

# Aluminium and aluminium alloys — Reroll stock for general applications —

## Part 2: Specifications for cold rolled reroll stock

The European Standard EN 12482-2:1998 has the status of a British Standard

ICS 77.150.10

## National foreword

This British Standard is the English language version of EN 12482-2:1998.

The UK participation in its preparation was entrusted by Technical Committee NFE/35, Light metals and their alloys, to Subcommittee NFE/35/5, Wrought aluminium and aluminium alloys, which has the responsibility to:

- aid enquirers to understand the text;
- present to the responsible international/European committee any enquiries on the interpretation, or proposals for change, and keep the UK interests informed;
- monitor related international and European developments and promulgate them in the UK.

A list of organizations represented on this subcommittee can be obtained on request to its secretary.

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### Summary of pages

This document comprises a front cover, an inside front cover, the EN title page, pages 2 to 5 and a back cover.

### Amendments issued since publication

Amd. No.	Date	Text affected

This British Standard, having been prepared under the direction of the Engineering Sector Committee, was published under the authority of the Standards Committee and comes into effect on 15 December 1998

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ISBN 0 580 30337 3

ICS 77.150.10

Descriptors: aluminium, aluminium alloys, cold rolled products, reroll stock, definitions, specifications, delivery, orders, sales documents, dimensions, dimensional tolerances, tests, acceptance tests, marking, packing

English version

## Aluminium and aluminium alloys — Reroll stock for general applications — Part 2: Specifications for cold rolled reroll stock

Aluminium et alliages d'aluminium — Ebauches de relaminage pour applications générales —  
Partie 2: Spécifications pour ébauches obtenues par laminage à froid

Aluminium und Aluminiumlegierungen —  
Vorwalzband für allgemeine Anwendungen —  
Teil 2: Spezifikationen für kaltgewalztes Vorwalzband

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**CEN**

European Committee for Standardization  
Comité Européen de Normalisation  
Europäisches Komitee für Normung

**Central Secretariat: rue de Stassart 36, B-1050 Brussels**

## Foreword

This European Standard 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 January 1999, and conflicting national standards shall be withdrawn at the latest by January 1999.

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, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom.

This standard is part of a series of two standards. The other standard deals with:

EN 12482-1, *Aluminium and aluminium alloys — Reroll stock for general applications — Part 1: Specifications for hot rolled reroll stock.*

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## Introduction

When hot or cold rolled strip in aluminium and aluminium alloy is to be rolled to thinner gauges in order to obtain cold rolled products such as sheets, strips, finstock and foil, this intermediate product is then called reroll stock.

As the properties of the final products depend on the properties of the reroll stock and the further process, it is therefore not practicable to specify in detail minimum requirements for all properties of reroll stock. This standard therefore gives only guidelines to the specifications which have to be established carefully between producer and purchaser prior to ordering.

## 1 Scope

This part of EN 12482 specifies the particular requirements for wrought aluminium and aluminium alloys in the form of cold rolled strip. The thickness range covered is over 0,20 mm to 4 mm.

It does not apply to cold rolled strip which is not rerolled, such as strip for general engineering or special applications.

## 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.

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

EN 485-2, *Aluminium and aluminium alloys — Sheet, strip and plate — Part 2: Mechanical properties.*

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.*

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

## 3 Definitions

For the purposes of this European Standard, the definitions of aluminium and aluminium alloys according to EN 12258-1, the definitions of strip, hot rolled strip, sample, test piece and test according to EN 485-1, and the following apply.

### 3.1

#### reroll stock

rolled strip destined to be rolled to thinner gauges in order to obtain cold rolled products such as sheets, strips, finstock and foil

### 3.2

#### cold rolled reroll stock

reroll stock whose final thickness is obtained by cold rolling

## 4 Technical conditions for inspection and delivery

### 4.1 Orders or tenders

The order or tender shall define the product required and shall contain at least the following information:

- a) the form and type of product:
  - 1) the designation of the aluminium or aluminium alloy in accordance with EN 573-3;
  - 2) the application intended by the purchaser:
    - the form, final thickness and temper to which the product is transformed at the purchaser's works;
    - any indication on intended surface treatments;
- b) the temper of the product for delivery in accordance with EN 515;
- c) whether mechanical properties are to be specified;
- d) the number of this European Standard or a specification number, or, where none exists, the properties agreed between producer and purchaser;
- e) the dimensions and shape of the product:
  - thickness;
  - width;
  - net mass of the coil (without core);
  - internal and external diameters of the coil;
  - core size and type;
- f) the quantity:
  - number of coils;
  - minimum and maximum mass of coils;
  - tolerance on quantity if required;
- g) any requirements for inspection documents;
- h) any special requirements for packing:
  - mass per coil;
  - design of pallet;
- i) any special requirements agreed between producer and purchaser:
  - marking of products;
  - additional property requirements.

## 4.2 Requirements

### 4.2.1 Production and manufacturing processes

Unless otherwise stated in the order, the production and manufacturing processes shall be left to the discretion of the producer. Unless it is explicitly stated in the order no obligation shall be placed on the producer to use the same processes for subsequent and similar orders.

### 4.2.2 Quality control

The producer shall be responsible for the performance of all inspection and tests required by the relevant European Standard and/or the particular specification, prior to shipment of the product.

If the purchaser wishes to inspect the product at the producer's works, he shall notify the producer at the time of placing the order.

### 4.2.3 Freedom from defects

The product shall be free from defects prejudicial to its suitable and proper use. It shall have a smooth and clean rolling surface.

The surface condition shall be agreed between producer and purchaser.

### 4.2.4 Chemical composition

The chemical composition shall comply with the requirements as specified in EN 573-3.

If the purchaser requires content limits for elements not specified in the above standard, these limits shall be stated on the order, after agreement between producer and purchaser.

### 4.2.5 Mechanical properties

If mechanical properties are required, they shall be in conformity with those specified in EN 485-2 or those agreed between producer and purchaser and stated on the order.

### 4.2.6 Tolerances on dimensions

The tolerances on dimensions shall be in conformity with those specified in clause 5 or agreed between producer and purchaser and stated on the order.

### 4.2.7 Other properties

Additional property requirements, such as surface roughness, surface aspect, edge trimming, etc., shall be agreed between producer and purchaser and stated on the order.

## 4.3 Test procedures

### 4.3.1 Chemical composition

Chemical composition shall be tested as specified in EN 485-1.

### 4.3.2 Tensile test

Selection and preparation of samples and test pieces shall be in conformity with EN 485-1.

### 4.3.3 Retests

Retests shall be carried out in conformance with EN 485-1.

## 5 Tolerances on dimensions

### 5.1 Thickness

Tolerances on thickness are specified in Table 1.

For the purpose of this standard the alloys are divided into two groups, which correspond to varying difficulty when manufacturing the products.

The division into group I and group II of the most commonly used general engineering alloys is specified in Table 3.

Table 1 — Tolerances on thickness

Dimensions in millimetres

Specified thickness		Tolerances on nominal thickness for specified width					
Over	Up to and including	Over 1 000 up to and including 1 250		Over 1 250 up to and including 1 600		Over 1 600 up to and including 2 100	
		Alloy group I	Alloy group II	Alloy group I	Alloy group II	Alloy group I	Alloy group II
0,2	0,5	±0,04	±0,05	±0,05	±0,06	±0,05	±0,06
0,5	0,7	±0,05	±0,06	±0,06	±0,07	±0,07	±0,08
0,7	1,0	±0,06	±0,08	±0,08	±0,09	±0,09	±0,10
1,0	1,2	±0,07	±0,09	±0,09	±0,10	±0,10	±0,12
1,2	1,5	±0,09	±0,11	±0,10	±0,12	±0,11	±0,14
1,5	2,0	±0,11	±0,13	±0,12	±0,14	±0,14	±0,16
2,0	3,0	±0,13	±0,15	±0,15	±0,17	±0,17	±0,19
3,0	4,0	±0,20	±0,20	±0,22	±0,23	±0,23	±0,23

## 5.2 Width

### 5.2.1 Strip without trimmed edges

Tolerances on width for strip without trimmed edges shall be agreed between producer and purchaser and stated on the order.

### 5.2.2 Strip with trimmed edges

Tolerances on width for strip with trimmed edges are specified in Table 2.

**Table 2 — Tolerances on width for strip with trimmed edges**

Dimensions in millimetres

Specified thickness		Tolerance on width for specified width		
Over	Up to and including	Over 1 000 up to and including 1 250	Over 1 250 up to and including 1 600	Over 1 600 up to and including 2 100
0,2	1,0	+2,0 0	+3,0 0	+3,5 0
1,0	2,0	+2,5 0	+3,0 0	+3,5 0

Tolerances on width for thicknesses over 2,0 mm shall be agreed between producer and purchaser and stated on the order.

## 6 Inspection documents

Inspection documents shall be in conformity with those specified in EN 485-1.

## 7 Marking

Unless otherwise agreed at the time of ordering, the following marking requirements shall apply:

- name or mark of the producer;
- alloy and temper designation;
- order number;
- ordered dimensions;
- production batch number and mass.

Each of these items shall be given on a label, which is to be attached to every coil or pack.

## 8 Packing

The packing requirements shall be agreed between producer and purchaser.

## 9 Arbitration tests

In cases of dispute concerning conformity with the requirements of this European Standard or specification cited on the order, before rejecting the products, testing and examination shall be carried out by an arbitrator chosen by mutual agreement between producer and purchaser.

The arbitrator's decision shall be final.

## 10 Alloy groups

The division into group I and group II of the most commonly used general engineering alloys is specified in Table 3. Grouping of other alloys is subject to agreement between producer and purchaser.

**Table 3 — Alloy groups**

Group I	EN AW-1080A, EN AW-1070A, EN AW-1050A, EN AW-1200, EN AW-1100, EN AW-3003, EN AW-3103, EN AW-3005, EN AW-3105, EN AW-3105A, EN AW-3207, EN AW-5005, EN AW-5005A, EN AW-5050, EN AW-5050A, EN AW-8011A, EN AW-8111
Group II	EN AW-3004, EN AW-3104, EN AW-5040, EN AW-5042, EN AW-5049, EN AW-5251, EN AW-5052, EN AW-5154A, EN AW-5454, EN AW-5754, EN AW-5182, EN AW-5083, EN AW-5086, EN AW-8006, EN AW-8008, EN AW-8014

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