SECTION 09 26 00
VENEER PLASTERING

SPEC WRITER NOTES:

1. Delete between // // if not applicable to project.
2. Delete any other item or paragraph not applicable in the section and renumber the paragraphs.
3. Coordinate veneer plaster with VA criteria for finishes and Section 09 06 00, SCHEDULE FOR FINISHES.
4. Veneer plaster is a very thin coating that will be adversely affected by extreme or non-uniform drying conditions and by rapid changes in temperature. It should not be used in spaces where adequate environmental control cannot be obtained.
5. Veneer plaster provides a hard, dense finish for areas such as corridors and conference rooms of major facilities where walls are subjected to frequent impact and where appearance is important. It should not be used in shower rooms or excessively humid areas.
6. Inaccessible Ceilings: At Mental Health and Behavioral Nursing Units, areas accessible to patients and not continuously observable by staff (e.g., patient bedrooms, day rooms), ceilings should be a solid material such as veneer plaster to limit patient access. Coordinate and specify access doors in accordance with Section 08 31 13, ACCESS DOORS AND FRAMES. Access doors are needed to access electrical and mechanical equipment above the ceiling. These doors should be locked to prevent unauthorized access and secured to the ceiling using tamper resistant fasteners.
7. GENERAL
	1. DESCRIPTION
		1. This section specifies veneer plaster and veneer plaster base.
	2. RELATED WORK:
		1. // Section 01 81 13, SUSTAINABLE CONSTRUCTION REQUIREMENTS: Sustainable Design Requirements. //
		2. Section 07 92 00, JOINT SEALANTS: Application of Sealants.
		3. Section 08 31 13, ACCESS DOORS AND FRAMES: Access Doors.
		4. Section 09 22 16, NON-STRUCTURAL METAL FRAMING: Metal Framing.
		5. Section 09 29 00, GYPSUM BOARD: Gypsum Backing Board on Multi-Layer Systems.
		6. Section 09 23 00, GYPSUM PLASTERING: Gypsum Plaster.
		7. Section 09 24 00, PORTLAND CEMENT PLASTERINGL Cement Plaster.
		8. Section 13 49 00, RADIATION PROTECTION: Lead Lined Veneer Base.
	3. TERMINOLOGY
		1. Definitions and description of terms in accordance with ASTM C11, ASTM C843, ASTM C844, and as specified.
		2. Underside of Structure Overhead: Where steel trusses or bar joists are shown, the underside of structure overhead is the underside of the floor or roof construction supported by the trusses or bar joists.
		3. Yoked: Gypsum Board cut out for opening with no joint at the opening corners.
	4. SUBMITTALS
		1. Submit in accordance with Section 01 33 23, SHOP DRAWINGS, PRODUCT DATA, AND SAMPLES.
		2. //Sustainable Design Submittals as described below:
			1. //Postconsumer and preconsumer recycled content as specified in PART 2 ‑ PRODUCTS. //
			2. //Volatile organic compounds per volume as specified in PART 2 ‑ PRODUCTS. // //
		3. Manufacturer's Literature and Data:
			1. Gypsum veneer plaster.
			2. Gypsum Base for Veneer Plaster.
			3. Accessories.
			4. Joint reinforcing materials.
			5. Laminating adhesive.
		4. Shop Drawings:
			1. Typical veneer plaster installation, showing corner details, casing details, control joint details, and other similar details.
		5. Installers qualifications.
	5. Delivery and storage
		1. Deliver and store plaster materials in the manufacturer’s original unopened containers.
		2. Store materials off the ground within a completely enclosed structure or enclosed within a weathertight covering. Store gypsum base and gypsum backing board flat to prevent warping and protect from excessive exposure to sunlight.
	6. SCHEDULING
		1. Commence application only after the area scheduled for veneer plaster work is completely weathertight.
		2. The heating, ventilating, and air-conditioning systems should be complete and in operation prior to application of the plaster. If the mechanical system cannot be activated before veneer plastering is begun, the plastering may proceed in accordance with an approved plan to maintain the environmental conditions specified below.
		3. Apply plaster prior to the installation of finish flooring and acoustic ceiling.
	7. ENVIRONMENTAL REQUIREMENTS
		1. Do not expose the gypsum base to excessive sunlight prior to plaster application, as bond failure of the plaster may result.
		2. Maintain a continuous uniform temperature of not less than 10 degrees C (50 degrees F) and not more than 27 degrees C (80 degrees F) for at least one (1) week prior to the application of veneer plaster, while the plastering is being done, and for at least one (1) week after the plaster is set.
		3. Shield air supply and distribution devices to prevent any uneven flow of air across the plastered surfaces.
		4. Provide ventilation to exhaust moist air to the outside during plaster application and set, and until plaster is dry.
		5. In glazed areas, keep windows open top and bottom or side to side 76 to 101 mm (3 to 4 inches). Openings can be reduced by 50 percent when temperature is less than 4 degrees C (40 degrees F).
		6. For enclosed areas lacking natural ventilation, provide temporary mechanical means for ventilation.
		7. In unglazed areas subjected to hot, dry winds or temperature differentials from day to night of 10 degrees C (20 degrees F) or more, screen openings with cheesecloth or similar materials.
		8. During periods of low indoor humidity, provide minimum air circulation following plastering operations and until plaster is dry.
	8. QUALITY ASSURANCE
		1. Installers Qualifications: Work is to be performed by installer having a minimum of three (3) years’ experience for work relating to this Section. Submit installer qualifications.
	9. PERFORMANCE REQUIREMENTS
		1. Where indicated on construction documents, provide veneer plaster assemblies identical to those of assemblies tested for fire resistance according to ASTM E119 by a qualified testing agency.
		2. Where indicated on construction documents, provide veneer plaster assemblies identical to those of assemblies tested for STC ratings according to ASTM E90 and classified according to ASTM E413 by a qualified testing agency.
	10. APPLICABLE PUBLICATIONS
		1. Publications listed below form a part of this specification to the extent referenced. Publications are referenced in the text by the basic designation only.
		2. ASTM International (ASTM):

C11-18b Terminology Relating to Gypsum and Related Building Materials and Systems

C472-20 Physical Testing of Gypsum, Gypsum Plasters and Gypsum Concrete

C475/C475M-17 Joint Compound and Joint Tape for Finish Gypsum Board Construction

C587-04(2018) Gypsum Veneer Plaster

C631-09(2020) Bonding Compounds for Interior Plastering

C840-20 Application and Finishing of Gypsum Board

C843-17 Application of Gypsum Veneer Plaster

C844-15 Application of Gypsum Base to Receive Gypsum Veneer Plaster

C954-18 Steel Drill Screws for the Application of Gypsum Panel Products Board or Metal Plaster Bases to Steel Studs from 0.033 in. (0.84 mm) to 0.112 in. (2.84 mm) in thickness

C1002-18 Steel Drill Screws for the Applications of Gypsum Panel Products Board or Metal Plaster Bases

C1047-19 Accessories for Gypsum Wallboard and Gypsum Veneer Base

C1396/C1396M-17 Specification Gypsum Board

D3678-19 Rigid Poly (Vinyl Chloride) (PVC) Interior-Profile Extrusions

E90-09(2016) Test Method for Laboratory Measurement of Airborne Sound Transmission Loss of Building Partitions and Elements

E119-20 Test Methods for Fire Tests of Building Construction and Materials

E413-16 Rating Sound Insulation

* + 1. Code of Federal Regulation (CFR):

40 CFR 59 Determination of Volatile Matter Content, Water Content, Density Volume Solids, and Weight Solids of Surface Coating

SPEC WRITER NOTE: Make material requirements agree with applicable requirements specified in the referenced Applicable Publications. Update and specify only that which applies to the project.

1. PRODUCTS
	1. VENEER BASE
		1. ASTM C1396/C1396M, plain, Type "X", 16 mm (5/8-inch) thick. Provide square edges, rounded, or tapered as recommended by the veneer plaster manufacturer.
	2. GYPSUM VENEER PLASTER
		1. ASTM C587. Minimum compressive strength of finish coat plaster to be 17.2 MPa (2500 psi) in accordance with ASTM C472.
	3. ACCESSORIES
		1. Corner Bead, Edge Trim and Control Joints: ASTM C1047 or ASTM D3678, except as specified.
		2. Corner bead and edge trim (casings): Minimum 0.38 mm (0.015-inch) thick zinc-coated steel sheet or rigid PVC plaster.
			1. //Recycled Content of Metal Products: Post consumer content plus one‑half of preconsumer content not less than // 30 // //   // percent.//
		3. Flanges not less than 22 mm (7/8-inch) wide with punch-outs or deformations as required to provide plaster bond.
	4. JOINT REINFORCING TAPE
		1. ASTM C475/C475M, paper tape.
	5. LAMINATING ADHESIVE
		1. ASTM C475/C475M joint compound chemical setting type or as recommended by veneer base manufacturer. VOC not to exceed 20 g/L; free of antifreeze and other deleterious impurities.
			1. //Sealant adhesive shall have a VOC content of // 250 // //   // g/L or less when calculated according to 40 CFR 59, (EPA Method 24).//
	6. FASTENERS
		1. Screws: ASTM C1002 or ASTM C954.
		2. Staples: Flattened zinc-coated steel wire, minimum 15 mm (9/16-inch) leg for securing corner beads or casing and minimum 9 mm (3/8-inch) leg for securing joint reinforcement.
	7. BONDING COMPOUND
		1. ASTM C631.
2. EXECUTION

SPEC WRITER NOTES:

1. Read ASTM C840, ASTM C843, and ASTM C844; coordinate with construction document requirements.
2. Ensure partitions are fully detailed for all requirements and types. Detail construction to conform to UL rated assemblies.
3. The veneer plaster is a thin, hard coating, it may be damaged by excessive deflection or racking of the partitions. Where heavy loads such as wall hung cabinets, counters or hospital TV sets are indicated, the partitions must be strengthened to support the applied loads.
4. Control joint locations should be indicated on construction documents. Control joint spacing in walls or wall furring are not to exceed 9144 mm (30 feet). Control joint spacing are not to exceed 9144 mm (30 feet) in either direction in restrained ceilings, and 15240 mm (50 feet) in either direction in ceilings with perimeter relief.
5. Provide joints at the wings of L, U, and T shaped ceiling areas.
	1. INSTALLATION CRITERIA
		1. Where fire rated construction is required for walls, partitions, columns, beams and floor-ceiling assemblies, construction to match that used in fire rating test and as shown on construction documents.
		2. Sound Rated Assemblies and Materials: Construct as indicated on construction documents.
		3. Ventilate unheated spaces above veneer plaster ceilings as per ASTM C844.
	2. installation OF VENEER BASE
		1. Steel Framing:
			1. Steel framing members to be installed as per ASTM C754.
			2. Space framing at 406 mm (16 inches) on center maximum. Provide partitions to support applied loads such as cabinets and counters without exceeding the permitted deflection.
			3. Partition Framing System:
				1. Provide metal non-load bearing framing and furring system capable of carrying a transverse load of 24 ksm (5 psf) without exceeding either the allowable stress or a deflection of L/240.
				2. Provide studs of 0.45 mm (0.0179 inch) maximum thickness for partitions having the same material and the same material thickness on both sides.
				3. For partitions using 0.45 mm (0.0179 inch) thick studs, the surfacing material to cover the full height of the partition on both sides, or the stud flange to be otherwise supported to ensure rigidity.
				4. Provide studs of 0.84 mm (0.0329 inch) minimum thickness for partitions having different materials or different material thickness on the two (2) sides.
				5. At partition ends, corners, and intersections, and at jambs of openings, fasten studs to runners with screws.
			4. Special Framing:
				1. Build framing for beams, columns, soffits, and other special items to the sizes, shapes, or forms indicated on construction documents. Secure rigidly at each intersection with wallboard screws.
			5. Shaftwall Framing System:
				1. Shaftwalls to be standard, tested designs.
				2. Provide metal framing in accordance with the shaftwall manufacturer’s printed instructions.
			6. Ceiling Openings:
				1. Provide support members at ceiling openings such as required for access panels, recessed light fixtures, and for air supply or exhaust openings.
				2. Locate support members of not less than 38 mm (1-1/2 inch) main runner channels and suspension wires or straps to provide at least the minimum support specified herein for furring and wallboard attachment.
				3. Provide intermediate structural members for attachment or suspension of support members.
			7. Wall Openings:
				1. At wall openings the framing system to provide for the installation and anchorage of the required subframes or finish frames.
				2. Attach steel frames securely through built-in anchors to the nearest stud on each side of the opening with wallboard screws.
				3. Provide 0.84 mm (0.329 inch) minimum thickness double studs at both jambs of all doors openings.
				4. For doors over 1219 mm (4 feet) wide, double doors, and for extra-heavy doors // such as x-ray doors //, provide doubled studs // // mm (// // inches) minimum thickness.
				5. Spot grout door frames at the jamb anchor locations with joint compound applied just prior to application of gypsum base.
			8. Blocking:
				1. Provide blocking when mounting equipment.
				2. Cut metal // or wood // blocking to fit in between the framing members.
				3. Rigidly anchor blocking to the framing members.
				4. Under no circumstances will accessories or other wall mount equipment be anchored directly to the veneer plaster system.
		2. Veneer Base:
			1. Apply gypsum base and backing board to framing and furring members in accordance with ASTM C844, as specified herein, and as indicated on construction documents.
			2. Use veneer base of maximum practical length.
			3. Install veneer base with long dimension direction as follows:
				1. On ceilings, at 90 degrees to framing to which it is applied.
				2. On partitions, horizontally or vertically, except when the partition is fire rated, apply base as designed in the fire rating test.
			4. In vertical application of veneer base, use panels of length required to reach full height of vertical surfaces in one (1) continuous piece.
			5. Erect veneer base so that the leading edge of the base is first attached to the open end of the metal stud flange.
			6. Leave a space approximately 6 mm (1/4-inch) at bottom and top of veneer base for caulking or sealant.
			7. Edge and End Joints:
				1. Locate edge joints over framing in fire rated partitions.
				2. Locate end joints over furring or framing in all cases.
				3. Stagger end joints of adjoining boards or multiple layer boards.

SPEC WRITER NOTES:

1. Show and clearly define on construction document locations of control joints.
2. Detail control joints.
3. See ASTM C844 for design criteria.
4. Detail and show expansion and control joints. Maintain integrity of fire, smoke, and sound partitions.
	* + 1. Control Joints:
				1. ASTM C844, Paragraph 7.4.
				2. Locate at both side of jambs of openings if gypsum board is not yoked. Use only one (1) system throughout.
				3. Not required for wall length less than 9144 mm (30 feet).
				4. Do not extend veneer base across control joints.
				5. Extend control joints the full height of the wall or length of soffit/ceiling veneer plaster membrane.
			2. Two-Ply Construction:
				1. Apply in accordance with ASTM C844 with joints between layers staggered or offset and falling over framing member, except at control joints where they are to align.
				2. Use screws to hold veneer base in place.
			3. Accessories:
				1. Set plastering accessories plumb, level and true to line, neatly mitered at corners and intersections, and securely attach to supporting surfaces with screws or staples.
				2. Install in one piece, within the limits of the longest commercially available lengths.
				3. Corner Beads:

At all external corners.

Where required as grounds.

Where indicated on construction documents.

* + - * 1. Casings Beads:

At both sides of expansion and control joints, except as otherwise shown on construction documents.

Where veneer plaster terminates against dissimilar materials and at perimeter of openings, except where covered by flanges, casings or permanently built-in equipment.

Where non-load bearing veneer plastered surfaces abuts load bearing members.

Where indicated on construction documents.

* + - 1. Concealed Surfaces: Do not omit veneer plaster behind cabinets, furniture, furnishings, or similar removable items. Omit veneer plaster above suspended ceilings and behind wood paneling unless required to maintain fire resistance or STC ratings.
	1. SEALANT APPLICATION:
		1. Apply sealants to veneer plaster base to cut outs, penetrations, and intersections with adjoining materials prior to application of veneer plaster for acoustical partitions.
		2. Coordinate with Section 07 92 00, JOINT SEALANTS, for application of sealants.
	2. VENEER PLASTER APPLICATION OVER GYPSUM BASE:
		1. Apply gypsum veneer plaster in accordance with ASTM C843, and with the manufacturer’s approved installation instructions where such instructions are additional to or more restrictive than the requirements of ASTM C843. Apply plaster as a // one-component // // two-component // system. Provide minimum plaster thickness as recommended by the manufacturer, but in no case less than // 1.6 mm (1/16 inch) for one-component system. // // 1.6 mm (1/16 inch) for base coat and 0.8 mm (1/32 inch) for finish coat of a two-component system. //
		2. Joint Reinforcement: ASTM C843.
		3. Apply smooth-trowel finish.
		4. Extend finish to underside of structure overhead for fire partitions, smoke partitions, shafts, and sound rated partitions. Seal penetrations and edges for fire, smoke or acoustical requirements.
		5. At new suspended ceilings, extend finish not less than 101 mm (4 inches) above suspended ceiling.
		6. At existing ceilings, finish may terminate at ceiling except for fire, smoke, or sound rated partitions conditions stated above.
		7. Seal and reinforce all joints and fastener heads above ceilings.

SPEC WRITER NOTES:

1. Add new paragraphs for direct applications on masonry or concrete if this occurs in project.
2. See ASTM C843 for Surface Preparation.
3. Coordinate and specify substrate requirements in appropriate sections. Require flush joints on new masonry work to receive veneer plaster.
	1. CLEANUP AND PATCHING:
		1. Remove any plaster splashes from adjacent surfaces. Repair defects in veneer plaster. Plaster surfaces are to be smooth, clean, and in condition to receive the finishing materials that will be applied.

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