

First edition
2007-02-15

**Footwear — Performance requirements
for components for footwear —
Accessories**

*Chaussures — Exigences de performance pour les composants des
chaussures — Accessoires*



Reference number
ISO/TR 20572:2007(E)

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Published in Switzerland

Foreword

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In exceptional circumstances, when a technical committee has collected data of a different kind from that which is normally published as an International Standard ("state of the art", for example), it may decide by a simple majority vote of its participating members to publish a Technical Report. A Technical Report is entirely informative in nature and does not have to be reviewed until the data it provides are considered to be no longer valid or useful.

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/TR 20572 was prepared by the European Committee for Standardization (CEN) Technical Committee CEN/TC 309, *Footwear*, in collaboration with Technical Committee ISO/TC 216, *Footwear*, in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

Footwear — Performance requirements for components for footwear — Accessories

1 Scope

This Technical Report establishes the performance requirements for accessories (laces and eyelets, metal components and touch and close fasteners) for footwear (not for finished footwear), irrespective of the material, in order to assess the suitability for the end use. It also establishes the test methods to be used to evaluate the compliance with the requirements.

This Technical Report applies to accessories (laces and eyelets, metal components and touch and close fasteners) for all kind of footwear as defined in Clause 3.

This Technical Report is intended to be used as a reference between the manufacturer and the supplier. It is not intended for third party certification of finished shoes destined for the consumer.

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 31-0, *Quantities and units — Part 0: General principles*

EN ISO 19952, *Footwear — Vocabulary*

EN ISO 22774, *Footwear — Test methods for accessories: shoe laces — Abrasion resistance*

EN ISO 22775, *Footwear — Test methods for accessories: Metallic accessories — Corrosion resistance*

EN ISO 22776, *Footwear — Test methods for accessories: Touch and close fasteners — Shear strength before and after repeated closing*

EN ISO 22777, *Footwear — Test method for accessories: Touch and close fasteners — Peel strength before and after repeated closing*

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

3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN ISO 19952 apply.

4 Requirements

4.1 General

This Technical Report establishes performance (essential) requirements, all of which shall be taken into account.

The results of each single analytical determination, as well as the average values, shall be rounded off in accordance with ISO 31-0.

When taken from finished footwear, samples shall be prepared in accordance with ISO 17709.

4.2 Performance requirements for accessories components for general purpose sports and school footwear

See Table 1.

Table 1 — Test methods and properties for general purpose sports and school footwear

| Test method | Property | Requirement | |
|--------------|--|-------------------------|--|
| EN ISO 22774 | Laces and eyelet abrasion resistance | Method 1 | 15 000 cycles |
| | | Methods 2 and 3 | 15 000 cycles |
| EN ISO 22775 | Metal accessories corrosion resistance | Method 1 | No worse than grade 4 |
| | | Method 2 | No worse than grade 4 |
| EN ISO 22776 | Touch and close fasteners shear strength | Before repeated closing | 100 kPa (minimum shear) |
| | | After repeated closing | 80 kPa (after 5 000 opening/closing cycles) |
| EN ISO 22777 | Touch and close fasteners peel strength | Before repeated closing | 0,10 N/mm (minimum peel) |
| | | After repeated closing | 0,08 N/mm (after 5 000 opening/closing cycles) |

4.3 Performance requirements for accessories components for casual, men's town, cold weather, women's town and fashion footwear

See Table 2.

Table 2 — Test methods and properties for casual, men's town, cold weather, women's town and fashion footwear

| Test Method | Property | Requirement | |
|--------------|--|-------------------------|--|
| EN ISO 22774 | Laces and eyelet abrasion resistance | Method 1 | 10 000 cycles |
| | | Methods 2 and 3 | 10 000 cycles |
| EN ISO 22775 | Metal accessories corrosion resistance | Method 1 | No worse than grade 4 |
| | | Method 2 | No worse than grade 4 |
| EN ISO 22776 | Touch and close fasteners shear strength | Before repeated closing | 70 kPa (minimum shear) |
| | | After repeated closing | 60 kPa (after 5 000 opening/closing cycles) |
| EN ISO 22777 | Touch and close fasteners peel strength | Before repeated closing | 0,08 N/mm (minimum peel) |
| | | After repeated closing | 0,06 N/mm (after 5 000 opening/closing cycles) |

4.4 Performance requirements for accessories components for infants' and indoor footwear

See Table 3.

Table 3 — Test methods and properties for infants' and indoor footwear

| Test method | Property | Requirement | |
|--------------|--|-------------------------|--|
| EN ISO 22774 | Laces and eyelet abrasion resistance | Method 1 | 5 000 cycles |
| | | Methods 2 and 3 | 5 000 cycles |
| EN ISO 22775 | Metal accessories corrosion resistance | Method 1 | No worse than grade 4 |
| | | Method 2 | No worse than grade 4 |
| EN ISO 22776 | Touch and close fasteners shear strength | Before repeated closing | 50 kPa (minimum shear) |
| | | After repeated closing | 40 kPa (after 5 000 opening/closing cycles) |
| EN ISO 22777 | Touch and close fasteners peel strength | Before repeated closing | 0,08 N/mm (minimum peel) |
| | | After repeated closing | 0,06 N/mm (after 5 000 opening/closing cycles) |

5 Marking and labelling

Marking and labelling is optional.

If reference to this Technical Report is made, only accessories complying with all the essential requirements can be marked. In this case, this shall be clearly marked by the manufacturer either directly on the product or by a label with the following additional information:

- a) the manufacturer's name, trade mark or identification mark.
- b) the type of footwear for which the accessories shall be used as indicated in Table 4.
- c) reference to this Technical Report.

Any reference to compliance with this Technical Report shall not be put in a part of the accessories which could be visible when the footwear is finished.

If the component complies, additional requirements agreed upon between the component supplier and the footwear manufacturer may be specified in the marking or label, making reference to the corresponding subclause.

Table 4 — Codes for various types of footwear

| Type of footwear | Code |
|-------------------------|------|
| General sports footwear | SP |
| School footwear | SC |
| Casual footwear | CS |
| Men's town footwear | MT |
| Cold weather footwear | CW |
| Women's town footwear | WT |
| Fashion footwear | FS |
| Infants' footwear | IF |
| Indoor footwear | IN |

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ICS 61.060

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