ICS 23.040.10 SLOVENSKÁ TECHNICKÁ NORMA Júl 2025

STN	**Potrubia diaľkového (teplovodného) vykurovania Združené dvojrúrové potrubné systémy pre predizolované bezkanálové rozvody teplej vody Časť 2: Priemyselne vyrábané oceľové tvarovky a armatúry zostavené z oceľovej teplonosnej rúry s polyuretánovou tepelnou izoláciou a s vonkajším plášťom z polyetylénu**	**STN EN 15698-2** 38 3379

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

Táto norma obsahuje anglickú verziu európskej normy.
This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 06/25

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English Version

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

Tuyaux de chauffage urbain - Systèmes bloqués de bitubes pour les réseaux d'eau chaude enterrés directement - Partie 2: Assemblages de raccords et d'appareils de robinetterie manufacturés pour tubes de service en acier, isolation thermique en polyuréthane et tube de protection en polyéthylène

Fernwärmerohre - Doppelrohr-Verbundsysteme für direkt erdverlegte Fernwärmenetze - Teil 2: Werkmäßig gefertigte Formstück- und Armaturbaueinheiten, bestehend aus Stahl-Mediumrohr, einer Wärmedämmung aus Polyurethan und einer Ummantelung aus Polyethylen

This European Standard was approved by CEN on 27 January 2025.

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European foreword

This document (EN 15698-2:2025) has been prepared by Technical Committee CEN/TC 107 “Prefabricated district heating and district cooling pipe system”, 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of an identical text or by endorsement, at the latest by September 2025, and conflicting national standards shall be withdrawn at the latest by September 2025.

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.

This document supersedes EN 15698-2:2019.

EN 15698-2:2025 includes the following significant technical changes with respect to EN 15698-2:2019:

— alignment with the structure of EN 253;

— in alignment with the other standards of CEN/TC 107, explanatory information has been included in Annex B.

The EN 15698 series, under the title *District heating pipes — Bonded twin pipe systems for directly buried hot water networks*, is currently composed of the following parts:

— *Part 1: Factory made twin pipe assembly of steel service pipes, polyurethane thermal insulation and one casing of polyethylene*;

— *Part 2: Factory made fitting and valve assemblies of steel service pipes, polyurethane thermal insulation and one casing of polyethylene* (this document).

Any feedback and questions on this document should be directed to the users’ national standards body. A complete listing of these bodies can be found on the CEN website.

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, Türkiye and the United Kingdom.

Introduction

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 488-1, *District heating pipes — Bonded single pipe systems for directly buried hot water networks — Part 1: Factory made steel shut-off valve assembly for steel service pipes, polyurethane thermal insulation and a casing of polyethylene*;

— EN 488-2, *District heating and district cooling pipes — Bonded pipe systems for directly buried hot and cold water networks — Part 2: 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 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 buried hot water networks — Surveillance systems*

— EN 15632 (all parts), *District heating pipes — Factory made 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 17248, *District heating and district cooling pipe systems — Terms and definitions*

— EN 17414 (all parts), *District cooling pipes — Factory made flexible pipe systems*

— EN 17415 (all parts), *District cooling pipes — Bonded single pipe systems for directly buried cold water networks*

— EN 17878 (all parts), *District heating pipes — Factory made flexible pipe systems with a lower temperature profile*

Waste management and recycling of materials is dealt with in Annex B.

Examples of twin pipe fitting assemblies are shown in Annex C.

1 Scope

This document specifies requirements and test methods for fitting and steel valve assemblies of factory made thermally insulated bonded twin pipe assemblies for hot water networks in accordance with EN 13941-1, comprising two steel service pipes, in most cases steel fittings and/or steel valves, steel components, polyurethane (PUR) foam thermal insulation and one casing of polyethylene.

NOTE Steel components can be e.g. fixing bars.

The twin pipe assembly can also include the following additional elements: measuring wires, spacers and diffusion barriers.

This document covers the following assemblies:

— fittings: bends, T-pieces and reducers;

— valves for main line.

This document applies to fitting assemblies with an internal pressure of at least 1,6 MPa and steel valve assemblies with a maximum internal pressure of 2,5 MPa.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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 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 488-1, *District heating pipes — Bonded single pipe systems for directly buried hot water networks — Part 1: Factory made steel valve assembly for steel service pipes, polyurethane thermal insulation and a casing of polyethylene*

EN 488-2, *District heating and district cooling pipes — Bonded pipe systems for directly buried hot and cold water networks — Part 2: Factory made steel service valve assembly for steel service pipes, polyurethane thermal insulation and a casing of polyethylene*

EN 10204, *Metallic products — Types of inspection documents*

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 14419, *District heating pipes — Bonded single and twin pipe systems for buried hot water networks — Surveillance 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 17248, *District heating and district cooling pipe systems — Terms and definitions*