

DIN EN 15498**DIN**

ICS 91.100.30

See start of validity

**Precast concrete products –
Wood-chip concrete shuttering blocks –
Product properties and performance
English version of DIN EN 15498:2008-08**

Betonfertigteile –
Holzspanbeton-Schalungssteine –
Produkteigenschaften und Leistungsmerkmale
Englische Fassung DIN EN 15498:2008-08

Document comprises 55 pages



Start of validity

This standard is due to be valid from 1 January 2009.

It should be noted that, in Germany, CE conformity marking of construction products will be permitted once this standard has been listed in the *Bundesanzeiger* (German Federal Law Gazette) and from the date given therein.

National foreword

This standard has been prepared by Technical Committee CEN/TC 229 "Precast concrete products" (Secretariat: AFNOR, France).

The responsible German body involved in its preparation was the *Normenausschuss Bauwesen* (Building and Civil Engineering Standards Committee), Technical Committee NA 005-07-08 AA *Betonfertigteile* — Sp CEN/TC 229.

EUROPEAN STANDARD

EN 15498

NORME EUROPÉENNE

EUROPÄISCHE NORM

April 2008

ICS 91.100.30

English Version

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

Produits préfabriqués en béton - Blocs de coffrage en béton utilisant des copeaux de bois comme granulat - Propriétés et performances des produits

Betonfertigteile - Holzspanbeton-Schalungssteine - Produkteigenschaften und Leistungsmerkmale

This European Standard was approved by CEN on 18 March 2008.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN Management Centre or to any CEN member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the CEN Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.



EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

Management Centre: rue de Stassart, 36 B-1050 Brussels

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 Construction 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