA Safety Commission, which is responsible for the UIAA Safety Standards, expects that the corresponding EN Standard will be updated in due course to include the additional requirements of this UIAA Safety Standard.

© UIAA (Union Internationale des Associations d'Alpinisme)

Copyright is secured for the present standard work including all its parts. Any use beyond the limit of the copyright act is forbidden by law. This concerns especially copying, microfilming and feeding and processing in electronic data systems.

1 General Remarks on the UIAA Trademark and UIAA Label

- 1.1 The UIAA Trademark (see section 5.1.) is copyright protected internationally. The UIAA Label is only given to items of mountaineering and climbing equipment after application from the manufacturer.
- 1.2 The procedure to be followed by a manufacturer, when applying for a UIAA Safety Label, is laid down in the [General Regulations for the UIAA Label](#) (see also [How to Obtain a UIAA Label](#)).

2 Requirements for Dynamic Ropes

- 2.1 The UIAA Label can only be granted for dynamic ropes that meet all the requirements of EN 892, with the following exception:
 - 2.1.1 No EN number required.
- 2.2 For the award of the UIAA Label, the following additional safety requirements shall be met:
 - 2.2.1 **Safety Requirements**
The sheath slippage shall not exceed 1 %, thus when tested in accordance with EN 892, the sheath slippage shall not exceed 20 mm.
 - 2.2.2 **Test Method**
The test method shall be as stated in the relevant part of EN 892.
 - 2.2.3 **Test Report**
Recommendation: The slippage at the rope clamp after the last fall should be stated in the test report.
 - 2.2.4 **Packaging**
If dynamic rope is supplied on a drum and consists of more than one piece, the ends of the pieces shall be clearly visible and not joined together; the number of pieces shall be stated on the drum.
- 2.3 **Additional designation as a 'multidrop rope'**
A single or half rope in accordance with EN 892, which withstands 10 or more test falls according to the aforementioned EN, may state that it is a 'multidrop rope' tested to UIAA standards

3 Demonstrating that the Requirements are met

- 3.1 The requirements of section 2.1 shall be satisfied by either
 - (a) a test report from a UIAA-approved test laboratory, or
 - (b) a Type Test Certificate from an EU Notified Body, together with any additional documentation or test report which may be necessary.

- 3.2 The requirements of section 2.2 shall be satisfied by either
- (a) a test report from a UIAA-approved test laboratory, or
 - (b) a test report, which covers these particular requirements, from a test laboratory acceptable to an EU Notified Body.
- 3.3 In sections 3.1 (a) and 3.2 (a), every test shall be carried out on three items of production, and every item of production shall pass the test(s).

4 Information to be supplied

- 4.1 The information to be supplied (in accordance with EN 892) shall be given at least in the language of the country in which the product is sold.

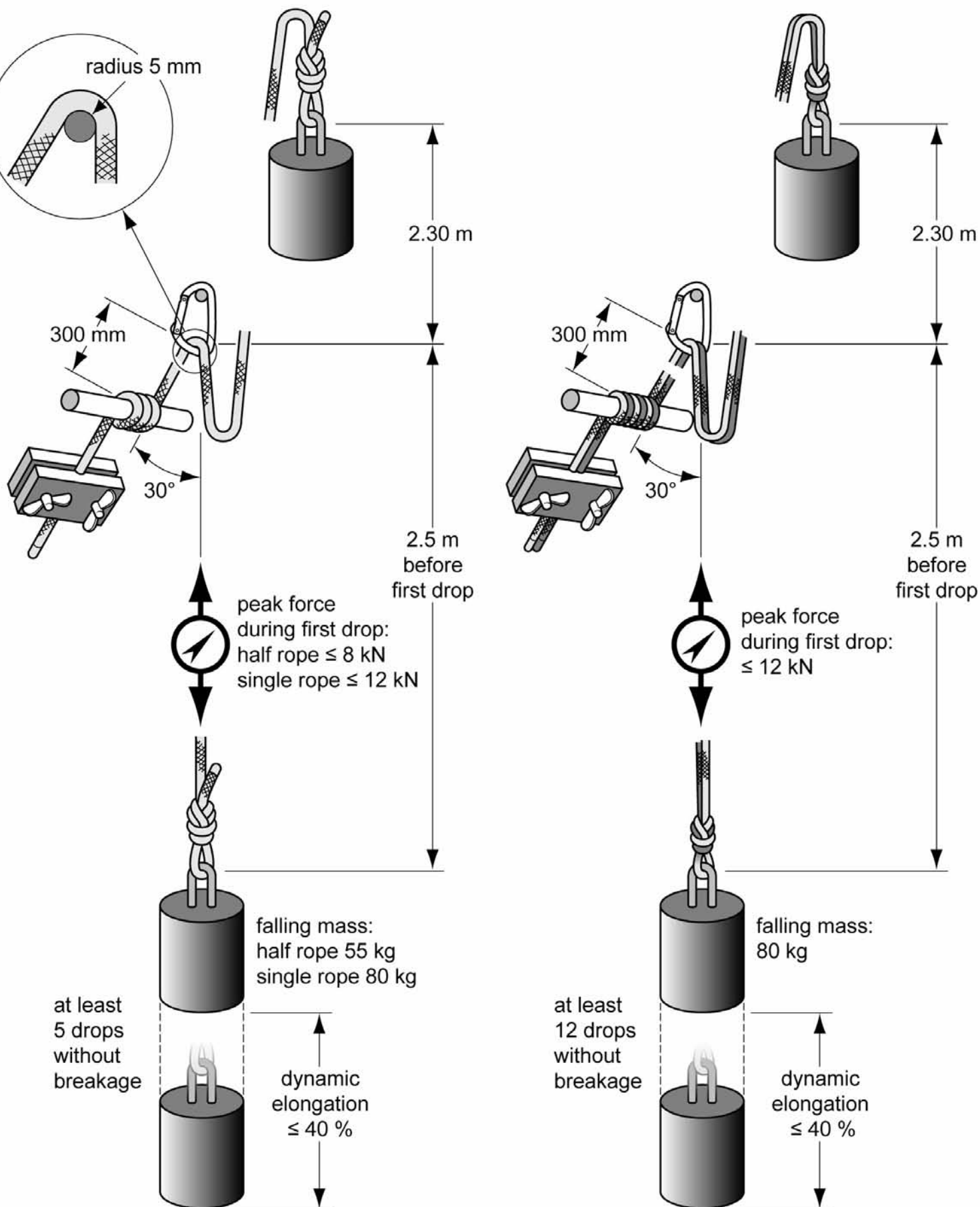
5 Attachment of the UIAA Safety Label

- 5.1 For any model of mountaineering equipment, which has been awarded the UIAA Safety Label, the UIAA recommends that the UIAA Trademark (see below) or the four letters "UIAA" be marked clearly, indelibly and permanently on each item sold.



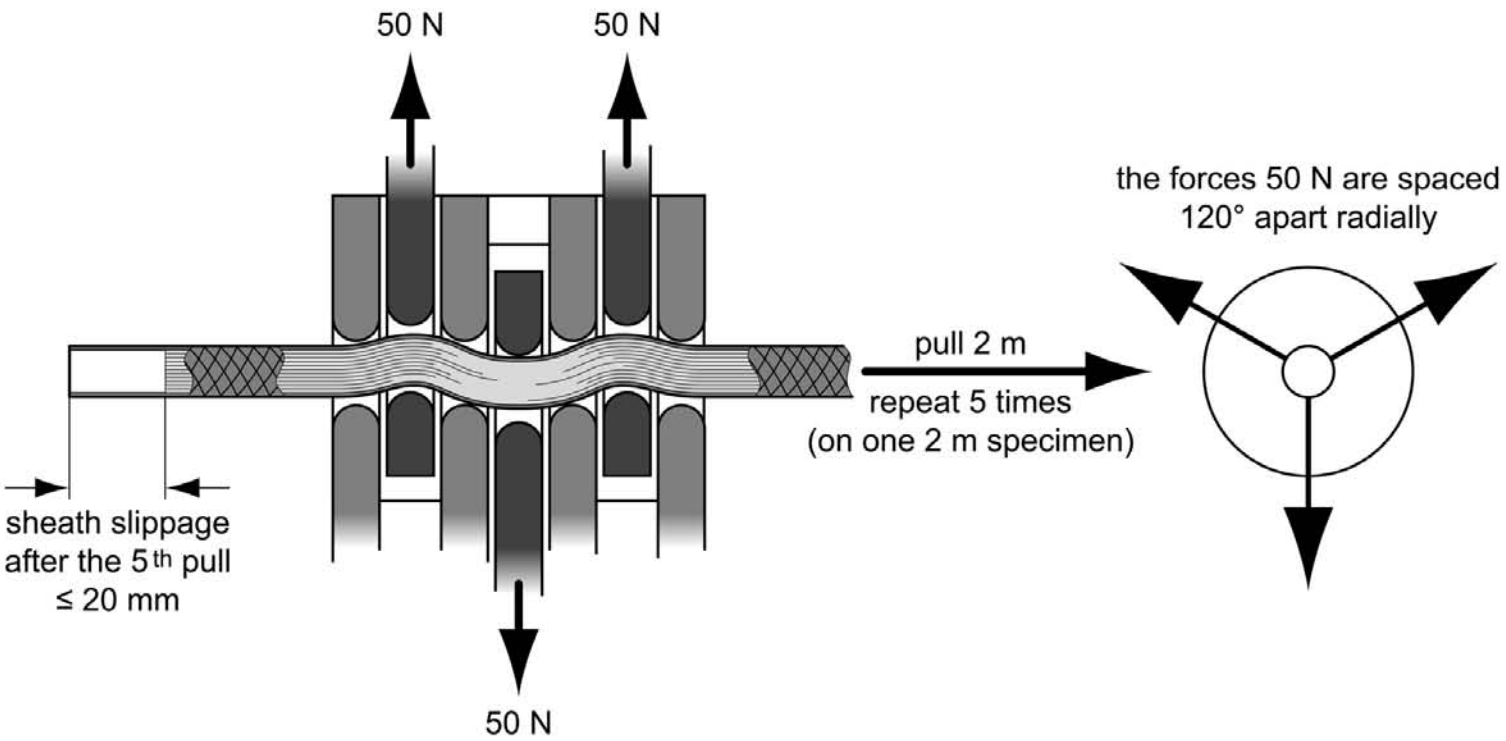
- 5.2 In addition, the UIAA Trademark or the four letters "UIAA" may be included in the instructions for use and/or on a swing ticket as well as in catalogues and other publications of the manufacturer. In the last case, the illustration and/or the text must clearly apply only to the equipment which has been awarded the UIAA Safety Label.

This representation of EN 892 and UIAA 101 does not contain the full details of the test methods and requirements in these standards; it gives only a simplified pictorial presentation. For full details, EN 892 and UIAA 101 should be consulted. © Copyright. This material may not be copied for commercial use.

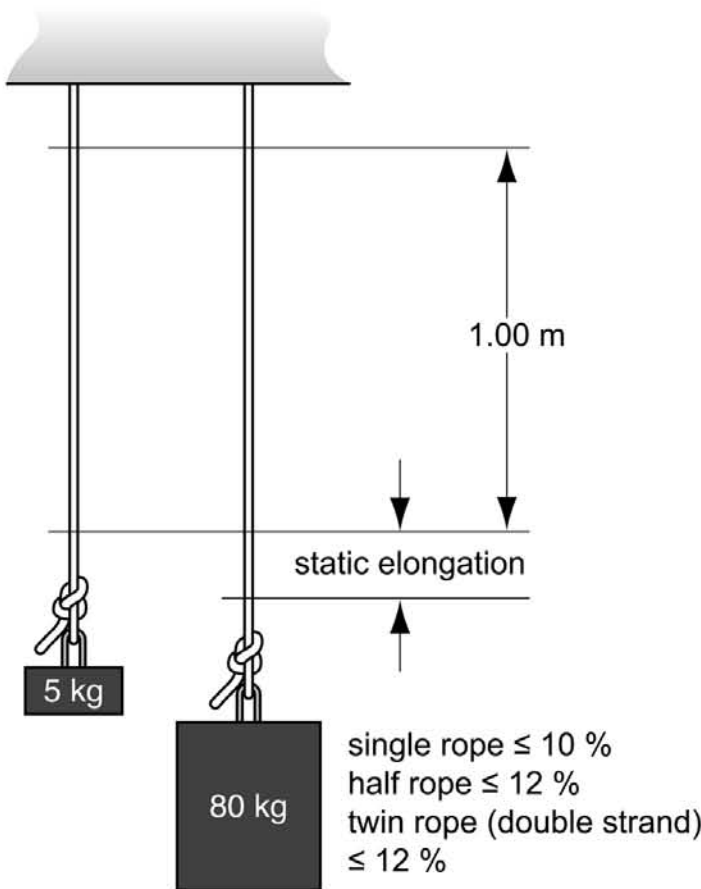


Fall test: half rope / single rope

Fall test: twin rope

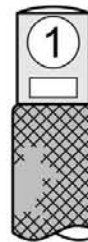


Sheath slippage test



Static elongation test

Marking



single rope



half rope



twin rope

All tests shall be done after conditioning as follows:
24 h (50 ± 5) °C and ≤ 10 % rel. humidity, after that
2 h (20 ± 2) °C and ≤ 65 % rel. humidity, after that
72 h (20 ± 2) °C and (65 ± 2) % rel. humidity.

There are no constraints on rope diameter or mass per unit length, but both are measured by standard methods and given in the information for use.