Foreword

This UIAA 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 Standard is based on the European Standard EN 12275 in order to prevent unnecessary multiplicity of standards. The EN Standards in turn are based on the former UIAA Standards (the UIAA Standards were the first standards for mountaineering and climbing equipment in the world). However, this UIAA Standard has additional requirements above those in EN 12275.

Owing to copyright restrictions, this UIAA Standard does not state the requirements of EN 12275 to which it refers. Hence it is necessary to obtain a copy of EN 12275. EN Standards can be purchased from various Standards Institutions.

The UIAA 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 Label).

A complete list of UIAA Standards for mountaineering and climbing equipment can be found on the UIAA Website.

The UIAA Safety Commission, which is responsible for the UIAA Standards, expects that the corresponding EN Standard will be updated in due course to include the additional requirements of the UIAA Standard.
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 Label, is laid down in the General Regulations for the UIAA Label (see also How to Obtain a UIAA Label).

2. **Requirements for Connectors**

2.1. The UIAA Label can only be granted for connectors that meet all the requirements of EN 12275, 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. Major axis gate-open strength of type K connectors

When tested with the gate open in accordance with the test method in EN 12275 and 2.2.3. below, type K connectors shall withstand a minimum load of 8 kN.

2.2.2. Strength requirements for type K connectors when loaded over an edge

When tested in accordance with 2.2.4., type K connectors shall withstand a minimum load of 8 kN.

2.2.3. Major axis testing, gate-closed and gate-open, of type K connectors

Apply the load to the larger end of the connector using a pin of diameter \((16 \pm 0.01)\) mm. All other aspects of the tests shall be as stated in the relevant parts of EN 12275.

2.2.4. Edge test for type K connectors

2.2.4.1. Test device

The test apparatus consists of a vertical steel pin of diameter \((16 \pm 0.1)\) mm, rigidly mounted above a thick, horizontal steel plate. The horizontal plate has an edge of radius \((2 \pm 0.1)\) mm. The distance between the edge and the vertical axis of the pin is \((27 \pm 0.1)\) mm. See figure 1, which also specifies other dimensions.

2.2.4.2. Test method

Clip the larger end of the test sample onto the vertical pin, allowing the autolocking gate to close and lock. Arrange the connector so that its smaller end overhangs the horizontal edge. If the connector is not supplied by the manufacturer with a rope or tape attachment, make such an attachment in accordance with the manufacturer’s instructions. Apply a force vertically downwards to the small end of the connector by loading the rope or tape attachment. Apply the force at a speed of 20 to 200 mm/minute. Increase the force to 8 kN and check that the connector has not become detached from the vertical pin. Permanent deformation or fracture of parts of the connector is acceptable.
2.3  Remark
UIAA 121 and EN 12275 do not specify a minimum dimension for the cross-sectional profile and thickness of connectors in the region in contact with the rope. If the thickness is too small, it will lead to increased wear of the rope in use. Further information is provided in Annex A.

Figure 1 Test Edge for type K connectors

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 12275) shall be given at least in the language of the country in which the product is sold.

5. **Attachment of the UIAA Label**

5.1. For any model of mountaineering equipment, which has been awarded the UIAA 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 Label.

**Annex A** (informative)

**Connector cross-sectional profile and thickness**

Neither the cross-sectional profile and thickness, nor the curvature of the connector surface in the region that comes in contact with the rope under load are specified in UIAA 121 or EN 12275.

One example of a good profile design in this region is shown in the figure. Depending on the method of manufacture, there will be irregularities in the cross-section such that a perfect radial profile can not be achieved. It is also difficult to specify the region over which the minimum thickness of 8 mm should be maintained. If the thickness and/or the radius of curvature are too small, it will lead to increased wear of the rope in use.

Manufacturers of connectors are hereby advised to design connectors with this example of good profile design in mind.