

---

---

**Footwear — Test methods for uppers  
— Resistance to rubbing using a  
rubber strip**

*Chaussures — Méthodes d'essai pour les tiges — Résistance au  
frottement à l'aide d'une bande en caoutchouc*



This document is a preview generated by EKO



# **COPYRIGHT PROTECTED DOCUMENT**

© ISO 2020

All rights reserved. Unless otherwise specified, or required in the context of its implementation, no part of this publication may be reproduced or utilized otherwise in any form or by any means, electronic or mechanical, including photocopying, or posting on the internet or an intranet, without prior written permission. Permission can be requested from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office  
CP 401 • Ch. de Blandonnet 8  
CH-1214 Vernier, Geneva  
Phone: +41 22 749 01 11  
Email: [copyright@iso.org](mailto:copyright@iso.org)  
Website: [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>1</b>
<b>4 Principle .....</b>	<b>1</b>
<b>5 Apparatus .....</b>	<b>1</b>
<b>6 Preparation of test pieces .....</b>	<b>4</b>
6.1 Dry rubbing resistance .....	4
6.2 Wet rubbing resistance .....	4
<b>7 Procedure .....</b>	<b>4</b>
7.1 Dry rubbing resistance .....	4
7.2 Wet rubbing resistance .....	5
<b>8 Expression of results .....</b>	<b>5</b>
<b>9 Test report .....</b>	<b>5</b>
<b>Bibliography .....</b>	<b>6</b>

## 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.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see [www.iso.org/directives](http://www.iso.org/directives)).

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. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see [www.iso.org/patents](http://www.iso.org/patents)).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation of 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 [www.iso.org/iso/foreword.html](http://www.iso.org/iso/foreword.html).

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

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at [www.iso.org/members.html](http://www.iso.org/members.html).

# Footwear — Test methods for uppers — Resistance to rubbing using a rubber strip

## 1 Scope

This document specifies a method for the determination of the rubbing resistance of leather and synthetic materials using rubber.

The method aims to establish testing conditions that are similar to those of the practical use of footwear subjected to drastic stress, as is the case of hiking or children's footwear, where the upper of one of the shoes is expected to rub with the sole of the other.

This method is applicable to all types of leather and synthetic materials intended for shoe uppers.

## 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 105-A02, *Textiles — Tests for colour fastness — Part A02: Grey scale for assessing change in colour*

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

## 3 Terms and definitions

No terms and definitions are listed in this document.

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/>

## 4 Principle

The shoe upper material is drastically rubbed with the abrading rubber element under a given pressure for a given number of 'to-and-fro' motions (cycles).

## 5 Apparatus

The test apparatus suitable for this test shall incorporate the following elements:

### 5.1 A carriage with the following:

- a) horizontal, completely planar metal platform;
- b) holder for fastening the material to be tested leaving 80 mm freely exposed;
- c) device that allows the test-piece to be extended at least 10 % in the direction of rubbing.