

DIN EN 16510-2-7:2026-06 (E)

Residential solid fuel burning appliances - Part 2-7: Combination appliances fired by wood logs and pellets

Contents		Page
European foreword		4
Introduction		6
1	Scope	7
2	Normative references	7
3	Terms and definitions	8
4	Essential characteristics	8
4.1	Load bearing capacity	8
4.2	Protection of combustible materials	8
4.3	Carbon monoxide emission (CO)	9
4.4	Nitrogen oxides (NO _x) emissions	10
4.5	Emission of organic gaseous compounds (OGC)	10
4.6	Particulate matter (PM) emissions	10
4.7	Safety and accessibility in use	11
4.7.1	General	11
4.7.2	Flue gas outlet temperature at nominal heat output	11
4.7.3	Flue gas outlet temperature at part load heat output	11
4.7.4	Minimum flue draught at nominal heat output	11
4.7.5	Minimum flue draught at part load heat output	12
4.7.6	Flue gas mass flow at nominal heat output	12
4.7.7	Flue gas mass flow at part load heat output	12
4.7.8	Fire safety of installation to the chimney	12
4.8	Energy economy and heat retention	12
4.8.1	General	12
4.8.2	Space heat output at nominal heat output	12
4.8.3	Water heat output, if existing at nominal heat output	13
4.8.4	Efficiency at nominal heat output	13
4.8.5	Space heat output at part load heat output	13
4.8.6	Water heat output, if existing at part load heat output	13
4.8.7	Efficiency at part load heat output	13
4.8.8	Seasonal space heating efficiency at appliance's nominal heat output	14
4.8.9	Energy efficiency	14
4.8.10	Electric power consumption at nominal heat output, if existing	14
4.8.11	Electric power consumption at part load heat output, if existing	15
4.8.12	Standby mode power consumption, if existing	15
4.9	Environmental sustainability	15
5	Descriptive features	17
5.1	Data for potential use with room ventilation systems: type of appliance (in relation to its tightness to the room)	17
5.2	Data for the building's statics: appliance's mass	17
5.3	Materials and construction elements	17
5.3.1	General	17
5.3.2	General stresses	17
5.3.3	Integral boiler or heat exchanger	18
5.4	Risk of burning fuel falling out	18
5.5	Temperature rise in the fuel storage	18

5.5.1	Temperature rise in the fuel hopper	18
5.5.2	Safety against back burning through the fuel conveyor system	18
5.5.3	Temperature rise in the wood log storage	18
5.6	Temperature rise of the operating components	18
5.7	Spillage of flue gases into the room	18
5.7.1	Possible spillage of CO, if relevant for the fuel type	18
5.7.2	Safety test for spillage of flue gases into the room and discharge of embers	18
5.7.3	Open operation	19
5.8	Cleanability	19
5.8.1	Heating surfaces	19
5.8.2	Flueways	19
5.8.3	Ashpan	19
5.8.4	Bottomgrate	19
5.8.5	Damper	19
5.8.6	Fan-cut-out-device	20
5.9	Strength and leak tightness of boiler shells	20
6	Assessment and verification of constancy of performance - AVCP	20
6.1	General	20
6.2	Assessment of performance	20
6.2.1	General	20
6.2.2	Test samples, testing and compliance criteria	21
6.3	Verification of constancy of performance	22
6.3.1	Factory production control (FPC)	22
6.3.2	Initial inspection of factory to validate environmental sustainability company specific data	26
6.3.3	Environmental sustainability assessment validation	26
	Annex A (normative) Test methods	27
	Annex GA (normative) Measurement positions for conveyor systems	36
	Annex ZA (informative) Relationship of this European Standard with Regulation (EU) No. 305/2011	40
	ZA.1 Scope and relevant characteristics	40
	ZA.2 System of Assessment and Verification of Constancy of Performance (AVCP)	46
	ZA.3 Assignment of AVCP tasks	47