SECTION 09 24 00 - CEMENT PLASTERING

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

A. Section Includes:

1. Interior portland cement plasterwork on [**metal lath**] [**unit masonry**] [**and**] [**monolithic concrete**].
2. Exterior portland cement plasterwork (stucco) on [**metal lath**] [**unit masonry**] [**and**] [**monolithic concrete**].

B. Related Sections:

1. Section 054000 "Cold-Formed Metal Framing" for structural, load-bearing (transverse and axial) steel studs and joists that support lath and portland cement plaster.
2. Section 061000 "Rough Carpentry" for wood framing and furring included in portland cement plaster assemblies.
3. Section 061600 "Sheathing" for sheathing and water-resistant barriers included in portland cement plaster assemblies.
4. Section 072100 "Thermal Insulation" for thermal insulations and vapor retarders included in portland cement plaster assemblies.

5. Section 092216 "Non-Structural Metal Framing" for non-structural framing and suspension systems that support lath and portland cement plaster.
6. Section 092300 "Gypsum Plastering" for gypsum-based conventional plaster and associated lath.
7. Section 092613 "Gypsum Veneer Plastering" for gypsum-based veneer plaster applied on gypsum base for veneer plaster, unit masonry, and monolithic concrete.

1.3 ACTION SUBMITTALS

A. Product Data: For each type of product indicated.

B. LEED Submittals:

1. Product Data for Credit MR 4.1 [**and Credit MR 4.2**]: For products having recycled content, documentation indicating percentages by weight of postconsumer and preconsumer recycled content. Include statement indicating cost for each product having recycled content.
2. Product Data for Credit MR 2.1 [**and Credit MR 2.2**]: For products diverted from disposal in landfills and incinerators, and where recycled resources are directed back to the manufacturing process. Include statement indicating percentage of materials diverted and recycled, and the costs associated with each.
3. Product Data for Credit MR 5: For products where product manufacturing is within a 500 mile radius of the jobsite and the point of extraction of the raw materials. Include a statement indicating the location and distances for the manufacturing plant and the point of extraction of raw materials in relation to the jobsite location.
4. Product Data for Credit IEQ 4.1: For sealants, documentation including printed statement of VOC content.
5. Laboratory Test Reports for Credit IEQ 4: For sealants, documentation indicating that products comply with the testing and product requirements of the California Department of Health Services' "Standard Practice for the Testing of Volatile Organic Emissions from Various Sources Using Small-Scale Environmental Chambers."

C. Shop Drawings: Show locations and installation of control and expansion joints including plans, elevations, sections, details of components, and attachments to other work.

D. Samples for Initial Selection: For each type of factory-prepared finish coat indicated.

E. Samples for Verification: For each type of [**factory-prepared**] [**colored**] [**textured**] finish coat indicated; 12 by 12 inches (305 by 305 mm), and prepared on rigid backing.

1.4 QUALITY ASSURANCE

A. Fire-Resistance Ratings: Where indicated, provide portland cement plaster assemblies identical to those of assemblies tested for fire resistance per ASTM E 119 by, and displaying a classification label from, a qualified independent testing agency acceptable to the authority having jurisdiction. Identify products with appropriate markings of applicable testing agency.

1. Construct fire-resistance rated partitions in compliance with tested assembly requirements [**indicated on drawings**].
2. Rated assemblies to be substantiated from applicable testing using proposed products, by Contractor.
3. Both metal framing and wallboard manufacturers must submit written confirmation that they accept the other manufacturer's product as a suitable component in the assembly. Acceptance is as follows:

    a. If installation of both products is proper, no adverse effect will result in the performance of one manufacturer's product by the other's product.
    b. Combining products can be substantiated by required assembly tests.

4. Indicate design designations from UL's "Fire Resistance Directory" or from the listings of another qualified testing agency.

B. Sound-Transmission Characteristics: Where indicated, provide portland cement plaster assemblies identical to those of assemblies tested for STC ratings per ASTM E 90 and classified according to ASTM E 413 by a qualified testing agency.

C. Mockups: Before plastering, install mockups of at least 100 sq. ft. (9.3 sq. m) in surface area to demonstrate aesthetic effects and set quality standards for materials and execution.

1. Install mockups for each type of finish indicated.
2. For interior plasterwork, simulate finished lighting conditions for review of mockups.
3. Approved mockups may become part of the completed Work if undisturbed at time of Substantial Completion.

D. Preinstallation Conference: Conduct conference at [**Project site**] <**Insert location**>.

1.5 DELIVERY, STORAGE, AND HANDLING

A. Store materials inside under cover and keep them dry and protected against damage from weather, direct sunlight, surface contamination, corrosion, construction traffic, and other causes.

B. Protect cold-formed metal framing from corrosion, deformation, and other damage during delivery, storage, and handling as required by AISI's "Code of Standard Practice".

1.6 PROJECT CONDITIONS

A. Comply with ASTM C 926 requirements.

B. Interior Plasterwork: Maintain room temperatures at greater than 40 deg F (4.4 deg C) for at least 48 hours before plaster application, and continuously during and after application.

1. Avoid conditions that result in plaster drying out during curing period. Distribute heat evenly; prevent concentrated or uneven heat on plaster.
2. Ventilate building spaces as required to remove water in excess of that required for hydrating plaster in a manner that prevents drafts of air from contacting surfaces during plaster application and until plaster is dry.

C. Exterior Plasterwork:

1. Apply and cure plaster to prevent plaster drying out during curing period. Use procedures required by climatic conditions, including moist curing, providing coverings, and providing barriers to deflect sunlight and wind.
2. Apply plaster when ambient temperature is greater than 40 deg F (4.4 deg C).
3. Protect plaster coats from freezing for not less than 48 hours after set of plaster coat has occurred.

D. Factory-Prepared Finishes: Comply with manufacturer's written recommendations for environmental conditions for applying finishes.

PART 2 - PRODUCTS

2.1 METAL LATH

A. Expanded-Metal Lath: ASTM C 847, cold-rolled carbon-steel sheet, ASTM A 653/A 653M, G60 (Z180).

1. Basis-of-Design Product: Subject to compliance with requirements, provide products by ClarkDietrich Building Systems or comparable product by one of the following:

a. Alabama Metal Industries Corporation; a Gibraltar Industries company.
b. CEMCO.
c. MarinoWARE.
d. Phillips Manufacturing Co.
e. <**Insert manufacturer's name**>.

2. Recycled Content: Postconsumer recycled content plus one-half of preconsumer recycled content not less than [**25**] <**Insert number**> percent.
3. Diamond-Mesh Lath: [**Flat**] [**Self-furring**], [**2.5 lb/sq. yd. (1.4 kg/sq. m)**] [**3.4 lb/sq. yd. (1.8 kg/sq. m)**].
4. Flat Rib Lath: Rib depth of not more than 1/8 inch (3.1 mm), [**2.75 lb/sq. yd. (1.5 kg/sq. m)**] [**3.4 lb/sq. yd. (1.8 kg/sq. m)**].
5. Rib Lath, 3/8-Inch (9.5-mm): [**3.4 lb/sq. yd. (1.8 kg/sq. m)**] [**4 lb/sq. yd. (2.2 kg/sq. m)**].

B. Wire Lath: ASTM C 933, Class 1 Galvanized Coating complying with ASTM A 641.

1. Basis-of-Design Product: Subject to compliance with requirements, provide named Structa Wire Corp. products by ClarkDietrich Building Systems or comparable product by one of the following:

a. <**Insert manufacturer's name**>.

2. Structa Welded Wire Lath, ASTM C933:

3. Structalath No 17 SF CR II:

   a. Weight: 1.0 lb/sq. yd (0.5kg/sq.m)
   b. Finish: Class 1 Galvanized Coating complying with ASTM A 641.
   c. Alternate lath to 1.14 lb/sq. yd (0.62 kg/sq. m) welded wire lath specified in ASTM C 933.
   d. As per ICC ESR-2017.

4. Structalath No 17 SF CR Twin Trac:

   a. Weight: 1.14 lb / sq yd (0.62 kg/sq. m).
   b. Finish: Class 1 Galvanized Coating complying with ASTM A 641.
   c. Alternate lath to 2.5 lb/sq. yd (1.4 kg/sq. m) diamond mesh metal lath specified in ASTM C 847.
   d. As per ICC ESR-2017.

5. Structa Mega Lath:

   a. Weight: 1.95 lb/sq. yd (1.1 kg/sq. m).
   b. Finish: Class 1 Galvanized Coating complying with ASTM A 641.
   c. Alternate lath to 3.4 lb/sq. yd (1.8 kg/sq. m) diamond mesh metal lath specified in ASTM C 847.
   d. As per ICC ESR-2017.

6. V Truss Wall & Ceiling - Rib Lath:

   a. Weight 2.2 lb/sq. yd (1.2 kg/sq. m).
   b. Finish: Class 1 Galvanized Coating complying with ASTM A 641.
   c. Alternate lath to 3.4 lb/sq. yd (1.8 kg/sq. m) rib metal lath specified in ASTM C 847.
   d. As per ICC ESR-2017.

7. V Truss Corners - Exterior Corner Reinforcements:

   a. Profile: [**Straight**] [**Bullnose**] [**Arch**] [**One Coat**].
   b. Finish: Class 1 Galvanized Coating complying with ASTM A 641.
   c. As per ICC ESR-2017.

C. Wire-Fabric Lath:

1. Manufacturers: Subject to compliance with requirements, [**provide products by one of the following**] [**available manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following**]:

   a. Davis Wire Corporation; a Heico Wire Group company.
   b. Jaenson Wire Company.
   c. Keystone Steel & Wire Co.
   d. K-Lath; a division of Georgetown Wire.
   e. <**Insert manufacturer's name**>.

2. Welded-Wire Lath: ASTM C 933; self-furring, [**1.4 lb/sq. yd. (0.8 kg/sq. m)**] [**1.95 lb/sq. yd. (1.1 kg/sq. m)**].
3. Woven-Wire Lath: ASTM C 1032; self-furring, with stiffener wire backing, [**1.1 lb/sq. yd. (0.6 kg/sq. m)**] [**1.4 lb/sq. yd. (0.8 kg/sq. m)**].

D. Paper Backing: FS UU-B-790, Type I, [**Grade D, Style 2 vapor-permeable paper**] [**Grade B, Style 1a vapor-retardant paper**] <**Insert requirements**>.

1. Provide paper-backed lath [**unless otherwise indicated**] [**at exterior locations**] [**in locations indicated on Drawings**] <**Insert locations**>.

2.2 ACCESSORIES

A. General: Comply with ASTM C 1063 and coordinate depth of trim and accessories with thicknesses and number of plaster coats required.

B. Metal Accessories:

1. Basis-of-Design Product: Subject to compliance with requirements, provide products by ClarkDietrich Building Systems or comparable product by one of the following:

   a. Alabama Metal Industries Corporation; a Gibraltar Industries company.
   b. CEMCO.
   c. MarinoWARE.
   d. Phillips Manufacturing Co.
   e. <**Insert manufacturer's name**>.

2. Foundation Weep Screed: Fabricated from hot-dip galvanized-steel sheet, ASTM A 653/A 653M, G60 (Z180) zinc coating.
3. Cornerite: Fabricated from expanded metal lath with ASTM A 653/A 653M, G60 (Z180), hot-dip galvanized zinc coating.
4. Strip Lath: Fabricated from expanded-metal lath with ASTM A653/A 653M, G60 (Z180), hot-dip galvanized zinc coating.
5. External-Corner Reinforcement: Fabricated from metal lath with ASTM A 653/A 653M, G60 (Z180), hot-dip galvanized zinc coating.
6. Cornerbeads: Fabricated from [**zinc**] [**or**] [**zinc-coated (galvanized) steel**].

   a. Small nose cornerbead with expanded flanges; use unless otherwise indicated.
   b. Small nose cornerbead with perforated flanges; use on curved corners.
   c. Small nose cornerbead with expanded flanges reinforced by perforated stiffening rib; use on columns and for finishing masonry corners.
   d. Bull nose cornerbead, radius 3/4 inch (19.1 mm) minimum, with expanded flanges; use at locations indicated on Drawings.

7. Casing Beads: Fabricated from [**zinc**] [**or**] [**zinc-coated (galvanized) steel**]; square-edged style; with expanded flanges.
8. Control Joints: Fabricated from [**zinc**] [**or**] [**zinc-coated (galvanized) steel**]; one-piece-type, folded pair of unperforated screeds in M-shaped configuration; with perforated flanges and removable protective tape on plaster face of control joint.

9. Expansion Joints: Fabricated from [**zinc**] [**or**] [**zinc-coated (galvanized) steel**]; folded pair of unperforated screeds in M-shaped configuration; with expanded flanges.
10. Two-Piece Expansion Joints: Fabricated from [**zinc**] [**or**] [**zinc-coated (galvanized) steel**]; formed to produce slip-joint and square-edged reveal that is adjustable from 1/4 to 5/8 inch (6.34 to 16 mm) wide; with perforated flanges.

C. Accessories for Portland Cement Base Plaster: ASTM C 1063. Fabricated from Zinc Alloy (99 percent pure zinc), galvanized (zinc coated) steel, rigid PVC or CPVC plastic, or anodized aluminum alloy.

1. Basis-of-Design Product: Subject to compliance with requirements, provide products by ClarkDietrich Building Systems or comparable products by one of the following:

    a. Alabama Metal Industries Corporation; a Gibraltar Industries company.
    b. Phillips Manufacturing Co.
    c. Plastic Components, Inc.
    d. Vinyl Corp.
    e. <**Insert manufacturer's name**>.

2. Corner beads: With perforated flanges.

    a. Small nose corner bead; use unless otherwise indicated.
    b. Bull nose corner bead, radius 3/4 inch (19.1 mm) minimum; use at locations indicated on Drawings.

3. Casing Beads: With perforated flanges in depth required to suit plaster bases indicated and flange length required to suit applications indicated.

    a. Square-edge style; use unless otherwise indicated.
    b. Bull-nose style, radius 3/4 inch (19.1 mm) minimum; use at locations indicated on Drawings.

4. Control Joints: One-piece-type, folded pair of unperforated screeds in M-shaped configuration; with perforated flanges and removable protective tape on plaster face of control joint.
5. Expansion Joints: Two-piece type, formed to produce slip-joint and square-edged [**1/2-inch- (13-mm-)**] [**1-inch- (25-mm-)**] [**1-1/2-inch- (38-mm-)**] <**Insert dimension**> wide reveal; with perforated concealed flanges.
6. Soffit Reveals: PVC reveals conforming to ASTM C 1047.

    a. Vinyl Corp. "No. DC58-50SE".

7. Soffit Vents: Vinyl soffit vent.

    a. Vinyl Corp. "No. CSJ50-200V".

D. Plastic Accessories for Gypsum Wallboard and Gypsum Veneer Base: ASTM C847. Fabricated from plastic or plastic and paper in combination shall be manufactured from rigid

PVC, ABS, PETG, high-impact polystyrene (HIPS), or polycarbonate (PC) plastic not less than 0.028 inch (0.7112 mm) and Section 4.3.1 [**PVC specification D 3678 Class II or III**].

1. Basis-of Design Product: Subject to compliance with requirements, provide products by ClarkDietrich Building Systems or comparable products by one of the following:

    a. Alabama Metal Industries Corporation; a Gibraltar Industries company.
    b. Plastic Components, Inc.
    c. Vinyl Corp.
    d. <**Insert manufacturer's name**>.

2.3 MISCELLANEOUS MATERIALS

A. Water for Mixing: Potable and free of substances capable of affecting plaster set or of damaging plaster, lath, or accessories.

B. Fiber for Base Coat: Alkaline-resistant glass or polypropylene fibers, 1/2 inch (13 mm) long, free of contaminants, manufactured for use in portland cement plaster.

C. Bonding Compound: ASTM C 932.

D. Steel Drill Screws: For metal-to-metal fastening, ASTM C 1002 or ASTM C 954, as required by thickness of metal being fastened; with pan head that is suitable for application; in lengths required to achieve penetration through joined materials of no fewer than three exposed threads.

E. Fasteners for Attaching Metal Lath to Substrates: Complying with ASTM C 1063.

F. Wire: ASTM A 641/A 641M, Class 1 zinc coating, soft temper, not less than 0.0475-inch (1.21-mm) diameter, unless otherwise indicated.

G. Sound Attenuation Blankets: ASTM C 665, Type I (blankets without membrane facing) produced by combining thermosetting resins with mineral fibers manufactured from glass, slag wool, or rock wool.

1. Fire-Resistance-Rated Assemblies: Comply with mineral-fiber requirements of assembly.
2. Recycled Content: Postconsumer recycled content plus one-half of preconsumer recycled content not less than <**Insert number**> percent by weight.

H. Acoustical Sealant: As specified in

1. Sealants shall have a VOC content of [**250**] <**Insert value**> g/L or less when calculated according to 40 CFR 59, Subpart D (EPA Method 24).
2. Sealants shall comply with the testing and product requirements of the California Department of Health Services' "Standard Practice for the Testing of Volatile Organic Emissions from Various Sources Using Small-Scale Environmental Chambers."

2.4 PLASTER MATERIALS

A. Portland Cement: ASTM C 150, [**Type I**] [**Type II**].

1. Color for Finish Coats: [**White**] [**Gray**].

B. Masonry Cement: ASTM C 91, Type N.

1. Color for Finish Coats: [**White**] [**Gray**].

C. Plastic Cement: ASTM C 1328.

D. Colorants for Job-Mixed Finish Coats: Colorfast mineral pigments that produce finish plaster color [**to match Architect's sample**] <**Insert requirements**>.

E. Lime: ASTM C 206, Type S; or ASTM C 207, Type S.

F. Sand Aggregate: ASTM C 897.

1. Color for Job-Mixed Finish Coats: [**White**] [**In color matching Architect's sample**].

G. Perlite Aggregate: ASTM C 35.

H. Exposed Aggregates for Finish Coats: [**For marblecrete finish, clean, sound, crushed marble matching color and size gradation of Architect's sample**] <**Insert requirements**>.

I. Ready-Mixed Finish-Coat Plaster: Mill-mixed portland cement, aggregates, coloring agents, and proprietary ingredients.

1. Products: Subject to compliance with requirements, [**provide the following**] [**provide one of the following**] [**available products that may be incorporated into the Work include, but are not limited to, the following**]:

a. Bonsal American, an Oldcastle Company; Marblesil Stucco Mix.
b. California Stucco Products Corp.; Conventional Portland Cement Stucco.
c. El Rey Stucco Company, Inc., a brand of ParexLaHabra, Inc.; Premium Stucco Finish.
d. Florida Stucco; Florida Stucco.
e. LaHabra, a brand of ParexLaHabra, Inc.; Exterior Stucco Color Coat.
f. Omega Products International, Inc.; ColorTek Exterior Stucco.
g. QUIKCRETE; QUIKCRETE Finish Coat Stucco, No. 1201.
h. Shamrock Stucco LLC; Exterior Stucco.
i. SonoWall, BASF Wall Systems, Inc.; Thoro Stucco.
j. USG Corporation; Oriental Exterior Finish Stucco.
k. <**Insert manufacturer's name; product name or designation**>.

2. Color: [**Match Architect's sample**] [**As selected by Architect from manufacturer's full range**].

J. Acrylic-Based Finish Coatings: Factory-mixed acrylic-emulsion coating systems, formulated with colorfast mineral pigments and fine aggregates; for use over portland cement plaster base coats. Include manufacturer's recommended primers and sealing topcoats for acrylic-based finishes.

1. Products: Subject to compliance with requirements, [**provide the following**] [**provide one of the following**] [**available products that may be incorporated into the Work include, but are not limited to, the following**]:

    a. Acrocrete, BASF Wall Systems, Inc.; Acrotex.
    b. California Stucco Products Corp.; Texture Flex.
    c. Dryvit Systems, Inc.; Dryvit TAFS.
    d. El Rey Stucco Company, Inc., a brand of ParexLaHabra, Inc.; Prema-Flex.
    e. Finestone, BASF Wall Systems, Inc.; PebbleTex.
    f. LaHabra, a brand of ParexLaHabra, Inc.; Acrylic Finish.
    g. Master Wall Inc.; Superior Finishes.
    h. Omega Products International, Inc.; Omega Flex Finishes.
    i. Parex, Inc., a brand of ParexLaHabra, Inc.; e-lastic.
    j. Pleko Group LLC Products, Inc.; Pleko Structure Finishes.
    k. Senergy, BASF Wall Systems, Inc.; Senerflex.
    l. Shamrock Stucco LLC; Stucco Acrylic Finish.
    m. Sto Corp.; Powerwall Finish.
    n. Stuc-O-Flex International, Inc.; Elastomeric Finish.
    o. Surewall, a brand of ParexLaHabra, Inc.; Acrylic Finish.
    p. SonoWall, BASF Wall Systems, Inc.; StuccoTex Finish.
    q. <**Insert manufacturer's name; product name or designation**>.

2. Color: [**Match Architect's sample**] [**As selected by Architect from manufacturer's full range**].

2.5 PLASTER MIXES

A. General: Comply with ASTM C 926 for applications indicated.

1. Fiber Content: Add fiber to base-coat mixes after ingredients have mixed at least two minutes. Comply with fiber manufacturer's written instructions for fiber quantities in mixes, but do not exceed 1 lb of fiber/cu. yd. (0.6 kg of fiber/cu. m) of cementitious materials.

B. Base-Coat Mixes for Use over Metal Lath: Scratch and brown coats for three-coat plasterwork as follows:

1. Portland Cement Mixes:

    a. Scratch Coat: For cementitious material, mix 1 part portland cement and [**0 to 3/4**] [**3/4 to 1-1/2**] parts lime. Use 2-1/2 to 4 parts aggregate per part of cementitious material.
    b. Brown Coat: For cementitious material, mix 1 part portland cement and [**0 to 3/4**] [**3/4 to 1-1/2**] parts lime. Use 3 to 5 parts aggregate per part of cementitious material, but not less than volume of aggregate used in scratch coat.

2. Masonry Cement Mixes:

    a. Scratch Coat: 1 part masonry cement and 2-1/2 to 4 parts aggregate.

b. Brown Coat: 1 part masonry cement and 3 to 5 parts aggregate, but not less than volume of aggregate used in scratch coat.

3. Portland and Masonry Cement Mixes:

a. Scratch Coat: For cementitious material, mix 1 part portland cement and 1 part masonry cement. Use 2-1/2 to 4 parts aggregate per part of cementitious material.
b. Brown Coat: For cementitious material, mix 1 part portland cement and 1 part masonry cement. Use 3 to 5 parts aggregate per part of cementitious material, but not less than volume of aggregate used in scratch coat.

4. Plastic Cement Mixes:

a. Scratch Coat: 1 part plastic cement and 2-1/2 to 4 parts aggregate.
b. Brown Coat: 1 part plastic cement and 3 to 5 parts aggregate, but not less than volume of aggregate used in scratch coat.

5. Portland and Plastic Cement Mixes:

a. Scratch Coat: For cementitious material, mix 1 part plastic cement and 1 part portland cement. Use 2-1/2 to 4 parts aggregate per part of cementitious material.
b. Brown Coat: For cementitious material, mix 1 part plastic cement and 1 part portland cement. Use 3 to 5 parts aggregate per part of cementitious material, but not less than volume of aggregate used in scratch coat.

C. Base-Coat Mixes: Single base coats for two-coat plasterwork as follows:

1. Portland Cement Mix: For cementitious material, mix 1 part portland cement and 0 to 3/4 part lime. Use 2-1/2 to 4 parts aggregate per part of cementitious material.
2. Portland and Masonry Cement Mix: For cementitious material, mix 1 part portland cement and 1 part masonry cement. Use 2-1/2 to 4 parts aggregate per part of cementitious material.
3. Plastic Cement Mix: Use 1 part plastic cement and 2-1/2 to 4 parts aggregate.

D. Base-Coat Mixes: Single base coats for two-coat plasterwork as follows:

1. Portland Cement Mix: For cementitious material, mix 1 part portland cement and 3/4 to 1-1/2 parts lime. Use 2-1/2 to 4 parts aggregate per part of cementitious material.
2. Masonry Cement Mix: Use 1 part masonry cement and 2-1/2 to 4 parts aggregate.
3. Plastic Cement Mix: Use 1 part plastic cement and 2-1/2 to 4 parts aggregate.

E. Job-Mixed Finish-Coat Mixes:

1. Portland Cement Mix: For cementitious materials, mix 1 part portland cement and [**3/4 to 1-1/2**] [**1-1/2 to 2**] parts lime. Use 1-1/2 to 3 parts aggregate per part of cementitious material.
2. Masonry Cement Mix: 1 part masonry cement and 1-1/2 to 3 parts aggregate.
3. Portland and Masonry Cement Mix: For cementitious materials, mix 1 part portland cement and 1 part masonry cement. Use 1-1/2 to 3 parts aggregate per part of cementitious material.

4. Plastic Cement Mix: 1 part plastic cement and 1-1/2 to 3 parts aggregate.

F. Factory-Prepared Finish-Coat Mixes: For [**ready-mixed finish-coat plasters**] [**acrylic-based finish coatings**], comply with manufacturer's written instructions.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine areas and substrates, with Installer present, and including welded hollow-metal frames, cast-in anchors, and structural framing, for compliance with requirements and other conditions affecting performance of the Work.

B. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 PREPARATION

A. Protect adjacent work from soiling, spattering, moisture deterioration, and other harmful effects caused by plastering.

B. Prepare solid substrates for plaster that are smooth or that do not have the suction capability required to bond with plaster according to ASTM C 926.

3.3 INSTALLATION, GENERAL

A. Fire-Resistance-Rated Assemblies: Install components according to requirements for design designations from listing organization and publication indicated on Drawings.

B. Sound Attenuation Blankets: Where required, install blankets before installing lath unless blankets are readily installed after lath has been installed on one side.

C. Acoustical Sealant: Where required, seal joints between edges of plasterwork and abutting construction with acoustical sealant.

3.4 INSTALLING METAL LATH

A. Expanded-Metal Lath: Install according to ASTM C 1063.

1. Partition Framing and Vertical Furring: Install [**flat diamond-mesh**] [**flat rib**] [**welded-wire**] [**woven-wire**] lath.
2. Flat-Ceiling and Horizontal Framing: Install [**flat diamond-mesh**] [**flat rib**] [**3/8-inch (9.5-mm) rib lath**] [**welded-wire**] [**woven-wire**] lath.
3. Curved-Ceiling Framing: Install [**flat diamond-mesh**] [**welded-wire**] [**flat woven-wire**] lath.
4. On Solid Surfaces, Not Otherwise Furred: Install self-furring, [**diamond-mesh**] [**welded-wire**] [**woven-wire**] lath.

3.5 INSTALLING WIRE LATH (STRUCTA WIRE)

A. Structalath II:

1. Installation as per ESR 2017 - Fastener type and spacing as per ASTM C 1063 except that fasteners may attach the lath to framing supports either at the furring crimps on the vertical cross wire, at the intersection of the longitudinal wire and cross wire or any point along the longitudinal wires. Maximum spacing of supports 16 in (406 mm) OC. Refer to current manufacturer's instructions posted at http://www.structawire.com.

B. Structalath Twin Trac

1. Installation as per ESR 2017 - Fastener type and spacing as per ASTM C 1063 except that fasteners may attach the lath to framing supports either at the furring crimps on the vertical cross wire, at the intersection of the longitudinal wire and cross wire or any point along longitudinal wire, or the lath may be installed by placing a nail or screw fastener between the two Twin Trac longitudinal wires, or a staple over any longitudinal wire
2. For installation as an alternative to 1.14 lb/sq. yd (0.62 kg/sq. m) welded wire or 2.5 lb/sq.yd (1.4 kg/sq.m) diamond mesh metal lath, the maximum spacing of supports must be in accordance with Table 3 of ASTM C 1063. Refer to current manufacturer's instructions posted at http://www.structawire.com.

C. Structa Mega Lath:

1. Installation as per ESR 2017 - Fastener type and spacing as per ASTM C 1063 except that fasteners may attach the lath to framing supports either at the furring crimps on the vertical cross wire, at the intersection of the longitudinal wire and cross wire or any point along longitudinal wire. Mega Lath is designed for nail or screw or staple fastening points to coincide with the longitudinal Twin Trac wires. For alternative installations for 1.4 lb/sq.yd (0.75 kg/sq.m) woven wire or to 3.4 lb/sq.yd (1.8 kg/sq.m) diamond mesh metal lath the maximum spacing must be in accordance with Table 3 of ASTM C 1063. Mega Lath is approved for 24 in (610mm) OC and is to be lapped one mesh. Refer to current manufacturer's instructions posted at http://www.structawire.com.

D. V Truss Wall and Ceiling Lath (Structa Rib Lath):

1. Installation as per ESR 2017 - Fastener type and attachment as per ASTM C 1063 except that fasteners must attach lath at framing supports at every 2nd rib either at the furring crimps on the vertical cross wire, at the intersection of the longitudinal wire and cross wire or any point along longitudinal wire that is welded to the furring crimp. When using screws - deformation of the rib is preferable. The maximum fastener spacing for alternative installations either 1.4 lb/sq.yd (0.75 kg/sq. m) woven wire or to 3.4 lb/sq. yd (1.8 kg/sq.m) diamond mesh metal lath must be in accordance with Table 3 of ASTM C 1063. Lath must be lapped a minimum of one mesh at sides. End laps must be a minimum of one mesh and must occur over supports. The ends of the sheets must be staggered between courses. Refer to current manufacturer's instructions posted at http://www.structawire.com.

3.6 INSTALLING ACCESSORIES

A. Install according to ASTM C 1063 and at locations indicated on Drawings.

B. Reinforcement for External Corners:

1. Install lath-type, external-corner reinforcement at exterior locations.
2. Install corner bead at interior[**and exterior**] locations.

C. Control Joints: Install control joints [**at locations indicated on Drawings.**] [**in specific locations approved by Architect for visual effect as follows:**]

1. As required to delineate plasterwork into areas (panels) of the following maximum sizes:

   a. Vertical Surfaces: 144 sq. ft. (13.4 sq. m).
   b. Horizontal and other Nonvertical Surfaces: 100 sq. ft. (9.3 sq. m).

2. At distances between control joints of not greater than 18 feet (5.5 m) o.c.
3. As required to delineate plasterwork into areas (panels) with length-to-width ratios of not greater than 2-1/2:1.
4. Where control joints occur in surface of construction directly behind plaster.
5. Where plasterwork areas change dimensions, to delineate rectangular-shaped areas (panels) and to relieve the stress that occurs at the corner formed by the dimension change.

3.7 PLASTER APPLICATION

A. General: Comply with ASTM C 926.

1. Do not deviate more than plus or minus 1/4 inch in 10 feet (6.4 mm in 3 m) from a true plane in finished plaster surfaces, as measured by a 10-foot (3-m) straightedge placed on surface.
2. Finish plaster flush with metal frames and other built-in metal items or accessories that act as a plaster ground unless otherwise indicated. Where casing bead does not terminate plaster at metal frame, cut base coat free from metal frame before plaster sets and groove finish coat at junctures with metal.
3. Provide plaster surfaces that are ready to receive field-applied finishes indicated.

B. Bonding Compound: Apply on [**unit masonry**] [**and**] [**concrete**] plaster bases.

C. Walls; Base-Coat Mixes for Use over Metal Lath: Scratch and brown coats for three-coat plasterwork[**, on masonry**] [**, on concrete**]; 3/4-inch (19-mm) thickness.

1. Portland cement mixes.
2. Masonry cement mixes.
3. Portland and masonry cement mixes.
4. Plastic cement mixes.
5. Portland and plastic cement mixes.

D. Ceilings; Base-Coat Mixes for Use over Metal Lath: Scratch and brown coats for three-coat plasterwork; [**1/2 inch (13 mm) thick**] [**3/4 inch (19 mm) thick on concrete**].

1. Portland cement mixes.
2. Masonry cement mixes.
3. Portland and masonry cement mixes.
4. Plastic cement mixes.
5. Portland and plastic cement mixes.

E. Walls; Base-Coat Mix: Scratch coat for two-coat plasterwork[**, 3/8 inch (10 mm) thick on concrete masonry**] [**, 1/4 inch (6 mm) thick on concrete**].

1. Portland cement mixes.
2. Masonry cement mixes.
3. Portland and masonry cement mixes.
4. Plastic cement mixes.
5. Portland and plastic cement mixes.

F. Ceilings; Base-Coat Mix: Scratch coat for two-coat plasterwork, 1/4 inch (6 mm) thick on concrete.

1. Portland cement mixes.
2. Masonry cement mixes.
3. Portland and masonry cement mixes.
4. Plastic cement mixes.
5. Portland and plastic cement mixes.

G. Plaster Finish Coats: Apply to provide [**float**] [**dash**] [**scraped trowel-textured**] [**skip trowel-textured**] [**brocade (knock-down dash)**] [**trowel sweep**] [**combed**] [**sacked (California mission)**] [**English**] [**marblecrete**] <**Insert requirements**> finish to match Architect's sample.

H. Acrylic-Based Finish Coatings: Apply coating system, including primers, finish coats, and sealing topcoats, according to manufacturer's written instructions.

I. Concealed Exterior Plasterwork: Where plaster application will be used as a base for adhered finishes, omit finish coat.

J. Concealed Interior Plasterwork:

1. Where plaster application will be concealed behind built-in cabinets, similar furnishings, and equipment, apply finish coat.
2. Where plaster application will be concealed above suspended ceilings and in similar locations, finish coat may be omitted.
3. Where plaster application will be used as a base for adhesive application of tile and similar finishes, omit finish coat.

3.8 PLASTER REPAIRS

A. Repair or replace work to eliminate cracks, dents, blisters, buckles, crazing and check cracking, dry outs, efflorescence, sweat outs, and similar defects and where bond to substrate has failed.

3.9 PROTECTION

A. Remove temporary protection and enclosure of other work. Promptly remove plaster from door frames, windows, and other surfaces not indicated to be plastered. Repair floors, walls, and other surfaces stained, marred, or otherwise damaged during plastering.

END OF SECTION 092400