

**Reinforced plastics composites -
Specifications for pultruded profiles -
Part 2: Methods of test and general
requirements**

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pultruded profiles - Part 2: Methods of test and
general requirements

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN 13706-2:2003 sisaldab Euroopa standardi EN 13706-2:2002 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 18.02.2003 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN 13706-2:2003 consists of the English text of the European standard EN 13706-2:2002.</p> <p>This document is endorsed on 18.02.2003 with the notification being published in the official publication of the Estonian national standardisation organisation.</p> <p>The standard is available from Estonian standardisation organisation.</p>
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<p>Käsitlusala:</p> <p>This Part 2 of EN 13706 defines the general requirements applicable to the specification of all types of pultruded profiles falling within the scope of this specification as defined in Part 1 of EN 13706. This Part 2 of EN 13706 describes the properties to be followed in the preparation of test specimens for the determination of mechanical properties required for the designation in Part 1 and the specific requirements in Part 3 of EN 13706</p>	<p>Scope:</p> <p>This Part 2 of EN 13706 defines the general requirements applicable to the specification of all types of pultruded profiles falling within the scope of this specification as defined in Part 1 of EN 13706. This Part 2 of EN 13706 describes the properties to be followed in the preparation of test specimens for the determination of mechanical properties required for the designation in Part 1 and the specific requirements in Part 3 of EN 13706</p>
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ICS 83.120; 83.140.99

English version

Reinforced plastics composites - Specifications for pultruded profiles - Part 2: Methods of test and general requirements

Composites en plastique renforcé - Spécification pour les profilés pultrudés - Partie 2: Méthodes d'essai et exigences générales

Verstärkte Kunststoffverbundwerkstoffe - Spezifikationen für pultrudierte Profile - Teil 2: Prüfverfahren und allgemeine Anforderungen

This European Standard was approved by CEN on 16 September 2002.

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 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 Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Malta, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.



EUROPEAN COMMITTEE FOR STANDARDIZATION
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Foreword

This document EN 13706-2:2002 has been prepared by Technical Committee CEN/TC 249 "Plastics", the secretariat of which is held by IBN.

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 2003, and conflicting national standards shall be withdrawn at the latest by April 2003.

Part 2 of this European Standard, EN 13706, defines the test methods and general requirements applicable to the specification of pultruded profiles.

EN 13706 consists of the following parts under the general title *Reinforced plastics composites - Specifications for pultruded profiles*.

- *Part 1: Designation*
- *Part 2: Methods of test and general requirements*
- *Part 3: Specific requirements*

Annexes A to E are normative. Annexes F and G are informative.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Malta, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom.

1 Scope

1.1 This Part 2 of EN 13706 specifies the general requirements applicable to the specification of all types of pultruded profiles falling within the scope of this specification as defined in Part 1 of EN 13706.

1.2 This Part 2 of EN 13706 specifies the properties to be followed in the preparation of test specimens for the determination of mechanical properties required for the designation in Part 1 and the specific requirements in Part 3 of EN 13706.

1.3 This Part 2 of EN 13706 also specifies the test methods to be used to determine both the designated and the specified properties given in Parts 1 and 3 respectively of EN 13706.

2 Normative references

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text, and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies (including amendments).

EN 10204, *Metallic products - Types of inspection documents*.

EN ISO 472, *Plastics- Vocabulary (ISO 472:1999)*.

EN ISO 527-4, *Plastics - Determination of tensile properties - Part 4: Test condition for isotropic and orthotropic fibre-reinforced plastics composites (ISO 527-4:1997)*.

EN ISO 14125, *Fibre-reinforced plastic composites - Determination of flexural properties (ISO 14125:1998)*.

EN ISO 14130, *Fibre-reinforced plastic composites - Determination of apparent interlaminar shear strength by short-beam method (ISO 14130:1997)*.

ISO 1268-6, *Fibre-reinforced plastics – Methods for producing test plates - Part 6: Pultrusion moulding*.

ISO 5893, *Rubber and plastics test equipment – Tensile, flexural and compression types (constant rate of traverse) – Specification*.

NOTE Other test methods in Tables F.1 to F.4 of annex F are informative and the full titles are given in those Tables.

3 Terms and definitions

For the purposes of this European Standard, the terms and definitions given in EN ISO 472 and the following apply.

3.1

pultrusion

continuous production process for the manufacture of composite profiles, by pulling layers of fibrous materials, impregnated with a synthetic resin, through a temperature controlled die, and by curing and/or cooling the resin, forming the final shape of the profile

3.2

pultruded profile

linear composite products, produced continuously by the pultrusion process and usually of constant cross section and characteristics