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**BSI Standards Publication**

# **Aluminium and aluminium alloys — Extruded precision profiles in alloys EN AW-6060 and EN AW-6063**

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Part 1: Technical conditions for inspection and delivery

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## National foreword

This British Standard is the UK implementation of EN 12020-1:2022. It supersedes BS EN 12020-1:2008, which is withdrawn.

The UK participation in its preparation was entrusted to Technical Committee NFE/35, Light metals and their alloys.

A list of organizations represented on this committee can be obtained on request to its committee manager.

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This British Standard was published under the authority of the Standards Policy and Strategy Committee on 31 May 2022.

### Amendments/corrigenda issued since publication

Date	Text affected
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English Version

## Aluminium and aluminium alloys - Extruded precision profiles in alloys EN AW-6060 and EN AW-6063 - Part 1: Technical conditions for inspection and delivery

Aluminium et alliages d'aluminium - Profilés de précision filés en alliages EN AW-6060 et EN AW-6063  
- Partie 1: Conditions techniques de contrôle et de livraison

Aluminium und Aluminiumlegierungen - Stranggepresste Präzisionsprofile aus Legierungen EN AW-6060 und EN AW-6063 - Teil 1: Technische Lieferbedingungen

This European Standard was approved by CEN on 31 January 2022.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CEN member.

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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**CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels**

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<b>Contents</b>	<b>Page</b>
<b>European foreword</b> .....	<b>3</b>
<b>1 Scope</b> .....	<b>4</b>
<b>2 Normative references</b> .....	<b>4</b>
<b>3 Terms and definitions</b> .....	<b>5</b>
<b>4 Ordering information</b> .....	<b>5</b>
<b>4.1 General</b> .....	<b>5</b>
<b>4.2 Reference to a drawing</b> .....	<b>6</b>
<b>5 Requirements</b> .....	<b>7</b>
<b>5.1 Production and manufacturing processes</b> .....	<b>7</b>
<b>5.2 Quality control</b> .....	<b>7</b>
<b>5.3 Chemical composition limit</b> .....	<b>7</b>
<b>5.4 Mechanical properties</b> .....	<b>8</b>
<b>5.5 Freedom from surface defects</b> .....	<b>8</b>
<b>5.6 Tolerances on dimensions and form</b> .....	<b>8</b>
<b>5.7 Section mass</b> .....	<b>8</b>
<b>6 Test procedures</b> .....	<b>8</b>
<b>6.1 Sampling</b> .....	<b>8</b>
<b>6.1.1 Samples for chemical analysis</b> .....	<b>8</b>
<b>6.1.2 Mechanical properties</b> .....	<b>8</b>
<b>6.2 Test methods</b> .....	<b>8</b>
<b>6.2.1 Chemical composition limit</b> .....	<b>8</b>
<b>6.2.2 Hardness testing</b> .....	<b>9</b>
<b>6.2.3 Tensile testing</b> .....	<b>9</b>
<b>6.2.4 Measurement of dimensions</b> .....	<b>9</b>
<b>6.2.5 Surface finish</b> .....	<b>9</b>
<b>7 Inspection documents</b> .....	<b>9</b>
<b>8 Marking of products</b> .....	<b>9</b>
<b>9 Packaging</b> .....	<b>9</b>
<b>10 Arbitration</b> .....	<b>9</b>
<b>Bibliography</b> .....	<b>10</b>

This is a preview of "BS EN 12020-1:2022". [Click here to purchase the full version from the ANSI store.](#)

## European foreword

This document (EN 12020-1:2022) 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 2022, and conflicting national standards shall be withdrawn at the latest by September 2022.

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 12020-1:2008.

The following technical modifications have been introduced during the revision:

— Modification of the scope.

The series EN 12020 comprises the following parts under the general title *Aluminium and aluminium alloys - Extruded precision profiles in alloys EN AW-6060 and EN AW-6063*:

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

— *Part 2: Tolerances on dimensions and form*

Any feedback and questions on this document should be directed to the users' national standards body. A complete listing of these bodies can be found on the CEN website.

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

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## 1 Scope

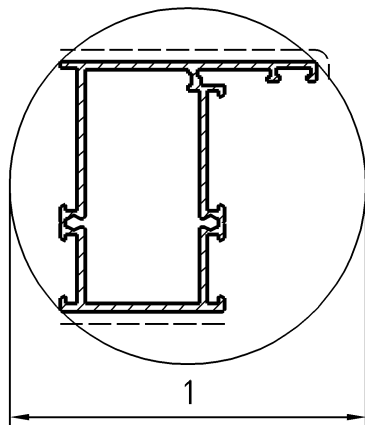
This document specifies technical conditions for inspection and delivery of alloys EN AW-6060 and EN AW-6063 extruded precision profiles manufactured with and without a thermal barrier (see Figures 1 and 2) and without further surface treatment.

Precision profiles for which this document is applicable are distinguished from extruded profiles for general applications covered in EN 755-9 by the following characteristics:

- they are designed with mostly uniform wall-thicknesses;
- they are mainly used for mechanical engineering, architectural and automotive (except crash-elements) applications;
- the maximum weight by meter is 10 kg/m;
- the max. wall-thickness proportion ( $t_{max}/t_{min}$ ) of 3,5.

In the case of profiles, which, due to the complexity of their design are difficult to manufacture and specify, then special agreements between supplier and purchaser may need to be reached.

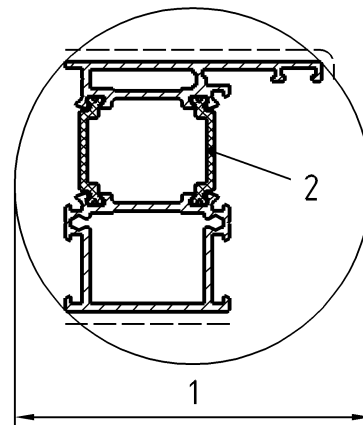
NOTE The effect of the thermal barrier material on the dimensional tolerances is covered by EN 12020-2 although the actual thermal barrier material itself is not (see EN 14024).



### Key

- 1 CD maximum 350 mm

Figure 1 — Profile without thermal barrier



### Key

- 1 CD maximum 350 mm  
2 thermal barriers

Figure 2 — Profile containing thermal barrier

## 2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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 573-3, *Aluminium and aluminium alloys - Chemical composition and form of wrought products - Part 3: Chemical composition and form of products*