# Ehituskoostete monteerimisel kasutatavad üldotstarbelised liimained. Nõuded ja katsemeetodid

General purpose adhesives for structural assembly. Requirements and test methods



## EESTI STANDARDI EESSÕNA NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN	This Estonian standard EVS-EN
15274:2007 sisaldab Euroopa standardi	15274:2007 consists of the English text of
EN 15274:2007 ingliskeelset teksti.	the European standard EN 15274:2007.
O	
Käesolev dokument on jõustatud 18.12.2007 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.	This document is endorsed on 18.12.2007 with the notification being published in the official publication of the Estonian national standardisation organisation.
Standard on kättesaadav Eesti	The standard is available from Estonian
standardiorganisatsioonist.	standardisation organisation.
<sup>2</sup> / <sub>x</sub>	
Käsitlusala:	Scope:
This European Standard specifies	This European Standard specifies

Käsitlusala:	Scope:
This European Standard specifies	This European Standard specifies
requirements for adhesives intended for	requirements for adhesives intended for
use in the creation and general assembly	use in the creation and general assembly
of load-bearing, structural elements used	of load-bearing, structural elements used
in civil engineering works and the	in civil engineering works and the
construction of buildings. Other than the	construction of buildings. Other than the
exceptions stated, it embraces all	exceptions stated, it embraces all
combinations of bonded materials, used	combinations of bonded materials, used
to create or repair load-bearing elements.	to create or repair load-bearing elements.
It covers individual adhesives and special	It covers individual adhesives and special
purpose kits comprising various	purpose kits comprising various
combinations of adhesive types and	combinations of adhesive types and
components. It includes test methods and	components. It includes test methods and
methods of assessment. The performance	methods of assessment. The performance
requirements in this standard may not be	requirements in this standard may not be
applicable to highly specialised	applicable to highly specialised
applications in extreme environmental	applications in extreme environmental
conditions, e.g. cryogenic use, nor do they	conditions, e.g. cryogenic use, nor do they
cover specialised circumstances such as	cover specialised circumstances such as
accidental impact, e.g. due to traffic or ice,	accidental impact, e.g. due to traffic or ice,
or earthquake loading where specific	or earthquake loading where specific
performance requirements will apply. The	performance requirements will apply. The
intended use is for internal and external	intended use is for internal and external
construction elements and those cladding	construction elements and those cladding
and covering elements (excluding ceramic	and covering elements (excluding ceramic
tiles) specifically required, by regulatory	tiles) specifically required, by regulatory
authorities, to provide protection from fire	authorities, to provide protection from fire
in identified building zones, including	in identified building zones, including
escape routes.	escape routes.

ICS 83.180

#### Võtmesõnad:

Eesti Standardikeskusele kuulub standardite reprodutseerimis- ja levitamisõigus

# **EUROPEAN STANDARD** NORME EUROPÉENNE **EUROPÄISCHE NORM**

# EN 15274

November 2007

ICS 83,180

**English Version** 

#### General purpose adhesives for structural assembly -Requirements and test methods

Adhésifs structuraux pour applications générales -Exigences et méthodes d'essai

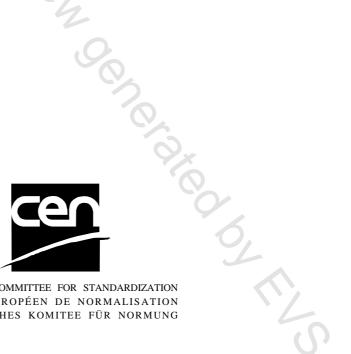
Klebstoffe für allgemeine Anwendungen in strukturellen Klebverbunden - Anforderungen und Prüfverfahren

This European Standard was approved by CEN on 8 September 2007.

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 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 Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.



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

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### Foreword

This document (EN 15274:2007) has been prepared by Technical Committee CEN/TC 193 "Adhesives", the secretariat of which is held by AENOR.

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 May 2008, and conflicting national standards shall be withdrawn at the latest by August 2009.

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.

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, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, ds. gdon. Sweden, Switzerland and the United Kingdom.

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#### 1 Scope

This European Standard specifies requirements for adhesives intended for use in the creation and general assembly of load-bearing, structural elements used in civil engineering works and the construction of buildings. Other than the exceptions stated, it embraces all combinations of bonded materials, used to create or repair load-bearing elements.

It covers individual adhesives and special purpose kits comprising various combinations of adhesive types and components.

It includes test methods and methods of assessment.

The performance requirements in this standard may not be applicable to highly specialised applications in extreme environmental conditions, e.g. cryogenic use, nor do they cover specialised circumstances such as accidental impact, e.g. due to traffic or ice, or earthquake loading where specific performance requirements will apply.

The intended use is for internal and external construction elements and those cladding and covering elements (excluding ceramic tiles) specifically required, by regulatory authorities, to provide protection from fire in identified building zones, including escape routes.

It does not cover:

- Prefabricated, bonded structural components.
- Concrete bonded either to itself or steel or a material based on carbon fibre.
- Wood, when bonded to itself to form a timber based, laminated beam [of the type known as a 'Glulam' beam] intended for use as a major structural, load bearing element.
- Thermoplastics [e.g. polyethylene, polypropylene, polyamide and fluorinated polymers in general] unless they have been specifically prepared [usually through a specialised oxidative process] for bonded assembly on site.
- Co-axial metallic assemblies comprising fasteners- threaded and otherwise, pipes and tubes.
- Glass assemblies in structural glazing applications made using silicone adhesives.
- Those structural elements that are permanently immersed in water.

#### 2 Normative references

The following referenced documents are indispensable for the application 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 923:2005, Adhesives - Terms and definitions

EN 1067, Adhesives - Examination and preparation of samples for testing

EN 1242, Adhesives - Determination of isocyanate content

EN 1465, Adhesives - Determination of tensile lap-shear strength of rigid-to-rigid bonded assemblies (ISO 4587:1979 modified)

EN 1504-8, Products and systems for the protection and repair of concrete structures - Definitions, requirements, quality control and evaluation of conformity - Part 8: Quality control and evaluation of conformity

EN 1877-1, Products and systems for the protection and repair of concrete structures - Test methods - Reactive functions related to epoxy resins - Part 1: Determination of epoxy equivalent

EN 1877-2, Products and systems for the protection and repair of concrete structures - Test methods - Reactive functions related to epoxy resins - Part 2: Determination of amine functions using the total basicity number

EN 12092, Adhesives - Determination of viscosity

EN 13999-1, Adhesives - Short term method for measuring the emission properties of low-solvent or solventfree adhesives after application - Part 1: General procedure

EN 13999-2, Adhesives - Short term method for measuring the emission properties of low-solvent or solventfree adhesives after application - Part 2: Determination of volatile organic compounds

EN 13999-3, Adhesives - Short term method for measuring the emission properties of low-solvent or solventfree adhesives after application - Part 3: Determination of volatile aldehydes

EN 13999-4, Adhesives - Short term method for measuring the emission properties of low-solvent or solventfree adhesives after application - Part 4: Determination of volatile diisocyanates

EN 14022, Structural adhesives - Determination of the pot life (working life) of multicomponent adhesives

EN 15336, Adhesives – Determination of the time to rupture of bonded joints under static load (ISO 15109:1998 modified)

EN ISO 75-3, Plastics - Determination of temperature of deflection under load - Part 3: High-strength thermosetting laminates (ISO 75-3:2004)

EN ISO 527-2, Plastics - Determination of tensile properties - Part 2: Test conditions for moulding and extrusion plastics (ISO 527-2:1993 including Corr 1:1994)

EN ISO 527-3, Plastics - Determination of tensile properties - Part 3: Test conditions for films and sheets (ISO 527-3:1995)

EN ISO 9142, Adhesives - Guide to the selection of standard laboratory ageing conditions for testing bonded joints (ISO 9142:2003)

EN ISO 9664, Adhesives - Test methods for fatigue properties of structural adhesives in tensile shear (ISO 9664:1993)

EN ISO 11339, Adhesives - T-peel test for flexible-to-flexible bonded assemblies (ISO 11339:2003)

EN ISO 11909, Binders for paints and varnishes - Polyisocyanate resins - General methods of test (ISO 11909:2007)

EN ISO 14896, Plastics - Polyurethane raw materials - Determination of isocyanate content (ISO 14896:2000)

EN ISO 15605, Adhesives - Sampling (ISO 15605:2000)