

Thermoplastics piping systems for non-pressure underground drainage and sewerage - Test method for resistance to combined temperature cycling and external loading (ISO 13260:2010)

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NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN ISO 13260:2011 sisaldab Euroopa standardi EN ISO 13260:2011 ingliskeelset teksti.</p> <p>Standard on kinnitatud Eesti Standardikeskuse 30.09.2011 käskkirjaga ja jõustub sellekohase teate avaldamisel EVS Teatajas.</p> <p>Euroopa standardimisorganisatsioonide poolt rahvuslikele liikmetele Euroopa standardi teksti kättesaadavaks tegemise kuupäev on 07.09.2011.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN ISO 13260:2011 consists of the English text of the European standard EN ISO 13260:2011.</p> <p>This standard is ratified with the order of Estonian Centre for Standardisation dated 30.09.2011 and is endorsed with the notification published in the official bulletin of the Estonian national standardisation organisation.</p> <p>Date of Availability of the European standard text 07.09.2011.</p> <p>The standard is available from Estonian standardisation organisation.</p>
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English Version

Thermoplastics piping systems for non-pressure underground
drainage and sewerage - Test method for resistance to
combined temperature cycling and external loading (ISO
13260:2010)

Systèmes de canalisations thermoplastiques pour
branchements et collecteurs d'assainissement enterrés
sans pression - Méthode d'essai de la résistance à un cycle
de température et de charge externe combinés (ISO
13260:2010)

Kunststoff-Rohrleitungssysteme aus Thermoplasten für
erdverlegte Abwasserkanäle und -leitungen - Prüfverfahren
zur Bestimmung der Widerstandsfähigkeit gegen
Temperaturwechsel und gleichzeitige äußere Belastung
(ISO 13260:2010)

This European Standard was approved by CEN on 11 August 2011.

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EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

Management Centre: Avenue Marnix 17, B-1000 Brussels

Foreword

The text of ISO 13260:2010 has been prepared by Technical Committee ISO/TC 138 "Plastics pipes, fittings and valves for the transport of fluids" of the International Organization for Standardization (ISO) and has been taken over as EN ISO 13260:2011 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 March 2012, and conflicting national standards shall be withdrawn at the latest by March 2012.

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Endorsement notice

The text of ISO 13260:2010 has been approved by CEN as a EN ISO 13260:2011 without any modification.

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Thermoplastics piping systems for non-pressure underground drainage and sewerage — Test method for resistance to combined temperature cycling and external loading

1 Scope

This International Standard specifies two methods for testing pipes and fittings or joints for plastics piping systems intended for use in underground drainage and sewerage systems for their resistance to deformation and leakage, when subjected to sustained external loading in conjunction with the passage of hot water.

Method A involves temperature cycling, by passing hot water and cold water alternately, and is applicable to pipes and associated fittings having a mean outside diameter $d_{em} \leq 190$ mm.

Method B involves passing hot water only, except at intervals specified for measurement of internal deflection, and is applicable to pipes and associated fittings having a mean outside diameter $190 \text{ mm} < d_{em} \leq 510$ mm.

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.

ISO 48, *Rubber, vulcanized or thermoplastic — Determination of hardness (hardness between 10 IRHD and 100 IRHD)*

3 Principle

A test piece comprising a pipe or an assembly of pipe(s) and fitting(s) is placed on a 100 mm gravel bed and covered with gravel to 600 mm above the crown of the pipe confined by a box of specified dimensions. Depending on the nominal size of the largest pipe or joint under test, a constant vertical load is applied via the gravel and either a specified number of cycles of hot and cold water or just hot water is passed through the test piece. The deformation of the test piece, as indicated by vertical deflection or internal diametric compression, is measured.

For sizes having a mean outside diameter $d_{em} \leq 190$ mm, hot and cold water is passed through the test piece and air may be blown through the test piece during the intervals between stages (Method A).

For pipes with a mean outside diameter $190 < d_{em} \leq 510$ mm a constant flow of hot water is passed through the test piece (Method B).

Vertical deflection of the test piece is measured. The test piece is checked at the end of the test for cracking, for local deflection in the bottom of the main channel and for leakage at the joints.