
**Footwear — Test methods for outsoles
— Abrasion resistance**

*Chaussures — Méthodes d'essai applicables aux semelles d'usure —
Résistance à l'abrasion*



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Foreword

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For an explanation on the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see the following URL: www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 216, *Footwear*.

This second edition cancels and replaces the first edition (ISO 20871:2001), which has been technically revised.

Footwear — Test methods for outsoles — Abrasion resistance

1 Scope

This document specifies a method for the determination of the abrasion resistance for outsoles, irrespective of the material.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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 2420, *Leather — Physical and mechanical tests — Determination of apparent density and mass per unit area*

ISO 2781, *Rubber, vulcanized or thermoplastic — Determination of density*

ISO 17709, *Footwear — Sampling location, preparation and duration of conditioning of samples and test pieces*

ISO 18454, *Footwear — Standard atmospheres for conditioning and testing of footwear and components for footwear*

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- ISO Online browsing platform: available at <https://www.iso.org/obp>
- IEC Electropedia: available at <http://www.electropedia.org/>

3.1

abrasion resistance

resistance to wear by mechanical action upon a surface

3.2

relative mass loss

M

mass loss of the outsole after being subjected to abrasion by an abrasive cloth will cause the appropriate standard rubber to lose a mass of 200 mg under the preferred conditions, namely a distance of 40 m, a load of 10 N and using a non-rotating test piece

Note 1 to entry: The mass loss is expressed in milligrams.

3.3

relative volume loss

V

volume loss of the test rubber after being subjected to abrasion by an abrasive sheet which will cause a reference compound to lose a defined mass under the same specified conditions of test

Note 1 to entry: The relative volume loss is expressed in cubic millimetres.