


THE INTERNATIONAL MOUNTAINEERING AND CLIMBING FEDERATION

UNION INTERNATIONALE DES ASSOCIATIONS D'ALPINISME

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	<p>Mountaineering and Climbing Equipment</p> <p>'ROCK ANCHORS'</p>	<p>UIAA 123</p>
<p style="text-align: center;">Foreword</p> <p>This UIAA Standard is only published in the English language version, which is the master text. For any validations in translation, the UIAA Safety Commission should be contacted via the UIAA Office in Bern, Switzerland.</p> <p>UIAA Standards are the only 'globally recognized' standards for mountaineering equipments. In order to prevent multiplicity, the UIAA collaborates with its partner in standardization CEN; and bases UIAA standard 123 on the European Standard EN 959:2007. The EN Standards in turn are based on the original UIAA Standards, the first of their kind in the world. Additionally the UIAA publishes pictorials for each of the standards in a user-friendly way. This UIAA Standard 123 also has additional requirements over and above those in EN 959:2007.</p> <p>Owing to copyright restrictions, this UIAA Standard does not state the full requirements of EN 959:2007 to which it refers. Hence it is necessary to obtain a copy of EN 959:2007. The procedure for purchasing the EN Standards is included at the end of the text of this standard. The UIAA Standards are reviewed at intervals to see whether they meet the latest technical requirements and revised if necessary.</p> <p>The UIAA invites manufacturers of mountaineering and climbing equipment worldwide to become members of the UIAA Safety Commission as Safety Label Holders. Members can participate in discussions on standard requirements, test methods and revisions thereof (see the "General Regulations for the UIAA Safety Label").</p> <p>A complete list of UIAA Standards for mountaineering and climbing equipment can be found on the UIAA website.</p> <p>The UIAA Safety Commission, which is responsible for the UIAA Standards, expects that the corresponding EN Standard will be updated to include the additional requirements of the UIAA Standard.</p>		
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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 upon approval of prospective label holder's application from the UIAA.
- 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 Safety Label Certification"

2. Requirements for Rock anchors

- 2.1. The UIAA Label can only be granted for bolts which meet all the requirements of EN 959:2007, 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. Material.

Rock anchors shall be manufactured from corrosion-resistant material with properties at least equivalent to material number 1.4307 in accordance with EN 10088-3:1995 or, what concerns corrosion resistance, equivalent material, except number 1.4305.

NOTE: Examples of suitable types of materials see Table 1 below :

Types of steel: Table 1 – Examples of suitable types of steel according to AISI (American Iron and Steel Institute)

Standard organisation	Types of steel
AISI	301, 304, 304H, 304LN, 305, 308, 403, 410, 416, 420, 431, 440C (number 303 should not be used)

- 2.2.2. The embedded part of any rock anchor held in place by a chemical bonding agent shall have deformations or roughness, intended to prevent extraction or rotation.

- 2.2.3. When tested in accordance with 3.3, all types of rock anchors shall have an axial load bearing capacity of 20 kN.

- 2.2.4. When tested in accordance with 3.4. all types of rock anchors held in place by a chemical bonding agent shall withstand a torque of 150 N-m for 60(0/+5) seconds without rotating in the hole.

3. Test Methods

- 3.1. Check by visual examination that the requirements according to 2.2.2 are met.
- 3.2. Check mill test report supplied by the manufacturer that the requirements according to 2.2.1. are met.
- 3.3. Carry out an axial load test on a rock anchor of any type in accordance with the test methods in the relevant parts of EN 959:2007.
- 3.4. Carry out a torque test on a rock anchor of any type by applying a torque of 150 N-m to the eye of the rock anchor.

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4. Demonstrating that the Requirements are met

- 4.1. 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.
- 4.2. 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, or
 - (c) a mill test report showing that the requirements of 2.2.1. are met.

5. Information to be supplied

- 5.1. The information to be supplied (in accordance with EN 959:2007) shall be given in English, or at least in the language of the country in which the product is sold.

6. Attachment of the UIAA Label

- 6.1. 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 and indelibly on each item sold in accordance with the branding guidelines specified in the "General regulations for UIAA Safety Label".



UIAA

- 6.2. 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.

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Copies of the EN Standards can be purchased from the following:

Great Britain British Standards Institution (BSI), Tel: +44 20 8996 9001
Order by Fax: +44 20 8996 7001 (with credit card details)
by post: BSI Customer Services c/o Cash Office,
PO Box 16206, London W4 4ZL (cash with order)

France: Association Francaise de Normalisation (AFNOR),
Serv. "Qualite de la Vie" (SQV), Tour Europe,
F-92049 Paris La Défense CEDEX
TEL: + 33 142 91 55 33 FAX: + 33 142 91 56 56

Germany: Beuth-Verlag GmbH, Burggrafenstrasse 4-10,
D-10787 Berlin
TEL: +49 30 2601 2260 FAX: +49 30 2601 1260

Italy: Ente Nazionale Italiano di Unificazione (UNI),
Via Battistotti Sassi 11/b, I-20133 Milano
TEL: +39 270 0241 FAX: +39 270 106 106

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