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English Version

Residential solid fuel burning appliances - Part 2-3: Cookers

Appareils de chauffage domestiques à combustible
solide - Partie 2-3 : Cuisinières

Häusliche Heizgeräte für feste Brennstoffe - Teil 2-3:
Herde

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

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European foreword

This document (prEN 16510-2-3:2021) has been prepared by Technical Committee CEN/TC 295 “Residential solid fuel burning appliances”, the secretariat of which is held by BSI.

This document is currently submitted to the CEN Enquiry.

This document together with EN 16510-1:2021 will supersede EN 12815:2001 as amended and corrected.

This document has been prepared under a standardization request given to CEN/CENELEC by the European Commission and the European Free Trade Association.

For relationship with (EU) Regulation 305/2011, see informative Annex ZA, which is an integral part of this document.

The structure of EN 16510, Residential solid fuel burning appliances, is as follows:

- *Part 1: General requirements and test methods;*
- *Part 2-1: Roomheaters;*
- *Part 2-2: Inset appliances including open fires;*
- *Part 2-3: Cookers;*
- *Part 2-4: Independent boilers – Nominal heat output up to 50 kW;*
- *Part 2-5: Slow heat release appliances;*
- *Part 2-6: Mechanically by wood pellets fed roomheaters, inset appliances and cookers.*

Other sections of Part 2 will be added to cover residential solid fuel burning appliances not included in parts 2-1 to 2-6.

This Part 2-3 supplements or modifies the corresponding clauses in prEN 16510-1:2021, so as to convert that publication into the European Standard: *Residential solid fuel burning appliances – Requirements and test methods for cookers.*

This document is expected to be used in conjunction with prEN 16510-1:2021. This document refers to Clauses of prEN 16510-1:2021 or adapts Clauses by stating “with the following modification”, “with the following addition”, “is replaced by the following” or “shall not be applicable” in the corresponding Clause. This document adds Clauses or Subclauses to the structure of prEN 16510-1:2021 which are particular to this document.

Subclauses and Figures which are additional to those in prEN 16510-1:2021 are numbered starting with 301. Annexes which are additional to those in prEN 16510-1:2021 are numbered starting with CA.

1 Scope

This document is applicable to hand fired residential cookers whose primary function is to cook and whose secondary function is to provide heat into the space in which they are installed. Additionally, where fitted with a boiler, they also provide domestic hot water and/or central heating.

These appliances can burn one or more types of the following solid fuels in accordance with the appliance manufacturer's instructions:

- wood logs;
- compressed untreated wood;
- wood pellets;
- lignite briquettes;
- solid mineral fuels;
- peat briquettes.

This document is not applicable to appliances with fan assisted combustion air or appliances that are mechanically fed.

This document is used in conjunction with prEN 16510-1 of which it is an integral part.

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.

prEN 16510-1:2021, Residential solid fuel burning appliances - Part 1: General requirements and test methods

3 Terms and definitions

For the purposes of this document, the terms and definitions given in prEN 16510-1:2021 apply.

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

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

4 Descriptive features

prEN 16510-1:2021, Clause 4, shall be applicable with the following modifications.

4.4.2.2 Integral boilers constructed of steel

Addition:

Differing from the requirement given in Table 2 for walls of water backed surfaced of the combustion chamber in contact with burning fuel or products of combustion the minimum wall thickness for non-alloy steels is 4 mm for cookers.

4.4.7 Ashpan and ash removal

prEN 16510-1:2021, 4.4.7, shall be applicable with the following modification.

Replacement of the 1st paragraph:

A means of removing ash residue from the appliance shall be provided. Where an ashpan is provided its capacity shall be not less than 0,3 dm³ per kW nominal output whilst retaining sufficient space above to allow adequate primary air-flow through the bottomgrate or firebed. If the ashpan resides in the appliance it shall locate in the ashpit in such a way that it allows the free passage of primary air and in such a position that it does not obstruct any primary air inlet control.

4.4.8 Bottomgrate

prEN 16510-1:2021, 4.4.8, shall be applicable with the following modification.

Add the following sentence to the 2nd paragraph:

A de-ashing mechanism shall be fitted where fuels other than wood are burnt.

4.4.11 Charging doors and ash-pit doors

prEN 16510-1:2021, 4.4.11, shall be applicable with the following additional paragraphs:

When open, firedoors shall not obstruct the firebox opening and shall be capable of opening to an angle greater than 90°.

If fitted, hotplate charging doors shall either be removable or capable of being opened to an angle greater than 90°.

Designed air inlets around the periphery of the door(s) are permitted.

Addition of the following new subclause:

4.301 Additional requirements for cookers

4.301.1 Oven door

When open, side hinged oven doors shall not obstruct the oven opening and shall be capable of opening to an angle greater than 90°.

When drop down doors are completely open, they shall form an angle of between 85° and 90° to the vertical and remain in this position. When tested in accordance with A.4.301.5, the drop down door shall not sag by more than 15 mm, and the cooker shall not tilt.

4.301.2 Hotplate and top plate

The top plate shall incorporate a metal or ceramic surface in the form of a hotplate. Part of the hotplate shall be designed as a boiling plate area.

When the cooker is assembled in accordance with the appliance manufacturer's installation instructions, complete with any legs or plinth supplied as an integral part of the appliance, the height from the floor to the cooking surface(s) shall be between 800 mm and 930 mm.

4.301.3 Main/additional ovens

Where a compartment or compartments are provided as an oven or ovens, their purpose shall be specified in the appliance operating instructions.