

DIN EN 13168:2013-03 (E)

Thermal insulation products for buildings - Factory made wood wool (WW) products - Specification

Contents		Page
Foreword		4
1	Scope	6
2	Normative references	6
3	Terms, definitions, symbols, units and abbreviated terms	7
3.1	Terms and definitions	7
3.2	Symbols, units and abbreviated terms	9
4	Requirements	11
4.1	General	11
4.2	For all applications	11
4.3	For specific applications	15
5	Test methods	19
5.1	Sampling	19
5.2	Conditioning	19
5.3	Testing	19
6	Designation code	21
7	Evaluation of conformity	22
7.1	General	22
7.2	Initial type testing	23
7.3	Factory production control	23
8	Marking and labelling	23
Annex A (normative)	Determination of the declared values of thermal resistance and thermal conductivity	25
A.1	General	25
A.2	Input data	25
A.3	Declared values	25
A.3.1	General	25
A.3.2	Case where thermal resistance and thermal conductivity are declared	25
A.3.3	Case where thermal resistance alone is declared	26
Annex B (normative)	Initial type testing (ITT) and factory production control (FPC)	28
Annex C (normative)	WW multi-layered insulation products	32
C.1	General	32
C.2	Requirements	32
C.2.1	For all applications	32
C.2.1.1	General	32
C.2.1.2	Thermal resistance	32
C.2.1.3	Length and width, thickness, squareness, flatness	32
C.2.1.4	Reaction to fire	32
C.2.1.5	Durability characteristics	33

C.2.2	For specific applications	33
C.3	Test methods	33
C.4	Evaluation of conformity	33
Annex D (normative) Specific test methods		34
D.1	Chloride content	34
D.2	Load resistance	34
D.3	Impact resistance	35
Annex E (normative) Determination of the thermal conductivity in relation to moisture content		37
Annex ZA (informative) Clauses of this European Standard addressing the provisions of the EU Construction Products Directive		39
ZA.1	Scope and relevant characteristics	39
ZA.2	Procedures for attestation of conformity of factory made wood wool products	41
ZA.2.1	Systems of attestation of conformity	41
ZA.2.2	EC certificate and declaration of conformity	43
ZA.3	CE Marking and labelling	45
Bibliography		47
Tables	Table 1 -- Classes for length and width tolerances	12
	Table 2 -- Classes for thickness tolerances	12
	Table 3 -- Levels for deviation from flatness	13
	Table 4 -- Levels for chloride content	13
	Table 5 -- Levels for tensile strength perpendicular to faces	14
	Table 6 -- Levels for the deviation from squareness	15
	Table 7 -- Levels for compressive stress or compressive strength	16
	Table 8 -- Levels for bending strength	17
	Table 9 -- Levels for short term water absorption	17
	Table 10 -- Test methods, specimens and conditions	20
	Table A.1 -- Values for k for one sided 90 % tolerance interval with a confidence level of 90 %	26
	Table B.1 -- Minimum product testing frequencies	28
	Table B.1-- Minimum product testing frequencies	29
	Table B.2 -- Minimum product testing frequencies for the reaction to fire characteristics	30
	Table ZA.1 -- Relevant clauses for Wood wool and relevant clauses for WW multi-layered products and composite WW products with intended use	40
	Table ZA.2 -- Systems of attestation of conformity	41
	Table ZA.3 -- Assignment of evaluation of conformity tasks for products under system 1 for reaction to fire and system 3 for other characteristics	42

Table ZA.4 -- Assignment of evaluation of conformity tasks for products under system 3 or system 3 combined with system 4 for reaction to fire43

Figures Figure D.1 -- Test rig for load resistance of slabs 35

Figure D.2 -- Test rig for impact resistance of slabs36

Figure E.1 -- Example of a graphic representation of "f"38

Figure ZA.1 -- Example CE marking information46