

DIN EN 534**DIN**

ICS 91.100.50

Supersedes
DIN EN 534:2006-08
See start of validity**Corrugated bitumen sheets –
Product specification and test methods (includes Amendment A1:2010)
English translation of DIN EN 534:2010-07**

Bitumen-Wellplatten –
Produktfestlegungen und Prüfverfahren (enthält Änderung A1:2010)
Englische Übersetzung von DIN EN 534:2010-07

Plaques ondulées bitumées –
Spécifications des produits et méthodes d'essai (Amendement A1:2010 inclus)
Traduction anglaise de DIN EN 534:2010-07

Document comprises 42 pages

Translation by DIN-Sprachendienst.

In case of doubt, the German-language original shall be considered authoritative.

A comma is used as the decimal marker.

Start of validity

This standard is due to take effect on 1 July 2010.

DIN EN 534:2006-08 may be used in parallel until 30 September 2010 (see deadline in the EU Official Journal).

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 Gazette) and from the date given therein.

National foreword

This standard has been prepared by Technical Committee CEN/TC 128 "Roof covering products for discontinuous laying and products for wall cladding" (Secretariat: NBN, Belgium).

The responsible German body involved in its preparation was the *Normenausschuss Bauwesen* (Building and Civil Engineering Standards Committee), Working Committee NA 005-02-05 AA *Bitumenschindeln und Bitumenwellplatten* (Sp CEN/TC 128/SC 6).

Amendments

This standard differs from DIN EN 534:2006-08 as follows:

- a) Subclause 5.3.7 "Load bearing capacity on the roof" has been modified.
- b) Figures 3 and 7 have been replaced.
- c) ZA.1 "Scope and relevant clauses" has been revised.

Previous editions

DIN EN 534: 1998-10, 2006-08

March 2010

ICS 91.100.50

Supersedes EN 534:2006

English Version

Corrugated bitumen sheets - Product specification and test methods

Plaques ondulées bitumées - Spécifications des produits et méthodes d'essai

Bitumen-Wellplatten - Produktfestlegungen und Prüfverfahren

This European Standard was approved by CEN on 3 May 2006 and includes Amendment 1 approved by CEN on 9 February 2010.

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, Croatia, 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: Avenue Marnix 17, B-1000 Brussels

Contents

	Page
Foreword.....	4
1 Scope	5
2 Normative references	5
3 Symbols and abbreviations	5
4 General.....	5
5 Requirements	6
5.1 Geometrical properties	6
5.1.1 Length	6
5.1.2 Width	6
5.1.3 Thickness	6
5.1.4 Height of corrugations	6
5.1.5 Pitch of corrugations.....	6
5.1.6 Squareness.....	7
5.2 Mechanical properties.....	7
5.2.1 Bending under downward load	7
5.2.2 Impact strength.....	7
5.2.3 Tearing strength.....	7
5.3 Physical properties.....	7
5.3.1 Water impermeability	7
5.3.2 Proportion of bitumen	7
5.3.3 Mass	7
5.3.4 Homogeneity of the product.....	8
5.3.5 Water absorption	8
5.3.6 Slip resistance.....	8
5.3.7 □ Load bearing capacity on the roof □	8
5.4 Durability	8
5.4.1 Tearing strength after freeze/thaw ageing	8
5.4.2 Water impermeability after freeze/thaw ageing.....	8
5.4.3 Thermal coefficient.....	8
5.5 Fire performance.....	8
5.5.1 Reaction to fire	8
5.5.2 External fire performance	8
6 Sampling and conditioning.....	9
6.1 Sample preparation	9
6.2 Cutting of the corrugated bitumen sheet	10
7 Test methods.....	11
7.1 Geometrical properties	11
7.1.1 Length	11
7.1.2 Width	12
7.1.3 Thickness	12
7.1.4 Height of corrugations	13
7.1.5 Pitch of corrugations.....	15
7.1.6 Squareness.....	16
7.2 Mechanical properties.....	18
7.2.1 Bending under downward load	18
7.2.2 Impact strength.....	20
7.2.3 Tearing strength.....	21
7.3 Physical properties.....	23

7.3.1	Water impermeability	23
7.3.2	Proportion of bitumen.....	24
7.3.3	Mass.....	24
7.3.4	Homogeneity of the product.....	25
7.3.5	Water absorption	25
7.4	Durability	26
7.4.1	Tearing strength after freeze/thaw ageing	26
7.4.2	Water impermeability after freeze/thaw ageing	26
7.4.3	Thermal coefficient.....	26
7.4.4	Frost resistance conditioning	27
7.5	Fire performance	28
7.5.1	Reaction to fire	28
7.5.2	External fire performance	28
8	Evaluation of conformity	28
8.1	General	28
8.2	Initial type testing	28
8.3	Factory production control (FPC).....	29
8.3.1	General	29
8.3.2	Equipment	29
8.3.3	Raw materials and components	29
8.3.4	Non-conforming products	29
8.3.5	Frequency of testing	29
8.3.6	Tests methods	29
9	Marking	29
Annex A (normative) Frequencies of testing for factory production control.....		31
Annex ZA (informative) Clause of this European Standard addressing the provisions of the EU Construction Products Directive (89/106/EEC)		32
ZA.1	Scope and relevant clauses	32
ZA.2	Procedure for the attestation of conformity of corrugated bitumen sheets	34
ZA.2.1	Systems of attestation of conformity	34
ZA.2.2	EC Certificate and Declaration of conformity.....	37
ZA.3	CE marking.....	39