

This is a preview of "BS EN 17248:2019". [Click here to purchase the full version from the ANSI store.](#)



**BSI Standards Publication**

## **District heating and district cooling pipe systems — Terms and definitions**

---

This is a preview of "BS EN 17248:2019". [Click here to purchase the full version from the ANSI store.](#)

## National foreword

This British Standard is the UK implementation of EN 17248:2019.

The UK participation in its preparation was entrusted to Technical Committee RHE/9, Insulated underground pipelines.

A list of organizations represented on this committee can be obtained on request to its secretary.

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

© The British Standards Institution 2020  
Published by BSI Standards Limited 2020

ISBN 978 0 539 12729 4

ICS 01.040.23; 23.040.07

**Compliance with a British Standard cannot confer immunity from legal obligations.**

This British Standard was published under the authority of the Standards Policy and Strategy Committee on 31 October 2019.

### Amendments/corrigenda issued since publication

Date	Text affected
31 January 2020	Implementation of CEN correction notice 2 December 2019: identifier in header corrected

This is a preview of "BS EN 17248:2019". [Click here to purchase the full version from the ANSI store.](#)

## EUROPÄISCHE NORM

October 2019

ICS 01.040.23; 23.040.07

English Version

## District heating and district cooling pipe systems - Terms and definitions

Canalisations pour le chauffage urbain et réseaux d'eau glacée - Termes et définitions

Fernwärme- und Fernkälterohrsysteme - Begriffe

This European Standard was approved by CEN on 12 August 2019.

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, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, 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: Rue de la Science 23, B-1040 Brussels**

This is a preview of "BS EN 17248:2019". [Click here to purchase the full version from the ANSI store.](#)

<b>Contents</b>	<b>Page</b>
<b>European foreword</b> .....	<b>3</b>
<b>Introduction</b> .....	<b>3</b>
<b>1 Scope</b> .....	<b>5</b>
<b>2 Normative references</b> .....	<b>5</b>
<b>3 Terms and definitions</b> .....	<b>5</b>
<b>Bibliography</b> .....	<b>22</b>

This is a preview of "BS EN 17248:2019". [Click here to purchase the full version from the ANSI store.](#)

## **European foreword**

This document (EN 17248:2019) has been prepared by Technical Committee CEN/TC 107 "Prefabricated district heating and district cooling pipe systems", the secretariat of which is held by DS.

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 2020, and conflicting national standards shall be withdrawn at the latest by April 2020.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN shall not be held responsible for identifying any or all such patent rights.

According to the CEN-CENELEC Internal Regulations, the national standards organisations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

This is a preview of "BS EN 17248:2019". [Click here to purchase the full version from the ANSI store.](#)

## Introduction

This document compiles a vocabulary of terms, with their definitions, applied in the field of district heating and district cooling pipe systems with factory made system components. Only terms which are particular to the pertinent field in CEN/TC 107 are included.

The other standards from CEN/TC 107 are:

- EN 253, *District heating pipes — Bonded single pipe systems for directly buried hot water networks — Factory made pipe assembly of steel service pipe, polyurethane thermal insulation and a casing of polyethylene;*
- EN 448, *District heating pipes — Bonded single pipe systems for directly buried hot water networks — Factory made fitting assemblies of steel service pipes, polyurethane thermal insulation and a casing of polyethylene;*
- EN 488, *District heating pipes — Bonded single pipe systems for directly buried hot water networks — Factory made steel valve assembly for steel service pipes, polyurethane thermal insulation and a casing of polyethylene;*
- EN 489-1, *District heating pipes - Bonded single and twin pipe systems for directly buried hot water networks - Part 1: Joint casing assemblies and thermal insulation for hot water networks in accordance with EN 13941-1;*
- EN 13941-1, *District heating pipes - Design and installation of thermal insulated bonded single and twin pipe systems for directly buried hot water networks — Part 1: Design;*
- EN 13941-2, *District heating pipes - Design and installation of thermal insulated bonded single and twin pipe systems for directly buried hot water networks — Part 2: Installation;*
- EN 14419, *District heating pipes — Bonded single and twin pipe systems for directly buried hot water networks — Surveillance systems;*
- EN 15632 (all parts), *District heating pipes - Pre-insulated flexible pipe systems;*
- EN 15698-1, *District heating pipes — Bonded twin pipe systems for directly buried hot water networks — Part 1: Factory made twin pipe assembly of steel service pipes, polyurethane thermal insulation and one casing of polyethylene*
- EN 15698-2, *District heating pipes — Bonded twin pipe systems for directly buried hot water networks — Part 2: Factory made fitting and valve assemblies of steel service pipes, polyurethane thermal insulation and one casing of polyethylene*

This is a preview of "BS EN 17248:2019". Click here to purchase the full version from the ANSI store.

## 1 Scope

This document compiles a vocabulary of terms, with their definitions, applied in the field of district heating and district cooling pipe systems with factory made system components. Only terms which are particular to the pertinent field in CEN/TC 107 are included.

## 2 Normative references

There are no normative references in this document.

## 3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- IEC Electropedia: available at <http://www.electropedia.org/>
- ISO Online browsing platform: available at <https://www.iso.org/obp>

### 3.1

#### **above ground installation**

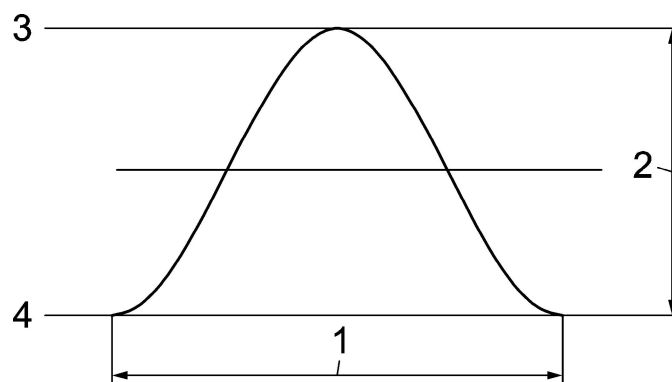
installation method where the pipe is not surrounded by soil

### 3.2

#### **action cycle**

impact comprising of one full action course, ranging from a minimum (maximum) level through an average value to a maximum (minimum) level and back

Note 1 to entry: See Figure 1 for the principle of action cycles.



#### **Key**

- 1 one action cycle
- 2 action (or stress or deformation) range
- 3 maximum level of the action, stress or deformation
- 4 minimum level of the action, stress or deformation

**Figure 1 — Principle of one action cycle**