BS EN 14527:2016

BSI Standards Publication

Shower trays for domestic purposes

bsi.

National foreword

This British Standard is the UK implementation of EN 14527:2016. It supersedes BS EN 14527:2006+A1:2010 which is withdrawn.

The UK participation in its preparation was entrusted to Technical Committee B/503, Sanitary appliances.

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

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

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EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 14527

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Supersedes EN 14527:2006+A1:2010

English Version

Shower trays for domestic purposes

Receveurs de douche à usage domestique

Duschwannen für den Hausgebrauch

This European Standard was approved by CEN on 30 April 2016.

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EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

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European foreword

This document (EN 14527:2016) has been prepared by Technical Committee CEN/TC 163 “Sanitary appliances”, the secretariat of which is held by UNI.

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of an identical text or by endorsement, at the latest by December 2016, and conflicting national standards shall be withdrawn at the latest by March 2018.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN shall not be held responsible for identifying any or all such patent rights.

This document supersedes EN 14527:2006+A1:2010.

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 Regulation (EU) No 305/2011 for construction products (CPR).

For relationship with Regulation (EU) No 305/2011 see informative Annex ZA which is an integral part of this European Standard.

According to the CEN-CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

1 Scope

This European Standard specifies requirements, test methods and procedures for evaluation of conformity for shower trays used for domestic purposes which ensure that the product, when installed, used and maintained in accordance with the manufacturer's instructions, will satisfy cleanability and durability when used for personal hygiene.

This standard is applicable to all sizes and shapes of shower trays.

This standard does not cover shower trays for use with medical provisions.

NOTE 1 For the purpose of this standard the term “domestic purposes” includes use in hotels, accommodation for students, hospitals and similar buildings.

NOTE 2 Annex A lists characteristics of materials commonly used for manufacturing shower trays.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 251, *Shower trays - Connecting dimensions*

EN ISO 28706-1:2011, *Vitreous and porcelain enamels - Determination of resistance to chemical corrosion - Part 1: Determination of resistance to chemical corrosion by acids at room temperature (ISO 28706-1:2008)*

EN ISO 28706-2:2011, *Vitreous and porcelain enamels - Determination of resistance to chemical corrosion - Part 2: Determination of resistance to chemical corrosion by boiling acids, boiling neutral liquids and/or their vapours (ISO 28706-2:2008)*

EN ISO 28706-3:2011, *Vitreous and porcelain enamels - Determination of resistance to chemical corrosion - Part 3: Determination of resistance to chemical corrosion by alkaline liquids using a hexagonal vessel (ISO 28706-3:2008)*

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

3.1
shower tray
sanitary appliance that collects the water from washing of the human body under a shower and directs it to a waste outlet

3.2
cleanability
characteristics which allow the surface intended to come into contact with water to be non-absorbent and readily kept visually free from dirt and/or stains when subject to a maintenance regime which may include, when appropriate, specific instructions for use and care specified by the manufacturer

3.3
durability
attributes of materials and their surfaces intended to come into contact with water, which allow the anticipated working life of the product

4 Classification

Class 1: Products complying with the requirements of Clause 5.

Class 2: Products complying with the requirements of Clause 6.

5 Requirements for class 1 products

5.1 General

The manufacturer shall provide instructions with each shower tray covering installation and care.

NOTE Annex B gives advice which manufacturers can include in their instructions.

5.2 Cleanability

5.2.1 Appearance of surface

When a shower tray is inspected under strong and oblique illumination, the surfaces intended to come into contact with water shall be visibly smooth, non-absorbent and free from inaccessible corners that would impair cleanability.

NOTE Surfaces with cracks, chips, crazing and other similar defects are not considered to be smooth.

5.2.2 Drainage of water

Shower trays shall have at least one waste outlet hole. The dimensions of the waste outlet hole shall comply with the requirements of EN 251. Other dimensions are permissible, if the manufacturer provides or recommends a suitable waste fitting.

All water shall empty from the shower tray unless prevented by surface tension.

5.3 Durability

5.3.1 General

Conformance with the requirements of 5.3.2 to 5.3.4 give an assurance of durability.

5.3.2 Stability of bottom

When tested in accordance with 8.1, there shall be no permanent distortion or other defects, e.g. cracks, such that the requirements of 5.2.2 are not satisfied.

5.3.3 Resistance to chemicals and staining agents

5.3.3.1 General

When shower trays, other than those made from the materials specified in 5.3.3.2, are tested in accordance with 8.2, the surface finish shall be unaffected by the chemicals and staining agents specified in Table 1 except for superficial surface changes which are removable with water or with water and the specified abrasive agent.

Experience has shown that shower trays made of glazed ceramics comply with these requirements.

Table 1 — Chemicals and staining agents

Family	Product
Acids	Acetic acid (CH_3COOH), 10 % V/V
Alkalines	Sodium hydroxide (NaOH), 5 % m/m
Alcohols	Ethanol (C_2H_5OH), 70 % V/V
Bleaches	Sodium hypochlorite (NaOCI), 5 % active chlorine (CI_2) [a]
Staining agents	Methylene blue, 1 % m/m
[a] The above specified bleach may be replaced by sodium percarbonate ($2Na_2CO_3 \cdot 3H_2O_2$) prepared as follows: Dissolve 1 g of a commercial available powdery bleach based on sodium percarbonate containing 15 % to 30 % of the active component in 100 ml de-ionized water at room temperature.	

5.3.3.2 Particular requirements for shower trays made of enamelled steel and enamelled cast iron

Shower trays made from enamelled steel and enamelled cast iron shall comply with the requirements given in Table 2.

Table 2 — Requirements for shower trays made of enamelled steel and enamelled cast iron

Requirement	Parameter	Test method
Resistance to boiling water	< 10 g/m²	EN ISO 28706-2:2011, Clause 13
Resistance to cold citric acid	Class 2[a]	EN ISO 28706-1:2011, Clause 9
Resistance to boiling citric acid	< 5 g/m²	EN ISO 28706-2:2011, Clause 10
Resistance to cold sulphuric acid	Class 2[a]	EN ISO 28706-1:2011, Clause 10
Resistance to alkali solutions	< 8 g/m²	Testing in accordance with EN ISO 28706-2:2011, Clause 14 Test solution in accordance with EN ISO 28706-3:2011, Clause 9 Duration of test: 2,5 h
[a] Class 2 refers to EN ISO 28706-1		

5.3.4 Resistance to temperature changes

When tested in accordance with 8.3, all shower trays shall show no evidence of distortion or other defects, e.g. crazing, which will impair their cleanability.

Experience has shown that shower trays manufactured from the stainless steel grades listed in Annex A, enamelled steel, enamelled cast iron and glazed ceramics comply with this requirement.

6 Requirements for class 2 products

6.1 General

The manufacturer shall provide instructions with each shower tray covering installation and care.

NOTE Annex B gives advice which manufacturers can include in their instructions.

6.2 Cleanability

6.2.1 Appearance of surface

When a shower tray is inspected under strong and oblique illumination, the surfaces intended to come into contact with water shall be visibly smooth, non-absorbent and free from inaccessible corners that would impair the cleanability.

NOTE Surfaces with cracks, chips, crazing and other similar defects are not considered to be smooth.

6.2.2 Drainage of water

Shower trays shall have at least one waste outlet hole. The dimensions of the waste outlet hole shall comply with the requirements of EN 251. Other dimensions are permissible, if the manufacturer provides or recommends a suitable waste fitting.

All water shall empty from the shower tray unless prevented by surface tension.

6.3 Durability

6.3.1 General

Shower trays shall be readily cleanable for their anticipated working life when normal cleaning and maintenance is carried out.

6.3.2 Materials

Experience has shown that shower trays made from plastics materials, enamelled steel, enamelled cast iron, stainless steel, glazed ceramics or glass and their surfaces intended to come into contact with water have the properties described in 6.3.1.

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:// http://ec.europa.eu/growth/tools-databases/cp-ds/*.

8 Test methods

8.1 Stability of the bottom of the shower tray

8.1.1 Test apparatus

8.1.1.1 An adequate number of reinforced cloth bags, each with dimensions of approximately 500 mm x 200 mm filled with lead shot, iron shot or sand of a mass of 25 $^{+0,5}_{0}$ kg or 12,5 $^{+0,5}_{0}$ kg.

8.1.2 Determination of the load

The load to be applied for the test shall comprise the adequate number of cloth bags (see 8.1.1) equating to 100 kg.

8.1.3 Procedure

— Install the shower tray in accordance with the manufacturer's installation instructions.

— Position the adequate number of bags in the geometric centre of shower tray as shown in Figure 1.

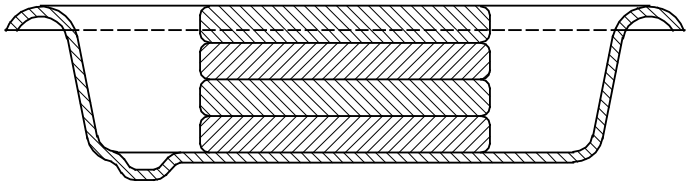


Figure 1 — Load application

— Leave the load for 10 $^{+1}_{0}$ min.

— On completion of the tests remove all the bags.

— After 10 $^{+1}_{0}$ min verify that the shower tray complies with 5.3.2 by pouring copious amounts of water coloured in contrast with that of the shower tray around all the inner surface of the sides of the showering area.

8.2 Chemical resistance

8.2.1 Principle

The test is intended to give an indication of the effect of commonly used household chemicals, staining agents and cleansing agents.

8.2.2 Test apparatus and chemicals

8.2.2.1 Chemicals and stains:

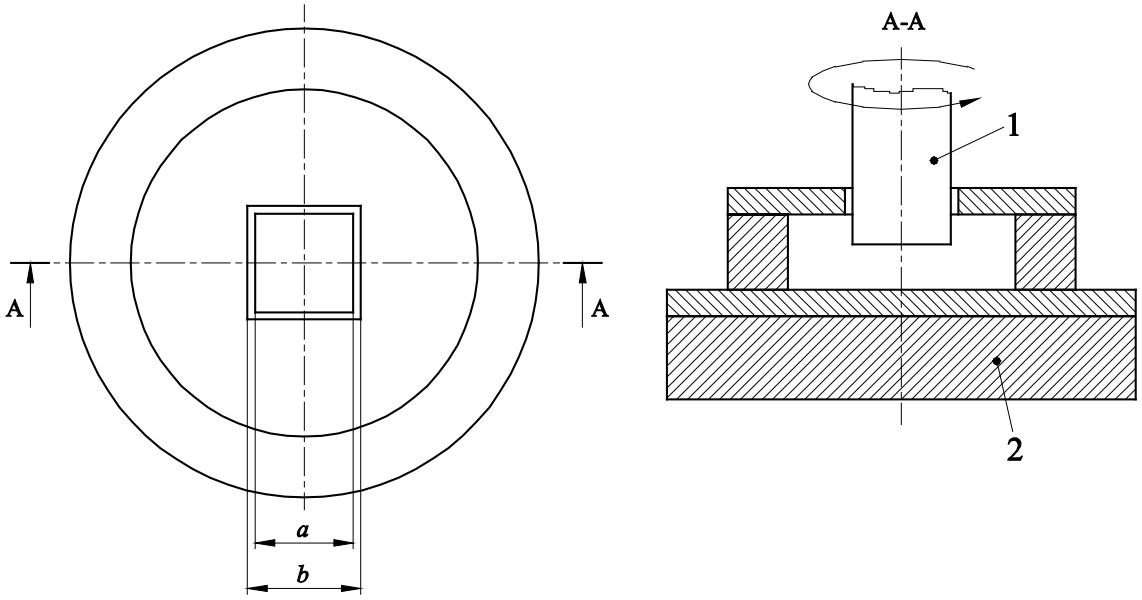
A list of chemicals and stains to be used is specified in Table 1. Each chemical solution shall be prepared immediately before use with de-ionized water, and it shall be applied at a temperature (23 ± 5) °C.

8.2.2.2 Borosilicate watch glasses: 40 mm nominal diameter.

8.2.2.3 Pipettes.

8.2.2.4 Cleaning device:

A typical cleaning device is shown in Figure 2. It consists of a disc of 75 mm diameter, faced with synthetic flexible open cell foam 15 mm in thickness. The device is driven by means of a square axle which fits loosely into the device. Any device having a mass of (1 000 ± 50) g can be used.



Key

1 square axle ($a = b - 1$ mm)

2 disc faced with foam

Figure 2 — Cleaning device

8.2.2.5 Abrasive comprising 12 h-alumina (suspension of aluminium oxide in water)[1)].

8.2.3 Test specimens

Carry out the tests on the bottom, and on a flat part of the wall of the shower tray or on test specimens cut from these areas.

8.2.4 Procedure

— Select an area to be tested.

— Use each test area only once for each application. Clean the test area thoroughly with hot soapy water, rinse and wipe dry with a clean dry cloth.

— At each of the test areas deposit a drop of the test solution. Cover the drop with a watch glass concave face downwards. The drop size shall be such that it is completely covered by the watch glass. Leave for (120 ± 5) min with the test area protected from sunlight.

— Thoroughly rinse the test areas with de-ionized water and visually check for any adverse change in appearance. If any deterioration is noticed, dip the foam disc in de-ionized water and place it on the surface that was tested. Rotate the cleaning device at a speed of 60 min^{-1}. Clean for 30 revolutions.

— Rinse with de-ionized water, dry and visually re-examine the test areas. If any deterioration persists, repeat the cleaning process using the abrasive comprising 12 h-aluminia suspended in water and re-examine.

1) A suitable product is available from MERCK Eurolab-Prolabo, 54 rue Roger Salengro, 94126 Fontenay sous Bois CEDEX, France, as DURMAX™ under product description N° 20993. This information is given for the convenience of users of this standard and does not constitute an endorsement by CEN of this product.

8.2.5 Expression of results

a) Note the exact test area.

b) Record:

1) whether or not the reagent causes a stain or deterioration of the surface;

2) whether or not such stain or deterioration is removed, and if so, whether with water or with water including abrasive agent.

8.3 Resistance to temperature changes

8.3.1 Test apparatus

8.3.1.1 Water supply capable of discharging cold and hot water with temperatures, flow rates and volumes as defined in 8.3.2.

8.3.1.2 Shower handset.

8.3.1.3 Thermometer with an accuracy of 1 % at the measured values.

8.3.1.4 Flow meter for measuring a flow rate of water at (0,15 ± 0,015) l/s.

8.3.2 Procedure

— By means of the shower handset 1 m above the floor of the shower tray in such a way that the water spray impinges on the edge of the shower tray and at least half of the shower tray floor, discharge (90 ± 1) l of water with a temperature of (75 ± 2) °C and a flow rate of (0,15 ± 0,015) l/s with the waste outlet hole open.

— Discharge immediately afterwards the same quantity of cold water with a temperature of (12 ± 3) °C and at the same flow rate as before with the waste outlet hole open.

— Repeat this procedure 100 times without interruption.

— After the last cycle apply over the surface, by means of a sponge or a paint brush, a solution of eosine in water of 100 g/l to which is added 1 cm^3/l of liquid detergent. Leave for $5\,^{+1}_{0}$ min, then remove the eosine from the surface by cleaning with a damp cloth.

— Visually check for any adverse change in appearance and for any trace of eosine.

— Record any failure to comply with the requirements of 5.3.4.

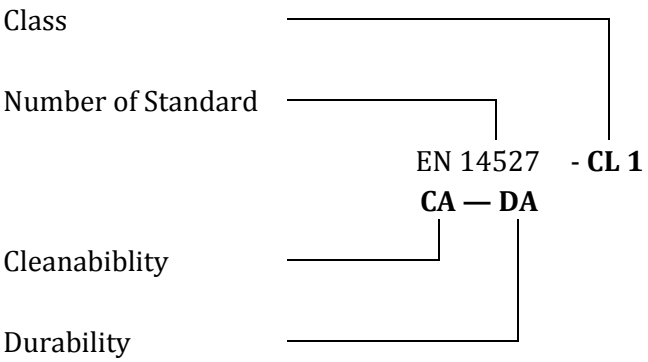
9 Marking, labelling and packaging

The relevant Essential Characteristics for shower trays including their abbreviations are given in Table 3.

Table 3 — Characteristics and abbreviations

Abbreviation	Characteristics
EN 14527	Number of European Standard for shower trays for product description
CA	Cleanability
CL 1	Class 1 product complying with the requirement of Clause 5
CL 2	Class 2 product complying with the requirement of Clause 6
DA	Durability

All shower trays shall be designated in accordance with the following system:



The second line of the designation code can be omitted when those characteristics are fulfilled.

EXAMPLE 1 For a shower tray of Class 1 where all Essential Characteristics specified in accordance with Annex ZA are satisfied.

EN 14527 — CL 1

EXAMPLE 2 For a shower tray of both Class 1 and Class 2 where all Essential Characteristics specified in accordance with Annex ZA are satisfied.

EN 14527 — CL 1 + CL 2

NOTE For CE marking, see Annex ZA.

10 Assessment and verification of constancy of performance - AVCP

10.1 General

The compliance of a shower tray with the requirements of this standard and with the performances declared by the manufacturer in the Declaration of Performance (DoP) shall be demonstrated by:

— determination of the product type (see 10.2);

— factory production control by the manufacturer (FPC), including product assessment (see 10.3).

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).

10.2 Type testing

10.2.1 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 shower tray (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 shower tray design, in the raw material 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 of the shower tray manufacturer to ensure that the shower tray as a whole is correctly manufactured and its component products have the declared performance values.

10.2.2 Samples, testing and compliance criteria

The shower tray shall be subjected to and pass the relevant tests in Table 4.

Table 4 — Type testing for class 1 products

Characteristics to be tested	Assessment method according to subclauses of this standard	Number of samples	Compliance criteria
Appearance of surface	5.2.1	1	5.2.1
Drainage of water	5.2.2	1	5.2.2
Stability of bottom	8.1	1	5.3.2.
Resistance against chemicals and staining agents	8.2	1	5.3.3.1
Requirements of shower trays made from enamelled steel and cast iron	5.3.3.2	1	5.3.3.2
Resistance to temperatures changes	8.3	1	5.3.4

Table 5 — Type testing for class 2 products

Characteristics to be tested	Assessment method according to subclauses of this standard	Number of samples	Compliance criteria
Appearance of surface	6.2.1	1	6.2.1
Drainage of water	6.2.2	1	6.2.2
Durability	6.3	1	6.3

10.3 Factory production control

10.3.1 General

The manufacturer shall establish, document and maintain a factory production control (FPC) system to ensure that the products placed on the market conform with the stated performance characteristics.

The FPC system shall consist of procedures, regular inspections and tests and/or assessments and the use of the results to control raw and other incoming materials or components, equipment, the production process and the product.

The results of inspections, tests or assessments requiring action shall be recorded. The action to be taken when control values or criteria are not met shall be recorded.

NOTE Manufacturers having an FPC system, which complies with EN ISO 9001 Standard and which addresses the provisions of the present European standard, are considered as satisfying the FPC requirements of the Regulation (EU) No 305/2011.

10.3.2 Equipment

10.3.2.1 Testing

All weighing, measuring and testing equipment shall be calibrated and regularly inspected according to documented procedures, frequencies and criteria.

10.3.2.2 Manufacturing

All equipment used in the manufacturing process shall be regularly inspected and maintained to ensure use, wear or failure does not cause inconsistency in the manufacturing process. Inspections and maintenance shall be carried out and recorded in accordance with the manufacturer’s written procedures and the records retained for the period defined in the manufacturer's FPC procedures.

10.3.3 Raw materials and components

The specifications of all incoming raw materials and components shall be documented, as shall the inspection scheme for ensuring their conformity. In cases where supplied kit components are used, the constancy of performance system of the component shall be that given in the appropriate harmonized technical specification for that component.

10.3.4 Product testing and assessment

The manufacturer shall establish and document procedures to ensure that the stated values of all of the characteristics are maintained.

10.3.5 Non-conforming products

The manufacturer shall have written procedures which specify how non-conforming products shall be dealt with. Any such events shall be recorded as they occur and these records shall be kept for the period defined in the manufacturer's written procedures.

Where the product fails to satisfy the acceptance criteria, the provisions for non-conforming products shall apply, the necessary corrective action(s) shall immediately be taken and the products or batches not conforming shall be isolated and properly identified.

Once the fault has been corrected, the test or verification in question shall be repeated.

The results of controls and tests shall be properly recorded. The product description, date of manufacture, test method adopted, test results and acceptance criteria shall be entered in the records under the signature of the person responsible for the control/test.

With regard to any control result not meeting the requirements of this European Standard, the corrective measures taken to rectify the situation (e.g. a further test carried out, modification of manufacturing process, throwing away or putting right of product) shall be indicated in the records.

10.3.6 Corrective action

The manufacturer shall have documented procedures that instigate action to eliminate the cause of non-conformities in order to prevent recurrence.

Annex A
(informative)

Materials

A.1 Synthetic materials

Synthetic sanitaryware is characterized by being made from plastics comprising pure synthetic polymers, or a polymer alloy, or a polymer composite with added fillers and/or fibres.

Synthetic sanitaryware can comprise one or more layers of the above mentioned plastics materials.

Plastics materials may contain auxiliary products, such as colours, stabilizers, antioxidants, U.V. absorbers and crosslinking agents.

When sanitaryware made from plastics has one or more layers of composites, the fillers and/or the fibres may be, by weight, the major part of the material.

See also EN 263, EN 13558 and EN 13559.

A.2 Ceramic materials

A.2.1 Vitreous china

Material made of a compact vitrified body, white or artificially coloured, with a water absorption coefficient less than 0,75 %, covered with an opaque or translucent glaze which can be white or coloured.

The body is usually made of kaolin, quartz, clay, sodium or potassium feldspars.

The glaze is usually made of sodium, potassium or calcium aluminium-silicates.

A.2.2 Fireclay

Material made of a porous body, generally covered with a white or coloured engobe and an opaque or translucent glaze which can be white or coloured.

The body is made of clay and grog (clacined clay). The engobe, where it exists, is prepared with kaolins, clays, quartz, sodic or potassic feldspars.

The glaze is usually made of sodium, potassium or calcium aluminium-silicates.

A.3 Enamelled materials

A.3.1 Enamelled cast iron

A glazed surface finish produced by the application of a powdered inorganic glass either dry or suspended in water, to cast iron parts, and its subsequent fusion by heat.

A.3.2 Enamelled steel

A glazed surface finish produced by the application of a powdered inorganic glass either dry or suspended in water, to sheet steel parts, and its subsequent fusion by heat.

A.4 Stainless steel

Designations for stainless steel grades used for manufacturing shower trays:

1.4510, 1.4520, 1.4301, 1.4401, 1.4521 as listed in EN 10088-2.

A.5 Natural stone

The term “natural stone” is defined in EN 12407 and EN 12670.

Any type of natural stone may be used if it complies with the specifications of these Standards.

Annex B
(informative)

Surface of shower trays

When wet, the surface of the majority of shower trays will show an increase in the potential for slipping. This is particularly the case when soap, shampoo, bath oil, etc. are used. It is important that designers, installers and users are aware of this.

Annex ZA
(informative)

Clauses of this European Standard addressing the provisions of the EU Construction Products Regulation

ZA.1 Scope and relevant characteristics

This European Standard has been prepared under Mandate M110 Sanitary Appliances as amended by M139 given to CEN by the European Commission and the European Free Trade Association.

If this European standard is cited in the Official Journal of the European Union (OJEU), the clauses of this standard, shown in this annex, are considered to meet the provisions of the relevant mandate, under the Regulation (EU) No. 305/2011.

This annex deals with the CE marking of the shower trays intended for the use indicated in Tables ZA.1.1 and ZA.1.2 and shows the relevant clauses applicable.

This annex has the same scope as in Clause 1 of this standard related to the aspects covered by the mandate and is defined by Tables ZA.1.1 and ZA.1.2.

Table ZA.1.1 — Scope and relevant clauses for class 1 products

Construction product: Shower trays of class 1 as covered by scope of this standard Intended use: Personal hygiene			
Essential Characteristics	Requirement clauses in this European Standard	Mandated levels and/or classes	Notes (Expression at results)
Cleanability	5.2	None	Pass/fail
Durability	5.3	None	Pass/fail

Table ZA.1.2 — Scope and relevant clauses for class 2 products

Construction product: Shower trays of class 2 as covered by scope of this standard Intended use: Personal hygiene			
Essential Characteristics	Requirement clauses in this European Standard	Mandated levels and/or classes	Notes (Expression at results)
Cleanability	6.2	None	Pass/fail
Durability	6.3	None	Pass/fail

The declaration of the product performance related to certain essential characteristics is not required in those Member States (MS) where there are no regulatory requirements on these essential characteristics for the intended use of the product.

In this case, manufacturers placing their products on the market of these MS are not obliged to determine nor declare the performance of their products with regard to these essential characteristics and the option “No performance determined” (NPD) in the information accompanying the CE marking and in the declaration of performance (see ZA.3) may be used for those essential characteristics.

ZA.2 Procedure for assessment and verification of constancy of performance (AVCP) of shower trays

ZA.2.1 System of AVCP

The AVCP system of shower trays indicated in Tables ZA.1.1 and ZA.1.2, established by EC Decision(s) 2001/596/EC and 2002/592/EC is shown in Table ZA.2 for the indicated intended use(s) and relevant level(s) or class(es) of performance.

Table ZA.2 — System(s) of AVCP

Products	Intended uses	Level(s) or class(es) of performance	AVCP system(s)
Shower tray	Personal hygiene	-	4
System 4: See Regulation (EU) No. 305/2011 (CPR) Annex V, 1.5			

The AVCP of the shower trays in Tables ZA.1.1 and ZA.1.2 shall be according to the AVCP procedures indicated in Table ZA.3 resulting from application of the clauses of this or other European Standard indicated therein. The content of tasks of the notified body shall be limited to those essential characteristics as provided for, if any, in Annex III of the relevant mandate and to those that the manufacturer intends to declare.

Table ZA.3 — Assignment of AVCP tasks for shower trays under system 4

Tasks		Content of the task	AVCP clauses to apply
Tasks for the manufacturer	Determination of the product-type on the basis of type testing, type calculation, tabulated values or descriptive documentation of the product	All characteristics of Table ZA.1.1 or Table ZA.1.2	10.2
	Factory production control	Parameters related to all characteristics of Table ZA.1.1 or Table ZA.1.2	10.3

ZA.2.2 Declaration of performance (DoP)

ZA.2.2.1 General

The manufacturer draws up the DoP and affixes the CE marking on the basis of the different AVCP systems set out in Annex V of the Regulation (EU) No 305/2011, amended by the Regulation No 568/2014:

— the factory production control carried out by the manufacturer

— the determination by the manufacturer of the product type on the basis of type testing, type calculation, tabulated values or descriptive documentation of the product.

ZA.2.2.2 Content

The model of the DoP is provided in Annex III of the Regulation (EU) No 305/2011, amended by the Regulation No 574/2014.

According to this Regulation, the DoP shall contain, in particular, the following information:

— the reference of the product-type for which the declaration of performance has been drawn up;

— the AVCP system or systems of the construction product, as set out in Annex V of the CPR, amended by the Regulation No 568/2014;

— the reference number and date of issue of the harmonized standard which has been used for the assessment of each essential characteristic;

— where applicable, the reference number of the Specific Technical Documentation used and the requirements with which the manufacturer claims the product complies.

The DoP shall in addition contain:

(a) the intended use or uses for the construction product, in accordance with the applicable harmonized technical specification;

(b) the list of essential characteristics, as determined in the harmonized technical specification for the declared intended use or uses;

(c) the performance of at least one of the essential characteristics of the construction product, relevant for the declared intended use or uses;

(d) where applicable, the performance of the construction product, by levels or classes, or in a description, if necessary based on a calculation in relation to its essential characteristics determined in accordance with the Commission determination regarding those essential characteristics for which the manufacturer shall declare the performance of the product when it is placed on the market or the Commission determination regarding threshold levels for the performance in relation to the essential characteristics to be declared.

(e) the performance of those essential characteristics of the construction product which are related to the intended use or uses, taking into consideration the provisions in relation to the intended use or uses where the manufacturer intends the product to be made available on the market;

(f) for the listed essential characteristics for which no performance is declared, the letters “NPD” (No Performance Determined);

Regarding the supply of the DoP, Article 7 of the Regulation (EU) No 305/2011 applies.

The information referred to in Article 31 or, as the case may be, in Article 33 of Regulation (EC) No 1907/2006, (REACH) shall be provided together with the DoP.

ZA.2.2.3 Example of DoP

The following give examples of a filled-in DoP for shower trays.

EXAMPLE 1 Full text version of DoP with attached list of product numbers(identification codes) for this DoP:

DECLARATION OF PERFORMANCE
No. CPR-14527

1. Unique identification code of the product-type:

For product number(s) see list attached.

2. Type, batch or serial number or any other element allowing identification of the construction product as required under Article 11(4):

Shower tray

3. Intended use or uses of the construction product, in accordance with the applicable harmonized technical specification, as foreseen by the manufacturer:

Personal hygiene (PH)

4. Name, registered trade name or registered trade mark and contact address of the manufacturer as required under Article 11(5):

AnyCo SA,
PO Box 21
B-1050 Brussels, Belgium
Tel. +32987654321
Fax: +32123456789
Email: anyco.sa@provider.be

5. Where applicable, name and contact address of the authorized representative whose mandate covers the tasks specified in Article 12(2):

Anyone Ltd
Flower St. 24
West Hamfordshire
AB1 2CD United Kingdom
Tel. +44987654321
Fax: +44123456789
e-mail: anyone.ltd@provider.uk

6. System or systems of assessment and verification of constancy of performance of the construction product as set out in CPR, Annex V:

System 4

7. In case of the declaration of performance concerning a construction product covered by a harmonized standard.

Determination of the product type on the basis of type testing, type calculation, tabulated values or descriptive documentation of the product;

8. Declared performance

Essential characteristics [a]	Performance	Harmonized technical specification
Cleanability	**Pass**	EN 14527:2016
Durability	**Pass**	
[a] Specific performance of essential requirements are given by the designation code as cited in the attachment.		

9. The performance of the product identified in points 1 and 2 is in conformity with the declared performance in point 8.

This declaration of performance is issued under the sole responsibility of the manufacturer identified in point 4.

Signed for and on behalf of the manufacturer by:

……
(name and function)

…… ……
(place and date of issue) (signature)

Attachment to Declaration of Performance

No. CPR-14228

Product code no.	**Product name (Optional)**	**Description (Optional)**	**CE marking (Optional)**	**Digits (Optional)**
A1234XYZ	Square 800 × 800	Rectangular shower tray	EN 14527 — **CL 1**	
…..				

……

(Name and function)

…… ……

(place and date of issue) (signature)

EXAMPLE 2 Short-text version of DoP with attached list of product numbers (identification codes) for this DoP:

Declaration of Performance

No. CPR-14527

1. **For product number (identification code) see list attached.**
2. **Shower tray(s)**
3. **Personal hygiene (PH)**
4. **Any Co Ltd**

   Any Street 1

   12345 Example City

   Country

   Ph.: +49 987-8654-0

   Fax: +49 987-8654-1

   info@sanitary-plant.com
5. **n.a.**
6. **System 4**
7. **Determination of product type and factory production control by the manufacturer**
8. **Declared performance**

Essential Characteristics[a]	**Performance**	**Harmonized technical specification**
CA	**Pass**	EN 14527:2016
DA	**Pass**	
[a] Specific performance of Essential Characteristics are given by the designation code as cited in the attachment.		

9. The performance of the product identified in points 1 and 2 is in conformity with the declared performance in point 8.

   This declaration of performance is issued under the sole responsibility of the manufacturer identified in point 4.

   Signed for and on behalf of the manufacturer by:

……

(Name and function)

…… ……

(place and date of issue) (signature)

Attachment to Declaration of Performance

No. CPR-14228

Product code no.	**Product name (Optional)**	**Description (Optional)**	**CE marking (Optional)**	**Digits (Optional)**
A1234XYZ	Square 800 × 800	Rectangular shower tray	EN 14527 — **CL 1**	

……

(Name and function)

…… ……

(place and date of issue) (signature)

ZA.3 CE marking and labelling

The CE marking symbol shall be in accordance with the general principles set out in Article 30 of Regulation (EC) No 765/2008 and shall be affixed visibly, legibly and indelibly:

— to the product

or

— to a label attached to it.

Where this is not possible or not warranted on account of the nature of the product, it shall be affixed:

— to the packaging

or

— to the accompanying documents.

The CE marking shall be followed by:

— the last two digits of the year in which it was first affixed;

— the name and the registered address of the manufacturer, or the identifying mark allowing identification of the name and address of the manufacturer easily and without any ambiguity,

— the unique identification code of the product-type

— the reference number of the declaration of performance

— the level or class of the performance declared

— the reference to the harmonized technical specification applied

— the intended use as laid down in the harmonized technical specification applied.

The CE marking shall be affixed before the construction product is placed on the market. It may be followed by a pictogram or any other mark notably indicating a special risk or use.

Figure ZA.1 gives an example of the information related to products subject to AVCP system 4 to be given on the product or to a label attached to it or to the packaging or to the accompanying documents.

CE	*CE marking, consisting of the "CE"-symbol*
AnyCo Ltd, PO Box 21, B-1050, Brussels, Belgium 16 001CPR2013–07–14	*name and the registered address of the manufacturer, or identifying mark* *Last two digits of the year in which the marking was first affixed* *Reference number of the DoP*
A1234XYZ PH EN 14527 **CL 1**	*Unique identification code of the product-type* *Intended use of the product as laid down in the European Standard applied* *No. of European standard applied, as referenced in OJEU* *Level or class of the performance declared*

Figure ZA.1 — Example CE marking information of products under AVCP system 4 to be given on the product or to a label attached to it or to the packaging or to the accompanying documents

Bibliography

[1] EN 263, *Sanitary appliances - Crosslinked cast acrylic sheets for baths and shower trays for domestic purposes*

[2] EN 10088-2, *Stainless steels - Part 2: Technical delivery conditions for sheet/plate and strip of corrosion resisting steels for general purposes*

[3] EN 12407, *Natural stone test methods - Petrographic examination*

[4] EN 12670, *Natural stone - Terminology*

[5] EN 13558, *Specifications for impact modified extruded acrylic sheets for shower trays for domestic purposes*

[6] EN 13559, *Specifications for impact modified coextruded ABS/Acrylic sheets for baths and shower trays for domestic purposes*

[7] EN ISO 9001, *Quality management systems – Requirements (ISO 9001)*

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