

# Appliances, solid fuels and firelighters for barbecueing —

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

The European Standard EN 1860-1:2003, incorporating amendment A1:2006, has the status of a British Standard

ICS 75.160.10

# National foreword

This British Standard is the official English language version of EN 1860-1:2003, including amendment A1:2006.

The start and finish of text introduced or altered by amendment is indicated in the text by tags **A1** **A1**. Tags indicating changes to CEN text carry the number of the CEN amendment. For example, text altered by CEN amendment A1 is indicated in the text by **A1** **A1**.

The UK participation in its preparation was entrusted by Technical Committee RHE/28, Domestic solid mineral fuel appliances, to Subcommittee RHE/28/1, Appliances, solid fuels and firestarters for barbecuing, 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.

## Cross-references

The British Standards which implement international or European publications referred to in this document may be found in the *BSI Catalogue* under the section entitled “International Standards Correspondence Index”, or by using the “Search” facility of the *BSI Electronic Catalogue* or of British Standards Online.

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

**Compliance with a British Standard does not of itself confer immunity from legal obligations.**

This British Standard was published under the authority of the Standards Policy and Strategy Committee on 27 March 2003

**Summary of pages**  
This document comprises a front cover, an inside front cover, the EN title page, pages 2 to 18, an inside back cover and a back cover.

The BSI copyright date displayed in this document indicates when the document was last issued.

## Amendments issued since publication

Amd. No.	Date	Comments
16257	August 2006	See national foreword

English version

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

Appareils, combustibles solides et allume-barbecue pour la cuisson au barbecue - Partie 1: Barbecue 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 28 November 2002.

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 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 Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Luxembourg, Malta, Netherlands, Norway, Portugal, Slovakia, Spain, Sweden, Switzerland and United Kingdom.



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

Management Centre rue de Stassart, 36 B-1050 Brussels

## Contents

	page
<b>Foreword</b> .....	<b>3</b>
<b>Introduction</b> .....	<b>4</b>
<b>1 Scope</b> .....	<b>5</b>
<b>2 Normative references</b> .....	<b>5</b>
<b>3 Terms and definitions</b> .....	<b>5</b>
<b>4 Requirements</b> .....	<b>6</b>
4.1 General requirements .....	6
4.2 Requirements for parts .....	8
4.2.1 Cooking grid .....	8
4.2.2 Spit .....	8
4.2.3 Fuel compartment .....	9
4.2.4 Gravy tray or drip pan .....	10
4.2.5 Stand .....	10
4.2.6 Handles or gripping devices .....	10
4.2.7 Motor .....	10
<b>5 Test methods</b> .....	<b>11</b>
5.1 General .....	11
5.2 Thermal test .....	11
5.3 Combustibility .....	11
5.4 Stability .....	11
5.4.1 Barbecues and suitcase barbecues .....	11
5.4.2 Permanent barbecues .....	12
5.5 Handling .....	14
5.6 Cooking grid .....	14
5.7 Perforation test .....	15
<b>6 Marking</b> .....	<b>17</b>
<b>7 Instructions for use</b> .....	<b>17</b>
<b>Bibliography</b> .....	<b>18</b>

## Foreword

This document (EN 1860-1:2003) 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 September 2003, and conflicting national standards shall be withdrawn at the latest by September 2003.

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: Solid fuels for use in barbecue appliances - Requirements and test methods.*

*Part 3: Firelighters for igniting solid fuels for use in barbecues 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 organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Luxembourg, Malta, Netherlands, Norway, Portugal, Slovakia, Spain, Sweden, Switzerland and the United Kingdom.

## Foreword to amendment A1

This document (EN 1860-1:2003/A1:2006) 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 Amendment to the European Standard EN 1860-1:2003 shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by August 2006, and conflicting national standards shall be withdrawn at the latest by August 2006.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.

## 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.

## 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 are also applicable to this standard.

This standard specifies requirements for materials, construction, design and test methods relating to them.

## 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 (including amendments).

prEN 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 European Standard, the following terms and definitions apply.

### 3.1

#### **barbecue**

an appliance designed for cooking in the open air by means of radiant and possible convection heat and consisting at least of a fuel compartment and a cooking grid and/or a rotating spit

### 3.1.2

#### **permanent barbecue**

an 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

### 3.2

#### **fuel compartment**

the part of the barbecue where the fuel is burnt; it may have, or be a grate

### 3.3

#### **grate**

a 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 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 grate

### 3.5.2

#### **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

#### **meat forks**

clamping devices on the spit that can be slid into 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

### 3.7

#### **usable area**

any area of a barbecue component and accessories 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/m<sup>2</sup> and 25 g/m<sup>2</sup> usually used to wrap delicate objects

[ISO 4046:2001]

## 4 Requirements

### 4.1 General requirements

Coatings shall withstand the test as described in 5.2.

**NOTE** For surfaces of and coatings on parts of the barbecue coming into contact with the food to be barbecued, cooking grid, spit, meat forks and gravy trays, see Directive 89/109/EEC (see Bibliography). Differing legal requirements can exist in non-EU-countries.

It shall be possible to assemble and dismantle suitcase 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 can not 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.

All accessible parts of the barbecue components made of sheet or tube of thickness less than 0,7 mm without coating shall be as shown in Figures 1, 2, 3 and 4.



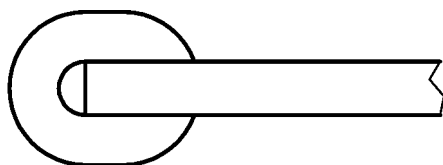


Figure 1 — Fully edged

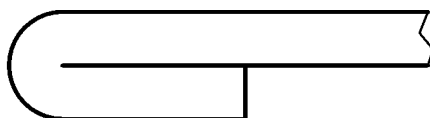


Figure 2 — Folded and flattened

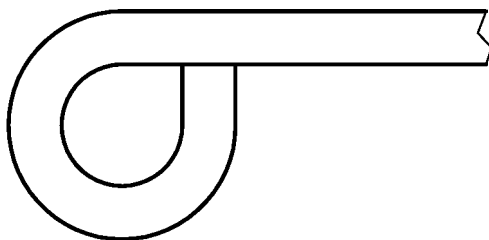


Figure 3 — Rolled and closed

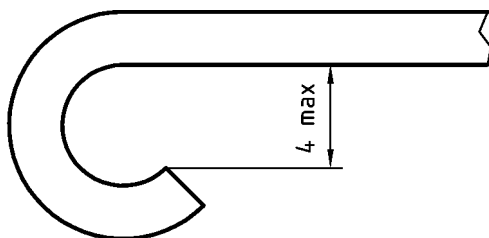


Figure 4 — Rolled and half closed

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 spit loaded as described in 5.5, shall be possible without the barbecue tipping over or components become 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 5.2 and 5.4 a barbecue fails if:

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

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

- c) any component falls off;
- d) the temperature of the base on which the barbecue is placed has exceeded 70 °C during the test.

## 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.

No handle is 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 Spit

The end of the 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 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 spit exceeds 800 mm a second handle shall be provided unless the motor has the function of a second handle.

The handle (or handles) shall be fitted to the spit in such a way that when tested in accordance with 5.2 the surface temperatures shall not exceed the values specified in Table 3.

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

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

The other components of the barbecue shall not come into contact with a cylinder 200 mm in diameter, with a grid in place, and of a length equivalent to at least 60 % of the usable spit length placed centrally around the spit and in the centre of the spit. If several 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 (uncoated) as specified in Table 1.

**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 uncoated 0,7 mm, minimum uncoated 0,5 mm, is acceptable, provided they are glass or porcelain enamelled on both sides and withstand the tests according to:

- 1) 5.2 three times consecutively; and
- 2) 5.7.

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

Fuel compartments made of materials other than steel sheet or cast material shall withstand the tests according to

- 1) 5.2 three times consecutively; and
- 2) 5.7.

#### 4.2.3.2 Openings

If the fuel container 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 mm<sup>2</sup>.

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 mm<sup>2</sup>.

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.

**Table 2 — Minimum depth of the fuel compartment**

Grid size diameter or longest side measurement	Minimum depth of fuel compartment
≤ 400 mm	50 mm
> 400 mm	60 mm

If the fuel compartment is a grate Table 2 shall not be taken into account but it shall have an ash catcher.

If the fuel compartment has several possible positions, stops shall be provided to secure the container in each of these positions.

Where a barbecue is built into brick, pre-fabricated brickwork elements or similar structure, the brickwork can be used as part of the fuel compartment when calculating the minimum depth shown in Table 2.

#### 4.2.4 Gravy tray or drip pan

If the barbecue has a gravy tray or drip pan with the barbecue in the horizontal position it shall either be arranged in such a way that its contents flow away from the fuel compartment or have a recess at least 5 mm deep and the horizontal distance between the grate and the beginning of the recess shall be at least 30 mm, when the base of the gravy tray or drip pan is horizontal.

#### 4.2.5 Stand

If the stand is foldable, the folding elements shall be capable of being locked in the operating position of the barbecue. A locking and/or unlocking device shall not operate unintentionally.

The stand shall support the barbecue when tested in any position as described in 5.4. The barbecue shall not tip over and when used in accordance with the instructions for use no components shall fall off.

If the stand or barbecue has wheels to enable it to be moved, no parts or accessories shall fall off during movement and a means shall be provided to prevent accidental movement of the stand or barbecue during normal use.

A gripping device shall be provided to move the barbecue safely.

#### 4.2.6 Handles or gripping devices

Handles shall have a usable length of minimum 80 mm. Separate requirements apply for spit handles (see 4.2.2).

Handles or gripping devices shall be fitted in such a way that when tested in accordance with 5.2 the surface temperatures over the full usable part of the handle shall not exceed the values specified in Table 3.

**Table 3 — Surface temperatures**

Material	Temperature
Metal	55 °C
Glass/ceramics	66 °C
Plastics	70 °C
Wood	89 °C

#### 4.2.7 Motor

For a barbecue supplied with a motor with spring winding or battery operated, or if the use of a specific motor is permitted by the instructions for use, the following shall apply:

- the motor shall operate the spit for at least 30 min without having to rewind the motor or replace the batteries;
- there shall be no risk, when rewinding the motor or replacing the batteries of the operators hand coming into contact with other part of the barbecue with surface temperatures exceeding the values specified in Table 3.

This requirement applies for the spit loaded as described in 4.2.2.

The motors supplied shall still be capable of moving the spit loaded as described in 4.2.2 after testing in accordance with 5.2.

NOTE For electric motors, see also EN 50165.

## 5 Test methods

### 5.1 General

The requirements given in clause 4 shall be verified by visual examination, linear measurement, function testing and/or calculation, unless otherwise specified.

Testing shall be carried out with charcoal as defined in prEN 1860-2 (see also DIN 51749 or in NF B 55-101)

Testing shall be carried out at an ambient temperature of  $20\text{ °C} \pm 5\text{ °C}$ , in still air (airspeed less than 0,5 m/s).

For testing purposes each individual weight shall not exceed 0,5 kg and 100 mm in any dimension.

### 5.2 Thermal test

The barbecue is placed on a horizontal plane made of plywood approximately 25 mm thick with a matt black painted surface.

The fuel compartment is filled to 75 % of its nominal capacity with charcoal in accordance with the instructions for use.

The nominal capacity of the fuel compartment is calculated by multiplying its actual minimum depth by the usable area of its cooking grid. The actual minimum depth shall not be less than shown in Table 2.

The charcoal is lit and the barbecue operated for as long as it takes for the charcoal to burn completely.

In the case of permanent barbecues a second test shall be carried out with two consecutive loads of fir timber cut to listels of section 50 mm x 50 mm and the same length as the fuel compartment and placed in such a way as to form a bound stack with a distance of 10 mm between adjacent listels, the capacity as calculated above. The second load shall be one half in volume of the first load and shall be loaded not later than 30 min after the first lighting. Operate the barbecue until both loads are burnt completely.

The temperature of the plywood plane and all handles shall be measured. For the handles the measurement shall be taken over the full usable part.

For barbecues with several fuel compartments which may be operated separately or simultaneously, the test shall be carried out in the most unfavourable combination.

If the fuel compartment or the compartments have several positions the testing shall be carried out in each position.

In addition verify whether the marking as specified in clause 6 is still legible or has not come away.

### 5.3 Combustibility

The barbecue is placed loaded and operated as described in 5.2 except the plywood is of natural colour and additionally covered with white silk paper in accordance with 3.10.

The size of the test area shall correspond to the barbecue installation area, plus a margin of 250 mm all round. During the test the paper shall not burn and the plywood shall not become singed.

### 5.4 Stability

#### 5.4.1 Barbecues and suitcase barbecues

The barbecue is placed on a plane made of plywood at an angle of  $10^\circ$  to the horizontal. To prevent the barbecue from slipping or rotating, it may be stopped at the contact points without restricting the possibility of tipping over. The barbecue shall not tip over in any of the most unfavourable positions and conditions for use when loaded as described in 5.2 and the spit loaded as described in 4.2.2.

Then the barbecue shall be placed on a horizontal plane with the fuel compartment loaded as described in 5.2 and the grate loaded with a charge of 1 kg/dm<sup>2</sup> of the usable area of the grid uniformly distributed.

During these two tests the requirements of 4.1 a), b) and c) shall be verified by visual examination and linear measurement.

#### **5.4.2 Permanent barbecues**

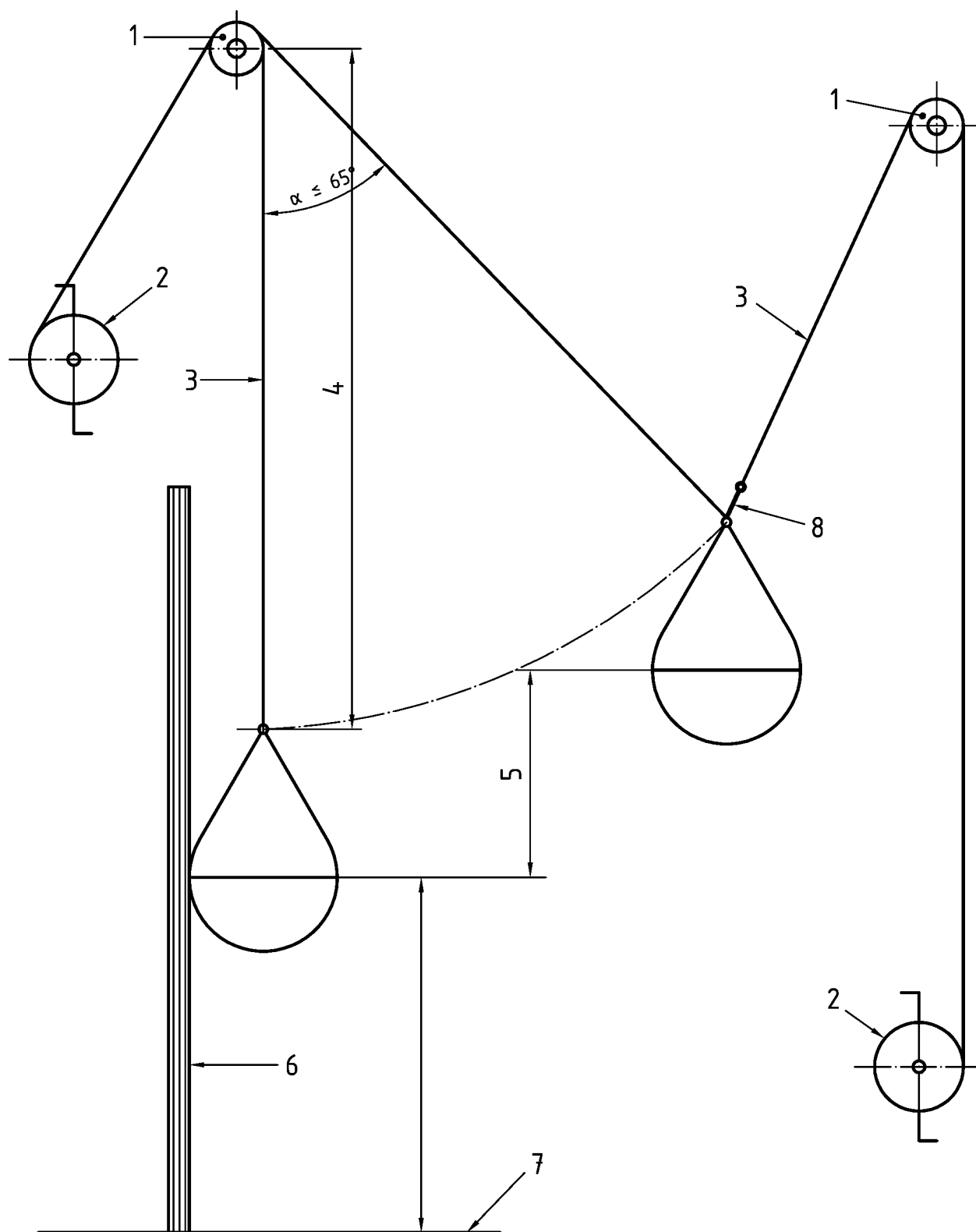
##### **5.4.2.1 Permanent barbecues with hood**

The stability test shall be an impact resistance test carried out according to Figure 5, with the impact point in the central rear part at 1,3 m from the horizontal base, a drop height of 1,0 m and using a sphericoconical bag according to Figure 6. The mass of the sphericoconical bag shall be 10 % of the total mass of the barbecue with a maximum of 50 kg. The barbecue shall be built according to the instructions for installation and use.

In the mass evaluation the prefabricated elements not structurally fitted (e.g. a bench) shall be excluded.

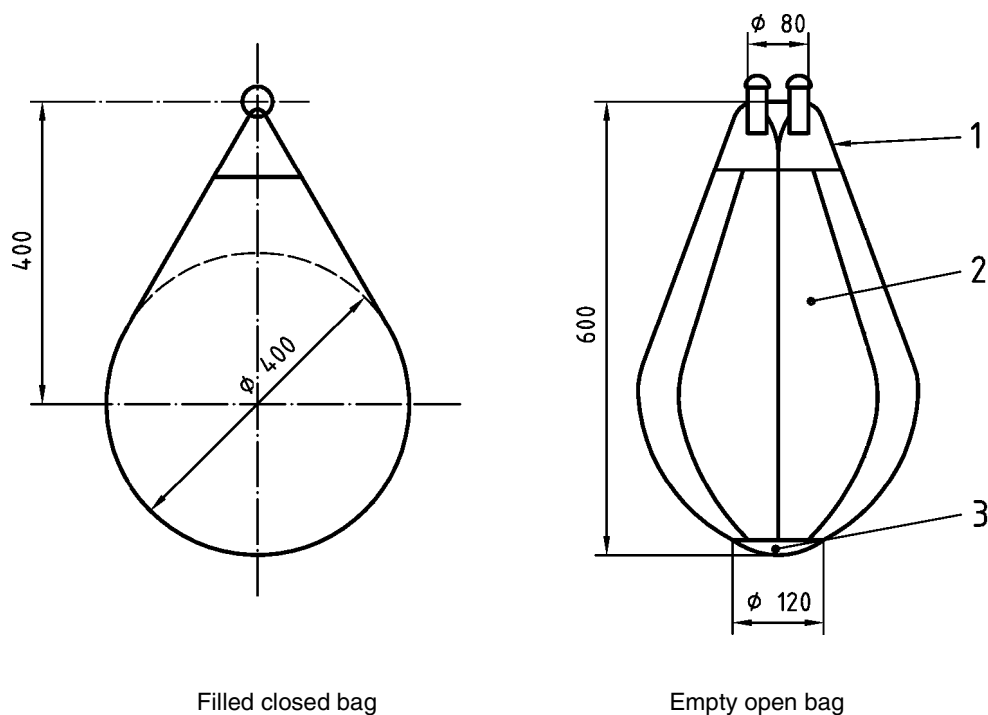
##### **5.4.2.2 Permanent barbecues without hood**

The permanent barbecue without hood shall be tested according to A1 5.4.1. A1

**Key**

- |          |  |
|----------|--|
| 1 Pulley | 5 Drop height                          |
| 2 Winch  | 6 Rear of the permanent barbecue       |
| 3 Cable  | 7 Horizontal surface                   |
| 4 Length | 8 Snap-hook releasable from a distance |

**Figure 5 — Stability test**

**Key**

- 1 Leather string
- 2 Eight canvas sections
- 3 Leather bottom

**Figure 6 — Spheroconical bag for the stability test****5.5 Handling**

The barbecue is placed as described in 5.2:

- a) The cooking grid is loaded with  $0,25 \text{ kg/dm}^2$  uniformly distributed over the usable area;
- b) The spit is loaded with  $0,5 \text{ kg/dm}$  usable length, uniformly distributed.

It shall be observed if it is possible to insert or remove barbecue accessories and to change the position of the fuel compartment, as described in the instructions for use.

**5.6 Cooking grid**

The barbecue is placed as described in 5.2. The cooking grid is loaded with  $0,5 \text{ kg/dm}^2$  of the usable area. The load shall be removed after one minute.

The permanent deformation of each grid bar shall be measured and shall comply with 4.2.1.



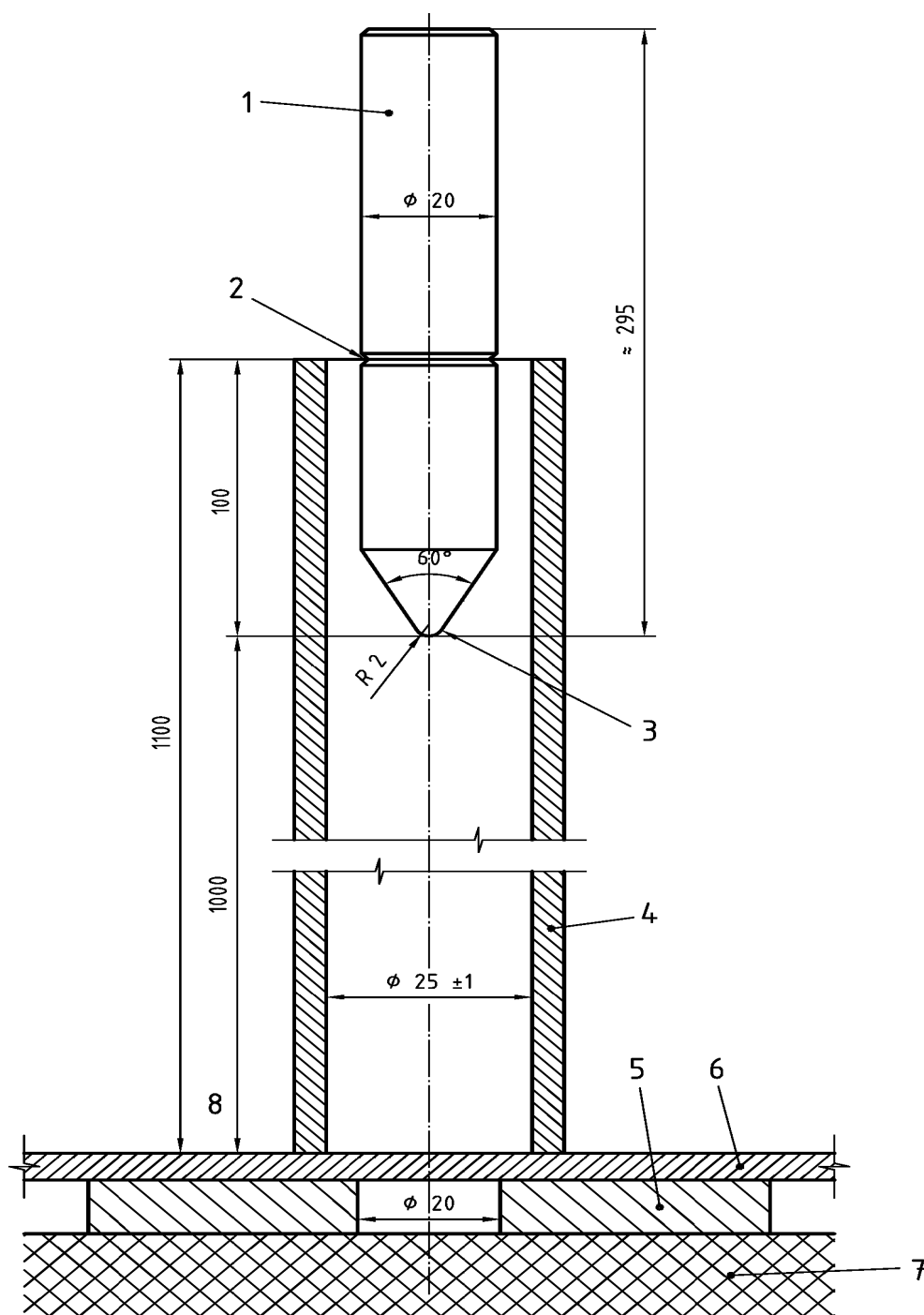
## 5.7 Perforation test

Using the arrangement shown in Figure 7, the test object is placed on a horizontal solid steel support of minimum 10 mm thickness.

The guide tube shall be placed vertically above the test object on the centre line of the 20 mm diameter hole. Position the test weight in the top of the tube with the point 1 m above the test object. The test weight is allowed to fall by gravity on to the test object.

The test fails if the test object is perforated.

NOTE This subclause should be read in conjunction with 4.2.3.1.

**Key**

- 1 Weight 700g  $\pm$  1 %
- 2 Marking
- 3 Point hardened
- 4 Pipe

- 5 Solid steel support 10mm x 100mm x 200 mm
- 6 Test object
- 7 Solid bottom
- 8 Free fall

**Figure 7 — Perforation test by gravity**

## 6 Marking

Markings shall be visible, legible, indelible and at least in the national language(s) of the country of sale.

The barbecue shall be marked with the following information:

- a) Name or trademark of the manufacturer or distributor. This shall be fitted on the barbecue by casting, stamping, enamelling or labelling;
- b) Warning notice

**A1** "CAUTION! Do not use spirit or petrol for lighting or re-lighting!" **A1**

This warning notice shall still be legible and shall not have come off after testing in accordance with 5.2. The size of the lettering shall be at least 3 mm for capital letters and 2 mm for small letters and shall be visible during the operation of the barbecue and in contrast with the background;

- c) Model or type designation. This marking may be on the packaging only.

## 7 Instructions for use

The instructions for use shall be given at least in the national language(s) of the country of sale. They shall contain at least the following information and shall be supplied with each barbecue:

- a) the model or type designation including exploded view and parts list;
- b) the statement that the barbecue has to be installed on a secure level base prior to use;
- c) the method of correct assembly, possibly using illustrations;
- d) advice on the safe operation of the barbecue;
- e) the recommendation that the barbecue shall be heated up and the fuel kept red hot for at least 30 min prior to the first cooking on the barbecue;
- f) the recommended fuel(s) and the maximum amount to be used;
- g) the correct lighting procedures including the statement "do not cook before the fuel has a coating of ash";
- h) the type of batteries to be used if a battery powered electric motor is supplied or specified;
- i) the type of bonding agent if required for construction of permanent barbecues ;
- j) the following warning notices:

**"ATTENTION! This barbecue will become very hot, do not move it during operation"**

**"Do not use indoors!"**

**A1** "CAUTION! Do not use spirit or petrol for lighting or re-lighting! Use only firelighters complying to EN 1860-3!" **A1**

**"WARNING! Keep children and pets away"**

## Bibliography

EN 563, *Safety of machinery - Temperatures of touchable surfaces - Ergonomics data to establish temperature limit values for hot surfaces.*

EN 50165, *Electrical equipment of non-electric appliances for household and similar purposes - Safety requirements.*

ISO 4046, *Paper, board, pulp and related terms. Vocabulary.*

ISO 7892, *Vertical building elements - Impact resistance tests - Impact bodies and general test procedures.*

Directive 73/23/EEC, *Council Directive of 19 February 1973 on the harmonisation of the laws of Directive 73/23/EEC the Member States relating to electrical equipment designed for use within certain voltage limits.*

Directive 89/109/EEC, *Council Directive of 21 December 1988 on the approximation of the Directive 89/109/EEC laws of the Member States relating to materials and articles intended to come into contact with foodstuff.*

DIN 51749, *Grill charcoal and grill charcoal briquettes -Requirements, tests.*

NF B55-101, *Charcoal and charcoal briquettes for domestic use. Designation – Specifications - Tests.*



---

## BSI — British Standards Institution

BSI is the independent national body responsible for preparing British Standards. It presents the UK view on standards in Europe and at the international level. It is incorporated by Royal Charter.

### Revisions

British Standards are updated by amendment or revision. Users of British Standards should make sure that they possess the latest amendments or editions.

It is the constant aim of BSI to improve the quality of our products and services. We would be grateful if anyone finding an inaccuracy or ambiguity while using this British Standard would inform the Secretary of the technical committee responsible, the identity of which can be found on the inside front cover.  
Tel: +44 (0)20 8996 9000. Fax: +44 (0)20 8996 7400.

BSI offers members an individual updating service called PLUS which ensures that subscribers automatically receive the latest editions of standards.

### Buying standards

Orders for all BSI, international and foreign standards publications should be addressed to Customer Services. Tel: +44 (0)20 8996 9001.  
Fax: +44 (0)20 8996 7001. Email: [orders@bsi-global.com](mailto:orders@bsi-global.com). Standards are also available from the BSI website at <http://www.bsi-global.com>.

In response to orders for international standards, it is BSI policy to supply the BSI implementation of those that have been published as British Standards, unless otherwise requested.

### Information on standards

BSI provides a wide range of information on national, European and international standards through its Library and its Technical Help to Exporters Service. Various BSI electronic information services are also available which give details on all its products and services. Contact the Information Centre.  
Tel: +44 (0)20 8996 7111. Fax: +44 (0)20 8996 7048. Email: [info@bsi-global.com](mailto:info@bsi-global.com).

Subscribing members of BSI are kept up to date with standards developments and receive substantial discounts on the purchase price of standards. For details of these and other benefits contact Membership Administration.  
Tel: +44 (0)20 8996 7002. Fax: +44 (0)20 8996 7001.  
Email: [membership@bsi-global.com](mailto:membership@bsi-global.com).

Information regarding online access to British Standards via British Standards Online can be found at <http://www.bsi-global.com/bsonline>.

Further information about BSI is available on the BSI website at <http://www.bsi-global.com>.

### Copyright

Copyright subsists in all BSI publications. BSI also holds the copyright, in the UK, of the publications of the international standardization bodies. Except as permitted under the Copyright, Designs and Patents Act 1988 no extract may be reproduced, stored in a retrieval system or transmitted in any form or by any means – electronic, photocopying, recording or otherwise – without prior written permission from BSI.

This does not preclude the free use, in the course of implementing the standard, of necessary details such as symbols, and size, type or grade designations. If these details are to be used for any other purpose than implementation then the prior written permission of BSI must be obtained.

Details and advice can be obtained from the Copyright & Licensing Manager.  
Tel: +44 (0)20 8996 7070. Fax: +44 (0)20 8996 7553.  
Email: [copyright@bsi-global.com](mailto:copyright@bsi-global.com).