

Resilient and laminate floor coverings - Determination of the effect of simulated movement of a furniture leg (ISO 16581:2014)

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN ISO 16581:2019 sisaldab Euroopa standardi EN ISO 16581:2019 ingliskeelset teksti.	This Estonian standard EVS-EN ISO 16581:2019 consists of the English text of the European standard EN ISO 16581:2019.
Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas	This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation.
Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 05.06.2019.	Date of Availability of the European standard is 05.06.2019.
Standard on kättesaadav Eesti Standardikeskusest.	The standard is available from the Estonian Centre for Standardisation.

Tagasisidet standardi sisu kohta on võimalik edastada, kasutades EVS-i veebilehel asuvat tagasiside vormi või saates e-kirja meiliaadressile standardiosakond@evs.ee.

ICS 97.150

Standardite reprodutseerimise ja levitamise õigus kuulub Eesti Standardikeskusele

Andmete paljundamine, taastekitamine, kopeerimine, salvestamine elektroonsesse süsteemi või edastamine ükskõik millises vormis või millisel teel ilma Eesti Standardikeskuse kirjaliku loata on keelatud.

Kui Teil on küsimusi standardite autorikaitse kohta, võtke palun ühendust Eesti Standardikeskusega:

Koduleht www.evs.ee; telefon 605 5050; e-post info@evs.ee

The right to reproduce and distribute standards belongs to the Estonian Centre for Standardisation

No part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying, without a written permission from the Estonian Centre for Standardisation.

If you have any questions about copyright, please contact Estonian Centre for Standardisation:

Homepage www.evs.ee; phone +372 605 5050; e-mail info@evs.ee

EUROPEAN STANDARD

EN ISO 16581

NORME EUROPÉENNE

EUROPÄISCHE NORM

June 2019

ICS 97.150

Supersedes EN 424:2001

English Version

Resilient and laminate floor coverings - Determination of the effect of simulated movement of a furniture leg (ISO 16581:2014)

Revêtements de sol résilient et laminé - Détermination de l'effet d'un mouvement simulé d'un pied de meuble (ISO 16581:2014)

Elastische und Laminat-Bodenbeläge - Bestimmung des Verhaltens bei einer nachgeahmten Verschiebung eines Möbelfußes (ISO 16581:2014)

This European Standard was approved by CEN on 8 April 2019.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CEN member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

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



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

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

European foreword

The text of ISO 16581:2014 has been prepared by Technical Committee ISO/TC 219 "Floor coverings" of the International Organization for Standardization (ISO) and has been taken over as EN ISO 16581:2019 by Technical Committee CEN/TC 134 "Resilient, textile and laminate floor coverings" the secretariat of which is held by NBN.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by December 2019, and conflicting national standards shall be withdrawn at the latest by December 2019.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN shall not be held responsible for identifying any or all such patent rights.

This document supersedes EN 424:2001.

According to the CEN-CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

Endorsement notice

The text of ISO 16581:2014 has been approved by CEN as EN ISO 16581:2019 without any modification.

Contents

	Page
Foreword	iv
1 Scope	1
2 Principle	1
3 Apparatus	1
4 Sampling and preparation of test piece	3
5 Conditioning	3
6 Procedure	3
6.1 Test paths.....	3
6.2 Testing.....	3
7 Expression of results	4
7.1 Resilient floor coverings.....	4
7.2 Laminate floor coverings.....	4
8 Test report	4

Resilient and laminate floor coverings — Determination of the effect of simulated movement of a furniture leg

1 Scope

This International Standard specifies a method for determining the resistance of an installed resilient or laminate floor covering to the mechanical stress resulting from the simulated movement of a furniture leg.

2 Principle

The resistance of an installed floor covering to the movement of a furniture leg with rounded edges and different loadings is assessed for deterioration of surface flatness, surface damage, cuts of varying depths, and penetrating edges.

3 Apparatus

The apparatus consists of following elements (see also [Figure 1](#)):

3.1 Frame, comprising two guide rails (diameter of 100 mm) supporting the motor and the control capstan and fixed relative to the test specimen.

The unloaded peripheral speed shall be 300 mm/s.

3.2 Carriage, with a wheel base designed to prevent jerky movements, supported, and guided by rails.

The traction device is fixed to the carriage in such a way that it remains perfectly stable during the test. The tension shall be strictly perpendicular to the axis of the furniture leg.

3.3 Force-indicating device, linked to the cable and to the carriage that permits identification of the maximum tensile stress value.

3.4 Three square brass or stainless feet, conforming to the dimensions given in [Table 1](#).

The foot base shall be always parallel to the plane of the floor covering surface even during the displacement of the furniture leg. The device should be designed so that the applied mass corresponds to the target when the foot is in motion. Particular attention should be paid to floor coverings with a high deformation to ensure that the vertical displacement of the foot is sufficient to support the deformation of the flooring.

3.5 Platform, can be weighted with masses of respectively 32 kg, 70 kg, or 100 kg, sliding vertically in the carriage with slight friction and resting on the test piece by means of one of the feet.

Table 1 — Dimensions of feet

Type	Applied mass kg	Horizontal edge radius <i>RH</i> mm	Vertical edge radius <i>RV</i> mm	Distance between opposite vertical faces mm
3	70 ^{+0,35} kg	3 ± 0,05	0,1 ± 0,05	34,6 ± 0,05
2	100 ^{+0,5} kg	2 ± 0,05	0,1 ± 0,05	33,6 ± 0,05
0	32 ^{+0,16} kg	0,1 ± 0,05	0,1 ± 0,05	31,7 ± 0,05