



ISO 15875-2

**Plastics piping systems for hot
and cold water installations —
Crosslinked polyethylene (PE-X) —**

**Part 2:
Pipes**

*Systèmes de canalisations en plastique pour les installations
d'eau chaude et froide — Polyéthylène réticulé (PE-X) —*

Partie 2: Tubes

**Second edition
2025-10**

This is a preview of ISO 15875-2:2025. [Click here to purchase the full version from the ANSI store.](#)



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The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO document should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

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This document was prepared by Technical Committee ISO/TC 138, *Plastics pipes, fittings and valves for the transport of fluids*, Subcommittee SC 2, *Plastics pipes and fittings for water supplies*, in collaboration with the European Committee for Standardization (CEN) Technical Committee CEN/TC 155, *Plastics piping systems and ducting systems*, in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

This second edition cancels and replaces the first edition (ISO 15875-2:2003), which has been technically revised. It also incorporates the Amendments ISO 15875-2:2003/Amd 1:2007 and ISO 15875-2:2003/Amd 2:2020.

The main changes are as follows:

- the normative references have been updated;
- a new [Clause 4](#) "Generic requirements, instructions and explanations" has been added and subsequent clauses have been renumbered;
- pipe material has been specified more precisely;
- [Formula \(2\)](#) for the 110 °C reference curve has been added;
- a new [subclause 5.3](#) "Reference lines" has been added;
- a new [subclause 5.5](#) "Barrier layer material" has been added;
- a new [subclause 5.5.1](#) "General" has been added;
- a new [subclause 5.5.2](#) "Thermal stability of the barrier layer material" with requirements on the thermal stability of the material has been added;
- a new [subclause 5.5.3](#) "Thermal stability of the adhesive layer material" with requirements on the thermal stability of the material has been added;

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- a new [subclause 6.4](#) "Oxygen permeability" has been added;
- in [subclause 7.2](#), the diameter range has been extended up to 250 mm;
- a new [subclause 7.3](#) "Pipes with barrier layer - Dimensions of pipes" has been added;
- [Clause 8](#), [Table 12](#), mechanical characteristics of pipes, characteristic: resistance to internal pressure, new test parameters have been added: 20 °C / 22 hours and 95 °C / 2 500 hours;
- in [Clause 9](#), a requirement defining the point in time at which the minimum degree of crosslinking is to be reached has been added;
- in [Table 13](#), a new crosslinking method has been added: PE-Xe - UV light initiated crosslinking;
- a new [Annex A](#) "Pipe construction" has been added;
- [Annex B](#) (formerly Annex A) "Derivation of $S_{\text{calc,max}}$ values" has been changed from informative to normative;
- a new [Annex C](#) for the proof of the thermal stability of materials has been added;
- editorial modifications have been made to facilitate the readability of the document and to bring it in line with the ISO/IEC Directives Part 2.

A list of all parts in the ISO 15875 series can be found on the ISO website.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

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The ISO 15875 series specifies the requirements for a piping system consisting of pipe, fitting and the jointing made of it, when the pipe is made from crosslinked polyethylene (PE-X). The ISO 15875 series consists of ISO 15875-1, ISO 15875-2, ISO 15875-3 and ISO 15875-5, and covers the requirements and related test methods for all components used in the system (e. g. pipes and fittings). In addition, the ISO 15875 series includes requirements and related test methods to verify the performance and compatibility of the jointing of components.

The piping system is intended to be used for hot and cold water installations.

In respect of potential adverse effects on the quality of water intended for human consumption, caused by the product covered by ISO 15875 (all parts):

- ISO 15875 (all parts) provides no information as to whether the product may be used without restriction in any of the Member States of the EU or EFTA;
- it should be noted that, while awaiting the adoption of verifiable European criteria, existing national regulations concerning the use and/or the characteristics of this product remain in force.

Requirements and test methods for material and components, other than pipes, are specified in ISO 15875-1 and ISO 15875-3. Characteristics for fitness for purpose (mainly for joints) are covered in ISO 15875-5. ISO/TS 15875-7 gives guidance for the assessment of conformity.

This document specifies the characteristics of pipes.

At the date of publication of this document, standards for piping systems of other plastics materials used for the same application include:

- the ISO 15874 series,
- the ISO 15875 series,
- the ISO 15876 series,
- the ISO 15877 series,
- the ISO 21003 series, and
- the ISO 22391 series.