



Designation: C933 – 23

Standard Specification for Welded Wire Lath¹

This standard is issued under the fixed designation C933; 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.

1. Scope

1.1 This specification covers welded wire lath, flat or self-furring, with or without backing, designed for use as a base to receive portland cement-based interior plaster and exterior stucco.

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

A641/A641M Specification for Zinc-Coated (Galvanized) Carbon Steel Wire

C11 Terminology Relating to Gypsum and Related Building Materials and Systems

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

2.2 *Federal Specifications:*

UU-B-790 Building Paper, Vegetable Fiber: (Kraft, Waterproofed, Water Repellent and Fire Resistant)³

3. Terminology

3.1 Definitions of terms used in this standard shall be in accordance with Terminology **C11**.

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.

Current edition approved Oct. 1, 2023. Published November 2023. Originally approved in 1980. Last previous edition approved in 2018 as C933 – 18. DOI: 10.1520/C0933-23.

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 Available from Standardization Documents Order Desk, Bldg. 4 Section D, 700 Robbins Ave., Philadelphia, PA 19111-5094, Attn: NPODS.

4. Materials and Manufacture

4.1 Welded wire lath shall be fabricated from not less than 0.0625 in. (1.588 mm), cold-drawn, galvanized steel wire, conforming to Specification **A641/A641M**.

4.1.1 Diameter tolerance for galvanized wire shall be in accordance with Specification **A641/A641M**.

4.1.2 The wire shall be zinc-coated (galvanized) in accordance with Specification **A641/A641M**.

4.1.3 If provided, the factory-attached water-resistive barrier shall conform to Federal Specification UU-B-790 or ASTM Specification **E2556/E2556M**. The water-resistive barrier shall be either absorptive or water resistant. The water-resistive barrier shall have a bursting strength of not less than that required to maintain integrity under normal hand- or machine-application pressures.

4.1.4 If provided, the factory-attached water-resistive barrier shall be attached to the lath to prevent accidental removal during shipping, handling or installation. Attachment of the water-resistive barrier shall allow lapping of wire-to-wire and water-resistive barrier to water-resistive barrier of not less than one mesh at ends and edges and shall permit full embedment, in not less than ¼ in. (6 mm) of plaster, of not less than one-half of the total length and width of the wire.

4.1.5 The thickness of the embedment of the lath and plaster shall be measured from the back plane of the back wire, exclusive of furring, to the water-resistive barrier or surface of the substrate.

5. Dimensions and Permissible Variations

5.1 *Openings and Stiffening:*

5.1.1 Lath shall be welded at all intersections of wire to form openings not more than 2 in. by 2 in. (51 mm by 51 mm).

5.1.2 Reinforced lath shall be permitted to be reinforced continuously and parallel to the long dimension of the lath at intervals of not more than 6 in. (150 mm). Wires used for this purpose shall range from 0.072 in. to 0.1205 in. (1.9 mm to 3.1 mm). Reduction of the size of the openings to less than 2 in. by 2 in. (51 mm by 51 mm) shall also be permitted.

5.1.3 Self-furring crimps on self-furring lath shall project not less than ¼ in. (6 mm) from the plane of the back of the lath.

5.2 *Thickness*—The nominal thickness shall be ⅛ in. (3.2 mm), exclusive of self-furring crimps, with a permissible variation of $\pm 1/32$ in. (0.8 mm).