

## SANITARY APPLIANCES

# Technical document 017-01

Technical specifications additional to standards

Technical document 017-01 rev. 01

12/01/2022

CSTB (Centre Scientifique et Technique du Bâtiment), a public establishment supporting innovation in construction, has four key activities—research, expertise, assessment and dissemination of knowledge—organised to meet the challenges of the ecological and energy transition in the construction sector. Its field of expertise includes construction materials, buildings and their integration into districts and towns. With over 900 employees, its subsidiaries and networks of national, European and international partners, the CSTB group works for all the stakeholders in the construction sector to advance building quality and safety.

Any reproduction or representation, in whole or in part, by whatever means, of the pages published in this technical document and executed without the authorisation of CSTB is illegal and constitutes a counterfeit. The only authorised exceptions are 1) reproductions strictly reserved for the use of the typist and not intended for any collective use or 2) analyses and short quotations required due to the scientific or informational nature of the work in which they appear (article L.122-5 of the Intellectual Property Code). This document has been drawn up under the initiative and direction of CSTB, which has gathered the opinions of all interested parties

© CSTB

## MODIFICATION HISTORY

<b>Revision no.</b>	<b>Application date</b>	<b>Modifications</b>
00	21/12/2018	Update to the document layout and reference
01	12/01/2022	Addition of the standard NF EN 13310 for the special disposition on abrasion resistance test Addition of a special disposition for NF EN 997 about the tolerance on toilet paper dimension

## Contents

1.	Special dispositions to standards .....	5
----	---	---

# 1. Special dispositions to standards

## Special dispositions to Standard NF EN 31

- Plane surface for seal: this surface shall be perpendicular to the centre line of the upper cone on which the plug is born: a defect of under 2 mm is allowed. Since the washbasin is installed level on a vertical support that is itself level, the planeness defect is measured relative to the horizontal using a shim (it must be impossible to insert a 2 mm shim) or any other appropriate means.
- Since dimension d1 (diameter of outside holes in the case of a 3-hole valve fitting) is difficult to check if the valve fitting hole is pre-drilled, it is acceptable to check that the pre-drilling diameter is more than 32 mm, which guarantees a 32 mm hole for the valve fitting hole.
- Dimension t does not have to be respected if the washbasin is equipped with an overflow, on the condition that an NF drain is provided.

## Special disposition to Standard NF EN 33

- The orifice of the pan outlet for "baby" WC pans is  $84 \pm 5$  mm.

## Special dispositions to Standard NF EN 198 and NF EN 15719

- During static load tests, the dial gauge placed at the centre of the bath may be moved if the bath is fitted with a central stand.
- Thermal shock tests on baths:  
If the cold water temperature is higher than 15°C (test temperature in standard  $12^{\circ}\text{C} \pm 3^{\circ}\text{C}$ ), the test is considered to be satisfactory if the difference between the temperature of the hot water and the cold water remains within the temperature difference given in the standard ( $75^{\circ}\text{C} \pm 2^{\circ}\text{C}$  for test A and  $60^{\circ}\text{C} \pm 2^{\circ}\text{C}$  for test B).  
The test is non-conforming if the cold water temperature is below 9°C.

## Special disposition to Standard NF EN 232

- If angle  $\beta$  (angle formed by the plane surface of D<sub>4</sub> and by the plane of the plug hole) does not respect the specifications in standard NF EN 232, then the holder's technical documentation shall mention that the bath must be equipped with a flexible drain tube.

## Special disposition to Standard NF EN 251

- If the shower tray is extra-flat, the dimension e of the plug hole does not have to conform (i.e. it may be less than 2 mm) if the drain is NF certified (NF076 – Sanitary components), delivered with the shower tray and if no water retention is observed when the shower tray is installed.

## Special disposition to Standard NF EN 695

- The value x (level difference between r and r1 for tool access) given in table 2 in §5.1 (page 6 in the standard) is not checked for the purposes of the NF mark.

## Special disposition to Standard NF EN 14527

- The load to be applied for the test shall include the number of bags (see 8.1.1) necessary to obtain 200 kg.

**Special disposition to Standard NF EN 14688 and to NF EN 13310**

- For the abrasion resistance test (§5.7), the sandpaper to be used is reference S 42 instead of reference S 33.

**Special disposition to Standards NF EN 263, NF EN 13310, NF EN 13559, NF EN 14516, NF EN 14527, NF EN 14688 and NF EN 15719**

- The test to determine the resistance to chemicals and stains described in these standards is supplemented as follows: "If there is a stain, check the sample once after 48h and consider the result to be satisfactory if the stain has disappeared".

**Special disposition to Standard NF D12-101**

- §6 is not applicable to "baby" WC pans.

**Special disposition to Standard NF D12-203**

- In §4.3.3 "Air Trap", a) should read: see chapters 5.2.6 and 5.2.7 in the EN 14055 standard.

**Special disposition to Standard NF D12-208**

- The static load test of the support frame may be conducted under installation conditions, in other words, on the frame composed of two assembled parts consolidated by cladding provided that:
  - the frame is sold complete (cladding delivered with the two parts of the frame) with installation instructions that leave no ambiguity;
  - the durability test is carried out with the complete frame.

**Special disposition to Standard NF D14-503**

- A shower tray is deemed to be extra-flat if the internal step is  $\leq 20$  mm on the side(s) used at the shower tray entrance regardless of the height of this step on the other sides.

**Special dispositions to Standard NF D14-506**

- The test specimens may consist of plates with dimensions smaller than 100 mm x 100 mm, but large enough for the watch glass to fit on them.
- The solution may be prepared with a quantity of water less than 100 ml, but the citric acid concentration must still be equal to 10%.

**Special disposition to Standard NF D14-509**

- The check on the continuity of the enamel layer after the test on the resistance of enamelled surfaces to thermal shocks may be carried out using a coloured solution (for example eosin).

**Waiver to Standard NF EN 997**

- Following the analysis showing toilet paper's dimension impact on the flushing of paper's test, the sheets taken individually have to measure  $(100 \pm 10\text{mm}) \times (130 +10/- 20)$  mm.