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IS 2556-17 (2001): Vitreous Sanitary Appliances (Vitreous China) - , Part 17: Specific Requirements of Wall Mounted Bidets [CED 3: Sanitary Appliances and Water Fittings]



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भाग 17 दीवार पर लगने वाले बिडेट के लिए विशिष्ट अपेक्षाएँ

*Indian Standard*

VITREOUS SANITARY APPLIANCES  
( VITREOUS CHINA ) — SPECIFICATION

PART 17 SPECIFIC REQUIREMENTS OF WALL MOUNTED BIDETS

ICS 91.140.70

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**BUREAU OF INDIAN STANDARDS**

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NEW DELHI 110002

## FOREWORD

This Indian Standard was adopted by the Bureau of Indian Standards, after the draft finalized by the Sanitary Appliances and Water Fittings Sectional Committee had been approved by the Civil Engineering Division Council.

Wall mounted bidets are manufactured similar to the conventional bidets. There is no much difference in the manufacturing process. Wall mounted bidets give better aesthetic and hygienic effects in the toilets.

This standard is based on indigenous manufacturers data, prevalent field practices and also based on European Standard EN 36 : 1977 'Wall hung bidets — Over rim supply only — Connecting dimensions'.

The composition of the Committee responsible for the formulation of this standard is given in Annex A.

For the purpose of deciding whether a particular requirement of this standard is complied with, the final value, observed or calculated, expressing the result of a test or analysis, shall be rounded off in accordance with IS 2 : 1960 'Rules for rounding off numerical values (*revised*)'. The number of significant places retained in the rounded off value should be the same as that of the specified value in this standard.

## *Indian Standard*

# VITREOUS SANITARY APPLIANCES ( VITREOUS CHINA ) — SPECIFICATION

## PART 17 SPECIFIC REQUIREMENTS OF WALL MOUNTED BIDETS

### 1 SCOPE

This standard ( Part 17 ) lays down the requirements for patterns, construction, dimensions and tolerances, finish, inspection and marking of wall mounted type bidets made of vitreous china.

### 2 REFERENCES

The Indian Standards given below contain provisions which through references in this text, constitute provisions of this standard. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this standards are encouraged to investigate the possibility of applying the most recent editions of the standards :

<i>IS No.</i>	<i>Title</i>
2556 ( Part 1 ) : 1994	Specification for vitreous sanitary appliances ( vitreous china ) : Part 1 General requirements ( <i>third revision</i> )
9140 : 1996	Method for sampling of vitreous and fire clay sanitary appliances ( <i>second revision</i> )

### 3 GENERAL REQUIREMENTS

The general requirements relating to terminology, materials, manufacture, glazing, defects, minimum thickness, performance and methods of test covered in IS 2556 ( Part 1 ) shall be complied with.

### 4 PATTERNS

4.1 Wall mounted bidets shall be of one of the following patterns and sizes:

- a) *Pattern 1* – Wall mounted bidets with flushing rim and spray hole ( *see Fig. 1* ), and
- b) *Pattern 2* – Wall mounted bidets without flushing rim and over rim supply ( *see Fig. 2* ).

4.1.1 Wall mounted bidets may also be made in other patterns where so agreed to between the manufacturer and the purchaser. However, except for functional dimensions, all other requirements as laid down in this

standard shall be complied with.

### 5 CONSTRUCTION

Wall mounted bidets shall be of one piece construction. Wall mounted bidet with flushing rim shall have three tap holes and a spray hole as shown in Fig. 1A and 1B. The pop up hole shall be optional. The central hole shall have the provision to supply water to the rim. Wall mounted bidet without flushing rim shall be provided with one or three tap holes ( *see Fig. 3* ) and without any spray hole as shown in Fig. 2A and 2B. Each wall mounted bidet shall be provided with a waste outlet of dimensions as shown in Fig. 4 with or without overflow arrangement.

The wall mounted bidet shall be provided with not less than two fixing holes to enable the wall mounted bidet to be securely installed to the wall using metallic corrosion resistant bolts and nuts and an independent concealed support frame. The support frame ( metal carrier ), depending on the design, shall be securely attached to the building structural members so that no strain is transmitted to the wall mounted bidet connector or any other part of the plumbing system.

### 6 DIMENSIONS AND TOLERANCES

6.1 The functional dimensions ( dimensions other than connecting dimensions ) and connecting dimensions ( critical for plumbing requirements ), shall be as given in Table 1 and Table 2 respectively.

6.2 Dimension of the waste outlet provided in bidets shall conform to Table 3 read with Fig. 4.

6.3 Tolerances where not given for specific dimensions shall conform to IS 2556 ( Part 1 ).

### 7 FINISH

The inside surface of the bidet and waste outlet shall be glazed uniform, smooth for efficient drawing.

### 8 LOAD TEST

8.1 Wall mounted bidet, when tested as per the procedure given in 8.2, shall cause no damage or defect shall occur, to the bidet and the fastening.

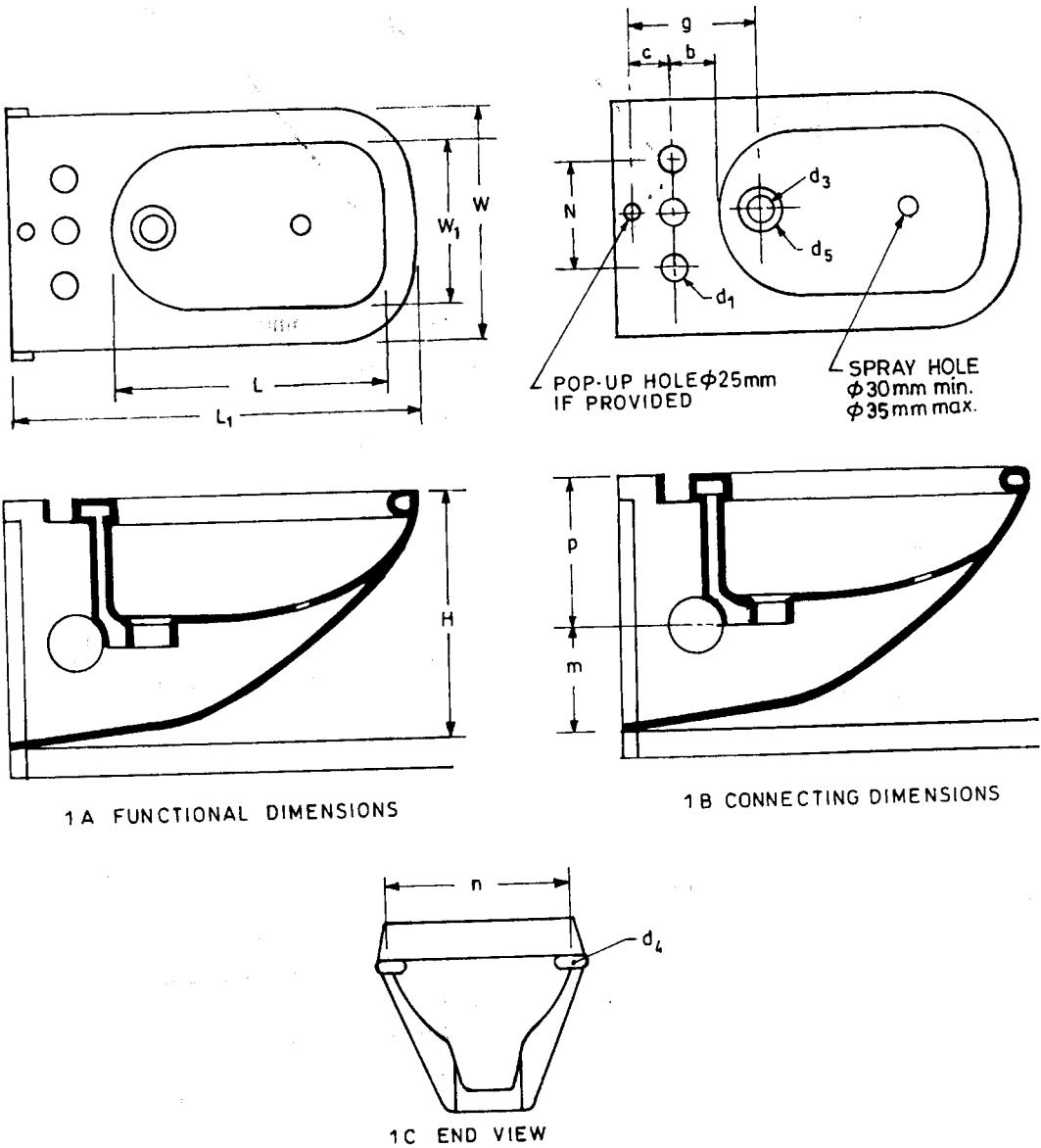


FIG. 1 TYPICAL ILLUSTRATION OF BIDET ( WITH FLUSHING RIM )

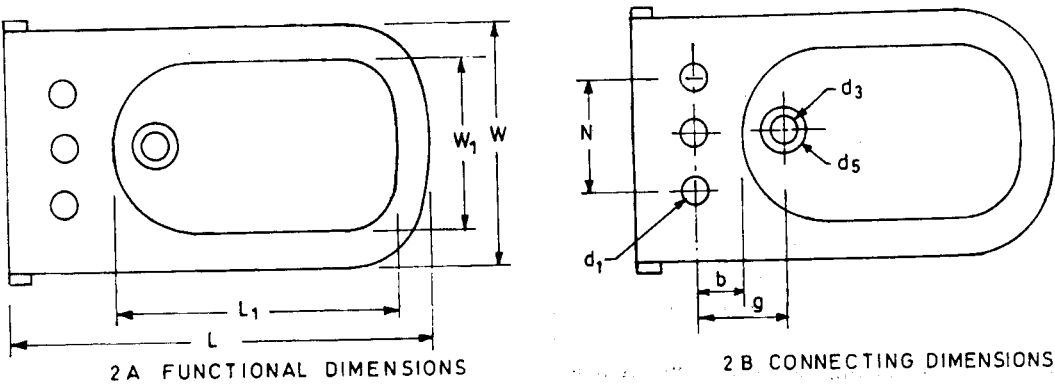


FIG. 2 TYPICAL ILLUSTRATION OF BIDET ( WITHOUT FLUSHING RIM )

**Table 1 Functional Dimensions**

( Clause 6.1 )

All dimensions in millimetres.

Sl No.	Description	Ref to Figures	Pattern 1	Pattern 2
i)	Length, <i>Max</i>	$L$	600	600
ii)	Breadth	$W$	$360 \pm 20$	$360 \pm 20$
iii)	Height	$H$	$350 \pm 10$	$350 \pm 10$
iv)	Length of opening, <i>Min</i>	$L_1$	375	375
v)	Width of opening, <i>Min</i>	$W_1$	220	220

**Table 2 Connecting Dimensions**

( Clause 6.1 )

All dimensions in millimetres.

Sl No.	Description	Ref to Figures	Pattern 1	Pattern 2
i)	Diameter of tap hole	$d_1$	$35 \pm 2$	$35 \pm 2$
ii)	Distance between two outer tap holes, <i>Min</i>	$N$	150	150
iii)	Distance between centre line of centre tap hole and pop-up hole, if provided	$c$	50, <i>Min</i>	NA
iv)	Distance between centre line of centre tap hole and the edge of the rim/bowl, <i>Max</i>	$b$	80	80
v)	Distance between the centre line of tap hole and centre line of waste hole, <i>Max</i>	$g$	170	170
vi)	Vertical distance between the tap platform and the lower plane of the waste hole, <i>Max</i>	$p$	250	250
vii)	Distance between the lower plane of the waste hole and the lower portion of the bidet, <i>Min</i>	$m$	100	100
viii)	Radius of a cylinder with the same axis as the fitting hole which permits the following free space below the inside edge of the tap fitting hole, <i>Min</i>			
	a) of 0 to 5 mm height	$r$	25	25
	b) of 5 mm and more height	$r_1$	30	30
ix)	Wall thickness in the zone of the tap fitting hole, <i>Max</i>	$s$	18	18
x)	Distance between fixing hole	$N$	$230 \pm 5$	$230 \pm 5$
xi)	Dimension of fixing hole ( Elliptical )	$d_4$	$( 30 \times 25 ) \pm 3$	$( 30 \times 25 ) \pm 3$

**NOTES**1 Circular fixing hole is also permitted. Fixing hole diameter shall be  $20 \pm 2$  mm for both patterns.

2 Ovality is permissible within the variation allowed for the dimension.

3 Tolerances where not specified shall conform to IS 2556 ( Part 1 ).

4 Recommended diameter of fixing bolts is  $14 \pm 2$  mm and same should be of a suitable material which passes the load test as specified in 8.

5 Wall mounted bidets shall be installed with a minimum gap of 40 mm from the lowest portion of the bidet to the finished floor.



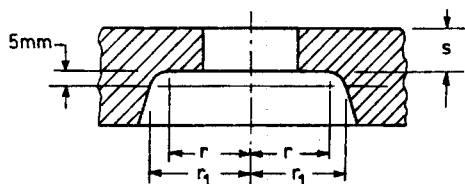


FIG. 3 DETAILS OF TAP FITTING HOLE

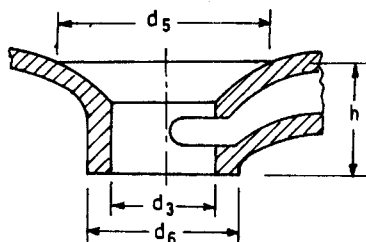


FIG. 4 DIMENSIONS OF WASTE OUTLET HOLE

8.2 Wall mounted bidet shall be fixed in a stable arrangement as shown in Fig. 5 with the fastenings supplied and in accordance with the manufacturer's instructions on a smooth surface with a layer of mortar or other facing material used for pointing between the back of the bidet and the smooth surface. A load of  $400^{+5}_0$  kg or a force of  $4^{+0.5}_0$  kN shall be applied for a period of 1 h by placing it on a wooden beam with

a cross-section of 100 mm × 100 mm positioned across the centre of the opening of the top surface of the bidet. The bidet shall be examined thereafter.

## 9 SAMPLING, PROCESS INSPECTION AND LOT INSPECTION

The recommended method of sampling, process inspection and lot inspection shall be as given in IS 9140.

## 10 MARKING

10.1 Each bidet shall be clearly and indelibly marked at a suitable place with the following:

- Name or trade-mark of the manufacture, and
- Batch/Lot number.

### 10.2 BIS Certification Marking

10.2.1 Each bidet may also be marked with the Standard Mark.

10.2.2 The use of the Standard Mark is governed by the provisions of the *Bureau of Indian Standards Act, 1986* and the Rules and Regulations made thereunder. The details of conditions under which a licence for the Standard Mark may be granted to manufacturers or producers may be obtained from the Bureau of Indian Standards.

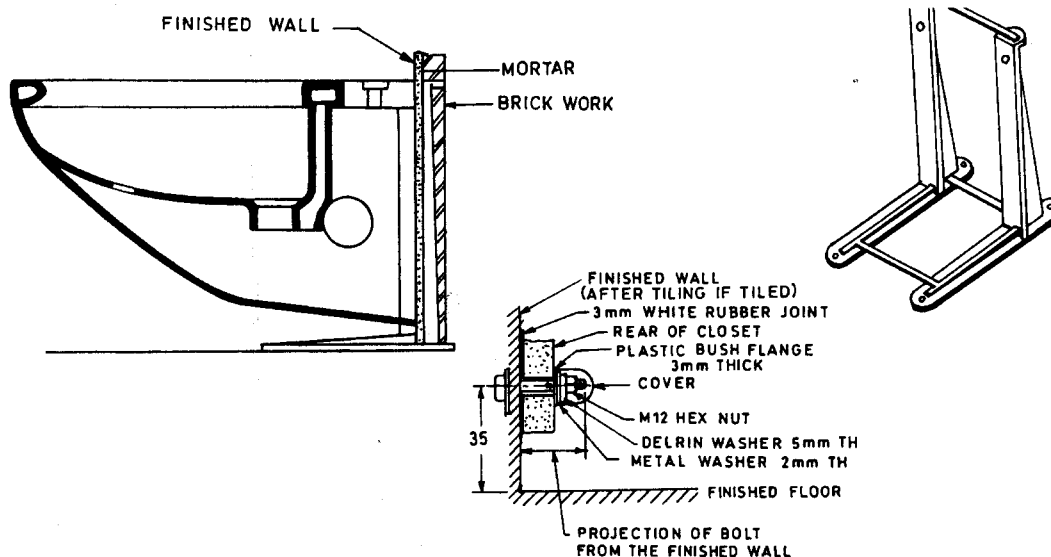


FIG. 5 SUPPORT FRAME CARRIER

**Table 3 Dimensions of Waste Outlet Hole***( Clause 6.2 )*

All dimensions in millimetres.

Sl No.	Description	Ref to Fig.	Dimension
i)	Diameter of water outlet opening	$d_3$	$46^{+2}_{-3}$
ii)	Maximum diameter at the bevelled portion of the waste outlet opening	$d_5$	75, <i>Max</i>
iii)	Outside diameter of the seating face of the waste outlet opening	$d_6$	60, <i>Min</i>
iv)	Depth of outlet with integral overflow	$h$	$45^{+5}_0$

**ANNEX A***( Foreword )***COMMITTEE COMPOSITION****Sanitary Appliances and Water Fittings Sectional Committee, CED 3**

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#### Amendments Issued Since Publication

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