



NSAI
Standards

Irish Standard
I.S. EN 15534-6:2015+A1:2017

Composites made from cellulose-based materials and thermoplastics (usually called wood-polymer composites (WPC) or natural fibre composites (NFC)) - Part 6: Specifications for fencing profiles and elements

I.S. EN 15534-6:2015+A1:2017

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 15534-6:2015+A1:2017

Published:

2017-10-25

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

2017-11-13

ICS number:

79.080

83.140.99

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

National Foreword

I.S. EN 15534-6:2015+A1:2017 is the adopted Irish version of the European Document EN 15534-6:2015+A1:2017, Composites made from cellulose-based materials and thermoplastics (usually called wood-polymer composites (WPC) or natural fibre composites (NFC)) - Part 6: Specifications for fencing profiles and elements

This document does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

For relationships with other publications refer to the NSAI web store.

Compliance with this document does not of itself confer immunity from legal obligations.

In line with international standards practice the decimal point is shown as a comma (,) throughout this document.

This page is intentionally left blank

EUROPEAN STANDARD

EN 15534-6:2015+A1

NORME EUROPÉENNE

EUROPÄISCHE NORM

October 2017

ICS 79.080; 83.140.99

Supersedes EN 15534-6:2015

English Version

Composites made from cellulose-based materials and
thermoplastics (usually called wood-polymer composites
(WPC) or natural fibre composites (NFC)) - Part 6:
Specifications for fencing profiles and elements

Composites à base de matières cellulosiques et de
thermoplastiques (communément appelés composites
bois-polymères (WPC) ou composites fibres d'origine
naturelle (NFC)) - Partie 6 : Spécifications relatives aux
profilés et éléments pour clôtures

Verbundwerkstoffe aus cellulosehaltigen Materialien
und Thermoplasten (üblicherweise Holz-Polymer-
Werkstoffe (WPC) oder Naturfaserverbundwerkstoffe
(NFC) genannt) - Teil 6: Anforderungen an Zaunprofile
und -elemente

This European Standard was approved by CEN on 15 August 2015 and includes Amendment 1 approved by CEN on 9 August 2017.

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	4
1 Scope	5
2 Normative references	5
3 Terms and definitions	5
4 Requirements for fencing profiles	7
4.1 General	7
4.2 Material	7
4.3 Appearance	7
4.4 Physical properties	7
4.5 Mechanical properties	8
4.5.1 Falling mass impact resistance	8
4.5.2 Flexural properties	9
4.5.3 Durability of the material against biological agents	9
4.5.4 Durability of the fencing profiles against ageing and moisture	9
4.5.5 Thermal properties	10
4.5.6 Additional properties	10
5 Requirements for fencing elements	12
6 Marking	12
Annex A (informative) Minimum frequencies of testing for factory production control purposes	14
Annex B (normative) Deformation due to the exposure to thermal radiations from the sun	15
B.1 Principle	15
B.2 Apparatus	15
B.3 Test specimen	15
B.4 Conditioning	15
B.5 Procedure	15
B.6 Expression of the results	16
B.7 Test report	17
Annex C (informative) Description and arrangement of infrared lamps	18
Annex D (informative) Soft body impact test	19
D.1 Principle	19
D.2 Apparatus	19
D.3 Test specimens	20
D.4 Conditioning	20
D.5 Procedure	20
D.6 Expression of results	21

D.7 Test report	21
Bibliography	22

EN 15534-6:2015+A1:2017 (E)

European foreword

This document (EN 15534-6:2015+A1:2017) has been prepared by Technical Committee CEN/TC 249 “Plastics”, 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 April 2018, and conflicting national standards shall be withdrawn at the latest by April 2018.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN shall not be held responsible for identifying any or all such patent rights.

This document supersedes EN 15534-6:2015.

This document includes Amendment 1 approved by CEN on 09 August 2017.

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

EN 15534 comprises the following parts:

- EN 15534-1, *Composites made from cellulose-based materials and thermoplastics (usually called wood-polymer composites (WPC) or natural fibre composites (NFC)) — Part 1: Test methods for characterization of compounds and products*
- EN 15534-4, *Composites made from cellulose-based materials and thermoplastics (usually called wood-polymer composites (WPC) or natural fibre composites (NFC)) — Part 4: Specifications for decking profiles and tiles*
- EN 15534-5, *Composites made from cellulose-based materials and thermoplastics (usually called wood-polymer composites (WPC) or natural fibre composites (NFC)) — Part 5: Specifications for cladding profiles and tiles*
- EN 15534-6, *Composites made from cellulose-based materials and thermoplastics (usually called wood-polymer composites (WPC) or natural fibre composites (NFC)) — Part 6: Specifications for fencing profiles and fencing elements*

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 part of EN 15534 specifies the characteristics of fencing profiles and elements made from cellulose-based materials and thermoplastics, usually called wood-polymer composites (WPC) or natural fibre composites (NFC).

It is applicable to fencing profiles and elements for non-structural fencing systems.

The security systems, perimeter protections, handrails and load bearing applications are out of the scope of this part of EN 15534.

Any systems made from profiles in the scope of this part of EN 15534 that are affected by regulations are under the responsibility of the system supplier.

EN 15534-1 specifies some of the test methods relevant to this part of EN 15534.

NOTE For editorial reasons, in EN 15534 the abbreviation “WPC” is used for “composites made from cellulose-based materials and thermoplastics”.

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 927-6, *Paints and varnishes — Coating materials and coating systems for exterior wood — Part 6: Exposure of wood coatings to artificial weathering using fluorescent UV lamps and water*

EN 16472, *Plastics — Method for artificial accelerated photoageing using medium pressure mercury vapour lamps*

EN 15534-1:2014, *Composites made from cellulose-based materials and thermoplastics (usually called wood-polymer composites (WPC) or natural fibre composites (NFC)) — Part 1: Test methods for characterisation of compounds and products*

EN ISO 4892-1:2000, *Plastics — Methods of exposure to laboratory light sources — Part 1: General guidance (ISO 4892-1:1999)*

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

3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN 15534-1:2014 and the following apply.

3.1

fencing profile

single profile intended to be assembled in a fencing element

3.2

fencing element

assembly of two posts and one or several fencing profile(s) and possibly, fastenings and accessories

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](#)
-