INTERNATIONAL

Designation: ~~C1788 – 14 (Reapproved 2019)~~ C1788 – 20

Standard Specification for Non Metallic Plaster Bases (Lath) Used ~~with~~With Portland Cement Based Plaster in Vertical Wall Applications[1]

This standard is issued under the fixed designation C1788; 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 ~~standard~~specification provides the minimum specification for use of non metallic plaster bases with ~~portland~~Portland cement based plaster in vertical wall applications.

1.2 *Units*—The values stated in either SI units or inch-pound units are to be regarded separately as standard. The values stated in each system are not necessarily exact equivalents; therefore, to ensure conformance with the standard, each system shall be used independently of the other, and values from the two systems shall not be combined.

1.3 Details of construction for a specific assembly to achieve the required fire resistance, sound, or acoustic rating shall be obtained from reports of fire-resistance tests, engineering evaluations, or listings from recognized fire testing, sound or acoustic laboratories.

1.4 *This standard does not purport to address all of the safety concerns, if any, associated with its use. It is the responsibility of the user of this standard to establish appropriate safety, health, and environmental practices and determine the applicability of regulatory limitations prior to use.*

1.5 *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]

C926 Specification for Application of Portland Cement-Based Plaster
E631 Terminology of Building Constructions
C1764 Test Methods for Non Metallic Plaster Bases (Lath) Used with Portland Cement Based Plaster in Vertical Wall Applications

3. Terminology

~~3.1 *Definitions*—For definitions of terms used in these test methods, See Terminology E631.~~

3.1 *Definitions:*

[1] This ~~test method~~ 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 ~~March 1, 2019~~Oct. 15, 2020. Published ~~March 2019~~November 2020. Originally approved in 2014. Last previous edition approved in ~~2014~~2019 as ~~C1788 – 14.~~C1788 – 14 (2019). DOI: ~~10.1520/C1788-14R19.~~10.1520/C1788-20.

[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.

3.1.1 For definitions of terms used in this specification, see Terminology E631.

3.2 *Definitions of Terms Specific to This Standard:*

~~3.2.1 *portland cement based plaster, n*—in accordance with Specification C926.~~

3.2.1 *non metallic plaster base (lath), n*—~~material used~~ a product manufactured from non metal materials that serves as a base for ~~portland cement based plaster that is flat or self furred, that meets or exceeds the requirements set forth in~~ Portland cement based plaster.~~Table 1~~.

3.2.1.1 *Discussion*—

Examples of non metallic materials are plastic, glass fiber, and nylon.

3.2.2 *Portland cement based plaster, n*—in accordance with Specification C926.

4. Inspection

4.1 Inspection of the material shall be agreed upon between the purchaser and producer or supplier as part of the purchase agreement.

5. Rejection

5.1 Material that fails to conform to the requirements of this specification may be rejected. Rejection should be reported to the producer or supplier promptly and in writing. In case of dissatisfaction with the results of the test, the producer or supplier may make claim for a rehearing.

6. Product Packaging

6.1 Non metallic plaster bases shall be packaged in sheets or rolls in sizes that is convenient for shipping, handling, as well as application.

TABLE 1 Performance Requirements

Property	~~Method~~Test Methods	Requirements
~~Transverse load~~	~~Refer to Test Methods C1764~~	~~Specimens shall be tested in both positive and negative directions. Ultimate load is achieved when the specimen no longer maintains the applied test load or maximum mid span deflection exceeds L/360. Design loads, in both directions, shall be based on applying a safety factor of 3 to the average ultimate loads which in no case shall be less than 75 lbf/ft^2.~~
Transverse Load	Test Methods C1764	Specimens shall be tested in both positive and negative directions. Ultimate load is achieved when the specimen no longer maintains the applied test load or maximum mid span deflection exceeds L/360. Design loads, in both directions, shall be based on applying a safety factor of 3 to the average ultimate loads which in no case shall be less than 75 lbf/ft^2.
~~Vertical load~~	~~Refer to Test Methods C1764~~	~~Not less than 7 lb (3kg)/fastener multiplied by the appropriate safety factor using a 7 in. (178 mm) by 16 in. (406 mm) tributary area/fastener.~~
Vertical Load	Test Methods C1764	Not less than 7 lb (3 kg)/fastener multiplied by the appropriate safety factor using a 7 by 16 in. (178 by 406 mm) tributary area/fastener.
~~Embedment~~	~~Refer to Test Methods C1764~~	~~Not less than ½ the total length and width of the lath shall be fully embedded minimum ¼ in. (6 mm) regardless of furring attachment at fastener unless lath is furred from vertical supports or solid surfaces at least ¼ in. (6 mm).~~
Embedment	Test Methods C1764	Not less than ½ the total length and width of the lath shall be fully embedded minimum ¼ in. (6 mm) regardless of furring attachment at fastener unless lath is furred from vertical supports or solid surfaces at least ¼ in. (6 mm).
~~Fastener pull-through resistance~~	~~Refer to Test Methods C1764~~	~~The greater of design load or 85 lbf (378 N).~~
Fastener Pull-through Resistance	Test Methods C1764	The greater of design load or 85 lbf (378 N).
~~Alkali resistance (glass fiber lath only)~~	~~Refer to Test Methods C1764~~	~~Tensile strength of all exposed and unexposed specimens shall be not less than 120 pli (21 015 N/m).~~
Alkali Resistance (Test Applies to Glass Fiber Materials Only)	Test Methods C1764	Tensile strength of all exposed and unexposed specimens shall be not less than 120 pli (21 015 N/m).