

**Plasttorustikusüsteemid. Isevoolsed  
termoplastist torustikusüsteemid.  
Veetiheduse katsemeetod**

Plastics piping systems - Thermoplastics piping  
systems for non-pressure applications - Test method  
for watertightness

## EESTI STANDARDI EESSÕNA

## NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN 1053:1999 sisaldab Euroopa standardi EN 1053:1995 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 23.11.1999 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN 1053:1999 consists of the English text of the European standard EN 1053:1995.</p> <p>This document is endorsed on 23.11.1999 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><b>Käsitlusala:</b></p> <p>Käesolev standard määrab kindlaks veetiheduse meetodi a) isevoolsete termoplastist torustikusüsteemide ühenduste jaoks; b) selliste isevoolsete torustike termoplastist toodetud toodete jaoks, mis koosnevad rohkem kui ühest tükist.</p>	<p><b>Scope:</b></p>
--	----------------------

ICS 23.040.20

**Võtmesõnad:** hooned, kanalisatsioon, kinnitus, lekketestid, plasttorud, puhtana hoidmine, sisustus, termoplastvaigud, vee eemaldamine, veetihedus

ICS 23.040.90

Descriptors: Plastics, tubes, piping systems, thermoplastics, testing, watertightness.

**English version**

Plastics piping systems

Thermoplastics piping systems for non-pressure applications

Test method for watertightness

Systèmes de canalisations en plastiques;  
systèmes de canalisations thermoplasti-  
ques pour applications sans pression;  
méthode d'essai de l'étanchéité à l'eau

Kunststoff-Rohrleitungssysteme; Rohr-  
leitungssysteme aus Thermoplasten für  
drucklose Anwendungen; Prüfverfahren  
auf die Wasserdichtheit

This European Standard was approved by CEN on 1995-10-05.

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**

## Foreword

This European Standard has been prepared by the Technical Committee CEN/TC 155 "Plastics piping systems and ducting systems", of which the secretariat is held by NNI.

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 1996, and conflicting national standards shall be withdrawn at the latest by April 1996.

According to 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 the United Kingdom.

This standard is based on annex B "Watertightness test" of the ISO 3633:1991 "Unplasticized poly(vinyl chloride) (PVC-U) pipes and fittings for soil and waste discharge (low and high temperature) systems inside buildings - Specifications", published by the International Organization for Standardization (ISO). It is a modification of annex B for reasons of applicability to other plastics materials and/or other test conditions and alignment with texts of other standards on test methods.

The modifications are:

- no material is mentioned;
- test parameters, except those common to all plastics, are omitted;
- no diameter limit is included;
- no material-dependent requirements are given;
- editorial changes have been introduced;
- the method has been extended to cover quick testing of fabricated products made from more than one piece.

The material-dependent test parameters and/or performance requirements are incorporated in the System Standard(s) concerned.

This standard is one of a series of standards on test methods which support System Standards for plastics piping systems and ducting systems.

## 1 Scope

This standard specifies a test method for watertightness of

- a) joints of thermoplastics piping systems for non-pressure applications;
- b) thermoplastics fabricated products made from more than one piece for non-pressure applications.

## 2 Principle

A test assembly comprising either a fabricated product or an assembly of pipes and/or fittings is subjected to a given internal hydrostatic pressure for a given period during which the leaktightness of the fabricated product or the joint is verified by inspection.

*NOTE: It is assumed that the following test parameters are set by the standard making reference to this standard:*

- a) the sampling procedure (see 4.1);*
- b) the number of test pieces (see 4.2).*

## 3 Apparatus

**3.1 End-sealing devices**, having a size and using a sealing method both appropriate to the type of joint under test. The devices shall be restrained in a manner that does not exert longitudinal forces on the joint assembly and that prevents the devices or the assembly under test from separating under pressure. The weight of the devices shall not be allowed to influence the angular deflection to be applied (see 5.2).

**3.2 Hydrostatic pressure source**, connected to one end of at least one end-sealing device, capable of applying the required pressure gradually and evenly in accordance with 5.4 and then of keeping it constant to within  $\pm 2\%$  for the duration of the test required (see clause 5).

**3.3 Bleed valve**, capable of venting air when hydrostatic pressure is applied to the test piece.

**3.4 Pressure measuring device**, capable of checking conformity to the required test pressure (see 3.2 and clause 5).