

**Alumiinium ja alumiiniumisulamid. Pressitud vardad või latid, torud ja profiilid. Osa 1: Tehnilised kontrolli- ja tarnetingimused**

Aluminium and aluminium alloys - Extruded rod/bar, tube and profiles - Part 1: Technical conditions for inspection and delivery

## EESTI STANDARDI EESSÕNA

## NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 755-1:2008 sisaldab Euroopa standardi EN 755-1:2008 ingliskeelset teksti.

Standard on kinnitatud Eesti Standardikeskuse 19.05.2008 käskkirjaga ja jõustub sellekohase teate avaldamisel EVS Teatajas.

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**Võtmesõnad:** alumiinium, alumiiniumisulamid, deformeeritavad tooted, katsed, kontroll, metalllatid, metalltorud, profiilmetall, tarnimine, tehnilised andmed

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English Version

## Aluminium and aluminium alloys- Extruded rod/bar, tube and profiles - Part 1: Technical conditions for inspection and delivery

Aluminium et alliages d'aluminium - Barres, tubes et profilés filés - Partie 1: Conditions techniques de contrôle et de livraison

Aluminium und Aluminiumlegierungen - Stranggepresste Stangen, Rohre und Profile - Teil 1: Technische Lieferbedingungen

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## Foreword

This document (EN 755-1:2008) 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of an identical text or by endorsement, at the latest by September 2008, and conflicting national standards shall be withdrawn at the latest by September 2008.

This document supersedes EN 755-1:1997.

Within its programme of work, Technical committee CEN/TC 132 entrusted CEN/TC 132/WG 5 "*Extruded and drawn products*" to revise EN 755-1:1997.

The following technical modifications have been introduced during the revision:

- Clause 1: Scope is clarified with respect to what is not included
- Clause 3: Definition of order document is included
- Clause 4: Ordering document shall contain information about application, especially for products to be anodised
- Subclauses 5.4 and 6.2.3: Provisions regarding Brinell hardness testing are included
- Subclauses 5.7 and 6.2.6: Requirements to stress corrosion cracking resistance are included (from former Annex A in Part 2)
- Subclause 6.1.1: For samples for chemical analysis reference is made to EN 14361
- Subclause 6.1.3.3: For shapes and dimensions of test pieces reference is made to EN 10002-1 (and former Annex A is deleted)
- Clause 7: For inspection documents, reference is made to EN 10204
- Annex B: Annex B Resistance to stress corrosion cracking – Electrical conductivity is added (taken from former Part 2)

EN 755 comprises the following parts under the general title "*Aluminium and aluminium alloys — Extruded rod/bar, tube and profiles*":

- *Part 1: Technical conditions for inspection and delivery*
- *Part 2: Mechanical properties*
- *Part 3: Round bars, tolerances on dimensions and form*
- *Part 4: Square bars, tolerances on dimensions and form*
- *Part 5: Rectangular bars, tolerances on dimensions and form*
- *Part 6: Hexagonal bars, tolerances on dimensions and form*
- *Part 7: Seamless tubes, tolerances on dimensions and form*
- *Part 8: Porthole tubes, tolerances on dimensions and form*

— *Part 9: Profiles, tolerances on dimensions and form*

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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 the United Kingdom.

## 1 Scope

This document specifies the technical conditions for inspection and delivery of wrought aluminium and aluminium alloy extruded rod/bar, tube and profile for general engineering applications.

This document does not apply to:

- forging stock (EN 603),
- extruded precision profiles in alloys EN AW-6060 and EN AW-6063 (EN 12020),
- products delivered in coils (prEN 13957),
- coiled tubes cut to length (prEN 13957).

## 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.

EN 515, *Aluminium and aluminium alloys — Wrought products — Temper designations*

EN 573-3, *Aluminium and aluminium alloys - Chemical composition and form of wrought products - Part 3: Chemical composition and form of products*

EN 755-2, *Aluminium and aluminium alloys — Extruded rod/bar, tube and profiles — Part 2: Mechanical properties*

EN 755-3, *Aluminium and aluminium alloys — Extruded rod/bar, tube and profiles — Part 3: Round bars, tolerances on dimensions and form*

EN 755-4, *Aluminium and aluminium alloys — Extruded rod/bar, tube and profiles — Part 4: Square bars, tolerances on dimensions and form*

EN 755-5, *Aluminium and aluminium alloys — Extruded rod/bar, tube and profiles — Part 5: Rectangular bars, tolerances on dimensions and form*

EN 755-6, *Aluminium and aluminium alloys — Extruded rod/bar, tube and profiles — Part 6: Hexagonal bars, tolerances on dimensions and form*

EN 755-7, *Aluminium and aluminium alloys — Extruded rod/bar, tube and profiles — Part 7: Seamless tubes, tolerances on dimensions and form*

EN 755-8, *Aluminium and aluminium alloys — Extruded rod/bar, tube and profiles — Part 8: Porthole tubes, tolerances on dimensions and form*

EN 755-9, *Aluminium and aluminium alloys — Extruded rod/bar, tube and profiles — Part 9: Profiles, tolerances on dimensions and form*

EN 2004-1, *Aerospace series — Test methods for aluminium and aluminium alloy products — Part 1: Determination of electrical conductivity of wrought aluminium alloys*

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

EN 10204, *Metallic products — Types of inspection documents*

EN 12258-1:1998, *Aluminium and aluminium alloys — Terms and definitions — Part 1: General terms*

EN 14242, *Aluminium and aluminium alloys — Chemical analysis — Inductively coupled plasma optical emission spectral analysis*

EN 14361, *Aluminium and aluminium alloys — Chemical analysis — Sampling from metal melts*

EN ISO 6506-1, *Metallic materials — Brinell hardness test — Part 1: Test method (ISO 6506-1:2005)*

ISO 9591, *Corrosion of aluminium alloys — Determination of resistance to stress corrosion cracking*

ASTM G47, *Standard Test Method for Determining Susceptibility to Stress-Corrosion Cracking of 2XXX and 7XXX Aluminium Alloy Products*

### 3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN 12258-1:1998 and the following apply.

#### 3.1

##### order document

document or set of documents agreed between supplier and purchaser at the time of ordering

### 4 Ordering information

The order document shall contain the following:

a) form and type of product:

- form of the product (extruded rod/bar, tube or profile). If tube, whether seamless or porthole/bridge extruded,
- reference to EN 573-3 for chemical composition limits,
- reference to EN 515 for temper designation,
- purchaser application, in particular whether subsequent anodising is intended. This shall be clearly stated on the order document.

b) reference to EN 755-2 for mechanical property limits;

c) reference to this document (EN 755-1);

d) dimensions and shape of the product:

1) round tube:

- length,

and only two of the following dimensions:

- outside diameter,
- inside diameter,
- wall thickness.