INTERNATIONAL STANDARD

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AMENDMENT 2
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Plastics piping systems for hot and cold water installations — Chlorinated poly(vinyl chloride) (PVC-C) —

Part 5: Fitness for purpose of the system

AMENDMENT 2

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 2

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Foreword

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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).

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Part 5: Fitness for purpose of the system

AMENDMENT 2

Normative references

Replace the reference to "EN 712" with the following:

ISO 3501, *Plastics piping systems — Mechanical joints between fittings and pressure pipes — Test method for resistance to pull-out under constant longitudinal force*

Replace the reference to "EN 12293" with the following:

ISO 19893, *Plastics piping systems — Thermoplastics pipes and fittings for hot and cold water — Test method for the resistance of mounted assemblies to temperature cycling*

Replace the reference to "EN 12294" with the following:

ISO 13056, *Plastics piping systems — Pressure systems for hot and cold water — Test method for leaktightness under vacuum*.

Replace the reference to "EN 12295" with the following:

ISO 19892, *Plastics piping systems — Thermoplastics pipes and fittings for hot and cold water — Test method for the resistance of joints to pressure cycling*

4.1, Table 1

Replace the reference to "EN 712" with "ISO 3501".

Replace the reference to "EN 12293" with "ISO 19893".

Replace the reference to "EN 12295" with "ISO 19892".

Replace the reference to "EN 12294" with "ISO 13056".

4.3

In the first sentence, replace the reference to "EN 712" with "ISO 3501".

4.4

In the first sentence, replace the reference to "EN 12293" with "ISO 19893".

In the third paragraph, replace the reference to "EN 12293" with "ISO 19893".

4.4, Table 8

Replace Table 8 with the following table:

Table 8 — Test parameters for thermal cycling for PVC-C

	Application class			
	Class 1	**Class 2**	**Class 4**	**Class 5**
Maximum design temperature, T_{max}, in °C	80	80	70	90
Highest test temperature, in °C	90	90	80	95
Lowest test temperature, in °C	20	20	20	20
Test pressure, in bars	p_D	p_D	p_D	p_D
Number of cycles for $d_n \leq 160$ mm[a]	5 000	5 000	5 000	5 000
Number of cycles for $d_n > 160$ mm[b]	500	500	500	500
Number of test pieces	One set of fittings in accordance with the configuration shown in ISO 19893[c]			

[a] Each cycle shall comprise $15\,^{+1}_{0}$ min at the highest test temperature and $15\,^{+1}_{0}$ min at the lowest (i.e. the duration of one cycle is $30\,^{+2}_{0}$ min).

[b] Each cycle shall comprise 150^{+5}_{0} min at the highest test temperature and 150^{+5}_{0} min at the lowest (i.e. the duration of one cycle is 300^{+10}_{0} min).

[c] The test arrangement consists of min. 4 pipe connectors or min. 6 pipe connections for $d_n > 160$ mm. The free pipe length between the joints shall not be less than 150 mm. A representative set of fittings shall be used in the assembly.