

Klaasja kihiga kaetud keraamilised torud ja liitmikud ning toruühendused drenide ja kanalisatsioonitorustike jaoks. Osa 7: Nõuded klaasja kihiga kaetud keraamilistele torudele ja torude pingutamiseks ettenähtud ühendustele

Vitrified clay pipes and fittings and pipe joints for drains and sewers - Part 7: Requirements for vitrified clay pipes and joints for pipe jacking

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN 295-7:2000 sisaldab Euroopa standardi EN 295-7:1995 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 11.01.2000 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN 295-7:2000 consists of the English text of the European standard EN 295-7:1995.</p> <p>This document is endorsed on 11.01.2000 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>
--	---

<p>Käsitlusala: Käesolev Euroopa standardi osa määrab kindlaks nõuded selliste torustike ehitamisel, kus kasutatakse elastselt ühendatud, klaasja kihiga kaetud keraamilisi torusid. Torustikke ehitatakse torude pingutamise tehnoloogia alusel, kasutades mikrotunnelite tegemist, torusüvistamist, toruläbindamist ja vajadusel torulibistamist. Et standard näeb ette ühendamise eri tugevusklasse, saab tellija/ostja valida vastavalt oma vajadustele.</p>	<p>Scope:</p>
---	----------------------

ICS 93.030

Võtmesõnad: kanalisatsiooniseadmed, kokkumonteerimine, liivakivitooted, lisavarustus, mõõtmised, märgistus, surveava, tehnilised andmed, torud, toruvarustus, tähistus, vee eemaldamine, veetorustikud

ICS 23.040.30; 23.040.50

Descriptors: Vitrified clay pipes, pipes, fittings.

English version

**Vitrified clay pipes and fittings and pipe joints
for drains and sewers**

Part 7: Requirements for vitrified clay pipes and joints for pipe jacking

Tuyaux et accessoires en grès et assemblages de tuyaux pour les réseaux de branchement et d'assainissement.
Partie 7: Prescriptions pour les tuyaux en grès et leurs assemblages destinés au fonçage

Steinzeugrohre und Formstücke sowie Rohrverbindungen für Abwasserleitungen und -kanäle. Teil 7: Anforderungen an Steinzeugrohre und Verbindungen beim Rohrvortrieb

This European Standard was approved by CEN on 1995-07-02.

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, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.

CEN

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

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

Contents

	Page		Page
Foreword	2	5.1.1 Rubber sealing elements	8
1 Scope	3	5.1.2 Polyurethane sealing elements	8
2 Normative references	3	5.1.3 Stainless steel sleeves	8
3 Definitions	3	5.1.4 Polypropylene sleeve couplings	9
4 Pipes	4	5.1.5 Materials of other components	9
4.1 Materials and manufacture	4	5.2 Packing rings	9
4.2 Measurement of dimensions	4	5.3 Watertightness of joints	9
4.3 Minimum bore and internal diameter	4	5.3.1 Internal pressure	9
4.3.1 Minimum bore	4	5.3.2 External pressure	9
4.3.2 Internal diameter	5	5.4 Angular deflection	9
4.3.3 Invert conformity	5	5.5 Shear resistance	9
4.4 External diameter	6	5.6 Chemical and physical resistance to effluent ...	10
4.5 Length	6	5.6.1 Joint assemblies	10
4.6 Squareness of ends	6	5.6.2 Jointing materials	10
4.7 Deviation from straightness	6	5.7 Thermal cycling stability	10
4.8 Strength	7	5.8 Long-term thermal stability	10
4.8.1 Crushing strength	7	6 Sampling	10
4.8.2 Compressive strength	7	6.1 General	10
4.8.3 Jacking strength	7	6.2 Compressive and jacking strength	10
4.8.4 Design jacking load	7	7 Designation	12
4.8.5 Maximum working jacking load	7	8 Marking	12
4.8.6 Bending tensile strength	7	8.1 Pipes	12
4.8.7 Fatigue strength under pulsating load	8	8.2 Limitation	12
4.9 Watertightness of pipes	8	9 Quality assurance	12
4.10 Chemical resistance	8	Annex A (normative) Compressive strength	13
4.11 Hydraulic roughness	8	Annex B (normative) Calculation of maximum working jacking load	15
4.12 Abrasion resistance	8	Annex C (normative) Invert conformity	17
5 Joint assemblies	8	Annex D (normative) Squareness of ends	19
5.1 Jointing materials	8		

Foreword

This European Standard has been prepared by Technical Committee CEN/TC 165 'Waste water engineering', the Secretariat of which is held by DIN.

The EN 295 series of standards 'Vitrified clay pipes and fittings and pipe joints for drains and sewers' consists of the following Parts:

Part 1: Requirements

Part 2: Quality control and sampling

Part 3: Test methods

Part 4: Requirements for special fittings, adaptors and compatible accessories

Part 5: Requirements for perforated vitrified clay pipes and fittings

Part 6: Requirements for vitrified clay manholes

Part 7: Requirements for vitrified clay pipes and joints for pipe jacking

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, and conflicting national standards withdrawn, by October 1996 at the latest.

In accordance with the CEN/CENELEC Internal Regulations, the following countries are bound to implement this European Standard:

Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.

1 Scope

This part of this European Standard specifies requirements for flexibly jointed vitrified clay pipes for the construction of pipelines by pipe jacking techniques including micro-tunnelling, pipe-eating, pipe bursting and where appropriate for slip-lining.

Where this standard provides for different strength classes the specifiers/purchasers may select according to their requirements.

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.

EN 295-1	1991	Vitrified clay pipes and fittings and pipe joints for drains and sewers Part 1 : Requirements.
EN 295-2	1991	Vitrified clay pipes and fittings and pipe joints for drains and sewers Part 2 : Quality Control and sampling.
EN 295-3	1991	Vitrified clay pipes and fittings and pipe joints for drains and sewers Part 3 : Test methods.
EN 295-4	1995	Vitrified clay pipes and fittings and pipe joints for drains and sewers Part 4 : Requirements for special fittings, adaptors and compatible accessories.
ISO/DIS 4633	1986	Rubber seals - Joint rings for water supply, drainage and sewerage pipe lines Specification for materials
ISO 3302	1990	Rubber - Dimensional tolerances for use with products.
prEN 312 - 1		Particle boards : Specifications - Part 1 : General requirements for all board types.
prEN 312 - 4		Particle boards : Specifications - Part 4 : Requirements for load-bearing boards for use in dry conditions.
prEN 312 - 5		Particle boards : Specifications - Part 5 : Requirements for load-bearing boards for use in humid conditions.
Euronorm 88-1	1986	Stainless steels - Part 1 : Technical delivery conditions for bars, wire rod and forgings
Euronorm 88-2	1986	Stainless steels - Part 2 : Technical delivery conditions for sheet/plate and strip for general purposes.

3 Definitions

For the purposes of this standard definitions given in EN 295-1 apply.