



Standard Specification for Installation of Non Metallic Plaster Bases (Lath) Used with Portland Cement Based Plaster in Vertical Wall Applications¹

This standard is issued under the fixed designation C1787; 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 applies to the minimum installation requirements for non metallic plaster bases used with portland cement based plaster in vertical wall applications.

1.2 Where a fire resistance rating is required for plastered assemblies and constructions, details of construction shall be in accordance with reports of fire tests of assemblies that have met the requirements of the fire rating imposed.

1.3 *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 may not be exact equivalents; therefore, each system shall be used independently of the other. Combining values from the two systems may result in non-conformance with the standard.

1.4 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.

1.5 *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 and health practices and determine the applicability of regulatory limitations prior to use.*

2. Referenced Documents

2.1 ASTM Standards:²

C926 Specification for Application of Portland Cement-Based Plaster

C954 Specification for Steel Drill Screws for the Application

¹ This test method is under the jurisdiction of ASTM Committee C11 on Gypsum and Related Building Materials and Systems and is the direct responsibility of Subcommittee C11.03 on Specifications for the Application of Gypsum and Other Products in Assemblies.

Current edition approved Feb. 1, 2014. Published April 2014. DOI: 10.1520/C1787-14.

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.

of Gypsum Panel Products or Metal Plaster Bases to Steel Studs from 0.033 in. (0.84 mm) to 0.112 in. (2.84 mm) in Thickness

C1063 Specification for Installation of Lathing and Furring to Receive Interior and Exterior Portland Cement-Based Plaster

E631 Terminology of Building Constructions

C1788 Specification 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.

3.2 Definitions of Terms Specific to This Standard:

3.2.1 *portland cement based plaster, n*—see Specification C926.

3.2.2 *non metallic plaster base (lath), n*—material used as a base for portland cement based plaster that is self furred and meets or exceeds the requirements set forth in Specification C1788.

3.2.3 *framing member, n*—see Specification C1063.

4. Delivery and Storage of Materials

4.1 All materials shall be delivered in original, undamaged containers.

4.2 Store materials inside or under cover protected from weather.

5. Coordination and Scheduling

5.1 Coordinate and schedule installation of non metallic plaster base with related work of other sections.

6. Materials

6.1 Materials shall conform to the requirements of the referenced specifications and standards and to the requirements specified herein.

6.2 *Portland Cement Based Plaster*, in accordance with Specification C926.

6.3 *Accessories*, in accordance with Specification **C1063**.

7. Application of Accessories

7.1 In accordance with Specification **C1063**.

8. Application of Non Metallic Plaster Bases

8.1 *Workmanship*—Non metallic plaster base shall be installed so the finished plaster surfaces are true to line, level, plumb, square, or curved as required to receive the specified plaster thickness.

8.2 *Application of Non Metallic Plaster Base:*

8.2.1 Non metallic plaster bases shall be attached to framing members at not more than 7 in. (178 mm) along framing members spaced not more than 16 in. (406 mm) on center.

8.2.2 Non metallic plaster base shall be installed over solid backing or sheathing sufficiently rigid to permit portland cement plaster application.

8.2.3 Non metallic plaster base shall be applied with the long dimension at right angles to the supports unless approved otherwise by the manufacturer and justified through compliance with the performance requirements set forth in Specification **C1788**.

8.2.4 Ends of adjoining non metallic plaster bases shall be staggered in a running bond pattern with adjacent rows of non metallic plaster base.

8.2.5 Non metallic plaster base shall not be continuous through control joints but shall be stopped and fastened at each side.

8.2.6 Non metallic plaster base shall only be installed to vertical surfaces.

8.3 *Attachment of Non Metallic Plaster Bases to Wood Framing:*

8.3.1 Non metallic plaster base shall be attached to framing members spaced not more than 16 in. (406 mm) on center with attachments spaced not more than 7 in. (178 mm) on center along supports.

8.3.2 Non metallic plaster base shall be attached with manufacturer recommended fasteners. Staples shall be minimum 16 gauge with crowns not less than $\frac{3}{4}$ in. (19 mm),

engage not less than two strands of non metallic plaster base and penetrate the wood framing members not less than $\frac{3}{4}$ in. (19 mm).

8.4 *Attachment of Non Metallic Plaster Bases to Metal Framing:*

8.4.1 Non metallic plaster base shall be attached to framing members spaced not more than 16 in. (406 mm) on center with attachments spaced not more than 7 in. (178 mm) on center along supports.

8.4.2 Non metallic plaster bases shall be attached with manufacturers recommended fasteners. Specification **C954** screws or pneumatic pins and corrosion resistant washers shall engage not less than two strands of the non metallic plaster base and attach it to metal framing members. Screw fasteners shall extend through the steel connection a minimum of three exposed threads. Pneumatic pins shall extend through the steel connection in accordance with the minimum depth recommended by the pin manufacturer.

8.5 *Attachment of Non Metallic Plaster Bases to Concrete or Concrete Masonry Units:*

8.5.1 Non metallic plaster base shall be attached to concrete or concrete masonry units with attachments spaced not more than 7 in. (178 mm) on center in rows not more than 16 in. (406 mm) on center.

8.5.2 Non metallic plaster bases shall be attached with manufacturers recommended fasteners. Masonry, power, or powder actuated fastener and corrosion resistant washers shall engage not less than two strands of non metallic plaster base. Minimum fastener penetration into the concrete or concrete masonry units shall be not less than $\frac{3}{4}$ in. (19 mm).

8.6 *Lapping of Non Metallic Plaster Bases:*

8.6.1 Side and end laps shall be 3 in. (76 mm) minimum unless justified through compliance with the performance requirements set forth in Specification **C1788** and recommended by the manufacturer.

9. Keywords

9.1 lath; non metallic plaster base; portland cement based plaster

ASTM International takes no position respecting the validity of any patent rights asserted in connection with any item mentioned in this standard. Users of this standard are expressly advised that determination of the validity of any such patent rights, and the risk of infringement of such rights, are entirely their own responsibility.

This standard is subject to revision at any time by the responsible technical committee and must be reviewed every five years and if not revised, either reapproved or withdrawn. Your comments are invited either for revision of this standard or for additional standards and should be addressed to ASTM International Headquarters. Your comments will receive careful consideration at a meeting of the responsible technical committee, which you may attend. If you feel that your comments have not received a fair hearing you should make your views known to the ASTM Committee on Standards, at the address shown below.

This standard is copyrighted by ASTM International, 100 Barr Harbor Drive, PO Box C700, West Conshohocken, PA 19428-2959, United States. Individual reprints (single or multiple copies) of this standard may be obtained by contacting ASTM at the above address or at 610-832-9585 (phone), 610-832-9555 (fax), or service@astm.org (e-mail); or through the ASTM website (www.astm.org). Permission rights to photocopy the standard may also be secured from the Copyright Clearance Center, 222 Rosewood Drive, Danvers, MA 01923, Tel: (978) 646-2600; http://www.copyright.com/