



**SLOVENSKI STANDARD**  
**oSIST prEN 16510-2-8:2026**  
**01-junij-2026**

---

**Grelne naprave na trdna goriva za stanovanjske stavbe - 2-8. del: Sobni grelniki z gravimetričnim dovajanjem peletov**

Residential solid fuel burning appliances - Part 2-8: Gravimetrically pellet-fed room heaters

Häusliche Feuerstätten für feste Brennstoffe - Teil 2-8: Gravimetrisch beschickte Raumheizer

Equipement de chauffage domestique - Partie 2-8 : Poêles à pellet alimenté par gravimétrie

**Ta slovenski standard je istoveten z: prEN 16510-2-8**

---

**ICS:**

97.100.30      Grelniki na trdo gorivo      Solid fuel heaters

**oSIST prEN 16510-2-8:2026**      **en,fr,de**

# Sample Document

get full document from [standards.iteh.ai](https://standards.iteh.ai)

EUROPEAN STANDARD  
NORME EUROPÉENNE  
EUROPÄISCHE NORM

**DRAFT**  
**prEN 16510-2-8**

April 2026

ICS 97.100.30

English Version

## Residential solid fuel burning appliances - Part 2-8: Gravimetrically pellet-fed room heaters

Équipement de chauffage domestique - Partie 2-8 :  
Poêles à pellet alimenté par gravimétrie

Häusliche Feuerstätten für feste Brennstoffe - Teil 2-8:  
Gravimetrisch beschickte 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, Türkiye 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**

© 2026 CEN All rights of exploitation in any form and by any means reserved  
worldwide for CEN national Members.

Ref. No. prEN 16510-2-8:2026 E

<b>Contents</b>	<b>Page</b>
European foreword.....	5
<b>1 Scope .....</b>	<b>6</b>
<b>2 Normative references .....</b>	<b>6</b>
<b>3 Terms and definitions .....</b>	<b>6</b>
<b>4 Characteristics .....</b>	<b>7</b>
4.1 Load bearing capacity.....	7
4.2 Protection of combustible materials.....	7
4.3 Carbon monoxide emission (CO).....	8
4.4 Nitrogen oxides (NO <sub>x</sub> ) emissions .....	8
4.5 Emission of organic gaseous compounds (OGC).....	9
4.6 Particulate matter (PM) emissions.....	9
4.7 Safety and accessibility in use .....	9
4.7.1 General.....	9
4.7.2 Flue gas outlet temperature at nominal heat output .....	9
4.7.3 Flue gas outlet temperature at part load heat output.....	10
4.7.4 Minimum flue draught at nominal heat output.....	10
4.7.5 Minimum flue draught at part load heat output .....	10
4.7.6 Flue gas mass flow at nominal heat output.....	10
4.7.7 Flue gas mass flow at part load heat output.....	10
4.7.8 Fire safety of installation to the chimney .....	10
4.8 Energy economy and heat retention .....	10
4.8.1 Space heat output at nominal heat output .....	10
4.8.2 Efficiency at nominal heat output .....	11
4.8.3 Space heat output at part load heat output .....	11
4.8.4 Efficiency at part load heat output.....	11
4.8.5 Seasonal space heating efficiency at appliance's nominal heat output.....	11
4.8.6 Energy efficiency .....	12
4.8.7 Electric power consumption at nominal heat output, if existing.....	13
4.8.8 Electric power consumption at part load heat output, if existing .....	13
4.8.9 Standby mode power consumption, if existing .....	13
4.9 Environmental sustainability .....	13
<b>5 Descriptive features.....</b>	<b>15</b>
5.1 Data for potential use with room ventilation systems: type of appliance (in relation to its tightness to the room) .....	15
5.2 Data for the building's statics: appliance's mass .....	15
5.3 Materials and construction elements .....	15
5.3.1 General.....	15
5.3.2 General stresses.....	15
5.4 Risk of burning fuel falling out.....	16
5.5 Temperature rise in the fuel storage .....	16
5.5.1 Temperature rise in the fuel hopper .....	16
5.5.2 Safety against back burning through the fuel conveyor system .....	16
5.6 Temperature rise of the operating components.....	16
5.7 Spillage of flue gases into the room.....	16
5.7.1 Possible spillage of CO, if relevant for the fuel type.....	16
5.7.2 Safety test for spillage of combustion gas and discharge of embers .....	16
5.7.3 Open operation .....	16
5.8 Cleanability.....	16

5.8.1	Heating surfaces.....	16
5.8.2	Flue ways.....	16
5.8.3	Ashpan.....	16
5.8.4	Bottom grate.....	17
5.8.5	Damper.....	17
5.8.6	Fan-cut-out-device.....	17
6	Assessment and verification of constancy of performance - AVCP.....	17
6.1	General.....	17
6.2	Assessment of performance.....	17
6.2.1	General.....	17
6.2.2	Test samples, testing and compliance criteria.....	18
6.3	Verification of constancy of performance.....	19
6.3.1	Factory production control (FPC).....	19
Annex A (normative) Test methods.....		24
A.1	Test environment.....	24
A.2	Test assembly.....	24
A.3	Measurement equipment.....	24
A.4	Test procedures.....	24
A.4.1	Fuel load and basic fire bed.....	24
A.4.2	Fuelling and de-ashing.....	24
A.4.3	Combustible heat losses in the residue.....	24
A.4.4	Performance test at nominal heat output.....	24
A.4.4.1	General.....	24
A.4.4.2	Ignition and pre-test period.....	25
A.4.4.3	Test period.....	25
A.4.5	Part load heat output test.....	26
A.4.5.1	General.....	26
A.4.5.2	Ignition and pre-test period.....	26
A.4.5.3	Test period.....	26
A.4.5.3.1	..... Temperature safety test for woodburning and multifuel appliances.....	26
A.4.5.3.1.1	..... Ge neral.....	26
A.4.5.3.1.2	..... Ignition and test period.....	27
A.4.5.3.1.3	..... Safety in case of backburn into the hopper.....	27
A.5	Test results.....	28
A.6	Calculation methods.....	28
A.7	Test report.....	28

**prEN 16510-2-8:2026 (E)**

**Annex H A (informative) Principle function of the gravimetrically pellet-fed room heater 29**

**Sample Document**

get full document from [standards.iteh.ai](https://standards.iteh.ai)

## European foreword

This document (prEN 16510-2-8:2026) 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.

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*;
- Part 2-7: *Combination appliances fired by wood logs and pellets*;
- Part 2-8: *Gravimetrically pellet-fed roomheaters*.

Other sections of Part 2 will be added to cover residential solid fuel burning appliances not included in parts 2-1 to 2-8.

Subclauses and Figures which are additional to those in EN 16510-1:2022 are numbered starting with 801. Annexes which are additional to those in EN 16510-1:2022 are numbered starting with HA.

## prEN 16510-2-8:2026 (E)

### 1 Scope

This document is applicable to gravimetrically pellet-fed room heaters, inset appliances and cookers.

The intended use of the appliances is space heating in residential buildings and can be cooking.

These appliances burn wood pellets only as specified in EN ISO 17225.

This document is not applicable to appliances which are in addition intended for non-gravimetrically fuelling with wood logs (e.g. from the front on top of the burner pot or even if a cover of the burner pot is provided and intended to be used).

This document is not applicable to appliances with fan assisted combustion air, appliances that are mechanically or to appliances fitted with a boiler (integral part of the appliance containing water to be heated up) for the supply of hot water for central heating systems.

This document is not applicable to appliances that can operate with fire door open.

This document specifies procedures for assessment and verification of constancy of performance (AVCP) of characteristics of solid fuel burning room heaters.

### 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.

EN 15804:2012+A2:2019, *Sustainability of construction works - Environmental product declarations - Core rules for the product category of construction products*

EN 16510-1:2022, *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 EN 16510-1:2022 apply with the following additions.

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

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

#### 3.801

##### **gravimetrically pellet-fed room heater**

appliance with a closed combustion chamber burning wood pellets on basis of a gravimetrical feeding of fuel from a hopper into the combustion chamber

#### 3.802

##### **feeding chute**

space on the bottom of the hopper where the fuel is lead into the combustion chamber

#### 3.803

##### **retort**

##### **(burner pot)**

vessel forming the firebox of the appliance into which the fuel is gravimetrically fed from the fuel hopper and in which it is burned

**3.804****layer height limiter**

slider in the feeding chute that limits the amount of fuel being gravimetrically fed into the retort

**4 Characteristics****4.1 Load bearing capacity**

The performance of the appliance in relation to the ability to carry a chimney shall be determined in accordance with EN 16510-1:2022, 4.6.

If for an appliance with an upper outlet the ability to carry a chimney is specified the value of the maximum load is to be given in [kg] as an integer according to EN 16510-1:2022, Table 22, no. 57 ( $m_{\text{chim}}$ ).

**4.2 Protection of combustible materials**

The performance of the appliance in relation to protection of combustible materials shall be determined in accordance with EN 16510-1:2022, 5.6.

When tested in accordance with EN 16510-1:2022, 5.6, the protection measure(s) as specified according to Table 1 shall be given as minimum distance to combustible materials and if appropriate as material type and thickness of protective insulation material.

The protection measures as specified shall be given in [mm] as an integer according to EN 16510-1:2022, Table 22, no. 33, 34, 35, 36, 37, 38, 39 and 41 ( $d_R$ ,  $d_S$ ,  $d_C$ ,  $d_P$ ,  $d_F$ ,  $d_L$ ,  $d_B$ ,  $s$ ).

**Table 1 — Protection of combustible materials**

Protection measure	Declared clearance distance to combustible material or thickness of protective insulation material [mm]	Protective insulation material if any
Minimum distance to combustible materials - bottom ( $d_B$ )		-
Minimum distance to combustible materials – floor in front ( $d_F$ )		-
Minimum distance to combustible materials – ceiling ( $d_C$ )		-
Minimum distance to combustible materials – rear ( $d_R$ )		-
Minimum distance to combustible materials – side ( $d_S$ )		-
Minimum distance to combustible materials – side radiation area ( $d_L$ )		-