

DIN EN 15250:2007-06 (E)

Slow heat release appliances fired by solid fuel - Requirements and test methods

Contents	Page
Foreword	4
1 Scope	5
2 Normative references	5
3 Terms and definitions	6
4 Materials, design and construction	9
4.1 Production documentation	9
4.2 Construction	10
4.2.1 General construction	10
4.2.2 Cleaning of heating surfaces	10
4.2.3 Flue spigot or socket	10
4.2.4 Flueways	10
4.2.5 Ashpan and ash removal	11
4.2.6 Bottomgrate	11
4.2.7 Combustion air supply	11
4.2.8 Control of flue gas	11
4.2.9 Firedoors and charging doors	12
4.2.10 Flue bypass device	12
4.2.11 Front firebars and/or deepening plate	12
5 Safety	12
5.1 Temperature rise in the fuel storage container	12
5.2 Temperature rise of the operating components	12
5.3 Temperature of adjacent combustible materials	12
5.4 Electrical safety	13
6 Performance	13
6.1 Flue gas temperature	13
6.2 Carbon monoxide emission	13
6.3 Efficiency	13
6.4 Flue draught	13
6.5 Refuelling intervals	13
6.6 Thermal storage capacity	13
7 Appliance instructions	14
7.1 General	14
7.2 Installation instructions	14
7.3 User operating instructions	15
8 Marking	16
9 Evaluation of conformity	16
9.1 General	16
9.2 Type testing	17
9.2.1 Initial type testing	17
9.2.2 Further type testing	18
9.3 Factory production control (FPC)	20
9.3.1 General	20
9.3.2 Raw materials and components	20

9.3.3	Control of inspection, measuring and test equipment	20
9.3.4	Process control	20
9.3.5	Product inspection, testing and evaluation	21
9.3.6	Non conforming products	22
9.3.7	Corrective and preventive action	22
9.3.8	Handling, storage, packaging, preservation and delivery	22
Annex A (normative) Test methods		23
A.1	Test environment	23
A.1.1	Ambient room temperature	23
A.1.2	Cross-draught	23
A.1.3	External sources	23
A.2	Test assembly	23
A.2.1	General	23
A.2.2	Trihedron	24
A.2.3	Measurement section	24
A.2.4	Connection of appliance to measurement section	25
A.2.5	Measurement of appliance surface temperature for slow heat release appliances	25
A.3	Measurement equipment	26
A.4	Test procedures	27
A.4.1	Appliance installation	27
A.4.2	Fuel load	27
A.4.3	Fuelling and de-ashing the fire	28
A.4.4	Flue gas losses	28
A.4.5	Combustible heat losses in the residue	28
A.4.6	Burning rate performance test	28
A.4.7	Temperature safety test for woodburning and multifuel appliances	29
A.5	Test results	30
A.6	Calculation methods	31
A.6.1	Notations and units used	31
A.6.2	Equations	32
A.7	Test report	36
Annex B (normative) Test fuels and recommended fuels		47
B.1	General	47
B.2	Test fuel	47
B.2.1	Selection of test fuel	47
B.2.2	Storage, preparation and analysis	47
B.3	Tests for recommended fuels	48
B.3.1	Basis of testing	48
B.3.2	Test methods and criteria	48
Annex C (informative) Calculation of an approximate heat release curve against time		54
Annex ZA (informative) Clauses of this European standard addressing the provisions of the EU Construction Products Directive		57
Z.A.1 Scope and relevant characteristics		57
Z.A.2 Procedure for the attestation of conformity of slow heat release appliances fired by solid fuels		59
Z.A.2.1 System of attestation of conformity		59
Z.A.2.2 EC Declaration of conformity		60
Z.A.3 CE Marking and labelling		60
Bibliography		63