



SLOVENSKI STANDARD
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Straniščne školjke in straniščna oprema z integriranim sifonom

WC pans and WC suites with integral trap

WC-Becken und WC-Anlagen mit angeformtem Geruchverschluss

Cuvettes de WC et cuvettes à réservoir attendant à siphon intégré

Ta slovenski standard je istoveten z: EN 997:2012/FprA1

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91.140.70 Sanitarne naprave Sanitary installations

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Cuvettes de WC et cuvettes à réservoir attenant à siphon
intégré

WC-Becken und WC-Anlagen mit angeformtem
Geruchverschluss

This draft amendment is submitted to CEN members for unique acceptance procedure. It has been drawn up by the Technical Committee CEN/TC 163.

This draft amendment A1, if approved, will modify the European Standard EN 997:2012. If this draft becomes an amendment, CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for inclusion of this amendment into the relevant national standard without any alteration.

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COMITÉ EUROPÉEN DE NORMALISATION
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Foreword

This document (EN 997:2012/FprA1:2014) has been prepared by Technical Committee CEN/TC 163 “Sanitary appliances”, the secretariat of which is held by UNI.

This document is currently submitted to the Unique Acceptance Procedure.

This document has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association, and supports essential requirements of the EU Construction Products Regulation.

For relationship with EU Construction Products Regulation, see informative Annex ZA, which is an integral part of this document.

EN 997:2012/FprA1:2014 (E)**1 Modification to Clause 3, Terms and definitions**

At the end of the clause, add the following new term and definition:

“

3.40**product type**

construction product with a set of representative performance levels or classes in relation to its essential characteristics, produced using a given combination of raw materials or other elements in a specific production process

”.

2 Modification to 5.7.2.4.1, Test material

Replace the paragraph in the subclause with the following one:

“Single layer toilet paper with a saturation time of 15^{+15}_{-10} s verified by the basket method in accordance with Annex D. Individual sheets shall have a size of (130 ± 10) mm x (100 ± 10) mm. The mass per unit surface of the toilet paper shall be (30 ± 10) g/m².”.

3 Addition of a new Clause 7, Dangerous substances

Add the following new Clause 7 (and have the following clauses and subclauses accordingly renumbered):

“

7 Dangerous substances

National regulations on dangerous substances may require verification and declaration on release, and sometimes content, when construction products covered by this standard are placed on those markets.

In the absence of European harmonized test methods, verification and declaration on release/content should be done taking into account national provisions in the place of use.

NOTE An informative database covering European and national provisions on dangerous substances is available at the Construction website on EUROPA accessed through: <http://ec.europa.eu/enterprise/construction/cpd-ds/index.cfm>.”.

4 Modification to Clause 7, Marking

Replace the former Clause 7 (now to be renumbered as Clause 8) with the following one:

“

8 Marking

The intended use of close-coupled suites, one-piece and independent WC pans with integral trap is personal hygiene in accordance with the scope of this standard.

NOTE The intended use is also mentioned in Annex ZA, Tables ZA.1.1 and ZA.1.2. The abbreviation “PH” for the intended use personal hygiene might be used for CE-marking.

A schematic drawing of the product may optionally follow the abbreviation for personal hygiene.

EXAMPLE 1 Use of full text: Personal hygiene

EXAMPLE 2 Use of abbreviation: PH

EXAMPLE 3 Use of the abbreviation and the optional schematic drawing: PH



Close-coupled suites, one-piece and independent WC pans with integral trap belong always to one class and type at least. For each class and type a set of requirements to be tested (see 9.2.2) is defined. Due to this a close-coupled suite, one-piece and independent WC pan with integral trap can be described with a designation code which includes all fulfilled essential requirements.

The relevant product characteristics and the Essential Characteristics for close-coupled suites, one-piece and independent WC pans with integral trap including their abbreviations are given in Tables 4 and 5.

Table 4 — Characteristics and abbreviations for class 1 products

Abbreviation	Characteristics
EN 997	Number of European Standard for WCs and WC suites for product description
CL 1 - X	Class 1 product with fixed flush volumes (9 l, 7 l, 6 l, 5 l or 4 l)
(Y)	Minimum supply pressure (optionally)
A	Flushing cistern
C	Pressure flush valve
WL	Water tightness / leak tightness
CF	Capacity of flush
BP	Backflow prevention (foul air)
CA	Cleanability
VR(x)	Valve reliability (Class 1 close-coupled suites and one-piece WC pans only – category I or II)
LR	Load resistance
DA	Durability

Table 5 — Characteristics and abbreviations for class 2 products

Abbreviation	Characteristics
EN 997	Number of European Standard for WCs and WC suites for product description
CL 2 - Z	Class 2 product with flush volume ≤ 6 l and optionally minimum full flush volume (as Z)
WL	Water tightness / leak tightness
CF	Capacity of flush
BP	Backflow prevention (foul air)
VR	Valve reliability
CA	Cleanability
LR	Load resistance
DA	Durability

All close-coupled suites, one-piece and independent WC pans with integral trap shall be designated in accordance with the following system:

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Valve reliability (category I or II)

Flushing device and optionally minimum supply pressure

Minimum full flush volume, for class II optional

Flush volume for class I

Class of product

Number of standard

EN 997 — CL1 (or 2) — (X or Z) — A (or C) / Y — VR I (or II)
 WL — CF — BP — CA — VR — LR — DA

Watertightness / leaktightness

Capacity of flush

Backflow prevention (of foul air)

Cleanability

Valve reliability

Load resistance

Durability

The declaration of the characteristics of the second line is considered being covered by the declaration of the relevant class. However, the characteristics should be listed when one of those characteristics is not declared.

EXAMPLE 1 Class 1 independent WC pan for a flush volume of 5 l and 4 l when flushed by a flushing cistern, and for a flush volume of 6 l when flushed with a pressure flush valve. All Essential Characteristics specified for class 1 products in accordance with Annex ZA are satisfied:

EN 997 — CL 1 — 5/4 A — 6 C

EXAMPLE 2 Class 1 close coupled suite or one-piece WC pan with a flush volume of 6 l when flushed with a flushing cistern equipped with a valve of reliability category II. The requirements for class 2 products are also satisfied:

EN 997 — CL 1 — 6 — VR II + CL 2

If class 1 close-coupled suites components (WC pan and flushing cistern) are delivered separately, both components should be CE marked.

EXAMPLE 3 Class 2 WC suite for use with designated flushing cistern(s). All Essential Characteristics specified for class 2 products in accordance with Annex ZA are satisfied:

EN 997 — CL 2

EXAMPLE 4 Class 1 close coupled suite for a flush volume of 6 l when flushed with a flushing cistern equipped with a valve of reliability category II. The minimum supply pressure is specified by the manufacturer with 0,5 MPA (0,5 bar) optional. All Essential Characteristics specified for Class 1 products in accordance with Annex ZA are satisfied. The requirements for Class 2 products are also satisfied:

EN 997 — CL 1 — 6 / 0,5 — VR II + CL 2

EXAMPLE 5 Class 2 WC suite for use with designated flushing cistern(s). Minimum full flush volume 5,2 l is shown in the designation code as an option. All Essential Characteristics specified for class 2 products in accordance with Annex ZA are satisfied:

5 Modification to Clause 8, Evaluation of conformity

Replace the former Clause 8 (now to be renumbered as Clause 9) with the following one:

“

9 Assessment and verification of constancy of performance – AVCP

9.1 General

The compliance of close-coupled suites, one-piece and independent WC pans with integral trap with the requirements of this standard and with the performances declared by the manufacturer in the DoP shall be demonstrated by:

- determination of the product type (see 9.2);
- factory production control by the manufacturer (FPC), including product assessment (see 9.3).

The manufacturer shall always retain the overall control and shall have the necessary means to take responsibility for the conformity of the product with its declared performance(s).

9.2 Type testing

9.2.1 General

All performances related to characteristics included in this standard shall be determined when the manufacturer intends to declare the respective performances unless the standard gives provisions for declaring them without performing tests. (e.g. use of previously existing data, CWFT and conventionally accepted performance).

Assessment previously performed in accordance with the provisions of this standard, may be taken into account provided that they were made to the same or a more rigorous test method, under the same AVCP system on the same product or products of similar design, construction and functionality, such that the results are applicable to the product in question.

For the purposes of assessment, the manufacturer's products may be grouped into families, where it is considered that the results for one or more characteristics from any one product within the family are representative for that same characteristics for all products within that same family.

Products may be grouped in different families for different characteristics.

Reference to the assessment method standards should be made to allow the selection of a suitable representative sample.

In addition, the determination of the product type shall be performed for all characteristics included in the standard for which the manufacturer declares the performance:

- at the beginning of the production of a new or modified close-coupled suites, one-piece and independent WC pans with integral trap (unless a member of the same product range), or
- at the beginning of a new or modified method of production (where this may affect the stated properties); or
- they shall be repeated for the appropriate characteristic(s), whenever a change occurs in the modified close-coupled suites, one-piece and independent WC pans with integral trap design, in the raw material

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or in the supplier of the components, or in the method of production (subject to the definition of a family), which would affect significantly one or more of the characteristics.

Where components are used whose characteristics have already been determined, by the component manufacturer, on the basis of assessment methods of other product standards, these characteristics need not be re-assessed. The specifications of these components shall be documented.

Products bearing regulatory marking in accordance with appropriate harmonized European specifications may be presumed to have the performances declared in the DoP, although this does not replace the responsibility on the close-coupled suites, one-piece and independent WC pans with integral trap manufacturer to ensure that the close-coupled suites, one-piece and independent WC pans with integral trap as a whole is correctly manufactured and its component products have the declared performance values.

9.2.2 Test samples, testing and compliance criteria

The number of samples of close-coupled suites, one-piece and independent WC pans with integral trap to be tested/assessed shall be in accordance with Table 6 and/or Table 7.

Table 6 — Type testing for class 1 products

Characteristic to be tested	Assessment method according to clauses of this standard	Number of samples	Requirement and Compliance criteria
Depth of water seal	5.7.1	1	5.1
Wash of bowl	5.7.2.3	1	5.2.2
Flushing toilet paper	5.7.2.4	1	5.2.3
Flushing of 50 plastic balls	5.7.2.5	1	5.2.4
Oversplashing	5.7.2.6	1	5.2.5
After-flush volume	5.7.2.7	1	5.2.6
Water absorption	5.7.3	1	5.3
Static load	5.7.4	1	5.4
Flush volume(s) for flushing cisterns of suites	5.7.5.1	1	5.5.4
Leaktightness between cistern and bowl	5.7.5.2	1	5.5.5
Outlet valve leak tightness	5.7.5.3		5.5.6 ^a
Outlet valve reliability	5.7.5.4		5.5.7 ^a
Overflow	5.7.5.5	1	5.5.8
Safety margin – dimension <i>c</i>	5.7.5.6	1	5.5.9
Safety margin – dimension <i>a</i>	5.7.5.7	1	5.5.10
Dangerous substances	7	—	—

^a Where an outlet valve is used in several cisterns, the outlet valve need only be tested once unless there are design changes.