



SLOVENSKI STANDARD
SIST EN 13442:2023

01-junij-2023

Nadomešča:
SIST EN 13442:2013

**Lesene in parketne talne obloge ter leseni stenski in stropni opaži - Ugotavljanje
odpornosti proti kemijskim snovem**

Wood and parquet flooring and wood panelling and cladding - Determination of the
resistance to chemical agents

Holz- und Parkettfußböden und Wand- und Deckenbekleidungen aus Holz - Bestimmung
der chemischen Widerstandsfähigkeit

Planchers et parquets en bois et lambris et bardages en bois - Détermination de la
résistance aux agents chimiques

Ta slovenski standard je istoveten z: EN 13442:2023

ICS:

79.080

Polizdelki iz lesa

Semi-manufactures of timber

SIST EN 13442:2023

en,fr,de

EUROPEAN STANDARD

EN 13442

NORME EUROPÉENNE

EUROPÄISCHE NORM

April 2023

ICS 79.080

Supersedes EN 13442:2013

English Version

Wood and parquet flooring and wood panelling and cladding - Determination of the resistance to chemical agents

Planchers et parquets en bois et lambris et bardages en bois - Détermination de la résistance aux agents chimiques

Holz- und Parkettfußböden und Wand- und Deckenbekleidungen aus Holz - Bestimmung der chemischen Widerstandsfähigkeit

This European Standard was approved by CEN on 3 March 2023.

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EUROPEAN COMMITTEE FOR STANDARDIZATION
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European foreword

This document (EN 13442:2023) has been prepared by Technical Committee CEN/TC 175 “Round and sawn timber”, the secretariat of which is held by AFNOR.

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of an identical text or by endorsement, at the latest by October 2023, and conflicting national standards shall be withdrawn at the latest by October 2023.

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 13442:2013.

The main changes compared to the previous edition are listed below:

- 3.6 and 3.7, new definitions;
- 6.1.2, light sources has been modified;
- 6.2, Test equipment has been modified;
- Table 1, test agent has been modified;
- Table 2, has been added;
- 8.2, Procedure has been clarified;
- 9.3, has been deleted;
- Figure 2, has been deleted.

Any feedback and questions on this document should be directed to the users’ national standards body. A complete listing of these bodies can be found on the CEN website.

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EN 13442:2023 (E)

Introduction

This document is one of a series of standards about wood floorings (including parquet) and wood panelling and cladding.

iTeh STANDARD PREVIEW
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SIST EN 13442:2023

<https://standards.iteh.ai/catalog/standards/sist/87636e7f-ffe1-4ac2-88d9-7e9c27381a3e/sist-en-13442-2023>

1 Scope

This document specifies a test method to determine the resistance of the surface of an element of wood flooring, panelling and cladding, to a predetermined list of chemical agents they may be exposed to during their service life.

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.

EN 13756, *Wood flooring and parquet - Terminology*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN 13756 and the following apply.

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

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

3.1 test piece

part, of a size suitable for testing, taken from an element

3.2 test specimen

either a full element or an assembly of elements to be tested

3.3 test surface

part of the test piece, where the test area is located

Note 1 to entry: For products made from small elements the test piece can be the same as the test specimen.

3.4 test area

area under the Petri dish

3.5 reference area

any unexposed surface of the test specimen close to the test area but outside the Petri dish

EN 13442:2023 (E)**3.6****film-forming coating**

coating that forms a continuous, perceivable and measurable film on a wood surface

Note 1 to entry: A continuous coating film can be produced in planed surfaces of coniferous wood species (e.g. spruce, pine and larch) and ring porous hardwood species (e.g. oak, ash and elm) above a dry film thickness of approximately 20 µm. On diffuse-porous hardwood species (e.g. maple, beech and birch) lower dry film thicknesses can result in continuous coating films.

Note 2 to entry: On structured surfaces the dry film thickness can be up to 30 µm.

[SOURCE: ISO 5323:2019, 3.47, modified —adding note 2 to entry]

3.7**non-film-forming coating**

coating which does not form a continuous physical film

Note 1 to entry: Oiled and waxed surfaces or combinations of both with a thickness of the dry coating film < 20 µm are examples for non-film-forming coatings.

4 Principle

A liquid test agent impregnating a saturated paper is laid on a surface, which is then covered by a glass Petri dish. After a specified period of time, removal of the paper, washing and drying of the surface and examination for visible change. Assessment of the test results in terms of a numerical rating code.

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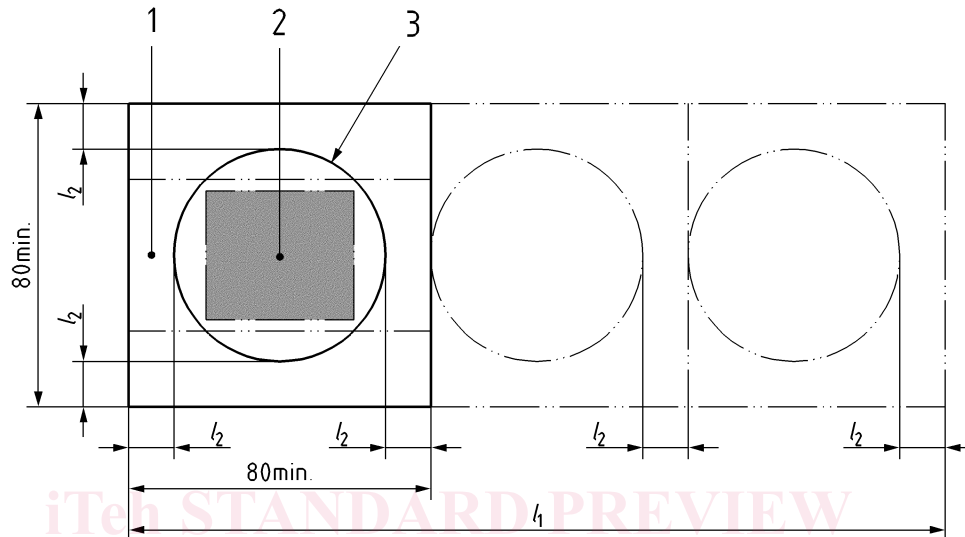
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5 Test pieces and test specimens

5.1 Dimensions

A test piece shall have a minimum size of 80 mm by 80 mm by the thickness of the element, see Figure 1.

Dimensions in millimetres



Key

- 1 test surface
- 2 test area
- 3 Petri dish
- l_1 $\geq 80 + 60 (n - 1)$ mm, minimum distance between the edge and the next test area(s) according to the number of test areas
- l_2 20 mm, minimum distance between any test area and the edge or another test area
- n number of test areas

Figure 1 — Dimensions of a test piece

If the size of the element delivered by the manufacturer does not allow the cutting of a test piece, a test specimen shall be assembled in accordance with the manufacturer's specification, which allows to cut the necessary test pieces.

5.2 Sampling

Three test pieces or test specimens shall be tested for each agent to be applied.

EN 13442:2023 (E)**6 Equipment and materials****6.1 Apparatus****6.1.1 Conditioning**

If a conditioning system is available, the following climate shall be used:

- temperature (23 ± 2) °C;
- relative humidity (50 ± 5) %.

6.1.2 Diffused light source

This source provides evenly diffused light, giving an illumination on the test area of between (1 200 ± 400) lx.

The light source should have a correlated colour temperature of (6 500 ± 50) K and an R_a (colour rendering index) greater than 92, by using a colour matching booth in accordance with EN ISO 3668.

6.2 Test equipment

6.2.1 Pieces of cellulose filter paper with a diameter of (25 ± 2) mm to apply each of the test agents, free of dyes and of chemicals, with a grammage of 400 g/m² to 500 g/m².

6.2.2 Glass Petri dishes with ground edges and without lips, external diameter between 40 mm and 60 mm.

6.2.3 Pair of tweezers.

6.2.4 Absorbent paper or tissue, with good absorbent properties, free of dyes and of chemicals.

6.2.5 White, soft, absorbent cotton cloths.

6.2.6 Vessels for containing test agents during soaking of filter paper.

6.3 Chemical agents**6.3.1 Test agents**

The test agents for film-forming coatings are listed in Table 1. The test agents for non-film-forming coating are listed in Table 2.