



NSAI
Standards

Irish Standard
I.S. EN 1013:2012+A1:2014

Light transmitting single skin profiled plastics sheets for internal and external roofs, walls and ceilings - Requirements and test methods

I.S. EN 1013:2012+A1:2014

Incorporating amendments/corrigenda/National Annexes issued since publication:

The National Standards Authority of Ireland (NSAI) produces the following categories of formal documents:

I.S. xxx: Irish Standard — national specification based on the consensus of an expert panel and subject to public consultation.

S.R. xxx: Standard Recommendation — recommendation based on the consensus of an expert panel and subject to public consultation.

SWiFT xxx: A rapidly developed recommendatory document based on the consensus of the participants of an NSAI workshop.

This document replaces/revises/consolidates the NSAI adoption of the document(s) indicated on the CEN/CENELEC cover/Foreword and the following National document(s):

NOTE: The date of any NSAI previous adoption may not match the date of its original CEN/CENELEC document.

This document is based on:

EN 1013:2012+A1:2014

Published:

2014-12-03

This document was published under the authority of the NSAI and comes into effect on:

2015-01-12

ICS number:

83.140.10

91.060.01

NOTE: If blank see CEN/CENELEC cover page

NSAI
1 Swift Square,
Northwood, Santry
Dublin 9

T +353 1 807 3800
F +353 1 807 3838
E standards@nsai.ie
W NSAI.ie

Sales:
T +353 1 857 6730
F +353 1 857 6729
W standards.ie

Údarás um Chaighdeáin Náisiúnta na hÉireann

EUROPEAN STANDARD

EN 1013:2012+A1

NORME EUROPÉENNE

EUROPÄISCHE NORM

December 2014

ICS 83.140.10; 91.060.01

Supersedes EN 1013:2012

English Version

Light transmitting single skin profiled plastics sheets for internal and external roofs, walls and ceilings - Requirements and test methods

Plaques d'éclairage profilées, simple paroi, en matière plastique, pour toitures, bardages et plafonds intérieurs et extérieurs - Exigences et méthodes d'essai

Lichtdurchlässige, einschalige profilierte Platten aus Kunststoff für Innen- und Außenanwendungen an Dächern, Wänden und Decken - Anforderungen und Prüfverfahren

This European Standard was approved by CEN on 20 October 2012 and includes Amendment 1 approved by CEN on 22 August 2014.

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, 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

EN 1013:2012+A1:2014 (E)

Contents

Page

Foreword.....	4
Introduction	5
1 Scope	6
2 Normative references	6
3 Terms and definitions	7
4 Symbols and abbreviations	8
4.1 Symbols	8
4.2 Abbreviations	8
5 Requirements	8
5.1 Visual appearance	8
5.2 Dimensional tolerances and mass per square metre	8
5.3 Light transmission	9
5.4 Flexural/tensile strength	9
5.5 Durability	10
5.6 Thermal ageing resistance (only for thermoplastic sheets)	12
5.7 Longitudinal reversion and profile retention (only for thermoplastic sheets)	12
5.8 Impact resistance.....	12
5.9 Resistance to deflection (mechanical resistance)	12
5.10 Water vapour permeability.....	13
5.11 Water/air permeability	13
5.12 Linear thermal expansion	13
5.13 Reaction to fire.....	14
5.14 External fire performance	14
5.15 Glass-fibre content (only for glass-fibre reinforced sheets).....	15
5.16 Barcol hardness (only for glass-fibre reinforced sheets)	15
5.17 Presence of protective coating	15
5.18 Adhesion of surface coating (only for glass-fibre reinforced sheets)	16
5.19 Resistance to fixings	16
5.20 Dangerous substances	16
6 Test methods.....	16
6.1 Dimensional tolerances	16
6.2 Light transmission.....	20
6.3 Yellowness index.....	20
6.4 Flexural/tensile strength	21
6.5 Thermal ageing resistance	21
6.6 Longitudinal reversion and profile retention	22
6.7 Small hard body impact resistance	24
6.8 Resistance to deflection	26
6.9 Reaction to fire.....	29
6.10 External fire performance	31
6.11 Glass-fibre content	32
6.12 Barcol hardness.....	32
6.13 Presence of protective coating	32
6.14 Adhesion of surface coating	35
7 Assessment and verification of constancy of performance – AVCP	36
7.1 General.....	36
7.2 Product type determination	36

7.3	Factory production control (FPC)	38
7.4	Initial inspection of factory and of FPC	40
7.5	Continuous surveillance of FPC	40
8	Marking and labelling	41
Annex A	(normative) Profile terminology	42
Annex B	(normative) Glass content by density of laminate	45
Annex ZA	(informative) Clauses of this European Standard addressing the provisions of the EU Construction Products Regulation	47
	Bibliography	58

EN 1013:2012+A1:2014 (E)

Foreword

This document (EN 1013:2012+A1:2014) has been prepared by Technical Committee CEN/TC 128 "Roof covering products for discontinuous laying and products for wall cladding", the secretariat of which is held by NBN.

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 June 2015, and conflicting national standards shall be withdrawn at the latest by September 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 supersedes A1 EN 1013:2012 A1.

This document includes Amendment 1 approved by CEN on 2014-08-22.

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

A1 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 the EU Construction Products Regulation.

For relationship with EU Directive(s) and the Construction Products Regulation, see informative Annex ZA, which is an integral part of this document. A1

A1 *deleted text* A1

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, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

Introduction

This document describes the requirements and test methods for light transmitting single skin profiled plastics sheets.

The physical properties of light transmitting single skin profiled plastics sheets differ from bituminous, metal and fibre reinforced cement sheets, as defined in EN 534 [1], EN 506 [2], EN 508-1 [3], EN 508-2 [4], EN 508-3 [5] and EN 494 [6]. They do not necessarily have the same span capabilities and alternative fixing specifications are generally required.

Reference should be made to national regulations and the manufacturer's literature for requirements concerning design, storage and installation, including all safety aspects, according to the material.

EN 1013:2012+A1:2014 (E)

1 Scope

This European Standard specifies the requirements for light transmitting single skin profiled plastics sheets for internal and external walls, roofs and ceilings. It is applicable to single skin sheets which are used as a single layer or when assembled to form a multiple layer construction.

It also specifies the test methods and provides for the evaluation of conformity and marking of the sheets.

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 59, *Glass reinforced plastics - Measurement of hardness by means of a Barcol impressor*

CEN/TS 1187:2012, *Test methods for external fire exposure to roofs*

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

EN 13501-5, *Fire classification of construction products and building elements — Part 5: Classification using data from external fire exposure to roofs tests*

EN 13823:2010, *Reaction to fire tests for building products - Building products excluding floorings exposed to the thermal attack by a single burning item*

EN ISO 178, *Plastics — Determination of flexural properties (ISO 178)*

EN ISO 472:2001, *Plastics — Vocabulary (ISO 472:1999)*

EN ISO 527-1, *Plastics — Determination of tensile properties — Part 1: General principles (ISO 527-1)*

EN ISO 527-2, *Plastics — Determination of tensile properties — Part 2: Test conditions for moulding and extrusion plastics (ISO 527-2)*

EN ISO 527-4, *Plastics — Determination of tensile properties — Part 4: Test conditions for isotropic and orthotropic fibre-reinforced plastic composites (ISO 527-4)*

EN ISO 1043-1:2011, *Plastics - Symbols and abbreviated terms - Part 1: Basic polymers and their special characteristics (ISO 1043-1:2011)*

EN ISO 1043-2:2011, *Plastics - Symbols and abbreviated terms - Part 2: Fillers and reinforcing materials (ISO 1043-2:2011)*

EN ISO 1172:1998, *Textile-glass-reinforced plastics - Prepregs, moulding compounds and laminates - Determination of the textile-glass and mineral-filler content - Calcination methods (ISO 1172:1996)*

EN ISO 4892-2:2006, *Plastics — Methods of exposure to laboratory light sources — Part 2: Xenon-arc lamps (ISO 4892-2:2006)*

EN ISO 4892-3:2006, *Plastics — Methods of exposure to laboratory light sources — Part 3: Fluorescent UV lamps (ISO 4892-3:2006)*

EN ISO 6603-1, *Plastics — Determination of puncture impact behaviour of rigid plastics — Part 1: Non-instrumented impact testing (ISO 6603-1)*

This is a free preview. Purchase the entire publication at the link below:

[Product Page](#)

-
- [Looking for additional Standards? Visit Intertek Inform Infostore](#)
 - [Learn about LexConnect, All Jurisdictions, Standards referenced in Australian legislation](#)
-