

**Ehitusliimid. Hoonetes ja rajatistes
kasutatavate koaksiaalsete metall-
liidete anaeroobsete liimide
spetsifikatsioon**

Structural adhesives. Characterisation of anaerobic adhesives for co-axial metallic assembly in building and civil engineering structures

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 15275:2007 sisaldab Euroopa standardi EN 15275:2007 ingliskeelset teksti. Käesolev dokument on jõustatud 22.11.2007 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes. Standard on kättesaadav Eesti standardiorganisatsioonist.	This Estonian standard EVS-EN 15275:2007 consists of the English text of the European standard EN 15275:2007. This document is endorsed on 22.11.2007 with the notification being published in the official publication of the Estonian national standardisation organisation. The standard is available from Estonian standardisation organisation.
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Käsitlusala: This European Standard specifies requirements and test methods for the characterisation of anaerobic adhesives intended for the general assembly of co-axial metallic elements in building and civil engineering structures including fasteners- threaded and otherwise, pipes and tubes. It is applicable to single adhesives and systems (kits) comprising adhesives, activators and/or primers for both internal and external construction elements. This European Standard only applies to metallic substrates.	Scope: This European Standard specifies requirements and test methods for the characterisation of anaerobic adhesives intended for the general assembly of co-axial metallic elements in building and civil engineering structures including fasteners- threaded and otherwise, pipes and tubes. It is applicable to single adhesives and systems (kits) comprising adhesives, activators and/or primers for both internal and external construction elements. This European Standard only applies to metallic substrates.
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ICS 83.180

Võtmesõnad:

ICS 83.180

English Version

Structural adhesives - Characterisation of anaerobic adhesives for co-axial metallic assembly in building and civil engineering structures

Adhésifs structuraux - Caractérisation des adhésifs
anaérobies pour assemblages métalliques coaxiaux dans
les bâtiments et ouvrages de génie

Strukturklebstoffe - Charakterisierung anaerober Klebstoffe
für koaxiale Metallverbindungen im Bauwesen

This European Standard was approved by CEN on 16 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.

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Foreword

This document (EN 15275:2007) 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 April 2008, and conflicting national standards shall be withdrawn at the latest by July 2009.

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 Construction Products Directive (89/106/EEC).

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

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Introduction

Anaerobic adhesives are single component adhesives that cure in absence of oxygen, curing being inhibited by the presence of oxygen and catalysed by metal ions. Polymerisation takes normally place at room temperature. Due to their curing properties these adhesives are well suited for easy assembling threaded and otherwise, pipes and tubes in building and civil engineering structures. By the curing reaction a polymeric material is formed, which fills narrow gaps or micro-imperfections of threads thus sealing and bonding the joint. In addition, anaerobic adhesives may be used to joint load-bearing parts of the structures when used in tubular lap joints or pin-into-bore type joints.

The primary aim of the test methods presented herein is for ranking and quality control of anaerobic adhesives and reliance should not be placed on any test results for design purposes. Design data should preferably be obtained from tests using the construction materials and configurations used in the actual design. The requirements to the assemblies are strongly depending on the intended use. Apart from the sealing ability, strength requirements may conflict with the intention to regular or occasional dismantling the joint for maintenance purposes. The values defined in this standard are considered to indicate a general or typical suitability for use of an anaerobic adhesive in a particular application in building and civil engineering structures.

1 Scope

This European Standard specifies requirements and test methods for the characterisation of anaerobic adhesives intended for the general assembly of co-axial metallic elements in building and civil engineering structures including fasteners- threaded and otherwise, pipes and tubes. It is applicable to single adhesives and systems (kits) comprising adhesives, activators and/or primers for both internal and external construction elements. This European Standard only applies to metallic substrates.

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 751-1, *Sealing materials for metallic threaded joints in contact with 1st, 2nd and 3rd family gases and hot water - Part 1: Anaerobic jointing compounds*

EN 923:2005, *Adhesives - Terms and definitions*

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

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

EN 15337, *Adhesives - Determination of shear strength of anaerobic adhesives using pin-and-collar specimens (ISO 10123:1990 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 10964, *Adhesives - Determination of torque strength of anaerobic adhesives on threaded fasteners (ISO 10964:1993)*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN 923:2005 and the following applies.

3.1

anaerobic adhesive

adhesive that cures in absence of oxygen, curing being inhibited by the presence of oxygen and catalysed by metal ions

NOTE Deviating from this definition, anaerobic adhesives may be defined also as anaerobic polymerisable compounds, or anaerobic jointing compounds including liquid, gel like or pasty sealants.