

Adhesives for floor coverings - Preparation of adhesive application - Test methods for the determination of corresponding humidity of mineral substrates

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN 17668:2022 sisaldab Euroopa standardi EN 17668:2022 ingliskeelset teksti.	This Estonian standard EVS-EN 17668:2022 consists of the English text of the European standard EN 17668:2022.
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English Version

Adhesives for floor coverings - Preparation of adhesive application - Test methods for the determination of corresponding humidity of mineral substrates

Adhésifs pour revêtements de sol - Préparation de l'application d'adhésif - Méthodes d'essai pour la détermination de la teneur en humidité relative d'équilibre dans les supports minéraux

Klebstoffe für Bodenbeläge - Vorbereitung der Klebstoffanwendung - Prüfverfahren zur Bestimmung der korrespondierenden Luftfeuchte von mineralischen Untergründen

This European Standard was approved by CEN on 10 July 2022.

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European foreword

This document (EN 17668:2022) has been prepared by Technical Committee CEN/TC 193 “Adhesives”, the secretariat of which is held by UNE.

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of an identical text or by endorsement, at the latest by March 2023, and conflicting national standards shall be withdrawn at the latest by March 2023.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

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Introduction

This document describes test methods for measuring humidity in, at or from a mineral substrate. Using these test methods will assist a floor layer in determining whether a floor is suitable to accept a levelling compound and/or an adhesive and a floor covering. High humidity can lead to the decomposition of moisture-sensitive levelling compounds and/or the decomposition or disruption and subsequent weakening of flooring adhesives used for installation. This results in a complete failure of the construction or in a reduction in adhesive strength and a negative impact on indoor air quality due to increased overall VOC emissions and bad odour. Using these test methods, a floor layer will be able to decide on the time at which the levelling compound and/or adhesive can be applied in order to help to avoid potential, humidity related problems. They provide data to determine whether the load-bearing, mineral substrate is ready for covering.

This document supplements the national standards already described for determining the moisture conditions of mineral substrates.

The material independent information regarding the moisture activity is one of the advantages of these measurement methods. They provide reliable data to help to establish the readiness for installation, especially for mineral substrates containing additives.

SAFETY WARNING — Persons using this document should be familiar with normal practice. The document cannot address all safety problems that can be associated with its application. It is the responsibility of the user to define measures for health and safety at work and ensure that these correspond with the European and national regulations.

1 Scope

This document specifies test methods to measure humidity of any kind of mineral substrate prior to the installation of levelling compounds and/or floor coverings or parquet floors bonded with adhesives. The methods are independent of the mineral substrate chemical composition or materials and applicable with commercially available equipment.

This document is not applicable to loose lay installations.

The measurement of the moisture content of mineral substrates according to EN 13813 is described in EN 1264-4.

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 923:2015, *Adhesives — Terms and definitions*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN 923:2015 and the following apply.

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

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

3.1

moisture

presence of water in trace amounts

3.2

humidity

water vapour partial pressure present in air

3.3

relative humidity

RH

ratio of the partial pressure of water vapour to the equilibrium vapour pressure of water at a given temperature

Note 1 to entry: It is usually expressed as a percentage.

3.4

corresponding relative humidity

CRH

relative humidity in percent, which is present in the air close to a sample of the material at equilibrium

Note 1 to entry: The corresponding relative humidity is expressed in % RH or as the absolute number as water activity.