

DIN EN 15498:2008-08 (E)

Precast concrete products - Wood-chip concrete shuttering blocks - Product properties and performance

Contents		Page
Foreword		5
1	Scope	6
2	Normative references	6
3	Terms, definitions, symbols and abbreviations	7
3.1	Terms and definitions	7
3.2	Symbols and abbreviations	8
4	Requirements	11
4.1	Material requirements	11
4.1.1	Wood-chip concrete	11
4.1.2	Supplementary thermal insulation materials	11
4.2	Finished product requirements	11
4.2.1	Geometric characteristics	11
4.2.2	Density	12
4.2.3	Moisture movement	12
4.2.4	Reaction to fire	12
4.2.5	Water vapour permeability	13
4.2.6	Mechanical strength	13
4.2.7	Acoustic properties	13
4.2.8	Thermal properties	14
4.2.9	Durability	14
5.1	Principle	15
5.2	Procedure	15
5.2.1	Geometric characteristics	15
5.2.2	Density	16
5.2.3	Moisture movement	16
5.2.4	Reaction to fire	16
5.2.5	Water vapour permeability	16
5.2.6	Mechanical strength	16
5.2.7	Acoustic properties	17
5.2.8	Thermal properties	17
5.2.9	Durability	18
6.1	General	18
6.2	Demonstration of conformity	18
6.3	Assessment of conformity	18
6.4	Initial type testing	19
6.5	Factory production control	19
6.5.1	General	19
6.5.2	Equipment	20
6.5.3	Materials	20
6.5.4	Production process	20
6.5.5	Product testing	20
6.5.6	Stock control	20
7	Marking and labelling	20
7.1	Marking and labelling on product	20

7.2	Marking and labelling on delivery documentation	21
	Annex A (normative) Filling pressure of concrete infill	22
	Annex B (normative) Determination of tensile strength of web	24
B.1	Principle	24
B.2	Apparatus	24
B.3	Procedure	25
B.4	Determination of tensile strength	28
B.4.1	Principle	28
B.4.2	Calculation of the minimum required tensile strength of the web	29
B.4.3	Measurement of the web tensile failure load and calculation of the tensile strength of webs	29
B.5	Test report	30
	Annex C (normative) Determination of flexural strength of shells	31
C.1	Principle	31
C.2	Apparatus	31
C.3	Procedure	31
C.4	Determining the flexural strength of shells	32
C.4.1	General	32
C.4.2	Calculation of the minimum required flexural strength of shells	33
C.4.3	Measurement of the flexural failure load and calculation of the flexural strength of shells	34
C.5	Test report	35
	Annex D (normative) Test methods for determination of specific heat capacity	36
D.1	Principle	36
D.2	Test device	36
D.3	Specimen	36
D.4	Procedure	36
D.4.1	Core temperature measurement	36
D.4.2	Core temperature calculation	37
D.4.3	Comparison of measured and calculated core temperature	38
D.5	Determination of specific heat capacity	38
D.6	Test report	38
D.7	VBA-Routine for calculation of core temperature (informative)	38
	Annex E (normative) Sampling for initial type testing	40
E.1	General	40
E.2	Sampling procedure	40
E.2.1	Random sampling	40
E.2.2	Representative sampling	40
E.2.3	Dividing the sample	41
E.2.4	Number of shuttering blocks required for testing	42
E.3	Place and dates of inspection and acceptance testing	42
	Annex F (normative) Compliance criteria for initial type testing and for independent testing of consignment	43
	Annex G (informative) Example of an inspection scheme	44
G.1	Equipment inspection	44
G.1.1	Testing and measuring equipment	44
G.1.2	Storage and production equipment	44
G.2	Materials inspection	45
G.2.1	All materials	45
G.2.2	Materials not submitted to an assessment of conformity before delivery 2)	45
G.3	Production process inspection	46

G.4	Product inspection	46
G.4.1	Product testing	46
G.4.2	Marking, storage, delivery	46
G.5	Switching rules	47
G.5.1	Normal inspection	47
G.5.2	Normal to reduced inspection	47
G.5.3	Reduced to normal inspection	47
G.5.4	Tightened inspection	47
G.5.5	Tightened to normal inspection	47
G.5.6	Stopped production	47
Annex ZA (informative)	Relationship between this European Standard and the Essential Requirements of EU Directive Constructions products	48
ZA.1	Scope and relevant characteristics	48
ZA.2	Procedure(s) for attestation of conformity of wood-chipconcrete shuttering blocks	49
ZA.2.1	System(s) of attestation of conformity	49
ZA.2.2	EC Certificate and Declaration of conformity	50
ZA.3	CE marking and labelling	51
Bibliography		53