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

Táto norma obsahuje anglickú verziu európskej normy. This standard includes the English version of the European Standard.

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# EUROPEAN STANDARD NORME EUROPÉENNE EUROPÄISCHE NORM

EN 12814-8

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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

# EN 12814-8:2021 (E)

Contents  European foreword		Page
1	Scope	4
2	Normative references	
3	Terms, definitions, symbols and abbreviations	
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
	Peel tests	
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.

## 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

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