

Designation: C847 - 18

Standard Specification for Metal Lath¹

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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, ½ and ½ in. (3.2 and 9.6 mm), all with or without factory-attached water-resistive barrier 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.
- 1.3 This international standard was developed in accordance with internationally recognized principles on standardization established in the Decision on Principles for the Development of International Standards, Guides and Recommendations issued by the World Trade Organization Technical Barriers to Trade (TBT) Committee.

2. Referenced Documents

2.1 ASTM Standards:²

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

E2556/E2556M Specification for Vapor Permeable Flexible Sheet Water-Resistive Barriers Intended for Mechanical Attachment

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.

- ¹ This specification is under the jurisdiction of ASTM Committee C11 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 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.

- 3.2 *Water-Resistive Barrier*—Compliant with Federal Specification UU-B-790a, or Specification E2556/E2556M.
- 3.3 Factory-attached water-resistive barrier shall be attached to the lath sufficiently enough to prevent accidental removal during shipping, handling, or installation. Attachment of water-resistive barrier shall also allow lapping of metal to metal and water-resistive barrier to water-resistive barrier, 1 in. (25.4 mm) on the ends and ½ 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 ½ in. (3.2 mm). The nominal thickness of other rib metal lath shall be as designated, ¾ in. (9.6 mm). The nominal thickness of self-furring diamond mesh shall be ½ 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: 5d27a19da2/astm-c847-18

Type:	Weight, lb/yd² (kg/m²)
Diamond mesh	2.5 (1.4); 3.4 (1.8)
Flat rib	1.8 (1.0); 2.75 (1.5); 3.4 (1.8)
%-in. rib	3.4 (1.8); 4.0 (2.1)

4.4.2 Canadian Weights:

Type:	Weight, lb/yd ² (kg/m ²)
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*, $\pm \frac{1}{64}$ in. (0.4 mm).
 - 4.5.2 Width, -0 in., $+\frac{3}{8}$ in. (9.5 mm).
 - 4.5.3 *Length*, -0 in., $+1\frac{1}{2}$ in. (38.1 mm).
 - 4.5.4 Weight, $\pm 10 \%$.

5. Finish

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