3.03 ACOUSTIC ACCESSORIES INSTALLATION A. Acoustic Insulation: Place tightly within spaces, around cut openings, behind and around electrical and mechanical items within partitions, and tight to items passing through partitions. B. Sound Isolation Tape: Apply to vertical studs and top and bottom tracks/runners in accordance with manufacturer's instructions. C. Acoustic Sealant: Install in accordance with manufacturer's instructions. 1. Place continuous bead at perimeter of each layer of gypsum board. 2. Seal around all penetrations by conduit, pipe, ducts, and rough-in boxes, except where firestopping is provided. 3.04 BOARD INSTALLATION A. Comply with ASTM C840, GA-216, and manufacturer's instructions. Install to minimize butt end joints, especially in highly visible locations. B. Single-Layer Nonrated: Install gypsum board in most economical direction, with ends and edges occurring over firm bearing. C. Double-Layer, Nonrated: Use gypsum board for first layer, placed parallel to framing or furring members, with ends and edges occurring over firm bearing. Use glass mat faced gypsum board at exterior walls and at other locations as indicated. Place second layer perpendicular to framing or furring members. Offset joints of second layer from joints of first layer. D. Fire-Resistance-Rated Construction: Install gypsum board in strict compliance with requirements of assembly listing. E. Exterior Sheathing: Comply with ASTM C1280. Install sheathing vertically, with edges butted tight and ends occurring over firm bearing. 1. Seal joints, cut edges, and holes with water-resistant sealant. F. Installation on Metal Framing: Use screws for attachment of gypsum board except face layer of nonrated double-layer assemblies, which may be installed by means of adhesive lamination. 3.05 INSTALLATION OF TRIM AND ACCESSORIES A. Control Joints: Place control joints consistent with lines of building spaces and as indicated. 1. Not more than 30 feet (10 meters) apart on walls and ceilings over 50 feet (16 meters) long. B. Corner Beads: Install at external corners, using longest practical lengths. C. Edge Trim: Install at locations where gypsum board abuts dissimilar materials and as indicated. 3.06 JOINT TREATMENT A. Glass Mat Faced Gypsum Board and Exterior Glass Mat Faced Sheathing: Use fiberglass joint tape, embed and finish with setting type joint compound. B. Finish gypsum board in accordance with levels defined in ASTM C840, as follows: 1. Level 5: Walls and ceilings to receive semi-gloss or gloss paint finish and other areas specifically indicated. 2. Level 4: Walls and ceilings to receive paint finish or wall coverings, unless otherwise indicated. 3. Level 2: In utility areas, behind cabinetry, and on backing board to receive tile finish. 4. Level 1: Fire-resistance-rated wall areas above finished ceilings, whether or not accessible in the completed construction. C. Tape, fill, and sand exposed joints, edges, and corners to produce smooth surface ready to receive finishes. 1. Feather coats of joint compound so that camber is maximum 1/32 inch (0.8 mm). 2. Taping, filling, and sanding are not required at base layer of double-layer applications. D. Where Level 5 finish is indicated, spray apply high build drywall surfacer over entire surface after joints have been properly treated; achieve a flat and tool mark-free finish. 3.07 TOLERANCES A. Maximum Variation of Finished Gypsum Board Surface from True Flatness: 1/8 inch in 10 feet (3 mm in 3 m) in any direction. END OF SECTION 092116 SECTION 092216 NON-STRUCTURAL METAL FRAMING PART 1 GENERAL 1.01 SECTION INCLUDES A. Metal partition, ceiling, and soffit framing. B. Framing accessories. 1.02 REFERENCE STANDARDS A. ASTM A36/A36M - Standard Specification for Carbon Structural Steel: 2019. B. ASTM A653/A653M - Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process; 2023. C. ASTM A1003/A1003M - Standard Specification for Steel Sheet, Carbon, Metallic- and Nonmetallic-Coated for Cold-Formed Framing Members; 2015. D. ASTM C645 - Standard Specification for Nonstructural Steel Framing Members; 2018. E. ASTM C754 - Standard Specification for Installation of Steel Framing Members to Receive Screw-Attached Gypsum Panel Products; 1.03 SUBMITTALS A. Product Data: Provide data describing framing member materials and finish, product criteria, load charts, and limitations. B. Product Data: Provide manufacturer's data on partition head to structure connectors, showing compliance with requirements. C. Shop Drawings: 1. Indicate component details, stud layout, framed openings, anchorage to structure, acoustic details, type and location of fasteners, 2. Describe method for securing studs to tracks, splicing, and for blocking and reinforcement of framing connections. D. Manufacturer's Installation Instructions: Indicate special procedures and perimeter conditions requiring special attention. 1.04 QUALITY ASSURANCE A. Installer Qualifications: Company specializing in performing the work of this section with minimum five years documented experience and approved by manufacturer. PART 2 PRODUCTS 2.01 MANUFACTURERS A. Metal Framing, Connectors, and Accessories: 1. ClarkDietrich: www.clarkdietrich.com/#sle. 2. Jaimes Industries; : www.jaimesind.com/#sle. 3. MarinoWARE: www.marinoware.com/#sle. 4. R-stud: www.rstud.com/#sle. SCAFCO Corporation: www.scafco.com/#sle. 6. Substitutions: See Section 016000 - Product Requirements. 2.02 FRAMING MATERIALS A. Fire-Resistance-Rated Assemblies: As indicated on Drawings. B. Non-Loadbearing Framing System Components: ASTM C645; galvanized sheet steel, of size and properties necessary to comply with ASTM C754 for the spacing indicated, with maximum deflection of wall framing of L/240 at 5 psf (L/240 at 240 Pa). 1. Studs: C-shaped with knurled or embossed faces. 2. Runners: U-shaped, sized to match studs. 3. Ceiling Channels: C-shaped. Furring: a. Hat-shaped sections, minimum depth of 7/8 inch (22 mm). b. Zee-shaped sections, minimum depth of 1 inch (25 mm). 5. Resilient Furring Channels: Single or double leg configuration; 1/2 inch (12 mm) channel depth. 6. Resilient Sound Isolation Clips: Steel resilient clips with molded rubber isolators; attaches to framing; improves noise isolation for areas between gypsum board assemblies and adjacent sources of noise. C. Partition Head to Structure Connections: Provide track fastened to structure with legs of sufficient length to accommodate deflection, for friction fit of stude cut short and braced with continuous bridging on both sides. D. Deflection and Firestop Track: Intumescent strip factory-applied to track flanges expands when exposed to heat or flames to provide a perimeter joint seal. E. Non-Loadbearing Framing Accessories: 1. Ceiling Hangers: Type and size as specified in ASTM C754 for spacing required. 2. Partial Height Wall Framing Support: Provides stud reinforcement and anchored connection to floor. a. Materials: ASTM A36/A36M formed sheet steel support member with factory-welded ASTM A1003/A1003M steel plate base. 3. Framing Connectors: ASTM A653/A653M G90 galvanized steel clips; secures cold rolled channel to wall studs for lateral bracing. 4. Flexible Wood Backing: Fire-retardant-treated wood with sheet steel connectors. F. Grid Suspension Systems: Steel grid system of main tees and support bars, connected to structure using hangining wire. PART 3 EXECUTION 3.01 EXAMINATION A. Verify existing conditions before starting work. B. Verify that rough-in utilities are in proper location. 3.02 INSTALLATION OF STUD FRAMING A. Comply with requirements of ASTM C754. B. Extend partition framing to structure in all locations. C. Partitions Terminating at Ceiling: Attach ceiling runner securely to ceiling track in accordance with manufacturer's instructions. D. Partitions Terminating at Structure: Attach top runner to structure, maintain clearance between top of studs and structure, and brace both flanges of studs as indicated. E. Align and secure top and bottom runners at 24 inches (600 mm) on center. F. At partitions indicated with an acoustic rating: 1. Place one bead of acoustic sealant between runners and substrate, studs and adjacent construction. 2. Place one bead of acoustic sealant between studs and adjacent vertical surfaces. G. Fit runners under and above openings; secure intermediate studs to same spacing as wall studs H. Install studs vertically at 16 inches (400 mm) on center. Align stud web openings horizontally. J. Secure studs to tracks using crimping method. Do not weld. K. Stud splicing is not permitted. L. Fabricate corners using a minimum of three studs. M. Install double studs at wall openings, door and window jambs, not more than 2 inches (50 mm) from each side of openings. N. Brace stud framing system rigid. O. Coordinate erection of studs with requirements of door frames; install supports and attachments. P. Coordinate installation of bucks, anchors, and blocking with electrical, mechanical, and other work to be placed within or behind stud Q. Blocking: Use wood blocking secured to studs. Provide blocking for support of plumbing fixtures, toilet partitions, wall cabinets, toilet accessories, hardware, and opening frames R. Sound Isolation Clips: Mechanically attach to framing or structure with fasteners recommended by clip manufacturer. Install at spacing indicated on drawings. S. Furring: Install at spacing and locations shown on drawings. Lap splices a minimum of 6 inches (150 mm). 3.03 CEILING AND SOFFIT FRAMING A. Comply with requirements of ASTM C754. B. Install furring after work above ceiling or soffit is complete. Coordinate the location of hangers with other work. C. Install furring independent of walls, columns, and above-ceiling work. D. Securely anchor hangers to structural members or embed them in structural slab. Space hangers as required to limit deflection to criteria indicated. Use rigid hangers at exterior soffits. E. Space main carrying channels at maximum 72 inches (1 800 mm) on center, and not more than 6 inches (150 mm) from wall surfaces. F. Securely fix carrying channels to hangers to prevent turning or twisting and to transmit full load to hangers. G. Place furring channels perpendicular to carrying channels, not more than 2 inches (50 mm) from perimeter walls, and rigidly secure. Lap H. Reinforce openings in suspension system that interrupt main carrying channels or furring channels with lateral channel bracing. Extend bracing minimum 24 inches (600 mm) past each opening. I. Laterally brace suspension system. 3.04 TOLERANCES A. Maximum Variation From True Position: 1/8 inch in 10 feet (3 mm in 3 m). B. Maximum Variation From Plumb: 1/8 inch in 10 feet (3 mm in 3 m). END OF SECTION 092216 SECTION 093000 TILING PART 1 GENERAL 1.01 SECTION INCLUDES A. Tile for floor applications B. Tile for wall applications. C. Cementitious backer board as tile substrate. D. Ceramic accessories. E. Non-ceramic trim. A. ANSI A108/A118/A136 - American National Standard Specifications for the Installation of Ceramic Tile (Compendium); 2019. B. ANSI A108.1a - American National Standard Specifications for Installation of Ceramic Tile in the Wet-Set Method, with Portland Cement C. ANSI A108.1b - Installation of Ceramic Tile on a Cured Portland Cement Mortar Setting Bed with Dry-Set, Modified Dry-Set, or Improved Modified Dry-Set Cement Mortar; 2023. D. ANSI A108.1c - Contractor's Option: Installation of Ceramic Tile in the Wet-Set Method with Portland Cement Mortar or Installation of Ceramic Tile on a Cured Portland Cement Mortar Setting Bed with Dry-Set, Modified Dry-Set, or Improved Modified Dry-Set Cement Mortar; E. ANSI A108.2 - American National Standard General Requirements: Materials, Environmental and Workmanship; 2019. F. ANSI A108.4 - American National Standard Specifications for Installation of Ceramic Tile with Organic Adhesive or Water Cleanable Tile-Setting Epoxy Adhesive; 2023. G. ANSI A108.5 - Setting of Ceramic Tile with Dry-Set Cement Mortar, Modified Dry-Set Cement Mortar, EGP (Exterior Glue Plywood) Modified Dry-Set Cement Mortar, or Improved Modified Dry-Set Cement Mortar; 2023. H. ANSI A108.6 - American National Standard Specifications for Installation of Ceramic Tile with Chemical Resistant, Water Cleanable Tile-Setting and -Grout Epoxy; 2023. I. ANSI A108.8 - American National Standard Specifications for Installation of Ceramic Tile with Chemical Resistant Furan Resin Mortar and Grout: 1999 (Reaffirmed 2024). J. ANSI A108.9 - American National Standard Specifications for Installation of Ceramic Tile with Modified Epoxy Emulsion Mortar/Grout;

A. Preinstallation Meeting: Convene a preinstallation meeting one week before starting work of this section; require attendance by affected 1.04 SUBMITTALS A. Product Data: Provide manufacturers' data sheets on tile, mortar, grout, and accessories. Include instructions for using grouts and B. Shop Drawings: Indicate tile layout, patterns, color arrangement, perimeter conditions, junctions with dissimilar materials, control and expansion joints, ceramic accessories, and setting details. C. Samples: Mount tile and apply grout on two plywood panels, minimum 18 by 18 inches (457 by 457 mm) in size illustrating pattern, color variations, and grout joint size variations D. Manufacturer's Certificate: Certify that products meet or exceed specified requirements. E. Master Grade Certificate: Submit for each type of tile, signed by the tile manufacturer and tile installer. F. Installer's Qualification Statement: 1. Submit documentation of National Tile Contractors Association (NTCA) or Tile Contractors' Association of America (TCAA) 2. Submit documentation of completion of apprenticeship and certification programs. 3. Submit documentation of Natural Stone Institute Accreditation. G. Maintenance Data: Include recommended cleaning methods, cleaning materials, and stain removal methods. H. Maintenance Materials: Furnish the following for Owner's use in maintenance of project. 1. Extra Tile: 10 square feet (1 square meters) of each size, color, and surface finish combination. 1.05 QUALITY ASSURANCE A. Maintain one copy of ANSI A108/A118/A136 and TCNA (HB) on site. B. Manufacturer Qualifications: Company specializing in manufacturing the types of products specified in this section, with minimum five C. Installer Qualifications: Natural Stone Institute (NSI) Accredited Commercial B Contractor (light commercial): www.naturalstoneinstitute.org/#sle. D. Installer Qualifications: 1. Company specializing in performing tile installation, with minimum of five years of documented experience. a. Accredited Five-Star member of the National Tile Contractors Association (NTCA) or Trowel of Excellence member of the Tile Contractors' Association of America (TCAA). 2. Installer Certification: a. Ceramic Tile Education Foundation (CTEF): Certified Tile Installer (CTI). b. Apprenticeship Program: Installer has achieved Journeyworker status through an apprenticeship from the International Union of Bricklayers and Allied Craftworkers (IUBAC) or a U.S. Department of Labor (DOL)-recognized program. c. Advanced Certifications for Tile Installers (ACT): Certification in the installation of membranes, large format tile, and grouts. d. International Masonry Training and Education Foundation (IMTEF): Supervisor Certification Program (SCP). 1.06 MOCK-UPS A. Construct tile mock-up where indicated on drawings, incorporating all components specified for the location. 1. Minimum Size of Mock-Up: 5 ft by 5 ft (1524 mm by 1524 mm) minimum, for each type of tile. 2. Demolish mock-up when directed by Architect, and remove debris from the site. 1.07 DELIVERY, STORAGE, AND HANDLING A. Protect adhesives from freezing or overheating in accordance with manufacturer's instructions. 1.08 FIELD CONDITIONS A. Do not install solvent-based products in an unventilated environment. B. Maintain ambient and substrate temperature above 50 degrees F (10 degrees C) and below 100 degrees F (38 degrees C) during installation and curing of setting materials. PART 2 PRODUCTS 2.01 TILE A. Manufacturers: 1. Basis of Design: As indicated on drawings. 2. Substitutions: See Section 016000 - Product Requirements. 2.02 TRIM AND ACCESSORIES A. Ceramic Trim: Matching bullnose and cove base ceramic shapes in sizes coordinated with field tile. Applications: a. Open Edges: Bullnose. b. Inside Corners: Jointed. c. Floor to Wall Joints: Cove base. 2. Manufacturers: Same as for tile. B. Non-Ceramic Trim: Satin natural anodized extruded aluminum, style and dimensions as indicated on drawings, for setting using tile mortar or adhesive. 1. Applications: a. Open edges of wall tile. b. Open edges of floor tile. c. Wall corners, outside and inside. d. Transition between floor finishes of different heights. e. Thresholds at door openings. f. Expansion and control joints, floor and wall. g. Floor to wall joints. h. Borders and other trim as indicated on drawings. Manufacturers: a. Basis of Design: Schluter-Systems: www.schluter.com/#sle. b. Substitutions: See Section 016000 - Product Requirements. 2.03 SETTING MATERIALS A. Provide setting and grout materials from same manufacturer. 1. ARDEX Engineered Cements: www.ardexamericas.com/#sle. 2. Custom Building Products: www.custombuildingproducts.com/#sle. 3. LATICRETE International, Inc: www.laticrete.com/#sle. 4. Substitutions: See Section 016000 - Product Requirements C. Improved Latex-Portland Cement Mortar Bond Coat: ANSI A118.15. 1. Applications: Use this type of bond coat where Large and Heavy Tile (LHT) mortar is indicated. a. ARDEX Engineered Cements; S 28: www.ardexamericas.com/#sle. b. Custom Building Products; Complete Contact-LFT Premium Rapid Setting Large Format Tile Mortar, with Multi-Surface Bonding Primer: www.custombuildingproducts.com/#sle. c. LATICRETE International, Inc; MULTIMAX LITE: www.laticrete.com/#sle. d. Substitutions: See Section 016000 - Product Requirements. 2.04 GROUTS A. Provide setting and grout materials from same manufacturer. B. Manufacturers: 1. ARDEX Engineered Cements: www.ardexamericas.com/#sle. 2. Custom Building Products: www.custombuildingproducts.com/#sle. 3. LATICRETE International, Inc: www.laticrete.com/#sle. 4. Substitutions: See Section 016000 - Product Requirements C. High Performance Polymer Modified Grout: ANSI A118.7 polymer modified cement grout. Applications: Use this type of grout where indicated and where no other type of grout is indicated. 2. Use sanded grout for joints 1/8 inch (3.2 mm) wide and larger; use unsanded grout for joints less than 1/8 inch (3.2 mm) wide. 3. Color(s): As indicated on drawings. 4. Products: a. ARDEX Engineered Cements; ARDEX FL: www.ardexamericas.com/#sle. b. Custom Building Products; Prism Color Consistent Grout: www.custombuildingproducts.com/#sle. c. LATICRETE International, Inc; LATICRETE PERMACOLOR Grout: www.laticrete.com/#sle. d. Substitutions: See Section 016000 - Product Requirements. 2.05 MAINTENANCE MATERIALS A. Tile Sealant: Gunnable, silicone, siliconized acrylic, or urethane sealant; moisture and mildew resistant type. 1. Applications: Between tile and plumbing fixtures. 2. Color(s): As selected by Architect from manufacturer's full line. 3. Products a. ARDEX Engineered Cements; ARDEX SX: www.ardexamericas.com/#sle. b. Custom Building Products; Commercial 100% Silicone Caulk: www.custombuildingproducts.com/#sle. c. LATICRETE International, Inc; LATICRETE LATASIL: www.laticrete.com/#sle. d. Substitutions: See Section 016000 - Product Requirements. B. Grout Sealer: Liquid-applied, moisture and stain protection for existing or new Portland cement grout. 1. Composition: Water-based colorless silicone. 2. Color(s): As selected by Architect from manufacturer's full line. C. Grout Release: Temporary, water-soluble pre-grout coating. a. Custom Building Products; Aqua Mix Grout Release: www.custombuildingproducts.com/#sle. b. Substitutions: See Section 016000 - Product Requirements. 2.06 ACCESSORY MATERIALS A. Concrete Floor Slab Crack Isolation Membrane: Material complying with ANSI A118.12; not intended as waterproofing. 1. Crack Resistance: No failure at 1/8 inch (3.2 mm) gap, minimum. 2. Fluid or Trowel Applied Type: a. Material: Synthetic rubber or Acrylic. b. Thickness: 20 mils (0.5 mm), maximum. 1) LATICRETE International, Inc; LATICRETE Blue 92 Anti-Fracture Membrane: www.laticrete.com/#sle. 2) Substitutions: See Section 016000 - Product Requirements. B. Backer Board: Cementitious type complying with ANSI A118.9; high density, glass fiber reinforced, 7/16 inch (11 mm) thick; 2 inch (51 mm) wide coated glass fiber tape for joints and corners. Products: a. Custom Building Products; WonderBoard Lite Backerboard: www.custombuildingproducts.com/#sle. b. Substitutions: See Section 016000 - Product Requirements. PART 3 EXECUTION 3.01 EXAMINATION A. Verify that subfloor surfaces are smooth and flat within the tolerances specified for that type of work and are ready to receive tile. B. Verify that wall surfaces are smooth and flat within the tolerances specified for that type of work, are dust-free, and are ready to receive C. Verify that subfloor surfaces are dust free and free of substances that could impair bonding of setting materials to subfloor surfaces. D. Cementitious Subfloor Surfaces: Verify that substrates are ready for tiling installation by testing for moisture and alkalinity (pH). a. Alkalinity (pH): ASTM F710. b. Internal Relative Humidity: ASTM F2170. c. Moisture Vapor Emission: ASTM F1869. 2. Obtain instructions if test results are not within limits recommended by tiling material manufacturer and setting material manufacturer. 3. Follow moisture and alkalinity remediation procedures in Section 090561 E. Verify that required floor-mounted utilities are in correct location. 3.02 PREPARATION A. Protect surrounding work from damage. B. Vacuum clean surfaces and damp clean. C. Seal substrate surface cracks with filler. Level existing substrate surfaces to acceptable flatness tolerances. D. Install backer board in accordance with ANSI A108.11 and board manufacturer's instructions. Tape joints and corners, cover with skim coat of setting material to a feather edge. E. Prepare substrate surfaces for adhesive installation in accordance with adhesive manufacturer's instructions. 3.03 INSTALLATION - GENERAL A. Install tile and grout in accordance with applicable requirements of ANSI A108.1a through ANSI A108.20, manufacturer's instructions, and TCNA (HB) recommendations. B. Lay tile to pattern indicated. Do not interrupt tile pattern through openings. C. Cut and fit tile to penetrations through tile, leaving sealant joint space. Form corners and bases neatly. Align floor joints. D. Place tile joints uniform in width, subject to variance in tolerance allowed in tile size. Make grout joints without voids, cracks, excess mortar or excess grout, or too little grout. E. Form internal angles square and external angles bullnosed. F. Install non-ceramic trim in accordance with manufacturer's instructions. G. Sound tile after setting. Replace hollow sounding units. H. Keep control and expansion joints free of mortar, grout, and adhesive. I. Prior to grouting, allow installation to completely cure; minimum of 48 hours. J. Grout tile joints unless otherwise indicated. Use latex-portland cement grout unless otherwise indicated . K. At changes in plane and tile-to-tile control joints, use tile sealant instead of grout, with either bond breaker tape or backer rod as appropriate to prevent three-sided bonding. 3.04 INSTALLATION - FLOORS - THIN-SET METHODS A. Over interior concrete substrates, install in accordance with TCNA (HB) Method F113, dry-set or latex-Portland cement bond coat, with high performance, polymer modified grout, unless otherwise indicated. K. ANSI A108.10 - American National Standard Specifications for Installation of Grout in Tilework; 2017 (Reaffirmed 2022). 1. Use uncoupling membrane under all tile unless other underlayment is indicated. L. ANSI A108.11 - American National Standard Specifications for Interior Installation of Cementitious Backer Units; 2018. B. Install tile-to-tile floor movement joints in accordance with TCNA (HB) Methods as follows: M. ANSI A108.12 - Installation of Ceramic Tile with EGP (Exterior Glue Plywood) Modified Dry-Set Mortar; 2023. 1. Control or Contraction Joints: EJ171B. N. ANSI A108.13 - American National Standard for Installation of Load Bearing, Bonded, Waterproof Membranes for Thin-Set Ceramic Tile

2. Expansion Joints: EJ171D.

3. Perimeter Joints: EJ171G.

A. Do not permit traffic over finished floor surface for 4 days after installation.

A. Over cementitious backer units on studs, install in accordance with TCNA (HB) Method W244, using membrane at showers in accordance

3.05 INSTALLATION - WALL TILE

3.06 CLEANING

3.07 PROTECTION

END OF SECTION 093000

with TCNA (HB) Method W244F.

A. Clean tile and grout surfaces.

W. ASTM F2170 - Standard Test Method for Determining Relative Humidity in Concrete Floor Slabs Using in situ Probes: 2019a.

X. TCNA (HB) - Handbook for Ceramic, Glass, and Stone Tile Installation; 2023.

1.03 ADMINISTRATIVE REQUIREMENTS

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SECTION 095100 ACOUSTICAL CEILINGS
V. ASTM F1869 - Standard Test Method for Measuring Moisture Vapor Emission Rate of Concrete Subfloor Using Anhydrous Calcium
                                                                                                                                                PART 1 GENERAL
                                                                                                                                                1.01 SECTION INCLUDES
                                                                                                                                                   A. Suspended metal grid ceiling system.
                                                                                                                                                  B. Acoustical units.
                                                                                                                                                    C. Supplementary insulation above ceiling.
                                                                                                                                                1.02 REFERENCE STANDARDS
                                                                                                                                                   A. ASTM C635/C635M - Standard Specification for Manufacture, Performance, and Testing of Metal Suspension Systems for Acoustical Tile
                                                                                                                                                       and Lay-in Panel Ceilings; 2022.
                                                                                                                                                   B. ASTM C636/C636M - Standard Practice for Installation of Metal Ceiling Suspension Systems for Acoustical Tile and Lay-In Panels; 2019.
                                                                                                                                                   C. ASTM E580/E580M - Standard Practice for Installation of Ceiling Suspension Systems for Acoustical Tile and Lay-in Panels in Areas
                                                                                                                                                       Subject to Earthquake Ground Motions; 2022.
                                                                                                                                                   D. ASTM E1264 - Standard Classification for Acoustical Ceiling Products; 2023.
                                                                                                                                                1.03 ADMINISTRATIVE REQUIREMENTS
                                                                                                                                                  A. Sequence work to ensure acoustical ceilings are not installed until building is enclosed, sufficient heat is provided, dust generating
                                                                                                                                                       activities have terminated, and overhead work is completed, tested, and approved.
                                                                                                                                                   B. Do not install acoustical units until after interior wet work is dry.
                                                                                                                                                1.04 SUBMITTALS
                                                                                                                                                   A. Product Data: Provide data on suspension system components and acoustical units.
                                                                                                                                                   B. Shop Drawings: Indicate grid layout and related dimensioning.
                                                                                                                                                   C. Evaluation Service Reports: Show compliance with specified requirements
                                                                                                                                                    D. Samples: Submit two samples 6 by 6 inch (152 by 152 mm) in size illustrating material and finish of acoustical units.
                                                                                                                                                   E. Manufacturer's Installation Instructions: Indicate special procedures and perimeter conditions requiring special attention.
                                                                                                                                                   F. Designer's qualification statement.
                                                                                                                                                   G. Manufacturer's qualification statement.
                                                                                                                                                   H. Maintenance Materials: Furnish the following for Owner's use in maintenance of project.
                                                                                                                                                       1. Extra Acoustical Units: Quantity equal to 5 percent of total installed.
                                                                                                                                                1.05 QUALITY ASSURANCE
                                                                                                                                                   A. Designer Qualifications for Seismic Design: Perform under direct supervision of a Professional Structural Engineer experienced in design
                                                                                                                                                       of this work and licensed at the State in which the Project is located.
                                                                                                                                                   B. Suspension System Manufacturer Qualifications: Company specializing in manufacturing the products specified in this section with
                                                                                                                                                       minimum three years documented experience.
                                                                                                                                                   C. Acoustical Unit Manufacturer Qualifications: Company specializing in manufacturing the products specified in this section with minimum
                                                                                                                                                       three years documented experience.
                                                                                                                                                1.06 FIELD CONDITIONS
                                                                                                                                                  A. Maintain uniform temperature of minimum 60 degrees F (16 degrees C), and maximum humidity of 40 percent prior to, during, and after
                                                                                                                                                   acoustical unit installation.
                                                                                                                                                PART 2 PRODUCTS
                                                                                                                                               2.01 MANUFACTURERS
                                                                                                                                                  A. Acoustic Panels:
                                                                                                                                                       1. Armstrong World Industries, Inc: www.armstrongceilings.com/#sle.
                                                                                                                                                        2. Rockfon: www.rockfon.com/#sle.
                                                                                                                                                       3. USG Corporation: www.usg.com/ceilings/#sle
                                                                                                                                                       4. Substitutions: See Section 016000 - Product Requirements.
                                                                                                                                                   B. Suspension Systems:
                                                                                                                                                         1. Same as for acoustical units.
                                                                                                                                                         2. Substitutions: See Section 016000 - Product Requirements.
                                                                                                                                                2.02 ACOUSTICAL UNITS
                                                                                                                                                   A. Acoustical Units - General: ASTM E1264, Class A.
                                                                                                                                                   B. Acoustical Panels: Painted mineral fiber, with the following characteristics:
                                                                                                                                                         1. Basis of Design: As indicated on the Drawings.
                                                                                                                                                       2. Size: 24 by 24 inches (610 by 610 mm).
                                                                                                                                                       3. Color: White.
                                                                                                                                                       4. Suspension System: 15/16-inch (24 mm) exposed grid.
                                                                                                                                                2.03 SUSPENSION SYSTEM(S)
                                                                                                                                                   A. Metal Suspension Systems - General: Complying with ASTM C635/C635M; die cut and interlocking components, with perimeter
                                                                                                                                                        moldings, hold down clips, and splices as required.
                                                                                                                                                   B. Exposed Suspension System: Hot-dipped galvanized steel grid with steel cap.
                                                                                                                                                       1. Structural Classification: Intermediate-duty, when tested in accordance with ASTM C635/C635M.
                                                                                                                                                       2. Profile: Tee; 15/16 inch (24 mm) face width.
                                                                                                                                                       3. Finish: Baked enamel.
                                                                                                                                                       4. Color: White.
                                                                                                                                                   C. Suspension Systems for ACC-1 and ACC-2: As specified in this Section.
                                                                                                                                                  A. Support Channels and Hangers: Galvanized steel; size and type to suit application, seismic requirements, and ceiling system flatness
                                                                                                                                                       requirement specified.
                                                                                                                                                   B. Hanger Wire: 12 gauge, 0.08 inch (2 mm) galvanized steel wire.
                                                                                                                                                   C. Hold-Down Clips: Manufacturer's standard clips to suit application.
                                                                                                                                                    D. Seismic Clips: Manufacturer's standard clips for seismic conditions and to suit application.
                                                                                                                                                   E. Perimeter Moldings: Same metal and finish as grid.
                                                                                                                                                       1. Size: As required for installation conditions and specified Seismic Design Category.
                                                                                                                                                       2. Angle Molding: L-shaped, for mounting at same elevation as face of grid.
                                                                                                                                                        3. Acoustical Sealant For Perimeter Moldings: Non-hardening, non-skinning, for use in conjunction with suspended ceiling system.
                                                                                                                                                   F. Acoustical Insulation: See Section 092116.
                                                                                                                                                       1. Thickness: 2 inch (51 mm).
                                                                                                                                                   G. Touch-up Paint: Type and color to match acoustical and grid units.
                                                                                                                                                PART 3 EXECUTION
                                                                                                                                                3.01 EXAMINATION
                                                                                                                                                   A. Verify existing conditions before starting work.
                                                                                                                                                    B. Verify that layout of hangers will not interfere with other work
                                                                                                                                                3.02 PREPARATION
                                                                                                                                                   A. Install after major above-ceiling work is complete
                                                                                                                                                   B. Coordinate the location of hangers with other work.
                                                                                                                                                3.03 INSTALLATION - SUSPENSION SYSTEM
                                                                                                                                                   A. Install suspension system in accordance with ASTM C636/C636M, ASTM E580/E580M, and manufacturer's instructions and as
                                                                                                                                                       supplemented in this section.
                                                                                                                                                   B. Rigidly secure system, including integral mechanical and electrical components, for maximum deflection of 1:360.
                                                                                                                                                    C. Lay out system to a balanced grid design with edge units no less than 50 percent of acoustical unit size.
                                                                                                                                                    D. Perimeter Molding: Install at intersection of ceiling and vertical surfaces and at junctions with other interruptions.

    Install in bed of acoustical sealant.

                                                                                                                                                       2. Use longest practical lengths.
                                                                                                                                                       3. Overlap and rivet corners.
                                                                                                                                                   E. Suspension System, Non-Seismic: Hang suspension system independent of walls, columns, ducts, pipes and conduit. Where carrying
                                                                                                                                                        members are spliced, avoid visible displacement of face plane of adjacent members.
                                                                                                                                                   F. Seismic Suspension System, Seismic Design Category C: Hang suspension system independent of walls, columns, ducts, pipes and
                                                                                                                                                       conduit. Maintain a 3/8 inch (9 mm) clearance between grid ends and wall.
                                                                                                                                                   G. Where ducts or other equipment prevent the regular spacing of hangers, reinforce the nearest affected hangers and related carrying
                                                                                                                                                       channels to span the extra distance.
                                                                                                                                                    H. Do not support components on main runners or cross runners if weight causes total dead load to exceed deflection capability.
                                                                                                                                                   I. Support fixture loads using supplementary hangers located within 6 inches (152 mm) of each corner, or support components
                                                                                                                                                    J. Do not eccentrically load system or induce rotation of runners.
                                                                                                                                                   K. Form expansion joints as detailed. Form to accommodate plus or minus 1 inch (25 mm) movement. Maintain visual closure.
                                                                                                                                                3.04 INSTALLATION - ACOUSTICAL UNITS
                                                                                                                                                   A. Install acoustical units in accordance with manufacturer's instructions.
                                                                                                                                                   B. Fit acoustical units in place, free from damaged edges or other defects detrimental to appearance and function.
                                                                                                                                                   C. Fit border trim neatly against abutting surfaces.
                                                                                                                                                    D. Install acoustical units level, in uniform plane, and free from twist, warp, and dents.
                                                                                                                                                    E. Cutting Acoustical Units:

    Cut to fit irregular grid and perimeter edge trim.

                                                                                                                                                        2. Make field cut edges of same profile as factory edges.
                                                                                                                                                        3. Double cut and field paint exposed reveal edges.
                                                                                                                                                   F. Where round obstructions occur, provide preformed closures to match perimeter molding.
                                                                                                                                                   G. Lay acoustical insulation for a distance of 48 inches (1219 mm) either side of acoustical partitions as indicated.
                                                                                                                                                   H. Install hold-down clips on panels within 20 ft (6 m) of an exterior door.
                                                                                                                                                   I. Coordinate with fire detection and suppression systems and to comply with applicable codes.
                                                                                                                                                3.05 TOLERANCES
                                                                                                                                                   A. Maximum Variation from Flat and Level Surface: 1/8 inch in 10 feet (3 mm in 3 m).
                                                                                                                                                  B. Maximum Variation from Plumb of Grid Members Caused by Eccentric Loads: 2 degrees.
                                                                                                                                                3.06 CLEANING
                                                                                                                                                   A. Clean surfaces.
                                                                                                                                                  B. Replace damaged or abraded components.
                                                                                                                                                END OF SECTION 095100
                                                                                                                                                SECTION 096500 RESILIENT FLOORING
                                                                                                                                                PART 1 GENERAL
                                                                                                                                                1.01 SECTION INCLUDES
                                                                                                                                                  A. Resilient tile flooring.
                                                                                                                                                  B. Resilient base.
                                                                                                                                                   C. Installation accessories
                                                                                                                                                1.02 REFERENCE STANDARDS
                                                                                                                                                   A. ASTM E648 - Standard Test Method for Critical Radiant Flux of Floor-Covering Systems Using a Radiant Heat Energy Source; 2019a,
                                                                                                                                                       with Editorial Revision (2020)
                                                                                                                                                    B. ASTM F710 - Standard Practice for Preparing Concrete Floors to Receive Resilient Flooring; 2022.
                                                                                                                                                   C. ASTM F1066 - Standard Specification for Vinyl Composition Floor Tile; 2004 (Reapproved 2018).
                                                                                                                                                    D. ASTM F1861 - Standard Specification for Resilient Wall Base; 2021.
                                                                                                                                                    E. ASTM F1869 - Standard Test Method for Measuring Moisture Vapor Emission Rate of Concrete Subfloor Using Anhydrous Calcium
                                                                                                                                                    Chloride; 2023.
                                                                                                                                                   F. ASTM F2170 - Standard Test Method for Determining Relative Humidity in Concrete Floor Slabs Using in situ Probes; 2019a.
                                                                                                                                                   G. NFPA 253 - Standard Method of Test for Critical Radiant Flux of Floor Covering Systems Using a Radiant Heat Energy Source; 2023.
                                                                                                                                                1.03 SUBMITTALS
                                                                                                                                                  A. Product Data: Provide data on specified products, describing physical and performance characteristics; including sizes, patterns and
                                                                                                                                                       colors available: and installation instructions.
                                                                                                                                                   B. Shop Drawings: Indicate seaming plans and floor patterns.
                                                                                                                                                   C. Verification Samples: Submit two samples, 12 by 12 inch (305 by 305 mm) in size illustrating color and pattern for each resilient flooring
                                                                                                                                                       product specified
                                                                                                                                                    D. Concrete Subfloor Test Report: Submit a copy of the moisture and alkalinity (pH) test reports.
                                                                                                                                                   E. Certification: Prior to installation of flooring, submit written certification by flooring manufacturer and adhesive manufacturer that condition
                                                                                                                                                    of subfloor is acceptable.
                                                                                                                                                    F. Installer's Qualification Statement
                                                                                                                                                   G. Maintenance Data: Include maintenance procedures, recommended maintenance materials, and suggested schedule for cleaning,
                                                                                                                                                       stripping, and re-waxing
                                                                                                                                                   H. Maintenance Materials: Furnish the following for Owner's use in maintenance of project.
                                                                                                                                                       1. One full, unopened box of each type and color.
                                                                                                                                                       2. Extra Wall Base: 100 linear feet (30.4 linear meters) of each type and color.
                                                                                                                                                1.04 QUALITY ASSURANCE
                                                                                                                                                   A. Manufacturer Qualifications: Company specializing in manufacturing specified flooring with minimum three years documented experience.
                                                                                                                                                   B. Installer Qualifications: Company specializing in installing specified flooring with minimum three years documented experience.
                                                                                                                                                    C. Testing Agency Qualifications: Independent firm specializing in performing concrete slab moisture testing and inspections of the type
                                                                                                                                                    specified in this section.
                                                                                                                                                1.05 DELIVERY, STORAGE, AND HANDLING
                                                                                                                                                  A. Upon receipt, immediately remove any shrink-wrap and check materials for damage and the correct style, color, quantity and run
                                                                                                                                                   B. Store all materials off of the floor in an acclimatized, weather-tight space.
                                                                                                                                                    C. Maintain temperature in storage area between 55 degrees F (13 degrees C) and 90 degrees F (72 degrees C).
                                                                                                                                                    D. Protect roll materials from damage by storing on end.
                                                                                                                                                  E. Do not double stack pallets.
                                                                                                                                                1.06 FIELD CONDITIONS
                                                                                                                                                   A. Store materials for not less than 48 hours prior to installation in area of installation at a temperature of 70 degrees F (21 degrees C) to
                                                                                                                                                   achieve temperature stability. Thereafter, maintain conditions above 55 degrees F (13 degrees C).
                                                                                                                                                PART 2 PRODUCTS
                                                                                                                                               2.01 PLANK TILE FLOORING
                                                                                                                                                  A. Vinyl Plank Tile: Printed film type, with transparent or translucent wear layer; acoustic interlayer or backing.
                                                                                                                                                       1. Manufacturers:
                                                                                                                                                           a. Basis of Design: As indicated on Drawings
                                                                                                                                                           b. Substitutions: See Section 016000 - Product Requirements.
                                                                                                                                                        2. Minimum Requirements: Comply with ASTM F1066, of Class corresponding to type specified.
                                                                                                                                                        3. Critical Radiant Flux (CRF): Minimum 0.45 watt per square centimeter, when tested in accordance with ASTM E648 or NFPA 253.
                                                                                                                                                       4. Total Thickness: As indicated on drawings
                                                                                                                                                       5. Color and Pattern: (As indicated on drawings.)
                                                                                                                                                2.02 RESILIENT BASE
```

A. Resilient Base: ASTM F1861, Type TS, rubber, vulcanized thermoset; Style B, Cove.

2. Critical Radiant Flux (CRF): Minimum 0.45 watt per square centimeter, when tested in accordance with ASTM E648 or NFPA 253.

b. Substitutions: See Section 016000 - Product Requirements.

a. Basis of Design: As indicated on Drawings.

1. Manufacturers:

5. Finish: Satin.

6. Length: Roll.

3. Height: 4 inches (100 mm).

4. Thickness: 0.125 inch (3.2 mm).

7. Color: As indicated on drawings.

```
A. Subfloor Filler: White premix latex; type recommended by adhesive material manufacturer.
   B. Primers, Adhesives, and Seam Sealer: Waterproof; types recommended by flooring manufacturer.
    C. Adhesive for Vinyl Flooring:

    Manufacturers:

            a. Basis of Design: H.B. Fuller Construction Products, Inc. TEC Flexera HT - High Tack Premium Universal PSA
            Adhesive: www.tecspecialty.com/#sle.
           b. Substitutions: Section 016000 - Product Requirements.
       Moldings, Transition and Edge Strips: Same material as flooring.
       Filler for Coved Base: Plastic.
PART 3 EXECUTION
3.01 EXAMINATION
  A. Verify that surfaces are flat to tolerances acceptable to flooring manufacturer, free of cracks that might telegraph through flooring, clean,
       dry, and free of curing compounds, surface hardeners, and other chemicals that might interfere with bonding of flooring to substrate.
   B. Verify that wall surfaces are smooth and flat within the tolerances specified for that type of work, are dust-free, and are ready to receive
    C. Cementitious Subfloor Surfaces: Verify that substrates are ready for resilient flooring installation by testing for moisture and alkalinity (pH).
       1. Test as Follows:
           a. Alkalinity (pH): ASTM F710.
            b. Internal Relative Humidity: ASTM F2170.
            c. Moisture Vapor Emission: ASTM F1869.
        2. Conduct tests by an independent testing agency acceptable to Owner.
        3. Obtain instructions if test results are not within limits recommended by resilient flooring manufacturer and adhesive materials
       4. Follow moisture and alkalinity remediation procedures in Section 090561.
3.02 PREPARATION
   A. Prepare floor substrates as recommended by flooring and adhesive manufacturers.
      Remove subfloor ridges and bumps. Fill minor low spots, cracks, joints, holes, and other defects with subfloor filler to achieve smooth,
        flat, hard surface.
       Prohibit traffic until filler is fully cured.

    Clean substrate.

       Apply primer as required to prevent "bleed-through" or interference with adhesion by substances that cannot be removed.
       INSTALLATION - GENERAL
  A. Starting installation constitutes acceptance of subfloor conditions.
       Install in accordance with manufacturer's written instructions.
       Adhesive-Applied Installation:
           Fit joints and butt seams tightly
           Set flooring in place, press with heavy roller to attain full adhesion.
       Where type of floor finish, pattern, or color are different on opposite sides of door, terminate flooring under centerline of door.
       Install edge strips at unprotected or exposed edges, where flooring terminates, and where indicated.
           Metal Strips: Attach to substrate before installation of flooring using stainless steel screws.
            Resilient Strips: Attach to substrate using adhesive.
       Scribe flooring to walls, columns, cabinets, floor outlets, and other appurtenances to produce tight joints.
    G. Install flooring in recessed floor access covers, maintaining floor pattern.
   H. At movable partitions, install flooring under partitions without interrupting floor pattern.
3.04 INSTALLATION - TILE FLOORING
  A. Mix tile from container to ensure shade variations are consistent when tile is placed, unless otherwise indicated in manufacturer's
        installation instructions
   B. Install plank tile with a random offset of at least 6 inches (152 mm) from adjacent rows.
3.05 INSTALLATION - RESILIENT BASE
   A. Fit joints tightly and make vertical. Maintain minimum dimension of 18 inches (45 mm) between joints.
    B. Miter internal corners. At external corners, use premolded units. At exposed ends, use premolded units.
       Install base on solid backing. Bond tightly to wall and floor surfaces.
    D. Scribe and fit to door frames and other interruptions.
3.06 CLEANING
  A. Remove excess adhesive from floor, base, and wall surfaces without damage.
   B. Clean in accordance with manufacturer's written instructions.
3.07 PROTECTION
  A. Prohibit traffic on resilient flooring for 48 hours after installation.
END OF SECTION 096500
SECTION 099123 INTERIOR PAINTING
PART 1 GENERAL
1.01 SECTION INCLUDES

 A. Surface preparation.

  B. Field application of paints.
    C. Scope: Finish interior surfaces exposed to view, unless fully factory-finished and unless otherwise indicated, including the following:
         1. Aluminum and galvanied metal.
        2. Structural steel columns, joists, trusses, beams, miscellaneous and ornamental iron, structural iron, and ferrous metal.
        5. Both sides and edges of plywood backboards for electrical and telecom equipment before installing equipment.
            a. In finished areas, paint insulated and exposed pipes, conduit, boxes, insulated and exposed ducts, hangers, brackets, collars and
            supports, mechanical equipment, and electrical equipment, unless otherwise indicated.
            b. In finished areas, paint shop-primed items.
            c. Paint interior surfaces of air ducts that are visible through grilles and louvers with one coat of flat black paint to visible surfaces.
            d. Paint dampers exposed behind louvers, grilles, to match face panels.
       Do Not Paint or Finish the Following Items:
         1. Items factory-finished unless otherwise indicated; materials and products having factory-applied primers are not considered factory
        2. Items indicated to receive other finishes.
        3. Items indicated to remain unfinished.
        4. Fire rating labels, equipment serial number and capacity labels, bar code labels, and operating parts of equipment.
        5. Stainless steel, anodized aluminum, bronze, terne-coated stainless steel, and lead items.
        6. Floors, unless specifically indicated.
        7. Ceramic and other tiles.
        9. Acoustical materials, unless specifically indicated.
        10. Concealed pipes, ducts, and conduits.
1.02 DEFINITIONS
   A. Comply with ASTM D16 for interpretation of terms used in this section.
1.03 REFERENCE STANDARDS
  A. 40 CFR 59, Subpart D - National Volatile Organic Compound Emission Standards for Architectural Coatings; U.S. Environmental
    Protection Agency; current edition.
    B. ASTM D16 - Standard Terminology for Paint, Related Coatings, Materials, and Applications; 2023.
     C. ASTM D4442 - Standard Test Methods for Direct Moisture Content Measurement of Wood and Wood-Based Materials; 2020.
   D. MPI (APSM) - Master Painters Institute Architectural Painting Specification Manual; Current Edition.
    E. SSPC-SP 1 - Solvent Cleaning; 2015, with Editorial Revision (2016).
    F. SSPC-SP 2 - Hand Tool Cleaning; 2024.
   G. SSPC-SP 6 - Commercial Blast Cleaning; 2007.
1.04 SUBMITTALS
   A. Product Data: Provide complete list of products to be used, with the following information for each:
        1. Manufacturer's name, product name and/or catalog number, and general product category (e.g., "alkyd enamel").
        2. MPI product number (e.g., MPI #47).
        3. Cross-reference to specified paint system products to be used in project; include description of each system.
        4. Manufacturer's installation instructions.
    B. Samples: Submit four paper "draw down" samples, 8-1/2 by 11 inches (216 by 279 mm) in size, illustrating range of colors available for
    each finishing product specified.
        1. Where sheen is specified, submit samples in only that sheen.
        2. Where sheen is not specified, discuss sheen options with Architect before preparing samples, to eliminate sheens not required.
        3. Allow 30 days for approval process, after receipt of complete samples by Architect.
        4. Paint color submittals will not be considered until color submittals for major materials not to be painted, such as masonry, have been
     C. Certification: By manufacturer that paints and finishes comply with VOC limits specified.

    D. Manufacturer's Instructions: Indicate special surface preparation procedures.

    E. Maintenance Data: Submit data including finish schedule showing where each product/color/finish was used, product technical data
        sheets, material safety data sheets (MSDS), care and cleaning instructions, touch-up procedures, repair of painted and finished
        surfaces, and color samples of each color and finish used.
   F. Maintenance Materials: Furnish the following for Owner's use in maintenance of project.
        1. Extra Paint and Finish Materials: 1 gal (4 L) of each color; from the same product run, store where directed.
         2. Label each container with color in addition to the manufacturer's label.
1.05 QUALITY ASSURANCE
   A. Applicator Qualifications: Company specializing in performing the type of work specified with minimum three years experience.
1.06 MOCK-UP
   A. Provide one accent wall as directed by Architect to demonstrate color and finish.
   B. Provide door and frame assembly illustrating paint color, texture, and finish.
    C. Locate where directed by Architect.
    D. Mock-up may remain as part of the work.
1.07 DELIVERY, STORAGE, AND HANDLING
   A. Deliver products to site in sealed and labeled containers; inspect to verify acceptability.
   B. Container Label: Include manufacturer's name, type of paint, brand name, lot number, brand code, coverage, surface preparation, drying
       time, cleanup requirements, color designation, and instructions for mixing and reducing.
   C. Paint Materials: Store at minimum ambient temperature of 45 degrees F (7 degrees C) and a maximum of 90 degrees F (32 degrees C),
       in ventilated area, and as required by manufacturer's instructions.
   D. Handling: Maintain a clean, dry storage area to prevent contamination or damage to materials.
1.08 FIELD CONDITIONS
  A. Do not apply materials when surface and ambient temperatures are outside the temperature ranges required by the paint product
   B. Follow manufacturer's recommended procedures for producing best results, including testing of substrates, moisture in substrates, and
        humidity and temperature limitations.
   C. Provide lighting level of 80 fc (860 lux) measured mid-height at substrate surface.
PART 2 PRODUCTS
2.01 MANUFACTURERS
   A. Provide paints and finishes used in any individual system from the same manufacturer; no exceptions.
  B. Paints:
        1. Behr Process Corporation: www.behr.com/#sle.
        2. Pittsburgh Paints: www.ppgpaints.com/#sle.
        3. Sherwin-Williams Company: www.sherwin-williams.com/#sle.
     C. Primer Sealers: Same manufacturer as top coats.
    D. Substitutions: See Section 016000 - Product Requirements.
2.02 PAINTS AND FINISHES - GENERAL
  A. Paints and Finishes: Ready-mixed, unless intended to be a field-catalyzed paint.
        1. Provide paints and finishes of a soft paste consistency, capable of being readily and uniformly dispersed to a homogeneous coating,
        with good flow and brushing properties, and capable of drying or curing free of streaks or sags.
        2. Provide materials that are compatible with one another and the substrates indicated under conditions of service and application, as
        demonstrated by manufacturer based on testing and field experience.
        3. For opaque finishes, tint each coat including primer coat and intermediate coats, one-half shade lighter than succeeding coat, with
        4. Supply each paint material in quantity required to complete entire project's work from a single production run.
        5. Do not reduce, thin, or dilute paint or finishes or add materials unless such procedure is specifically described in manufacturer's
   B. Volatile Organic Compound (VOC) Content:
        1. Provide paints and finishes that comply with the most stringent requirements specified in the following:
            a. 40 CFR 59, Subpart D--National Volatile Organic Compound Emission Standards for Architectural Coatings.
            b. Architectural coatings VOC limits of the State in which the Project is located.
        2. Determination of VOC Content: Testing and calculation in accordance with 40 CFR 59, Subpart D (EPA Method 24), exclusive of
        colorants added to a tint base and water added at project site; or other method acceptable to authorities having jurisdiction.
     C. Flammability: Comply with applicable code for surface burning characteristics.
    D. Sheens: Provide the sheens specified; where sheen is not specified, sheen will be selected later by Architect from the manufacturer's full
```

E. Colors: To be selected from manufacturer's full range of available colors.

2. Allow for minimum of three colors for each system, unless otherwise indicated, without additional cost to Owner.

A. Metal: Structural steel columns, joists, trusses, beams, miscellaneous and ornamental iron, structural iron, and ferrous metal.

3. Top Coats: Primer: Sherwin-Williams Company; Scuff Tuff Interior Waterbased Enamel, Semi-Gloss, S26-50 Series.

a. Primer: Sherwin-Williams Company; Pro Industrial Pro-Cryl Universal Primer, B6601310 Series.

b. Top Coats: Primer: Sherwin-Williams Company; Pro Industrial Acrylic Semi-Gloss, B66-650 Series.

4. In finished areas, finish pipes, ducts, conduit, and equipment the same color as the wall/ceiling under which they are mounted.

5. In utility areas, finish equipment, piping, conduit, and exposed duct work in colors according to the color coding scheme indicated.

3. Extend colors to surface edges; colors may change at any edge as directed by Architect.

2. Primer: Sherwin-Williams Company; Premium Wall and Wood Primer, B28W8111.

1. Selection to be made by Architect after award of contract.

1. Latex Systems: One primer coat and two top coats.

2.03 PAINT SYSTEMS - INTERIOR

B. Wood: Trim for Opaque Finish.

1. One primer coat and two top coats.

208 Pirkle Ferry Road, Suite C Cumming, GA 30040





PRINT RECORD DESCRIPTION No. DATE 09/19/2025 ISSUED FOR BID A 12/05/2025 ADDENDUM #3

Checked By Drawn By

Job No. Date 08/01/2025 Sheet Title

SPECIFICATIONS

Sheet No.

RELEASED FOR BID

and Dimension Stone; 2005 (Reaffirmed 2021).

Stone Installation: 2014 (Reaffirmed 2019).

Panels/Slabs; 2020.

O. ANSI A108.19 - American National Standard Specifications for Interior Installation of Gauged Porcelain Tiles and Gauged Porcelain Tile

P. ANSI A108.20 - American National Standard Specifications for Exterior Installation of Gauged Porcelain Tiles and Gauged Porcelain Tile

Panels/Slabs by the Thin-Bed Method Bonded with Modified Dry-Set Cement Mortar or Improved Modified Dry-Set Cement Mortar; 2020.

R. ANSI A118.9 - American National Standard Specifications for Test Methods and Specifications for Cementitious Backer Units; 2019.

S. ANSI A118.12 - American National Standard Specifications for Crack Isolation Membranes for Thin-Set Ceramic Tile and Dimension

Q. ANSI A118.7 - American National Standard Specifications for High Performance Cement Grouts for Tile Installation: 2019.

T. ANSI A118.15 - American National Standard Specifications for Improved Modified Dry-Set Cement Mortar; 2019.

U. ASTM F710 - Standard Practice for Preparing Concrete Floors to Receive Resilient Flooring; 2022.