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Personal equipment for protection against falls — Rope access systems — Part 1: Fundamental principles for a system of work

*Équipement individuel de protection contre les chutes — Systèmes
d'accès par corde —*

Partie 1: Principes fondamentaux pour un système de travail



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Foreword

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The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

ISO 22846-1 was prepared by Technical Committee ISO/TC 94, *Personal safety — Protective clothing and equipment*, Subcommittee SC 4, *Personal equipment for protection against falls*.

ISO 22846 consists of the following parts, under the general title *Personal equipment for protection against falls — Rope access systems*:

- *Part 1: Fundamental principles for a system of work*
- *Part 2: Code of practice* (in the early stages of preparation)

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Introduction

Rope access is a system that provides a user with the means, typically using synthetic fibre kernmantel ropes and associated equipment, to gain access to, be supported at, and then as a means of egress from, a place of work for the purpose of carrying out a work task.

Rope access has its background in mountaineering and particularly in caving, where it has been well proven, although it relies on only a single rope. For adaptation to the work environment, the techniques and some of the equipment have been modified. The most significant change is the inclusion of a second rope to provide additional safety. These modifications allow the system to offer a level of protection to the operatives equal to, or better than, other similar forms of access.

In a typical system, one rope (the working line) is used for access and egress (usually ascent and descent) and for support at the workplace. A harness is attached to the user and specially designed devices are attached to the working line and to the harness. The other rope (the safety line) is connected to the user via a safety device, which travels along the safety line as the user ascends or descends the working line. In the event of a failure of the working line or any of its components, the safety line protects against a fall and limits the load to the equipment and operative. This is one example of a system. However, the need to provide a basic access system and a back-up system may also be accomplished in other ways. The techniques and equipment used for this purpose may be extended to encompass traversing and aid climbing.

The safe use of rope access systems requires competence, normally acquired by training, and confirmed with independent assessment and certification, not only in the use of the system itself, but also in workmate rescue/retrieval.

While this part of ISO 22846 provides the generalized framework for the specification and the operation of rope access, individual countries, states and localities may have particular requirements. These local requirements should be followed in addition to those of this part of ISO 22846.