

Technical Bulletin

Corporate: P.O. Box 397 • Fortson • Georgia • 31808 • 800-755-0825 • FAX 706-569-6704
Technical: 800-760-2861

MW# 179-120115

Related Systems
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Topic: Expanded Metal Lath

Diamond Mesh Lath has been around practically forever in various forms such as flat, dimpled, paper backed, and it is easy to take it for granted that it is a commodity and they are all the same. Unfortunately, this is not always the case.

The reference standard for metal lath is ASTM C847. This standard was revised in 2014 and includes some revisions including extending the length from 96" to 97". As you can see from the photo at the right, some suppliers are not on board with the new standard.

Why is this important for your projects? It all comes down to the application of the lath. In standard applications the lath needs to be lapped a minimum of 1/2" (12.7 mm) at the sides (ASTM C1063, 7.8.2). The 97" length makes it easier to meet the lap requirement over a framing member without having to resort to wire tying the metal lath as you would with non-compliant lath.



Big Box can lead to big problems when it comes to non-compliant lath

Compliant Lath Benefits

With compliant lath you get other benefits that extend beyond the purchase price. These include the following:

- A building code compliance report to help you breeze through any building official concerns.
- Technical support from both the lath manufacturer and Master Wall[®].
- A valid Master Wall[®] warranty when our products are used.

Disclaimer

This Technical Bulletin is published for general informational purposes only and is not intended to imply that these are the only materials, procedures, or methods, which are available or suitable. Materials, procedures, or methods may vary according to the particular circumstances, local building code requirements, design conditions, or statutory and regulatory requirements. While the information in this Technical Bulletin is believed to be accurate and reliable, it is presented without guarantee or responsibility on the part of Master Wall Inc.

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Field Checking Lath for Conformance

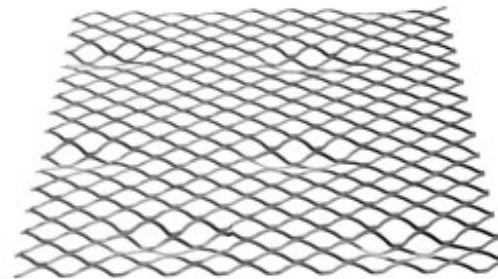
The lath in full bundles should be labeled with a tag, band or label with the manufacturer's identification, lath weight, notation that it meets ASTM C847 and possibly color-coding (Blue for 2.5, Red for 3.4). If the manufacturer has performed third-party testing it will be noted on the tag as well. 1.75#/sq yard lath is not included in ASTM C847 and relies on a manufacturer's code compliance report.

The lath itself should measure 27" (686 mm) by 97" (2462 mm) with a nominal thickness of 5/16" (7.9 mm) for self-furring lath.

A fish scale or any 10lb scale can be used to check the lath weight. The ASTM standard permits a +/- 10% of target weight (section 4.5.4) and it should weight within the tolerances noted below:

Sheet Style	Total Sheet weight (range)
1.75 lbs/sq.yard	3.5 lbs/sheet (3.15 lbs – 3.85 lbs)
2.5 lbs/sq. yard	5.00 lbs/sheet (4.5 lbs – 5.5 lbs)
3.4 lbs/sq.yard	6.8 lbs/sheet (6.12 lbs – 7.48 lbs)

If you finding lath weights not within these ranges, contact the manufacturer to report the discrepancy and ask for a properly weighted product to be supplied.



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ATI Evaluation Service
A Division of Architectural Testing – Certification Services

Code Compliance Research Report **CCRR-0204**

Subject to Renewal: 03/04/2015 Issued: 02/19/2015
Visit www.atl-es.com for current status Revised: 04/23/2015
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ClarkDietrich™ Building Systems, LLC
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1.0 Subject
ClarkDietrich™ Expanded Metal Lath and Metal Lath Accessories

2.0 Research Scope

2.1 Building Codes
2012 International Building Code (IBC)
2012 International Residential Code (IRC)
2010 Florida Building Code (FBC)
Includingly Handy Nominale Zone (HNZ)
2013 California Building Code (CBC)

2.2 Properties

Physical Properties

3.0 Description

3.1 Metal lath and metal lath accessories described in this report comply with Section 2007.2 of the IBC, FBC and CBC, and IRC Section R703.5.1 for use as reinforcement for interior or exterior plaster.

3.2 ClarkDietrich™ Expanded Diamond Mesh Metal Lath and Self-Furring Lath is galvanized expanded metal lath complying with ASTM C847, fabricated from steel complying with ASTM A653 with a G90 galvanized coating. Products are available in 1/4 inch thick, 27 inch by 97 inch sheets, with nominal weights of 2.5 lb/sq ft or 3.4 lb/sq ft.

3.2.1 Expanded diamond mesh lath is a flat metal lath (see Figure 1), and the self-furring lath is a dimpled or grooved metal lath (see Figure 2).

3.2.2 Expanded diamond mesh lath and self-furring lath are available with a Grade-D, Style 2 passivating water-resistive barrier, complying with ICC-ES AC308, Acceptance Criteria for Water-Resistive Barriers. See Figure 3.

3.3 ClarkDietrich™ strip lath, 1/4 inch rib lath, and Corner™ are manufactured of galvanized expanded metal lath complying with ASTM C847, fabricated from steel complying with ASTM A653 with a G90 galvanized coating.

3.3.1 Strip lath is a flat expanded metal strip used as plaster reinforcement over joints. Strip lath is available in 4 inch by 97 inch or 8 inch by 97 inch strips, with a minimum weight of 1.75 lb/sq ft. See Figure 4.

3.3.2 The 1/4 inch rib lath is a herringbone mesh pattern with longitudinal solid steel 1/4 inch ribs, spaced 4 inches on center. Rib lath is available in 27 inch by 97 inch sheets, with a nominal weight of 3.4 lb/sq ft. See Figure 5.

3.3.3 Corner™ is used as reinforcement for inner plaster corners and available with legs of 2" or 3" with lengths up to 90 inches, and minimum weight of 1.75 lb/sq ft. See Figure 6.

3.4 ClarkDietrich™ #1A Expanded Flange Corner Bead is used as reinforcement for outer plaster corners, manufactured in accordance with ASTM C1003 Table 1 in galvanized steel or zinc. Flanges are 2-7/8 inches in length. See Figure 7.

3.4.1 The galvanized steel expanded corner beads comply with ASTM A653 having a G90 coating.

3.4.2 The zinc expanded corner beads comply with ASTM specification B90, and are manufactured in accordance with ASTM C1003 Table 1.

4.0 Performance

4.1 Metal lath products have a fire-resistance rating as identified in IBC Table 721.1(2) (FBC Table 720.1(2), CBC Table 721.1(2)) when installed in accordance with Section 5.1 of this report and IBC Section 721 (FBC Sect. 720, CBC Sect 721).

Architectural Testing, Inc. 130 Derry Court • York, PA 17406 717-764-7700
www.archtest.com

Quality lath comes with a code report and manufacturer support
Courtesy ClarkDietrich™ Building Systems, LLC