

Isekandvad plekist katuse- ja seinakatteelemendid. Spetsifikatsioon ja nõuded

Self-supporting metal sheet for roofing, external cladding and internal lining - Product specification and requirements

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 14782:2007 sisaldab Euroopa standardi EN 14782:2006 ingliskeelset teksti.

Standard on kinnitatud Eesti Standardikeskuse 27.02.2006 käskkirjaga ja jõustub sellekohase teate avaldamisel EVS Teatajas.

Euroopa standardimisorganisatsioonide poolt rahvuslikele liikmetele Euroopa standardi teksti kättesaadavaks tegemise kuupäev on 11.01.2006.

Standard on kättesaadav Eesti standardiorganisatsioonist.

This Estonian standard EVS-EN 14782:2007 consists of the English text of the European standard EN 14782:2006.

This standard is ratified with the order of Estonian Centre for Standardisation dated 27.02.2006 and is endorsed with the notification published in the official bulletin of the Estonian national standardisation organisation.

Date of Availability of the European standard text 11.01.2006.

The standard is available from Estonian standardisation organisation.

ICS 77.140.50, 77.150.01, 91.060.10, 91.060.20

Võtmesõnad: katsetamine, katusekattematerjalid, nõuded, omadused, spetsifikatsioonid, vastavushindamine

Standardite reprodutseerimis- ja levitamiseõigus 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

ICS 77.140.50; 77.150.01; 91.060.10; 91.060.20

English Version

Self-supporting metal sheet for roofing, external cladding and internal lining - Product specification and requirements

Plaques métalliques autoportantes pour couverture, bardages extérieur et intérieur et cloisons - Spécification de produit et exigences

Selbsttragende Dachdeckungs- und Wandbekleidungselemente für die Innen- und Außenanwendung aus Metallblech - Produktspezifikation und Anforderungen

This European Standard was approved by CEN on 28 November 2005.

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 Central Secretariat 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 Central Secretariat has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, 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
1 Scope	5
2 Normative references	6
3 Terms and definitions	7
4 Requirements	7
4.1 Materials	7
4.2 Nominal thickness	7
4.3 Mechanical resistance	7
4.3.1 General	7
4.3.2 Resistance of roofing products to concentrated forces	8
4.4 Water permeability	8
4.5 Vapour and air permeability	8
4.6 Dimensional change	8
4.7 Dimensional tolerances	9
4.8 Durability	9
4.9 External fire performance	9
4.10 Reaction to fire	9
4.11 Release of regulated dangerous substances	9
5 Testing, assessment and sampling methods	9
5.1 External fire performance for roof covering products	9
5.1.1 Products deemed to satisfy the requirements for external fire performance	9
5.1.2 Products classified without the need for further testing (CWFT option)	10
5.1.3 Other products	10
5.2 Reaction to fire	10
5.2.1 Products satisfying the requirements for reaction to fire Class A1 without the need for testing	10
5.2.2 Products classified without the need for further testing (CWFT option)	10
5.2.3 Other products	10
5.3 Release of regulated dangerous substances	10
6 Evaluation of conformity	10
6.1 General	10
6.2 Initial type testing (ITT)	11
6.2.1 General	11
6.2.2 Sampling for ITT	13
6.3 Factory production control (FPC)	13
6.3.1 General	13
6.3.2 General requirements	15
7 Designation	17
8 Product marking	17
Annex A (normative) Multilayer coated steel sheet	18
A.1 General	18
A.2 Substrate material	18
A.3 Specific requirements	18
A.3.1 Minimum nominal values of thickness	18
A.3.2 Bituminous coating specification	18
A.3.3 Durability	19
A.4 Freedom from defects	19
Annex B (normative) Determination of resistance to concentrated forces	20

B.1	Principle.....	20
B.2	Test spans	20
B.3	Test sheets	21
B.4	Test procedure.....	21
B.5	Number of tests and analysis of results	22
B.6	Acceptance criteria.....	23
B.7	Test report	24
Annex C (normative) Mounting and fixing conditions of the test specimen for reaction to fire		
	testing	25
C.1	General	25
C.2	Mounting and fixing conditions	25
C.2.1	General	25
C.2.2	General configuration.....	25
C.2.3	Securing the overlap vertical joint.....	27
C.2.4	Standard assembly – Steel corner flashings	27
C.2.5	Alternative assembly – Corner flashings and seals	27
C.2.6	Test arrangement for reaction to fire test according to EN ISO 11925-2 (Ignitability test).....	27
C.3	Direct and extended application of the fire test results according to EN 13823	28
C.3.1	General	28
C.3.2	Direct application: Systems with only one metal sheet (single skin system without insulation).....	28
C.3.3	Direct application: Systems with two (profiled or flat) coated metal sheets (or one cassette plus one sheet) with an insulation between the two sheets (double skin system)	30
C.3.4	Extended application: Other insulated systems – General methodology	33
Annex ZA (informative) Clauses of this European Standard addressing the provisions of the EU Construction Products Directive		
		35
ZA.1	Scope and relevant characteristics	35
ZA.2	Procedures for the attestation of conformity of products	36
ZA.3	CE marking and labelling	38
	Bibliography.....	41

Foreword

This European Standard (EN 14782:2005) 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 IBN.

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 July 2006, and conflicting national standards shall be withdrawn at the latest by July 2006.

This European Standard has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive(s).

For relationship with EU Directive(s), see informative Annex ZA, which is an integral part of this European Standard.

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

1 Scope

This European Standard specifies the terminology, requirements and test methods for factory made self-supporting metal sheets and tiles (for non-structural applications) delivered in the form of manufactured pieces for roofing and wall cladding and lining.

This standard also covers ceiling (including internal metal sheet) and soffit applications and cassettes (see Figure 1).

This standard covers self-supporting copper, zinc, steel, aluminium and stainless steel sheet with or without coatings, e.g. metallic, organic, inorganic or multi-layer (see Annex A). A moisture retaining layer intended to reduce the fall of droplets coming from condensation may be present on the reverse side of the product.

This standard also includes rules for marking, labelling and evaluation of conformity.

This standard does not cover products for structural purposes, i.e. it does not cover products intended to contribute to the global or partial stability of the building structure by providing racking resistance or resistance to permanent static loads (excluding self-weight of the metal sheet).

Requirements concerning acoustical and thermal insulation properties are not considered in this standard.

This standard does not include calculation or design requirements with regards to the works, installation techniques or the performance of the installed products.

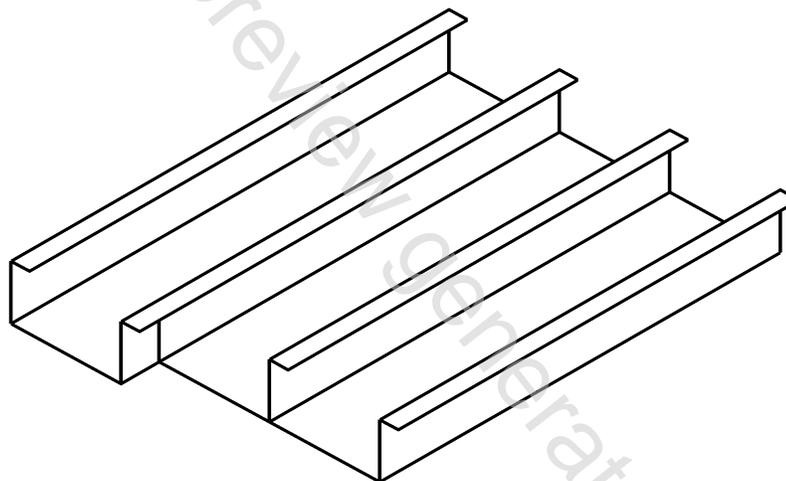


Figure 1 – Illustration of a cassette

2 Normative references

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

EN 506:2000, *Roofing products from metal sheet - Specification for self-supporting products of copper or zinc sheet*

EN 508-1:2000, *Roofing products from metal sheet - Specification for self-supporting products of steel, aluminium or stainless steel sheet - Part 1: Steel*

EN 508-2:2000, *Roofing products from metal sheet - Specification for self-supporting products of steel, aluminium or stainless steel sheet - Part 2: Aluminium*

EN 508-3:2000, *Roofing products from metal sheet - Specification for self-supporting products of steel, aluminium or stainless steel sheet - Part 3: Stainless steel*

ENV 1187, *Test methods for external fire exposure to roofs*

EN 1427, *Bitumen and bituminous binders - Determination of softening point - Ring and Ball method*

EN 10002-1, *Metallic materials - Tensile testing - Part 1: Method of test at ambient temperature*

EN 10088-1, *Stainless steels - Part 1: List of stainless steels*

EN 10204, *Metallic products - Types of inspection documents*

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

EN 13162, *Thermal insulation products for buildings - Factory made mineral wool (MW) products - Specification*

EN 13501-1, *Fire classification of construction products and building elements - Part 1: Classification using test data from reaction to fire tests*

EN 13501-5, *Fire classification of construction products and building elements - Part 5: Classification using data from external fire exposure to roof tests*

EN 13823, *Reaction to fire tests for building products - Building products excluding floorings exposed to the thermal attack by a single burning item*

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 9001:2000, *Quality management systems - Requirements (ISO 9001:2000)*

EN ISO 11925-2, *Reaction to fire tests - Ignitability of building products subjected to direct impingement of flame - Part 2: Single-flame source test (ISO 11925-2:2002)*

ISO 9227, *Corrosion tests in artificial atmospheres - Salt spray tests*