Alumiinium ja alumiiniumisulamid. Lehed, ribad ja plaadid. Osa 2: Mehaanilised omadused

Aluminium and aluminium alloys - Sheet, strip and plate - Part 2: Mechanical properties

EESTI STANDARDIKESKUS

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 485-2:2007 sisaldab Euroopa standardi EN 485-2:2007 ingliskeelset teksti. Käesolev dokument on jõustatud 31.05.2007 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes. Standard on kättesaadav Eesti standardiorganisatsioonist.	This Estonian standard EVS-EN 485-2:2007 consists of the English text of the European standard EN 485-2:2007. This document is endorsed on 31.05.2007 with the notification being published in the official publication of the Estonian national standardisation organisation. The standard is available from Estonian standardisation organisation.

Käsitlusala: This document specifies the mechanical properties of wrought aluminium and wrought aluminium alloy sheet, strip and plate for general engineering applications. It does not apply to semi-finished rolled products in coiled form to be subjected to further rolling (reroll stock) or to special products such as corrugated, embossed, painted, sheets and strips or to special applications such as aerospace, can stock, finstock, for which mechanical properties are specified in separate European Standards. The chemical composition limits of the alloys are specified in EN 573-3. Temper designations are defined in Annex B, in compliance with the provisions of EN 515.	**Scope:** This document specifies the mechanical properties of wrought aluminium and wrought aluminium alloy sheet, strip and plate for general engineering applications. It does not apply to semi-finished rolled products in coiled form to be subjected to further rolling (reroll stock) or to special products such as corrugated, embossed, painted, sheets and strips or to special applications such as aerospace, can stock, finstock, for which mechanical properties are specified in separate European Standards. The chemical composition limits of the alloys are specified in EN 573-3. Temper designations are defined in Annex B, in compliance with the provisions of EN 515.

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Võtmesõnad: alumiinium, alumiiniumisulamid, eritakistus, korrosioonikindlus, kõvadusteimid, mehaanilised omadused, metallplaadid, paindeteimid, raud- ja terastooted, terasribad, tõmbeteimid, valtstooted

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English Version

Aluminium and aluminium alloys - Sheet, strip and plate - Part 2: Mechanical properties

Aluminium et alliages d'aluminium - Tôles, bandes et tôles épaisses - Partie 2: Caractéristiques mécaniques

Aluminium und Aluminiumlegierungen - Bänder, Bleche und Platten - Teil 2: Mechanische Eigenschaften

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Foreword

This document (EN 485-2:2007) has been prepared by Technical Committee CEN/TC 132 “Aluminium and aluminium alloys”, the secretariat of which is held by AFNOR.

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 October 2007, and conflicting national standards shall be withdrawn at the latest by October 2007.

This document supersedes EN 485-2:2004.

Within its programme of work, Technical Committee CEN/TC 132 entrusted CEN/TC 132/WG 7 "Sheet, strip and plate" to revise EN 485-2:2004.

EN 485 comprises the following parts under the general tittle, "Aluminium and aluminium alloys — Sheet, strip and plate".

— *Part 1: Technical conditions for inspection and delivery*

— *Part 2: Mechanical properties*

— *Part 3: Tolerances on dimensions and form for hot-rolled products*

— *Part 4: Tolerances on shape and dimensions for cold-rolled products*

Besides very slight editorial adjustments in the text and update of normative references, the following technical changes have been made:

Clauses 3 to 9:	Have been moved to prEN 485-1.
Tables 1 to 46:	Due to the introduction of new alloys, the tables have been renumbered when necessary.
New alloys:	EN AW-2618A; EN AW-5010; EN AW-5026; EN AW-5059; EN AW-5070; EN AW-5088; EN AW-6025; EN AW-7010 added.

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.

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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, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.

1 Scope

This document specifies the mechanical properties of wrought aluminium and wrought aluminium alloy sheet, strip and plate for general engineering applications.

It does not apply to semi-finished rolled products in coiled form to be subjected to further rolling (reroll stock) or to special products such as corrugated, embossed, painted, sheets and strips or to special applications such as aerospace, can stock, finstock, for which mechanical properties are specified in separate European Standards.

The chemical composition limits of the alloys are specified in EN 573-3.

Temper designations are defined in Annex B, in compliance with the provisions of EN 515.

2 Normative references

The following referenced documents are indispensable for the application 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.

prEN 485-1, *Aluminium and aluminium alloys — Sheet, strip and plate — Part 1: Technical conditions for inspection and delivery*

EN 10002-1, *Metallic materials — Tensile testing — Part 1: Method of test at ambient temperature*

ASTM G66, *Visual Assessment of Exfoliation Corrosion Susceptibility of 5xxx Series Aluminium Alloys (ASSET test)*

ASTM G67, *Standard Test Method for Determining the Susceptibility to Intergranular Corrosion of 5xxx series Aluminium Alloys by mass loss after exposure to nitric acid (NAMLT test)*

3 Requirements

The mechanical properties shall be in conformity with those specified in Clause 4 or those agreed upon between purchaser and manufacturer and stated on order document.

4 List of alloys with mechanical property limits

4.1 General

Tables 1 to 46 contain mechanical property limits values obtained by tensile testing according to EN 10002-1 after sampling and after sample preparation according to prEN 485-1.

They also contain values of bend radius and hardness following sampling and test methods as described in prEN 485-1. These values are for information only.

For some alloys they contain provisions related to intergranular corrosion, exfoliation corrosion or stress corrosion testing, see also prEN 485-1.