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SINGAPORE STANDARD

Personal equipment for protection against falls – Rope access systems

- Part 2 : Code of practice



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IOSH Singapore Branch
KB Access Private Limited
Ministry of Manpower
Singapore Institution of Safety Officers
Singapore Rope Access Association
The Institution of Engineers, Singapore
TRACTEL Singapore Private Limited
Workplace Safety and Health Council

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National Foreword

This Singapore Standard was prepared by the Technical Committee on Personal Safety and Health under the direction of the General Engineering and Safety Standards Committee.

SS 588 consists of the following two parts, under the general title *Personal equipment for protection against falls – Rope access systems*:

- Part 1: Fundamental principles for a system of work (modified adoption of ISO 22846-1 : 2003)
- Part 2: Code of practice (modified adoption of ISO 22846-2 : 2012)

The Part 2 of SS 588 is a modified adoption of ISO 22846-2 : 2012 – 'Personal equipment for protection against falls – Rope access systems – Part 2: Code of practice", published by the International Organization for Standardization. The Part 2 of this standard has been redrafted for ease of use by the readers. Certain modifications have been made due to the particular needs of the rope access industry. These technical deviations have been incorporated and are marked by a single bar in the margin. A complete list of modifications for Part 2, together with their justification, is given in Annex ZA.

Attention is drawn to the following:

- Where the words 'this part of ISO 22846' appears, they should be interpreted as 'this part of SS 588'.
- 2) The comma has been used throughout as a decimal marker in ISO 22846-1, whereas in Singapore Standards it is a practice to use a full-point on the baseline as the decimal marker.

SS 588: Part 2 shall be read in conjunction with Part 1. This series is applicable to the use of rope access methods in any situation where ropes are used as the primary means of access, egress or support and as the primary means of protection against a fall, on both man-made and natural features.

At the time of publication, SS 588 Parts 1 and 2 are expected to be used by employers, employees and self-employed persons who use rope access methods, by those commissioning rope access work and by rope access associations, professional engineers and consultants.

The following referenced documents are indispensable for the application of this Singapore Standard. The latest editions of the referenced documents (including any amendments) apply:

- a) Workplace Safety and Health Act and its subsidiary regulations;
- b) Code of practice on WSH Risk Management.

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

NOTE

- 1. Singapore Standards (SSs) and Technical References (TRs) are reviewed periodically to keep abreast of technical changes, technological developments and industry practices. The changes are documented through the issue of either amendments or revisions.
- 2. An SS or TR is voluntary in nature except when it is made mandatory by a regulatory authority. It can also be cited in contracts making its application a business necessity. Users are advised to assess and determine whether the SS or TR is suitable for their intended use or purpose. If required, they should refer to the relevant professionals or experts for advice on the use of the document. Enterprise Singapore shall not be liable for any damages whether directly or indirectly suffered by anyone or any organisation as a result of the use of any SS or TR.
- 3. Compliance with a SS or TR does not exempt users from any legal obligations.

Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

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 22846-2 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

Introduction

ISO 22846 (all parts) sets out important criteria for the application of rope access systems for industrial purposes.

ISO 22846-1 sets out fundamental principles; this part of ISO 22846 expands on these, giving recommendations for planning and management, operative competence and responsibilities of personnel, supervision, the selection, use and care of equipment, and advice on how to implement a safe system of work.

Rope access is a method of working at height, typically using synthetic fibre kernmantel ropes and associated equipment, used to gain access to, be supported at, and as a means of egress from, a place of work.

The application of rope access methods are regarded as a complete system, in which planning, competence and suitable equipment are equally important. The malfunction or removal of any component in the system can weaken the operation or prevent the system from operating properly.

This part of ISO 22846 is intended for use by all persons concerned with the use of rope access, including operatives, specifiers, managers, rope access supervisors, purchasing personnel, trainers, clients and regulatory authorities. Users are reminded always to take into account the entire system and not just the component parts.

To ensure a rope access system operates correctly, at least the following factors are important:

- system management and planning;
- competence of the operatives and correct team composition;
- equipment selection, use and maintenance;
- proper organization and execution of working methods.

There can also be other issues to consider, depending upon the nature and location of the work, the competence and experience of operatives and possible local or regional legal requirements.

A failure or shortcoming in any of the above can render the entire system deficient.

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1 Scope

This part of ISO 22846 provides recommendations and guidance on the use of rope access methods for work at height and expands on the fundamental principles given in ISO 22846-1, in conjunction with which it is intended to be used. It is intended for use by employers, employees and self-employed persons who use rope access methods, by those commissioning rope access work and by rope access associations. This part of ISO 22846 is applicable to the use of rope access methods in any situation where ropes are used as the primary means of access, egress or support and as the primary means of protection against a fall, on both man-made and natural features.

This part of ISO 22846 is not intended to apply to the use of rope access methods for leisure activities, arboriculture, general steeplejack methods, emergency personal evacuation or to the use of rope rescue (line rescue) techniques by emergency services for rescue work or for rescue training. Nevertheless, individuals engaged in these and similar activities can benefit from the advice given in this part of ISO 22846.