



**iTeh STANDARD PREVIEW**  
**(standards.iteh.ai)**

SIST-TP CEN ISO/TR 20882:2007

<https://standards.iteh.ai/catalog/standards/sist/4200fc7f-cf2a-4a33-8cb8-f234379ce2af/sist-tp-cen-iso-tr-20882-2007>

ICS 61.060

English Version

**Footwear - Performance requirements for components for  
footwear - Lining and insoles (ISO/TR 20882:2007)**

Chaussures - Exigences de performance pour les  
composants des chaussures - Doublures et premières de  
propreté (ISO/TR 20882:2007)

Schuhe - Anforderungen an das Gebrauchsverhalten von  
Schuhbestandteilen - Futter und Einlegesohlen (ISO/TR  
20882:2007)

This Technical Report was approved by CEN on 21 August 2006. It has been drawn up by the Technical Committee CEN/TC 309.

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.

**iTeh STANDARD PREVIEW**  
**(standards.iteh.ai)**

[SIST-TP CEN ISO/TR 20882:2007](https://standards.iteh.ai/catalog/standards/sist/4200fc7f-cf2a-4a33-8cb8-f234379ce2af/sist-tp-cen-iso-tr-20882-2007)

<https://standards.iteh.ai/catalog/standards/sist/4200fc7f-cf2a-4a33-8cb8-f234379ce2af/sist-tp-cen-iso-tr-20882-2007>



EUROPEAN COMMITTEE FOR STANDARDIZATION  
COMITÉ EUROPÉEN DE NORMALISATION  
EUROPÄISCHES KOMITEE FÜR NORMUNG

**Management Centre: rue de Stassart, 36 B-1050 Brussels**

## Foreword

This document (CEN ISO/TR 20882:2007) has been prepared by Technical Committee CEN/TC 309 "Footwear", the secretariat of which is held by AENOR, in collaboration with Technical Committee ISO/TC 216 "Footwear".

# iTeh STANDARD PREVIEW (standards.iteh.ai)

[SIST-TP CEN ISO/TR 20882:2007](https://standards.iteh.ai/catalog/standards/sist/4200fc7f-cf2a-4a33-8cb8-f234379ce2af/sist-tp-cen-iso-tr-20882-2007)

<https://standards.iteh.ai/catalog/standards/sist/4200fc7f-cf2a-4a33-8cb8-f234379ce2af/sist-tp-cen-iso-tr-20882-2007>

---

---

**Footwear — Performance requirements  
for components for footwear — Lining  
and insoles**

*Chaussures — Exigences de performance pour les composants des  
chaussures — Doublures et premières de propreté*

**iTeh STANDARD PREVIEW**  
**(standards.iteh.ai)**

[SIST-TP CEN ISO/TR 20882:2007](https://standards.iteh.ai/catalog/standards/sist/4200fc7f-cf2a-4a33-8cb8-f234379ce2af/sist-tp-cen-iso-tr-20882-2007)

[https://standards.iteh.ai/catalog/standards/sist/4200fc7f-cf2a-4a33-8cb8-  
f234379ce2af/sist-tp-cen-iso-tr-20882-2007](https://standards.iteh.ai/catalog/standards/sist/4200fc7f-cf2a-4a33-8cb8-f234379ce2af/sist-tp-cen-iso-tr-20882-2007)



**PDF disclaimer**

This PDF file may contain embedded typefaces. In accordance with Adobe's licensing policy, this file may be printed or viewed but shall not be edited unless the typefaces which are embedded are licensed to and installed on the computer performing the editing. In downloading this file, parties accept therein the responsibility of not infringing Adobe's licensing policy. The ISO Central Secretariat accepts no liability in this area.

Adobe is a trademark of Adobe Systems Incorporated.

Details of the software products used to create this PDF file can be found in the General Info relative to the file; the PDF-creation parameters were optimized for printing. Every care has been taken to ensure that the file is suitable for use by ISO member bodies. In the unlikely event that a problem relating to it is found, please inform the Central Secretariat at the address given below.

**iTeh STANDARD PREVIEW**  
**(standards.iteh.ai)**

[SIST-TP CEN ISO/TR 20882:2007](https://standards.iteh.ai/catalog/standards/sist/4200fc7f-cf2a-4a33-8cb8-f234379ce2af/sist-tp-cen-iso-tr-20882-2007)

<https://standards.iteh.ai/catalog/standards/sist/4200fc7f-cf2a-4a33-8cb8-f234379ce2af/sist-tp-cen-iso-tr-20882-2007>

© ISO 2007

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office  
Case postale 56 • CH-1211 Geneva 20  
Tel. + 41 22 749 01 11  
Fax + 41 22 749 09 47  
E-mail [copyright@iso.org](mailto:copyright@iso.org)  
Web [www.iso.org](http://www.iso.org)

Published in Switzerland

## Contents

Page

Foreword.....	iv
<b>1 Scope .....</b>	<b>1</b>
<b>2 Normative references .....</b>	<b>1</b>
<b>3 Terms and definitions.....</b>	<b>2</b>
<b>4 Requirements .....</b>	<b>2</b>
<b>4.1 General.....</b>	<b>2</b>
<b>4.2 Performance requirements for lining and insock components for general purpose sports footwear .....</b>	<b>2</b>
<b>4.3 Performance requirements for lining and insocks components for school footwear .....</b>	<b>4</b>
<b>4.4 Performance requirements for lining and insocks components for casual footwear.....</b>	<b>6</b>
<b>4.5 Performance requirements for lining and insocks components for men's town footwear .....</b>	<b>8</b>
<b>4.6 Performance requirements for lining and insocks components for cold weather footwear .....</b>	<b>10</b>
<b>4.7 Performance requirements for lining and insocks components for women's town footwear .....</b>	<b>12</b>
<b>4.8 Performance requirements for lining and insocks components for fashion footwear .....</b>	<b>14</b>
<b>4.9 Performance requirements for lining and insocks components for infants' footwear .....</b>	<b>16</b>
<b>4.10 Performance requirements for lining and insocks components for indoor footwear.....</b>	<b>18</b>
<b>5 Marking and labelling .....</b>	<b>20</b>

[SIST-TP CEN ISO/TR 20882:2007](https://standards.iteh.ai/catalog/standards/sist/4200fc7f-cf2a-4a33-8cb8-f234379ce2af/sist-tp-cen-iso-tr-20882-2007)

<https://standards.iteh.ai/catalog/standards/sist/4200fc7f-cf2a-4a33-8cb8-f234379ce2af/sist-tp-cen-iso-tr-20882-2007>

## 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.

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 20882 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 — Lining and insocks

## 1 Scope

This Technical Report establishes the performance requirements for lining and insock components for footwear (not for finished footwear), irrespective of the material, in order to assess the suitability for the end use and/or fitness for purpose. It also establishes the test methods to be used to evaluate the compliance with the requirements.

This Technical Report applies to lining and insocks for all kinds 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.

## 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.

- <https://standards.iteh.ai/catalog/standards/sist/4200fc7f-cf2a-4a33-8cb8-1254379cc2a1/sist-tp-cen-iso-t-20882-2007>  
ISO 31-0, *Quantities and units — Part 0: General principles*
- ISO 17694, *Footwear — Test methods for uppers and lining — Flex resistance*
- ISO 17696, *Footwear — Test methods for uppers, lining and insocks — Tear strength*
- ISO 17697, *Footwear — Test methods for uppers, lining and insocks — Seam strength*
- ISO 17699, *Footwear — Test methods for uppers and lining — Water permeability and absorption*
- EN ISO 17700, *Footwear — Test methods for uppers, linings and insocks — Colour fastness to rubbing*
- ISO 17704, *Footwear — Test methods for uppers, lining and insocks — Abrasion resistance*
- ISO 17705, *Footwear — Test methods for uppers, lining and insocks — Thermal insulation*
- ISO 17709, *Footwear — Sampling location, preparation and duration of conditioning of samples and test pieces*
- EN ISO 19952, *Footwear — Vocabulary*
- ISO 20869, *Footwear — Test methods for outsoles, insoles, lining and insocks — Water soluble content*
- ISO 22649, *Footwear — Test methods for insoles and insocks — Water absorption and desorption*
- ISO 22652, *Footwear — Test methods for insoles, lining and insocks — Perspiration resistance*
- ISO 22653, *Footwear — Test methods for lining and insocks — Static friction*

### 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 two different types of performance requirement.

The essential requirements shall all be taken into account. The additional ones can be additionally agreed by the component supplier and the footwear manufacturer as indicated in 4.2 to 4.10.

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 lining and insock components for general purpose sports footwear

#### 4.2.1 Essential requirements (lining)

These essential requirements shall be fulfilled in all cases. See Table 1.

**Table 1 — Test methods and properties for general sports footwear — Essential requirements for linings**

Test method	Property	Requirement
ISO 17696	Tear strength	lining $\geq$ 15 N reinforcing lining $\geq$ 20 N (if it applies)
ISO 17697	Lining seam strength	<u>method A</u> $\geq$ 4,0 N/mm
EN ISO 17700	Colour fastness	<u>method A</u> staining $\geq$ 3 (grey scale) after 50 cycles with perspiration solution
ISO 17704	Abrasion resistance	25 600 cycles dry 12 800 cycles wet without hole through the thickness of the material component

#### 4.2.2 Essential requirements (insocks)

These essential requirements shall be fulfilled in all cases. See Table 2.

**Table 2 — Test methods and properties for general sports footwear — Essential requirements for insocks**

Test method	Property	Requirement
EN ISO 17700	Colour fastness	method A staining ≥ 3 (grey scale) after 50 cycles with perspiration solution
ISO 17704	Abrasion resistance	25 600 cycles dry 12 800 cycles wet
ISO 22649	Insocks water absorption and desorption	(method B) absorption ≥ 70 mg/cm <sup>2</sup> desorption ≥ 60 %

#### 4.2.3 Additional requirements (lining)

These additional requirements should be agreed by both component supplier and footwear manufacturer. See Table 3.

**Table 3 — Test methods and properties for general sports footwear — Additional requirements for linings**

Subclause	Test method	Property	Requirement
4.2.3.1	ISO 17699	Lining water vapour permeability and absorption	WVP ≥ 2,0 mg/cm <sup>2</sup> .h if WVP of upper < 0,8 mg/cm <sup>2</sup> .h then WVA of lining ≥ 8,0 mg/cm <sup>2</sup>
4.2.3.2	ISO 20869	Water soluble substances content	≤ 1,5 % sulfated ashed water soluble (SAWS) ≤ 16 % total water soluble (TWS) (testing not necessary to certain lining materials) <sup>a</sup>
4.2.3.3	ISO 22652	Perspiration resistance	After five cycles the component shall not develop any cracks when bent, and must keep 80 % tear resistance (testing not necessary to certain lining materials) <sup>a</sup>
4.2.3.4	ISO 22653	Static friction	≥ 0,7
4.2.3.5	ISO 17694	Flex resistance	dry 15 000 cycles without visible damage
<sup>a</sup> This requirement is considered essential for leather.			