UL 32

STANDARD FOR SAFETY

Metal Waste Cans

UL Standard for Safety for Metal Waste Cans, UL 32

Fifth Edition, Dated September 29, 1994

Summary of Topics

This revision of ANSI/UL 32 dated July 1, 2019 is being issued to update the title page to reflect the most recent designation as a Reaffirmed American National Standard (ANS). No technical changes have been made.

Text that has been changed in any manner or impacted by UL's electronic publishing system is marked with a vertical line in the margin.

The requirements are substantially in accordance with Proposal(s) on this subject dated April 19, 2019.

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UL 32

Standard for Metal Waste Cans

The First edition was titled Waste Cans.

First Edition – August, 1954
Second Edition – November, 1970
Third Edition – April, 1974
Fourth Edition – October, 1981

Fifth Edition

September 29, 1994

This ANSI/UL Standard for Safety consists of the Fifth Edition including revisions through July 1, 2019.

The most recent designation of ANSI/UL 32as a Reaffirmed American National Standard (ANS) occurred on June 28, 2019. ANSI approval for a standard does not include the Cover Page, Transmittal Pages, and Title Page.

Comments or proposals for revisions on any part of the Standard may be submitted to UL at any time. Proposals should be submitted via a Proposal Request in UL's On-Line Collaborative Standards Development System (CSDS) at https://csds.ul.com.

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INTRODUCTION

1 Scope

1.1 These requirements cover metal waste cans intended to be employed in factories, garages, workshops, and other locations where there is need for a receptacle for temporary storage inside buildings of oily waste, rags, and other similar combustible waste materials.

1.2 *Deleted*

2 General

2.1 Units of measurement

2.1.1 Values stated without parentheses are the requirement. Values in parentheses are explanatory or approximate information.

2.2 Components

2.2.1 Except as indicated in 2.2.2, a component of a product covered by this standard shall comply with the requirements for that component.

2.2.2 A component is not required to comply with a specific requirement that:

a) Involves a feature or characteristic not required in the application of the component in the product covered by this standard, or

b) Is superseded by a requirement in this standard.

2.2.3 A component shall be used in accordance with its rating established for the intended conditions of use.

2.2.4 Specific components are incomplete in construction features or restricted in performance capabilities. Such components are intended for use only under limited conditions, such as certain temperatures not exceeding specified limits, and shall be used only under those specific conditions.

2.3 Undated references

2.3.1 Any undated reference to a code or standard appearing in the requirements of this standard shall be interpreted as referring to the latest edition of that code or standard.

3 Sizes

3.1 Inside diameters, inside heights, and nominal capacities of established trade sizes of cylindrical waste cans are given in Table 3.1. These values are considered examples. Values between the values shown in the table are allowed, provided the minimum and maximum sizes are maintained. See 4.2.

Table 3.1
Trade sizes of waste cans

Nominal inside diameter of body		Nominal inside height of body		Nominal capacities[a]	
inches	(mm)	inches	(mm)	Gallons	(L)
11	(279)	12-1/4	(311)	5	(19)
12	(305)	13-3/8	(340)	6	(23)
13	(330)	14-1/2	(368)	8	(30)
14	(356)	15-1/2	(394)	10	(38)
15	(381)	16-5/8	(422)	12	(45)
16	(406)	17-3/4	(451)	15	(57)
17	(432)	18-7/8	(479)	18	(68)
18	(457)	20	(508)	22	(83)
19	(483)	21-1/8	(537)	26	(98)
20	(508)	22-1/4	(565)	30	(114)
21	(533)	23-3/8	(594)	35	(132)
22	(559)	24-1/2	(622)	40	(151)

[a] Nominal capacities are specified to the nearest gallon or liter.

CONSTRUCTION

4 General

4.1 The body of a waste can may be round or have flat sides with rounded corners.

4.2 The inside diameter of a waste can shall be not less than 11 inches (279 mm) nor more than 22 inches (559 mm) and shall be not less than 90 percent of the inside height of the body.

4.3 The inside diameter of a waste can having four flat sides is considered to be the minor distance between its flat sides. The inside diameter of a triangular waste can is considered to be the average of the diameters of an inscribed circle and a circumscribed circle.

4.4 If the body of a waste can is made with flat sides, the corners shall be rounded on a radius of not less than 25 percent of the inside diameter of four-sided cans or of the distance from the front to back (apex of triangle to center of base) of triangular cans.

4.5 A waste can, when the cover is closed, shall prevent continued combustion of the contents should ignition occur from any cause. Projections, ridges, or other obstructions that might interfere with the closing of the cover shall be eliminated.

4.6 A waste can cover may be opened by hand or by a foot-operated lever.

4.7 The cover shall close by gravity and shall be prevented from opening more than 60 degrees from the closed position.

4.8 The form of the can shall prevent any appreciable area of the side or rear wall from being in close proximity to a room wall. Waste cans with flat sides or back or both shall be marked in accordance with 17.1B.

4.9 The form and assembly of a waste can shall be such that dripping of oil to the floor is prevented.

4.10 A waste can shall be provided with supports to space the bottom not less than 3 inches (76 mm) nor more than 4 inches (102 mm) above the floor and in a manner that will provide free circulation of air beneath the can. See Can Supports, Section 14.

4.11 A waste can shall be provided with handles to make it readily portable in an upright position.

4.12 Conventional designs of cans illustrating forms of construction that are in compliance with these requirements are illustrated in Figure 4.1, Figure 4.2, and Figure 4.3.

Figure 4.1
Examples of forms of construction for waste cans that comply with this standard

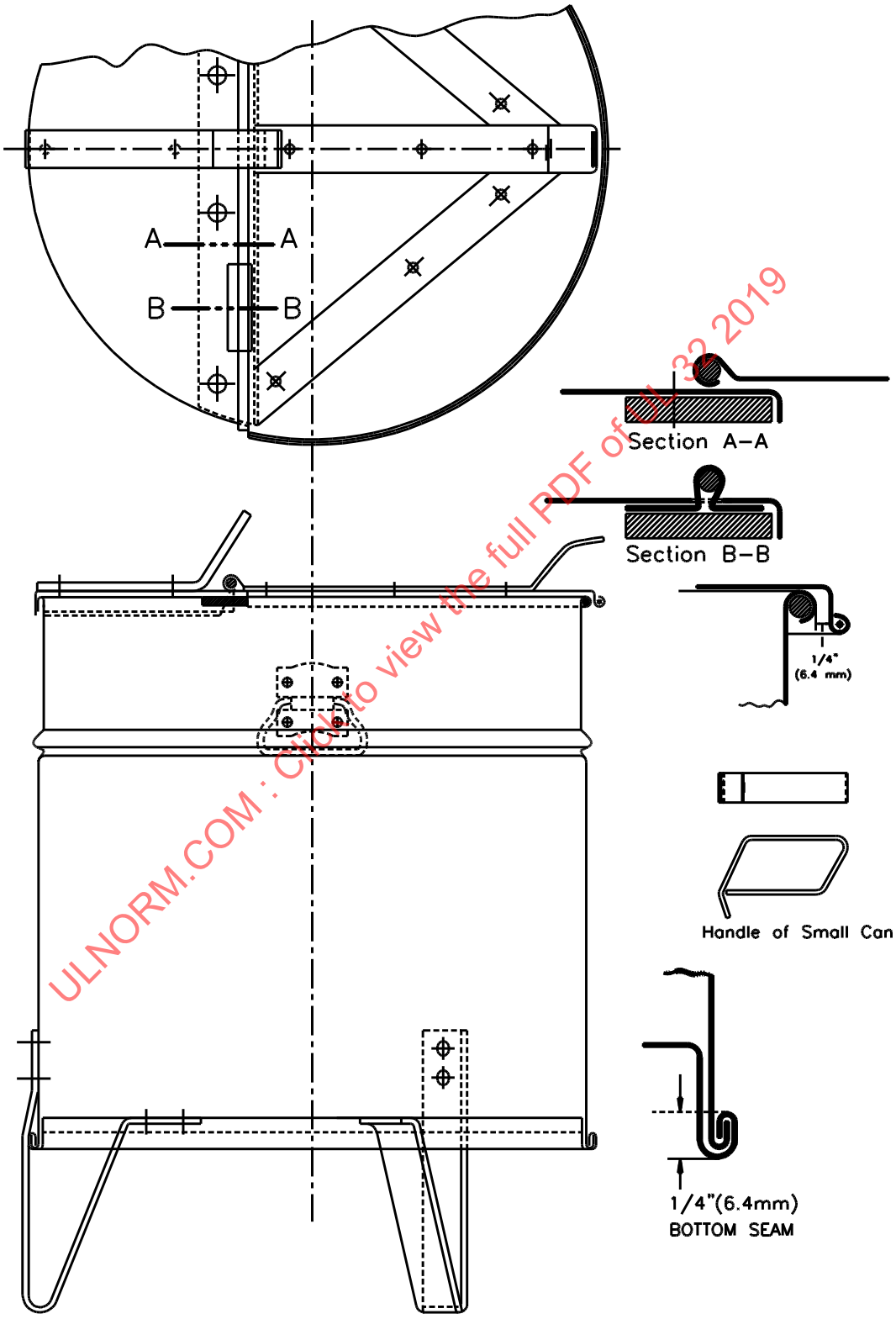

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Figure 4.2
Examples of forms of construction for waste cans that comply with this standard

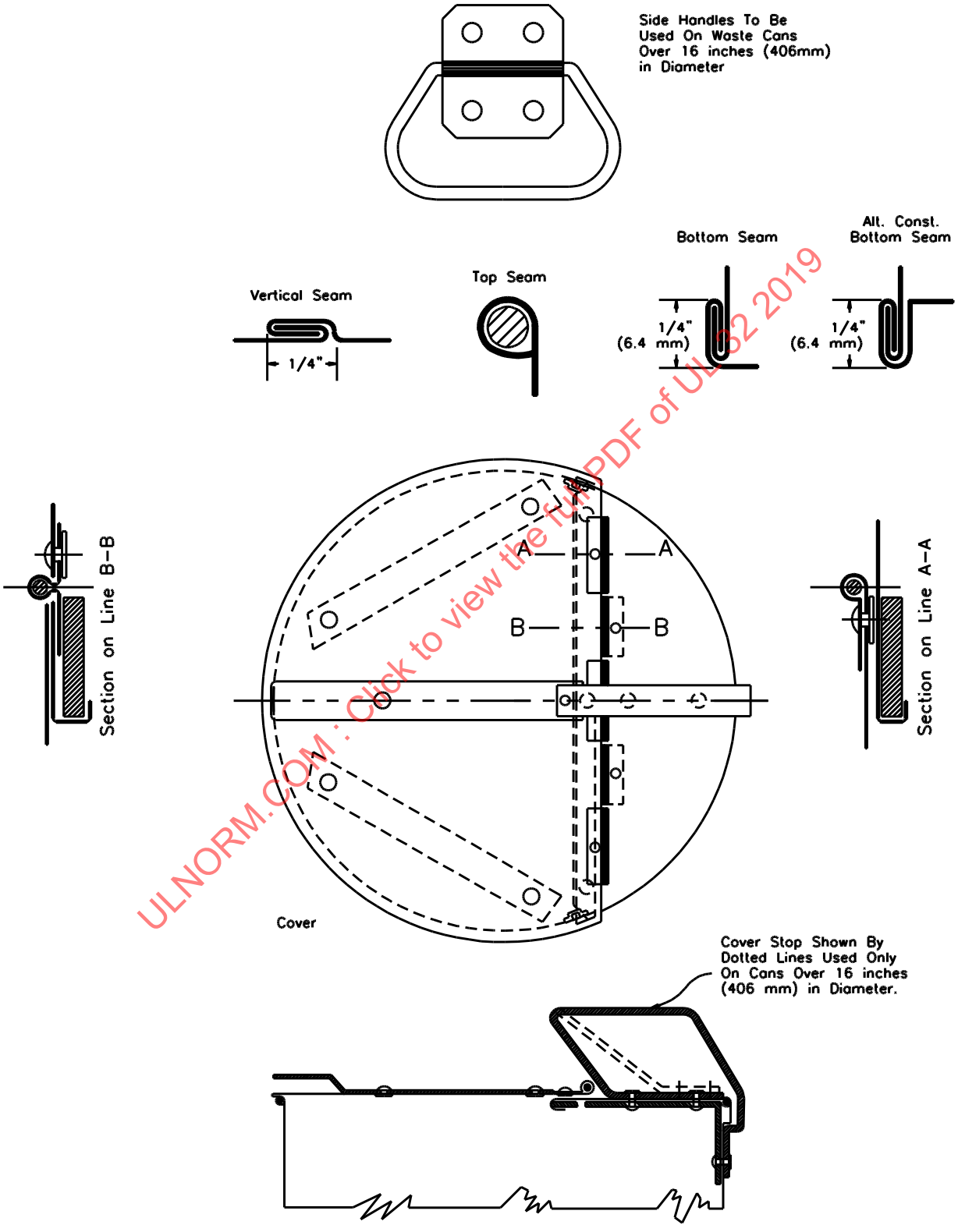
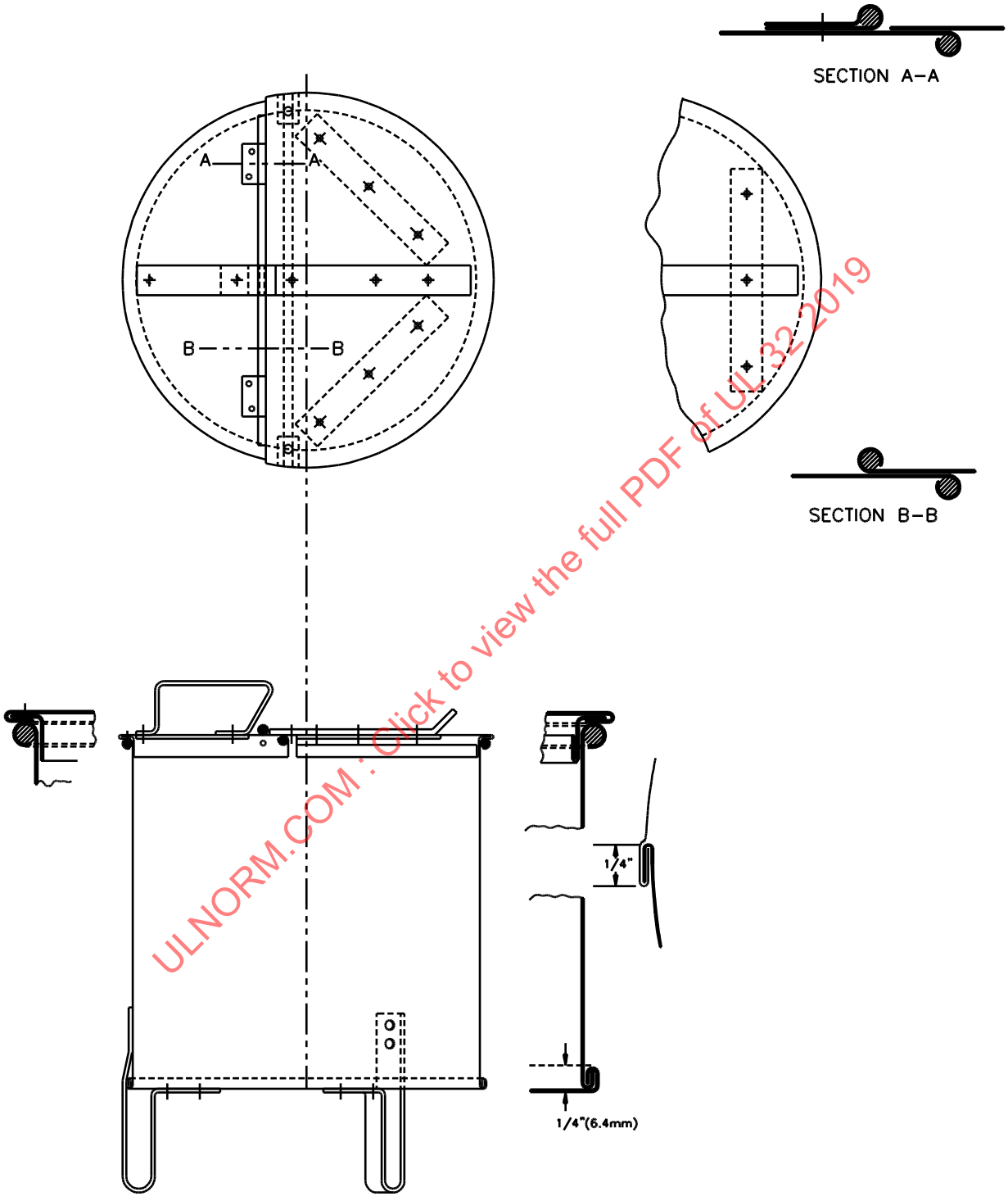


Figure 4.3
Examples of forms of construction for waste cans that comply with this standard



5 Materials

5.1 The bottom, body, and cover of a waste can shall be made of galvanized sheet steel, terne plate, or of corrosion resistant metal. Uncoated steel may be used if cans are galvanized after forming.

5.2 The minimum thickness of metal used for the body, bottom, and cover shall not be less than that specified in Table 5.1. In the case of coated sheets, the thickness shall be that measured under the coating.

Table 5.1
Minimum thickness of metal

Diameter of can[a]		Body, bottom, and fixed cover section		Hinged cover section	
		Uncoated steel		Uncoated steel	
inch	(mm)	inch	(mm)	inch	(mm)
11 – 13	(280 – 330)	0.016	(0.41)	0.021	(0.53)
14 – 16	(355 – 405)	0.018	(0.46)	0.024	(0.61)
17 – 19	(430 – 485)	0.021	(0.53)	0.027	(0.69)
20 – 22	(510 – 560)	0.024	(0.61)	0.030	(0.76)

[a] For functional diameters of 1/2 inch (12.7 mm) and over use values for the next larger size.

5.3 The thickness of the metal is to be determined by five micrometer readings spaced equally along the edge of the full piece as rolled. Thickness is to be determined on the sheet not less than 3/8 inch (9.5 mm) from a cut edge and not less than 3/4 inch (19.1 mm) from a mill edge.

5.4 A coating of galvanized sheet steel shall comply with the coating designation G60 or A60 in Table 1 of the Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process, ANSI/ASTM A653/A653M. Not less than 40 percent of the zinc shall be on either side, as determined by the single-spot test described in ANSI/ASTM A653/A653M. The coating shall be free from lumps, blisters, dross, and flux, and shall not flake or peel when formed.

5.5 The weight of coating on terne-coated sheet steel shall be at least as specified for coating designation LT35 in Table 1 of the Standard Specification for Steel Sheet, Terne (Lead-Tin Alloy) Coated by the Hot-Dip Process, ASTM A308. That is, the triple-spot coating weight shall not be less than 0.35 ounce per square foot (0.107 kg/m^2) and the single-spot coating weight shall not be less than 0.25 ounce per square foot (0.076 kg/m^2).

5.5.1 The weight of a galvanized coating may be determined by any method. However, in case of question, coating weight shall be established in accordance with the Standard Test Method for Weight (Mass) of Coating on Iron and Steel Articles With Zinc or Zinc-Alloy Coatings, ASTM A90/A90M.

5.6 Metal coatings injured or removed in the process of manufacture shall be replaced by solder or aluminum paint.

5.7 Strip steel used for legs and reinforcements shall be painted or plated to retard corrosion.

6 Seams and Joints

6.1 All seams or joints in the bottom and in the body shall be welded, brazed, or seamed and shall not depend on soft solder alone for strength.

6.2 Acceptable types of formed seams are illustrated in Figure 4.1, Figure 4.2, and Figure 4.3.

6.3 Formed seams shall be not less than 1/4 inch (6.4 mm) in width and shall have a metal overlap of not less than 1/8 inch (3.2 mm).

6.4 The bottom and the lower 6 inches (152 mm) of the body shall prevent oil leakage. If the bottom and vertical body joints are formed seams, they shall be sweated and soldered unless the can is galvanized after forming.

7 Rivets and Spot Welds

7.1 A rivet shall have a shank diameter of not less than 1/8 inch (3.2 mm), and shall not be headed over against sheet metal. If a can is galvanized after forming, an uncoated rivet may be used.

7.2 A rivet shall have a close fit in the rivet hole.

7.3 The head of a rivet on the inside of a waste can within 6 inches (152 mm) of the bottom shall be sweated with solder unless the can is galvanized after the rivet is installed.

7.4 When spot welding is used for the attachment of any part, at least twice the number of welds shall be used as is required for a rivet. Spot welding shall not burn through sheet metal.

8 Body Reinforcements

8.1 The upper edge of the body shall be reinforced by hemming, rolling, wiring, or by some other method that provides stiffness.

8.2 If a waste can is supported by a sheet metal base, the bottom edge of the base shall be reinforced as required for the upper edge of the body.

8.3 A steel strip reinforcement shall be riveted, welded, brazed, or otherwise mechanically secured.

9 Cover

9.1 The cover of a waste can may be made in one or two pieces.

9.2 A one-piece cover shall be constructed of sheet metal 0.006 inch (0.15 mm) thicker than that specified in Table 5.1 for the hinged cover section unless it is reinforced or provides the equivalent degree of stiffness.

9.3 If a cover is made in two pieces, the stationary section shall be of a width equal to approximately one-third of the diameter of the waste can and shall be secured to the body by rivets or welding.

9.4 Unless it is made of material not less than 0.006 inch (0.15 mm) thicker than that specified in Table 5.1, the outer edge of the cover shall be flanged downward to overlap the can body not less than 1/2 inch (12.7 mm) and to clear the top edge, horizontally, not less than 1/4 inch (6.4 mm). If a flange is provided inside the can, it shall clear the side wall only sufficiently to prevent striking. When not flanged, the edge of the movable section shall be hemmed and shall extend beyond the side of the body not less than 1/4 inch (6.4 mm).

9.5 A manually opened cover shall be provided with a lifting handle.