Irish Standard
I.S. EN 1610:2015

Construction and testing of drains and sewers

I.S. EN 1610:2015

Incorporating amendments/corrigenda/National Annexes issued since publication:

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I.S. xxx: Irish Standard — national specification based on the consensus of an expert panel and subject to public consultation.

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This document replaces/revises/consolidates the NSAI adoption of the document(s) indicated on the CEN/CENELEC cover/Foreword and the following National document(s):

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This document is based on:	*Published:*
EN 1610:2015	2015-09-02

This document was published under the authority of the NSAI and comes into effect on:	ICS number:
2015-09-21	93.030
	NOTE: If blank see CEN/CENELEC cover page

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National Foreword

I.S. EN 1610:2015 is the adopted Irish version of the European Document EN 1610:2015, Construction and testing of drains and sewers

This document does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

Compliance with this document does not of itself confer immunity from legal obligations.

In line with international standards practice the decimal point is shown as a comma (,) throughout this document.

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EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 1610

September 2015

ICS 93.030

Supersedes EN 1610:1997

English Version

Construction and testing of drains and sewers

Mise en oeuvre et essai des branchements et canalisations d'assainissement

Einbau und Prüfung von Abwasserleitungen und -kanälen

This European Standard was approved by CEN on 24 July 2015.

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.

CEN members are the national standards bodies of 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 United Kingdom.

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Ref. No. EN 1610:2015 E

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European foreword

This document (EN 1610:2015) 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 March 2016, and conflicting national standards shall be withdrawn at the latest by March 2016.

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 1610:1997.

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

— updating of references and their associated requirements;

— addition of requirements for the soil-pipe-system.

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, 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 is applicable to the construction and related testing of drains and sewers usually buried in the ground and usually operating under gravity but up to 0,5 kPa when surcharged.

The construction of pipelines operating under pressure is covered by this European Standard together with EN 805 as appropriate (e.g. for testing).

This European Standard is applicable to drains and sewers installed in trenches, under embankments or above ground. For trenchless construction EN 12889 applies. Additionally, other local or national regulations may apply, e.g. concerning health and safety, pavement reinstatement and requirements for tightness testing.

NOTE Further information is given by reference to national documents listed in Annex D.

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 476:2011, *General requirements for components used in drains and sewers*

EN 752, *Drain and sewer systems outside buildings*

EN 805, *Water supply — Requirements for systems and components outside buildings*

EN 1295-1, *Structural design of buried pipelines under various conditions of loading — Part 1: General requirements*

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply. The same definitions apply for trenches with vertical or sloping sides and for pipes laid below embankments. Some of these terms are illustrated in Figure 1.

3.1
bedding
part of the construction which supports the pipe between the trench bottom and the sidefill or initial backfill

Note 1 to entry: The bedding consists of upper and lower bedding. In the case of the pipe laid on natural trench bottom, the trench bottom is the lower bedding.

3.2
compaction layer thickness
thickness of each new layer of fill material prior to its compaction

3.3
depth of cover
vertical distance from the top of the pipe barrel to the surface

3.4
embedment
fill around the pipe including bedding, sidefill and initial backfill