

SINGAPORE STANDARD

Specification for personal protective equipment – Footwear

– Part 1 : Safety footwear

[ISO title : Personal protective equipment – Safety footwear]



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ST Aerospace Ltd
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National Foreword

This Singapore Standard was prepared by a Working Group appointed by the Technical Committee on Personal Safety and Health which is under the purview of the General Engineering and Safety Standards Committee.

SS 513 comprises the following two parts under the general title, "Specification for personal protective equipment – Safety footwear":

- Part 1 : Safety footwear
- Part 2 : Test methods for footwear

Part 1 specifies basic and additional (optional) requirements for safety footwear used for general purposes and Part 2 specifies methods for testing footwear designed as personal protective equipment.

This part of SS 513 is a revision of SS 513 : Part 1 : 2005. SS 513 : Part 1 : 2005 was an identical adoption of ISO 20345 : 2004 "Personal protective equipment – Safety footwear". ISO 20345 underwent a revision in 2011. A review was therefore initiated for SS 513 : Part 1 and this resulted in the identical adoption of ISO 20345 : 2011 as Part 1 of SS 513.

A national Annex ZA has been included to provide information on batch testing of safety footwear. The addition of this annex does not alter the provisions of the International Standard.

Attention is drawn to the following:

1. Where the references "ISO 20345" and "ISO 20344" appear, they should be interpreted as "SS 513 : Part 1" and "SS 513 : Part 2" respectively.
2. The reference to International Standards shall be replaced by the following Singapore Standards:

International Standard	Corresponding Singapore Standard
ISO 20345 : 2011	SS 513 : Part 1 : 2013 – Personal protective equipment – Footwear – Safety footwear
ISO 20344 : 2011	SS 513 : Part 2 : 2013 – Personal protective equipment – Footwear – Test methods for footwear

3. The comma has been used throughout as a decimal marker in ISO 20345, whereas in Singapore Standards it is a practice to use a full-point on the baseline as the decimal marker.

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 20345 was prepared by the European Committee for Standardization (CEN) Technical Committee CEN/TC 161, *Foot and leg protectors*, in collaboration with Technical Committee ISO/TC 94, *Personal safety — Protective clothing and equipment*, Subcommittee SC 3, *Foot protection*, in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

This second edition cancels and replaces the first edition (ISO 20345:2004), which has been technically revised. It also incorporates the Amendment ISO 20345:2004/Amd.1:2007 and the Technical Corrigenda ISO 20345:2004/Cor.1:2005 and ISO 20345:2004/Cor.2:2006.

Specification for personal protective equipment – Footwear : Part 1 : Safety footwear

1 Scope

This International Standard specifies basic and additional (optional) requirements for safety footwear used for general purpose. It includes, for example, mechanical risks, slip resistance, thermal risks, ergonomic behaviour.

Special risks are covered by complementary job-related standards (e.g. footwear for firefighters, electrical insulating footwear, protection against chain saw injuries, protection against chemicals and molten metal splash, protection for motor cycle riders).

2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 17075	Leather — Chemical tests — Determination of chromium(VI) content
ISO 20344:2011	Personal protective equipment — Test methods for footwear
EN 12568:2010	Foot and leg protectors — Requirements and test methods for toecaps and penetration resistant inserts
EN 50321	Electrically insulating footwear for working on low voltage installations