BS EN ISO 15877-5:2009+A2:2020
Incorporating corrigendum July 2024

BSI Standards Publication

Plastics piping systems for hot and cold water installations — Chlorinated poly(vinyl chloride) (PVC-C)

Part 5: Fitness for purpose of the system

bsi.

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Full document details: BS EN ISO 15877-5:2009+A2:2020

National foreword

This British Standard is the UK implementation of EN ISO 15877-5:2009+A2:2020. It is identical to ISO 15877-5:2009, incorporating amendment 1:2010 and amendment 2:2020. It supersedes BS EN ISO 15877-5:2009+A1:2010, which is withdrawn.

The start and finish of text introduced or altered by amendment is indicated in the text by tags. Tags indicating changes to ISO text carry the number of the ISO amendment. For example, text altered by ISO amendment 1 is indicated by ⟩A1⟨.

The UK participation in its preparation was entrusted to Technical Committee PRI/88, Plastics piping systems.

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

As the scope of this standard does not cover chlorinated poly(vinyl chloride) (PVC-C) piping systems for installations having service conditions in excess of those in Table 1 of BS EN ISO 15877-1:2009+A1:2010, the UK committee advises users to consult BS 7291-1:2010+A1:2023 when applying this standard.

BS 7291-1:2010+A1:2023 gives the Class "S" service conditions for sealed central heating systems and indirect hot water primary circuits in which the maximum system service temperature is 105 °C and the system malfunction temperature is 114 °C. As both of these temperatures are significantly in excess of those specified in Table 1 of BS EN ISO 15877-1:2009+A1:2010, and sealed central heating systems and indirect hot water primary circuits are therefore not covered by it, the UK committee advises that PVC-C piping systems conforming to the requirements of this standard should also be subjected to the temperatures given in Table 1 of BS 7291-1:2010+A1:2023.

The UK committee also advises users that:

a) The normal maximum operating cold water supply pressure in the UK is 12.5 bar (1 bar = 100 kPa), which some categories of piping systems in the BS EN ISO 15877 series of standards do not meet.

b) There is a disparity between the malfunction temperature quoted in Table 1 of BS EN ISO 15877-1:2009+A1:2010 (100 °C) and the malfunction temperatures applicable to boilers conforming to the requirements of BS EN 15502-1:2021+A1:2023, BS EN 15502-2-1:2022+A1:2023 and BS EN 15502-2-2:2014 (110 °C). Consequently, piping systems used with these gas-fired central heating boilers could be subjected to temperatures in service for which they have not been tested.

c) Piping systems conforming to the requirements of the BS EN ISO 15877 series of standards are designed for hot and cold water installations and are not suitable for waste discharge from unvented hot water systems (i.e. downstream pipe D2).

d) Continuously operated recirculating domestic hot water systems (known as recirculating, secondary hot circulation, return or ring main systems) carry pumped hot potable water to outlets where the temperature is between 60 °C and 70 °C, and is replenished by an incoming water supply to replace the water drawn to outlets. For piping systems conforming to the requirements of

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the BS EN ISO 15877 series of standards, the manufacturer and their technical information should always be consulted for specific limitations.

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Amendments/corrigenda issued since publication

Date	Text affected
31 January 2011	Implementation of ISO amendment 1:2010 with CEN endorsement A1:2010
31 December 2020	Implementation of ISO amendment 2:2020 with CEN endorsement A2:2020
31 July 2024	Correction to national foreword

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EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN ISO 15877-5:2009+A2

December 2020

ICS 23.040.20; 91.140.60

Supersedes EN ISO 15877-5:2003

English Version

Plastics piping systems for hot and cold water installations - Chlorinated poly(vinyl chloride) (PVC-C) - Part 5: Fitness for purpose of the system (ISO 15877-5:2009)

Systèmes de canalisations en plastique pour les installations d'eau chaude et froide - Poly(chlorure de vinyle) chloré (PVC-C) - Partie 5: Aptitude à l'emploi du système (ISO 15877-5:2009)

Kunststoff-Rohrleitungssysteme für die Warm- und Kaltwasserinstallation - Chloriertes Polyvinylchlorid (PVC-C) - Teil: 5 Gebrauchstauglichkeit des Systems (ISO 15877-5:2009)

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European foreword

This document (EN ISO 15877-5:2009) has been prepared by Technical Committee CEN/TC 155 "Plastics piping systems and ducting systems", the secretariat of which is held by NEN, in collaboration with Technical Committee ISO/TC 138 "Plastics pipes, fittings and valves for the transport of fluids".

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 2009, and conflicting national standards shall be withdrawn at the latest by September 2009.

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.

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European foreword to amendment A1

This document (EN ISO 15877-5:2009/A1:2010) has been prepared by Technical Committee CEN/TC 155 “Plastics piping systems and ducting systems” the secretariat of which is held by NEN, in collaboration with Technical Committee ISO/TC 138 “Plastics pipes, fittings and valves for the transport of fluids”.

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European foreword to amendment A2

This document (EN ISO 15877-5:2009/A2:2020) has been prepared by Technical Committee ISO/TC 138 "Plastics pipes, fittings and valves for the transport of fluids" in collaboration with Technical Committee CEN/TC 155 “Plastics piping systems and ducting systems” the secretariat of which is held by NEN.

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Endorsement notice

The text of ISO 15877-5:2009/Amd 2:2020 has been approved by CEN as EN ISO 15877-5:2009/A2:2020 without any modification.

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