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

	This Estonian standard EVS-EN 15651-1:2017 consists of the English text of the European standard EN 15651-1:2017.
Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas	This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation.
Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 15.02.2017.	Date of Availability of the European standard is 15.02.2017.
Standard on kättesaadav Eesti Standardikeskusest.	The standard is available from the Estonian Centre for Standardisation.

Tagasisidet standardi sisu kohta on võimalik edastada, kasutades EVS-i veebilehel asuvat tagasiside vormi või saates e-kirja meiliaadressile <u>standardiosakond@evs.ee</u>.

ICS 91.100.50

Standardite reprodutseerimise ja levitamise õigus kuulub Eesti Standardikeskusele

Andmete paljundamine, taastekitamine, kopeerimine, salvestamine elektroonsesse süsteemi või edastamine ükskõik millises vormis või millisel teel ilma Eesti Standardikeskuse kirjaliku loata on keelatud.

Kui Teil on küsimusi standardite autorikaitse kohta, võtke palun ühendust Eesti Standardikeskusega: Koduleht www.evs.ee; telefon 605 5050; e-post info@evs.ee

The right to reproduce and distribute standards belongs to the Estonian Centre for Standardisation

No part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying, without a written permission from the Estonian Centre for Standardisation.

If you have any questions about copyright, please contact Estonian Centre for Standardisation:

Homepage www.evs.ee; phone +372 605 5050; e-mail info@evs.ee

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

February 2017

EN 15651-1

ICS 91.100.50

Supersedes EN 15651-1:2012

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 25 December 2016.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CEN member.

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.

CEN members are the national standards bodies of 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, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and United Kingdom.



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

CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

Contents Page European foreword.......3 1 Normative references......4 2 3 Requirements......5 4 Identification requirements and test methods5 4.1 Short description of the sealant.......5 4.1.1 4.1.2 Density ______6 4.1.3 4.1.4 4.2 Conditioning, test procedure and substrates......6 Performance requirements and test methods for non-structural sealants for facade 4.3 4.3.1 General 7 Sealants for facade elements used in cold climates.......8 4.3.2 4.3.3 Performance requirements for non-structural sealants for facade elements for 4.4 interior application only9 4.5 4.6 4.6.1 4.6.2 5 6 7.1 7.2 7.3 Marking and labelling......14 Annex ZA (informative) Relationship of this European Standard with Regulation (EU) Scope and relevant characteristics...... 16 **ZA.1 ZA.2** System of Assessment and Verification of Constancy of Performance (AVCP).......18 Assignment of AVCP tasks....... 18 **ZA.3**

European foreword

This document (EN 15651-1:2017) has been prepared by Technical Committee CEN/TC 349 "Sealants for joints in building construction", the secretariat of which is held by AFNOR.

This document supersedes EN 15651-1:2012.

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 August 2017, and conflicting national standards shall be withdrawn at the latest by November 2018.

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 has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association, and supports basic work requirements of EU Regulation.

For relationship with EU Regulation, 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: Assessment and verification of constancy of performance, marking and labelling.

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

- Clause 4.1.3 and Clause 5 have been improved;
- Clause 4.5 has been modified:
- Clause 7 and Annex ZA have been changed in accordance with the regulation (EU) No.305/2011.

According to the CEN/CENELEC Internal Regulations, the national standards organizations 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, Serbia, 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 assessment and verification of constancy of performance - AVCP (i.e. Product type determination 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 interior 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, Fire classification of construction products and building elements — Part 1: Classification using data from reaction to fire tests

EN 15651-5:2017, 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 2811-1:2016, Paints and varnishes - Determination of density - Part 1: Pycnometer method (ISO 2811-1:2016)

EN ISO 6927, Buildings and civil engineering works - Sealants - Vocabulary (ISO 6927)

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 11600, Building construction - Jointing products - Classification and requirements for sealants (ISO 11600)

EN ISO 11358 (all parts), Plastics — Thermogravimetry (TG) of polymers (ISO 11358)

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 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.).