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## European foreword

This document (EN 16510-2-6:2022) has been prepared by Technical Committee CEN/TC 295 “Residential solid fuel burning appliances”, the secretariat of which is held by BSI.

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of an identical text or by endorsement, at the latest by June 2023, and conflicting national standards shall be withdrawn at the latest by November 2025.

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 supersedes EN 14785:2006 as amended and corrected. In relation to EN 14785:2006 as amended and corrected the following changes have been made:

- measurement methods for NO<sub>x</sub>, hydrocarbon and particulate matter emissions for solid fuel burning appliances;
- specifications for classification of solid fuel burning appliances and system boundaries for room sealed appliances;
- requirements for the safety of solid fuel burning appliances with water-bearing components added;
- Annex ZA updated according to requirements of M/577;
- energy efficiency and energy class labelling and seasonal space heating efficiency added;
- requirements for environmental sustainability added.

This document has been prepared under a standardization request given to CEN 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.

Subclauses and Figures which are additional to those in EN 16510-1:2022 are numbered starting with 601. Annexes which are additional to those in EN 16510-1:2022 are numbered starting with FA.

For inset pellet appliances and especially their testing, additional information from EN 16510-2-2:2022 is relevant.

For pellet cookers and especially their testing, additional information from EN 16510-2-3:2022 is relevant.

Any feedback and questions on this document should be directed to the users' national standards body. A complete listing of these bodies can be found on the CEN website.

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

## 1 Scope

This document is applicable to mechanical by wood pellets fed roomheaters, inset appliances and cookers up to 50 kW nominal heat output.

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

These appliances typically use auxiliary energy which is measured in this document as well. They can be operated with either natural draught or fan-assisted combustion air.

NOTE A fan-assisted appliance does still operate under negative pressure in the flue gas system.

These appliances burn wood pellets only as specified. They only operate with the firedoors closed.

This document is not applicable to appliances:

- with boiler intended for water systems having water temperatures above 110 °C and 3 bar;
- with boiler intended for water systems having direct contact with sanitary hot water;
- intended to be used with a pure horizontal exhaust (through the building wall);
- with flue gas condensation in the appliance;
- switching on/off for part load operation.

This document specifies procedures for assessment and verification of constancy of performance (AVCP) of characteristics of mechanical by wood pellets fed roomheaters, inset appliances and cookers.

## 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 15456:2008, *Heating boilers — Electrical power consumption for heat generators — System boundaries — Measurements*

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*

EN 16510-2-2:2022, *Residential solid fuel burning appliances — Part 2-2: Inset appliances including open fires*

EN 16510-2-3:2022, *Residential solid fuel burning appliances — Part 2-3: Cookers*