

**Kiudsarrustsemendist drenaazi- ja  
kanalisatsioonitorud. Osa 2:  
Heitveekaevud ja kontrollkaevud**

Fibre cement pipes for drains and sewers - Part 2:  
Manholes and inspection chambers

## EESTI STANDARDI EESSÕNA

## NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN 588-2:2002 sisaldab Euroopa standardi EN 588-2:2001 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 19.06.2002 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN 588-2:2002 consists of the English text of the European standard EN 588-2:2001.</p> <p>This document is endorsed on 19.06.2002 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><b>Käsitlusala:</b> This Standard gives specifications for asbestos free fibre-cement manholes and inspection chambers for use in buried drains and sewers with gravity flow at atmospheric pressure. Products covered by this standard include prefabricated elements in fibre-cement as well as prefabricated complete manholes and inspection chambers. It specifies definitions, descriptions, composition, general appearance and finish, geometrical characteristics, mechanical characteristics, acceptance tests, type tests and quality control requirements. NOTE: Complete manholes or prefabricated elements can also be used for other purposes such as pumping stations, items of drainage, items for sewage treatment or sewage disposal, when corresponding additional requirements according to the relevant European standards are fulfilled.</p>	<p><b>Scope:</b> This Standard gives specifications for asbestos free fibre-cement manholes and inspection chambers for use in buried drains and sewers with gravity flow at atmospheric pressure. Products covered by this standard include prefabricated elements in fibre-cement as well as prefabricated complete manholes and inspection chambers. It specifies definitions, descriptions, composition, general appearance and finish, geometrical characteristics, mechanical characteristics, acceptance tests, type tests and quality control requirements. NOTE: Complete manholes or prefabricated elements can also be used for other purposes such as pumping stations, items of drainage, items for sewage treatment or sewage disposal, when corresponding additional requirements according to the relevant European standards are fulfilled.</p>
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**ICS** 13.060.30, 93.030

**Võtmesõnad:** dimensional tolerances, dimensions, fibre-cement, gravity flow, hoses, inspection openings, interchangeability, junctions, marking, mechanical properties, pipe units, quality control, sanitation, sewage, specifications, tests

ICS 13.060.30; 93.030

English version

## Fibre cement pipes for drains and sewers - Part 2: Manholes and inspection chambers

Tuyaux en fibres-ciment pour réseaux d'assainissement et branchements - Partie 2: Regards et boîtes de branchements

Faserzementrohre für Abwasserkanäle und Abwasserleitungen - Teil 2: Einsteig- und Kontrollschächte

This European Standard was approved by CEN on 17 February 2001.

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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 Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.



EUROPEAN COMMITTEE FOR STANDARDIZATION  
COMITÉ EUROPÉEN DE NORMALISATION  
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## Contents

	page
1	Scope .....5
2	Normative references .....5
3	Terms and definitions.....5
4	Symbols and abbreviations .....5
5	Description and requirements for components.....6
5.1	Manholes with access for inspection by personnel.....6
5.2	Manholes with access for cleaning and inspection .....6
5.3	Inspection chambers .....6
5.4	Prefabricated elements .....12
5.4.1	Base element (see key 4) .....12
5.4.2	Saddle element (see key 7) .....12
5.4.3	Shaft (see key 6).....12
5.4.4	Connecting ring (see key 8) .....12
5.4.5	Reducer-slab (see key 9).....12
5.4.6	Capping structure (see key 12, 13, 14 and 15) .....12
5.4.7	Connection to sewer network (see key 5) .....12
5.5	Prefabricated complete manhole or inspection chamber (see Figures 1 and 2) .....12
6	Requirements .....13
6.1	General.....13
6.2	General composition .....13
6.3	General appearance and finish.....13
6.4	Geometrical characteristics.....13
6.4.1	Nominal diameter .....13
6.4.2	Wall thickness .....14
6.4.3	Height .....14
6.4.4	Angles between axes of connections to sewers .....14
6.4.5	Location for steps or fixed ladders .....15
6.4.6	Interchangeability .....15
6.4.7	Limit deviations.....15
6.5	Mechanical characteristics .....17
6.5.1	Crushing loads for pipes for base elements and shafts.....17
6.5.2	Stability of connections to sewer network.....17
6.5.3	Bonding stability.....17
6.5.4	Watertightness .....17
6.5.5	Access steps .....18
6.6	Hydraulic design .....18
6.7	Resistance to domestic sewage media .....18
6.8	Jointing of elements .....18
6.9	Assembly of prefabricated elements on-site .....18
6.10	Connections to sewers.....18
7	Test methods.....19
7.1	General.....19
7.1.1	Acceptance tests .....19
7.1.2	Type tests .....19
7.2	Geometrical characteristics of prefabricated elements.....19
7.2.1	Internal diameter .....19
7.2.2	Wall thickness .....19
7.2.3	Height .....20
7.2.4	Angles between the axis of connections .....20
7.2.5	Perpendicularity of end faces.....20
7.3	Mechanical characteristics .....20

7.3.1	Crushing loads for pipes to be used for base elements and shafts .....	20
7.3.2	Stability of connections to sewer network.....	20
7.3.3	Watertightness test.....	21
8	Marking .....	21
9	Conformity Evaluation.....	22
9.1	General Requirements.....	22
9.2	Initial control of the products (type testing) .....	22
9.3	Factory production control (internal quality control) .....	22
9.3.1	Quality control system .....	22
9.3.2	Acceptance tests .....	22
9.3.3	Inspection of a consignment of finished products .....	22
9.4	Third party inspection .....	23
Annex A	(normative) Quality organization for factories not complying with EN ISO 9001 .....	24
A.1	General requirements.....	24
A.1.1	Personnel, resources and test equipment .....	24
A.1.2	Quality records.....	24
A.1.3	Statistical methods.....	24
A.2	Sampling procedures .....	24
A.3	Non-conforming products .....	25
Annex B	(normative) Acceptance test for products which are not subject to third party certification .....	26
Annex C	(informative) Third party inspection .....	27
C.1	General.....	27
C.2	Factories with certification and quality system according to EN ISO 9001 or equivalent .....	27
C.3	Factories without certification and quality system according to EN ISO 9001 or equivalent. ....	27
C.4	Test report by the third party.....	28
C.5	Retesting.....	29
Annex D	(informative) Design requirements .....	30
D.1	Stability .....	30
D.2	Connections to sewers.....	30
Annex ZA	(informative) Clauses of this European standard addressing the provisions of the EU Construction Products Directive.....	31
ZA.1	Scope and relevant characteristics .....	31
ZA.2	Procedure(s) for the attestation of conformity of manholes and inspection chambers .....	32
ZA.2.1	Systems of attestation of conformity .....	32
ZA.2.2	Certificate and Declaration of conformity .....	33
ZA.3	CE Marking .....	33
Bibliography	.....	35

## Foreword

This European Standard has been prepared by Technical Committee CEN /TC 165, "Wastewater engineering", the secretariat of which is held by DIN.

This document 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 document.

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 June 2002, and conflicting national standards shall be withdrawn at the latest by September 2003.

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.

A distinction has been made between initial testing (type tests) and routine quality control requirements (acceptance tests).

Attention is drawn to the need for observance of EEC and/or EFTA and national legal requirements restricting the use of certain materials and to the related marking and labelling requirements.

The performance of a sewage network constructed with these products depends not only on the properties of the product as required by this standard but also on the design and construction of the network as a whole in relation to the environment and conditions of use.

## 1 Scope

This Standard gives specifications for asbestos free fibre-cement manholes and inspection chambers for use in buried drains and sewers with gravity flow at atmospheric pressure.

Products covered by this standard include prefabricated elements in as well as prefabricated complete manholes and inspection chambers.

It specifies definitions, descriptions, composition, general appearance and finish, geometrical characteristics, mechanical characteristics, acceptance tests, type tests and quality control requirements.

NOTE Complete manholes or prefabricated elements may also be used for other purposes such as pumping stations, items of drainage, items for sewage treatment or sewage disposal, when corresponding additional requirements according to the relevant European Standards are fulfilled.

## 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 latest edition of the publication referred to applies (including amendments).

EN 124:1994 , *Gully tops and manhole tops for vehicular and pedestrian areas - Design requirements, type testing, marking, quality control.*

EN 197-1:2000, *Cement - Part 1: Composition, specifications and conformity criteria for common cements.*

EN 476:1997, *General Requirements for Components used in Discharge Pipes, Drains and Sewers for Gravity System.*

EN 588-1:1996, *Fibre-cement pipes for sewers and drains - Part 1: Pipes, joints and fittings for gravity systems.*

EN 681-1:1996, *Elastomeric seals – Material requirements for pipe joint seals used in water and drainage applications – Part 1: Vulcanized rubber (modified by 681-1/A1 of June 1998).*

prEN 1917:1995, *Concrete manholes and inspection chambers, unreinforced, steel fibre and reinforced.*

ISO 390:1993, *Products in fibre reinforced cement - Sampling and inspection.*

## 3 Terms and definitions

For the purposes of this European Standard, the definitions given in EN 588-1:1996 apply:

## 4 Symbols and abbreviations

DN	nominal diameter of shaft or base element
$d_1$	internal diameter of shaft or base element
$e$	wall thickness of base element or shaft
$h$	height, invert to ground level
$h_a$	effective height of reducer-slab