



DPC: 21/30431510 DC

BSI Group Headquarters

389 Chiswick High Road London W4 4AL

Tel: +44 (0)20 8996 9000

Fax: +44 (0)20 8996 7400

www.bsigroup.com

Date: 15 April 2021

Origin: European

Latest date for receipt of comments: 08 June 2021

Project No. 2020/03418

Responsible committee: RHE/28 Domestic solid mineral fuel appliances

Interested committees:

Title: Draft BS EN 16510-2-1 Residential solid fuel burning appliances. Part 2-1: Roomheaters.

Please notify the secretary if you are aware of any keywords that might assist in classifying or identifying the standard or if the content of this standard

- i) has any issues related to 3rd party IPR, patent or copyright
- ii) affects other national standard(s)
- iii) requires additional national guidance or information

WARNING: THIS IS A DRAFT AND MUST NOT BE REGARDED OR USED AS A BRITISH STANDARD. THIS DRAFT IS NOT CURRENT BEYOND 08 June 2021

This draft is issued to allow comments from interested parties; all comments will be given consideration prior to publication. No acknowledgement will normally be sent. **See overleaf for information on the submission of comments.**

No copying is allowed, in any form, without prior written permission from BSI except as permitted under the Copyright, Designs and Patent Act 1988 or for circulation within a nominating organization for briefing purposes. Electronic circulation is limited to dissemination by e-mail within such an organization by committee members.

Further copies of this draft may be purchased from BSI Shop <http://shop.bsigroup.com> or from BSI Customer Services, Tel: +44(0) 20 8996 9001 or email cservices@bsigroup.com. British, International and foreign standards are also available from BSI Customer Services.

Information on the co-operating organizations represented on the committees referenced above may be obtained from <https://standardsdevelopment.bsigroup.com/>.

Introduction

This draft standard is based on national and international discussions. Your comments on this draft are invited and will assist in the preparation of the consequent standard.

For international standards, comments will be reviewed by the relevant UK national committee before sending the consensus UK vote and comments to the international committee, which will then decide appropriate action. If the international standard is approved, it is usual for the text to be published as a British Standard.

For national standards, comments will be reviewed by the relevant UK national committee and the resulting standards published as a British Standard.

UK Vote

Please indicate whether you consider the UK should submit a negative (with supporting technical reasons) or positive vote on this draft. Please indicate if you are aware of any reason why this draft standard should not be published as a British Standard.

Submission of Comments

- **Annotated drafts are not acceptable and will be rejected.**
- All comments should be submitted online at <https://standardsdevelopment.bsigroup.com/>. You will need to register in order to comment.

Template for comments and secretariat observations

Date: xx/xx/20xx	Document: ISO/DIS xxxx
------------------	------------------------

1	2	(3)	4	5	(6)	7
MB	Clause No./ Subclause No./Annex (e.g. 3.1)	Paragraph/Figure/ Table/Note	Type of comment	Commend (justification for change) by the MB	Proposed change by the MB	Secretariat observations on each comment submitted
	3.1	Definition 1	ed	Definition is ambiguous and needs clarifying.	Amend to read '...so that the mains connector to which no connection...'	
	6.4	Paragraph 2	te	The use of the UV photometer as an alternative cannot be supported as serious problems have been encountered in its use in the UK.	Delete reference to UV photometer.	

April 2021

ICS 97.100.30

English Version

Residential solid fuel burning appliances - Part 2-1: Roomheaters

Appareils de chauffage domestiques à combustible
solide - Partie 2-1 : Poêles

Häusliche Feuerstätten für feste Brennstoffe - Teil 2-1:
Raumheizer

This draft European Standard is submitted to CEN members for enquiry. It has been drawn up by the Technical Committee CEN/TC 295.

If this draft becomes a European Standard, 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.

This draft European Standard was established by CEN 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, Turkey and United Kingdom.

Recipients of this draft are invited to submit, with their comments, notification of any relevant patent rights of which they are aware and to provide supporting documentation.

Warning : This document is not a European Standard. It is distributed for review and comments. It is subject to change without notice and shall not be referred to as a European Standard.



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

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

Contents	Page
European foreword.....	4
1 Scope	5
2 Normative references	5
3 Terms and definitions	5
4 Descriptive features	5
5 Appliances Performance requirements in relation to safety	5
6 Appliances performance requirements in relation to the appliance operation	6
7 Appliance instructions	6
8 Sustainable use of natural resources	6
9 Assessment and verification of constancy of performance - AVCP	6
10 Marking and technical datasheet	6
Annex A (normative) Test methods.....	7
A.1 Test environment.....	7
A.2 Test assembly	7
A.3 Measurement equipment.....	7
A.4 Test procedures	7
A.5 Test results	8
A.6 Calculation methods.....	8
A.7 Test report.....	8
Annex B (normative) Test fuels and recommended fuels	9
Annex C (informative) Arrangement for measuring the leakage rate	10
Annex D (normative) Measuring procedure for nitrogen oxides (NO _x)	11
Annex E (normative) Measuring procedure for organic gaseous compounds (OGC)	12
Annex F (normative) Measuring procedure for particulate matter (PM).....	13
Annex G (informative) Guideline for the characteristics to be taken into account in order to decide on families of appliances.....	14
Annex H (informative) Deviation of measuring results as a basis for market surveillance measurements.....	15
Annex I (informative) Standing Air Loss.....	16
Annex J (informative) A-deviations	17
Annex K (normative) Energy Label.....	18
Annex ZA (informative) Relationship of this European Standard with Regulation (EU) No. 305/2011	19
ZA.1 Scope and relevant characteristics.....	19

ZA.2	System of Assessment and Verification of Constancy of Performance (AVCP)	22
ZA.3	Assignment of AVCP tasks	22

European foreword

This document (prEN 16510-2-1:2021) 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 and EN 16510-2-6 will supersede EN 13240:2001 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 2-1 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 roomheaters*.

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 101. Annexes which are additional to those in prEN 16510-1:2021 are numbered starting with AA.

1 Scope

This document is applicable to freestanding or inset roomheaters fired by solid fuel, without functional modification that operate with fire doors either as closed only or as closed or open.

The appliances covered by this document provide heat into the space where 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 EN 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 definitions 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.

5 Appliances Performance requirements in relation to safety

prEN 16510-1:2021, Clause 5, shall be applicable.

6 Appliances performance requirements in relation to the appliance operation

prEN 16510-1:2021, Clause 6, shall be applicable with the following modification.

6.7 Refuelling intervals

prEN 16510-1:2021, 6.7, shall be applicable with the following modification.

Replacement of Table 12:

Table 12 — Minimum refuelling intervals

Appliance type	Test fuel type (as detailed in Table B.1)	Minimum refuelling interval or burning rate
At nominal heat output		
Continuous burning appliance	Wood logs, lignite briquettes or peat briquettes	1,5 h
	All other test fuels	4 h
Intermittent burning appliance	Wood logs, lignite briquettes or peat briquettes	40 min
	All other test fuels	1 h
At slow combustion		
Continuous burning appliance	Wood logs, lignite briquettes or peat briquettes	3 h
	All other test fuels	12 h
Intermittent burning appliance	Wood logs, lignite briquettes or peat briquettes	no requirements
	All other test fuels	10 h

7 Appliance instructions

prEN 16510-1:2021, Clause 7, shall be applicable.

8 Sustainable use of natural resources

prEN 16510-1:2021, Clause 8, shall be applicable.

9 Assessment and verification of constancy of performance - AVCP

prEN 16510-1:2021, Clause 9, shall be applicable.

10 Marking and technical datasheet

prEN 16510-1:2021, Clause 10, shall be applicable.