

SRI LANKA STANDARD 568 : 1982

UDC 696.14 : 696.133 : 666.5

**SPECIFICATION FOR
CERAMIC SQUATTING PANS
AND TRAPS**

BUREAU OF CEYLON STANDARDS

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SLS 568:1982

Gr. 6

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BUREAU OF CEYLON STANDARDS

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This standard does not purport to include all the necessary provisions of a contract.

SRI LANKA STANDARD SPECIFICATION FOR CERAMIC SQUATTING PANS AND TRAPS

FOREWORD

This Sri Lanka Standard was authorised for adoption and publication by the Council of the Bureau of Ceylon Standards on 1982-05-24, after the draft finalised by the Drafting Committee on Sanitary Appliances was approved by the Civil Engineering Divisional Committee.

In Sri Lanka, ceramic squatting pans and traps are manufactured mostly from Vitreous China and this standard covers the specific requirements of ceramic squatting pans and traps. General requirements for sanitary ware are covered in SLS 229.

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 observation shall be rounded off in accordance with CS 102. The number of figures to be retained in the rounded off values shall be the same as that of the specified value in this standard.

In the preparation of this standard considerable assistance obtained from the publications of the Indian Standards Institution is gratefully acknowledged.

1 SCOPE

1.1 This standard lays down the requirements on sizes, construction, dimensional tolerances and finish for squatting pans and traps, of two commonly used types specified in 3.

2 REFERENCES

- CS 102 Presentation of numerical values.
- CS 124 Test sieves.
- SLS 229 General requirements on sanitaryware.

3 DEFINITIONS

3.1 For the purpose of this standard the following definitions shall apply:

3.1.1 **squatting pan** : A ceramic sanitary appliance, for the reception and flushing away of human solid and liquid excrement, consisting of a pan with or without an inlet for flushing water and with provision for connecting to a trap outlet.

3.1.2 **flushing cistern** : A cistern provided with a device for rapidly discharging the contained water and used in connection with a sanitary appliance for the purpose of cleansing the same and carrying away its contents into a drain.

3.1.3 **cistern flush squatting pan** : A squatting pan which shall have provision for connecting it to a flushing cistern.

3.1.4 **pour flush squatting pan** : A squatting pan which shall have no provision for connecting it to a flushing cistern but designed to enable manual flushing.

3.1.5 **trap** : A fitting or part of an appliance or pipe arranged to retain water so as to prevent the passage of foul air.

3.1.6 **'P' trap** : A trap with an inlet vertical and outlet inclined slightly below the horizontal.

3.1.7 **'S' trap** : A trap with the inlet vertical and outlet parallel to but not in alignment with the inlet.

3.1.8 **water seal** : The water in trap which acts as a barrier to the passage of air through the trap.

4 TYPES

4.1 Squatting pans shall be classified as Type 1 and Type 2 as follows:

Type 1 : Cistern flush squatting pan.

Type 2 : Pour flush squatting pan.

5 MATERIAL

5.1 The material used in the manufacture of squatting pans and traps shall conform to the requirements specified in **SLS 229**.

6 CONSTRUCTION

6.1 General requirements

6.1.1 General requirements specified in **SLS 229** shall be applicable to squatting pans and traps.

6.2 Specific requirements

6.2.1 The squatting pans and traps shall be manufactured in two different pieces. The inside of the bottom of the pan shall have sufficient slope from the front towards the outlet to enable easy, and quick disposal on flushing. Glazing shall not be provided on the exterior surface of the outlet and this surface shall be scored or grooved at right angles to the axis of the outlet.

6.2.2 The internal surface and the rim shall have a ceramic (vitreous) glaze.

6.2.3 Squatting pans of cistern flush type shall be provided with an integral flushing rim, with the flushing inlet either at the narrow end or broad end or at both ends as stipulated by the purchaser and to satisfy the flushing test requirements.

6.3 Each pan shall be provided with a 'P' or 'S' type trap. The trap shall be glazed inside.

7 DIMENSIONS AND TOLERANCES

7.1 Dimensions of pans

7.1.1 The dimensions shall be as given in Table 1 and Table 2 read with appropriate figures. (Fig. 1 and 2)

7.1.2 It is not intended to limit the designs and shapes of appliances to the illustration shown in this standard, but the minimum requirements specified are binding.

DIMENSIONS

TABLE 1 - Cistern flush type squatting pan
 (All dimensions are in millimetres)

A	B	C	D	E	F	G	α
432	46	252	95	116	160	230	15°

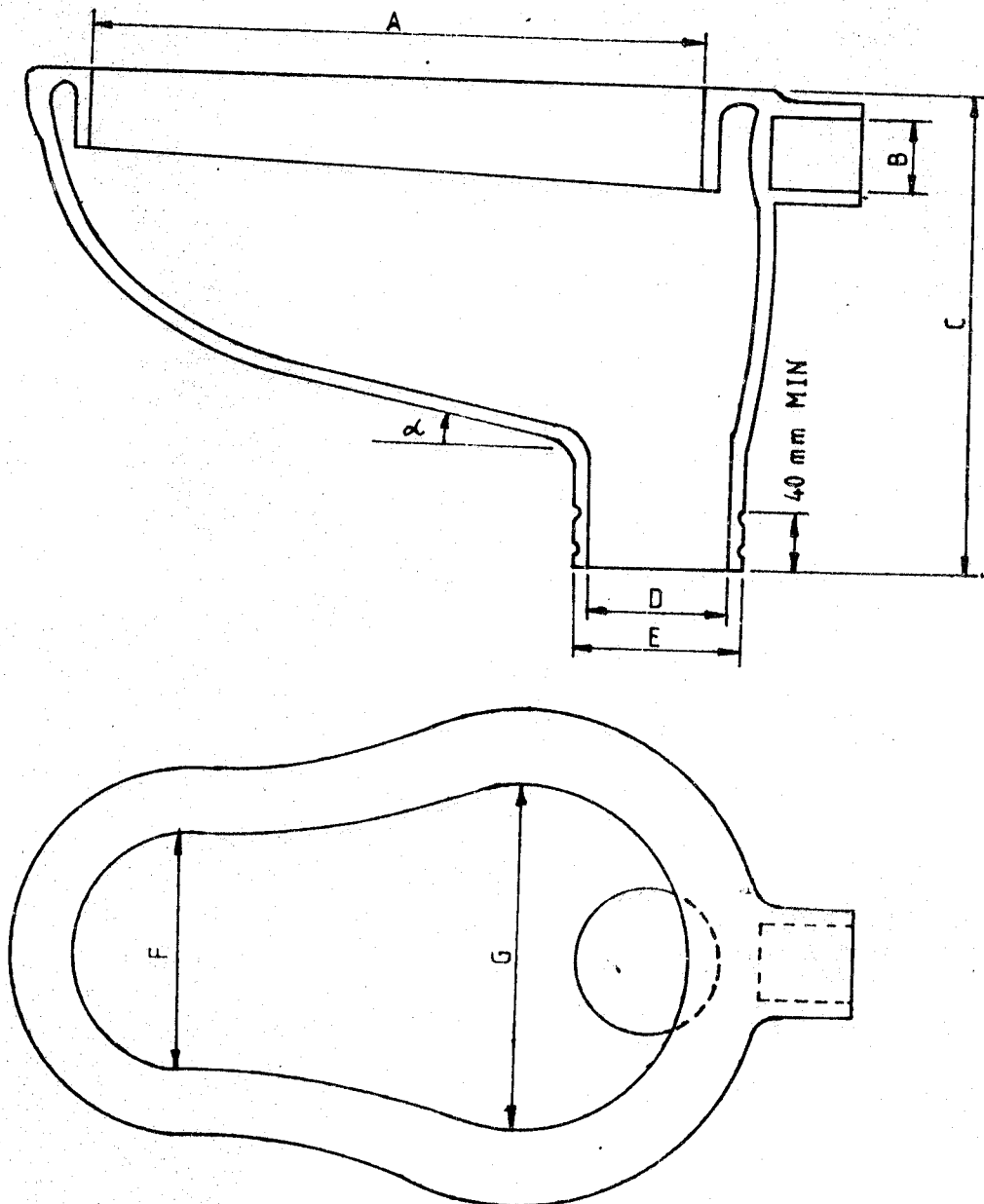


FIGURE 1 - Cistern flush type squatting pan

TABLE 2 - Pour flush type squatting pan
 (All dimensions are in millimetres)

A	B	C	D	E	F	α
408	220	75	90	120	200	25°

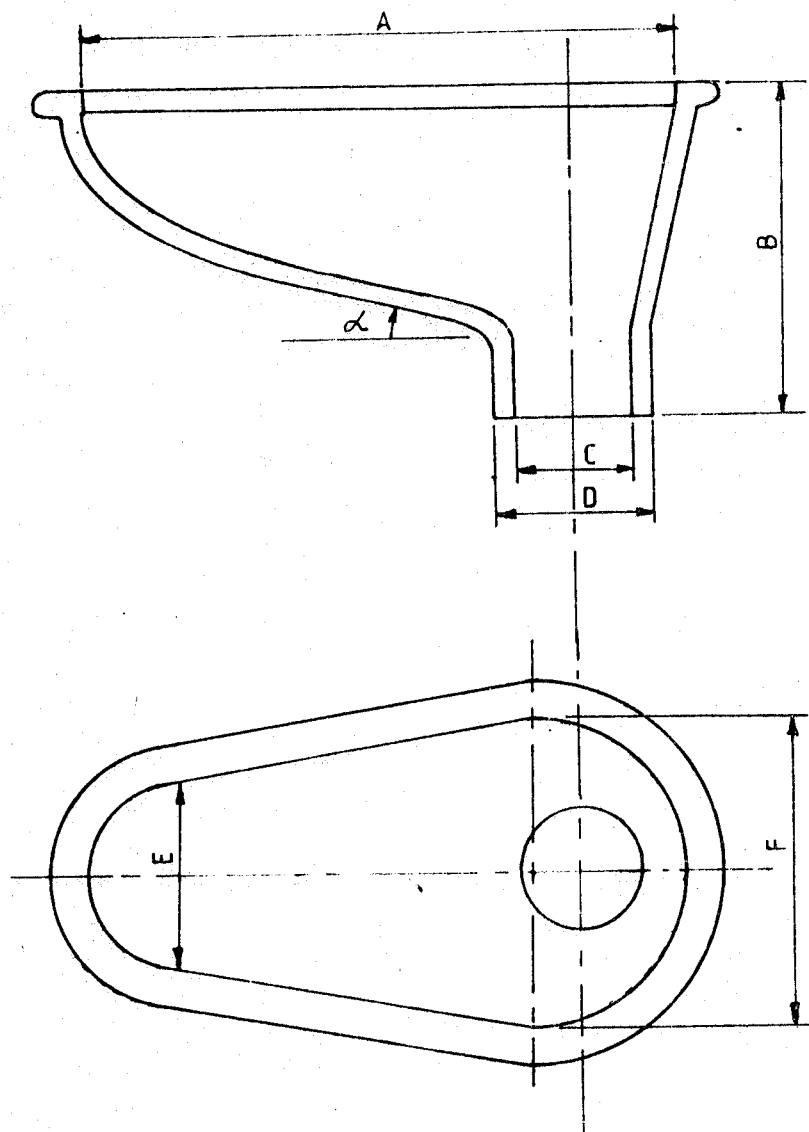


FIGURE 2 - Pour flush type squatting pan

7.2 Dimensions of traps

7.2.1 The dimensions of traps for Type 1 squatting pans shall be as given in Table 3 and Figure 3.

DIMENSIONS

TABLE 3 - 'P' or 'S' trap for cistern flush type squatting pan

(All dimensions are in millimetres)

A	B	C	D	E	F	G	H
127	95	163	86	12	320	370	170

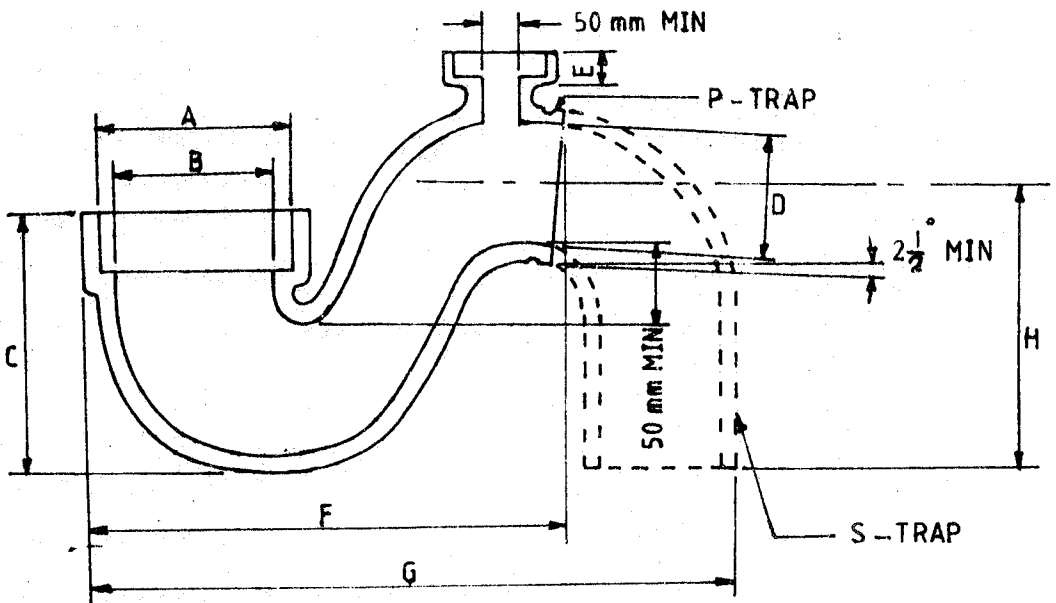


FIGURE 3 - P and S trap for cistern flush type squatting pan

7.2.2 The dimensions of trap for Type 2 squatting pans shall be those given in Table 4 and Figure 4.

DIMENSIONS

TABLE 4 - P-trap for pour flush type squatting pan
(All dimensions are in millimetres)

A	B	C	D	E
110	150	70	75	268

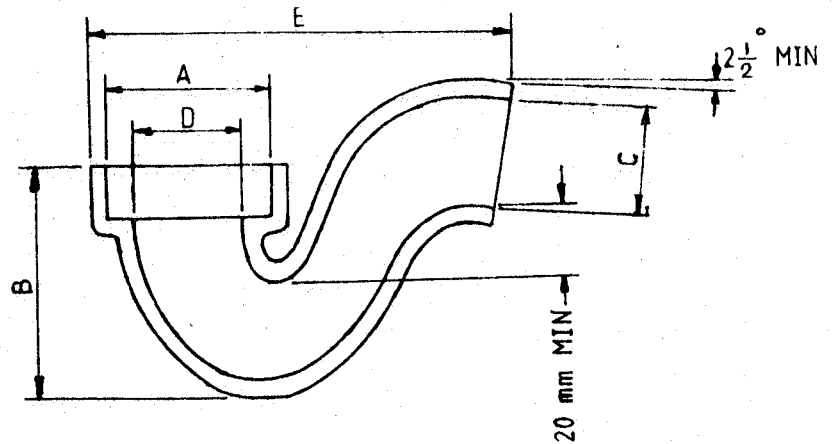


FIGURE 4 - Trap for pour flush type squatting pan

7.2.3 For 'P' type traps the slope of the outlet shall be $2\frac{1}{2}$ degree minimum below the horizontal.

7.2.4 The water seal shall be 50 mm minimum for trap of, Type 1 pan and 20 mm minimum for trap of Type 2 pan.

7.3 Tolerances

7.3.1 The following tolerances shall be permissible on the dimensions of pans and traps, unless otherwise specified.

On dimensions of 75 mm and over ± 4 per cent

On dimensions less than 75 mm ± 2 mm

8 FINISH

8.1 All surface shall be uniform in finish and all surfaces in contact with water shall be glazed smooth.

9 WATER ABSORPTION OF THE FINISHED MATERIAL

9.1 Water absorption of the finished material shall not be greater than 0.5 per cent when tested by the method specified in 15.3 of SLS 229.

10 PERMISSIBLE DEFECTS

10.1 Permissible defects of squatting pans shall be as given in SLS 229.

11 FLUSHING TESTS

11.1 The squatting pans and traps shall satisfy the tests given in 11.2.

11.2 A 9 - litre flushing cistern, shall be fixed such that the height between the top of the closet pan and bottom of the cistern is 1 250 mm and the squatting pan is connected with the cistern by a 32-mm diameter pipe. The following shall be the tests:

a) Test No. 1

The pan is filled with water to its nominal water level and charged with six pieces of usual toilet paper or polythene sheet of 0.05 mm thickness, approximately 150 mm x 115 mm in size and loosely crumpled. It is then flushed. This test is repeated four times and the pan shall discharge the full charge of paper at least thrice out of four times.

b) Test No. 2

The whole of the interior surface of box rim pans to 40 mm below the flushing rim is smudged with a substance such as quartz or lamp black. If the material used is quartz it should be screened using a test sieve of size 1.18-mm conforming to CS 124.

It shall then be flushed, the pan being observed closely during the test. Immediately after the flush, there shall be no smudge remaining on the pan.

c) Test No. 3

The pan, when sealed at the bottom of the trap in line with the back plate, shall be capable of holding not less than 9 litres of water between the normal water level and the highest possible water level of the pan as installed.

NOTE - The pour flush type may not be subject to the flushing tests.

12 MARKING

12.1 Squatting pans shall be clearly and indelibly marked at a prominent place visible after the pans are installed with the name or trade-mark of the manufacturer; traps shall also be clearly and indelibly marked at a prominent place with the name or trade mark of the manufacturer.

13 SAMPLING AND CRITERIA FOR CONFORMITY

13.1 The number of samples to be selected and criteria to determine the conformity of a given lot to the requirements of this standard shall be as given in SLS 229. Any appliance failing to satisfy the flushing test given in 11.1 of this standard shall also be considered as defective.

SLS CERTIFICATION MARK

The Sri Lanka Standards Institution is the owner of the registered certification mark shown below. Beneath the mark, the number of the Sri Lanka Standard relevant to the product is indicated. This mark may be used only by those who have obtained permits under the SLS certification marks scheme. The presence of this mark on or in relation to a product conveys the assurance that they have been produced to comply with the requirements of the relevant Sri Lanka Standard under a well designed system of quality control inspection and testing operated by the manufacturer and supervised by the SLSI which includes surveillance inspection of the factory, testing of both factory and market samples.

Further particulars of the terms and conditions of the permit may be obtained from the Sri Lanka Standards Institution, 17, Victoria Place, Elvitigala Mawatha, Colombo 08.



SRI LANKA STANDARDS INSTITUTION

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The Institution is financed by Government grants, and by the income from the sale of its publications and other services offered for Industry and Business Sector. Financial and administrative control is vested in a Council appointed in accordance with the provisions of the Act.

The development and formulation of National Standards is carried out by Technical Experts and representatives of other interest groups, assisted by the permanent officers of the Institution. These Technical Committees are appointed under the purview of the Sectoral Committees which in turn are appointed by the Council. The Sectoral Committees give the final Technical approval for the Draft National Standards prior to the approval by the Council of the SLSI.

All members of the Technical and Sectoral Committees render their services in an honorary capacity. In this process the Institution endeavours to ensure adequate representation of all view points.

In the International field the Institution represents Sri Lanka in the International Organization for Standardization (ISO), and participates in such fields of standardization as are of special interest to Sri Lanka.