

PIDEVPROTSESSIS ORGAANILISE PINNAKATTEGA
PINNATUD (RULLIS PINNATUD) TERASEST
LEHTTOOTED. TEHNILISED TARNETINGIMUSED

Continuously organic coated (coil coated) steel flat
products - Technical delivery conditions

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN 10169:2022 sisaldab Euroopa standardi EN 10169:2022 ingliskeelset teksti.	This Estonian standard EVS-EN 10169:2022 consists of the English text of the European standard EN 10169:2022.
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 and Accreditation.
Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 16.03.2022.	Date of Availability of the European standard is 16.03.2022.
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EUROPEAN STANDARD

EN 10169

NORME EUROPÉENNE

EUROPÄISCHE NORM

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ICS 25.220.60; 77.140.50

Supersedes EN 10169:2010+A1:2012

English Version

Continuously organic coated (coil coated) steel flat products - Technical delivery conditions

Produits plats en acier revêtus en continu de matières organiques (prélaqués) - Conditions techniques de livraison

Kontinuierlich organisch beschichtete (bandbeschichtete) Flacherzeugnisse aus Stahl - Technische Lieferbedingungen

This European Standard was approved by CEN on 24 January 2022.

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-CENELEC 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-CENELEC Management Centre has the same status as the official versions.

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EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
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CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

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European foreword

This document (EN 10169:2022) has been prepared by Technical Committee CEN/TC 459/SC 9 “Coated and uncoated flat products to be used for cold forming”, the secretariat of which is held by AFNOR.

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 September 2022, and conflicting national standards shall be withdrawn at the latest by September 2022.

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

This document supersedes EN 10169:2010+A1:2012.

In comparison with the previous edition, the following technical modifications have been made:

- addition of the requirement about a maximum six-month duration between production and processing of the coil coated product;
- addition of the corrosion resistance category RC5+ corresponding to very high corrosivity category C5 combining RC5-I and RC5-M that have been removed from this document;
- addition of the UV resistance category R_{uv5} ;
- addition of third party supervision for natural weathering tests if a certificate is required by the purchaser;
- definition of a four-year test duration for corrosion resistance category RC5+;
- definition of requirements for natural outdoor UV radiation resistance tests;
- removal of Geleen from the list of natural outdoor corrosivity exposure sites;
- editorial improvements and updating of normative references.

Any feedback and questions on this document should be directed to the users' national standards body. A complete listing of these bodies can be found on the CEN website.

According to the CEN-CENELEC Internal Regulations, the national standards organisations of the following countries are bound to implement this European Standard: 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, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

1 Scope

This document specifies requirements for continuously organic coated (coil coated) steel flat products. It particularly specifies the performance requirements.

The products covered are wide strip, sheet cut from wide strip, slit wide strip, strip rolled in widths less than 600 mm and cut lengths (from sheet or strip).

NOTE National provisions can set up relationships between the performances of the coatings as required in this document and the outdoor atmospheres and ambiances required for a relevant building under study.

This document is not applicable to continuously organic coated flat products made of:

- tin mill products;
- electrical steels.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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 10020, *Definition and classification of grades of steel*

EN 10021, *General technical delivery conditions for steel products*

EN 10025-1, *Hot rolled products of structural steels - Part 1: General technical delivery conditions*

EN 10025-2, *Hot rolled products of structural steels - Part 2: Technical delivery conditions for non-alloy structural steels*

EN 10048, *Hot rolled narrow steel strip - Tolerances on dimensions and shape*

EN 10051, *Continuously hot-rolled strip and plate/sheet cut from wide strip of non-alloy and alloy steels - Tolerances on dimensions and shape*

EN 10079, *Definition of steel products*

EN 10111, *Continuously hot rolled low carbon steel sheet and strip for cold forming - Technical delivery conditions*

EN 10130, *Cold rolled low carbon steel flat products for cold forming - Technical delivery conditions*

EN 10131, *Cold rolled uncoated and zinc or zinc-nickel electrolytically coated low carbon and high yield strength steel flat products for cold forming - Tolerances on dimensions and shape*

EN 10139, *Cold rolled uncoated mild steel narrow strip for cold forming - Technical delivery conditions*

EN 10140, *Cold rolled narrow steel strip - Tolerances on dimensions and shape*

EN 10143, *Continuously hot-dip coated steel sheet and strip - Tolerances on dimensions and shape*

EN 10152, *Electrolytically zinc coated cold rolled steel flat products for cold forming - Technical delivery conditions*

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

- EN 10268, *Cold rolled steel flat products with high yield strength for cold forming - Technical delivery conditions*
- EN 10338, *Hot rolled and cold rolled non-coated products of multiphase steels for cold forming - Technical delivery conditions*
- EN 10346, *Continuously hot-dip coated steel flat products for cold forming - Technical delivery conditions*
- EN 13523-1, *Coil coated metals - Test methods - Part 1: Film thickness*
- EN 13523-2, *Coil coated metals - Test methods - Part 2: Gloss*
- EN 13523-3, *Coil coated metals - Test methods - Part 3: Colour difference and metamerism - Instrumental comparison*
- EN 13523-4, *Coil coated metals - Test methods - Part 4: Pencil hardness*
- EN 13523-5, *Coil coated metals - Test methods - Part 5: Resistance to rapid deformation (impact test)*
- EN 13523-6, *Coil coated metals - Test methods - Part 6: Adhesion after indentation (cupping test)*
- EN 13523-7, *Coil coated metals - Test methods - Part 7: Resistance to cracking on bending (T-bend test)*
- EN 13523-8, *Coil coated metals - Test methods - Part 8: Resistance to salt spray (fog)*
- EN 13523-10, *Coil coated metals - Test methods - Part 10: Resistance to fluorescent UV radiation and water condensation*
- EN 13523-12, *Coil coated metals - Test methods - Part 12: Resistance to scratching*
- EN 13523-19, *Coil coated metals - Test methods - Part 19: Panel design and method of atmospheric exposure testing*
- EN 13523-21, *Coil coated metals - Test methods - Part 21: Evaluation of outdoor exposed panels*
- EN 13523-26, *Coil coated metals - Test methods - Part 26: Resistance to condensation of water*
- EN ISO 2815, *Paints and varnishes - Buchholz indentation test (ISO 2815)*
- EN ISO 4618, *Paints and varnishes - Terms and definitions (ISO 4618)*
- EN ISO 4628-2, *Paints and varnishes - Evaluation of degradation of coatings - Designation of quantity and size of defects, and of intensity of uniform changes in appearance - Part 2: Assessment of degree of blistering (ISO 4628-2)*
- EN ISO 4628-4, *Paints and varnishes - Evaluation of degradation of coatings - Designation of quantity and size of defects, and of intensity of uniform changes in appearance - Part 4: Assessment of degree of cracking (ISO 4628-4)*
- EN ISO 4628-5, *Paints and varnishes - Evaluation of degradation of coatings - Designation of quantity and size of defects, and of intensity of uniform changes in appearance - Part 5: Assessment of degree of flaking (ISO 4628-5)*
- EN ISO 8044, *Corrosion of metals and alloys - Vocabulary (ISO 8044)*

EN ISO 12944-2, *Paints and varnishes - Corrosion protection of steel structures by protective paint systems - Part 2: Classification of environments (ISO 12944-2)*

ISO 4997, *Cold-reduced carbon steel sheet of structural quality*

3 Terms and definitions

For the purpose of this document, the terms and definitions given in EN 10020, EN 10021, EN 10079, EN 10204, EN ISO 4618, EN ISO 8044, EN ISO 12944-2 and the following apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- ISO Online browsing platform: available at <https://www.iso.org/obp>
- IEC Electropedia: available at <https://www.electropedia.org/>

3.1

accessibility

ease of access to the steel components for the purpose of inspection and maintenance without any work over and above that concerned with routine inspection

3.2

ambience

environmental conditions which prevail in the interior of the building

Note 1 to entry: These conditions determine the corrosivity category of the ambience and include different parameters such as the air temperature, the relative humidity, the operating conditions in the building (e.g. use of aggressive chemical products, refrigerated areas).

Note 2 to entry: The atmosphere surrounding the building can influence the ambience.

Note 3 to entry: Annex A gives an example of classification of types of ambience.

3.3

building interior application

application in buildings for which the concerned construction products (i.e. components of the building fabric) are submitted to the influence of interior ambiances without significant exposure of any side of the product to the influence of exterior atmospheres

Note 1 to entry: Building products include, for example: liner trays, ribbed profiles for roofing and cladding, curved profiles, brake-pressed profiles, interior wall panels for partitions, ceiling panels, suspended frames (for suspended ceilings), factory foamed (or with mineral wool) sandwich panels for cold rooms or rooms with controlled ambience, interior door frames, interior metal doors, interior metal windows and for ceilings.

Note 2 to entry: Some coil coated products can be used for interior applications having special performance requirements, e.g. lighting. In such cases, these particular requirements should also be considered in consultation with the manufacturer.

Note 3 to entry: For interior building elements, it is important to consider the risk of corrosive attack on the reverse side of the element. This can be especially important in double-skin assemblies (e.g. built up insulated cladding) where the reverse side of the interior element is not easily accessible for maintenance and/or in situations where the interior element is expected to provide long-term durability.

Note 4 to entry: Besides the requirements written in this document, there can be other international or national requirements or regulations regarding fire, safety, food contact etc. that can be considered at the time of enquiry and order.