



NSAI
Standards

Irish Standard
I.S. EN 12814-8:2021

Testing of welded joints of thermoplastics semi-finished products - Part 8: Requirements

I.S. EN 12814-8:2021

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 12814-8:2021

Published:

2021-01-27

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

2021-02-15

ICS number:

25.160.40

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 12814-8:2021 is the adopted Irish version of the European Document EN 12814-8:2021, Testing of welded joints of thermoplastics semi-finished products - Part 8: Requirements

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 12814-8

NORME EUROPÉENNE

EUROPÄISCHE NORM

January 2021

ICS 25.160.40

Supersedes EN 12814-8:2001

English Version

Testing of welded joints of thermoplastics semi-finished products - Part 8: Requirements

Essais des assemblages soudés sur produits semi-finis
en thermoplastiques - Partie 8 : Exigences

Prüfen von Schweißverbindungen aus
thermoplastischen Kunststoffen - Teil 8:
Anforderungen

This European Standard was approved by CEN on 20 December 2020.

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, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, 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: Rue de la Science 23, B-1040 Brussels

Contents	Page
European foreword	3
1 Scope	4
2 Normative references	4
3 Terms, definitions, symbols and abbreviations	4
3.1 Terms and definitions	4
3.2 Symbols and abbreviations	4
4 Materials and properties	5
5 Destructive test methods	5
6 Requirements	5
6.1 General	5
6.2 Bend test	5
6.3 Tensile test	15
6.4 Tensile creep test	16
6.5 Peel tests	16
6.6 Macroscopic examination	16
6.7 Low temperature tensile test	16
6.8 Tensile test with waisted test specimen	17

European foreword

This document (EN 12814-8:2021) 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 July 2021, and conflicting national standards shall be withdrawn at the latest by July 2021.

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 12814-8:2001.

In comparison with the previous edition, the following technical modifications have been made:

- PVC-RI has been removed because it is no longer used in the designation;
- bend angle data for PVC-NI has been replaced by PVC-U;
- ram displacement requirements for PP-B and PP-H have been added;
- minimum short-term tensile welding factor for extrusion welding PVC-U has been added.

According to the CEN-CENELEC Internal Regulations, the national standards organisations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

EN 12814-8:2021 (E)

1 Scope

This document provides the requirements for the tests made on welded thermoplastics semi-finished products.

The selection of the appropriate test method(s) is made in accordance with the particular type and application of welded product.

The test results depend on the conditions of manufacture for the test specimen and on the test conditions. They can therefore only be related to the behaviour of the product or can only be used for designing a structure, if the test conditions can be related to the service conditions.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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 12814-1, *Testing of welded joints of thermoplastics semi-finished products - Part 1: Bend test*

EN 12814-2, *Testing of welded joints of thermoplastics semi-finished products - Part 2: Tensile test*

EN 12814-3, *Testing of welded joints in thermoplastics semi-finished products - Part 3: Tensile creep test*

EN 12814-4, *Testing of welded joints of thermoplastics semi-finished products - Part 4: Peel test*

EN 12814-5, *Testing of welded joints of thermoplastics semi-finished products - Part 5: Macroscopic examination*

EN 12814-6, *Testing of welded joints of thermoplastics semi-finished products - Part 6: Low temperature tensile test*

EN 12814-7, *Testing of welded joints of thermoplastics semi-finished products - Part 7: Tensile test with waisted test specimens*

3 Terms, definitions, symbols and abbreviations

3.1 Terms and definitions

No terms and definitions are listed in this document.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- IEC Electropedia: available at <http://www.electropedia.org/>
- ISO Online browsing platform: available at <https://www.iso.org/obp>

3.2 Symbols and abbreviations

For the purposes of this document, the following symbols and abbreviations apply.

HT Heated tool welding

HG Hot gas welding

EX Extrusion welding (continuous)

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](#)
-