

SLOVENSKI STANDARD

SIST EN 1860-1:2013+A1:2017

01-oktober-2017

Nadomešča:
SIST EN 1860-1:2013

**Naprave, trdna goriva in naprave za vžiganje žara - 1. del: Žari na trdna goriva -
Zahteve in preskusne metode (vključno z dopolnilom A1)**

Appliances, solid fuels and firelighters for barbecuing - Part 1: Barbecues burning solid
fuels - Requirements and test methods

Geräte, feste Brennstoffe und Anzündhilfen zum Grillen - Teil 1: Grillgeräte für feste
Brennstoffe - Anforderungen und Prüfverfahren

Appareils, combustibles solides et allume-feu pour la cuisson au barbecue - Partie 1:
Barbecues utilisant les combustibles solides - Exigences et méthodes d'essai

Ta slovenski standard je istoveten z: EN 1860-1:2013+A1:2017

ICS:

| | | |
|-----------|---|--|
| 75.160.10 | Trda goriva | Solid fuels |
| 97.040.20 | Štedilniki, delovni pulti, pečice in podobni aparati | Cooking ranges, working tables, ovens and similar appliances |

SIST EN 1860-1:2013+A1:2017 en,fr,de

iTeh STANDARD PREVIEW
(standards.iteh.ai)

[SIST EN 1860-1:2013+A1:2017](https://standards.iteh.ai/catalog/standards/sist/0c13ce5a-0315-416f-8edd-cc514c0d3641/sist-en-1860-1-2013a1-2017)

<https://standards.iteh.ai/catalog/standards/sist/0c13ce5a-0315-416f-8edd-cc514c0d3641/sist-en-1860-1-2013a1-2017>

EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN 1860-1:2013+A1

June 2017

ICS 75.160.10; 97.040.20

Supersedes EN 1860-1:2013

English Version

Appliances, solid fuels and firelighters for barbecuing - Part 1: Barbecues burning solid fuels - Requirements and test methods

Appareils, combustibles solides et allume-feu pour la cuisson au barbecue - Partie 1: Barbecues utilisant les combustibles solides - Exigences et méthodes d'essai

Geräte, feste Brennstoffe und Anzündhilfen zum Grillen - Teil 1: Grillgeräte für feste Brennstoffe - Anforderungen und Prüfverfahren

This European Standard was approved by CEN on 16 September 2012 and includes Amendment 1 approved by CEN on 30 April 2017.

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, 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 United Kingdom.



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

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

| Contents | Page |
|--|-------------|
| European foreword..... | 3 |
| Introduction | 4 |
| 1 Scope | 5 |
| 2 Normative references | 5 |
| 3 Terms and definitions | 5 |
| 4 Requirements | 7 |
| 4.1 General requirements | 7 |
| 4.2 Requirements for parts..... | 9 |
| 4.2.1 Cooking grid | 9 |
| 4.2.2 Rotisserie spit..... | 9 |
| 4.2.3 Fuel compartment..... | 10 |
| 4.2.4 Ash compartment or catcher | 12 |
| 4.2.5 Gravy tray or drip pan | 13 |
| 4.2.6 Stand | 13 |
| 4.2.7 Handles or gripping devices..... | 13 |
| 4.2.8 Motor | 15 |
| 5 Test methods | 15 |
| 5.1 General..... | 15 |
| 5.2 Thermal test..... | 16 |
| 5.2.1 General..... | 16 |
| 5.2.2 Thermal test of use | 16 |
| 5.2.3 Safety test..... | 18 |
| 5.3 Combustibility..... | 19 |
| 5.4 Stability..... | 19 |
| 5.4.1 Barbecues and suitcase barbecues | 19 |
| 5.4.2 Permanent barbecues | 20 |
| 5.5 Handling | 22 |
| 5.6 Cooking grid..... | 22 |
| 5.7 Perforation test..... | 22 |
| 6 Marking | 25 |
| 7 Instructions for use | 29 |
| 8 A1 Packaging A1 | 32 |
| Annex A (informative) Mandatory sentences | 37 |
| Annex B (informative) A1 A – Deviation A1 | 46 |
| Bibliography | 47 |

European foreword

This document (EN 1860-1:2013+A1:2017) has been prepared by Technical Committee CEN/TC 281 “Appliances, solid fuels and firelighters for barbecuing”, the secretariat of which is held by AENOR.

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 December 2017, and conflicting national standards shall be withdrawn at the latest by December 2017.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN [and/or CENELEC] shall not be held responsible for identifying any or all such patent rights.

This document includes Amendment 1 approved by CEN on 30 April 2017.

This document supersedes A1 EN 1860-1:2013 A1.

The start and finish of text introduced or altered by amendment is indicated in the text by tags A1 A1.

The main technical modifications are the following:

- a. Clause 3, Terms and definitions: definition of BBQ modified to introduce Close and Open barbecues;
- b. 4.2.3.1: measurement of thickness added;
- c. New 4.2.4, Ash compartment or catcher;
- d. 4.2.7: Table 3 modified;
- e. Clause 5, Test Methods: Test methods modified. A thermal test of use and a safety test were added;
- f. New Annex A.

This European Standard on *appliances, solid fuels and firelighters for barbecuing* consists of the following parts:

Part 1: Barbecues burning solid fuels — Requirements and test methods

Part 2: Barbecue charcoal and barbecue charcoal briquettes — Requirements and test methods

Part 3: Firelighters for igniting solid fuels for use in barbecue appliances — Requirements and test methods

Part 4: Single use barbecues burning solid fuels — Requirements and test methods

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.

EN 1860-1:2013+A1:2017 (E)

Introduction

This standard is part 1 of the European Standard for appliances, solid fuels and firelighters for barbecuing, which is intended to reduce the risks which can occur during and through barbecuing with solid fuels.

This part should be read in conjunction with parts 2 and 3.

iTeh STANDARD PREVIEW (standards.iteh.ai)

[SIST EN 1860-1:2013+A1:2017](https://standards.iteh.ai/catalog/standards/sist/0c13ce5a-0315-416f-8edd-cc514c0d3641/sist-en-1860-1-2013a1-2017)

<https://standards.iteh.ai/catalog/standards/sist/0c13ce5a-0315-416f-8edd-cc514c0d3641/sist-en-1860-1-2013a1-2017>


1 Scope

This part of this European Standard is applicable to barbecues which burn solid fuels, except single use barbecues. Barbecues which are intended to be converted from other fuels to solid fuels also should conform to this standard.

This European Standard specifies requirements for materials, construction, design, test methods, markings and instructions relating to them.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 71-1:2014, *Safety of toys - Part 1: Mechanical and physical properties* 

EN 1860-2, *Appliances, solid fuels and firelighters for barbecuing — Part 2: Barbecue charcoal and barbecue charcoal briquettes — Requirements and test methods*

3 Terms and definitions

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

3.1

barbecue

appliance designed for outdoor cooking in the open air which is divided into the following categories

3.1.1

suitcase barbecue or portable barbecue

appliance that can be carried with one hand without parts falling off when dismantled or folded. It can be classified as either:

- a) closed as described in 3.1.2 or;
- b) open as described in 3.1.3

3.1.2

closed barbecue

appliance designed for cooking outdoors by means of radiant and convection heat consisting at least of a fuel compartment, a lid which may have air vents, a cooking grid and/or a rotisserie

3.1.3

open barbecue

appliance designed for cooking outdoors by means of radiant heat consisting at least of a fuel compartment, a cooking grid and/or a rotisserie

EN 1860-1:2013+A1:2017 (E)

3.1.4**permanent barbecue**

outdoor barbecue designed to be permanently installed. It may consist of pre-fabricated elements fitted together and may include a pre-fabricated hood. It may have removable parts, and be classified as either:

- a) closed as described in 3.1.2 or;
- b) open as described in 3.1.3

3.2**fuel compartment**

part of the barbecue where the fuel is burnt; it may have, or be a fuel grate and may have air vents. In closed barbecues the fuel compartment is the fuel grate or the fuel grate with fuel rails or baskets or a fuel tray

3.3**fuel grate**

perforated part of the barbecue on which the fuel is placed

3.4**ash compartment or catcher**

part of the barbecue intended to catch any ash or embers which may fall from the fuel compartment or fuel grate

3.5**barbecue accessories**

parts of the barbecue which hold the food to be barbecued during cooking

3.5.1**cooking grid**

part of the barbecue on which the food to be cooked is placed and/or which can take on the function of the fuel grate

3.5.2**rotisserie spit**

metal rod suitable for skewering the food to be cooked via the truncated cone on one side and which can be rotated by hand and/or via a motor in a suitable support

3.5.3**rotisserie meat forks**

clamping devices on the rotisserie spit that can be slid onto and fixed in any position on which the food to be cooked can be secured

3.5.4**gravy tray**

device to collect juices and drippings to be consumed

3.6**removable parts**

parts which can be removed without the use of a tool

iTeh STANDARD PREVIEW
(standards.iteh.ai)

to be barbecued during cooking
<https://standards.iteh.ai/catalog/standards/sist/0c13ce5a-0315-416f-8edd-cc514c0d3641/sist-en-1860-1-2013a1-2017>

3.7**usable area**

any area of a barbecue component and accessories, as described in 3.5 through 3.5.4, intended to come into contact with the food to be barbecued during cooking is regarded as being usable

3.8**drip pan**

device to collect waste drippings not to be consumed

3.9**stand**

support structure of a barbecue onto which the functional parts of the barbecue are located

3.10**silk paper**

thin, soft, relatively hard to tear paper with a weight between 12 g/m² and 25 g/m² usually used to wrap delicate objects

3.11**windshield**

component of the barbecue used to minimise undesirable effect of the wind during the use of the barbecue

iTeh STANDARD PREVIEW (standards.iteh.ai)

4 Requirements**4.1 General requirements**

SIST EN 1860-1:2013+A1:2017

When testing as described in 5.2, the coatings of the barbecue accessories shall not liberate any solid substance nor ignite. Also any solid substance coming from other parts of the barbecue shall not ignite nor fall into the usable area.

NOTE For surfaces of and coatings on parts of the barbecue coming into contact with the food to be barbecued, cooking grid, rotisserie spit, rotisserie meat forks and gravy trays, see Regulation (EC) No 1935/2004 (see Bibliography). Differing legal requirements may exist in non-EU-countries.

It shall be possible to assemble and dismantle suitcase or portable barbecues as described in the instructions for use either without the aid of a tool or using the tool that is supplied. Components shall be fixed in such a way that they cannot fall off during transportation.

When assembling, operating and manipulating the barbecue, accessible edges and corners shall be free from burr. Rough surfaces, sharp edges and corners, which can cause injury, are not allowed.

In case of doubt to determine whether rough surface, sharp edges or corners can cause an injury a test according to **EN 71-1:2014**, 8.11 is mandatory. However, for the bars of the cooking grids, EN 71-1 test is not applicable, so general requirements as described above shall be applied.

All accessible parts of the barbecue components made of metal sheet or tubes of thickness less than 0,7 mm (– 0,02 mm) coating excluded shall be as shown in Figures 1, 2, 3 and 4.

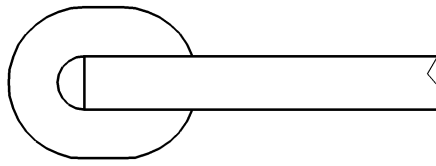


Figure 1 — Fully edged

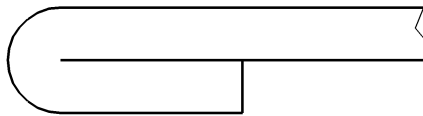


Figure 2 — Folded and flattened



Figure 3 — Rolled and closed

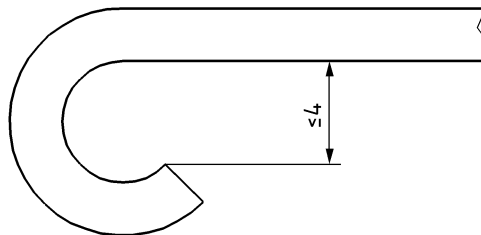


Figure 4 — Rolled and half closed

The construction of the barbecue shall be such that when placed horizontally the change of the fuel compartment position, according to the instruction for use and the insertion and removal of barbecue accessories with the cooking grid and/or rotisserie spit loaded as described in 5.5, shall be possible without the barbecue tipping over or components becoming detached or moved in such a way that they are no longer capable of fulfilling their functions. These requirements also apply when testing the barbecue as described in 5.2.

After testing in accordance with Clause 5, a barbecue fails if it does not meet the following requirements:

- a) any deformation of a component that compromises the use and safety of the barbecue;
- b) any component showing cracks and/or fractures;

NOTE A permanent barbecue may show cracks and/or fractures which do not influence the safety.

- c) any component falls off;
- d) the temperature and safety requirements mentioned in the test descriptions are not met.

4.2 Requirements for parts

4.2.1 Cooking grid

The clear distance between the bars of the cooking grid shall not exceed 20 mm before, during and after testing according to 5.2 and 5.6. This requirement relates to the usable area of the grid, which shall be at least 80 % of the horizontal area of the fuel compartment, vertically projected.

If the cooking grid has the function of a grate, the clear distance between the bars of the grate and also, in the case of vertical fuel compartment, of those between the grate and the edges of the fuel container shall not exceed 20 mm before, during and after testing according to 5.2 and 5.6.

The cooking grid shall rest on its supporting points in the most unfavourable position when loaded as described in 5.5. When the load has been removed the deformation of each grid bar shall not exceed 5 % relative to the length of the bar when tested according to 5.6.

Manually adjustable cooking grids up to 400 mm diameter or longest side measurement shall be fitted with one handle minimum, cooking grids over 400 mm diameter or longest side measurement shall be fitted with two handles. If the cooking grid position is adjustable, this adjustment shall be possible without the operator's hand coming into direct contact with the cooking grid.

Removable or movable handles shall be attached to the cooking grid in such a way that tipping to the side or forwards when loaded as described in 5.5 shall be impossible.

Handle is not required when the height of the cooking grid can be adjusted through a mechanical device.

The barbecue shall be designed in such a way that when the fuel compartment is uniformly loaded to 75 % of its capacity, the cooking grid in its most unfavourable position shall not come into contact with the fuel.

4.2.2 Rotisserie spit

The end of the rotisserie spit shall have the shape of a truncated cone of minimum diameter not less than 1,5 mm and not exceeding 3 mm and a taper angle between 60° and 90°.

The rotisserie spit shall have a permanent or removable handle of at least 100 mm usable length.

The handle for any motor supplied with it shall be 80 mm minimum length.

If the distance between the support points of the rotisserie spit exceeds 800 mm a second handle shall be provided unless the motor has the function of a handle.

The handle (or handles) shall be fitted to the rotisserie spit in such a way that when tested in accordance with 5.2.2 the surface temperatures shall not exceed the values specified in Table 3.

The rotisserie spit shall have a minimum of two adjustable and fixable rotisserie meat forks.

EN 1860-1:2013+A1:2017 (E)

When loading the rotisserie spit with 0,5 kg per 100 mm usable length it shall rest on all its supporting points.

The other components of the barbecue or the fuel load following the instructions for use shall not come into contact with a cylinder 200 mm in diameter and of a length equivalent to at least 60 % of the usable rotisserie spit length placed centrally around the rotisserie spit and in the centre of the rotisserie spit. If several rotisserie spit positions are possible, this requirement shall be met for at least one position.

4.2.3 Fuel compartment**4.2.3.1 General**

Fuel compartments made of steel sheet require a minimum thickness (coating excluded) as specified in Table 1.

The thickness shall be measured in three different points:

- one to be in the centre of the bottom;
- two on the opposite sides at minimum 150 mm from each other;

If one side of the fuel compartment is a grate, only two sides are measured.

iTeh STANDARD PREVIEW
(standards.iteh.ai)

[SIST EN 1860-1:2013+A1:2017](https://standards.iteh.ai/catalog/standards/sist/0c13ce5a-0315-416f-8edd-cc514c0d3641/sist-en-1860-1-2013a1-2017)

<https://standards.iteh.ai/catalog/standards/sist/0c13ce5a-0315-416f-8edd-cc514c0d3641/sist-en-1860-1-2013a1-2017>

The thickness shall be considered the average of the measurements.

NOTE On finished products ready to be commercialised:

- 1) Measure the total thickness " T_t " in the three points of the fuel compartment.
- 2) Measure at these same points on both sides the thickness of the coating C_{ext} and C_{int} .
- 3) Calculate by subtraction the thickness of the uncoated steel sheet in each. $T = T_t - (C_{ext} + C_{int})$
- 4) Calculate the average from them.

Table 1 — Minimum thickness of steel sheet for fuel compartments

| Grid size diameter or longest side measurement | Thickness |
|--|-----------|
| ≤ 400 mm | 0,7 mm |
| > 400 mm | 0,8 mm |

For fuel compartments with a grid size diameter or longest side measurement ≤ 400 mm, a thickness (coating excluded) between 0,5 mm and 0,7 mm is acceptable, provided they are glass or porcelain enamelled on both sides and withstand the tests according to:

- a) 5.2.2 one time and 5.2.3 two times consecutively; and
- b) 5.7.

iTeh STANDARD PREVIEW
(standards.iteh.ai)

Fuel compartments made of cast metal require a minimum thickness coating excluded of 2,5 mm.

Fuel compartments made of materials other than steel sheet or cast material (excluding permanent barbecues) shall withstand the tests according to:

- a) 5.2.2 one time and 5.2.3 two times consecutively; and
- b) 5.7.

4.2.3.2 Openings

If the fuel compartment after assembly has openings, these shall meet the following requirements when tested as described in 5.2 and 5.3.

The number of openings in the flat base of the fuel compartment shall not exceed four and shall be dimensioned so that a sphere of 3 mm in diameter will not fall through them, their area shall not exceed 50 mm².

Other openings, other than in the flat base, if circular should have a diameter not exceeding 8 mm, or, if a different shape, their area shall not exceed 50 mm².

With larger openings the barbecue shall be equipped with an ash catcher or the barbecue shall be designed so that it is impossible for any embers or fuel to fall out or roll off when tested as described in 5.2 and 5.3.

4.2.3.3 Depth of the fuel compartment

The minimum depth of the fuel compartment shall be as indicated in Table 2. The minimum depth shall be available over 80 % of the usable area of the fuel compartment.