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Specifications for dedicated liquefied petroleum gas
appliances - Portable vapour pressure liquefied
petroleum gas appliances
(corrected version 07.2019)

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN 521:2019 sisaldab Euroopa standardi EN 521:2019+AC:2019 ingliskeelset teksti.	This Estonian standard EVS-EN 521:2019 consists of the English text of the European standard EN 521:2019+AC:2019.
Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas	This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation.
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EUROPEAN STANDARD

EN 521:2019+AC

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Specifications for dedicated liquefied petroleum gas appliances - Portable vapour pressure liquefied petroleum gas appliances

Spécifications pour les appareils fonctionnant exclusivement aux gaz de pétrole liquéfiés - Appareils portatifs alimentés à la pression de vapeur des gaz de pétrole liquéfiés

Festlegungen für Flüssiggasgeräte - Tragbare, mit Dampfdruck betriebene Flüssiggasgeräte

This European Standard was approved by CEN on 15 February 2019 and includes Corrigendum AC approved by CEN on 15 February 2019.

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European foreword

This document (EN 521:2019+AC:2019) has been prepared by Technical Committee CEN/TC 181 “Appliances and leisure vehicle installations using liquefied petroleum gas and appliances using natural gas for outdoor use”, 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of an identical text or by endorsement, at the latest by October 2019, and conflicting national standards shall be withdrawn at the latest by October 2019.

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 includes Corrigendum 1 issued by CEN on 7 August 2019.

This document supersedes AC EN 521:2019 AC.

This document includes the corrigendum 1 which updates Figure 3 and adds a key to Figures C.2 and C.4.

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

The main changes from the 2006 version are linked to the fact that the flat gas stoves have been removed from the scope of this new version.

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 Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

1 Scope

This document specifies the construction and performance characteristics related to safety and the rational use of energy of portable appliances burning liquefied petroleum gases at the vapour pressure within the gas cartridge or gas cylinder, excepting those where the gas cartridge is inserted horizontally in the chassis.

NOTE These appliances are referred to in the body of the text as “appliances”.

This document applies to various types of portable appliances burning liquefied petroleum gases at vapour pressure and designed to be used with cartridges as complying with EN 417 or gas cylinders.

This document covers appliances for outdoor or in well ventilated areas uses only.

For example the following types of appliances are covered:

a) cooking appliances (stoves, grills, barbecues...);

This document does not cover barbecues that can be used indoors;

b) lighting appliances;

c) heating appliances;

This document only applies to appliances with a maximum heat input of up to 3 kW (H_S) for outdoor use only;

d) blowtorches;

This document only applies to blowtorches without a flexible hose;

e) laboratory burners.

The requirements apply to these appliances or their functional sections whether or not the latter are independent or incorporated into an assembly.

Appliances covered by this document are not connected to a flue for the discharge of products of combustion and are not connected to the mains electricity supply.

This document covers neither appliances supplied with LPG in the liquid phase nor appliance with fixed integral container which may or may not be refilled by the user

It does not apply to lighters as defined in EN ISO 9994.

It does not apply to gas appliances operating with a valve cartridge which is horizontally integrated into the chassis of the appliance also called “flat portable gas stove”.

Requirements for rational use of energy have been included for stove burners.

However, such requirements have not been included for the other types of appliances because:

- for grills and barbecues, this is a type of cooking which is achieved by various means such as radiant elements; in addition this type of cooking varies according to the type of food and region where the appliance is used;
- for lighting appliances, the consumption is insignificant because these appliances have a very low rate and are used only for a few hours in a year;
- for heating appliances, all the heat produced is discharged into the environment;

- for tools such as blowtorches which are not professional tools in regular use, the gas consumption depends very much on the way it is used.

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 30-1-1:—¹⁾, *Domestic cooking appliances burning gas fuel — Part 1-1: Safety — General*

EN 125:2010+A1:2015, *Flame supervision devices for gas burning appliances — Thermoelectric flame supervision devices*

EN 437:2018, *Test gases — Test pressures — Appliance categories*

EN 549:1994, *Rubber materials for seals and diaphragms for gas appliances and gas equipment*

3 Terms and definitions

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

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- IEC Electropedia: available at <http://www.electropedia.org/>
- ISO Online browsing platform: available at <http://www.iso.org/obp>

3.1

stove

cooking appliance incorporating one or several burners and a pan support(s) designed in such a way that it(they) can support the vessels containing the food

3.2

flat portable gas stove

flat stove operating with a gas cartridge horizontally placed in the chassis for which the length or width is bigger than its height

Note 1 to entry: Figure 2 gives an example of a flat portable gas stove

3.3

vapour pressure appliance

appliance for which the pressure at the gas inlet is equal to the pressure in the gas cartridge or gas cylinder

Note 1 to entry: If the appliance is fixed directly to the gas cylinder by a rigid connection, the appliance inlet is the part of the connection that takes the gas from the cylinder. A pressure reducing device may be incorporated in the gas circuit, between the gas inlet and the injector.

Note 2 to entry: If the appliance is connected to the gas cylinder by a flexible hose, the pressure in the flexible hose once it is connected to the gas cylinder is equal to the pressure in the gas cylinder. A pressure reducing device may be incorporated in the gas circuit downstream of the flexible hose

¹⁾ Under preparation. Stage at the time of publication: prEN 30-1-1:2017