



# Standard Specification for Metal Lath<sup>1</sup>

This standard is issued under the fixed designation C847; 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 U.S. Department of Defense.*

## 1. Scope\*

1.1 This specification covers sheet lath, expanded metal lath, diamond mesh, flat and self-furring, and rib metal lath, 1/8 and 3/8 in. (3.2 and 9.6 mm), all with or without backing and designed to be used as a base for gypsum or portland cement plaster.

1.2 The values stated in inch-pound units are to be regarded as standard. The values given in parentheses are mathematical conversions to SI units that are provided for information only and are not considered standard.

## 2. Referenced Documents

### 2.1 ASTM Standards:<sup>2</sup>

**A653/A653M** Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process

## 3. Material

3.1 Metal lath shall be fabricated from cold-rolled carbon steel sheet of commercial quality conforming to Specification **A653/A653M**. Galvanized metal lath shall have a G60 coating in accordance with Specification **A653/A653M**.

3.2 Backing shall be attached to the lath sufficiently enough to prevent accidental removal during shipping, handling, or installation. Attachment of backing shall also allow lapping of metal to metal and backing to backing, 1 in. (25.4 mm) on the ends and 1/2 in. (12.7 mm) on the sides.

## 4. Dimensions, Mass, and Permissible Variations

4.1 **Thickness**—The nominal thickness of diamond mesh and flat rib metal lath shall be 1/8 in. (3.2 mm). The nominal

thickness of other rib metal lath shall be as designated, 3/8 in. (9.6 mm). The nominal thickness of self-furring diamond mesh shall be 5/16 in. (7.9 mm).

4.2 **Width**—The minimum width of metal lath shall be 27 in. (686 mm).

4.3 **Length**—The minimum length of metal lath shall be 97 in. (2464 mm).

4.4 **Weight**—The weight of metal lath shall be as follows:

### 4.4.1 U.S. Weights:

Type:	Weight, lb/yd <sup>2</sup> (kg/m <sup>2</sup> )
Diamond mesh	2.5 (1.4); 3.4 (1.8)
Flat rib	1.8 (1.0); 2.75 (1.5); 3.4 (1.8)
3/8-in. rib	3.4 (1.8); 4.0 (2.1)

### 4.4.2 Canadian Weights:

Type:	Weight, lb/yd <sup>2</sup> (kg/m <sup>2</sup> )
Diamond mesh	2.5 (1.4); 3.0 (1.6); 3.4 (1.8)
Flat rib	1.8 (1.0); 2.5 (1.4); 3.0 (1.6)
3/8-in. rib	3.0 (1.6); 3.5 (1.9); 4.0 (2.1)

4.5 **Permissible Variations**—The permissible variations shall be as follows:

4.5.1 **Thickness**,  $\pm 1/64$  in. (0.4 mm).

4.5.2 **Width**,  $-0$  in.,  $+3/8$  in. (9.5 mm).

4.5.3 **Length**,  $-0$  in.,  $+1 1/2$  in. (38.1 mm).

4.5.4 **Weight**,  $\pm 10$  %.

## 5. Finish

5.1 Metal lath shall be fabricated from hot-dipped galvanized steel.

## 6. Weight Test

6.1 **Significance and Use**—This test method provides a procedure for measuring the weight of a single sheet of metal lath. It shall be used to determine compliance with this specification. The degree of performance of this test method with service performance has not been determined.

### 6.2 Apparatus:

6.2.1 **Scale**, capable of weighing in increments of 0.1 lb (0.05 kg) or 1 oz (28 g).

6.2.2 **Tape Measure**, capable of measuring in increments of 1/16 in. (1.6 mm).

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<sup>2</sup> For referenced ASTM standards, visit the ASTM website, www.astm.org, or contact ASTM Customer Service at service@astm.org. For *Annual Book of ASTM Standards* volume information, refer to the standard's Document Summary page on the ASTM website.

6.3 *Materials shall satisfy the following:*

6.3.1 *Metal Lath*—Specification C847.

6.4 *Sampling*—One sheet shall be selected from each bundle or package, but not more than five sheets from any one shipment for testing.

6.5 *Specimen Preparation:*

6.5.1 Measure and record the width and length of each specimen.

NOTE 1—For paper-backed lath, remove the paper and glue from the lath before weighing the specimen.

6.5.2 Each specimen to be weighed shall be permitted to be folded.

6.6 *Procedure:*

6.6.1 Attach the scale to a suitable support and tare the scale to zero.

6.6.2 Attach the specimen to the scale.

6.6.3 Record the weight of the specimen.

6.6.4 Calculate the number of square yards of material present in each specimen.

NOTE 2—The number of square yards per specimen is determined by taking the area of the specimen in square inches (square mm) and dividing the area by 1296 in.<sup>2</sup>/yd<sup>2</sup> (995 389 mm<sup>2</sup>/m<sup>2</sup>).

6.6.5 Calculate the weight per square yard for each specimen.

NOTE 3—The weight per square yard is determined by dividing the weight per specimen by the number of square yards of each specimen.

6.7 *Number of Tests and Retests:*

6.7.1 A sample consisting of five specimens of each type of lath shall be tested. If more than two specimens fail, the sample has failed to meet the requirements of this test.

6.7.2 If one of the five test specimens fails to meet the requirements, two more additional test specimens shall be chosen for retesting. If not more than one of the two additional test specimens fail, the sample has met the requirements of this test.

6.7.3 If more than one of the test specimens fails, the sample has failed to meet the requirements of the test.

6.8 *Report*—Report shall indicate the total number of specimens tested and the number of specimens meeting the requirements of this specification.

6.9 *Precision and Bias*—No statement is made about either the precision or bias of this test method, since the result merely states whether or not there is conformance to the criteria for success specified in the procedure.

## 7. Inspection

7.1 Inspection of the material shall be agreed upon between the purchaser and supplier as part of the purchase contract.

## 8. Rejection and Rehearing

8.1 Any rejection shall be based upon the specific cause of failure to conform to the requirements of this specification, and shall be reported to the seller within ten working days from the receipt of the shipment by the purchaser.

8.2 Claims for rehearing shall be valid only if made within 20 working days from receipt of notice of specific cause for rejection.

## 9. Certification

9.1 Where specified in the purchase order, a producer's or supplier's certification shall be furnished to the purchaser that the material was manufactured in accordance with this specification and has been found to meet the specified requirements.

## 10. Marking and Identification

10.1 Each bundle of metal lath shall be labeled with a tag, band, or label with the following information:

10.1.1 The manufacturer's identification (that is, name, logo or initials).

10.1.2 Lath weight (pounds per square yard) (kilogram/meter squared).

10.1.3 Meets Specification C847.

10.2 Where color-coding of tags, banding, or labeling of like members is employed the color-coding of either the background color or the lettering used shall be as indicated in [Table 1](#).

**TABLE 1 Color Codes**

Lath Weight lb/yd <sup>2</sup> (kg/m <sup>2</sup> )	Color
2.5 lb/yd <sup>2</sup> (1.4 kg/m <sup>2</sup> )	Blue
3.4 lb/yd <sup>2</sup> (1.8 kg/m <sup>2</sup> )	Red

## 11. Packaging

11.1 Metal lath shall be packaged ten sheets per bundle, and self-furring lath shall be packaged five or ten sheets per bundle (option of manufacturer).

## 12. Keywords

12.1 gypsum cement plaster; lath; metal lath; portland cement plaster; rib lath; self-furring; sheet lath

## SUMMARY OF CHANGES

Committee C11 has identified the location of selected changes to this standard since the last issue (C847 – 14) that may impact the use of this standard. (Approved Nov. 1, 2014.)

(1) Revised subsection 4.5.2.

(3) Removed subsection 11.2.

(2) Renamed Section 11.

Committee C11 has identified the location of selected changes to this standard since the last issue (C847 – 12) that may impact the use of this standard. (Approved June 1, 2014.)

(1) Added new Section 10.

(2) Added new Table 1.

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