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Footwear — Test methods for outsoles — Determination of split tear strength and delamination resistance

Chaussures — Méthodes d'essai applicables aux semelles d'usure — Détermination de la force de déchirure sur refente et résistance au délaminage

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ISO copyright office
CP 401 • Ch. de Blandonnet 8
CH-1214 Vernier, Geneva
Phone: +41 22 749 01 11
Fax: +41 22 749 09 47
Email: copyright@iso.org
Website: www.iso.org

Published in Switzerland

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Foreword

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

This second edition cancels and replaces the first edition (ISO 20875:2001), which has been technically revised.

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Footwear — Test methods for outsoles — Determination of split tear strength and delamination resistance

1 Scope

This document specifies a method for the determination of the split tear strength and delamination resistance for outsoles.

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 7500-1, *Metallic materials — Calibration and verification of static uniaxial testing machines — Part 1: Tension/compression testing machines — Calibration and verification of the force-measuring system*

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
delamination resistance
force required to propagate delamination of the adhesive layer or joint interface if a multilayer outsole is composed of an adhesive layer, divided by the width of the test pieces

3.2
split tear strength
force required to propagate a cut in a test piece by tearing

4 Apparatus and material

The following apparatus and material shall be used.

4.1 Tensile-testing machine.

The tensile-testing machine shall comply with the requirements of ISO 7500-1, to an accuracy corresponding to grade B, with a constant rate of traverse of 100 mm/min ± 10 mm/min. A low-inertia machine having autographic force recording facilities is essential.

4.2 Splitting jig and knife to use for making the initial cuts (see Figure 1).

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