

<b>STN</b>	<b>Hliník a zliatiny hliníka</b> <b>Pretláčané presné profily zo zliatin EN AW-6060</b> <b>a EN AW-6063</b> <b>Časť 2: Tolerancie rozmerov a tvaru</b>	<b>STN</b> <b>EN 12020-2</b>  42 7820
------------	---	--

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

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. 03/23

Obsahuje: EN 12020-2:2022

Oznámením tejto normy sa ruší  
STN EN 12020-2 (42 7820) z júna 2017

**136594**

EUROPEAN STANDARD

EN 12020-2

NORME EUROPÉENNE

EUROPÄISCHE NORM

December 2022

ICS 77.150.10

Supersedes EN 12020-2:2016

English Version

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

Aluminium et alliages d'aluminium - Profilés de précision filés en alliages EN AW-6060 et EN AW-6063  
- Partie 2 : Tolérances sur dimensions et forme

Aluminium und Aluminiumlegierungen - Stranggepresste Präzisionsprofile aus Legierungen EN AW-6060 und EN AW-6063 - Teil 2: Grenzabmaße und Formtoleranzen

This European Standard was approved by CEN on 30 October 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.

CEN members are the national standards bodies of 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, Türkiye and United Kingdom.



EUROPEAN COMMITTEE FOR STANDARDIZATION  
COMITÉ EUROPÉEN DE NORMALISATION  
EUROPÄISCHES KOMITEE FÜR NORMUNG

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

**EN 12020-2:2022 (E)**

<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 Tolerances on dimensions .....</b>	<b>5</b>
4.1 General.....	5
4.2 Cross-sectional dimensions.....	5
4.3 Length.....	7
4.4 Squareness of cut ends.....	8
4.5 Length offset for profiles with a thermal barrier .....	8
<b>5 Tolerances on form .....</b>	<b>8</b>
5.1 Parallelism.....	8
5.2 Straightness.....	9
5.3 Convexity-Concavity.....	10
5.4 Contour .....	12
5.5 Twist .....	13
5.6 Angularity .....	15
5.7 Corner and fillet radii .....	16
<b>Bibliography.....</b>	<b>18</b>

## **European foreword**

This document (EN 12020-2:2022) 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 June 2023, and conflicting national standards shall be withdrawn at the latest by June 2023.

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 12020-2:2016.

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, Türkiye and the United Kingdom.

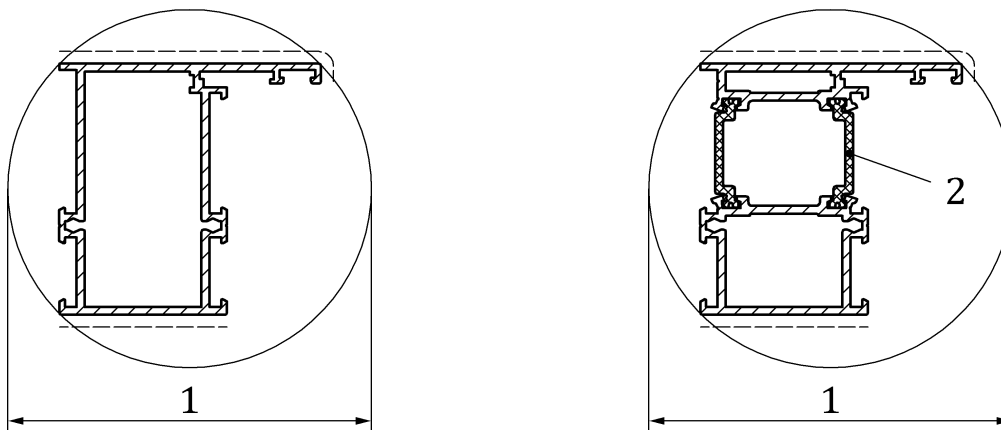
**EN 12020-2:2022 (E)****1 Scope**

This document specifies tolerances on dimensions and form of extruded precision profiles in alloys EN AW-6060 and EN AW-6063, manufactured with and without a thermal barrier (see Figures 1 and 2). It applies to extruded products supplied without further surface treatment. Precision profiles covered in this document 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;
- their maximum weight per metre is 10 kg/m;
- their maximum wall thickness ratio ( $t_{max}/t_{min}$ ) is 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 this document although the actual thermal barrier material itself is not (see EN 14024).

**Key**

1 CD maximum 350 mm

**Key**

1 CD maximum 350 mm

2 thermal barriers

**Figure 1 — Profile without thermal barrier****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 ISO 1101, *Geometrical product specifications (GPS) - Geometrical tolerancing - Tolerances of form, orientation, location and run-out (ISO 1101)*

**koniec náhľadu – text ďalej pokračuje v platenej verzii STN**