

This document is a preview generated by EVS

**Lehtmetallist katusetooted. Isekandvate
lehtterasest, alumiiniumist ja roostevabast
lehtterasest valmistatud toodete spetsifikatsioon.
Osa 1: Teras**

Roofing products from metal sheet - Specification for
self-supporting products of steel, aluminium or
stainless steel sheet - Part 1: Steel

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 508-1:2008 sisaldb Euroopa standardi EN 508-1:2008 ingliskeelset teksti.	This Estonian standard EVS-EN 508-1:2008 consists of the English text of the European standard EN 508-1:2008.
Standard on kinnitatud Eesti Standardikeskuse 18.08.2008 käskkirjaga ja jõustub sellekohase teate avaldamisel EVS Teatajas.	This standard is ratified with the order of Estonian Centre for Standardisation dated 18.08.2008 and is endorsed with the notification published in the official bulletin of the Estonian national standardisation organisation.
Euroopa standardimisorganisatsioonide poolt rahvuslikele liikmetele Euroopa standardi teksti kätesaadavaks tegemise kuupäev on 09.07.2008.	Date of Availability of the European standard text 09.07.2008.
Standard on kätesaadav Eesti standardiorganisatsionist.	The standard is available from Estonian standardisation organisation.

ICS 91.060.20

Võtmesõnad: katused, lehtmetall, lehtteras, spetsifikatsioon

Standardite reproduutseerimis- ja levitamisõigus kuulub Eesti Standardikeskusele

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

Kui Teil on küsimusi standardite autorikaitse kohta, palun võtke ühendust Eesti Standardikeskusega:
Aru 10 Tallinn 10317 Eesti; www.evs.ee; Telefon: 605 5050; E-post: info@evs.ee

EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN 508-1

July 2008

ICS 91.060.20

Supersedes EN 508-1:2000

English Version

**Roofing products from metal sheet - Specification for self-supporting products of steel, aluminium or stainless steel sheet -
Part 1: Steel**

Produits de couverture en tôle métallique - Spécification pour les plaques de couverture en tôles d'acier, d'aluminium ou d'acier inoxydable - Partie 1 : Acier

Dachdeckungsprodukte aus Metallblech - Festlegungen für selbsttragende Bedachungselemente aus Stahlblech, Aluminiumblech oder nichtrostendem Stahlblech - Teil 1: Stahl

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.....	7
3.2 Materials	7
3.3 Profile definitions.....	8
3.4 Product geometry	10
3.5 Symbols and abbreviations	13
4 Requirements	14
4.1 General.....	14
4.2 Materials	15
4.2.1 Materials for roll formed and brake pressed profiles.....	15
4.2.2 Materials for tiles	15
4.2.3 Nominal metallic coating	15
4.2.4 Organic coatings.....	16
4.3 Products	17
4.3.1 Mechanical resistance.....	17
4.3.2 Calculation and test of mechanical resistance.....	17
4.3.3 Dimensions.....	17
4.3.4 Dimensional tolerances for the profiled sheets	17
4.3.5 Safety in case of fire	17
5 Test methods.....	18
5.1 Material properties	18
5.2 Structural properties	18
6 Designation	18
7 Marking, labelling and packaging	18
7.1 Marking and labelling	18
7.2 Packaging and special ordering conditions	19
7.3 Transport, storage and handling.....	19
Annex A (informative) Aluminium coated steel sheet (type A).....	20
A.1 General.....	20
A.2 Specification for roof covering products	20
A.2.1 Steel grades.....	20
A.2.2 Coating mass	20
A.2.3 Dimensional tolerances	21
Annex B (normative) Multilayer coated steel sheet.....	22
B.1 General.....	22
B.2 Substrate material.....	22
B.3 Specific requirements	22
B.3.1 Minimum nominal values of thickness	22
B.3.2 Bituminous coating specification	22
B.3.3 Durability	23
B.4 Freedom from defects	23
Annex C (informative) Metallic coatings	24

Annex D (normative) Dimensional tolerances	27
D.1 Tolerances for trapezoidal sheets	27
D.1.1 General	27
D.1.2 Depth of profile	27
D.1.3 Depth of stiffeners	28
D.1.4 Pitch	28
D.1.5 Widths of crown and valley	29
D.1.6 Cover width	29
D.1.7 Radius of bends	30
D.1.8 Deviation from straightness	31
D.1.9 Deviation from squareness	31
D.1.10 Length	32
D.1.11 Deviation of side lap	33
D.1.12 Curve radius and angles	33
D.2 Tolerances for sinusoidal profiles	34
D.3 Tolerances on tiles	34
D.3.1 General	34
D.3.2 Depth of tile	35
D.3.3 Web angular displacement (Figure D.12)	36
D.3.4 Pitch	36
D.3.5 Width of crown and valley (Figure D.14)	36
D.3.6 Cover width	37
D.3.7 Radius of bends	37
D.3.8 Deviation from straightness	38
D.3.9 Deviation from squareness	39
D.3.10 Length	39
D.3.11 Contraction or bulging	39
D.4 Methods for measuring profiles	40
D.4.1 General	40
D.4.2 Depth of profile	40
D.4.3 Depth of stiffeners	41
D.4.4 Pitch	41
D.4.5 Width of crown and valley	42
D.4.6 Cover width	42
D.4.7 Radius of bends	42
D.4.8 Straightness	42
D.4.9 Squareness	42
D.4.10 Length	43
D.4.11 Side laps	43
D.4.12 Side lap ripple	43
Annex E (informative) Test methods for concentrated load	45
Bibliography	46

Foreword

This document (EN 508-1:2008) has been prepared by Technical Committee CEN/TC 128 "Roof covering products 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 508-1:2000.

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.

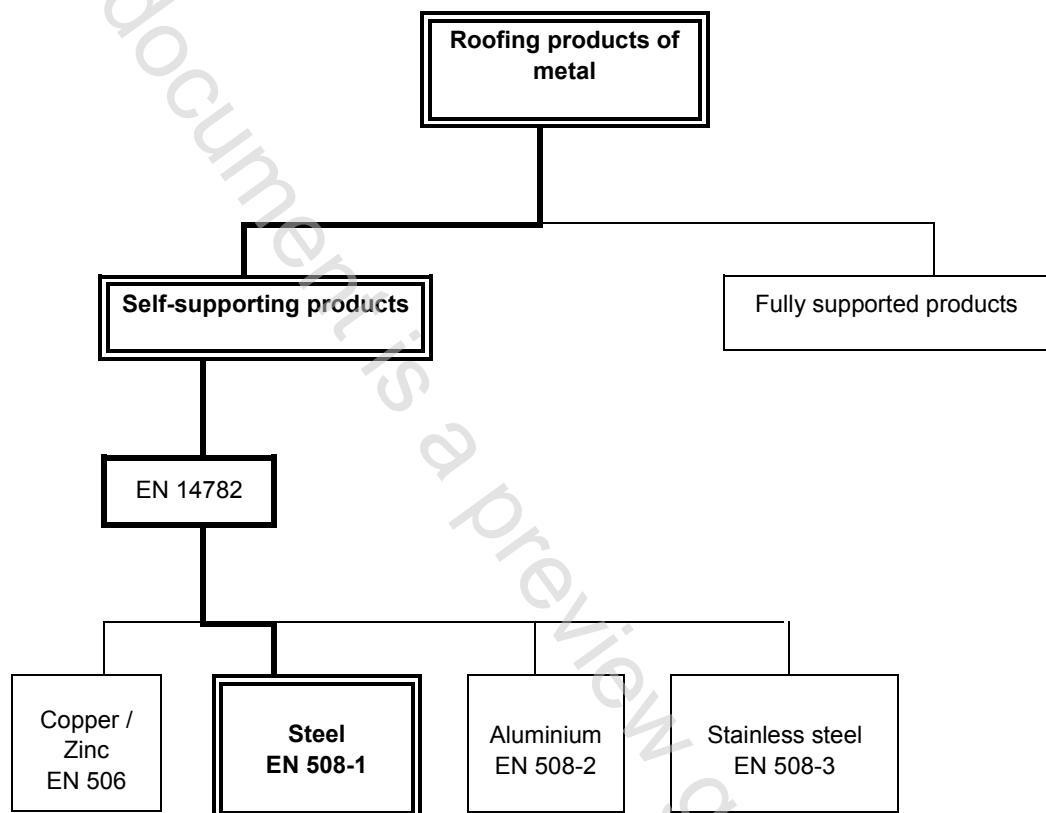


Figure 1 — Framework of standards

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 metallic coated steel 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 when purchased 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 with the exception of tiles with a surface area less than 1 m² and produced by stamping. 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 10143, *Continuously hot-dip coated steel sheet and strip - Tolerances on dimensions and shape*

EN 10169-1:2003, *Continuously organic coated (coil coated) steel flat products - Part 1: General information (definitions, materials, tolerances, test methods)*

EN 10169-2, *Continuously organic coated (coil coated) steel flat products - Part 2: Products for building exterior applications*

EN 10169-3, *Continuously organic coated (coil coated) steel flat products - Part 3: Products for building interior applications*

EN 10326, *Continuously hot-dip coated strip and sheet of structural steels - Technical delivery conditions*

EN 10327, *Continuously hot-dip coated strip and sheet of low carbon steels for cold forming - Technical delivery conditions*

EN ISO 6270-1, *Paints and varnishes - Determination of resistance to humidity - Part 1: Continuous condensation (ISO 6270-1:1998)*

EN ISO 6988, *Metallic and other non-organic coatings - Sulfur dioxide test with general condensation of moisture (ISO 6988:1985)*

EN ISO 9227, *Corrosion tests in artificial atmospheres - Salt spray tests (ISO 9227:2006)*

3 Terms and definitions, symbols and abbreviations

For the purposes of this standard, the terms and definitions given in EN 10169-1 and the following apply.