



Institut luxembourgeois de la normalisation
de l'accréditation, de la sécurité et qualité
des produits et services

ILNAS-EN 17456:2021

**Wood flooring and parquet -
Determination of top layer
delamination of multilayer elements -
Test method**

Holzfußböden und Parkett - Bestimmung
der Delaminierung der Decklagen von
Mehrschichtelementen - Prüfverfahren

Planchers en bois et parquets -
Détermination du décollement de la
couche supérieure des éléments
contrecollés - Méthode d'essai

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National Foreword

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**Wood flooring and parquet - Determination of top layer
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Delaminierung der Decklagen von
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European foreword

This document (EN 17456:2021) 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of an identical text or by endorsement, at the latest by October 2021, and conflicting national standards shall be withdrawn at the latest by October 2021.

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.

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Introduction

This document is one of a series of standards specifying requirements and test methods for wood flooring and parquet.

This document specifies a test method with three aging-treatments to measure the top layer bonding of multilayer parquet with different structures, dimensions and adhesives.

Floor heating systems, low energy or passive houses as well as public areas with heavy exposures represent a potential high stress to wood flooring and parquet elements that require them to withstand the effects of temperature and humidity occurring in practical installation situations.

The test method described in this document simulates these situations. By that the already existing large amount of knowledge about multilayer parquet and values for product characteristics attested by long use and experience is extended for the benefit of producers, installers, dealers and customers. For new products, technical data will have to be verified by testing.

NOTE A Round Robin trial was carried out involving seven international laboratories. The test method is therefore suitable as a yes/no decision for failure in the top layer bonding or poor product quality, but it does not allow quantification. It is possible to use it in conjunction with low limits of allowable delamination.

1 Scope

This document specifies a test method to determine the top layer delamination of multilayer parquet elements according to EN 13489 with different structures, dimensions and adhesives for internal use as flooring, at the time of the first delivery of the product.

The document specifies a test method with three aging-treatments (AT1, AT2 and AT3) of the test specimens.

The test method described in this document allows to determine a top layer bonding quality, also for parquet used on floor heating, and for the identification of bonding failure.

NOTE 1 For bottom layer of three layers elements the test method is applicable even if the experience is limited.

AT1 is a suitable treatment for the prognosis of multilayer parquets under dry indoor conditions and can be applied for all type of glues of parquets. It can be used for main underfloor heating systems.

AT2 is a suitable treatment for the assessment of multilayer parquets with PVAc-glues for top layer bonding.

AT3 is a suitable treatment for the assessment of multilayer parquets with different type of glues other than PVA-c for top layer bonding.

This document does not apply to the bonding quality of plywood if it is in use in the multilayer parquet construction.

NOTE 2 This document does not allow to estimate the compatibility of use in wet conditions.

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*

ISO 554, *Standard atmospheres for conditioning and/or testing — Specifications*

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 terminological databases for use in standardization at the following addresses:

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

3.1

top layer

finished or unfinished upper wood layer, intended to be the visible side when the floor is installed

[SOURCE: EN 13756:2018, 7.12]

3.2

delamination of top layer

detachment of the top layer of a multilayer construction