



**NSAI**  
Standards

Irish Standard  
I.S. EN 13480-6:2017

## Metallic industrial piping - Part 6: Additional requirements for buried piping

**I.S. EN 13480-6:2017**

*Incorporating amendments/corrigenda/National Annexes issued since publication:*

The National Standards Authority of Ireland (NSAI) produces the following categories of formal documents:

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

S.R. xxx: Standard Recommendation — recommendation based on the consensus of an expert panel and subject to public consultation.

SWiFT xxx: A rapidly developed recommendatory document based on the consensus of the participants of an NSAI workshop.

*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):*

*NOTE: The date of any NSAI previous adoption may not match the date of its original CEN/CENELEC document.*

*This document is based on:*

EN 13480-6:2017

*Published:*

2017-06-28

*This document was published under the authority of the NSAI and comes into effect on:*

2017-07-16

ICS number:

23.040.01

NOTE: If blank see CEN/CENELEC cover page

NSAI  
1 Swift Square,  
Northwood, Santry  
Dublin 9

T +353 1 807 3800  
F +353 1 807 3838  
E standards@nsai.ie  
W NSAI.ie

Sales:  
T +353 1 857 6730  
F +353 1 857 6729  
W standards.ie

Údarás um Chaighdeáin Náisiúnta na hÉireann

## National Foreword

I.S. EN 13480-6:2017 is the adopted Irish version of the European Document EN 13480-6:2017, Metallic industrial piping - Part 6: Additional requirements for buried piping

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

For relationships with other publications refer to the NSAI web store.

**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.*

This page is intentionally left blank

EUROPEAN STANDARD

EN 13480-6

NORME EUROPÉENNE

EUROPÄISCHE NORM

June 2017

ICS 23.040.01

Supersedes EN 13480-6:2012

English Version

## Metallic industrial piping - Part 6: Additional requirements for buried piping

Tuyauteries industrielles métalliques - Partie 6 :  
Exigences complémentaires pour les tuyauteries  
enterrées

Metallische industrielle Rohrleitungen - Teil 6:  
Zusätzliche Anforderungen an erdgedeckte  
Rohrleitungen

This European Standard was approved by CEN on 21 June 2017.

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, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and United Kingdom.



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

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

## Contents

	Page
European foreword.....	3
<b>1 Scope.....</b>	<b>5</b>
<b>2 Normative references.....</b>	<b>5</b>
<b>3 General.....</b>	<b>5</b>
3.1 Safety.....	5
3.2 Routes.....	6
3.3 Depth of installation.....	6
3.4 Pipes marking and recording.....	6
3.5 Internal inspection provisions.....	6
3.6 Contents removal.....	7
3.7 Trench drainage.....	7
<b>4 Materials.....</b>	<b>7</b>
<b>5 Design and calculation.....</b>	<b>7</b>
5.1 Minimum wall thickness for buried piping.....	7
5.2 Design.....	8
<b>6 Installation.....</b>	<b>9</b>
6.1 Trenches.....	9
6.2 Pipe laying.....	9
6.3 Back filling.....	10
<b>7 Sleeves or casings.....</b>	<b>10</b>
<b>8 Corrosion protection.....</b>	<b>10</b>
8.1 General.....	10
8.2 Coatings.....	11
8.3 Cathodic protection.....	11
<b>9 Examination and testing.....</b>	<b>11</b>
<b>Annex A (normative) Calculations for buried piping.....</b>	<b>12</b>
A.1 General.....	12
A.2 Materials.....	12
A.3 Design and calculation.....	12
<b>Annex Y (informative) History of EN 13480-6.....</b>	<b>35</b>
Y.1 Differences between EN 13480-6:2012 and EN 13480-6:2017.....	35
<b>Annex ZA (informative) Relationship between this European Standard and the Essential Requirements of EU Directive 2014/68/EU aimed to be covered.....</b>	<b>36</b>
<b>Bibliography.....</b>	<b>37</b>

## European foreword

This document (EN 13480-6:2017) has been prepared by Technical Committee CEN/TC 267 “Industrial piping and pipelines”, the secretariat of which is held by AFNOR.

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 December 2017, and conflicting national standards shall be withdrawn at the latest by December 2017.

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 has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive(s).

For relationship with EU Directive(s), see informative Annex ZA, which is an integral part of this document.

This European Standard EN 13480 for metallic industrial piping consists of eight interdependent and not dissociable Parts which are:

- *Part 1: General;*
- *Part 2: Materials;*
- *Part 3: Design and calculation;*
- *Part 4: Fabrication and installation;*
- *Part 5: Inspection and testing;*
- *Part 6: Additional requirements for buried piping;*
- *CEN/TR 13480-7, Guidance on the use of conformity assessment procedures;*
- *Part 8: Additional requirements for aluminium and aluminium alloy piping.*

Although these Parts may be obtained separately, it should be recognised that the Parts are interdependent. As such the manufacture of metallic industrial piping requires the application of all the relevant Parts in order for the requirements of the Standard to be satisfactorily fulfilled.

This European Standard will be maintained by a Maintenance MHD working group whose scope of working is limited to corrections and interpretations related to EN 13480.

**EN 13480-6:2017 (E)**  
**Issue 1 (2017-06)**

The contact to submit queries can be found at <http://www.unm.fr> ([en13480@unm.fr](mailto:en13480@unm.fr)). A form for submitting questions can be downloaded from the link to the MHD website. After subject experts have agreed an answer, the answer will be communicated to the questioner. Corrected pages will be given specific issue number and issued by CEN according to CEN Rules. Interpretation sheets will be posted on the website of the MHD.

This document supersedes EN 13480-6:2012. This new edition incorporates the Amendments which have been approved previously by CEN members, and the corrected pages up to Issue 4 without any further technical change. Annex Y provides details of significant technical changes between this European Standard and the previous edition.

Amendments to this new edition may be issued from time to time and then used immediately as alternatives to rules contained herein.

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, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.



## **1 Scope**

This document specifies requirements for industrial piping either totally buried or partly buried and partly run in sleeves or similar protection. It is used in conjunction with the other six parts of EN 13480.

Where buried piping subject to this standard connects to piping installed under other jurisdiction such as pipelines, the transition should be made at a closing element e.g. an isolating or regulating valve separating the two sections. This should be close to the boundary of the industrial site, but may be inside or outside the boundary.

Operating temperature up to 75 °C.

NOTE For higher temperatures reference should be made to EN 13941+A1:2010, but it should be kept in mind, that CEN/TC 107 only deals with pre-insulated piping with temperatures up to 140 °C and diameters up to 800 mm, which is state of the art for these products.

## **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 13480-1:2017, *Metallic industrial piping — Part 1: General*

EN 13480-2:2017, *Metallic industrial piping — Part 2: Materials*

EN 13480-3:2017, *Metallic industrial piping — Part 3: Design and calculation*

EN 13480-5:2017, *Metallic industrial piping — Part 5: Inspection and testing*

## **3 General**

### **3.1 Safety**

- a) Buried piping within an industrial site presents a potential hazard to site personal, equipment and environment. The sections set out in this document provide guidance as to how the hazard presented by the piping may be assessed, and the integrity of the piping system maintained.

NOTE 1 Attention is drawn to appropriate National or Local regulations.

- b) The main factors to be considered are:

- Design including Routing, Layout, Interaction with connecting systems;
- Materials and Construction Specification and Quality Control;
- Operating Procedures and Control;

This is a free preview. Purchase the entire publication at the link below:

[Product Page](#)

- 
- [Looking for additional Standards? Visit Intertek Inform Infostore](#)
  - [Learn about LexConnect, All Jurisdictions, Standards referenced in Australian legislation](#)
-