

Cast iron pipes and fittings, their joints and accessories for the evacuation of water from buildings - Requirements, test methods and quality assurance

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EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN 877:2000 sisaldab Euroopa standardi EN 877:1999 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 18.02.2000 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN 877:2000 consists of the English text of the European standard EN 877:1999.</p> <p>This document is endorsed on 18.02.2000 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:</p> <p>This European Standard applies to cast iron pipeline components used for the construction of discharge systems for buildings and of drains, normally as gravity systems. The range of nominal sizes extends from DN 40 to DN 600 inclusive. This standard specifies the requirements for the materials, dimensions and tolerances, mechanical properties, appearance, standard coatings and quality assurance for cast iron pipes, fittings and accessories. It also indicates performance requirements for all components, including joints. It covers pipes, fittings and accessories cast by any foundry process or manufactured by fabrication of cast components, as well as the corresponding joints.</p>	<p>Scope:</p> <p>This European Standard applies to cast iron pipeline components used for the construction of discharge systems for buildings and of drains, normally as gravity systems. The range of nominal sizes extends from DN 40 to DN 600 inclusive. This standard specifies the requirements for the materials, dimensions and tolerances, mechanical properties, appearance, standard coatings and quality assurance for cast iron pipes, fittings and accessories. It also indicates performance requirements for all components, including joints. It covers pipes, fittings and accessories cast by any foundry process or manufactured by fabrication of cast components, as well as the corresponding joints.</p>
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ICS 23.040.10, 23.040.40

Võtmesõnad:

ICS 23.040.10; 23.040.40

English version

**Cast iron pipes and fittings, their joints and
accessories for the evacuation of water from
buildings**

Requirements, test methods and quality assurance

Tuyaux et raccords en fonte, leurs
assemblages et accessoires destinés
à l'évacuation des eaux des
bâtiments – Prescriptions, méthodes
d'essais et assurance qualité

Rohre und Formstücke aus Guss-
eisen, deren Verbindungen und
Zubehör zur Entwässerung von
Gebäuden – Anforderungen, Prüf-
verfahren und Qualitätssicherung

This European Standard was approved by CEN on 1999-06-19.

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.

The European Standards exist 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, the Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, and the United Kingdom.

CEN

European Committee for Standardization
Comité Européen de Normalisation
Europäisches Komitee für Normung

Central Secretariat: rue de Stassart 36, B-1050 Brussels

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Foreword

This European Standard has been prepared by Technical Committee CEN/TC 203 "Cast iron pipes, fittings and their joints", the secretariat of which is held by AFNOR.

It is one of a series of standards for cast iron products for pipelines for various applications.

It deals with subjects covered by the International Standard ISO 6594. The major difference is the inclusion of requirements for joints and for product performance.

This standard is in conformity with the general requirements already established by CEN/TC 165 in the field of waste water engineering, as required by EN 476.

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 March 2000, and conflicting national standards shall be withdrawn at the latest by March 2000.

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).

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom.

1 Scope

This European Standard applies to cast iron pipeline components used for the construction of discharge systems for buildings and of drains, normally as gravity systems.

The range of nominal sizes extends from DN 40 to DN 600 inclusive.

This standard specifies the requirements for the materials, dimensions and tolerances, mechanical properties, appearance, standard coatings for cast iron pipes, fittings and accessories. It also indicates performance requirements for all components, including joints. Quality assurance is covered in an informative annex.

It covers pipes, fittings and accessories cast by any foundry process or manufactured by fabrication of cast components, as well as the corresponding joints.

2 Normative references

This European Standard incorporates by dated or undated reference provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the last edition of the publication referred to applies.

EN 476	1997	General requirements for components used in discharge pipes, drains and servers for gravity systems
EN 598	1994	Ductile cast iron pipes, fittings, accessories and their joints for sewerage application - Requirements and test methods
EN 605	1992	Paints and varnishes - Standard panels for testing (ISO 1514:1984 modified)
EN 10002-1	1990	Metallic materials - Tensile testing - Part 1: Method of test (at ambient temperature)
EN 10003-1	1994	Metallic materials - Brinell hardness test - Part 1: Test method
EN 10088-1	1995	Stainless steels - Part 1: List of stainless steels
EN 10088-2	1995	Stainless steels - Part 2: Technical delivery conditions for sheet/plate and strip for general purposes
EN 10088-3	1995	Stainless steels - Part 3: Technical delivery conditions for semi-finished products, bars, rods and sections for general purposes
EN 10204	1991	Metallic products - Types of inspection documents

EN 45011	1989	General criteria for certification bodies operating product certification
prEN 1366-3	-	Fire tests for building elements and components - Fire resistance testing of service installations - Part 3: Penetration seals
EN ISO 6708	1995	Pipework components - Definition and selection of DN (nominal size) (ISO 6708:1995)
EN ISO 9001	1994	Quality systems - Model for quality assurance in design, development, production, installation and servicing (ISO 9001:1991)
EN ISO 9002	1994	Quality systems - Model for quality assurance in production, installation and servicing (ISO 9002:1994)
ISO 185	1988	Grey cast iron - Classification
EN 20898-1	1991	Mechanical properties of fasteners - Part 1: Bolts, screws and studs (ISO 898-1:1988)
EN 20898-2	1993	Mechanical properties of fasteners - Part 2: Nuts with specified proof load values - coarse thread (ISO 898-2:1992)
ISO 1817	1985	Rubber, vulcanised - Determination of the effect of liquids
EN ISO 2409	1994	Paints and varnishes - Cross-cut test (ISO 2409:1992)
ISO 2808	1991	Paints and varnishes - Determination of film thickness
EN ISO 2812-1	1994	Paints and varnishes - Determination of resistance to liquids - Part 1: General methods (ISO 2812-1:1993)
ISO 4628-2	1982	Paints and varnishes - Evaluation of degradation of paint coatings - Designation of intensity, quantity and size of common types of defect - Part 2: Designation of degree of blistering
ISO 4628-3	1982	Paints and varnishes - Evaluation of degradation of paint coatings - Designation of intensity, quantity and size of common types of defect - Part 3: Designation of degree of rusting
ISO 4633	1996	Rubber seals - Joint rings for water supply, drainage and sewerage pipelines - specification for materials

ISO 7253	1984	Paints and varnishes - Determination of resistance to neutral salt spray
ISO 7724-1	1988	Paints and varnishes - Colorimetry - Part 1: Principles
ISO 7724-2	1988	Paints and varnishes - Colorimetry - Part 2: Colour measurement
ISO 7724-3	1988	Paints and varnishes - Colorimetry - Part 3: Calculation of colour differences

3 Definitions

For the purposes of this European Standard, the following definitions apply:

3.1 discharge system for buildings

System of pipes, fittings, accessories and joints used to collect and drain waste water and rainwater from a building; it comprises discharge pipes, stack ventilation and rainwater pipes, installed within the limits of a building or attached to the building.

3.2 drain

System of pipes, fittings, accessories and joints installed outside the limits of a building in order to connect the discharge system of this building to a sewer or a septic tank.

3.3 sewer

System of pipes designed to collect waste water and rainwater from buildings and surface water and to convey them to the point of disposal or treatment.

3.4 cast iron

Alloy of iron and carbon in which graphite can be present in different forms.

3.5 pipe

Casting of uniform bore, straight in axis, normally having plain ends but which can also be socketed.