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Laminate floor coverings — Determination of locking strength for mechanically assembled panels

Revêtements de sol stratifiés — Détermination de la résistance à la traction des lames assemblées mécaniquement

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Foreword

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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).

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For an explanation on the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the WTO principles in the Technical Barriers to Trade (TBT) see the following URL: Foreword - Supplementary information

The committee responsible for this document is ISO/TC 219, *Floor coverings*.

This second edition cancels and replaces the first edition (ISO 24334:2006), which has been technically revised.

Laminate floor coverings — Determination of locking strength for mechanically assembled panels

1 Scope

This International Standard specifies a method for the determination of the locking strength of joints between laminate floor covering panels which are assembled with both vertical and horizontal mechanical locking systems.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. 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 — Verification of static uniaxial testing machines — Part 1: Tension/compression testing machines — Verification and calibration of the force-measuring system*

3 Principle

Mechanically assembled panels with mechanical locking systems are pulled apart to an opening of 0,20 mm or until the lock breaks.

4 Apparatus

The following set of equipment is needed:

4.1 Tensile testing machine, verified and calibrated in accordance with ISO 7500-1 and conforming to class 3 for the force range which is applied for the locking strength measurement.

4.2 External extensometer or optical measurement system, with an accuracy of 0,01 mm.

4.3 Two clamping devices, attached to the tensile testing machine to hold the grippers.

NOTE Zwick/Roell clamps Type 8355[1)], 20 kN are found suitable for the purpose.

4.4 Two grippers, 50 mm × 210 mm, attached to the clamping devices to hold the specimen with an anti-slip coating material (see Figure 6 and Figure 7).

4.5 Sliding calliper, with an accuracy of 0,1 mm, to determine the length, width, and thickness of the specimen.

4.6 Saw, for cutting the specimen.

4.7 Balance, with an accuracy of 0,1 g.

1) Zwick/Roell clamps Type 8355 are examples of suitable products available commercially. This information is given for the convenience of users of this document and does not constitute an endorsement by ISO of these products. Equivalent products may be used if they can be shown to lead to the same results.