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STN	**Hliník a zliatiny hliníka Pretláčané presné profily zo zliatin EN AW-6060 a EN AW-6063 Časť 1: Technické podmienky na kontrolu a dodanie**	**STN EN 12020-1** 42 7820

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

Táto norma obsahuje anglickú verziu európskej normy.
This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 05/22

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EUROPEAN STANDARD

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Supersedes EN 12020-1:2008

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.

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EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
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CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

Ref. No. EN 12020-1:2022 E

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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of an identical text or by endorsement, at the latest by September 2022, and conflicting national standards shall be withdrawn at the latest by September 2022.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.

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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;

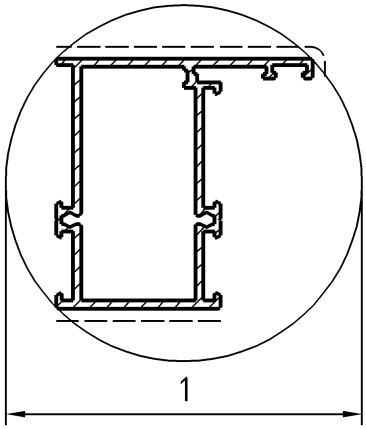
— they are mainly used for mechanical engineering, architectural and automotive (except crash-elements) applications;

— the maximum weight by meter is 10 kg/m;

— the max. wall-thickness proportion (tmax/tmin) 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.

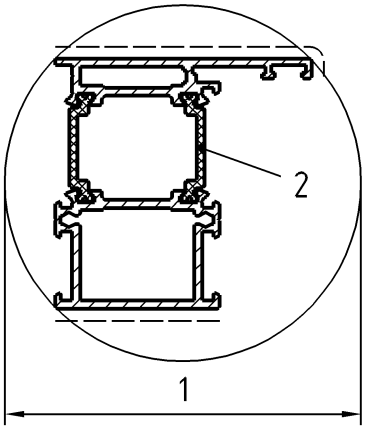
NOTE The effect of the thermal barrier material on the dimensional tolerances is covered by EN 12020-2 although the actual thermal barrier material itself is not (see EN 14024).



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*

EN 755-1, *Aluminium and aluminium alloys - Extruded rod/bar, tube and profiles - Part 1: Technical conditions for inspection and delivery*

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

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

EN 12020-2, *Aluminium and aluminium alloys - Extruded precision profiles in alloys EN AW-6060 and EN AW-6063 - Part 2: Tolerances on dimensions and form*

EN 12206-1, *Paints and varnishes - Coating of aluminium and aluminium alloys for architectural purposes - Part 1: Coatings prepared from thermosetting coating powder*

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)*

EN ISO 6892-1, *Metallic materials - Tensile testing - Part 1: Method of test at room temperature (ISO 6892-1)*

EN ISO 7599, *Anodizing of aluminium and its alloys - Method for specifying decorative and protective anodic oxidation coatings on aluminium (ISO 7599)*