



Standard Specification for Application of Portland Cement-Based Plaster¹

This standard is issued under the fixed designation C926; 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 the requirements for the application of full thickness portland cement-based plaster for exterior (stucco) and interior work.

1.2 This specification sets forth tables for proportioning of various plaster mixes and plaster thickness.

NOTE 1—General information will be found in [Annex A1](#). Design considerations will be found in [Annex A2](#).

1.3 The values stated in inch-pound units are to be regarded as the standard. The SI (metric) values given in parentheses are approximate and are provided for information purposes only.

1.4 The text of this specification references notes and footnotes that provide explanatory material. These notes and footnotes (excluding those in tables and figures) shall not be considered as requirements of the specification.

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

2. Referenced Documents

2.1 *ASTM Standards*:²

- [C11 Terminology Relating to Gypsum and Related Building Materials and Systems](#)
- [C25 Test Methods for Chemical Analysis of Limestone, Quicklime, and Hydrated Lime](#)
- [C35 Specification for Inorganic Aggregates for Use in Gypsum Plaster](#)
- [C91 Specification for Masonry Cement](#)
- [C150 Specification for Portland Cement](#)
- [C206 Specification for Finishing Hydrated Lime](#)

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 [C11.03](#) on Specifications for the Application of Gypsum and Other Products in Assemblies.

Current edition approved March 1, 2016. Published April 2016. Originally approved in 1981. Last previous edition approved in 2016 as C926 – 16. DOI: 10.1520/C0926-16A.

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.

- [C207 Specification for Hydrated Lime for Masonry Purposes](#)
- [C219 Terminology Relating to Hydraulic Cement](#)
- [C260 Specification for Air-Entraining Admixtures for Concrete](#)
- [C578 Specification for Rigid, Cellular Polystyrene Thermal Insulation](#)
- [C595 Specification for Blended Hydraulic Cements](#)
- [C631 Specification for Bonding Compounds for Interior Gypsum Plastering](#)
- [C897 Specification for Aggregate for Job-Mixed Portland Cement-Based Plasters](#)
- [C932 Specification for Surface-Applied Bonding Compounds for Exterior Plastering](#)
- [C1063 Specification for Installation of Lathing and Furring to Receive Interior and Exterior Portland Cement-Based Plaster](#)
- [C1116 Specification for Fiber-Reinforced Concrete and Shotcrete](#)
- [C1328 Specification for Plastic \(Stucco\) Cement](#)
- [C1787 Specification for Installation of Non Metallic Plaster Bases \(Lath\) Used with Portland Cement Based Plaster in Vertical Wall Applications](#)
- [E90 Test Method for Laboratory Measurement of Airborne Sound Transmission Loss of Building Partitions and Elements](#)
- [E119 Test Methods for Fire Tests of Building Construction and Materials](#)
- [E492 Test Method for Laboratory Measurement of Impact Sound Transmission Through Floor-Ceiling Assemblies Using the Tapping Machine](#)

2.2 *ANSI Standard*:

- [A108.1 Specification for Installation of Ceramic Tile](#)³

3. Terminology

3.1 Terms shall be defined as in Terminologies [C11](#) and [C219](#), except as modified herein.

3.2 *Definitions of Terms Specific to This Standard*:

3.2.1 *accelerator, n*—an admixture that will shorten the setting time of plaster.

³ Available from American National Standards Institute (ANSI), 25 W. 43rd St., 4th Floor, New York, NY 10036.

*A Summary of Changes section appears at the end of this standard

3.2.2 *admixture, n*—a material other than water, aggregate, or basic cementitious material added to the batch before or during job mixing.

3.2.3 *acid etching, n*—the cleansing and controlled erosion of a solid surface, using an acid wash.

3.2.4 *air entrainment, n*—the use of an air-entraining admixture or air-entraining cementitious material in a plaster mix to yield a controlled quantity of minute (typically between 10 and 1000 µm in diameter) disconnected air bubbles in the plaster (see *entrapped air*).

3.2.5 *back wrap, n*—a means of terminating a polymer-modified, fabric reinforced cementitious base coat by wrapping the reinforcing mesh, which has been affixed to the substrate onto the outboard surface of the foam plastic core to provide continuity of the reinforced base coat and protection for the foam plastic core.

3.2.6 *backplaster, n*—plaster applied to the face of metal lath opposite a previously applied plaster.

3.2.7 *barrier wall, n*—type of wall system that is intended to block or interrupt the movement of water to the interior.

3.2.8 *bond, n*—the state of adhesion between plaster coats or between plaster and plaster base.

3.2.9 *bonding compound or agent, n*—compounds surface applied or integrally mixed with plaster to improve the quality of bond between plaster and plaster base or between plaster coats.

3.2.10 *cementitious material, n*—a material that, when mixed with water and with or without aggregate, provides the plasticity and the cohesive and adhesive properties necessary for placement and the formation of a rigid mass.

3.2.11 *coat, n*—a thickness of plaster applied in a single operation.

3.2.11.1 *basecoat, n*—all plaster applied before the application of the finish coat.

3.2.11.2 *bedding coat, n*—a plaster coat that receives aggregate or other decorative material impinged into its surface before it sets.

3.2.11.3 *brown coat, n*—in three-coat work, the second coat, applied over the scratch coat. In two-coat work, brown coat refers to the double-up basecoat. In either use, the brown coat is the coat directly beneath the finish coat.

3.2.11.4 *dash-bond coat, n*—a thick wet mixture of portland cement and water, with or without aggregate, dashed onto the surface of a plaster base such as smooth monolithic concrete or concrete block surfaces to improve the mechanical key for subsequent plaster coats.

3.2.11.5 *double-up coat, n*—the brown-coat plaster applied to the scratch coat plaster before the scratch-coat plaster has set.

3.2.11.6 *finish coat, n*—the final layer of plaster applied over basecoat plaster.

3.2.11.7 *fog coat, n*—a light coat of cement and water, with or without aggregate or color pigment, applied by machine spray to improve color consistency.

3.2.11.8 *scratch coat, n*—the first coat of plaster applied to a plaster base.

3.2.11.9 *skim coat, n*—a thin finish coat applied to an existing plaster surface or other substrate to improve appearance.

3.2.11.10 *three-coat work, n*—application of plaster in three successive coats with time between coats for setting or drying, or both.

3.2.12 *cold joint (“joining” or “jointing”), n*—the juncture of fresh plaster application adjacent to set plaster, in the same plane.

3.2.13 *curing, v*—the act or processes of producing a moisture environment favorable to cement hydration, resulting in the setting or hardening of the plaster.

3.2.14 *drainage wall, n*—a wall system in which the cladding provides a substantial barrier to water intrusion, and which also incorporates a concealed water-resistive barrier over which drainage will occur.

3.2.15 *entrapped air, n*—unintentional air voids in the plaster generally larger than 1 mm.

3.2.16 *factory prepared (“mill-mixed” or “ready mixed”), adj*—pertaining to material combinations that have been formulated and dry-blended by the manufacturer, requiring only the addition of and mixing with water to produce plaster.

3.2.17 *fiber, natural or synthetic, n*—an elongated fiber or strand admixture added to plaster mix to improve cohesiveness or pumpability, or both.

3.2.18 *floating, v*—act of compacting and leveling brown-coat plaster to a reasonably true surface plane using a float tool or the act of bringing the aggregate to the surface of finish-coat plaster.

3.2.19 *key (also mechanical key), n*—plaster that physically surrounds, penetrates, or deforms to lock onto the perforations or irregularities of the plaster base or previous coat of plaster.

3.2.20 *metal plaster base, n*—expanded metal lath, or welded or woven wire lath.

3.2.21 *plaster, n*—portland cement-based cementitious mixture (see *stucco*).

3.2.22 *polymer modified cementitious base coat, n*—A base coat containing portland cement modified with chemical admixtures (typically polymer latexes) to improve characteristics of the finished product, such as workability, plasticity, water resistance, and adhesion.

3.2.23 *required, adj*—pertaining to a mandatory obligation imposed by a force outside of this specification, such as a building code, project specification, contract, or purchase order.

3.2.24 *rustication (also “break”), n*—an interruption or change in plane of a plastered surface.

3.2.25 *scoring (also known as “scratching”), n*—the grooving of the surface of an unset plaster coat to provide a key for a subsequent coat.

3.2.26 *set, n*—the chemical and physical change in plaster as it goes from a plastic, workable state to a rigid state.

3.2.27 *solid plaster bases, n*—substrates that do not require a metal plaster base, including cast in place and precast concrete, concrete and stone masonry, clay brick, and tile.

3.2.28 *stucco, n*—portland cement-based plaster used on exterior locations.

3.2.29 *stucco finish, n*—a factory-prepared, dry blend of materials for finish coat applications.

3.2.30 *temper, v*—to mix or restore unset plaster with water to a workable consistency.

3.2.31 *texture, n*—any surface appearance as contrasted to a smooth surface.

4. Delivery and Storage of Materials

4.1 Delivery:

4.1.1 Packaged materials shall be delivered in factory-sealed, unopened, and unbroken packages, containers, or bundles.

4.1.2 Bulk materials shall be delivered in clean transport vessels, free of contaminants.

4.2 Storage:

4.2.1 Weather-sensitive materials shall be kept in a dry condition until ready for use. (See A2.4.)

4.2.2 Bulk materials shall be stored to prevent subsequent contamination and segregation.

5. Materials

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

5.2 Cement:

5.2.1 *Portland Cement*—Specification C150, Type I, II, and III, as specified. White where specified.

5.2.2 *Air-Entraining Portland Cement*—Specification C150, type as specified. White where specified.

5.2.3 *Masonry Cement*—Specification C91, Types N, S, and M. White where specified.

5.2.4 *Blended Hydraulic Cement*—Specification C595, Type IP, IS(<70), IL, and IT(S<70), as specified.

5.2.5 *Air-Entraining Blended Hydraulic Cement*—Specification C595, Type IP-(A), IS(<70)-(A), IL-(A), and IT(S<70)-(A), as specified.

5.2.6 *Plastic Cement*—Plastic Cement shall meet the requirements of Specification C1328, Standard Specification for Plastic (Stucco) Cement.

NOTE 2—Plastic cements are not available nationally.

5.3 *Type “S” Hydrated Lime*—A hydrated lime that contains not more than 8 % unhydrated oxides when tested in accordance with Test Methods C25. See Specifications C206 and C207 for a complete description of a Type “S” hydrated lime.

5.4 Aggregates:

5.4.1 *Sand for Base Coats*—Specification C897. Aggregate failing to meet gradation limits in Specification C897 shall be permitted to be used, provided the plaster made with this sand has an acceptable demonstrated performance record in similar construction and climate conditions.

5.4.2 *Perlite*—Specification C35.

5.4.3 *Sand for Job-Mixed Finish Coats*—Specification C897.

5.5 *Water*—Water used in mixing, application, and finishing of plaster shall be clean, fresh, suitable for domestic water consumption, and free of such amounts of mineral or organic substances as would affect the set, the plaster, or any metal in the system.

5.6 *Admixtures*—See 3.2.2 and A2.5.

5.7 *Fibers*—Specification C1116 on alkali-resistant fibers, glass fibers, nylon, polypropylene or carbon fibers.

5.8 *Product Marking*—Packaged materials shall be clearly marked or labeled to indicate product, brand name, the manufacturer, and the weight of the material contained therein. Similar information shall be provided in the shipping advices accompanying the shipment of bulk materials.

6. Requirements for Bases to Receive Portland Cement-Based Plaster

6.1 Metal bases and accessories used to receive plaster shall be installed in conformance with Specification C1063, except as otherwise specified. Non-metallic bases used to receive plaster shall be installed in conformance with Specification C1787.

NOTE 3—All plaster bases and accessories shall be free of deleterious amounts of rust, oil, or other foreign matter, which could cause bond failure or unsightly discoloration.

6.2 Surfaces of solid bases to receive plaster, such as masonry, stone, cast-in-place or precast concrete shall be straight and true within ¼ in. in 10 ft (2.1 mm/m) and shall be free of form oil or other elements, which would interfere with bonding. Conditions where the surfaces are out of tolerance shall be corrected prior to the application of the plaster. Ferrous-containing form ties or other obstructions shall be removed or receded a minimum 1/8 in. (3 mm) below the surface of the solid base and treated with a corrosion-resistant coating. Non-ferrous protuberances shall be permitted to be trimmed back even with the surface of the solid base.

6.2.1 Solid surfaces shall have the suction (ability to absorb water) or surface roughness, or both, to provide the bond required for the plaster.

6.2.2 Smooth or nonabsorbent solid surfaces, such as cast-in-place or precast concrete, shall be prepared to receive portland cement plaster by one of the following methods:

6.2.2.1 Sandblasting, wire brushing, acid etching, or chipping or a combination thereof,

6.2.2.2 Application of a dash-bond coat applied forcefully against the surface, left untroweled, undisturbed, and moist cured for at least 24 h, or

6.2.2.3 Application of a bonding compound suitable for exterior or interior exposure solid surfaces in accordance with the manufacturer’s written directions.

6.2.3 Where bond cannot be obtained by one or more of the methods in 6.2.2, a furred or self-furring plaster base shall be installed in accordance with Specification C1063 or C1787 as appropriate. Where plaster base is used in areas where bond cannot be obtained by one or more of the methods in 6.2.2,

accessories shall be installed in accordance with Specification **C1063** or **C1787** as appropriate.

7. Application

7.1 Plaster Proportions:

7.1.1 All portland cement plasters shall be mixed and proportioned in accordance with the following tables and accompanying requirements, using measuring devices of known volume with successive batches proportioned alike.

7.1.2 Plaster mix used shall be as designated and referenced to **Table 1**.

7.1.3 Base-coat proportions shall be as shown in **Table 2** for the mix specified from **Table 1**.

7.1.3.1 *Measurement of Materials*—The method of measuring materials for the plaster shall be such that the specified proportions are controlled and accurately maintained. The weights per cubic foot of the materials are considered to be as follows:

Material	Weight, lb/ft ³ (kg/m ³)
Portland cement	94 (1505)
Blended cement	Weight printed on bag
Masonry or plastic cement	Weight printed on bag
Hydrated Lime	40 (640)
Lime Putty	80 (1280)
Sand, Damp and Loose (7.1.3.2)	80 (1280) of dry sand

7.1.3.2 For purposes of this specification, a weight of 80 lb (1280 kg) of oven-dried sand shall be used. This is, in most cases, equivalent to one cubic foot of loose, damp sand.

7.1.4 Finish-coat proportions for job-mixed finish coats shall be as specified in **Table 3**.

7.1.5 *Factory-Prepared Finish Coats*—See **3.2.16**.

7.1.6 Dash-bond coat proportions shall be 1 volume part portland cement and not more than 2 volume parts of aggregate mixed to a consistency that will permit application as specified in **7.3.5**.

7.1.7 Admixtures shall be proportioned, mixed, and applied in accordance with the printed directions of the manufacturer. (See **A2.5**.)

7.2 Mixing:

7.2.1 All plaster shall be prepared in a mechanical mixer, using sufficient water to produce a workable consistency and uniform color. (See **X1.1**.)

7.2.2 Base-coat plasters that have stiffened because of evaporation of water shall be permitted to be tempered one time only to restore the required consistency. Plaster not used within 1½ h from start of initial mixing shall be discarded.

NOTE 4—Severe hot, dry climate conditions accelerate the stiffening of plaster and require reduction of this limit. The use of cold waters will slow the stiffening process.

7.2.3 Finish-coat plaster shall not be tempered.

7.3 General Application:

7.3.1 Portland cement plaster shall be applied by hand or machine to the nominal thickness specified in **Table 4**. The nominal values expressed in **Table 4** represent neither a maximum nor minimum value. They consider the inherent variation of thickness due to the nature of the application process, and the allowable variation of the substrate and the finished plane of the plaster.

7.3.2 Plaster nominal thickness shall be measured from the back plane of the metal plaster base, exclusive of ribs or dimples, or from the face of the solid backing with or without metal plaster base, to the outer surface exclusive of texture variations.

7.3.3 Portland cement-based plaster shall be applied on furred metal plaster base when the surface of solid backing consists of gypsum board, gypsum plaster, wood, or rigid foam board-type products.

NOTE 5—On horizontal ceiling supports or roof soffits protected by a drip edge, gypsum board products shall be permitted to be used as backing for metal base to receive portland cement plaster.

7.3.4 Separation shall be provided where plaster abuts dissimilar construction materials or openings. (See **A2.1.4**.)

7.3.5 Each plaster coat shall be applied to an entire wall or ceiling panel without interruption to avoid cold joints and abrupt changes in the uniform appearance of succeeding coats. Wet plaster shall abut set plaster at naturally occurring interruptions in the plane of the plaster, such as corner angles, rustications, openings, expansion joints, and control joints where this is possible. Joinings, where necessary, shall be cut square and straight and not less than 6 in. (152 mm) away from a joining in the preceding coat.

7.3.6 Metal plaster base shall be covered with three-coat work with or without solid backing. The combined total nominal thickness shall be as shown in **Table 4**. A dash-bond coat shall not replace one of the specified number of coats.

7.3.7 Two-coat work shall be used only over solid bases meeting the requirements of **6.2**. The combined total nominal thickness shall be as shown in **Table 4**. A dash-bond coat shall not replace one of the specified number of coats.

7.3.8 Backplaster where required, shall be applied only after the coat on the opposite side has set sufficiently to resist breaking or cracking the plaster keys.

7.3.9 Each coat shall be permitted to set before the next coat is applied. (See **X1.5.2**.)

7.3.10 Plaster coats that have become dry shall be evenly dampened with water prior to applying subsequent coats to obtain uniform suction. There shall be no visible water on the surface when plaster is applied.

TABLE 1 Plaster Bases—Permissible Mixes

NOTE 1—See **Table 2** for plaster mix symbols.

Property of Base	Mixes for Plaster Coats	
	First (Scratch)	Second (Brown)
Low absorption, such as dense, smooth clay tile, brick, or concrete	C	C, CL, M, or CM
	CM or MS	CM, MS, or M
	P	P
High Absorption, such as concrete masonry, absorptive brick, or tile	CL	CL
	M	M
	CM or MS	CM, MS, or M
	P	P
Metal plaster base	C	C, CL, M, CM, or MS
	CL	CL
	CM or MS	CM, MS, or M
	M	M
	CP	CP or P
	P	P

TABLE 2 Base-Coat Proportions,^A Parts by Volume^B

Plaster Mix Symbols	Cementitious Materials					Volume of Aggregate per Sum of Separate Volumes of Cementitious Materials	
	Portland Cement or Blended Cement	Plastic Cement	Masonry Cement		Lime	1st Coat	2nd ^C Coat
			N	M or S			
C	1	...	...	...	0–¾	2½–4	3–5
CL	1	...	...	...	¾–1½	2½–4	3–5
M	...	...	1	...	...	2½–4	3–5
CM	1	...	1	...	...	2½–4	3–5
MS	...	...	...	1	...	2½–4	3–5
P	...	1	...	...	...	2½–4	3–5
CP	1	1	...	...	...	2½–4	3–5

^A The mix proportions for plaster scratch and brown coats to receive ceramic tile shall be in accordance with the applicable requirements of ANSI A108.1 series applicable to specified method of setting time.

^B Variations in lime, sand, and perlite contents are allowed due to variation in local sands and insulation and weight requirements. A higher lime content will generally support a higher aggregate content without loss of workability. The workability of the plaster mix will govern the amounts of lime, sand, or perlite.

^C The same or greater sand proportion shall be used in the second coat than is used in the first coat.

TABLE 3 Job-Mixed Finish Coat Proportion Parts by Volume

Plaster Mix Symbols ^A	Cementitious Materials					Volume of Aggregate per Sum of Separate Volumes of Cementitious Materials ^B
	Portland Cement or Blended Cement	Plastic Cement	Masonry Cement ^A		Lime	
			N	M or S		
F	1	...	...	...	¾ –1½	1½ –3
FL	1	...	...	...	1½ –2	1½ –3
FM	...	...	1	...	...	1½ –3
FCM	1	...	1	...	...	1½ –3
FMS	...	...	...	1	...	1½ –3
FP	...	1	...	...	...	1½ –3

^A Additional portland cement is not required when Type S or M masonry cement is used.

^B In areas not subject to impact, perlite aggregate shall be permitted to be used over base-coat plaster containing perlite aggregate.

TABLE 4 Nominal Plaster Thickness^A for Three- and Two-Coat Work, in. (mm)

BASE	Vertical				Horizontal			
	1st Coat	2nd Coat	3rd Coat ^B	Total	1st Coat	2nd Coat	3rd Coat ^B	Total
	Interior/Exterior							
Three-coat work: ^C								
Metal plaster base	⅜ (9.5)	⅜ (9.5)	⅛ (3)	⅞ (22)	¼ (6)	¼ (6)	⅛ (3)	⅝ (16)
Solid plaster base:								
Unit masonry	¼ (6)	¼ (6)	⅛ (3)	⅝ (16)	Use two-coat work			
Cast-in-place or precast concrete	¼ (6)	¼ (6)	⅛ (3)	⅝ (16)				⅜ (9.5), max
Metal plaster base over solid base	½ (12.5)	¼ (6)	⅛ (3)	⅞ (22)	½ (12.5)	¼ (6)	⅛ (3)	⅞ (22)
Two-coat work:								
Solid plaster base:								
Unit masonry	⅜ (9.5)	⅛ (3)		½ (12.5)				⅜ (9.5)
Cast-in-place or precast concrete	¼ (6)	⅛ (3)		⅜ (9.5)				⅜ (9.5)

^A Exclusive of texture.

^B For solid plaster partitions, additional coats shall be applied to meet the finished thickness specified.

^C For exposed aggregate finishes, the second (brown) coat shall become the “bedding” coat and shall be of sufficient thickness to receive and hold the aggregate.

7.4 Plaster Application on Metal and Non-Metallic Plaster Bases:

7.4.1 The first (scratch) coat shall be applied with sufficient material and pressure to form full keys through, and to embed the metal base, and with sufficient thickness of material over the metal to allow for scoring the surface.

7.4.1.1 As soon as the first (scratch) coat becomes firm, the entire surface shall be scored in one direction only. The vertical surfaces shall be scored horizontally.

7.4.1.2 The first (scratch) coat shall become sufficiently rigid to support the application of the second (brown) coat without damage to the monolithic continuity of the first (scratch) coat or its key.

7.4.2 The second (brown) coat shall be applied with sufficient material and pressure to ensure tight contact with the first (scratch) coat and to bring the combined thickness of the base coat to the nominal thickness shown in **Table 4**.

7.4.2.1 The surface of the second (brown) coat shall be brought to a true, even plane with a rod or straightedge, filling surface defects in plane with plaster. Dry rodding the surface of the brown coat shall be permitted.

7.4.2.2 The surface shall be floated uniformly to promote densification of the coat and to provide a surface receptive to bonding of the finish coat.

7.4.3 The third (finish) coat shall be applied with sufficient material and pressure to ensure tight contact with, and complete coverage of the base coat and to the nominal thickness shown in [Table 4](#) and [7.5.1.1](#).

7.5 *Plaster Application on Solid Plaster Bases:*

7.5.1 High-suction bases shall be evenly dampened with clean water prior to the application of plaster. Do not dampen low-suction solid bases, such as dense concrete or smooth brick.

7.5.1.1 Where masonry or concrete surfaces vary in plane, plaster thickness required to produce level surfaces shall not be required to be uniform.

7.5.2 *Three-Coat Application on Solid Bases:*

7.5.2.1 The first (scratch) coat shall be applied with sufficient material and pressure to ensure tight contact and complete coverage of the solid base, to the nominal thickness shown in [Table 4](#). As soon as the first (scratch) coat becomes firm, the entire surface shall be scored in one direction only. The vertical surfaces shall be scored horizontally.

7.5.2.2 The second (brown) coat shall be applied using the same procedures specified in [7.4.2](#) and [7.4.2.1](#), bringing the surface to a true, even plane with a rod or straightedge, filling any defects in plane with plaster and darbying. The surface shall be floated uniformly to provide a surface receptive to the application of the third (finish) coat.

7.5.2.3 The third (finish) coat shall be applied as specified in [7.4.3](#).

7.5.3 *Two-Coat Application on Solid Plaster Bases:*

7.5.3.1 The first (scratch) coat shall be applied as specified in [7.5.2.1](#).

7.5.3.2 The second (finish) coat shall be applied as specified in [7.4.3](#).

7.6 *Finish-Coat Application:*

7.6.1 Job-mixed or factory-prepared finish coats shall be applied, by machine or by hand, as specified in [7.4.3](#).

7.6.2 The use of excessive water during the application and finishing of finish-coat plaster shall be avoided.

7.7 *Fog-Coat Application*—Job-mixed or factory-prepared fog coats shall be applied in accordance with the directions of the manufacturer.

7.8 *Curing and Time Between Coats*

7.8.1 Provide sufficient moisture in the plaster mix or by moist or fog curing to permit continuous hydration of the cementitious materials. The most effective procedure for curing and time between coats will depend on climatic and job conditions. (See [X1.5.2](#).)

7.8.2 Sufficient time between coats shall be allowed to permit each coat to cure or develop enough rigidity to resist cracking or other physical damage when the next coat is applied. (See [X1.5.2](#).)

7.9 *Environmental Conditions:*

7.9.1 Portland cement-based plaster shall not be applied to frozen base or to a base containing frost. Plaster mixes shall not contain frozen ingredients. Plaster coats shall be protected from freezing for a period of not less than 24 h after set has occurred.

7.9.2 Portland cement plaster shall be protected from uneven and excessive evaporation during dry weather and from strong blasts of dry air.

7.9.3 *Plaster Application*—When artificial heat is required, heaters shall be located to prevent a concentration of heat on uncured plaster. Heaters shall be vented to the outside to prevent toxic fumes and other products of combustion from adhering to or penetrating plaster bases and plaster. Adequate ventilation shall be maintained in all areas, particularly in interior areas with little or no natural air movement.

7.9.3.1 Interior environment shall be maintained at a temperature above 40°F not less than 48 h prior to and during application of portland cement-based plaster. Interior temperature shall be maintained above 40°F until normal occupancy.

7.9.3.2 For exteriors, plaster shall be applied when the ambient temperature is higher than 40°F (4.4°C), unless the work area is enclosed and heat is provided as described in [7.9.3](#).

8. Keywords

8.1 bond; brown coat; cementitious; exterior plaster; fog coat; portland cement; scratch coat; stucco

ANNEXES

(Mandatory Information)

A1. GENERAL INFORMATION

A1.1 The work shall include all labor, materials, services, equipment, and scaffolding required to complete the plastering of the project in accordance with the drawings and specifications, except heat, electric power, and potable water.

A1.2 Where a specific degree of fire resistance is required for plastered assemblies and constructions, details of construction shall be in accordance with official reports of fire tests conducted by recognized testing laboratories, in accordance with Test Methods E119.

A1.3 Where a specific degree of sound control is required for plastered assemblies and constructions, details of construction shall be in accordance with official reports of tests conducted by recognized testing laboratories, in accordance with applicable sound tests of Test Methods E90 or E492.

A1.4 Scaffolding shall be constructed and maintained in strict conformity with applicable laws and ordinances.

A1.5 Work schedules shall provide for completion of work affecting supports, framework or lath of a suspended ceiling (such as loading) before plastering work is accomplished.

A1.6 Surfaces and accessories to receive plaster shall be examined before plastering is applied thereto. The proper authorities shall be notified and unsatisfactory conditions shall be corrected prior to the application of plaster. The plastering

contractor shall use this portion of the construction specifications for acceptance or rejection of such surfaces.

A1.6.1 Metal plaster bases, backing, attachment, and accessories to receive plaster shall be examined to determine if the applicable requirements of Specification C1063 have been met unless otherwise required by the contract specifications.

A1.6.2 Accessories shall be installed prior to the application of plaster; therefore, their type, depth, location, and orientation shall be included in the contract documents. Where masonry or concrete surfaces vary in plane, plaster thickness required to produce level surfaces shall not be required to be uniform.

A1.6.3 The construction specifier shall describe, in the proper section of the contract specifications, the physical characteristics of solid surface bases to receive plaster, including measures to promote bond. The plane tolerance shall be not more than ¼ in. in 10 ft (3.1 mm/m). The mortar joints shall be flush and not struck. Dissimilar ferrous-containing materials such as ties, reinforcing steel, and so forth, shall be cut back a minimum ⅛ in. (3 mm) below the surface and treated with a corrosion-resistant coating. Dissimilar non-ferrous protuberances shall be permitted to be trimmed back even with the surface of the solid base. Masonry shall be solid at corners and where masonry changes thickness in a continuous construction. Form release compounds shall be compatible with plaster or be completely removed from surfaces to receive plaster.

A2. DESIGN CONSIDERATIONS

A2.1 Exterior plaster (stucco) is applied to outside surfaces of all types of structures to provide a durable, fire-resistant covering. Interior plaster is applied to inside surfaces that will be subjected to various exposures, such as abrasion, vibration, or to continuous or frequent moisture and wetting, or to freezing or thawing.

A2.1.1 Sufficient slope on faces of plastered surfaces shall be provided to prevent water, snow, or ice from accumulating or standing. Air-entrained portland cement plaster provides improved resistance to freeze/thaw deterioration. Resistance to rain penetration is improved where plaster has been adequately densified during application and properly cured. Plaster shall not, however, be considered to be “waterproof.”

A2.1.2 The construction specifier shall describe, in the appropriate section of the contract specifications, the requirements for furnishing and application of flashing. Flashing shall be specified at openings, perimeters, and terminations to

prevent water from getting behind plaster. Flashing shall be corrosion-resistant material. Aluminum flashing shall not be used. Flashing supplemented with sealant shall be permitted.

A2.1.3 Sealing or caulking of V-grooves, exposed ends, and edges of plaster panels or exterior work to prevent entry of water shall be provided.

A2.1.4 To reduce spalling where interior plaster abuts openings, such as wood or metal door or window frames, or fascia boards, the edge of three-coat plaster shall be tooled through the second and finish coats to produce a continuous small V-joint of uniform depth and width. On two-coat work, the V-joint shall be tooled through the finish coat only.

A2.1.5 Provide in the appropriate project specification section that solid bases to receive plaster shall not be treated with bond breakers, parting compounds, form oil, or other material that will prevent or inhibit the bond of the plaster to the base.

A2.1.6 Maximum allowable deflection for vertical or horizontal framing for plaster, not including cladding, shall be $L/360$.

A2.2 Provisions for Drainage Behind Exterior Plaster:

A2.2.1 At the bottom of exterior drainage walls where the drainage plane is interrupted by a floor, supporting structure, or foundation, or when drainage wall assemblies are constructed above barrier wall assemblies, a drainage screed, flashing, or other effective means to drain away water that may get behind the plaster shall be provided.

A2.2.2 Where vertical and horizontal exterior plaster surfaces meet, both surfaces shall be terminated with casing beads with the vertical surface extending at least $\frac{1}{4}$ in. (6 mm) below the intersecting horizontal plastered surface, thus providing a drip edge. The casing bead for the horizontal surface shall be terminated not less than $\frac{1}{4}$ in. from the back of the vertical surface to provide drainage.

A2.3 Relief from Stresses:

A2.3.1 For information on the requirements for control joints and perimeter relief, where a metal plaster base is installed; see the Installation Section of Specifications C1063 or C1787 as applicable. Solid plaster bases are exempt from these criteria, except as stated in Specification C1063, subsection 7.11.4.3.

A2.3.1.1 Control joints shall be cleaned and clear of plaster within the control area after plaster application and before final plaster set.

A2.3.1.2 Prefabricated control joints and expansion joint members shall be installed prior to the application of plaster. Their type, location, depth, and method of installation shall be determined by the characteristics of the substrate and included in the project contract documents.

A2.3.1.3 A groove or cut in plaster only shall not be considered a control or expansion joint.

A2.3.2 Where plaster and plaster base continues across the face of a concrete column, or other structural member, a water-resistive barrier shall be placed between the plaster base and the structural member (paper or plastic-backed metal plaster base shall be permitted). Where the width of the structural member exceeds the approved span capability of the plaster base, self-furring plaster base shall be used and sparingly scatter nailed to bring the plaster base to general plane.

A2.3.3 Where dissimilar base materials abut and are to receive a continuous coat of plaster: (1) a two-piece expansion joint, casing beads back-to-back, or premanufactured control-expansion joint member shall be installed; or (2) the juncture shall be covered with a 6-in. (152 mm) wide strip of galvanized, self-furring metal plaster base extending 3 in. (76 mm) on either side of the juncture; or (3) where one of the bases is metal plaster base, self-furring metal plaster base shall be extended 4 in. (102 mm) onto the abutting base.

A2.4 Weather-Sensitive Materials—Water-sensitive materials shall be stored off the ground or floor and under cover, avoiding contact with damp floor or wall surfaces. Temperature-sensitive materials shall be protected from freez-

ing. Bulk materials shall be stored in the area of intended use and caution shall be exercised to prevent contamination and segregation of bulk materials prior to use.

A2.5 Admixtures—Admixtures shall be proportioned and mixed in accordance with the published directions of the admixture manufacturer.

A2.5.1 The quantity of admixtures required to impart the desired performance is generally very small in relation to the quantities of the other mix ingredients. Batch-to-batch quantities shall be measured accurately.

A2.5.2 Air-entraining agents cause air to be incorporated in the plaster in the form of minute bubbles, usually to improve frost or freeze-thaw resistance, or workability of the plaster during application. Air-entraining agents for portland cement-based plaster shall meet the requirements of Specification C260.

A2.6 Design and Application of Ornamental Features:

A2.6.1 The design and construction requirements of ornamental features that project beyond the surface of the cement plaster scratch and brown coat assembly (including quoins, bands, or other similar ornamentation) are to be described in the contract documents. The contract documents shall provide details to indicate the location, nature, and extent of the ornamental feature. The design authority shall be responsible for compliance with applicable building code(s) and prescribed design loads. The design authority shall also consider fire ratings and combustibility requirements in the design and selection of the ornamental feature.

A2.6.2 Ornamental features with sky-facing top surfaces that are exposed to the elements shall include sufficient slope for drainage as required by A2.1.1 or as minimally acceptable to the finish coat manufacturer, whichever is more restrictive.

A2.6.3 Ornamental features shall be isolated from load-bearing members, penetrating elements, and wall openings (such as fenestrations) as required by Specification C1063 to avoid the transfer of structural loads and to provide separation from dissimilar materials.

A2.6.4 Ornamental features shall not obstruct the function of control joints or expansion joints. The design authority shall provide details as to how to the ornamental feature shall interact with applicable joints.

A2.6.5 Application of Field-Coated Foam Core Ornamental Features—Field-finished ornamental features consist of foam plastic cores encapsulated with a polymer-modified cementitious base coat with an acrylic finish coat or other approved manufactured finish. The foam plastic cores are adhesively attached to the brown coat either before or after encapsulation in the field.

A2.6.5.1 Ornamental features shall be adhered to the plaster brown coat with an adhesive compatible with portland cement plaster and the ornamental core manufacturer. The ornamental feature shall be integrated with the plaster brown coat with consideration provided to crack control and moisture infiltration. The base coat of the material that encapsulates the core of the ornamental feature shall continue onto the surface of the

plaster brown coat without interruption. Crack control and moisture penetration resistance of the ornamental feature shall be addressed in the contract documents for plaster thickness that is less than those values provided in [Table 4](#).

A2.6.5.2 Cores of ornamental features shall be permitted to be fabricated of expanded polystyrene (EPS) conforming to Specification [C578](#) Type I or II having a minimum density of 0.9 lb/ft³ (14.4 kg/m³). The thickness of the core shall be no less than ¾ in. (19 mm).

A2.6.5.3 Foam core ornamental features shall be permitted to be covered with a variety of materials. A polymer-modified, fabric reinforced cementitious base coat and an acrylic finish coat shall be an acceptable finish over the ornamental feature. The design authority shall give consideration to profile differences in the finish coat (such as variation in shade, color, and sheen) that may result at the transition of the polymer-modified and portland cement base coat materials.

Nominal thickness for standard impact resistant base coats shall range from 1/16 to 3/32 in. (1.58 to 2.38 mm) and be applied over nominal 4 oz/yd² (135.6 g/m²) standard impact mesh. Thickness of impact-resistant base coats and nominal

weight of impact-resistant mesh shall follow the manufacturer's installation instructions. The design authority shall give consideration to prevent impact damage to ornamental features.

Mesh shall be embedded in the base coat and extend a minimum of 2.5 in. (63.5 mm) beyond the ornamental feature. Where extension beyond the ornamental feature is not possible, backwrapping shall be provided.

A2.6.5.4 Application of the finish coat shall follow the manufacturer's installation instructions for the specific finish type. When cement-based finishes are applied, a bonding agent or admixture shall be used to insure proper adhesion to the polymer-modified base coat.

A2.6.5.5 A sample detail of an ornamental feature encapsulated with an exterior polymermodified cementitious base coat and detailing mesh is provided in [Fig. A2.1](#). As depicted in the sample detail, the encapsulating material is continuous onto the surface of the plaster brown coat without interruption, providing a seamless transition between the ornamental feature and wall surface.

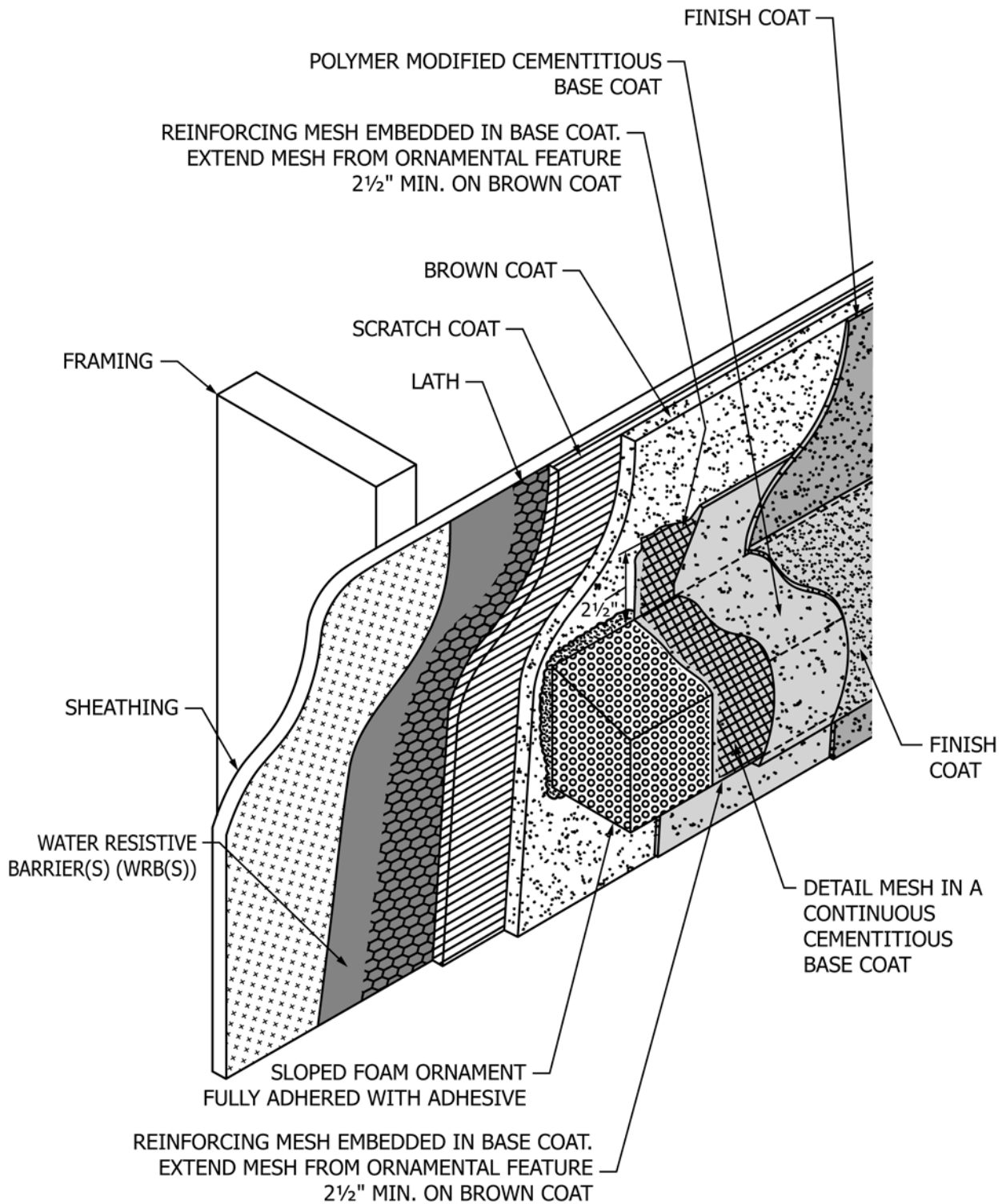


FIG. A2.1 Sample Detail of Ornamental Feature Consisting of Foam Plastic Core Encapsulated with Polymer Modified Cementitious Base Coat and Finish Coat

APPENDIX

(Nonmandatory Information)

X1. GENERAL INFORMATION

X1.1 *Additions*—Bonding compounds or agents may be pre-applied to a surface to receive plaster. In this usage it is not considered an admixture. Bonding compounds that are integrally mixed with plaster prior to its application are considered admixtures. Where exterior exposure and cyclic wetting are anticipated, the re-emulsification capability of the bonding material must be considered. Bonding agents are only as good as the material surface to which they are applied; therefore, form release materials must be removed from concrete or be compatible with the bonding material used. Bonding agents in plaster mixes may increase the cohesive properties of the plaster. Bonding agents should meet the requirements of Specifications C631 or C932.

X1.1.1 By the use of a suitable admixture or additive, it is possible to improve plaster's resistance to moisture movement. However, the use of the terms dampproofing or water proofing is misleading, and their use shall be discouraged.

X1.1.2 Natural or synthetic fibers, $\frac{1}{2}$ to 2 in. (13 to 51 mm) in length and free of contaminants may be specified to improve resistance to cracking or to impart improved pumpability characteristics. The quantities per batch shall be in accordance with the published directions of the fiber manufacturer. No more than 2 lb (0.90 kg) of fiber should be used per cubic foot of cementitious material. Asbestos fibers should not be used. Alkaline-resistant glass fibers are recommended where glass fiber is used.

X1.1.3 Plasticizers containing hydrated lime putty, air-entraining agents, or approved fatteners to increase the workability of a portland cement plaster may be used. Plaster consistency and workability are affected by plasticizers that are beneficial in proper quantities from an economic standpoint, but in excess can be detrimental to the long-term performance of the plaster in place.

X1.1.4 Color material for integral mixing with plaster should not significantly alter the setting, strength development, or durability characteristics of the plaster. Natural or mineral pigments that are produced by physical processing of materials mined directly from the earth appear to offer the best long-term performance with respect to resistance to fading. Plaster color is determined by the natural color of the cementitious materials, aggregate, and any color pigment, and their proportions to each other. The use of white cement with the desired mineral oxide pigment color material may result in truer color.

X1.1.4.1 The uniformity of color cannot be guaranteed by the materials manufacturer of the component materials or by the applying contractor. Color uniformity is affected by the uniformity of proportioning, thoroughness of mixing, cleanliness of equipment, application technique, and curing conditions and procedure, which are generally under the control of the applicator. Color uniformity is affected to an even greater

degree by variations in thickness and differences in the suction of the base coat from one area or location to another, the type of finish selected, the migration of color pigments with moisture, and with job site climatic and environmental conditions. These factors are rarely under the control of the applicator.

X1.1.5 Corrective measures for conditions cited in 6.2 include sandblasting, chipping, or grinding of the solid plaster base, application of a repair/build-out mortar, installation of a self-furring plaster base, or combinations thereof. Because these measures may have structural or integrity consequences, they should be considered by all concerned parties with the ultimate selection left to the discretion of the design authority.

X1.1.6 The "Project Documents" consist of many individual items but includes both the Project Specifications and the Contract Drawings. It is the intent of this standard to have the type, location, depth, and orientation of control and expansion joints both stated in the Project Specifications as well as shown and detailed on the Contract Drawings where either or both of these documents exist for any particular project.

X1.2 *Finish Coat Categories* (applicable to both natural and colored finishes):

X1.2.1 Texture, as a description of surface appearance, is identified generally with the method and tools used to achieve the finish. Texture can be varied by the size and shape of the aggregate used, the equipment or tools employed, the consistency of the finish coat mix, the condition of the base to which it is applied, and by subsequent decorative or protective treatment.

X1.2.2 There are many factors that affect the ultimate appearance of textured and integrally colored plaster. A suitably sized sample panel should be submitted for approval by the architect and the owner. Once approved, the sample should be maintained on site for reference and comparison.

X1.2.3 With the almost limitless variations possible for finish appearance or texture, the same term may not have the same meaning to the specifier, the contractor, and the actual applicator. The specifier is cautioned to use an approved range of sample panels. To provide some guidance, the following categories are generally understood and recognized to imply a particular method of application technique or resulting finished appearance:

X1.2.4 *Smooth Trowel*—Hand- or machine-applied plaster floated as smooth as possible and then steel-troweled. Steel troweling should be delayed as long as possible and used only to eliminate uneven points and to force aggregate particles into the plaster surface. Excessive troweling should be avoided.

X1.2.5 Float—A plaster devoid of coarse aggregate applied in a thin coat completely covering the base coat, followed by a second coat that is floated to a true plane surface yielding a relatively smooth to fine-textured finish, depending on the size of aggregate and technique used. It is also known as sand finish.

X1.2.6 Trowel-Textured (such as Spanish Fan, Trowel Sweep, English Cottage)—A freshly applied plaster coat is given various textures, designs, or stippled effects by hand troweling. The effects achieved may be individualized and may be difficult to duplicate by different applicators.

X1.2.7 Rough-Textured (such as Rough Cast, Wet Dash, Scottish Harl)—Coarse aggregate is mixed intimately with the plaster and is then propelled against the base coat by trowel or by hand tool. The aggregate is largely unexposed and deep textured.

X1.2.8 Exposed Aggregate (also known as Marblecrete)—Varying sizes of natural or manufactured stone, gravel, shell, or ceramic aggregates are embedded by hand or machine propulsion into a freshly applied finish “bedding” coat. The size of the aggregate determines the thickness of the “bedding” coat. It is generally thicker than a conventional finish coat.

X1.2.9 Spray-Textured—A machine-applied plaster coat directed over a previously applied thin smooth coat of the same mix. The texture achieved depends on the consistency of the sprayed mixture, moisture content of the base to which it is applied, the angle and distance of the nozzle to the surface, and the pressure of the machine.

X1.2.10 Brush-Finish—A method of surfacing or resurfacing new or existing plaster. The plaster is applied with a brush to a thickness of not less than $\frac{1}{16}$ in. (1.6 mm). For an existing plaster surface the bond capability must be determined by test application or a bonding compound must be applied prior to the brush application.

X1.2.11 Miscellaneous Types—This finish coat category is somewhat similar to trowel-textured finishes, except that the freshly applied plaster is textured with a variety of instruments other than the trowel, such as swept with a broom or brush, corrugated by raking or combing, punched with pointed or blunt instrument, scored by aid of a straightedge into designs of simulated brick, block, stone, and so forth. A variation of texturing a finish coat involves waiting until it has partially set and then flattening by light troweling of the unevenly applied plaster or by simulating architectural terracotta.

X1.2.12 Scraffitto—A method of applying two or more successive coats of different colored plaster and then removing parts of the overlaid coats to reveal the underlying coats, usually following a design or pattern. This is not generally considered a finish coat operation because of the number of thickness of coats.

X1.3 When specified as alternate for final coat, trowel- or plaster machine-applied textured acrylic finishes containing aggregate may be substituted for portland cement finish coats, provided brown coat is properly prepared and finish is applied according to the manufacturer’s directions.

X1.4 Staining of Plaster—Staining and discoloration of plaster, caused by free water draining from one plane of plaster to another or from a dissimilar material onto a plaster surface, can be minimized by providing sufficient depth and angle for drip caps and the use of water-resistive surface coatings.

X1.4.1 Staining of plaster due to entrapment of moisture behind the plaster, can be avoided or minimized by providing an air space for ventilation between the back of the plaster and adjacent material. This type of staining may occur where insulation with or without vapor barrier, or other material containing asphaltic or coal tar derivatives, fireproofing salts, and so forth, can migrate with moisture movement to the finished plaster surface.

X1.4.2 Integrally colored plaster can be discolored or altered in shade if subjected to moisture, either from uncured base coats or external sources, such as rain, too soon after applications.

X1.5 Installation Instructions:

X1.5.1 Hand mixing should not be permitted, except as approved by the contract specifier.

X1.5.1.1 After all ingredients are in the mixer, mix the plaster for 3 to 5 min.

X1.5.1.2 The amount of water used in the plaster mix should be determined by the plasterer. Factors such as the suction of the base, or of the previous coat, water content of the aggregate, drying conditions, and finishing operations should be considered in determining water usage. Use of excessive water may result in dropouts, fall or slide off, excessive shrinkage, high porosity, and lower strength.

X1.5.2 Time Between Coats and Curing for Portland Cement-Based Plaster:

X1.5.2.1 The timing between coats will vary with climatic conditions and types of plaster base. Temperature and relative humidity extend or reduce the time between consecutive operations. Cold or wet weather lengthens and hot or dry weather shortens the time period. Moderate changes in temperature and relative humidity can be overcome by providing additional heating materials during cold weather and by reducing the absorption of the base by pre-wetting during hot or dry weather.

X1.5.2.2 In order to provide more intimate contact and bond between coats and to reduce rapid water loss, the second coat should be applied as soon as the first coat is sufficiently rigid to resist cracking, the pressures of the second coat application, and the leveling process.

X1.5.2.3 The amount of water and the timing for curing portland cement plaster will vary with the climatic conditions, the type of base, and use or nonuse of water-retentive admixtures.

X1.5.2.4 Some moisture must be retained in or added back to freshly applied portland cement-based plaster. If the relative humidity is relatively high (above 75 %), the frequency for rewetting a surface may be reduced. If it is hot, dry, and windy, the frequency of rewetting must be increased.

X1.5.2.5 Consider the physical characteristics of the structure as well as the previously mentioned conditions when

selecting the method of curing. The method can be one or a combination of the following:

(1) Moist curing is accomplished by applying a fine fog spray of water as frequently as required, generally twice daily in the morning and evening. Care must be exercised to avoid erosion damage to portland cement-based plaster surfaces. Except for severe drying conditions, the wetting of finish coat should be avoided, that is, wet the base coat prior to application of the finish coat.

(2) Plastic film, when taped or weighted down around the perimeter of the plastered area, can provide a vapor barrier to retain the moisture between the membrane and plaster. Care must be exercised in placing the film: if too soon, the film may damage surface texture; if too late, the moisture may have already escaped.

(3) Canvas, cloth, or sheet material barriers can be erected to deflect sunlight and wind, both of which will reduce the rate of evaporation. If the humidity is very low, this option alone may not provide adequate protection.

X1.5.2.6 Application of Plaster Basecoats:

(1) Conventional, three-coat plaster is applied over a metal plaster base in two, nominal $\frac{3}{8}$ in. coats. The traditional application brings the plaster brown coat out to the lathing accessories which are set to approximately $\frac{3}{4}$ in. off the substrate. The lathing accessories that traditionally provide the plaster thickness screed point include the casing beads, used to terminate the plaster into a dissimilar material, control and expansion joints installed in accordance with Specification **C1063**, corner transition trims, typically used at a vertical to horizontal transition, and outside corner reinforcement (corner aids and corner beads).

(2) The interface of other exterior wall envelope systems, such as door and window frames, metal flashings and surrounds, drift joint framing, and other components often

create build up that the lathing and plastering must cover. Further impacting this build-up are self-adhering flashing and multiple layers of water-resistive barriers used to enhance the ability of the exterior wall to provide a weather-resistive exterior wall envelope.

(3) In load-bearing wood framed and wood sheathed walls, build-up can occur from the wood and sheathing and any structural connection plates and bolts required to complete the structure.

(4) As a result of these factors that can impact the thickness of the plaster and are usually out of the control of the plastering contractor, references to plaster thickness use the term nominal to qualify the required thickness. The term nominal is intentionally ambiguous so as not to unnecessarily burden the plastering contractor with an expectation to provide a thickness of plaster that cannot reliably be achieved. Nominal is a term commonly associated with lumber that was many years ago actually a dimensional reference, but due to changes in the manufacturing of studs and timber, has become simply a name, and not an exact dimension.

X1.6 Design Considerations

X1.6.1 Provisions for Drainage Behind Exterior Plaster Base Systems:

X1.6.1.1 A barrier wall system where the plaster is applied directly to a solid substrate will not require any provisions for drainage to the exterior of the wall assembly.

X1.6.1.2 A drainage wall system where plaster is applied to a metal or non metallic plaster base shall include a water resistive barrier and a defined drainage plane, including provisions for moisture to escape to the exterior of the wall.

SUMMARY OF CHANGES

Committee **C11** has identified the location of selected changes to this standard since the last issue (C926 – 16) that may impact the use of this standard. (Approved March 1, 2016.)

(1) Added Specification **C1787** to 2.1.

(2) Revised **6.1**, **6.2.3**, **7.4**, **A2.3.1**, **A2.3.2**, and **X1.6.1.2**.

(3) Revised **Note 3**.

(4) Revised **A2.3.2**.

Committee **C11** has identified the location of selected changes to this standard since the last issue (C926 – 15b^{E1}) that may impact the use of this standard. (Approved Jan. 1, 2016.)

(1) Revised **A1.6.2**, **A2.2.1**, and **X1.1.5**.

Committee **C11** has identified the location of selected changes to this standard since the last issue (C926 – 15a) that may impact the use of this standard. (Approved July 15, 2015.)

(1) Revised subsections **6.2** and **A1.6.3**.

Committee **C11** has identified the location of selected changes to this standard since the last issue (C926 – 15) that may impact the use of this standard. (Approved June 1, 2015.)

- (1) Added Specification **C578** to Referenced Documents sub-section **2.1**.
- (2) Added “back wrap” (**3.2.5**) and “polymer modified cementitious base coat” (**3.2.22**) to Terminology Section.
- (3) Added subsections **A2.6 – A2.6.5.5** and **Fig. A2.1**.

Committee **C11** has identified the location of selected changes to this standard since the last issue (C926 – 14a) that may impact the use of this standard. (Approved Feb. 1, 2015.)

- (1) Revised **5.2.4**, **5.2.5**, and **7.1.5**.
- (2) Renumbered **X1.4 – X1.4.2** (formerly **X1.3.1** through **X1.3.3**).

Committee **C11** has identified the location of selected changes to this standard since the last issue (C926 – 14) that may impact the use of this standard. (Approved April 15, 2014.)

- (1) Revised **6.2.3**.

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/>