



NSAI
Standards

Irish Standard
I.S. EN ISO 13260:2011&A1:2017

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

I.S. EN ISO 13260:2011&A1:2017

Incorporating amendments/corrigenda/National Annexes issued since publication:

EN ISO 13260:2011/A1:2017

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National Foreword

I.S. EN ISO 13260:2011&A1:2017 is the adopted Irish version of the European Document EN ISO 13260:2011, 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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EUROPEAN STANDARD

EN ISO 13260:2011/A1

NORME EUROPÉENNE

EUROPÄISCHE NORM

September 2017

ICS 23.040.45; 91.140.80; 23.040.20; 93.030

English Version

Thermoplastics piping systems for non-pressure
underground drainage and sewerage - Test method for
resistance to combined temperature cycling and external
loading - Amendment 1 (ISO 13260:2011/Amd 1:2017)

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 -
Amendement 1 (ISO 13260:2011/Amd 1:2017)

Kunststoff-Rohrleitungssysteme aus Thermoplasten
für erdverlegte Abwasserkanäle und -leitungen -
Prüfverfahren zur Bestimmung der
Widerstandsfähigkeit gegen Temperaturwechsel und
gleichzeitige äußere Belastung - Änderung 1 (ISO
13260:2011/Amd 1:2017)

This amendment A1 modifies the European Standard EN ISO 13260:2011; it was approved by CEN on 12 September 2017.

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CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

EN ISO 13260:2011/A1:2017 (E)

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European foreword

This document (EN ISO 13260:2011/A1:2017) has been prepared by Technical Committee ISO/TC 138 “Plastics pipes, fittings and valves for the transport of fluids” in collaboration with Technical Committee CEN/TC 155 “Plastics piping systems and ducting systems” the secretariat of which is held by NEN.

This Amendment to the European Standard EN ISO 13260:2011 shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by March 2018, and conflicting national standards shall be withdrawn at the latest by March 2018.

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Endorsement notice

The text of ISO 13260:2010/Amd 1:2017 has been approved by CEN as EN ISO 13260:2011/A1:2017 without any modification.

EUROPEAN STANDARD

EN ISO 13260

NORME EUROPÉENNE

EUROPÄISCHE NORM

September 2011

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Supersedes EN 1437:2002

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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EN ISO 13260:2011 (E)

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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.

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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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INTERNATIONAL STANDARD

ISO
13260

First edition
2010-06-15

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

*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*



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ISO 13260:2010(E)

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ISO 13260:2010(E)

Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

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ISO 13260 was prepared by Technical Committee ISO/TC 138, *Plastics pipes, fittings and valves for the transport of fluids*, Subcommittee SC 1, *Plastics pipes and fittings for soil, waste and drainage (including land drainage)*.

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.

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