

**Hoonete ja jalgteede mittekandvates liidetes
kasutatavad hermeetikud. Osa 1: Fassaadihermeetikud**

**Sealants for non-structural use in joints in buildings and
pedestrian walkways - Part 1: Sealants for facade
elements**

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN 15651-1:2012 sisaldab Euroopa standardi EN 15651-1:2012 ingliskeelset teksti.	This Estonian standard EVS-EN 15651-1:2012 consists of the English text of the European standard EN 15651-1:2012.
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ICS 91.100.50

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English Version

Sealants for non-structural use in joints in buildings and pedestrian walkways - Part 1: Sealants for facade elements

Mastics pour joints pour des usages non structuraux dans les constructions immobilières et pour chemins piétonniers
- Partie 1 : Mastics pour éléments de façade

Fugendichtstoffe für nicht tragende Anwendungen in Gebäuden und Fußgängerwegen - Teil 1: Fugendichtstoffe für Fassadenelemente

This European Standard was approved by CEN on 10 August 2012.

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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.

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Foreword

This document (EN 15651-1:2012) has been prepared by Technical Committee CEN/TC 349 "Sealants for joints in building construction", 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of an identical text or by endorsement, at the latest by March 2013, and conflicting national standards shall be withdrawn at the latest by June 2014.

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 15651-1:2010.

This document has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive(s).

For relationship with EU Directive(s), see informative Annex ZA, which is an integral part of this document.

This document is one of the product European Standards within the framework series of EN 15651 on *Sealants for non-structural use in joints in buildings and pedestrian walkways*, as follows:

- *Part 1: Sealants for facade elements* (this document),
- *Part 2: Sealants for glazing*,
- *Part 3: Sealants for sanitary joints*,
- *Part 4: Sealants for pedestrian walkways*,
- *Part 5: Evaluation of conformity and marking*.

The following significant technical changes have been implemented in this new edition:

- an Annex ZA has been added;
- the clause on reaction to fire was improved.

According to the CEN/CENELEC Internal Regulations, the national standards organisations 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, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

1 Scope

This European Standard specifies definitions and requirements for non-structural facade sealants intended for sealing exterior wall joints, window and door perimeter joints in building construction, including the interior face.

NOTE Provisions on evaluation of conformity (i.e. Initial Type Testing and Factory Production Control) and marking of these products are given in EN 15651-5.

This European Standard does not apply to non-structural sealants in any of non-paste form, to those used in internal walls and/or partitions and to oil-based mastics.

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.

EN 13238, *Reaction to fire tests for building products — Conditioning procedures and general rules for selection of substrates*

EN 13501-1:2007+A1, *Fire classification of construction products and building elements — Part 1: Classification using data from reaction to fire tests*

EN 15651-5:2012, *Sealants for non-structural use in joints in buildings and pedestrian walkways — Part 5: Evaluation of conformity and marking*

EN ISO 868, *Plastics and ebonite — Determination of indentation hardness by means of a durometer (Shore hardness) (ISO 868)*

EN ISO 1183-1:2004, *Plastics — Methods for determining the density of non-cellular plastics — Part 1: Immersion method, liquid pycnometer method and titration method (ISO 1183-1:2004)*

EN ISO 6927:2012, *Buildings and civil engineering works — Sealants — Vocabulary (ISO 6927:2012)*

EN ISO 7389, *Building construction — Jointing products — Determination of elastic recovery of sealants (ISO 7389)*

EN ISO 7390, *Building construction — Jointing products — Determination of resistance to flow of sealants (ISO 7390)*

EN ISO 8339, *Building construction — Sealants — Determination of tensile properties (Extension to break) (ISO 8339)*

EN ISO 8340, *Building construction — Sealants — Determination of tensile properties at maintained extension (ISO 8340)*

EN ISO 9046, *Building construction — Jointing products — Determination of adhesion/cohesion properties of sealants at constant temperature (ISO 9046)*

EN ISO 9047, *Building construction — Jointing products — Determination of adhesion/cohesion properties of sealants at variable temperatures (ISO 9047)*

EN ISO 10563, *Building construction — Sealants — Determination of change in mass and volume (ISO 10563)*

EN ISO 10590, *Building construction — Sealants — Determination of tensile properties of sealants at maintained extension after immersion in water (ISO 10590)*

EN ISO 10591, *Building construction — Sealants — Determination of adhesion/cohesion properties of sealants after immersion in water (ISO 10591)*

EN ISO 11358, *Plastics — Thermogravimetry (TG) of polymers — General principles (ISO 11358)*

EN ISO 11600, *Building construction — Jointing products — Classification and requirements for sealants (ISO 11600)*

EN ISO 11925-2, *Reaction to fire tests — Ignitability of products subjected to direct impingement of flame — Part 2: Single-flame source test (ISO 11925-2)*

ISO 13640, *Building construction — Jointing products — Specifications for test substrates*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN ISO 6927:2012 and the following apply.

3.1

non-reactive sealant

mainly physical drying mechanism, without significant change in the molecular weight of the main polymer

3.2

reactive sealant

mainly curing by chemical reaction, with significant increase of the molecular weight of the main polymer

3.3

cure

irreversible transformation of a sealant from a liquid or paste-like state into a hardened or rubber-like solid state

3.4

uncured/wet

state of a sealant prior to the above transformation

4 Requirements

4.1 Identification requirements and test methods

4.1.1 Short description of the sealant

The short description of the non-structural sealant for facade elements shall include brand name, type (general chemical family), opaque or translucent, waterborne or solvent based or solvent free, reactive or non-reactive, and one or multi-component (e.g. waterborne acrylic opaque and one component, etc.).

The primer shall be stated for the substrate concerned, if relevant (name, chemical type, etc.).

4.1.2 Thermogravimetric test

The test shall be carried out in accordance with EN ISO 11358 on the uncured or wet sealant, between 35 °C and 900 °C, temperature slope 10 °C/min, non-oxidative condition (e.g. nitrogen). A single sample shall be