

Ehitusdetailid. Korrosioonikindlus. Nõuded ja katsemeetodid

Building hardware - Corrosion resistance -
Requirements and test methods

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN 1670:2007 sisaldab Euroopa standardi EN 1670:2007 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 31.05.2007 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN 1670:2007 consists of the English text of the European standard EN 1670:2007.</p> <p>This document is endorsed on 31.05.2007 with the notification being published in the official publication of the Estonian national standardisation organisation.</p> <p>The standard is available from Estonian standardisation organisation.</p>
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<p>Käsitlusala: See Euroopa standard määrab kindlaks uste, akende, aknaluukide ja rippseina monteeritavate paneelide korrosioonikindluse nõuded. Standard määrab kindlaks nõuded nii kattega kui ka katteta pindade kohta ning nelja korrosioonikindlusastme (klassi) kohta, mis on kehtestatud vastavalt kasutustingimustele (astmed (klassid) 1 kuni 4). Hõlmatud on ka aste (klass) 0, mille kohta nõudeid ei ole veel kindlaks määratud. 4 korrosiooniastmest (klassist) kõrgemate korrosioonitasemete nõudeid ei ole käesolevas standardis hõlmatud ning vajadusel tuleb selles osas kokku leppida. Standard kehtib ka ehitusdetailide kinnitamiseks nõutavate metallist kinnitusdetailide kohta. Selles standardis kindlaksmääratud kaitsvate viimistluskatete nõuded on pärit ISO standarditest. Kui kasutatakse pinnakatteta materjale või ISO standarditega hõlmamata viimistluskatteid, põhineb klassifitseerimine tavaliste soolaudukatsete tulemustel, nagu on kindlaks määratud standardis ISO 9227.</p>	<p>Scope: This European Standard specifies the requirements for the corrosion resistance of building hardware for doors, windows, shutters and curtain walling. This European Standard provides a method of classification of corrosion resistance of building hardware based on performance in a neutral salt spray test (ISO 9227). This European Standard specifies requirements for both coated and uncoated surfaces and five grades of corrosion resistance being laid down in accordance with the different conditions of use grades 1 to 5. A grade 0 is also included for which no requirements have been specified. Requirements for levels of corrosion resistance which are higher than those laid down for grade 5 have not been included in this European Standard and are subject to agreement where required. This European Standard also applies to the metal fasteners required for fixing building hardware if specified. Screws and fastenings which are sold with a hardware product which conforms to this European Standard need to conform also to this European Standard.</p>
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ICS 91.190

Võtmesõnad: aknad, anodeerimine, ehitised, elektrosadestamine, kaitsekatted, katsetingimused, klassifikatsioonid, korrosioonikindlus, metallist kinnitusdetailid, soolaudukatseted, sulgurid, ukсед

Eesti Standardikeskusele kuulub standardite reprodutseerimis- ja levitamisoigus

English Version

Building hardware - Corrosion resistance - Requirements and test methods

Quincaillerie pour le bâtiment - Résistance à la corrosion -
Exigences et méthodes d'essai

Schlösser und Baubeschläge - Korrosionsbeständigkeit -
Anforderungen und Prüfverfahren

This European Standard was approved by CEN on 12 February 2007.

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.



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Foreword

This document (EN 1670:2007) has been prepared by Technical Committee CEN/TC 33 “Doors, windows, shutters, building hardware and curtain walling”, 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 2007, and conflicting national standards shall be withdrawn at the latest by September 2007.

This document supersedes EN 1670:1998.

CEN/TC 33 have considered previous comments by CEN/TC 262, thereby replacing this European Standard with a new one based solely on the performance testing of building hardware.

The current version has been revised to incorporate clarification of the scope, definitions, requirements and acceptance criteria throughout Annexes A and B.

The current version has also been revised to incorporate new developments in technology for corrosion resistance. The new technology combines specific layers and methods on the surface so that thickness or type of layer are no longer relevant.

This European Standard is one of a series of European Standards dedicated to building hardware products.

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 United Kingdom.

Introduction

Corrosion protection alone is not specified in any of the six essential requirements of the Construction Products Directive but is an implicit requirement for durability. This European Standard provides for the corrosion resistance of all building hardware, classified according to application.

Wherever reference is made to classes they are considered to be technical classes and not classes according to Article 3(2) of the Construction Products Directive (89/106/EEC).

The performance tests incorporated in this European Standard are considered to be reproducible and as such will provide a consistent and objective assessment of the performance of these products throughout CEN Member States.

A full contribution to the preparation of this European Standard has been made by the European manufacturers' organisation "ARGE".

NOTE This European Standard does not include testing for corrosion by sulfur dioxide which is covered by EN ISO 6988.

1 Scope

This European Standard specifies the requirements for the corrosion resistance of building hardware for doors, windows, shutters and curtain walling.

This European Standard provides a method of classification of corrosion resistance of building hardware based on performance in a neutral salt spray test (EN ISO 9227).

This European Standard specifies requirements for both coated and uncoated surfaces and five grades of corrosion resistance being laid down in accordance with the different conditions of use grades 1 to 5. A grade 0 is also included for which no requirements have been specified. Requirements for levels of corrosion resistance which are higher than those laid down for grade 5 have not been included in this European Standard and are subject to agreement where required.

This European Standard also applies to the metal fasteners required for fixing building hardware if specified.

Screws and fastenings which are sold with a hardware product which conforms to this European Standard should also conform to this European Standard.

NOTE 1 The term "grade" used in this European Standard corresponds to the term "class" which is used in ISO standards.

NOTE 2 There is seldom a direct relationship between resistance to the action of salt spray and resistance to corrosion in other media, because several factors influencing the progress of corrosion, such as the formation of protective films, vary greatly with the conditions encountered. Therefore, the test results should not be regarded as a direct guide to the corrosion resistance of the tested materials in all environments where these materials may be used. Also, the performance of different materials during the test should not be taken as a direct guide to the corrosion resistance of these materials in service.

The method described in this European Standard gives a means of checking that the comparative quality of a material, with or without corrosion protection, is maintained.

In addition, for quality control purposes, comparison can be made between specimens coated with the same coating. As comparative tests, however, salt spray tests are only suitable if the coatings are sufficiently similar in nature.

It is often not possible to use results gained from salt spray testing as a comparative guide to the long-term behaviour of different coating systems as the corrosion stress during these tests differs significantly from the corrosion stresses encountered in practice.

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 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 4628-2:2003)*

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