



**International
Standard**

ISO 20537

**Footwear — Identification of
defects during visual inspection —
Vocabulary**

First edition

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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 document 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).

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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.

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.

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Introduction

Visual inspection is important for manufacturers, suppliers, inspection organizations and costumers as one of the quality indicators of footwear products. This document is not only intended as a basis for assessing footwear appearance defects but also as a reference material and training material for the footwear industry.

The presence of one of these defects in footwear does not automatically imply that the footwear is substandard. Suppliers and purchasers can still reach an agreement on the scope and level of acceptance for defects in the goods, based on the intended use of the footwear.

Due to the development of material and technology in the footwear industry, as well as insufficient photographic resources, it is impossible to define all terms for identification of defects during visual inspection of footwear. The list of terms given in this document is not exhaustive.

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Footwear — Identification of defects during visual inspection — Vocabulary

1 Scope

This document defines the most common terms related to defects that occur in the manufacture, storage and usage of footwear and that can be determined during visual inspection of the end product.

NOTE The photos are given as examples and do not represent all possible instances.

2 Normative references



There are no normative references in this document.

3 Terms and definitions

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

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

3.1 General defects

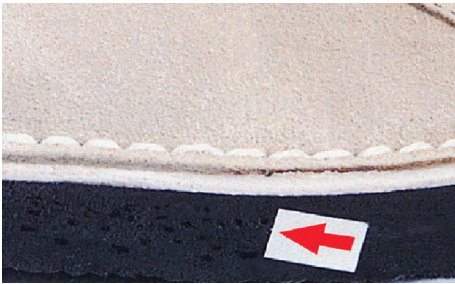




| Term and definition | Examples |
|---|--|
| <p>3.1.1 colour variation obvious difference in colour that can be seen in the same area within a pair, or in one component part or in the adjacent areas of one item of footwear Note 1 to entry: Intentional designs are not included.</p> |  |
| <p>3.1.2 damaged shoe footwear that has changed in appearance due to careless operation that adversely affects its performance</p> |  |


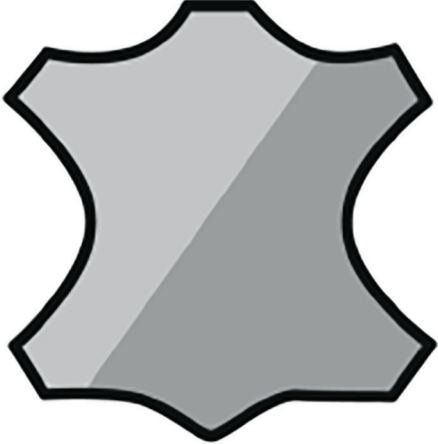

| Term and definition | Examples |
|---|--|
| <p>3.1.3 inconformity with the design situation when a product does not conform to the reference sample or drawing which both parties have agreed upon</p> | <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">  <p>drawing</p> </div> <div style="text-align: center;">  <p>product</p> </div> </div> |
| <p>3.1.4 mildewing infecting process by microorganisms on material at any part of the footwear</p> | <div style="text-align: center;">   </div> |
| <p>3.1.5 non-compliant box shoe box that does not conform with the footwear inside</p> <p style="color: red; font-size: small;"> https://standards.iteh.ai/catalog/standards/iso/05127c9d-d965-42c2-888b-b41082269750/iso-20537 </p> | <div style="text-align: center;">  </div> |

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| Term and definition | Examples |
|---|--|
| <p>3.1.6 poor printing printing on footwear that is incomplete or unclear</p> |  |
| <p>3.1.7 soiled shoe shoe with dirt or adhesive mark on the upper, lining or sides of the sole due to careless handling or cleaning</p> |  |
| <p>3.1.8 spue white frost-like layer that appears on the surface of footwear</p> |  |
| <p>3.1.9 weave fault defect that reduces the expected performance of the fabric Note 1 to entry: Related defects are described in ISO 8498 and ISO 8499.</p> |  |


3.2 Defects in materials aspects

| Term and definition | Examples |
|---|--|
| <p>3.2.1 air hole small hole which develops in the colloid structure of materials</p> |  |
| <p>3.2.2 colour migration discolouration caused by movement of colour from one material to another</p> |  |
| <p>3.2.3 crazing cracks in the coating of upper materials</p> |  |
| <p>3.2.4 discolouration staining or fading of the original material colour, either in discrete areas or across the whole product</p> |  |
| <p>3.2.5 impurity small particles that do not belong to the original formulation and show on the material</p> |  |

| Term and definition | Examples |
|---|--|
| <p>3.2.6 pit small hole in the surface of footwear</p> |  |
| <p>3.2.7 shade variation differences within materials that cause a difference in the shade of the finished footwear</p> |  |
| <p>3.2.8 sulfur blooming yellow or white layer that appears on the surface of rubber materials</p> |  |

3.3 Defects in components

3.3.1 Defects in upper

| Term and definition | Examples |
|---|--|
| <p>3.3.1.1 broken folding folding of upper over the edge that has broken during the making or wearing process</p> |  |