

**Plasttorustikusüsteemid.
Inimtarbimiseks sobimatu kuuma ja
külma vee süsteemid. Torude, liitmike ja
nende ühenduste toimimisomadused**

Plastics piping systems - Systems for hot and cold
water not intended for human consumption -
Performance characteristics for pipes, fittings and
their joints

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN 15015:2007 sisaldab Euroopa standardi EN 15015:2007 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 22.11.2007 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN 15015:2007 consists of the English text of the European standard EN 15015:2007.</p> <p>This document is endorsed on 22.11.2007 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:</p> <p>This European Standard specifies performance requirements for plastics pipes, fittings and their joints intended for hot and cold water installations for the conveyance of water and for heating systems with the exception of drinking water distribution for human consumption, and gives associated test methods for verification and evaluation of conformity with this European Standard. NOTE Compliance of pipes, fittings and their joints with this document does not confer a presumption of fitness of the product for the transport of water intended for human consumption within the meaning of the Directive 89/106/EEC. However, until the operation of the envisaged European Acceptance Scheme for construction products in contact with water intended for human consumption and the revision of this standard, products conforming to this standard could be used for the transport of water intended for human consumption if they conform to the relevant national, regional or local regulatory provisions or recommendations applicable in the place of use.</p>	<p>Scope:</p> <p>This European Standard specifies performance requirements for plastics pipes, fittings and their joints intended for hot and cold water installations for the conveyance of water and for heating systems with the exception of drinking water distribution for human consumption, and gives associated test methods for verification and evaluation of conformity with this European Standard. NOTE Compliance of pipes, fittings and their joints with this document does not confer a presumption of fitness of the product for the transport of water intended for human consumption within the meaning of the Directive 89/106/EEC. However, until the operation of the envisaged European Acceptance Scheme for construction products in contact with water intended for human consumption and the revision of this standard, products conforming to this standard could be used for the transport of water intended for human consumption if they conform to the relevant national, regional or local regulatory provisions or recommendations applicable in the place of use.</p>
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ICS 23.040.01

Võtmesõnad:

ICS 23.040.01

English Version

**Plastics piping systems - Systems for hot and cold water not
intended for human consumption - Performance characteristics
for pipes, fittings and their joints**

Systèmes de canalisations en plastique - Systèmes pour
eau chaude et froide non destinée à la consommation
humaine - Caractéristiques de performance pour tubes,
raccords et leurs assemblages

Kunststoff-Rohrleitungssysteme - Rohrleitungssysteme für
Warm- und Kaltwasser nicht für den menschlichen
Gebrauch - Eigenschaften für die Gebrauchstauglichkeit
von Rohren, Formstücken und deren Verbindungen

This European Standard was approved by CEN on 23 August 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 15015:2007) has been prepared by Technical Committee CEN/TC 155 "Plastics piping systems and ducting systems", the secretariat of which is held by NEN.

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 April 2008, and conflicting national standards shall be withdrawn at the latest by July 2009.

This document has been prepared under the mandate M/131 "Pipes, tanks and ancillaries not in contact with water intended for human consumption" given to CEN by the European Commission and the European Free Trade Association and support essential requirements of EU Directives.

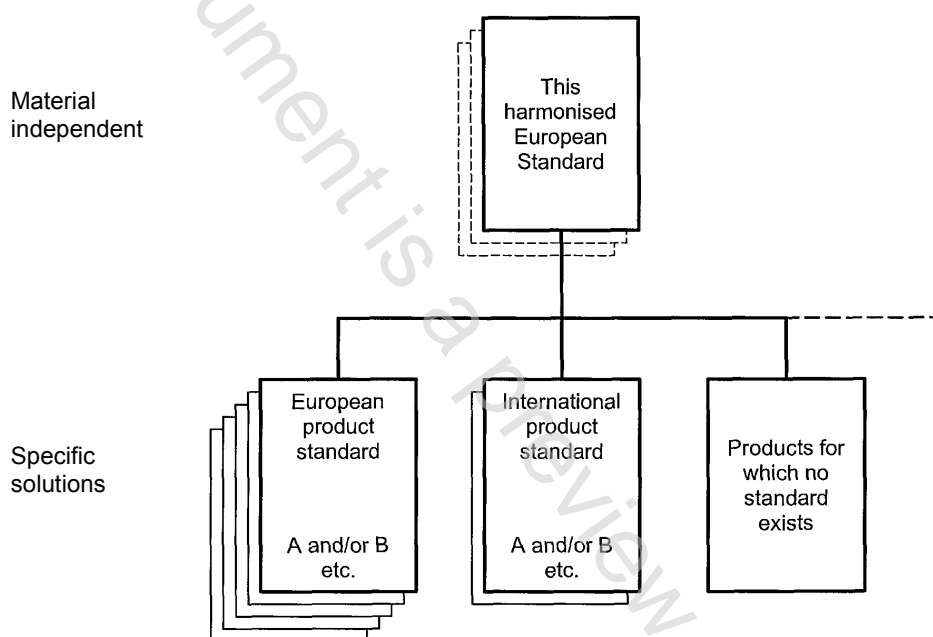
For the relationship with EU Directives, see informative Annex ZA, which is an integral part of this document.

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

This European Standard contains only the performance characteristics needed to meet the essential requirements of EU Directive(s). It does not cover all characteristics of the products. These are specified in the standards listed in Annex A or in other appropriate product specifications.

This harmonised European Standard is part of a family of cluster standards addressing plastics piping systems. The relationship is shown below.



For the harmonisation of plastics piping systems for hot and cold water (this European Standard) the following applies:

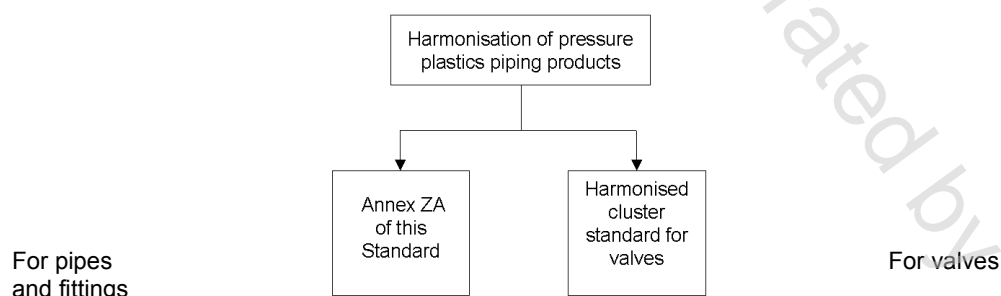


Figure 1

1 Scope

This European Standard specifies performance requirements for plastics pipes, fittings and their joints intended for hot and cold water installations for the conveyance of water and for heating systems with the exception of drinking water distribution for human consumption, and gives associated test methods for verification and evaluation of conformity with this European Standard.

NOTE Compliance of pipes, fittings and their joints with this document does not confer a presumption of fitness of the product for the transport of water intended for human consumption within the meaning of the Directive 89/106/EEC. However, until the operation of the envisaged European Acceptance Scheme for construction products in contact with water intended for human consumption and the revision of this standard, products conforming to this standard could be used for the transport of water intended for human consumption if they conform to the relevant national, regional or local regulatory provisions or recommendations applicable in the place of use.

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 681-1, *Elastomeric seals — Materials requirements for pipe joint seals used in water and drainage applications — Part 1: Vulcanized rubber*

EN 681-2, *Elastomeric seals — Materials requirements for pipe joint seals used in water and drainage applications — Part 2: Thermoplastic elastomers*

EN 12293, *Plastics piping systems — Thermoplastics pipes and fittings for hot and cold water — Test method for the resistance of mounted assemblies to temperature cycling*

EN 13501-1, *Fire classification of construction products and building elements — Part 1: Classification using test data from reaction to fire tests*

EN 15012:2007, *Plastics piping systems — Soil and waste discharge systems within the building structure — Performance characteristics for pipes, fittings and their joints*

EN ISO 1167-1, *Thermoplastics pipes, fittings and assemblies for the conveyance of fluids — Determination of the resistance to internal pressure — Part 1: General method (ISO 1167-1:2006)*

EN ISO 1167-2, *Thermoplastics pipes, fittings and assemblies for the conveyance of fluids — Determination of the resistance to internal pressure — Part 2: Preparation of pipe test pieces (ISO 1167-2:2006)*

prEN ISO 1167-3, *Thermoplastics pipes, fittings and assemblies for the conveyance of fluids — Determination of the resistance to internal pressure — Part 3: Preparation of components (ISO/DIS 1167-3:2005)*

prEN ISO 1167-4, *Thermoplastics pipes, fittings and assemblies for the conveyance of fluids — Determination of the resistance to internal pressure — Part 4: Preparation of assemblies (ISO/DIS 1167-4:2006)*

EN ISO 3126, *Plastics piping systems — Plastics components — Determination of dimensions (ISO 3126:2005)*

EN ISO 9001:2000, *Quality management systems — Requirements (ISO 9001:2000)*

EN ISO 9080, *Plastics piping and ducting systems — Determination of the long-term hydrostatic strength of thermoplastics materials in pipe form by extrapolation (ISO 9080:2003)*

ISO 10508:2006, *Plastics piping systems for hot and cold water installations — Guidance for classification and design*

ISO 17456, *Plastics piping systems — Multilayer pipes — Determination of the long-term strength*

BS 7291-1:2006, *Thermoplastics pipes and associated fittings for hot and cold water for domestic purposes and heating installations in buildings — Part 1: General requirements*

3 Terms, definitions and symbols

For the purposes of this document, the following terms, definitions and symbols apply.

3.1

nominal outside diameter

d_n

specified outside diameter, in millimetres, assigned to a nominal size

3.2

design pressure

P_D

highest pressure related to the circumstances for which the system has been designed and is intended to be used

4 Performance requirements

4.1 Reaction to fire

Where subject to regulatory requirements, the product shall be tested and classified in accordance with 5.1.

4.2 Internal pressure strength and resistance to high temperature

4.2.1 Determination of design pressure P_D

When determined in accordance with 5.2, the internal pressure strength of the pipe and fitting shall be expressed as a design pressure P_D of preferably 4 bar, 6 bar, 8 bar or 10 bar for a given class of application according to ISO 10508:2006 or class S according to BS 7291-1:2006 and declared by the manufacturer.

4.2.2 Verification of pressure strength

The verification of the internal pressure strength of pipes and fittings shall be done in accordance with 5.2.3.

4.3 Dimensional tolerances

The manufacturer shall declare the dimensional tolerances for the jointing of the components, either by means of:

- a) reference to a specific European Standard listed in Clause 2 or in Annex B, or
- b) in the absence of a European Standard, reference to a specific European product specification published by a recognized European organization, or
- c) in the absence of a) and b), reference to an International Standard, or
- d) in the absence of a), b) and c), by stating the values of his own specification and associated jointing method.

Dimensions shall be measured in accordance with 5.3 and shall be within the declared tolerances.