# Reinforced plastics composites -Specifications for pultruded profiles -Part 1: Designation

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### EESTI STANDARDI EESSÕNA

### NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 13706-	This Estonian standard EVS-EN 13706-			
1:2003 sisaldab Euroopa standardi EN	1:2003 consists of the English text of the			
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Standard on kättesaadav Eesti	The standard is available from Estonian			
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Käsitlusala:	Scope:			
This Part 1 of EN 13706 establishes a	This Part 1 of EN 13706 establishes a			
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data block system for the designation of pultruded profiles made from fibre reinforced plastics composites. The types of pultruded profiles are differentiated from each other by a classification system based on information about type of polymer matrix used, the reinforcement material, the type of reinforcement and the additional in-service performance features (e.g. fire retardancy, UV stability)

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**Võtmesõnad:** composite materials, designations, encoding, plastics, reinforced materials, reinforced plastics

# **EUROPEAN STANDARD** NORME EUROPÉENNE **EUROPÄISCHE NORM**

## EN 13706-1

November 2002

ICS 83,120: 83,140,99

English version

### Reinforced plastics composites - Specifications for pultruded profiles - Part 1: Designation

Composites en plastiques renforcés - Spécifications pour les profilés pultrudés - Partie 1: Désignation

Verstärkte Kunststoffverbundwerkstoffe - Spezifikationen für pultrudierte Profile - Teil 1: Bezeichnung

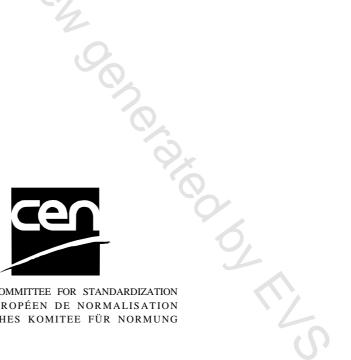
This European Standard was approved by CEN on 23 September 2002.

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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.

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EUROPEAN COMMITTEE FOR STANDARDIZATION COMITÉ EUROPÉEN DE NORMALISATION EUROPÄISCHES KOMITEE FÜR NORMUNG

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## Foreword

This document (EN 13706-1:2002) 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 May 2003, and conflicting national standards shall be withdrawn at the latest by May 2003.

Part 1 of this European Standard, EN 13706, establishes a data-block system for the designation of profiles made by the pultrusion process from fibre reinforced plastic composites using a format and coding system established by the International Standards Organisation (ISO) which is common to most fibre reinforced thermoset and thermoplastic materials. The system is intended to be applied only to materials ready for use.

The designation system is based on the premise that pultruded profiles can be divided into generic families based on the polymer matrix used, the nature of the reinforcement and the in-service performance required.

The system is intended for the designation of a particular profile (or a small group of similar profiles) within a generic family.

It is not intended to specify by this system the chemical composition or the volumetric content of the materials making up the profile but to designate the profile for identification purposes only. It is the responsibility of the producer of the profile to provide the appropriate designation.

The data-block system is also the basis for the specification given in Parts 2 and 3 of this standard.

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

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.

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### 1 Scope

**1.1** This Part 1 of EN 13706 establishes a data block system for the designation of pultruded profiles made from fibre reinforced plastics composites.

**1.2** The types of pultruded profiles are differentiated from each other by a classification system based on information about type of polymer matrix used, the reinforcement material, the type of reinforcement and the additional in-service performance features (e.g. fire retardancy, UV stability).

**1.3** This European Standard is applicable to pultruded profiles made from fibre reinforced plastics composites only. It applies to materials ready for use in the form of straight lengths of section, or in coils, for structural applications (see clause 3.3 EN 13706-2:2002).

This European Standard does not apply to the following types of pultruded profile :

- profiles designed primarily for their electrical properties ;
- profiles which are classified as non-structural, that is having properties below the minimum required to conform to the grade E17 (see Table 1 of clause 4.4, EN 13706-3:2002).

**1.4** This Part 1 of EN 13706 does not provide engineering data, performance data or data on service conditions which can be required to specify a profile for a particular application. If such additional properties are required, when ever possible, they shall be determined in accordance with the test methods specified in Part 2 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 13706-2:2002, Reinforced plastics composites — Specifications for pultruded profiles — Part 2: Methods of test and general requirements.

EN 13706-3:2002, Reinforced plastics composites — Specifications for pultruded profiles — Part 3: Specific requirements.

EN ISO 472:2001, Plastics - Vocabulary (ISO 472:1999).

### 3 Terms and definitions

For the purposes of this European Standard, the terms and definitions given in EN ISO 472:2001 apply. Additional terms and definitions are defined in clause 3 of EN 13706-2:2002.