Table 1 — *Manhole nominal sizes, internal manufacturing diameters and tolerances of circular units*

Nominal size of chamber and shaft units	Limits of internal manufacturing size		Tolerance on actual diameter from manufacturer's stated diameter [A)]
	Minimum	Maximum	
DN	mm	mm	mm
900	900	950	±8
1 050	1 050	1 100	±8
1 200	1 200	1 250	±9
1 350	1 350	1 400	±10
1 500	1 500	1 550	±11
1 800	1 800	1 850	±12
2 100	2 100	2 150	±14
2 400	2 400	2 450	±15
2 700	2 700	2 750	±15
3 000	3 000	3 050	±15
NOTE Capping units are currently not manufactured in the United Kingdom.			
[A)] See 3.5.			

Table 2 — *Manhole nominal sizes, internal manufacturing sizes and tolerances of rectangular units*

Preferred nominal size LN/WN	Limits of internal manufacturing size		Tolerance on actual size from manufacturer's stated size
	Minimum mm	Maximum mm	mm
900/675	900/675	925/700	±6
1 200/675	1 200/675	1 250/700	±6
1 200/750	1 200/750	1 250/800	±7
1 200/900	1 200/900	1 250/950	±7

[2)] Withdrawn.

Table 2 — *Manhole nominal sizes, internal manufacturing sizes and tolerances of rectangular units (continued)*

Preferred nominal size LN/WN	Limits of internal manufacturing size		Tolerance on actual size from manufacturer's stated size
	Minimum mm	Maximum mm	mm
1 000/1 000	1 000/1 000	1 025/1 025	±8
1 250/1 250	1 250/1 250	1 300/1 300	±9

5.4.4 Inspection chamber internal manufacturing diameter, manufacturing size and tolerance of vertical units

The internal manufacturing diameter and manufacturing sizes of circular and rectangular vertical units shall not be outside the limits given in Table 3.

Table 3 — *Inspection chambers*

Inspection chamber type	Dimensions (mm)							
	A	B	C	D	E	F	G	H
Shallow (for chambers not greater than 1.2 m in depth from cover level to invert)	Not less than 600	Not less than 75	Not less than 150	Not more than dimension *A*	Not less than 450	Not less than 430	Not less than 430	Not less than 430
Deep (for chambers greater than 1.2 m in depth from cover level to invert)	Not less than 450	Not less than 75	Not less than 150	Not more than dimension *A*	Not less than 450	Not more than 350	Not more than 300	Not more than 300

NOTE 1 Dimensions A to H are shown in Figure 10.

NOTE 2 A larger clear opening is permitted in Type 2 cover slabs provided the access is restricted to the dimensions F, G and H.

NOTE 3 The above guidance is consistent with the recommendations in BS EN 752:2017 ***NA.6.4.3****.*

5.5.1 Surface voids

With the exception of the external edges of slabs, when tested in accordance with Annex C surfaces of units shall be free from voids that permit diametrically opposite points of the rim of the gauge to touch the surface of the unit simultaneously.

Units exhibiting any surface void greater than 12 mm deep shall be deemed not to conform to this part of BS 5911.

NOTE Voids up to and including 12 mm deep may be made good by the manufacturer – see BS EN 1917:2002, ***4.3.2****.*

5.5.3 Shape, size and position of openings in slabs, adjusting units and corbel slabs

The shape, size and position of openings in slabs, adjusting units and corbel slabs shall be in accordance with Table 4 and Table 5. The tolerance on the sizes of openings in cover slabs, adjusting units and corbel slabs shall be between +20 and -0 mm.

NOTE It is permissible for the vertical face(s) of an opening to be cast with a nominal release angle away from the opening.

Annex C (normative)
Surface void test

C.1 Principle

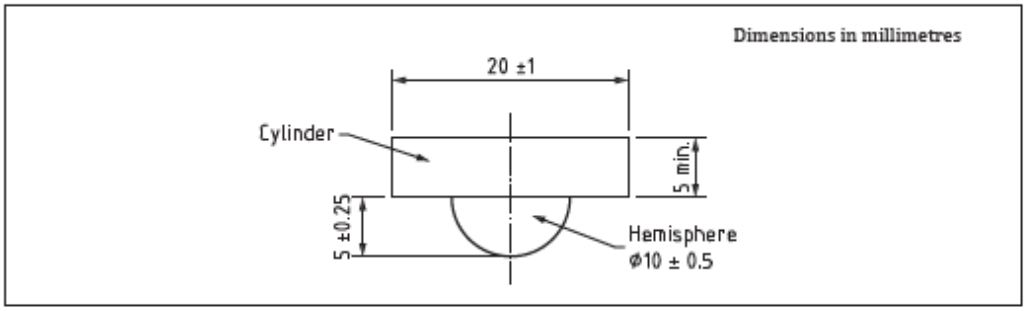
This test shall evaluate whether any void in the surface of a unit or component (except for the external edges of slabs and of adjusting units and corbel slabs) conforms to the limiting requirement in 5.3.

C.2 Apparatus

This shall consist of the following:

Gauge, as shown in Figure C.1.

Figure C.1 — *Gauge for assessing surface voids*



C.3 Procedure

Apply the ball of the gauge to the void.

C.4 Expression of result

Record whether diametrically opposite points in the rim of the gauge simultaneously touch the surface of the unit or component.

Annex D (normative)
Dimensional tests

COMMENTARY ON ANNEX D

At the manufacturer's discretion it is permissible to use purpose-made "go/no-go" gauges for dimensional measurements in lieu of the apparatus specified for the tests in this Annex.

D.1 Internal dimensions test

D.1.1 Principle

This test shall evaluate whether the internal diameter of circular vertical units and tapers, and the width/length of rectangular vertical units, conforms to 5.4.3 or 5.4.4 as appropriate.

D.1.2 Apparatus

This shall consist of the following:

Steel measuring tape or retractable pocket rule, with metric graduation and figuring conforming to BS 4484-1.

D.1.3 Procedure

For circular vertical units and related tapers, make three measurements of the internal diameter at each end at approximately 60° to each other. For rectangular vertical units, make two measurements of each internal dimension at each end. For base units, make measurements only at the upper end. For all units, take the measurements at approximately 50 mm from the end(s) of the unit.

D.1.4 Expression of results

Record whether each measured value of the internal diameter or length/width conforms to 5.4.3 or 5.4.4 as appropriate.