

**PLEKIST KATUSETOOTED. ISEKANDVATE TERASEST,
ALUMIINIUMIST JA ROOSTEVABAST TERASEST
PLEKIST VALMISTATUD TOODETE SPETSIFIKATSIOON.
OSA 2: ALUMIINIUM**

**Roofing products from metal sheet -Specification of
self-supporting products of steel, aluminium or
stainless steel sheet - Part 2: Aluminium**

EESTI STANDARDI EESSÕNA**NATIONAL FOREWORD**

See Eesti standard EVS-EN 508-2:2008 sisaldab Euroopa standardi EN 508-2:2008 ingliskeelset teksti.	This Estonian standard EVS-EN 508-2:2008 consists of the English text of the European standard EN 508-2:2008.
Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas.	This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation.
Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 09.07.2008.	Date of Availability of the European standard is 09.07.2008.
Standard on kättesaadav Eesti Standardikeskusest.	The standard is available from the Estonian Centre for Standardisation.

Tagasisidet standardi sisu kohta on võimalik edastada, kasutades EVS-i veebilehel asuvat tagasiside vormi või saates e-kirja meiliaadressile standardiosakond@evs.ee.

ICS 91.060.20

Standardite reprodutseerimise ja levitamise õigus kuulub Eesti Standardikeskusele

Andmete paljundamine, taastekitamine, kopeerimine, salvestamine elektroonsesse süsteemi või edastamine ükskõik millises vormis või millisel teel ilma Eesti Standardikeskuse kirjaliku loata on keelatud.

Kui Teil on küsimusi standardite autorikaitse kohta, võtke palun ühendust Eesti Standardikeskusega:

Aru 10, 10317 Tallinn, Eesti; koduleht www.evs.ee; telefon 605 5050; e-post info@evs.ee

The right to reproduce and distribute standards belongs to the Estonian Centre for Standardisation

No part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying, without a written permission from the Estonian Centre for Standardisation.

If you have any questions about copyright, please contact Estonian Centre for Standardisation:

Aru 10, 10317 Tallinn, Estonia; homepage www.evs.ee; phone +372 605 5050; e-mail info@evs.ee

English Version

Roofing products from metal sheet - Specification for self-supporting products of steel, aluminium or stainless steel sheet -
Part 2: Aluminium

Produits de couverture en tôle métallique - Spécification
pour les plaques de couverture en tôle d'acier, d'aluminium
ou d'acier inoxydable - Partie 2 : Aluminium

Dachdeckungsprodukte aus Metallblech - Spezifikation für
selbsttragende Bedachungselemente aus Stahlblech,
Aluminiumblech oder nichtrostendem Stahlblech - Teil 2:
Aluminium

This European Standard was approved by CEN on 30 May 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.....	4
Introduction	5
1 Scope	6
2 Normative references	6
3 Terms and definitions, symbols and abbreviations	6
3.1 General.....	6
3.2 Material definitions	6
3.3 Profile definitions.....	7
3.4 Product geometry	9
3.5 Symbols and abbreviations	12
4 Requirements	13
4.1 General.....	13
4.2 Materials	13
4.2.1 Aluminium	13
4.2.2 Organic coatings.....	14
4.3 Products	15
4.3.1 Mechanical resistance.....	15
4.3.2 Calculation and tests of mechanical resistance.....	15
4.3.3 Dimensions.....	15
4.3.4 Dimensional tolerances for the profiled sheet	16
4.3.5 Safety in case of fire.....	16
5 Test methods.....	16
5.1 Material properties	16
5.2 Surface properties	16
5.3 Structural properties	16
6 Designation	16
7 Marking, labelling and packaging	17
7.1 Marking and labelling	17
7.2 Packaging and special ordering conditions	17
7.3 Transport, storage and handling.....	17
Annex A (normative) Dimensional tolerances	18
A.1 Tolerances for trapezoidal sheets.....	18
A.1.1 General.....	18
A.1.2 Depth of profile	18
A.1.3 Depth of stiffeners	19
A.1.4 Pitch	19
A.1.5 Widths of crown and valley	20
A.1.6 Cover width	20
A.1.7 Radius of bends	21
A.1.8 Deviation from straightness	22
A.1.9 Deviation from squareness.....	23
A.1.10 Length	23
A.1.11 Deviation of side lap.....	24
A.1.12 Curve radius and angles	24
A.2 Tolerances for sinusoidal profiles	25
A.3 Tolerances on tiles	25
A.3.1 General.....	25
A.3.2 Depth of tile	26
A.3.3 Web angular displacement (Figure A.12)	27

A.3.4	Pitch	27
A.3.5	Width of crown and valley (Figure A.14)	27
A.3.6	Cover width	28
A.3.7	Radius of bends	28
A.3.8	Deviation from straightness	29
A.3.9	Deviation from squareness	29
A.3.10	Length	30
A.3.11	Contraction or bulging	30
A.4	Methods for measuring profiles	31
A.4.1	General	31
A.4.2	Depth of profile	31
A.4.3	Depth of stiffeners	31
A.4.4	Pitch	31
A.4.5	Width of crown and valley	32
A.4.6	Cover width	33
A.4.7	Radius of bends	33
A.4.8	Straightness	33
A.4.9	Squareness	33
A.4.10	Length	33
A.4.11	Side laps	33
A.4.12	Side lap ripple	33
Annex B (informative)	Test methods for concentrated load	35
Bibliography	36

Foreword

This document (EN 508-2:2008) has been prepared by Technical Committee CEN/TC 128 “Roof covering for discontinuous laying and products for wall cladding”, the secretariat of which is held by NBN.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by January 2009, and conflicting national standards shall be withdrawn at the latest by January 2009.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN [and/or CENELEC] shall not be held responsible for identifying any or all such patent rights.

This document supersedes EN 508-2:2000.

EN 508 *Roofing products from metal sheet - Specification for self-supporting products of steel, aluminium or stainless steel sheet* consists of the following parts:

- *Part 1: Steel;*
- *Part 2: Aluminium;*
- *Part 3: Stainless steel.*

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: 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 the United Kingdom.

Introduction

Figure 1 indicates the position of this standard in the CEN framework of standards concerning roofing products of metal.

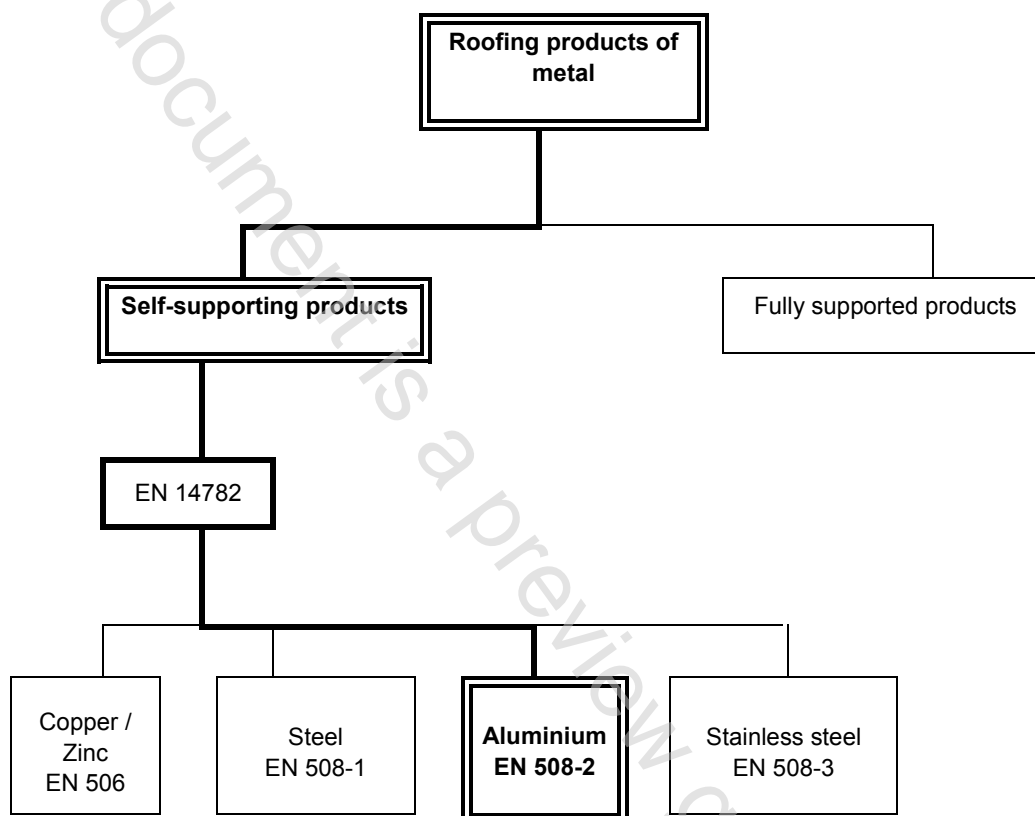


Figure 1 — Framework of standards

In this standard the performance of the product has been defined in terms of calculation and a number of type tests.

The performance of a roof constructed with these products depends not only on the properties of the product as required by this standard, but also on the design, construction and performance of the roof as a whole in relation to the environment and conditions of use.

1 Scope

This part of EN 508 specifies requirements for self-supporting roofing products for discontinuous laying made from aluminium sheet with or without additional organic coatings.

The standard establishes general characteristics, definitions, classifications and labelling for the products, together with requirements for the materials from which the products can be manufactured. It is intended to be used either by manufacturers to ensure that their products comply with the requirements or by purchasers to verify that the products comply before they are despatched from the factory. It specifies the requirements for products which enable them to meet all normal service conditions.

The standard applies to all discontinuously laid self-supporting external profiled sheets for roofing. These profiled roof sheets are designed to keep wind, rain and snow out of the building, and to transfer any resultant loads and infrequent maintenance loads to the structure.

No requirements for supporting construction, design of roof system and execution of connections and flashings are included.

2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 485-4, *Aluminium and aluminium alloys - Sheet, strip and plate - Part 4: Tolerances on shape and dimensions for cold-rolled products.*

EN 1396, *Aluminium and aluminium alloys - Coil-coated sheet and strip for general applications – Specifications.*

3 Terms and definitions, symbols and abbreviations

For the purposes of this document, the following terms and definitions apply.

3.1 General

3.1.1

self-supporting product

Product which will, by virtue of its material and shape, support all applied loadings (e.g. snow, wind, foot traffic), and transmit these loadings to spaced structural supports

3.2 Material definitions

3.2.1

aluminium

unalloyed aluminium or aluminium

3.2.2

unalloyed aluminium

metal with a minimum content of 99,0% by mass of aluminium and with content by mass of any other element within the following limits :

— a total content of iron and silicon not greater than 1,0% ;