



NSAI
Standards

Irish Standard
I.S. EN 15632-3:2010+A1:2014

District heating pipes - Pre-insulated flexible pipe systems - Part 3: Non bonded system with plastic service pipes; requirements and test methods

I.S. EN 15632-3:2010+A1:2014

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 15632-3:2010+A1:2014

Published:

2014-12-17

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

2015-01-19

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

EUROPEAN STANDARD

EN 15632-3:2010+A1

NORME EUROPÉENNE

EUROPÄISCHE NORM

December 2014

ICS 23.040.01

Supersedes EN 15632-3:2010

English Version

District heating pipes - Pre-insulated flexible pipe systems - Part 3: Non bonded system with plastic service pipes; requirements and test methods

Tuyaux de chauffage urbain - Systèmes de tuyaux flexibles préisolés - Partie 3: Système non bloqué avec tube de service en plastique - prescriptions et méthodes d'essai

Fernwärmerohre - Werkmäßig gedämmte flexible Rohrsysteme - Teil 3: Nicht-Verbundsysteme mit Mediumrohren aus Kunststoff - Anforderungen und Prüfungen

This European Standard was approved by CEN on 10 December 2009 and includes Amendment 1 approved by CEN on 8 November 2014.

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.



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

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

Contents	Page
Foreword	3
Introduction	4
1 Scope	5
2 Normative references	5
3 Terms and definitions	6
4 Classification	6
4.1 Operating temperatures and service life	6
4.2 Operating pressures	6
4.3 General requirements	7
4.4 Service pipes and fittings	7
4.4.1 Quality	7
4.4.2 Oxygen tightness	7
4.5 Sealing in linear direction	7
4.6 Water vapour permeation	7
5 Test procedures	8
5.1 General	8
5.2 Temperature cycle test	8
Annex A (informative) Application of Miner's Rule	9

Foreword

This document (EN 15632-3:2010+A1:2014) has been prepared by Technical Committee CEN/TC 107 "Prefabricated district heating 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 June 2015, and conflicting national standards shall be withdrawn at the latest by June 2015.

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 15632-3:2010.

This document includes Amendment 1 approved by CEN on 2014-11-08.

The start and finish of text introduced or altered by amendment is indicated in the text by tags $\boxed{A1}$ $\boxed{A1}$.

This document is one of a series of standards which form several parts of EN 15632, *District heating pipes — Pre-insulated flexible pipe systems*:

Part 1: *Classification, general requirements and test methods*;

Part 2: *Bonded system with plastic service pipes; requirements and test methods*;

Part 3: *Non bonded system with plastic service pipes; requirements and test methods*;

Part 4: *Bonded system with metal service pipes; requirements and test methods*.

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.

EN 15632-3:2010+A1:2014 (E)

Introduction

Pre-insulated flexible non bonded pipe systems with plastic service pipes are widely used in district and local heating networks.

This part of the series of standards for the various types of flexible pipe systems is intended to be used in connection with EN 15632-1 where the basic design criteria for flexible district heating pipes are specified.

1 Scope

This European Standard provides requirements and test methods for flexible, pre-insulated, direct buried district heating pipes with plastic service pipes and no bonding between the layers of the pipes.

This European Standard is valid for maximum operating temperatures of 95 °C and maximum operating pressures up to 10 bar for a design lifetime of at least 30 years.

This European Standard does not cover surveillance systems.

NOTE For higher temperatures or for the transport of other fluids, for example potable water, additional requirements and testing is needed. Such requirements are not specified in this European Standard.

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.

EN 489, *District heating pipes — Preinsulated bonded pipe systems for directly buried hot water networks — Joint assembly for steel service pipes, polyurethane thermal insulation and outer casing of polyethylene*

EN 15632-1:2009+A1:2014, *District heating pipes — Pre-insulated flexible pipe systems — Part 1: Classification, general requirements and test methods*

EN 15632-2:2009+A1:2014, *District heating pipes — Pre-insulated flexible pipe systems — Part 2: Bonded system with plastic service pipes; requirements and test methods*

EN ISO 9080, *Plastics piping and ducting systems — Determination of the long-term hydrostatic strength of thermoplastics materials in pipe form by extrapolation (ISO 9080:2003)*

EN ISO 13760, *Plastics pipes for the conveyance of fluids under pressure — Miner's rule — Calculation method for cumulative damage (ISO 13760:1998)*

EN ISO 15875-1, *Plastics piping systems for hot and cold water installations — Crosslinked polyethylene (PE-X) — Part 1: General (ISO 15875-1:2003)*

EN ISO 15875-2:2003, *Plastics piping systems for hot and cold water installations — Crosslinked polyethylene (PE-X) — Part 2: Pipes (ISO 15875-2:2003)*

EN ISO 15875-3, *Plastics piping systems for hot and cold water installations — Crosslinked polyethylene (PE-X) — Part 3: Fittings (ISO 15875-3:2003)*

EN ISO 15875-5:2003, *Plastics piping systems for hot and cold water installations — Crosslinked polyethylene (PE-X) — Part 5: Fitness for purpose of the system (ISO 15875-5:2003)*

EN ISO 15876-1, *Plastics piping systems for hot and cold water installations — Polybutylene (PB) — Part 1: General (ISO 15876-1:2003)*

EN ISO 15876-2, *Plastics piping systems for hot and cold water installations — Polybutylene (PB) — Part 2: Pipes (ISO 15876-2:2003)*

EN ISO 15876-3, *Plastics piping systems for hot and cold water installations — Polybutylene (PB) — Part 3: Fittings (ISO 15876-3:2003)*

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](#)
-