INTERNATIONAL STANDARD

ISO 15877-5

> Second edition 2009-03-15 **AMENDMENT 1** 2010-11-01

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

Part 5:

Fitness for purpose of the system

AMENDMENT 1

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

AMENDEMENT 1



Reference number ISO 15877-5:2009/Amd.1:2010(E)

PDF disclaimer

This PDF file may contain embedded typefaces. In accordance with Adobe's licensing policy, this file may be printed or viewed but shall not be edited unless the typefaces which are embedded are licensed to and installed on the computer performing the editing. In downloading this file, parties accept therein the responsibility of not infringing Adobe's licensing policy. The ISO Central Secretariat accepts no liability in this area.

Adobe is a trademark of Adobe Systems Incorporated.

Details of the software products used to create this PDF file can be found in the General Info relative to the file; the PDF-creation parameters were optimized for printing. Every care has been taken to ensure that the file is suitable for use by ISO member bodies. In the unlikely event that a problem relating to it is found, please inform the Central Secretariat at the address given below.



COPYRIGHT PROTECTED DOCUMENT

© ISO 2010

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office Case postale 56 • CH-1211 Geneva 20 Tel. + 41 22 749 01 11 Fax + 41 22 749 09 47 E-mail copyright@iso.org Web 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.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

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.

Amendment 1 to ISO 15877-5:2009 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 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).

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

Part 5:

Fitness for purpose of the system

AMENDMENT 1

PVC-C Type I piping systems for low-temperature heating applications have been used successfully in some countries for more than 30 years. Therefore, this amendment proposes to add to ISO 15877-5, Class 4 as defined in ISO 10508, for the conditions of service used in these countries (4 bar and 6 bar).

Page 4, 4.2.2, Table 3

Delete the existing Table 3, and insert:

Table 3 — Derivation of hydrostatic test pressure of solvent cement joints for PVC-C Type I

		Class 1	Class 2	Class 4
Maximum design temperatu	ıre			
T_{max}	°C	80	80	70
Design stress in the fitting material				
σ_{DF}	MPa	3,17	3,08	2,51
Test temperature				
T_{Test}	°C	80	80	80
Test duration				
t	h	≥ 3 000	≥ 3 000	≥ 3 000
Hydrostatic stress of the fit material	ting			
$\sigma_{\!F}$	MPa	6,14	6,14	6,14
Test pressure				
$p_{\rm J}$ for a design pressure, $p_{\rm D},$ of	in bars 4 bar 6 bar 8 bar 10 bar	7,7 11,6 15,5 19,4	8,0 12,0 15,9 19,9	9,8 14,7 Not applicable Not applicable
Number of test pieces		3	3	3

Page 5, 4.2.3, Table 5

Delete the existing Table 5, and insert:

Table 5 — Derivation of hydrostatic test pressure of mechanical joints for PVC-C Type I

		Class 1	Class 2	Class 4
Maximum design temperatu	re			
$T_{\sf max}$	°C	80	80	70
Design stress in the pipe ma	aterial			
$\sigma_{\sf DF}$	MPa	4,38	4,16	4,46
Test temperature				
$T_{\sf Test}$	°C	80	80	80
Test duration				
t	h	≥ 3 000	≥ 3 000	≥ 3 000
Hydrostatic stress of the pip	е			
$\sigma_{\!F}$	MPa	8,25	8,25	8,25
Test pressure				
$p_{\rm J}$ for a design pressure, $p_{\rm D}$, of	in bars 4 bar 6 bar 8 bar 10 bar	7,5 11,3 15,1 18,8	7,9 11,9 15,9 19,8	7,4 11,1 Not applicable Not applicable
Number of test pieces		3	3	3

ISO 15877-5:2009/Amd.1:2010(E)

ICS 23.040.20; 91.140.60

Price based on 2 pages