The Guide Specification contained within is intended to be used only as a “Guide.” The user accepts all responsibility for project specifications. The Florida Lath & Plaster Bureau bears no responsibility for errors or omissions of any portions of the project specifications.

**SECTION 09 24 23**

**PORTLAND CEMENT STUCCO**

**This document contains notes for the specifier. Specifier notes will not print.**

**Notes refer to the paragraph below. Click on the pilcrow symbol “¶” on your Word Taskbar to reveal editor’s notes**

**Coordinate section numbers and titles with remainder of Project Manual.**

GENERAL

Related Documents: Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 1 – Specification Sections, apply to Work of this Section. The Contractor and Installer of the Work shall examine the specifications and shall thoroughly familiarize themselves with all provisions regarding the Work of this Section.

SUMMARY

Insert a Description Of The Work

Delete unused sections.

Section includes:

Portland Cement-Based Plaster – Drainage Wall Systems

Traditional 3-coat Lathed Systems

Defined Drainage Space and Rainscreen Systems

Portland Cement-Based Plaster – Direct-Applied and Sealed Face-barrier Systems

Related Sections:

Cast-in-place concrete must be cleaned of all foreign material (cement dust, dirt, form-release agents, etc…prior to the application of plaster. Form release agents may require washing with a mild detergent prior to plastering.

A 4 inch strip lath, a control joint, or expansion joint accessories should be specified over the interface between c-i-p concrete and masonry infill.

Section 03 30 00 – Cast-in-Place Concrete

Check that open textured units and cut flush mortar joints are specified in Division 04. where concrete masonry surfaces are intended to receive plaster. In some Florida markets, a smooth texture block is typical. For further information on block texture see FC &PA Technical Bulletins ST-01-07 and ST-05-07 available at www.fcpa.org. If bond between the block and the plaster is a concern, a dash-bond coat or, a bonding agent conforming to ASTM C932 should be specified.

“Sponging” of the mortar joints by the mason should be prohibited in the Masonry Section of the Project Specifications. This action renders the masonry units unfit to receive plaster and requires cleaning prior to the application of plaster. Specify that mortar joints should be full depth and cut flush.

Section 04 22 00 – Concrete Unit Masonry

Check that a minimum 1/8 in. (3 mm) space is specified between the edges of abutting wood based sheathing.

Verify that all fastening for wood based sheathing comply with APA-An Engineered Wood Association (APA) requirements.

Section 06 11 00 – Wood Framing

F I O: The APA recommendation is to install wood sheathing with a 1/8 gap on all sides is critical in minimizing stucco cracking caused by stresses induced by moisture or temperature in the sheathing. The plastering contractor should notify appropriate party, in writing, if conditions are not acceptable.

Section 06 16 00 – Sheathing

Section 07 10 00 – Dampproofing and Waterproofing

Section 0760 00 – Flashing and Sheet Metal

Section 09 22 16 – Metal Framing

Many larger projects specify lath and accessories under Section 09 22 36. In short form specifications, lath and accessories are often specified within this Section, 09 24 23. It is the specifier's choice. This Guide includes general notes for inclusion of Lath and Accessories in this Section.

Specify only G60 or better galvanized, expanded metal lath in accordance with ASTM C847 or welded-wire lath in accordance with ASTM A641/A641M.

Specify the minimum acceptable weight of expanded metal lath in pounds per square yard (i.e…2.5 SF ) in accordance with ASTM C847 or welded-wire lath in accordance with ASTM C933.

Section 09 22 36 – Metal Lath

Section 09.22.XX Non-metallic Lath

REFERENCES

The applicable date for each reference should be given here. Use latest or other desired edition. When a date other than the latest edition is used, the specifier should state his intent in the use of that edition. It is commonly found that the latest published edition is much newer than the Code Referenced edition. In this case, the newer edition should be specified.

Include current Florida building Code Supplement edition.

Building Code: FBC – 7th Edition (2020)

ASTM B69- \_20\_\_ - Rolled Zinc

ASTM C91/C91M- \_18\_\_ - Masonry Cement

ASTM C150/C150M- \_20/\_ - Portland Cement

ASTM C847- \_18\_ - Standard Metal Lath

ASTM C897- \_15 (2020)\_ - Aggregates for Job Mixed Portland Cement-Based Plaster

ASTM C926- \_20b - Application of Portland Cement-Based Plaster

ASTM C932-\_06 (2019) - Surface-Applied Bonding Agents for Exterior Plastering

AQSTM C933-18 – Standard Specification for Welded Wire Lath

ASTM C979/C979M- \_16\_ - Pigments for Integrally Colored Concrete

ASTM C1063- \_20a\_ - Installation of Lathing and Furring to Receive Interior and Exterior Portland Cement-Based Plaster

ASTM C1116/C1116M- \_10a\_(2020) - Fiber-Reinforced Concrete and Shotcrete

ASTM C1328/C1328M- \_19\_ - Plastic (Stucco) Cement

ASTM C1878-18 - Standard Specification for Installation of Non Metallic Plaster Bases (Lath) Used with Portland Cement Based Plaster in Vertical Wall Applications

ASTM C1788-18 - Standard Specification for Non Metallic Plaster Bases (Lath) Used with Portland

Cement Based Plaster in Vertical Wall Applications1

ASTM C1861- \_20\_ - Lathing and Furring Accessories, and Fasteners, for Interior and Exterior Portland-Cement-Based Plaster

ASTM D4216- \_17\_\_ Rigid Poly (Vinyl Chloride) (PVC) and Related PVC and Chlorinated Poly (Vinyl Chloride) (CPVC) Building Products Compounds

ACI 524R- \_16\_ Guide to Portland Cement Plastering

ACI 117- \_10\_ - Specification for Tolerances for Concrete Construction and Materials.

Florida Lath & Plastering Bureau Technical Bulletins – TB-ST-01 through 08.

ICC Evaluation Service, Inc. AC38 Acceptance Criteria for Weather-Resistive Barriers.

ICC Evaluation Service, Inc. AC356 Moisture Drainage Systems Used with Exterior Cement Plaster or Adhered Masonry Veneer Walls

SUBMITTALS

Certification of compliance of materials with Contract Documents.

Manufacturer’s written specifications, proportion mixes, and installation instructions for factory-prepared materials.

Delete if project size does not require such qualifications.

Manufacturer’s Safety Data Sheet.

Evidence of applicator’s experience including project identification with names of Owner and Architect/Engineer.

QUALITY ASSURANCE

Delete when project size does not require such qualifications.

Applicator Qualifications: Application of cement plaster on at least three projects equal in scope to this Work. Provide evidence of applicator’s experience including project identification with names of Owner and Architect/Engineer.

The plastering contractor should notify appropriate party, in writing, if conditions are not acceptable.

Verify framing for support of Portland Cement-Based Plaster meets the FBC 7th Edition 2020 deflection criteria of L/360.

Verify Wood sheathing is gapped a minimum of 1/8 inch around all edges and 1/8 inch from all other structural elements such as masonry or concrete.

DELIVERY, STORAGE AND HANDLING

Deliver manufactured materials in original unopened packages or containers, identified with manufacturer’s label intact and legible. Deliver materials in sufficient quantity to assure continuity of work. Select and utilize handling equipment so as to avoid damage to materials handled and damage to other construction.

Keep all materials dry, stored above ground, under cover and away from damp surfaces.

Remove wet or deteriorated materials from the Site.

PROJECT CONDITIONS

The plastering contractor should notify appropriate party, in writing, if conditions are not acceptable.

Installer must examine surfaces that are to receive plaster, repair, alter and prepare surfaces to insure a timely completion of the work. Do not proceed with the plasterwork until unsatisfactory conditions have been corrected in a manner acceptable to the Installer and Architect.

Delete if no exterior work.

Delete if not applicable to Site location.

Method of temporary protection and heat is option of Contractor.

Cold Weather Requirements: Do not apply cement plaster when ambient temperature is expected to be less than 40ºF (4°C) and protect from freezing four at least 24 hours.

Delete if no exterior work.

Hot Weather Conditions

Use damp loose sand.

Use cool, potable water for mix water.

Pre-dampen masonry walls prior to the application of the scratch coat.

Moist curing periods are subject to weather conditions. Low humidity, high wind conditions may require more fogging for as much as a week.

Prevent the plaster from drying out by covering with a plastic sheet, or moist cure by fogging or spraying at least twice daily for the first 2 – 3 days. Dry or windy weather conditions may require moist curing at more frequent intervals or for longer periods of time.

Do not allow fresh plaster to be subject to hot, dry winds.

For Fenestration products and hardware

Protection:

Protect adjacent finished surfaces and projections, installed prior to plastering, by covering with plastic sheets, non-staining Kraft paper, removable type masking tape, non-staining petroleum jelly, or other appropriate means.

Maintain protection in place until completion of plastering.

PRODUCTS

MANUFACTURERS

Insert alternate/equals as desired

Approved Manufacturers:

Cement:

Ash Grove Stucco Cement

Ash Grove South

4750 E C 470

Sumterville, FL 33585

(352) 559-9974

[www.ashgrovesouth.com](http://www.ashgrovesouth.com)

Titan America Stucco Cement

Titan Florida LLC

11000 NW 121st Way, Medley, FL 33178

(800) 226-2057

[www.titanamerica.com](http://www.titanamerica.com)

Aggregate: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Surface-applied Bonding Agents: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Water Resistant Barriers: Sheet Goods

Drainage Plane: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Bond Break: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Delete if not applicable.

Water Resistant Barriers: Fluid-Applied: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Delete if not applicable.

Rainscreen \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

The FLAPB does not recommend the use of chloride-based accelerators or retarders.

Delete if not applicable.

Admixtures:

Integral Bonding Agent: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Fiber: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

Lath and Accessories

AMICO (Alabama Metal Industries)

 3245 Fayette Avenue

 Birmingham, AL 35208

 (800) 366-2642

 [www.alabama-online.com](http://www.alabama-online.com)

Clark Dietrich Building Systems

 9100 Centre Pointe Dr.; Suite 210

 West Chester, OH 45069

 (770) 844-5910

 [www.clarkdietrich.com](http://www.clarkdietrich.com)

Niles Building Products

8441 Western Way

Jacksonville, FL 32256

(904) 374-7183

[www.nilesbldg.com](http://www.nilesbldg.com).

Non-metallic Lath

PVC Accessories

Plastic Components

9051 NW 97th Terrace

Miami, FL 33178

(800) 327-7077

[www.plasticomponents.com](http://www.plasticomponents.com)

Vinyl Corp.

8000 NW 79th Place

Miami, FL 33166

(800) 648-4695

[www.clarkdietrich.com](http://www.clarkdietrich.com)

Sealants

General purpose sealant/caulk:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Elastic Crack Repair Sealant:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Coordinate materials selection with “Mixes” ARTICLE below.

MATERIALS

Check availability of cements. Combinations of cements should be allowed. Refer to ASTM C926. List only the cements relevant to this project.

*The preferred Cements for use in Florida are Masonry cements and Plastic cements.*

Cement:

Typical plaster for the Florida market should be Masonry Cement , ASTM C91 and/or Plastic Cement, ASTM C1328.

Masonry cement: ASTM C 91 Type S.

Plastic cement: ASTM C 1328 Type S.

Colored masonry cement: Conform to ASTM C 91 Type S; Color.

Aggregate:

Typically the sands in Florida do not meet the gradation limits for all the sieve sizes in ASTM C897. Historically, they have proven to be an excellent aggregate for plaster and are acceptable by ASTM C926. An alternate gradation specification to consider is FDOT 902.2 Silica Sand though it can be difficult to obtain in some areas and may be expensive.

Base Coats: ASTM C897, natural or manufactured sand.

Finish Coats: ASTM C897, natural or manufactured sand or other such aggregate as may be required to achieve specific finish textures.

Water: Potable, cool and free from impurities.

The specifier may wish to list approved manufacturers as well.

Delete if not applicable.

Weather Resistive Barriers

Indicate Manufacturer and model name/#

Drainage Plane WRB: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Bond Break WRB: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Delete if not applicable.

Rainscreen: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Identify paperbacked or non paperbacked and the appropriate desired weight as defined in the applicable ASTM Standard from Section 2.1.A.7 or 8. Non-paperbacked lath is recommended over two layers of weather-resistive barriers

Delete specific sections if not applicable..

Lath: Metal lath labeled as “Nominal” or “Utility” shall not be acceptable..

V-Groove lath is preferred because it lays out the vertical fastening for the lather so that the fasteners are applied at 6” intervals vertically into the framing member and within the groove. This enhances the embedment capability of the lath.

1. Expanded Metal Lath: ASTM C847, G 60 galvanized, self-furring, V-Groove\_, expanded metal lath of xxlbs./sq.yd. as specified in Article 2.1.A.7 above.

2. Welded-Wire Lath: ASTM C933

3. Non-Metallic Lath: PVC or Fiberglass in compliance with ASTM C1788

The specifier may wish to list approved manufacturers and specific products here or in a separate Section 09 22-36. Lath. Add or delete as necessary.

It is recommended to specify Zinc Alloy or PVC accessories for application in coastal (high salt) environments.

Indicate material type (vinyl, Galvanized, or other), Model #, depth of ground for all accessories.

Accessories

PVC accessories complying with ASTM D 4216 as specified in Article 2.1.A.9 above.

Weep or Drainage Screed

Foundation weep screed: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Other Weep or Drainage Screed or mechanism: \_\_\_\_\_\_\_\_\_\_\_\_\_\_

Control Joint: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Expansion Joint: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Plasterstop: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Cornerbead: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Other: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Delete if none required. Discourage indiscriminate use of admixtures.

Admixtures:

Indicate length and identify kind of fiber.

Indicate by brand name and manufacturer.

Indicate by brand name, manufacturer, and purpose for including admixture. Testing to confirm enhancement of desired property is recommended.

Delete if not applicable.

Fibers: ½ in. (12.7 mm) fibers meeting the requirements of ASTM C1116.

Integral bonding agents are considered admixtures and as such are not included in Section 2.2.F below. There are no ASTM Standards for these admixtures.

Delete if integral bonding agents are not permitted.

Integral Bonding Agent:

Florida made stucco cements already contain an integral water-proofing agent. It is not recommended to add additional water-proofing due to possible consequences of overdosing or chemical incompatibility.

Other: \_\_\_\_as manufactured by \_\_\_\_\_to provide \_\_\_\_\_\_\_.

Delete if not required. In some Florida markets, a smooth texture block is typical. If bond between the block and the plaster is a concern, a bonding agent conforming to ASTM C932 or, a dash bond coat should be specified.

 *Delete if not applicable.*

Surface-Applied Bonding Agent: ASTM C932, non-oxidizing, non-crystallizing, non-reemulsifiable, non-rewettable and non-retackifying material.

1. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Delete if coloring compound admixture is not required. Delete if colored masonry cement or colored factory-prepared finish-coat mixture is required.

Identify color compound brand name, color code, and manufacturer.

Sealants

General Purpose: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Elastic Crack Repair: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Delete if not applicable

Coloring Compounds:

ASTM C979 mineral oxide pigment \_\_\_\_\_as manufactured by \_\_\_\_\_\_\_\_.

Use coloring compound as prepared by factory certifying compliance to product standard and demonstrating no effect on setting and hardening of plaster mixture when used within recommended dosage range. Do not use carbon black, lampblack or organic pigments.

Delete if factory-prepared finish-coat mixture is not required.

Indicate producer’s name and identification of mixture required.

Factory-Prepared Finish Coat: Factory-prepared mixture produced by \_\_\_\_\_\_\_, under the product designation of \_\_\_\_\_\_.

Specify color required.

Color: \_\_\_\_\_\_\_\_\_\_\_\_\_.

Specify texture required.

Texture: \_\_\_\_\_\_\_\_\_\_\_.

EXECUTION

The APA recommendation is to install wood sheathing with a 1/8 gap on all sides is critical in minimizing stucco cracking caused by stresses caused by moisture in the sheathing. This gap is also required by ASTM C1063 and C1787. The plastering contractor should notify appropriate party if conditions are not acceptable.

EXAMINATION

Tolerances for solid substrates (concrete, masonry) shall conform to the applicable sections of ACI 117, ACI 530.1, and ASTM C926 and shall not exceed ¼ inch in 10 feet in any direction, non-accumulative. For further information, see Technical Bulletin TB-ST-03-12 of the Florida Lath & Plaster Bureau.

Verify that all substrates to receive plaster conform to the Requirements of ASTM C926.

General – All Substrates

All surfaces to receive stucco are within a plane tolerance of ¼ inch in 10 feet.

The sequential application and proper placement of flashing and sealants are of paramount importance in our wet Florida climate. Redundancy is recommended. At a minimum, penetrations should be flashed and sealed at the substrate or drainage plane level. Providing isolation and adding sealants at the finish level helps ensure the longevity and durability of such seals against potential water intrusion while also reducing cracking at penetrations.

All penetrations through the building envelope (windows, doors, conduits, vents and others) have been properly flashed and sealed.

Delete if not required. Concrete and masonry should not be pre-treated or manufactured as water-resistant as these admixtures or applications will inhibit the bond of stucco to the substrate.

Direct-Applied Stucco

The substrate is sufficiently absorptive to ensure the direct bond of the stucco.

Concrete/masonry is clean, free of beeholes or incomplete mortar joints.

All bee holes and missing mortar joints shall be tuckpointed in accordance with ASTM C270 prior to plastering.

All cracks in masonry or concrete surfaces to receive plaster shall be repaired and sealed prior to plastering with material specified in Article 2.2.I above.

All penetrations are flashed and sealed at the substrate level

Delete if not required.

Drainage Systems

A ⅛ inch gap is left around each individual wood sheathing panel.

Seams of all Drainage Plane WRBs are taped or sealed.

All penetrations are flashed and sealed at the drainage plane level.

Delete if not required.

Sealed Face-Barrier Systems:

Concrete/masonry is clean, free of beeholes or incomplete mortar joints.

All bee holes and missing mortar joints shall be tuckpointed in accordance with ASTM C270 prior to plastering.

All cracks in masonry or concrete surfaces to receive plaster shall be repaired and sealed prior to plastering with material specified in Article 2.2.I above.

A ⅛ inch gap is left around each individual wood sheathing panel.

Seams of all Drainage Plane WRBs are taped or sealed.

All penetrations are flashed and sealed at the drainage plane level.

Verify that areas and conditions under which work is to be performed permit proper and timely completion in a workmanlike manner.

Notify Superintendent/Builder in writing if conditions are not acceptable.

MIXING

General

Size mixer to produce batches that will be applied within maximum of 1½ hours after mixing.

Accurately proportion materials for initial plaster mixture using measuring devices or known volume. Shovels of sand can be used after mixer is calibrated with known volumes of materials, including water.

Use damp, loose sand.

Add pigments or other specified admixtures to batch in accordance with manufacturer’s recommendations.

Retempering of base-coat cement plaster is permitted one time only after initial mixing. Plaster not used within 1½ hours of initial mixing shall be discarded.

Retempering of a finish coat plaster may produce discoloration in the finish coat and therefore, should not be permitted.

Retempering of finish-coat cement plaster is not permitted.

Mechanical Mixing

Mix each batch separately; double batching with single batch discharge shall not be permitted.

Maintain mixer in clean condition before, during, and after plaster preparation. Remove partially set and hardened plaster from mixer drum before next batch. If mixer has been previously used in preparing gypsum plaster, thoroughly clean prior to use to prepare cement plaster.

Maintain mixer in continuous operation while charging mixer. Add water to bring plaster to desired consistency. Continue mixing for 3 to 5 minutes after all ingredients have been added to the mixer.

Mix factory-prepared plaster in accordance with manufacturer’s recommendations.

Mechanical mixing is preferred since it usually results in more uniformly mixed batches.

Mix Proportions

Delete if no dash-bond coat is required. A dash-bond coat is used to improve bond between plaster and dense, low-absorption surfaces such as concrete, smooth surface concrete block or clay brick.

Dash-bond coat: 1 part of Portland cement and maximum 2 parts of sand, proportioned by volume.

Indicate appropriate plaster mix symbol(s) [M], [MS], or [P], Mix selection is dependent upon materials available, base material, and exposure conditions in service. Coordinate plaster mix designation(s) See Tables 2 and 3 of ASTM C926 for plaster mix designations and proportioning...

Base coat(s):

The recommended plaster mix for base coats is [MS], using either ASTM C91 Masonry Cement or ASTM C1328 Plastic (stucco) Cement

ASTM C 926 Plaster Mix Type MS or Type P.

Delete if not required. Otherwise, identify fiber as defined in “Materials” ARTICLE above; indicate whether it is to be added to scratch coat, brown coat, or both; and indicate addition rate.

Add \_\_\_\_fiber to the \_\_\_\_coat per manufactures recommendation

Delete if not required. Otherwise, indicate addition rate for admixture of type defined in “Materials” ARTICLE above.

Add \_\_\_\_\_\_admixture to base-coat cement plaster at the addition rate of \_\_\_\_\_\_\_.

Specify factory-prepared finish-coat plaster; site-prepared finish-coat plaster by reference standard and plaster mix designation.

Indicate appropriate plaster mix symbol(s) [FM], [FMS], or [FP], basing selection on materials available, base-coat selection, desired appearance, and exposure conditions in service. Coordinate plaster mix designation(s) and “Materials –Cement” ARTICLE above. See Tables 2 and 4 of ASTM C926 for plaster mix designations and proportioning.

Caution: The variability of moisture in concrete masonry construction can cause discoloration of pigmented finish coats.

Finish Coat

The recommended plaster mix for field mixed finished coat is [FMS], using either ASTM C91 Masonry Cement, or ASTM C1328 Plastic (stucco) Cement.

Site prepared: ASTM C926 Plaster Mix Type FMS or FP.

Indicate producer’s name and identification of mixture as given in “Mixes” ARTICLE above.

Factory prepared: Proportion factory-prepared mixture produced by \_\_\_\_\_\_\_, under the product designation of \_\_\_\_\_\_\_\_with water as recommended by manufacturer.

PREPARATION

Direct-Applied and Sealed Face-Barrier Systems

Clean the surface to receive plaster of all foreign materials such as cement dust, dirt or form-release agents prior to application of the plaster.

Pre-wetting should be specified on all concrete masonry construction. The typical concrete masonry unit produced in Florida should be considered as a high-suction solid base. Pre-wetting the concrete or masonry wall prior to the application of the scratch coat is essential to achieving suitable bond between the block and the scratch coat. Note to the A/E: This is extremely important as it is the primary cause of failure of bonding of the plaster coat.

In a properly wetted condition the masonry wall will remain in a uniform and dark color. If areas begin to lighten, they should be re-wetted.

Wet high-suction solid bases with fine water spray to produce a uniformly damp surface.

For tilt-wall or cast-in-place applications: Clean the wall surface with a mild detergent and rinse thoroughly prior to application of the scratch coat to remove the form-release agent.

Delete if not applicable.

At Contractor’s option, where additional surface preparation is needed to provide an acceptable mechanical key, apply either a dash-bond coat or a bonding agent as described below.

1. Apply dash-bond coat of cement plaster to solid base and moist cure for a period of not less than 24 hours.

\*\*OR\*\*

2. Apply bonding agent meeting ASTM C932 as specified in Article 2.2.H above, directly to concrete surface as recommended by bonding agent manufacturer’s instructions.

Specify two layers of WRB (recommended) or one layer of WRB and paper-backed lath (Section 2.2.D above). The paper on Paper-backed lath meets the requirements of the Florida Building Code for WRBs. The two layers can be of the same material but usually are not. It is recommended to use a Drainage Plane WRB that is designed to provide drainage channels for water that may penetrate the outer layer (Bond-Break) WRB.

The FLAPB recommends wrapping the structure with two separate layers of differing material and application of non-backed lath. This method reduces the number of seams in the bond-break layer and facilitates the application of accessories.

Delete if not applicable.

Drainage Wall Systems without Rainscreens

Install Water-Resistant-Barriers (WRBs) in accordance with manufacturer’s instructions. Use single-source products where possible.

Install the Drainage Plane WRB, as specified in Article 2.2.D.1 above, in accordance with manufacturer’s instructions. Tape and seal all seams and joints with compatible tape.

Install the Bond-Break WRB, as specified in Article 2.2.D.2 above, in accordance with manufacturer’s instructions. Tape and seal all seams and joints with compatible tape.

Water-Resistive Barriers and lath are required over metal and wood framed construction, and may be used over solid bases as a last resort where other means of ensuring bond (see Section 5.2 of ASTM C926) are ineffective. Specify installation of WRB(s) and lath in Section 09 22 36 in accordance with ASTM C926, ASTM C1063, or ASTM C1787 and applicable building codes. Should the control joints on the drawing conflict with the codes and standards, the plastering contractor should notify the Contractor or Architect/Engineer (in accordance with the established communications channels) in writing that the conditions are not acceptable. Where dissimilar base materials abut and are to receive a continuous coat of plaster, install in accordance with ASTM C926 section A2.3.3.

Coordinate with Section 09 22 36 if applicable.

Delete if not applicable.

Drainage Wall Systems with Rainscreens

Install Water-Resistant-Barriers (WRBs) in accordance with manufacturer’s instructions. Use single-source products where possible.

Install the Drainage Plane WRB, as specified in Article 2.2.D.1 above, in accordance with manufacturer’s instructions. Tape and seal all seams and joints with compatible tape.

Many rainscreen products include a bond-break layer. Ensure that this layer is compliant WRB. For products that have a bond break layer but do not include a bond-break WRB, a separate layer shall be specified and installed.

Install the Rainscreen material as specified in Article 2.2.D.2 above, in accordance with manufacturer’s instructions.

Install WRB(s) and/or Lath and accessories in accordance with FBC 7th Edition (2020), ASTM C1063, ASTM C1787, ASTM C926 and manufacturer’s instructions.

The type, location and depth of ground of the control joint is required by ASTM C926 and C1063 to be specified and shown on the Contract Drawings. Control joints types and locations are design elements requiring the calculation of movement of both the plaster coat and the substrate and, as such, require the attention of the design professional. Do not leave this to the plasterer.

Some Sealed Face-Barrier Systems do not employ control or expansion joint accessories. Such systems do not technically follow the applicable codes and standards though they have been found to be very successful. The FBC allows for such anomalies to be used under the “unless otherwise specified” doctrine of the current code and standards. Check with your Authority Having Jurisdiction for approval. Many jurisdictions have already given approval and will simply require your submittals to identify the system you intend to use.

Install control and expansion joints in accordance with drawings and specifications.

Control Joints shall be tied to the lath. Fasteners that penetrate the Weather-resistant Barriers shall be prohibited.

Lath shall be discontinuous at the Control or Expansion Joints.

APPLICATION

Indicate application procedure: [hand]; [machine]; or [both hand and machine].

The plastering contractor is required to apply the plaster according to local building codes and industry standards.

Do not install cement plaster until all accessories are in place (see Section 09 22 36).

Specify the number of coats required: two or three.

Apply individual coats of cement plaster using 3-coat application over lath and 2-coat application over concrete/masonry to achieve the required thickness.

Corner beads should be prohibited in plaster over cmu where under 3 stories. Use strip-forming to achieve a solid, more durable corner.

Embedment of the lath is intended as a mechanical key for the plaster to hang on. Encapsulation, though not fully achievable is the goal for corrosion resistance.

Apply cement plaster with complete embedment into bases and all accessories. Fill all corner beads with each coat.

A Hawk and Trowel shall be used to apply the scratch and brown coats.

The use of “slickers” to apply the scratch or brown coats shall be prohibited.

Exception: Where scratch or brown coats are applied by pump or spray equipment, slickers may be used to bring the coat to plane.

Apply cement plaster with interruptions occurring only at junctures of plaster planes, at openings, or at control joints.

The recommended application of stucco to unit masonry in Florida is the two-coat double back method. Three-coat plaster offers no benefits over two-coat plaster, and may actually hinder the bond between the unit masonry and the plaster scratch coat.

Select applicable paragraph(s). When plaster is installed over lath, check that: 1) building paper, flashing, accessories, and lath are specified in Section 09 22 36 or “Materials” Article above; 2) requirements for installation of these materials are specified in Section 09 22 36 or “Preparation” Article above; 3) location of control joints as shown on drawings.

Delete if condition does not exist.

Install plaster over lath in accordance with the requirements of ASTM C926 for the application of cement plaster on lath.

\*\*OR\*\*

Delete for interior two-coat plaster applications. Refer to applicable building code and industry guides for recommendations on delay period between scratch and brown coat.

This wording permits the “double-back” application. This suggested method has historically produced a stronger bond between the base and the scratch coat. However, delaying the application of subsequent coats in accordance with ASTM C926 offers an opportunity to cure and repair any cracks that may develop prior to application of the succeeding coat.

Delete if condition does not exist.

Install plaster in accordance with the requirements of ASTM C926 for the application of two-coat or three-coat plaster on solid bases.

Consider applicable codes, industry guides, and anticipated climatic conditions to determine moist curing period. Recommended minimum moist curing times generally range from 3 to 5 days.

The party responsible for curing the plaster should be identified in the specification and the Contractor/Subcontractor Agreement.

For exterior plaster, delay application of brown coat until scratch coat has attained sufficient rigidity to resist cracking or other physical damage when the next coat is applied. Use a long rod, slicker or red rubber float to densify each coat.

Weather conditions may dictate the need for more or less moist curing events and the number of required days.

Curing: Moist cure the set and hardened base-coat plaster at the beginning and end of the workday by spraying a fine mist of water over the entire surface. Repeat application of a fine mist of water morning and evening until plaster has been in place 2 to 5 days (follow ASTM C926, Section X1.5.2). Alternatively, coverage of the base-coat plaster with plastic membrane until application of subsequent coat or finish-coat plaster is permitted.

Keep a daily moist curing log detailing the location, time and signature of the individual performing the moist curing.

Integrally colored finish coats should not be moist cured.

Finish Coats:

Apply plaster finish coats in number of coats and consistency necessary to achieve specified texture.

Enter finish texture desired: [trowel]; [float]; [\_\_\_].

Texture finish coat to the specified finish.

Tolerance: Complete plaster work such that the deviation from true plane (exclusive of texture) is no greater than 1/4 in. (6 mm) as measured from line of a 10-ft (3.5-m) straightedge placed at any location on surface.

Delete if not required. The level of inspection may vary depending on project complexity and owner requirements.

INSPECTION, ADJUSTING AND CLEANING

Delete individual sections if not required.

Inspection: The inspection agency will:

Tolerances for solid substrates (concrete, masonry) shall conform to the applicable sections of ACI 117, ACI 530.1, and ASTM C926. For further information, see Technical Bulletin TB-ST-03-12 of the Florida Lath & Plastering Bureau.

Confirm and document that bases and accessories to receive plaster meet requirements of ASTM C926, ASTM C1063, ASTM C1787 and ASTM C1861 and applicable building codes, prior to application of plaster.

Confirm and document that materials used in base-coat and finish-coat plaster meet the requirements of “Materials” Article 2.2 above.

Indicate frequency of inspection (twice per day, daily, first batch mixed. etc.).

Confirm and document, \_\_\_\_\_\_ that plaster proportioning and mixing procedures are in accordance with “Mixes” Article 2.4 above.

Inspect prior to and during plaster application.

Confirm and document, \_\_\_\_\_\_ that preparation of bases and application of plaster are in accordance with “Preparation” (3.2) and “Application” (3.3) Articles above.

For information on patching and repairing, refer to ACI 524 Guide to Portland Cement Plastering.

Adjusting:

Point-up plaster around trim and other locations where plaster abuts dissimilar materials.

Remove defective and damaged plaster by cutting it out.

Remove by cutting out stained and discolored finish-coat plaster scheduled to remain natural and unpainted.

Replace removed plaster using plaster with same composition and brought to desired texture and color consistent with surrounding area.

Cleaning:

Remove protective materials masking adjacent surfaces.

Remove stains that affect uniformity of plaster finish.

Use Cleaning methods approved in advance by the Architect/Engineer.

Color Uniformity: To correct non-uniform color throughout the field of the plaster, fog coat spray entire finish-coat surface. Fog coats shall consist of finish-coat materials, except aggregate, spray applied to entire finish-coat surface on discolored elevations identified by the Architect/Engineer.

END OF SECTION