
Cevni sistemi iz polimernih materialov za napeljave z vročo in hladno vodo - Klorirani polivinilklorid (PVC-C) - 3. del: Fitingi - Dopolnilo A2 (ISO 15877-3:2009/DAM 2:2020)

Plastics piping systems for hot and cold water installations - Chlorinated poly(vinyl chloride) (PVC-C) - Part 3: Fittings - Amendment 2 (ISO 15877-3:2009/DAM 2:2020)

Kunststoff-Rohrleitungssysteme für die Warm- und Kaltwasserinstallation - Chloriertes Polyvinylchlorid (PVC-C) - Teil 3: Formstücke - Änderung 2 (ISO 15877-3:2009/DAM 2:2020)

Systèmes de canalisations en plastique pour les installations d'eau chaude et froide - Poly(chlorure de vinyle) chloré (PVC-C) - Partie 3: Raccords - Amendment 2 (ISO 15877-3:2009/DAM 2:2020)

Ta slovenski standard je istoveten z: EN ISO 15877-3:2009/prA2

ICS:

23.040.45	Fitingi iz polimernih materialov	Plastics fittings
91.140.60	Sistemi za oskrbo z vodo	Water supply systems

SIST EN ISO 15877-3:2009/oprA2:2021 en,fr,de

iTeh STANDARD PREVIEW
(standards.iteh.ai)

[SIST EN ISO 15877-3:2009/oprA2:2021](https://standards.iteh.ai/catalog/standards/sist/1461355b-d14d-412f-bff8-bc3d521eac44/sist-en-iso-15877-3-2009-opra2-2021)

<https://standards.iteh.ai/catalog/standards/sist/1461355b-d14d-412f-bff8-bc3d521eac44/sist-en-iso-15877-3-2009-opra2-2021>

DRAFT AMENDMENT

ISO 15877-3:2009/DAM 2

ISO/TC 138/SC 2

Secretariat: SNV

Voting begins on:
2020-11-26Voting terminates on:
2021-02-18

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

Part 3: Fittings

AMENDMENT 2

Systèmes de canalisations en plastique pour les installations d'eau chaude et froide — Poly(chlorure de vinyle) chloré (PVC-C) —

Partie 3: Raccords

AMENDEMENT 2

iTeh STANDARD PREVIEW
(standards.iteh.ai)

ICS: 91.140.60; 23.040.45

[SIST EN ISO 15877-3:2009/oprA2:2021](https://standards.iteh.ai/catalog/standards/sist/1461355b-d14d-412f-bff8-bc3d521eac44/sist-en-iso-15877-3-2009-opra2-2021)

<https://standards.iteh.ai/catalog/standards/sist/1461355b-d14d-412f-bff8-bc3d521eac44/sist-en-iso-15877-3-2009-opra2-2021>

THIS DOCUMENT IS A DRAFT CIRCULATED FOR COMMENT AND APPROVAL. IT IS THEREFORE SUBJECT TO CHANGE AND MAY NOT BE REFERRED TO AS AN INTERNATIONAL STANDARD UNTIL PUBLISHED AS SUCH.

IN ADDITION TO THEIR EVALUATION AS BEING ACCEPTABLE FOR INDUSTRIAL, TECHNOLOGICAL, COMMERCIAL AND USER PURPOSES, DRAFT INTERNATIONAL STANDARDS MAY ON OCCASION HAVE TO BE CONSIDERED IN THE LIGHT OF THEIR POTENTIAL TO BECOME STANDARDS TO WHICH REFERENCE MAY BE MADE IN NATIONAL REGULATIONS.

RECIPIENTS OF THIS DRAFT ARE INVITED TO SUBMIT, WITH THEIR COMMENTS, NOTIFICATION OF ANY RELEVANT PATENT RIGHTS OF WHICH THEY ARE AWARE AND TO PROVIDE SUPPORTING DOCUMENTATION.

This document is circulated as received from the committee secretariat.

ISO/CEN PARALLEL PROCESSING



Reference number
ISO 15877-3:2009/DAM 2:2020(E)

© ISO 2020

iTeh STANDARD PREVIEW (standards.iteh.ai)

[SIST EN ISO 15877-3:2009/oprA2:2021](https://standards.iteh.ai/catalog/standards/sist/1461355b-d14d-412f-bff8-bc3d521eac44/sist-en-iso-15877-3-2009-opra2-2021)

<https://standards.iteh.ai/catalog/standards/sist/1461355b-d14d-412f-bff8-bc3d521eac44/sist-en-iso-15877-3-2009-opra2-2021>



COPYRIGHT PROTECTED DOCUMENT

© ISO 2020

All rights reserved. Unless otherwise specified, or required in the context of its implementation, no part of this publication may be reproduced or utilized otherwise in any form or by any means, electronic or mechanical, including photocopying, or posting on the internet or an intranet, without prior written permission. Permission can be requested from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office
CP 401 • Ch. de Blandonnet 8
CH-1214 Vernier, Geneva
Phone: +41 22 749 01 11
Email: copyright@iso.org
Website: www.iso.org

Published in Switzerland

Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

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 documents 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).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT), see www.iso.org/iso/foreword.html.

This document was prepared by the European Committee for Standardization (CEN) Technical Committee CEN/TC 155, *Plastics piping systems and ducting systems*, in collaboration with ISO 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 accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

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.

iTeh STANDARD PREVIEW
(standards.iteh.ai)

[SIST EN ISO 15877-3:2009/oprA2:2021](https://standards.iteh.ai/catalog/standards/sist/1461355b-d14d-412f-bff8-bc3d521eac44/sist-en-iso-15877-3-2009-opra2-2021)

<https://standards.iteh.ai/catalog/standards/sist/1461355b-d14d-412f-bff8-bc3d521eac44/sist-en-iso-15877-3-2009-opra2-2021>

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

Part 3: Fittings

AMENDMENT 2

Page 1, clause 2

Add the normative references

ISO 2768-1, *General tolerances — Part 1: Tolerances for linear and angular dimensions without individual tolerance indications*

ISO 2768-2, *General tolerances — Part 2: Geometrical tolerances for features without individual tolerance indications*

ISO 6506-1, *Metallic materials — Brinell hardness test — Part 1: Test method*

ISO 6509-1, *Corrosion of metals and alloys — Determination of dezincification resistance of copper alloys with zinc — Part 1: Test method*

ISO 6509-2, *Corrosion of metals and alloys — Determination of dezincification resistance of copper alloys with zinc — Part 2: Assessment criteria*

ISO 6957, *Copper alloys — Ammonia test for stress corrosion resistance*

Page 1, clause 2

Delete the normative reference

EN 1254-3, *Copper and copper alloys — Plumbing fittings — Part 3: Fittings with compression ends for use with plastics pipes*

Page 2, 3.1.2.1

Replace the existing clause 3.1.2.1. with the new clause 3.1.2.1 below.

3.1.2.1 compression fitting

fitting with internal support in which the joint is made by screwing a union nut along a thread to compress a ring on the outside wall of the pipe and finally to cause a clamping of the pipe between the ring and the inner support of the fitting

Note 1 to entry: The fitting may be with or without sealing element.

ISO 15877-3:2009/DAM 2:2020(E)

Page 3, 4.2

Replace the existing title of clause 4.2 with the new title below.

4.2 Plastics fitting material

Page 7, Table 1

Insert the following table footnote d to Vicat Softening Temperature.

^d Test samples may be annealed prior to testing at conditions recommended by the manufacturer.

Page 8, Table 2

Insert the following table footnote d to Vicat Softening Temperature.

^d Test samples may be annealed prior to testing at conditions recommended by the manufacturer.

Page 8, 4.5

Replace the existing clause 4.5 with the new clause below.

4.5 Metallic fitting material

Metallic materials for fittings intended to be used with components conforming to ISO 15875 shall be either copper alloys or stainless steel alloys. The alloys shall be defined according to a standard or regulatory document.

NOTE Examples for such standards and regulatory documents are listed in the bibliography.

For copper alloys, the fittings made thereof have to comply with the corrosion resistance requirements according to clause 7.4.

Page 9, 5.1

Replace the existing clause 5.1 with the new clause below.

5.1 Appearance**5.1.1 Appearance of plastic fittings**

When viewed without magnification, the internal and external surfaces of fittings shall be smooth, clean and free from scoring, cavities and other surface defects to an extent that would prevent conformance with this standard. The material shall not contain visible impurities. Slight variations in appearance of the colour shall be permitted. Each end of a fitting shall be square to its axis.

5.1.2 Appearance of metal fittings

When viewed without magnification, the internal and external surfaces of fittings shall be clean, free from any residues from the production (e. g. free from cast sand, grease or release agent) and shall have no sharp edges or cracks.

Page 9, 5.2

Replace the existing title of clause 5.2 with the new title below.

5.2 Opacity of plastic fittings

Page 9, 6.1, first sentence

Replace the existing 1st sentence of clause 6.1 with the new two sentences below.

Dimensions of plastic fittings shall be measured in accordance with ISO 3126.

Dimensions of metal fittings shall be measured in accordance with ISO 2768-1 and/or part 2.

Page 9, 6.2

Replace the existing title of clause 6.2 with the new title below.

6.2 Dimensions of plastic fittings

iTeh STANDARD PREVIEW
(standards.iteh.ai)

[SIST EN ISO 15877-3:2009/oprA2:2021](https://standards.iteh.ai/catalog/standards/sist/1461355b-d14d-412f-bff8-bc3d521eac44/sist-en-iso-15877-3-2009-opra2-2021)

<https://standards.iteh.ai/catalog/standards/sist/1461355b-d14d-412f-bff8-bc3d521eac44/sist-en-iso-15877-3-2009-opra2-2021>

ISO 15877-3:2009/DAM 2:2020(E)

Page 10, Table 3

Replace the existing Table 3 with the new Table 3 below, where larger dimensions (180 mm to 250 mm) have been added. The dimensions of 12 mm to 160 mm have been unchanged from the ISO 15877-3:2009 version.

Table 1 — Wall thicknesses of fitting bodies

Nominal diameter d_n	Pipe series		
	S 6,3	S 5	S 4
	Minimum wall thickness ^a e_{min}		
12	1,9	1,9	1,9
14	1,9	1,9	2,2
16	1,9	2,1	2,5
20	2,1	2,6	3,2
25	2,6	3,2	3,8
32	3,3	4,0	4,9
40	4,1	5,0	6,1
50	5,0	6,3	7,6
63	6,4	7,9	9,6
75	7,6	9,2	11,4
90	9,1	11,1	13,7
110	11,0	13,5	16,7
125	12,5	15,4	18,9
140	14,0	17,2	21,2
160	16,0	19,8	24,2
180	18,0	22,2	27,2
200	19,9	24,6	30,3
225	22,5	27,7	34,1
250	24,9	30,7	37,7

^a The values are rounded up to the first place of the decimals (i.e. the nearest higher 0,1 mm).

Page 12, Table 4

Replace the existing Table 4 with the new Table 4 below, where larger dimensions (180 mm to 250 mm) have been added. The dimensions of 12 mm to 160 mm have been unchanged from the ISO 15877-3:2009 version.

Table 4 — Calculated laying lengths (Z-lengths) and related tolerances of elbows, tees and couplers (double-sockets)

Dimensions in millimetres

Nominal diameter	Type of fitting					
	90° elbow	45° elbow	90° tee	45° tee		Double-socket
	Calculated Z-length and recommended deviations					
D_n	Z	Z	Z	Z	Z_1	Z
12	7 ±1	3,5 ±1	7 ±1	--	--	3 ±1
14	8 ±1	4 ±1	8 ±1	--	--	3 ±1
16	9 ±1	4,5 ±1	9 ±1	--	--	3 ±1
20	11 ±1	5 ±1	11 ±1	27 ±3	6 ⁺² ₋₁	3 ±1
25	13,5 ^{+1,2} ₋₁	6 ^{+1,2} ₋₁	13,5 ^{+1,2} ₋₁	33 ±3	7 ⁺² ₋₁	3 ^{+1,2} ₋₁
32	17 ^{+1,6} ₋₁	7,5 ^{+1,6} ₋₁	17 ^{+1,6} ₋₁	42 ⁺⁴ ₋₃	8 ⁺² ₋₁	3 ^{+1,6} ₋₁
40	21 ⁺² ₋₁	9,5 ⁺² ₋₁	21 ⁺² ₋₁	51 ⁺⁵ ₋₃	10 ⁺² ₋₁	3 ⁺² ₋₁
50	26 ^{+2,5} ₋₁	11,5 ^{+2,5} ₋₁	26 ^{+2,5} ₋₁	63 ⁺⁶ ₋₃	12 ⁺² ₋₁	3 ⁺² ₋₁
63	32,5 ^{+3,2} ₋₁	14 ^{+3,2} ₋₁	32,5 ^{+3,2} ₋₁	79 ⁺⁷ ₋₃	14 ⁺² ₋₁	3 ⁺² ₋₁
75	38,5 ⁺⁴ ₋₁	16,5 ⁺⁴ ₋₁	38,5 ⁺⁴ ₋₁	94 ⁺⁹ ₋₃	17 ⁺² ₋₁	4 ⁺² ₋₁
90	46 ⁺⁵ ₋₁	19,5 ⁺⁵ ₋₁	46 ⁺⁵ ₋₁	112 ⁺¹¹ ₋₃	20 ⁺³ ₋₁	5 ⁺² ₋₁
110	56 ⁺⁶ ₋₁	24 ⁺⁶ ₋₁	56 ⁺⁶ ₋₁	137 ⁺¹³ ₋₄	24 ⁺³ ₋₁	6 ⁺³ ₋₁
125	63,5 ⁺⁶ ₋₁	27 ⁺⁶ ₋₁	63,5 ⁺⁶ ₋₁	157 ⁺¹⁵ ₋₄	27 ⁺³ ₋₁	6 ⁺³ ₋₁
140	71 ⁺⁷ ₋₁	30 ⁺⁷ ₋₁	71 ⁺⁷ ₋₁	175 ⁺¹⁷ ₋₅	30 ⁺⁴ ₋₁	8 ⁺³ ₋₁
160	81 ⁺⁸ ₋₁	34 ⁺⁸ ₋₁	81 ⁺⁸ ₋₁	200 ⁺²⁰ ₋₆	35 ⁺⁴ ₋₁	8 ⁺⁴ ₋₁
180	91 ⁺⁸ ₋₁	39 ⁺⁸ ₋₁	91 ⁺⁸ ₋₁	224 ⁺²⁴ ₋₈	39 ⁺⁸ ₋₁	8 ⁺⁴ ₋₁
200	101 ⁺⁹ ₋₁	43 ⁺⁹ ₋₁	101 ⁺⁹ ₋₁	249 ⁺²⁵ ₋₈	43 ⁺⁹ ₋₁	8 ⁺⁵ ₋₁
225	114 ⁺¹⁰ ₋₁	48 ⁺¹⁰ ₋₁	114 ⁺¹⁰ ₋₁	280 ⁺²⁸ ₋₉	48 ⁺¹⁰ ₋₁	10 ⁺⁵ ₋₁
250	126 ⁺¹⁰ ₋₁	53 ⁺¹⁰ ₋₁	126 ⁺¹⁰ ₋₁	310 ⁺³¹ ₋₁₀	53 ⁺¹⁰ ₋₁	12 ⁺⁵ ₋₂