

Specification for
Mild steel dustbins

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Confirmed
December 2011

Co-operating organizations

The committee responsible for the preparation of this British Standard consists of representatives from the following Government department and scientific and industrial organizations:

Asbestos Cement Manufacturers Association
 Association of London Borough Engineers and Surveyors
 Association of Municipal Corporations
 Association of Public Health Inspectors
 British Plastics Federation
 British Precast Concrete Federation
 British Steel Industry
 Department of the Environment
 Engineering Industries Association
 Fire Officers Association
 Galvanized Tank Manufacturers
 Greater London Council
 Institute of Housing Managers
 Institution of Municipal Engineers
 Institute of Public Cleansing
 Institution of Public Health Engineers
 National Federation of Ironmongers
 National Steel and Hardware Association
 Paper Sack Development Association Limited
 Royal Institute of British Architects
 Royal Society of Health
 Society of Education Officers
 Society of Medical Officers of Health
 Society of Motor Manufacturers and Traders Limited
 Individual manufacturers

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Foreword

This British Standard for mild steel dustbins, the preparation of which was authorized by the Chemical Engineering Industry Committee in response to a request submitted by the Metropolitan Boroughs' Standing Joint Committee, was first issued in 1938 and revised in 1947.

The standard represents a direct metrication of the 1947 edition which it supersedes. The values given are in SI units and for further information on SI units reference should be made to BS 3763, "*International System of units (SI)*". Although the Standard is expressed in metric terms, equivalent values in imperial terms have been included.

In this revision the standard remains unaltered except for the change to metric units and minor changes in the clauses referring to the use of lids and marking. A British Standard does not purport to include all the necessary provisions of a contract. Users of British Standards are responsible for their correct application.

Compliance with a British Standard does not of itself confer immunity from legal obligations.

Summary of pages

This document comprises a front cover, an inside front cover, pages i and ii, pages 1 to 4, an inside back cover and a back cover.

This standard has been updated (see copyright date) and may have had amendments incorporated. This will be indicated in the amendment table on the inside front cover.

1 General

1.1 Scope

This British Standard provides for four sizes of dustbins, having nominal capacities of 0.028 m³ (1 ft³), 0.056 m³ (2 ft³), 0.071 m³ (2½ ft³) and 0.092 m³ (3¼ ft³) respectively, constructed of mild steel, circular in cross section, with tapered sides and unless otherwise ordered, having a removable lid.

NOTE The title of the British Standard referred to in this standard is given on the inside back cover

2 Materials

2.1 Quality and thickness of materials

The dustbin shall be constructed throughout from mild steel sheets and hoops, of the thickness given in Table 1 before galvanizing.

3 Construction

3.1 General dimensions

The internal height and internal diameters of the bin at the top and bottom shall conform to the appropriate dimensions given in Table 1.

3.2 Body

The body shall be circular in cross-section and shall not be corrugated. It shall be constructed of not more than two sheets and the seams shall be of one of the following types:

- 1) locked and grooved;
- 2) seam welded

In all cases the sheets shall be carefully shaped to ensure a close fit at the seam, and the joint on the inside of the bin shall be as smooth as manufacturing conditions of good standard permit.

3.3 Top rim of body

The top of the body shall be finished as specified in 3.3.1 or 3.3.2.

3.3.1 With rolled edge, reinforced with a mild steel wire 6.4 mm (¼ in) diameter for the 0.028 m³ (1 ft³) dustbins and 9.5 mm (3/8 in) diameter for the larger sizes. The ends of the wire shall be welded. The rolled edge shall cover the wire as completely as practicable, but at no place shall the width of the gap exceed the radius of the wire (dimension *A*, Figure 1*a*). The rolled edge shall be sound and smoothly finished.

3.3.2 With an external hoop 50.8 mm (2 in) wide and 1.2 mm (3/64 in) thick, rolled with the top of the body to form a bead, in such a manner shown in Figure 1*b*. The bead on the hoop shall be turned over to such an extent as to leave a gap not exceeding 1.6 mm (1/16 in), and at no place shall the gap between the rolled edge of the body and the hoop (dimension *B*, Figure 1*b*) exceed 3.2 mm (1/8 in). The diameter of the finished bead shall be not less than 11.1 mm (7/16 in).

3.4 Bottom

The bottom shall be dished so as to present a concave surface towards the inside of the bin. It shall be seamless and smooth, and the accuracy of shape and method of attachment of the bottom to the body shall be such that there is no crevice or raw edge inside the bin and the joint is as smooth as manufacturing conditions of good standard permit.

With the bin standing upon a level surface, the minimum vertical clearance between that surface and the underside of the bottom shall be 12.7 mm (½ in).

3.5 Bottom hoop

The base of the bin shall be reinforced with a hoop, closely fitting and securely attached to the bottom by riveting or welding. If welded, there shall be four fusion welds each not less than 12.7 mm (½ in) in length. One weld shall straddle the seam on the hoop. If riveted, there shall be four equally spaced 4.8 mm (3/16 in) diameter mild steel rivets. The thickness of the hoop shall be as given in Table 1. The bottom of the hoop shall be rounded and rolled close inwards to a diameter not less than 6.4 mm (¼ in).

3.6 Lid

The lid shall be domed in shape and seamless except that the flange may be welded on or seamed on as shown in Figure 2. The lid shall not be corrugated. The flange shall be finished with an inside beaded edge, as shown in Figure 2, and the depth shall be as given in Table 1.

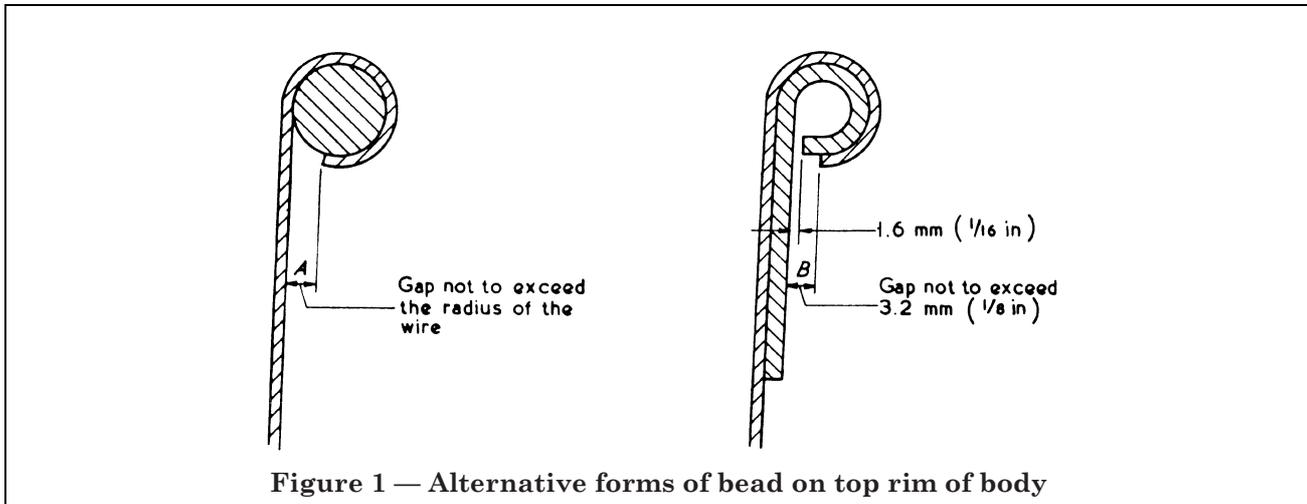


Figure 1 — Alternative forms of bead on top rim of body

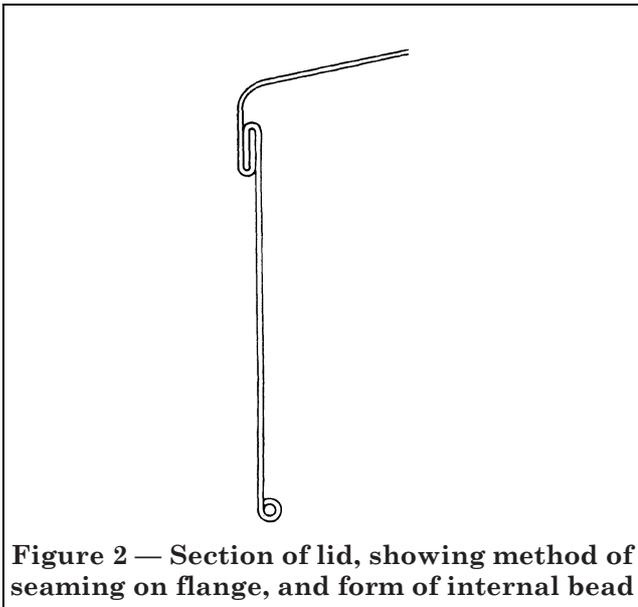


Figure 2 — Section of lid, showing method of seaming on flange, and form of internal bead

The lid shall fit outside the bin and the difference between the internal diameter of the bead of the lid and the external diameter of the body top rim shall be not less than 6.4 mm ($\frac{1}{4}$ in) nor more than 12.7 mm ($\frac{1}{2}$ in).

The fitting of rubber lids complying with the requirements of BS 3735 is optional.

3.7 Body handles

3.7.1 The 0.028 m³ (1 ft³) capacity bin. Each bin shall be fitted with a 12.7 mm ($\frac{1}{2}$ in) round edge bale-type handle, of such a shape as to swing clear of the lid when the latter is in position.

Each ear shall be attached to the body by two or more rivets.

3.7.2 The 0.056 m³ (2 ft³), 0.071 m³ (2½ ft³) and 0.092 m³ (3¼ ft³) capacity bins. Each bin shall be fitted with two body handles, situated at positions diametrically opposite, straddling the side seam, or seams, and at a height above the centre of gravity of the bin.

The handles shall be of the one-piece type, of forged metal circular in cross-section with flattened ends, the diameter of the cross-section being 9.5 mm ($\frac{3}{8}$ in) for the 0.056 m³ (2 ft³) capacity bin and 12.7 mm ($\frac{1}{2}$ in) for the 0.071 m³ (2½ ft³) and 0.092 m³ (3¼ ft³) capacity bins. The handles shall be forged in a die of such a shape that there is no abrupt change of section at any point, and particularly at the point where the shanks of the handle are bent and flattened for the rivet fixing.

The handle shall be so shaped as to give a comfortable hand hold, the grip being not less than 114 mm ($4\frac{1}{2}$ in) in length, and shall have a clear projection from the side of the bin not less than 50.8 mm (2 in). The handles shall be attached to the body at an upward angle of approximately 30° to the horizontal. There shall be four rivets to each handle.

The rivets shall have flat heads on the inside of the bin and shall be 4.8 mm ($\frac{3}{16}$ in) diameter for bins of 0.056 m³ (2 ft³) capacity and 6.4 mm ($\frac{1}{4}$ in) for bins of 0.071 m³ (2½ ft³) and 0.092 m³ (3¼ ft³) capacity; reinforcing plates shall not be used.

3.8 Lid handle

The lid handle shall be either of 9.5 mm (3/8 in) round steel or of not less than 25.4 mm × 2.0 mm (1 in × 5/64 in) rectangular cross-section steel strip or of a section having an equivalent strength and affording a comfortable handhold.

The handle shall have a 101.6 mm × 50.8 mm (4 in × 2 in) grip and be attached to the lid in a central position by riveting with one or more rivets to each side.

3.9 Galvanizing

After manufacture each bin and lid shall be galvanized in the following manner. After proper preparation by pickling acid, the bin and the lid shall be dipped in a bath of molten virgin spelter (containing not more than 2½ % impurities) at a temperature suitable to produce a complete and uniformly adhesive coating of zinc of a thickness equivalent to an added weight of 686.25 g/m² (2¼ oz/ft²) of double surface.

3.10 Weight

The weight of any bin, together with the lid, shall not be less than the standard weight as given in Table 1 by more than 5 %.

3.11 Marking

Each bin shall be clearly and indelibly marked with the following.

- 1) Manufacturer's name and trade mark.
- 2) The number of this British Standard (BS 792).
- 3) The capacity of the bin.

Each lid shall be indelibly marked BS 792, except that if rubber lids are used they shall be indelibly marked BS 3735.

NOTE Attention is drawn to certification facilities offered by BSI; see the inside back cover of this standard.

Table 1 — Dimensions and standard weights of dustbins

Nominal capacity	Dimensions				Thickness of metal				Standard weight after galvanizing	
	Internal height	Internal diameter at top	Internal diameter at bottom	Depth of flange on lid	Body	Bottom	Lid	Bottom reinforcing hoop	Bin	Lid
m ³ (ft ³)	mm (in)	mm (in)	mm (in)	mm (in)	mm (in)	mm (in)	mm (in)	mm (in)	kg (lb)	kg (lb)
0.028(1)	355.6(14)	355.6(14)	304.8(12)	38.1(1½)	0.64(0.025)	0.79(0.031)	0.64(0.025)	1.27(0.050)	4.99(11)	0.91(2)
0.056(2)	508.0(20)	406.4(16)	355.6(14)	50.8(2)	0.79(0.031)	0.79(0.031)	0.64(0.025)	1.27(0.050)	7.71(17)	1.36(3)
0.071(2½)	558.0(22)	431.8(17)	381.0(15)	50.8(2)	0.79(0.031)	0.79(0.031)	0.64(0.025)	1.60(0.063)	8.85(19½)	1.59(3½)
0.092(3¼)	609.6(24)	457.2(18)	406.4(16)	63.5(2½)	0.79(0.031)	1.02(0.040)	0.79(0.031)	1.60(0.063)	10.21(22½)	2.49(5½)

Publications referred to

This standard makes reference to the following British Standard.

BS 3735, *Rubber components for steel dustbins.*

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