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NSAI Standards

Irish Standard
I.S. EN 16254:2013+A1:2016

Adhesives - Emulsion polymerized isocyanate (EPI) for load-bearing timber structures - Classification and performance requirements

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NSAI	T +353 1 807 3800	Sales:
1 Swift Square,	F +353 1 807 3838	T +353 1 857 6730
Northwood, Santry	E standards@nsai.ie	F +353 1 857 6729
Dublin 9	W NSAI.ie	W standards.ie

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National Foreword

I.S. EN 16254:2013+A1:2016 is the adopted Irish version of the European Document EN 16254:2013+A1:2016, Adhesives - Emulsion polymerized isocyanate (EPI) for load-bearing timber structures - Classification and performance requirements

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EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 16254:2013+A1

April 2016

ICS 83.180

Supersedes EN 16254:2013

English Version

Adhesives - Emulsion polymerized isocyanate (EPI) for load-bearing timber structures - Classification and performance requirements

Adhésifs - Isocyanate polymérisé en émulsion (EPI) pour structures portantes en bois - Classification et exigences de performance

Klebstoffe - Emulsionspolymerisiertes Isocyanat (EPI) für tragende Holzbauteile - Klassifizierung und Leistungsanforderungen

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European foreword

This document (EN 16254:2013+A1:2016) 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of an identical text or by endorsement, at the latest by October 2016, and conflicting national standards shall be withdrawn at the latest by October 2016.

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 includes Amendment 1 approved by CEN on 2016-02-09.

This document supersedes EN 16254:2013.

The start and finish of text introduced or altered by amendment is indicated in the text by tags ▌A1⟩ ⟨A1▌.

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Introduction

This document is one of a series dealing with emulsion polymerised isocyanate (EPI) adhesives for use with timber structures, and is published in support of product standards for bonded load-bearing timber structures.

The series consists of:

— one standard for classification and performance requirements (EN 16254),

— seven test methods (EN 302-1, EN 302-2, EN 302-3, EN 302-4, EN 15416-2, EN 15416-3 and the method given in Annex B of this standard ("Glass house")) used to assess the performance of adhesives after specified heat and humidity treatments, and

— three test methods (EN 302-7, EN 15416-4 and EN 15416-5) to characterise the working properties of the adhesive.

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1 Scope

This European Standard establishes a classification for emulsion polymerised isocyanate (EPI) adhesives according to their suitability for use in load-bearing timber structures in defined climatic exposure conditions, and specifies performance requirements for such adhesives for the industrial manufacture of load-bearing timber structures only.

[A1] The performance requirements of this European Standard apply to the adhesives only, not to the timber structure. This European Standard does not cover the performance of adhesives for on-site gluing (except for factory-like conditions) nor the production of wood-based panels, except solid wood panels, or modified and stabilized wood with considerably reduced swelling and shrinkage properties, e.g. such as acetylated wood, heat treated wood and polymer impregnated wood. [A1]

This European Standard is primarily intended for the use of adhesive manufacturers and for the use in timber structures bonded with adhesives, to assess or control the quality of adhesives. This European Standard only specifies the performance of an adhesive for use in an environment corresponding to the defined conditions.

Such an adhesive meeting the requirements of this European Standard for its type is adequate for use in a load-bearing timber structure, provided that the bonding process has been carried out according to an appropriate product standard.

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 302-1, *Adhesives for load-bearing timber structures — Test methods — Part 1: Determination of longitudinal tensile shear strength*

EN 302-2, *Adhesives for load-bearing timber structures — Test methods — Part 2: Determination of resistance to delamination*

EN 302-3, *Adhesives for load-bearing timber structures — Test methods — Part 3: Determination of the effect of acid damage to wood fibres by temperature and humidity cycling on the transverse tensile strength*

EN 302-4, *Adhesives for load-bearing timber structures — Test methods — Part 4: Determination of the effects of wood shrinkage on the shear strength*

EN 302-7, *Adhesives for load-bearing timber structures — Test methods — Part 7: Determination of the working life under referenced conditions*

EN 923:2005+A1:2008, *Adhesives — Terms and definitions*

EN 15416-2, *Adhesives for load bearing timber structures other than phenolic and aminoplastic — Test methods — Part 2: Static load test of multiple bondline specimens in compression shear*

EN 15416-3, *Adhesives for load bearing timber structures other than phenolic and aminoplastic — Test methods — Part 3: Creep deformation test at cyclic climate conditions with specimens loaded in bending shear*

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