Designation: C 1047 – 99

Standard Specification for Accessories for Gypsum Wallboard and Gypsum Veneer Base[1]

This standard is issued under the fixed designation C 1047; the number immediately following the designation indicates the year of original adoption or, in the case of revision, the year of last revision. A number in parentheses indicates the year of last reapproval. A superscript epsilon (ε) indicates an editorial change since the last revision or reapproval.

This standard has been approved for use by agencies of the Department of Defense.

1. Scope *

1.1 This specification covers accessories used in conjunction with assemblies of gypsum wallboard and gypsum veneer plaster to protect edges and corners and to provide architectural features (see Fig. 1).

1.2 The values stated in inch-pound units are to be regarded as the standard. The SI units in parentheses are provided for information purposes only. The SI equivalents of inch-pound units may be approximate.

2. Referenced Documents

2.1 *ASTM Standards:*

A 463 Specification for Steel Sheet, Aluminum-Coated, by Hot-Dip Process [2]

A 591/A 591M Specification for Steel Sheet, Electrolytic Zinc-Coated, for Light Coating Mass Applications[2]

A 653/A 653M Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process[2]

B 69 Specification for Rolled Zinc[3]

B 117 Practice of Salt Spray (Fog) Apparatus[4]

C 475 Specification for Joint Compound and Joint Tape for Finishing Gypsum Board[5]

C 587 Specification for Gypsum Veneer Plaster[5]

D 1788 Specification for Rigid Acrylonitrile-Butadiene-Styrene (ABS) Plastics[6]

D 2092 Guide for Preparation of Zinc-Coated (Galvanized) Steel Surfaces for Painting[7]

D 3678 Specification for Rigid Poly(Vinyl Chloride) (PVC) Interior Profile Extrusions[8]

3. Terminology

3.1 *Definitions:*

3.1.1 *flange*—that part of the accessory extending out on the face of the gypsum board.

3.2 *Definitions of Terms Specific to This Standard:*

3.2.1 *accessories*—cornerbeads, edge trims, and control joints, such as casing beads, bull noses, and stops.

3.2.2 *control joint*—a formed product used for designed or required separations between adjacent surfaces of gypsum boards or gypsum veneer base.

3.2.3 *cornerbead*—a formed metal, plastic, or metal and paper angle for outside corners of gypsum boards or gypsum veneer base.

3.2.4 *edge trim*—typically "J"- or "L"-shaped strip, as shown in Fig. 1, formed of metal, plastic, or metal and paper to cover exposed ends or edges of gypsum board or gypsum veneer base.

4. Materials and Manufacture

4.1 Steel accessories and steel components of accessories manufactured from steel and paper in combination shall be manufactured from zinc-coated cold-roll (coil or cut length) sheet steel not less than 0.012-in. (0.30-mm) thick before application of coating.

4.1.1 Sheet steel, zinc-coated by the hot-dip process, shall be in accordance with Specification A 653/A 653M, minimized spangle, minimum G-30 coating.

4.1.2 Sheet steel, zinc-coated by the electrolytic process shall be in accordance with Specification A 591/A 591M, minimum coating on surface side to be 0.000140 in. (0.00356 mm), minimum coating on reverse side to be 0.00010 in. (0.00254 mm).

4.1.3 Sheet steel, aluminum-coated, shall be in accordance with Specification A 463 minimum T1-40 coating.

4.1.4 Phosphatizing (as specified in Method A of Guide D 2092) or other surface treatments may be used to ensure compatibility and bond as specified in Section 5.

4.2 Zinc accessories shall be manufactured from rolled zinc in accordance with Specification B 69, Type I, not less than 0.012-in. (0.305-mm) thick.

4.3 Plastic for accessories shall be manufactured from rigid PVC or ABS plastic not less than 0.012 in. (0.305 mm).

[1] This specification is under the jurisdiction of ASTM Committee C-11 on Gypsum and Related Building Materials and Systems and is the direct responsibility of Subcommittee C11.02 on Specifications and Test Methods for Accessories and Related Products.

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[2] *Annual Book of ASTM Standards,* Vol 01.06.

[3] *Annual Book of ASTM Standards,* Vol 02.04.

[4] *Annual Book of ASTM Standards,* Vol 03.02.

[5] *Annual Book of ASTM Standards,* Vol 04.01.

[6] *Discontinued;* see 1989 *Annual Book of ASTM Standards,* Vol 08.02.

[7] *Annual Book of ASTM Standards,* Vol 06.02.

[8] *Annual Book of ASTM Standards,* Vol 08.04.

***A Summary of Changes section appears at the end of this standard.**

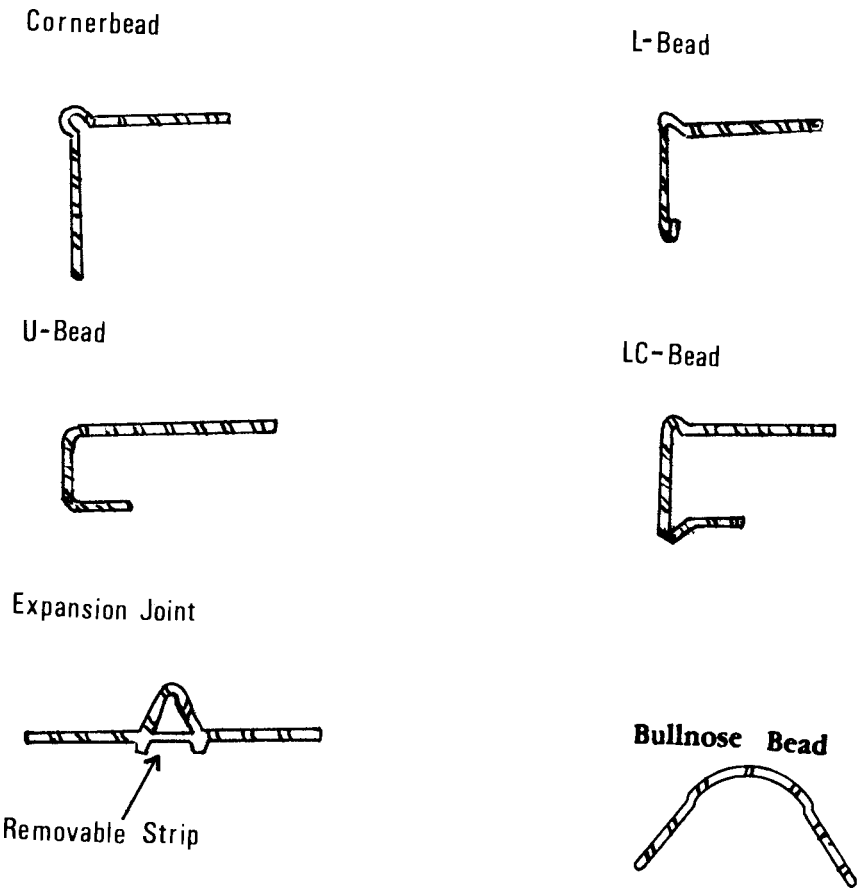

FIG. 1 Accessories for Gypsum Wallboard and Gypsum Veneer Base

4.3.1 PVC, Specification D 3678, Class II or III.

4.3.2 ABS, Specification D 1788 - 81, all limits 5-3-3-1-1.

4.4 Paper components of accessories manufactured from steel and paper in combination shall comply with requirements for thickness, tensile strength, dimensional stability, and bond of joint tape to joint compound as specified in Specification C 475.

5. Physical Properties

5.1 *Compatibility and Bond*—Accessories shall be compatible with and provide a surface bond to the materials specified in Specifications C 475 and C 587.

5.2 *Test Performance*—Steel accessories and steel components of accessories shall not show any red oxidation when tested as specified in Practice B 117 for 192 h.

6. Dimensions and Permissible Variations

6.1 Cornerbeads shall have an interior angle between the flanges no greater than 89°.

6.2 Accessories shall be free of twist or camber of a degree that will prevent their use in the assembly for which they are intended.

6.3 Length tolerances shall be ± 3⁄16 in. (±4.8 mm).

6.4 The size of the edge trim shall suit the thickness of the gypsum board used.

6.5 The minimum width of the flange shall be 7⁄8 ± 1⁄32 in. (22 ± 0.8 mm).

7. Appearance

7.1 Edges of accessories shall be free of burrs and sharp edges.

8. Configuration

8.1 Flanges of accessories, when required to be attached to framing members, shall have punch outs to accommodate fastening to the framing members. When required to meet performance requirements, the flanges shall be either knurled, made of mesh, deformed, expanded, or otherwise shaped to meet the performance requirements and intended use. Fig. 1 depicts the most commonly used shapes.

NOTE 1—Other types of accessories designed for special finish application (bull-nose, cove, and so forth) shall be manufactured in accordance with the general requirements of this specification.

9. Sampling

9.1 At least 0.25 % of the number of each type of accessory in a shipment, but not less than three pieces, shall be selected to represent the shipment and shall constitute a sample for the purpose of tests by the purchaser or user.

10. Inspection

10.1 Inspection of the accessories shall be agreed upon between the purchaser and the supplier as part of the purchase order.

11. Rejection and Rehearing

11.1 Rejection of accessories that fail to conform to the requirements of this specification shall be reported to the producer or supplier promptly and in writing within 10 working days from receipt of shipment by the purchaser. The notice of rejection shall contain a specific statement of the respect in which the accessories have failed to conform to the requirements of this specification. In case of dissatisfaction with the results of the test, at the request of the producer or supplier, such notice of rejection shall be supported by results of a test conducted by a mutually agreeable independent laboratory.

12. Certification

12.1 When specified in the purchase order, a producer's or supplier's certification that the product meets the requirements of this specification shall be furnished to the purchaser.

13. Packaging and Package Marking

13.1 Accessories shall be packaged to ensure safe delivery by common or other carriers.

13.2 When shipped for resale, the name of the manufacturer or seller and the brand and contents shall be legibly marked on each package.

14. Keywords

14.1 accessories; bead; corner; cornerbead; edge

SUMMARY OF CHANGES

This section identifies the location of changes to this specification that have been incorporated since the last issue. Committee C-11 has highlighted those changes that may affect the technical interpretation or use of this specification.

(*1*) Deleted the note in Fig. 1.