



## Standard Specification for Welded Wire Lath<sup>1</sup>

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 ( $\epsilon$ ) 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.

### 2. Referenced Documents

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

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

**C11** Terminology Relating to Gypsum and Related Building Materials and Systems

#### 2.2 *Federal Specifications*:

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

### 3. Terminology

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

### 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 The backing shall conform to Federal Specification UU-B-790. The backing shall be either absorptive or water resistant. The backing shall have a bursting strength of not less than that required to maintain integrity under normal hand- or machine-application pressures.

4.1.4 The backing shall be attached to the lath to prevent accidental removal during shipping, handling or installation. Attachment of the backing shall allow lapping of wire-to-wire and backing-to-backing 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 backing 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. (51 mm) by 2 in. (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. (1.9 mm) to 0.1205 in. (3.1 mm). Reduction of the size of the openings to less than 2 in. (51 mm) by 2 in. (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).

5.3 *Width*—The nominal width shall be 28 in. (700 mm) to 54 in. (1370 mm), with a permissible variation of  $\pm 3/4$  in. (19 mm).

5.4 *Length*—The minimum length shall be 48 in. (1200 mm) for sheets or a maximum of 150 ft (45.720 m) for rolls with a permissible variation of  $\pm 3/4$  in. (19 mm) for sheets or rolls.

<sup>1</sup> 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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<sup>2</sup> For referenced ASTM standards, visit the ASTM website, [www.astm.org](http://www.astm.org), or contact ASTM Customer Service at [service@astm.org](mailto:service@astm.org). For *Annual Book of ASTM Standards* volume information, refer to the standard's Document Summary page on the ASTM website.

<sup>3</sup> Available from Standardization Documents Order Desk, Bldg. 4 Section D, 700 Robbins Ave., Philadelphia, PA 19111-5094, Attn: NPODS.

5.5 *Weight*—The weight, exclusive of backing, shall be a minimum of 1.14 lb/yd<sup>2</sup> (0.618 kg/m<sup>2</sup>). The weight of reinforced lath, exclusive of backing, shall be a minimum of 1.95 lb/yd<sup>2</sup> (1.058 kg/m<sup>2</sup>).

## 6. Sampling

6.1 When specified by the purchase agreement, samples of welded wire lath shall be taken at the place of manufacture or at the place of destination. If samples are taken at the destination, such samples shall be taken within 24 h of the receipt of the material.

6.2 At least 0.25 % of the number of sheets of welded wire lath in a shipment, but not less than three sheets, shall be so selected as to be representative of the shipment and shall constitute a sample for the purpose of tests by the purchaser or user.

## 7. Inspection

7.1 Inspection of the welded wire lath shall be agreed upon between the purchaser and the producer or supplier as part of the purchase agreement.

## 8. Rejection

8.1 Rejection of welded wire lath that fails to conform to the requirements of the specification shall be reported to the producer or supplier promptly and in writing. The notice of rejection shall contain a statement documenting how the welded wire lath has failed to conform to the requirements of the specification.

## 9. Packaging and Package Marking

9.1 *Packaging*—Welded wire lath shall be packaged in bundles, rolls, or pallets.

9.2 *Marking*—Unless otherwise required by the purchase agreement, lath shall have legibly marked thereon the following: the product description; the name of the manufacturer or distributor, country of origin and contact information; the brand name (if any); and the ASTM designation for the product.

9.2.1 Each bundle or roll of lath with no backing shall be marked with metal or paper tags securely attached to the bundles or with metal tags, paper tags, plastic or metal banding, or paper wrapping on rolls.

9.2.2 Each flat sheet and roll of lath with backing shall be marked on the backing material.

9.2.3 The quantity for flat sheet bundles shall be square yards and number of sheets per bundle marked with metal or paper tags on the pallet or bundle. Rolls shall be marked with metal tags, paper tags, plastic or metal banding, or paper wrapping on rolls. The marking for flat sheets and rolls shall indicate the mesh-opening size and wire thickness of rolls.

## 10. Keywords

10.1 lath; metal plaster base; plaster; self-furring lath; stucco; wire lath

## SUMMARY OF CHANGES

Committee C11 has identified the location of selected changes to this specification since the last issue, C933 – 13, that may impact the use of this specification. (Approved Aug. 15, 2014.)

(1) Revised paragraphs 9.1 – 9.2.2.

(2) Added paragraph 9.2.3.

Committee C11 has identified the location of selected changes to this specification since the last issue, C933 – 11, that may impact the use of this specification. (Approved May 1, 2013.)

(1) Revised paragraph 5.1.2.

(2) Revised paragraph 5.5.

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