

Aluminium and aluminium alloys - Wrought products -  
Temper designations

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## EESTI STANDARDI EESSÕNA

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ICS 01.040.77, 77.120.10, 77.150.01

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EUROPEAN STANDARD

EN 515

NORME EUROPÉENNE

EUROPÄISCHE NORM

March 2017

ICS 01.040.77; 77.120.10; 77.150.01

Supersedes EN 515:1993

English Version

## Aluminium and aluminium alloys - Wrought products - Temper designations

Aluminium et alliages d'aluminium - Produits corroyés  
- Désignation des états métallurgiques

Aluminium und Aluminiumlegierungen - Halbzeug -  
Bezeichnungen der Werkstoffzustände

This European Standard was approved by CEN on 6 February 2017.

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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 CEN-CENELEC 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

**CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels**

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## European foreword

This document (EN 515:2017) 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of an identical text or by endorsement, at the latest by September 2017, and conflicting national standards shall be withdrawn at the latest by September 2017.

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 515:1993.

The following modifications were implemented in this new version of EN 515:

- Addition of Clause 2 “Normative references”;
- new definitions and sources in Clause 3;
- new precision in Subclauses 6.1, 7 and 7.3;
- new Table 1 and modification of Table 2;
- improvement of the content of Clause 8.4;
- modification of Figure 1;
- inclusion of new tempers in Table 3: T552, T554, T72, T72510, T72511, T74511, T7452, T7454, T7752, T7754, T7852, T7854, T7952 and T7954;
- modification of new tempers in Table 3: H131, T3510;
- updating Annex A.

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, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

## 1 Scope

This European Standard establishes temper designations for all forms of wrought aluminium and aluminium alloys and for continuously cast aluminium and aluminium alloys drawing stock and strip intended to be wrought.

NOTE Some of these temper designations may be subject of patent or patent applications and their listing herein is not to be construed in any way as the granting of a license under such patent right.

Additional temper designations, conforming to this standard, may be standardized with CEN/TC 132 and AECMA/5 provided:

- the temper is used or is available for use by more than one user;
- mechanical property limits are defined;
- the characteristics of the temper are significantly different from those of all other tempers which have the same sequence of basic treatments and for which designations already have been assigned for the same alloy and product;
- the following are also defined if characteristics other than mechanical properties are considered significant:
  - a) test methods and limits for the characteristics; or
  - b) the specific practices used to produce the temper.

## 2 Normative references

Not applicable.

## 3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

**3.1  
temper**  
condition of the metal produced by mechanical and/or thermal processing, typically characterized by a certain structure and specified properties

[SOURCE: EN 12258-1:2012, 3.6.5]

**3.2  
hot working**  
forming of a solid metal after preheating

Note 1 to entry: Strain hardening may or may not occur during hot working.

[SOURCE: EN 12258-1:2012, 3.2.3]