



NSAI
Standards

Irish Standard
I.S. EN ISO 9405:2017

Textile floor coverings - Assessment of changes in appearance (ISO 9405:2015)

I.S. EN ISO 9405:2017

Incorporating amendments/corrigenda/National Annexes issued since publication:

The National Standards Authority of Ireland (NSAI) produces the following categories of formal documents:

I.S. xxx: Irish Standard — national specification based on the consensus of an expert panel and subject to public consultation.

S.R. xxx: Standard Recommendation — recommendation based on the consensus of an expert panel and subject to public consultation.

SWiFT xxx: A rapidly developed recommendatory document based on the consensus of the participants of an NSAI workshop.

This document replaces/revises/consolidates the NSAI adoption of the document(s) indicated on the CEN/CENELEC cover/Foreword and the following National document(s):

NOTE: The date of any NSAI previous adoption may not match the date of its original CEN/CENELEC document.

This document is based on:

EN ISO 9405:2017

Published:

2017-06-14

This document was published under the authority of the NSAI and comes into effect on:

2017-07-02

ICS number:

97.150

NOTE: If blank see CEN/CENELEC cover page

NSAI
1 Swift Square,
Northwood, Santry
Dublin 9

T +353 1 807 3800
F +353 1 807 3838
E standards@nsai.ie
W NSAI.ie

Sales:
T +353 1 857 6730
F +353 1 857 6729
W standards.ie

Údarás um Chaighdeáin Náisiúnta na hÉireann

National Foreword

I.S. EN ISO 9405:2017 is the adopted Irish version of the European Document EN ISO 9405:2017, Textile floor coverings - Assessment of changes in appearance (ISO 9405:2015)

This document does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

For relationships with other publications refer to the NSAI web store.

Compliance with this document does not of itself confer immunity from legal obligations.

In line with international standards practice the decimal point is shown as a comma (,) throughout this document.

This page is intentionally left blank

EUROPEAN STANDARD

EN ISO 9405

NORME EUROPÉENNE

EUROPÄISCHE NORM

June 2017

ICS 97.150

Supersedes EN 1471:1996

English Version

Textile floor coverings - Assessment of changes in appearance (ISO 9405:2015)

Revêtements de sol textiles - Évaluation des changements d'aspect (ISO 9405:2015)

Textile Bodenbeläge - Beurteilung der Aussehensveränderung (ISO 9405:2015)

This European Standard was approved by CEN on 8 June 2017.

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: Avenue Marnix 17, B-1000 Brussels

EN ISO 9405:2017 (E)

Contents	Page
European foreword.....	3

European foreword

The text of ISO 9405:2015 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 9405:2017 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 2017, and conflicting national standards shall be withdrawn at the latest by December 2017.

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

This document supersedes EN 1471:1996.

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 9405:2015 has been approved by CEN as EN ISO 9405:2017 without any modification.

This page is intentionally left blank

**INTERNATIONAL
STANDARD**

**ISO
9405**

Second edition
2015-02-01

**Textile floor coverings — Assessment
of changes in appearance**

Revêtements de sol textiles — Évaluation des changements d'aspect



Reference number
ISO 9405:2015(E)

© ISO 2015

ISO 9405:2015(E)



COPYRIGHT PROTECTED DOCUMENT

© ISO 2015

All rights reserved. Unless otherwise specified, 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
Case postale 56 • CH-1211 Geneva 20
Tel. + 41 22 749 01 11
Fax + 41 22 749 09 47
E-mail copyright@iso.org
Web www.iso.org

Published in Switzerland

Contents

	Page
Foreword	iv
1 Scope	1
2 Normative references	1
3 Terms and definitions	1
4 Principle	2
5 General apparatus	2
5.1 Viewing cabinet.....	2
5.2 Digital images (reference scales for assessing appearance change).....	3
5.3 Large grey scales.....	3
6 Selection and preparation of specimens	3
7 Assessment of change	3
7.1 Assessors.....	3
7.2 Procedure.....	3
7.3 Change of colour.....	4
7.4 Test report.....	4
Annex A (informative) Precision of the test method	5
Bibliography	6

ISO 9405:2015(E)

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).

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).

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

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 9405:2001), which has been technically revised.

Textile floor coverings — Assessment of changes in appearance

1 Scope

This International Standard describes the procedures for assessing the overall change in appearance of textile floor coverings caused by Vettermann drum and hexapod tumbler testers according to ISO 10361 and ISO 4918.

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 105-A01, *Textiles — Tests for colour fastness — Part A01: General principles of testing*

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

ISO 2424, *Textile floor coverings — Vocabulary*

ISO 4918, *Resilient, textile and laminate floor coverings — Castor chair test*

ISO 10361, *Textile Floor coverings — Production of changes in appearance by means of Vettermann drum and hexapod tumbler testers*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 2424 and the following apply:

3.1

change in surface appearance

difference between a fatigued and an unfatigued specimen

Note 1 to entry: The degree of change is expressed by reference to standard digital image reference scales and by reference to large grey scales, grade 5 representing no change and grade 1 an extreme change.

Note 2 to entry: Changes in structure, roughness, colour, and/or pattern of a textile floor covering may contribute to change in appearance. It is not always possible to distinguish clearly between the factors since each can have an interaction with others.

3.2

change in structure

textural change

visible change in configuration of loops and tufts and/or fibres at the use-surface of a textile floor covering

3.3

loss of tuft definition

decrease of the pile definition caused by the bursting, opening, and untwisting of the pile yarn and/or decrimping of the fibres in the use-surface of a textile floor covering

3.4

crushing

flattening

loss of thickness of a textile floor covering under the action of a static or dynamic load

This is a free preview. Purchase the entire publication at the link below:

[Product Page](#)

-
- [Looking for additional Standards? Visit Intertek Inform Infostore](#)
 - [Learn about LexConnect, All Jurisdictions, Standards referenced in Australian legislation](#)
-