

STN	Tepelná ochrana a úspory energie v budovách Metóda stanovenia trvanlivosti lepenia lepiacimi páskami a lepiacimi hmotami na vytvorenie vzduchotesných vrstiev v klimatických podmienkach typických pre vnútorné prostredie	STN EN 17990 73 0544
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Thermal insulation and energy economy in buildings - Method to determine the durability of bondings with adhesive tapes and adhesive masses for the establishment of airtight layers under climatic conditions representative for indoor environments

Táto norma obsahuje anglickú verziu európskej normy.
This standard includes the English version of the European Standard.

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EUROPEAN STANDARD
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English Version

**Thermal insulation and energy economy in buildings -
Method to determine the durability of bondings with
adhesive tapes and adhesive masses for the establishment
of airtight layers under climatic conditions representative
for indoor environments**

Isolation thermique et économie d'énergie dans les
bâtiments - Méthode de détermination de la durabilité
des collages avec des rubans adhésifs et des masses
adhésives pour l'établissement de couches étanches à
l'air dans des conditions climatiques représentatives
des environnements intérieurs

Wärmeschutz und Energieeinsparung in Gebäuden -
Methoden zum Nachweis der Dauerhaftigkeit von
Verklebungen mit Klebebändern und Klebemassen zur
Herstellung von luftdichten Schichten unter
klimatischen Bedingungen von Innenräumen

This European Standard was approved by CEN on 21 April 2025.

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

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

EN 17990:2025 (E)

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EN 17990:2025 (E)**European foreword**

This document (EN 17990:2025) has been prepared by Technical Committee CEN/TC 89 “Thermal performance of buildings and building components”, the secretariat of which is held by SIS.

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of an identical text or by endorsement, at the latest by December 2025, and conflicting national standards shall be withdrawn at the latest by December 2025.

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1 Scope

This document specifies methods to determine the durability of bondings, prepared by means of adhesive materials (e.g. adhesive tapes and adhesive masses), for the establishment of airtight layers under climatic conditions representative for indoor environments based on test methods with and without ageing.

The methods provided in this document require at least 120 days for aging and are therefore not suitable for a short time evaluation nor can they be applied to in-field testing. This document excludes test methods for external weathering or UV exposure, even though this might occur during the construction phase.

The following typical applications are distinguished:

- bonding of the overlap of flexible airtightness layers;
- bonding of flexible airtightness layers to construction products and penetrations;
- establishment of airtightness layers by means of sheet materials and adhesive tapes.

This document does not apply to test methods for:

- pre-compressed sealing tapes and sealing profiles which will be mechanically secured;
- butyl-based adhesive tapes or adhesive masses;
- sheet joints of wood-based panels or gypsum plasterboards with adhesive masses or filler systems;
- bondings of bitumen membranes or of bitumen membranes to construction products;
- bonding of self-adhesive membranes;
- adhesive masses from reels. Adhesive masses from reels are cured viscoelastic adhesive masses, which are used in the same field of application as adhesive masses.

The tack is not addressed. It does not allow any conclusion on the durability of a bonding.

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 205, *Adhesives — Wood adhesives for non-structural applications — Determination of tensile shear strength of lap joints*

EN 12317-2, *Flexible sheets for waterproofing — Determination of shear resistance of joints — Part 2: Plastic and rubber sheets for roof waterproofing*

EN ISO 10365, *Adhesives — Designation of main failure patterns (ISO 10365)*

EN ISO 11339, *Adhesives — T-peel test for flexible-to-flexible bonded assemblies (ISO 11339)*

EN ISO 29862, *Self adhesive tapes — Determination of peel adhesion properties (ISO 29862)*

ISO 8296, *Plastics — Film and sheeting — Determination of wetting tension*

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