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Standards

Irish Standard  
I.S. EN 295-5:2013

# Vitrified clay pipe systems for drains and sewers - Part 5: Requirements for perforated pipes and fittings

## I.S. EN 295-5:2013

*Incorporating amendments/corrigenda/National Annexes issued since publication:*

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*This document replaces:*  
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English Version

## Vitrified clay pipe systems for drains and sewers - Part 5: Requirements for perforated pipes and fittings

Systèmes de tuyaux en grès vitrifié pour les collecteurs  
d'assainissement et les branchements - Partie 5:  
Exigences applicables aux tuyaux perforés et raccords

Steinzeugrohrsysteme für Abwasserleitungen und -kanäle -  
Teil 5: Anforderungen an gelochte Rohre und Formstücke

This European Standard was approved by CEN on 1 December 2012.

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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## Contents

Page

Foreword.....	3
1 Scope.....	4
2 Normative references.....	4
3 Terms and definitions .....	4
4 Requirements for pipes and fittings.....	4
4.1 Material, manufacture, water absorption and appearance .....	4
4.2 Internal diameter .....	4
4.3 Length.....	5
4.4 Deviation from straightness .....	5
4.5 Angle of curvature and radius of bends.....	5
4.6 Branch angle of junctions.....	6
4.7 Perforations.....	6
4.7.1 General .....	6
4.7.2 Arrangement of perforations .....	6
4.7.3 Area of perforations .....	6
4.8 Crushing strength ( $F_N$ ).....	6
4.9 Chemical resistance.....	7
4.10 Fatigue strength under cyclic load.....	8
5 Joint assemblies .....	8
6 Common requirements for pipes and fittings .....	8
6.1 Reaction to fire.....	8
6.2 Durability .....	8
6.3 Dangerous substances .....	8
7 Designation .....	9
8 Marking.....	9
9 Evaluation of conformity.....	10
9.1 General .....	10
9.2 Initial type testing.....	10
9.3 Factory production control (FPC).....	10
<b>Annex ZA (informative) Relationship between this European Standard and the Essential Requirements of the EU Construction Products Directive.....</b>	<b>11</b>
<b>ZA.1 Scope and relevant characteristics .....</b>	<b>11</b>
<b>ZA.2 Procedures for the attestation of conformity of perforated vitrified clay pipes and fittings .....</b>	<b>12</b>
<b>ZA.2.1 Systems of attestation of conformity .....</b>	<b>12</b>
<b>ZA.2.2 EC declaration of conformity.....</b>	<b>13</b>
<b>ZA.3 CE marking.....</b>	<b>14</b>
<b>ZA.3.1 General .....</b>	<b>14</b>
<b>ZA.3.2 CE marking on the product.....</b>	<b>14</b>
<b>ZA.3.3 CE marking in the accompanying documents.....</b>	<b>15</b>
Bibliography.....	17

## Foreword

This document (EN 295-5:2013) has been prepared by Technical Committee CEN/TC 165 "Wastewater engineering", the secretariat of which is held by DIN.

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 August 2013, and conflicting national standards shall be withdrawn at the latest by August 2013.

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

This document supersedes EN 295-5:1994 and together with EN 295-1:2013, EN 295-2:2013, EN 295-4:2013, EN 295-6:2013 and EN 295-7:2013 it supersedes EN 295-10:2005.

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.

The main changes with respect to the previous edition are listed below:

- requirements for the resistance to high pressure water jetting added;
- requirements for water absorption added;
- reaction to fire added;
- Annex ZA added;
- editorially revised.

The standard series EN 295 "Vitrified clay pipe systems for drains and sewers" consists of the following parts:

- *Part 1: Requirements for pipes, fittings and joints*
- *Part 2: Evaluation of conformity and sampling*
- *Part 3: Test methods*
- *Part 4: Requirements for adaptors, connectors and flexible couplings*
- *Part 5: Requirements for perforated pipes and fittings (the present document)*
- *Part 6: Requirements for components of manholes and inspection chambers*
- *Part 7: Requirements for pipes and joints for pipe jacking*

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, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

## 1 Scope

This European Standard specifies requirements for perforated pipes and compatible fittings made from vitrified clay with or without sockets for use in land drains and drainage of waste tips. They are also used for percolation into the ground.

This standard specifies different strength classes and areas of perforations.

NOTE 1 The specifiers/purchasers can select them according to their requirements.

NOTE 2 Corresponding provisions for the evaluation of conformity (ITT and FPC) and sampling and those for the test methods are further specified in EN 295-2 and EN 295-3, respectively.

## 2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 295-1:2013, *Vitrified clay pipe systems for drains and sewers — Part 1: Requirements for pipes, fittings and joints*

EN 295-2:2013, *Vitrified clay pipe systems for drains and sewers — Part 2: Evaluation of conformity and sampling*

EN 295-3:2012, *Vitrified clay pipe systems for drains and sewers — Part 3: Test methods*

## 3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN 295-1:2013 and the following apply.

### 3.1

#### **area of perforations**

total area of holes or slots per metre length measured on the inside of the pipe

## 4 Requirements for pipes and fittings

### 4.1 Material, manufacture, water absorption and appearance

For material, manufacture, water absorption and appearance, perforated pipes and fittings shall comply with EN 295-1:2013, 5.1.

### 4.2 Internal diameter

The internal diameter shall not be less than the values according to Table 1.

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