

1.02 REFERENCES
 A. ASTM C150 - Portland Cement
 B. ASTM C206 - Finishing Hydrated Lime
 C. ASTM C932 - Bonding Compounds for Adhering Plaster to Concrete or Concrete Unit Masonry
 D. ASTM C926 - Standard Specification for Application of Portland Cement Based Plaster
 E. ASTM C987 - Aggregate for Job-Mixed Portland Cement Based Plasters
 F. ASTM C1063 - Specification for Installation of Lathing and Furring to Receive Interior and Exterior Portland Cement Plaster
 G. PCA (Portland Cement Association) - Portland Cement Plaster (Stucco) Manual
 H. ACI (American Concrete Institute) ACI 524R - "Guide to Portland Cement Plastering"

1.04 SYSTEM DESCRIPTION
 A. Fabricate vertical elements to limit finish surface to 1/180 deflection under lateral point load of 100 lbs.
 B. Fabricate horizontal elements to limit finish surface to 1/240 deflection under superimposed dead load and wind uplift loads.

1.05 SUBMITTALS
 A. Submit under provisions Section 01300 "Submittals"
 B. Product Data: Provide data on plaster materials, characteristics and limitations of products specified.
 C. Samples: Submit two samples, 12 x 12 inch in size illustrating finish color and texture to match sample provided by owner.

1.06 QUALITY ASSURANCE
 A. Perform Work in accordance with PCA Plaster (Stucco) Manual and applicable manufacturer's performance guidelines.

1.07 QUALIFICATIONS
 A. Applicant: Company specializing in performing the work of this section with minimum three years experience and/or approved by manufacturer.

1.08 MOCKUP
 A. Provide mockup of plaster system with accessories.
 B. Construct mockup, 2 feet long by 2 feet wide, illustrating surface finish and color to match owner sample.
 C. Locate where directed by Owner.
 D. Mockup may remain as part of the Work.

1.09 Project Conditions
 A. Comply with ASTM C926 requirements
 B. Do not apply plaster when substrate or ambient air temperature is less than 40° F or above 100° F for 48 hours before, during and after stucco applications and until materials can be fully cured.
 C. Apply stucco to clean, adequately prepared surfaces free from dust, dirt or other deleterious substances.
 D. Provide adequate protection from contaminants and the weather for substrates prior to application of stucco and for stucco coat applications. Maintain in place until stucco is adequately cured.
 E. Protect stucco surfaces from uneven and excessive evaporation during hot, dry or windy weather. Use procedures required by climate conditions including moist curing, providing coverings and providing barriers to deflect sunlight and wind.
 F. Take necessary care to identify and protect adjacent surfaces from damage from stucco application and promptly remove all droppings.

PART 2 - PRODUCTS

2.01 MANUFACTURER
 A. The drawings were prepared and this specification written on the basis of using the products of Degasa Wall Systems, Jacksonville, FL. Such is intended to establish minimum quality standards, not to limit competitive bidding. Products with equal or superior characteristics by other manufacturers will be considered under conditions of the Specifications.

2.02 PLASTER BASE MATERIALS
 A. Cement: ASTM C150, Type 1 Portland
 B. Lime: Special finishing hydrated lime, ASTM C 206, Type S
 C. Aggregate: Natural or manufactured sand, in accordance with ASTM C897.
 D. Water: Clean, fresh, potable and free of mineral or organic matter which can affect plaster.
 E. Bonding Agent: ASTM C932, type recommended by manufacturer for bonding plaster to concrete masonry surfaces.
 F. Plaster Sand: Must be clean and free from deleterious amounts of loam, clay, salt, soluble salts and organic matter. Sampling and testing must comply with ASTM C144.
 G. Senergy STUCCOBASE Concentrate: Factory blended stucco mixture of Portland cement, reinforcing fibers, and proprietary ingredients for scratch and brown coats. Sampling and testing must comply with ASTM 926 and ICC ESR-1094.
 H. Senergy ALPHA BASE COAT (A/BC): 100% acrylic polymer base coat, site mixed with Portland cement. To attach and reinforce optional EPS shapes over face of dried stucco. Reinforcing Mesh: Open weaved, glass fiber reinforcing mesh for reinforcing optional EPS shapes.

2.03 PLASTER FINISH MATERIALS
 A. Cement: As specified for plaster base coat, pure white color.
 B. Lime: As specified for plaster base coat.
 C. Color Pigment: Synthetic type, color "Pure White".
 D. Water: Clean, fresh, potable and free of mineral or organic matter which can affect plaster.
 E. Primer (if needed): Senergy STUCCO PRIME, 100% acrylic based primer for stucco.
 F. Finish: Cementitious finish coat with texture per schedule, ready to receive paint.

2.04 FURRING AND LATHING
 A. Metal Lath at Walls: ASTM C841 and C847, flat diamond self furring mesh with ASTM A652A G60 hot dip, galvanized zinc coating, 2.4 lbs/sq. yd. of weight to suit application
 B. Metal Lath at Ceilings: ASTM C841 and C847, Flat Diamond non-furred and non-backed mesh with ASTM A652A G60 hot dip, galvanized zinc coating, 2.4 lbs/sq. yd.
 C. Casting Bead: Formed zinc, minimum 26 gage thick, depth governed by plaster thickness; maximum possible lengths, expanded metal flanges, with square edges.
 D. Corner Bead: Formed zinc, minimum 26 gage thick, depth governed by plaster thickness; maximum possible lengths, expanded metal flanges, with beveled edge.
 E. Base Corner: Formed zinc, minimum 26 gage thick, depth governed by plaster thickness; maximum possible lengths, expanded metal flanges, with beveled edge.
 F. Corner Mesh: Formed zinc, minimum 26 gage thick, expanded flanges shaped to permit complete embedding in plaster, minimum 2 inches wide, galvanized finish.
 G. Anchorage Accessories: Tie wire, nails, staples, or other approved metal supports, of type and size to suit application, and to rigidly secure lath and associated metal accessories in place, galvanized, complying with ASTM C1063.

2.05 CEMENT PLASTER MIXES
 A. Mix and proportion cement plaster in accordance with ASTM C926.
 B. Mix and proportion Senergy STUCCOBASE in accordance with manufacturer's instructions.
 C. Finish Coat: Mix Cementitious Finish Coat to ensure a homogeneous consistency. Add water as needed.
 D. Mix only as much plaster as can be used prior to initial set.
 E. Mix materials dry, to uniform color and consistency, before adding water.
 F. Add air entrainment admixtures to all coats to provide 5% percent entrainment.
 G. Protect mixtures from freezing, frost, contamination, and evaporation.
 H. Do not re-temper mixes after initial set has occurred.

PART 3 - EXECUTION

3.01 EXAMINATION
 A. Verify surfaces and site conditions are ready to receive work under this Section.
 B. Masonry: Verify joints are cut flush and surface is ready to receive work of this Section. Verify no bluntness or water repellent coatings exist on masonry surface.

3.02 PREPARATION
 A. Dampen masonry surfaces to reduce excessive suction.

3.03 INSTALLATION - LATHING MATERIALS
 A. Apply metal lath fast, with long dimension perpendicular to supports.
 B. Lap ends minimum 2 inch. Secure ends lags with tie wire where they occur between supports.
 C. Lap sides of diamond mesh lath minimum 2 inches.
 D. Place 4 inch wide strips of metal lath centered over junctions of dissimilar backing materials. Secure rigidly in place.
 E. Attach metal lath to supports using fastening method recommended by manufacturer. Back up material.
 F. Place strip mesh diagonally at corners of lathing openings. Secure rigidly in place.
 G. Continuously reinforce internal angles with corner mesh, return metal lath 3 inches from corner to form the angle reinforcement, lather at perimeter edges only.

3.04 INSTALLATION - ACCESSORIES
 A. All openings, plaster edges or where plaster edges terminate, and over plaster screeds. Use vented screed at soffit perimeter and where indicated on drawings.
 B. Place corner bead at external wall corners, fasten at outer edges only.
 C. Place casting beads at terminations of plaster finish. Back up material. Secure rigidly in place.

3.05 CONTROL AND EXPANSION JOINTS
 A. Establish control and expansion joints with back track casting beads, attached in drawings. Set both beads over 6 inches wide strip of building wrap tape for continuity.

3.06 PLASTERING
 A. Apply Portland cement plaster (stucco) in three coats: scratch, brown and finish with thickness not less than 7/8" in total. The scratch coat shall be applied as follows:
 1. First (Scratch) Coat: Apply to masonry reinforcement with sufficient material and pressure so that the plaster is completely embedded to completely embed the reinforcement.
 2. Second (Brown) Coat: Apply to scratch coat, approximately 3/8". Before scratch coat has set, a second scratch coat shall be applied to the second or brown coat.
 3. Finish Coat: Apply to brown coat continuously moist cured for not less than 48 hours after application.
 B. Senergy STUCCOBASE shall be applied not sooner than 48 hours after application of scratch coat. Before applying the brown coat, the surfaces of scratch coat shall be dampened only to obtain uniform suction (or fogged as environmental conditions (hot, dry, sunny days) dictate to property cure).
 C. A thickness of brown coat shall be a minimum of 3/8" total thickness and shall be applied in two applications or coats, one immediately following the other.
 D. Surface shall be brought to a true, even surface by floating or rodding and left rough, ready to receive finish coat, (for acrylic finishes: wood float or dabbing the surface and fill all voids for uniform surface).
 E. Brown coat shall be continuously moist for 48 hours after application and then allowed to dry.

3. Finish coat: Shall be laid out to permit completion of an entire surface in one operation. If this is impracticable, the plastering shall be carried to some natural breaking point as approved by the Owner.
 a. Finish coat shall be applied not sooner than 5 days after the application of preceding coat. Before applying finish coat, the surface of preceding coat shall be dampened evenly to obtain uniform suction.
 b. Primer (if needed): Senergy STUCCO PRIME: Apply STUCCO PRIME to STUCCOBASE or STUCCO PRIME with either airless sprayer, roller or brush at a rate of 175 - 275 sq per gallon.
 c. Finish Coat: Cementitious finish coat. Apply finish directly to STUCCOBASE or STUCCO PRIME with a clean stainless steel trowel. Maintain a wet edge on finish by applying and texturing continuously over the wall surface. Work finish to corners, joints or natural breaks and do not allow material to set up within an uninterrupted wall area. Float finish to achieve flat texture.

3.07 TOLERANCES
 A. Maximum Variation from True Flatness: 1/8 inch in 10 feet.

3.08 CLEAN-UP
 A. Upon completion of the work of this Section, remove related debris from premises.

END OF SECTION

SECTION 09250 GYPSUM BOARD

09250.1 GENERAL:
 A. DRAWING, SPECIFICATION DIVISION 1 AND CONTRACT

09250.12 DESCRIPTION OF WORK:
 A. TYPES OF WORK INCLUDES:
 1. GYPSUM BOARD APPLIED TO STUD FRAMING AND FURRING.
 2. FINISHING (JOINT TAPING AND COMPOUND TREATMENT)
 3. GYPSUM BOARD CEILING ON DIRECT SUSPENSION SYSTEM.

09250.13 QUALITY ASSURANCE:
 A. GYPSUM BOARD STANDARD IS GA-218 BY GYPSUM ASSOCIATION.
 B. WHERE GYPSUM BOARD SYSTEMS WITH FIRE RESISTANCE RATINGS ARE REQUIRED TO COMPLY WITH GOVERNING REGULATIONS, PROVIDE FIRE RESISTANCE MATERIALS AND INSTALLATION IDENTICAL WITH APPLICABLE ASSEMBLIES WHICH HAVE BEEN TESTED AND LISTED BY RECOGNIZED AUTHORITIES.

09250.14 PRODUCT HANDLING:
 A. DELIVER, IDENTIFY, STORE AND PROTECT GYPSUM DRYWALL MATERIALS TO COMPLY WITH MANUFACTURER'S RECOMMENDATIONS.

09250.21 GYPSUM BOARD PRODUCTS:
 A. EXPOSED GYPSUM BOARD: REGULAR TYPE WITH TAPERED LONG EDGES AND THICKNESS OF 5/8" EXCEPT WHERE OTHERWISE INDICATED.
 1. SHEET SIZE: MAXIMUM LENGTH AVAILABLE WHICH WILL MINIMIZE END JOINTS.
 2. GYPSUM WALLBOARD: ASTM C36, TAPERED EDGES, FOR EXPOSED SURFACES, REGULAR GRADE EXCEPT USE TYPE X WHERE INDICATED OR REQUIRED BY THE CODE. TYPE XWR (WATER RESISTANT) FOR WALLS IN TOILETS, WET AREAS (SUCH AS IN KITCHEN DISHWASHING AREA, ICE MACHINE AREA, SINK AREA, ETC.), WALLS RECEIVING CERAMIC TILE AND WHERE INDICATED PROVIDE GYPSUM WALLBOARD TYPE XWR FLOOR TO CEILING. TYPE X WR BOARDS AS REQUIRED AT RATED PARTITIONS WHERE WET AREAS SUCH AS DEFINED ABOVE IN TYPE WR.
 B. ATTACHMENT:
 1. SCREWS: ASTM C846, CORROSION RESISTANT SELF-TAPPING BUGLE HEAD SPIRAL, THREADED TYPE, MINIMUM 1 1/4" LONG EXCEPT 1 5/8" FOR DOUBLE LAYER WALLS, LENGTH TO PENETRATE ALL SUPPORTING METAL AT LEAST 3/8". FURNISH SPECIALLY HARDENED TYPE SCREWS FOR SUPPORTS HEAVIER THAN 25 GAUGE.
 2. TRIM ACCESSORIES: Provide standard trim accessories of types indicated for gypsum board work, formed of electro galvanized steel, with either knurled and perforated flanges for nailing or stapling, and beveled for concealed joints. Metal Trim and Corner Beads: Of electro galvanized steel with tapering flanges, as manufactured or recommended by drywall manufacturer, corner beads at all outside corners and "J" shaped trim members where joining other materials.

09250.23 JOINT TREATMENT MATERIALS:
 A. Type recommended by the manufacturer for the application indicated.
 B. Joint Tape: Perforated type.
 C. Joint compound: Ready-mixed vinyl-type for interior use.

09250.24 MISCELLANEOUS MATERIALS:
 A. Provide auxiliary materials for gypsum board work of the type and grade recommended by the manufacturer of the gypsum board.
 B. Textured Finish Materials: Latex based texturing material containing fine aggregate.

09250.25 DIRECT SUSPENSION SYSTEM:
 A. Direct Suspension System: Manufacturer standard zinc-coated system of furring runners, furring tees and accessories designed for concealed support of ceiling.

09250.3 EXECUTION:
09250.31 GENERAL GYPSUM BOARD INSTALLATION REQUIREMENTS:
 A. Locate exposed end-but joints as far from center of wall and ceilings as possible.
 B. Install exposed gypsum board with face side out. But joints together for a tight contact at edges and ends with not more than 1/16" open space between boards.
 C. Locate either edge or end joints over supports. Position boards so that both tapered edge joints abut, and mill-out or field-out end joints abut. Stagger vertical joints over different studs on opposite walls.
 D. Attach gypsum board to framing and blocking as required for additional support at openings and cutouts.
 E. Space fasteners in gypsum boards in accordance with referenced standards and manufacturer's recommendations.
 F. Attach gypsum board directly to direct hung metal support system for ceilings with member spacing 16" o.c. maximum.

09250.32 METHODS OF GYPSUM BOARD APPLICATION:
 A. Install exposed gypsum board as follows:
 1. On partitions/walls over 8" - 1" square gypsum board vertically (parallel).
 2. On partitions/walls 8" - 1" less in height apply gypsum board horizontally (perpendicular) use maximum length sheets possible to minimize end joints.
 3. On ceilings, apply prior to installation of partitions/walls.
 B. Where gypsum board is base for thin-set ceramic tile, and in toilet rooms, install over rest of floor.
 C. Where gypsum board is base for stainless steel, install thin and corner beads.
 D. Apply gypsum boards to supports with screws or nails per wall and screws only for ceilings.

09250.33 INSTALLATION OF DRYWALL FINISHING:
 A. Apply treatment at gypsum board joints (both direct and indirect) with joint compound, accessories, fastener heads, surface defects and other items required to prepare work for decoration.
 1. Apply joint tape at joints between gypsum boards, except where trim accessory is indicated.
 2. Apply joint compound in 3 coats, not including fill of all joints (in base), and sand between last 2 coats.
 3. Apply joint compound in 3 coats, not including fill of all joints at wall corners, gypsum board to masonry tile, pre-finished panels and trim finish.

END OF SECTION

SECTION 09310 TILE

09310.1 GENERAL:
 A. DRAWINGS, SPECIFICATIONS DIVISION 1 AND CONTRACT

09310.12 DESCRIPTION OF WORK:
 A. Tile Includes ceramic surfacing units made from clay or other ceramic materials and includes:
 1. Glazed Wall Tile: As specified on drawings.
 2. Quarry Tile: As specified on drawings.
 B. QUALITY ASSURANCE:
 1. The Council of American Standard 137.1 is the basis for requirements.
 C. PRODUCT HANDLING:
 Deliver packaged materials and store in original containers with seals unbroken and labels intact until time of use.
 D. JOB CONDITIONS:
 A. Maintain environmental conditions and protect work during and after installation in accordance with manufacturer's recommendations.

09310.2 PRODUCTS:
09310.21 TILE PRODUCTS:
 A. Glazed Wall Tile: Size per drawings.
 B. Quarry Tile: 1/2" thick of sizes noted on drawings.
 C. Where shown "Antislip", provide manufacturer's standard abrasive surfaced tile.
 D. Provide trim shapes of same material and finish as field tile, and as follows:
 1. Base: Sanitary cover units.
 2. External Corners: Riser drawings.

09310.22 MORTAR AND GROUT:
 Wall and Floor Tile:
 A. Chemical-Resistant, Water-Cleanable, Tile-Setting and Grouting Epoxy: ANSI A118.3.
 1. Provide product capable of withstanding continuous and intermittent exposure to temperatures of up to 140 deg F and 212 deg F, respectively, and certified by manufacturer for intended use.
 2. Floor Tile in Kitchen: Provide Lafarge International, Inc. - Lataloxy 200 modified epoxy grout or equal.
 3. Floor Tile in Dining Area, Restrooms, and Wall Tile: Provide Lafarge International, Inc. - Permacolor cementitious grout or equal.

09310.3 EXECUTION:
09310.31 TILE INSTALLATION STANDARDS:
 A. Comply with applicable requirements of the following American National Standards Institute standards:
 1. A108.4 for tile installed with organic adhesive.

2. A108.5 for tile installed with dry set Portland cement mortar or latex-Portland cement mortar.
 3. A108.6 for tile installed with epoxy adhesive.
 B. Comply with manufacturer's instructions for mixing and installation of proprietary materials.

09310.32 CLEANING AND PROTECTION:
 A. Upon completion of placement and grouting, clean all tile surfaces so they are free of foreign matter.
 B. Leave finished installation clean and free of cracked, chipped, broken, unbonded, or otherwise defective tile work.
 C. Exclude foot and wheel traffic from using tiled floors for at least three (3) day after grouting is completed.

END OF SECTION

SECTION 09390 TILE BACKER BOARD PANELS

09390.1 GENERAL:
09390.11 RELATED DOCUMENTS:
 A. Backer board for ceramic tile
 B. Fasteners

09390.12 RELATED SECTIONS:
 A. Section 08100 "Rough Carpentry"
 B. Section 09250 "Gypsum Board"
 C. Section 09300 "Tile"

09390.13 INTENT:
 A. This Specification generally outlines requirements for backer board work. It is not intended to modify, amend or otherwise change manufacturer's specifications for uses intended; manufacturer's specifications govern.

09390.14 REFERENCE STANDARDS:
 A. American Society for Testing Materials (ASTM)

09390.15 SUBMITTALS:
 A. Submit per Section 01300 "Submittals" for acceptance prior to beginning work of this section. Owner's acceptance is required prior to shipment.
 B. Product Data: Submit manufacturer's detailed technical product data and installation instructions and recommendations, including necessary data to document that materials comply with requirements.
 C. Samples: Two representative samples indicating range of finish, color and texture of actual materials through-out installation must be provided to the Architect for review and approval in drawings.

09390.2 PRODUCTS:
09390.21 MANUFACTURER:
 A. The Drawings were prepared and this Specification written on the basis of using the products of Georgia Pacific Corporation, Atlanta, Georgia. It is not the intent to limit competitive bidding.

09390.22 MATERIALS:
 A. Tile backer board panels: "Dens-Shield Fibrepro", type "X", 5/8" thick, non-structural, fiberglass faced, silicone treated epoxy core panel.
 B. THE CODE: TYPE XWR (WATER RESISTANT) FOR WALLS IN TOILETS, WET AREAS (SUCH AS IN KITCHEN DISHWASHING AREA, ICE MACHINE AREA, SINK AREA, ETC.), WALLS RECEIVING CERAMIC TILE AND WHERE INDICATED PROVIDE GYPSUM WALLBOARD TYPE XWR FLOOR TO CEILING. TYPE X WR BOARDS AS REQUIRED AT RATED PARTITIONS WHERE WET AREAS SUCH AS DEFINED ABOVE IN TYPE WR.
 B. ATTACHMENT:
 1. SCREWS: ASTM C846, CORROSION RESISTANT SELF-TAPPING BUGLE HEAD SPIRAL, THREADED TYPE, MINIMUM 1 1/4" LONG EXCEPT 1 5/8" FOR DOUBLE LAYER WALLS, LENGTH TO PENETRATE ALL SUPPORTING METAL AT LEAST 3/8". FURNISH SPECIALLY HARDENED TYPE SCREWS FOR SUPPORTS HEAVIER THAN 25 GAUGE.
 2. TRIM ACCESSORIES: Provide standard trim accessories of types indicated for gypsum board work, formed of electro galvanized steel, with either knurled and perforated flanges for nailing or stapling, and beveled for concealed joints. Metal Trim and Corner Beads: Of electro galvanized steel with tapering flanges, as manufactured or recommended by drywall manufacturer, corner beads at all outside corners and "J" shaped trim members where joining other materials.

09390.3 EXECUTION:
09390.31 DELIVERY AND STORAGE:
 A. Deliver materials in original unopened packages. Store to provide protection from damage and exposure to elements. Remove damaged or deteriorated materials from premises.

09390.32 PREPARATION:
 Inspect substrate to insure it is flat (not cupped), dry and securely fastened to framing. Shim as necessary to provide flat surface for panels. **09390.33 INSTALLATION:**
 A. Install both all ceramic tile walls and where indicated on the Drawings, in accord with manufacturer's specifications for complete system of leveling, laminating, furring, fastening, and joint treatment as required for system indicated.
 B. Install panels in lengths possible to minimize number of joints. Locate edge joints parallel to and on framing.

09390.34 CLEAN-UP:
 A. Upon completion of work of this Section remove related debris from premises.

END OF SECTION

SECTION 09900 PAINTING

09900.1 GENERAL:
09900.11 RELATED DOCUMENTS:
 A. Drawings, Specifications Division 1, Contract

09900.12 DESCRIPTION OF WORK:
 A. The extent of work includes painting and finishing of interior and exterior exposed items and surfaces throughout installation as shown on the drawings.
 1. Surface preparation, priming, and coats of paint specified are in addition to shop priming and surface treatment specified under other sections of work.

09900.13 DELIVERY AND STORAGE:
 A. Deliver materials to job site in original, new and unopened packages and containers bearing manufacturer's name and label.

09900.14 JOB CONDITIONS:
 A. Apply water based paints only when temperature of surface and ambient surrounding air temperatures are between 50 degrees F (10 degrees C) and 90 degrees F (32 degrees C) unless otherwise permitted by paint manufacturer's limited instructions.
 B. Apply solvent based paints only when temperatures of surface to be painted and surrounding air temperatures are between 45 degrees F (7 degrees C) and 90 degrees F (degrees C) unless otherwise permitted by paint manufacturer's painted instructions.
 C. Do not apply paint in snow, rain fog or mist.

09900.2 PRODUCTS:
09900.21 COATS AND FINISHES:
 A. Paint colors, surface textures, and finishes, are indicated on schedules in the contract Documents.
 B. Provide finish coats which are compatible with prime points used in the Regional Construction Manager as well as other problems using a specialized painting systems with substrates primed by others.
 C. Surface preparation, priming, and mist.
09900.22 MATERIAL QUALITY:
 A. Products of a single manufacturer and brand but products of one of the following manufacturers shall be accepted so long as they are similar in quality and identical in finish (color and texture).
 1. See Finish Schedule.
 B. All construction documents for paint finishes.
 C. All paint work must have a coating film longevity of 15 years and a fade rate of 10 years min.

09900.4 INTERIOR PAINT SYSTEMS:
 See contract documents for paint finishes.

09900.5 EXECUTION:
09900.51 INSPECTION:
 A. Examine areas and conditions under which painting work is to be applied and notify Architect of conditions detrimental to proper and timely completion of work.

09900.52 SURFACE PREPARATION:
 A. Perform preparation and cleaning procedures in accordance with paint manufacturer's instructions for each particular substrate condition.
 B. Where shown hardware accessories, plates, lighting, fixtures, and similar items in place and not to be finish-painted, or provide surface applied protection.
 C. Seal tops, bottoms, and cutouts of unpainted wood doors with a heavy coat of varnish or equivalent sealant.
09900.53 MATERIAL PREPARATION:
 A. Mix and prepare painting materials in accordance with manufacturer's directions.
 B. Prepare materials before applications to produce a mixture of uniform density, and stir as required during application.
09900.54 APPLICATION:
 A. Apply paint for substrate and type of material being applied. Spray application is recommended for general exterior stucco painting.
 B. Paint surfaces behind movable equipment and furniture same as similar exposed surfaces. Paint surfaces behind permanently fixed equipment or furniture with prime coat.
 C. Finish exterior doors on tops, bottoms and side edges same as exterior faces, unless otherwise indicated.
 D. Sand lightly between each succeeding enamel coat.
 E. Apply sufficient time between successive coatings to permit proper drying.
 F. Apply full-coat material to surfaces as soon as practical.
 G. Apply materials at not less than manufacturer's recommended spreading rate.
 H. Apply one (1) coat of primer (if indicated) and two (2) coats of the finish paint or other paint indicated for all items interior and exterior to be painted.
 1. Int the first finish coat to a shade lighter than the final coat noted on the schedule.
 I. Perform kitchen equipment touchup as necessary.

09900.55 CLEANUP AND PROTECTION:
 A. During progress of work, remove from site discarded paint materials, rubbish, cans and rags at end of each work day.
 B. Protect work of other tradesman, whether to be painted or not, against damage by painting and finishing work.
 C. At the completion of work of other trades, touchup and restore all damaged or defaced painted surfaces.
 D. Miscellaneous: For any items not specifically shown or specified that require a paint finish, apply 3 coats of paint as directed.

09900.56 CLEANING AND TOUCHUP WORK:
 Make a detailed inspection of paint finishes after all painting is completed; remove splatters of paint from adjoining surfaces, and make good all damage that may be caused by such cleaning operations. Carefully touchup all abraded, stained, or otherwise disfigured painting, as approved, and leave entire painting in first-class condition.

END OF SECTION

SECTION 09510 ACOUSTICAL CEILINGS

09510.1 GENERAL:
09510.11 RELATED DOCUMENTS:
 A. Drawings, Specifications Division 1 and Contract

09510.12 DESCRIPTION OF WORK:
 A. Extent of each type of acoustical ceiling is shown on scheduled ceilings and includes:
 1. Vinyl faced panel ceilings, exposed suspension system.

09510.13 QUALITY ASSURANCE:
 A. Provide acoustical ceilings and components of roof or low ceiling systems are required for compliance with governing regulations, provide acoustical ceiling with applicable suspension bearing UL Classification Marking for applicable number listed in UL "Fire Resistance Index".

09510.14 JOB CONDITIONS:
 A. Do not install acoustical ceilings until space is enclosed and weatherproof, wet-work in space is completed, and ambient conditions of minimum 60 degrees Fahrenheit and maximum 85 percent humidity are continuously maintained.

09510.2 PRODUCTS:
09510.21 CEILING UNITS:
 A. Provide United States: 24" x 24" x .45" white vinyl shell vinyl faced fire code panels and accessories.
09510.22 SUSPENSION MATERIALS:
 A. Coordinate with other work supported by or penetrating through ceilings, including light fixtures and HVAC equipment.
 B. Type of System: Either direct-hung or indirect-hung suspension system, at contractor's option. Exposed suspension systems: Armstrong with exposed cross runners.
 C. Color Coding: In mechanical and electrical equipment rooms and spaces, paint all ducts, piping, control, equipment and machinery, except such items having a complete factory finish, as specified for interior metal, colors as directed. Not more than 5 colors will be required.
 D. Weather stripping or Storm Seals: Paint exposed metal surfaces to match the door frame, whether or not unfinished, furnished with factory prime coat, or factory treated for paint adhesion.
 E. Painted Signs: Provide on walls in interior areas as shown or directed. Paint signs as specified for interior enamel on noted surface. Employ a skilled and experienced sign painter.
 F. Curtain Wall Fixed Glazing: Paint inaccessible equipment wallboard surfaces behind curtain wall fixed glazing with two coats of approved dark color 1900 Sinc-O-Lite before glazing is installed.
 G. Mechanical and Electrical Work: Carefully review Divisions 15 and 16 of the Specifications regarding painting performed there under and other painting required to be performed under this Section. Perform all painting of mechanical and electrical equipment and materials that are not expressly specified to be painted under Division 15 or 16, including required identification and color code painting, stenciling, and banding.

09510.3 EXECUTION:
09510.31 INSPECTION:
 Examine conditions under which acoustical ceiling work is to be performed and notify Architect of unsatisfactory conditions.

09510.32 PREPARATION:
 A. Establish layout of acoustical units to balance border widths at opposite edges of each work area.
 B. Avoid use of less than half width units at borders and comply with reflected ceiling plans whenever possible.

09510.33 INSTALLATION:
 A. Install materials in accordance with manufacturer's printed instructions, and comply with governing regulations, fire resistance rating requirements as indicated, and industry standards applicable to work.
 B. Install suspension systems with hangers supported only from building structural members. Locate hangers near each end and space 4' 0" along each carrying channel or direct hung runner, unless otherwise indicated. Leveling to tolerance of 1/8" in 12' 0".
 1. Secure wire hangers by looping and wire-tying, either directly to structures or to inserts, eye-screws, or other devices which are secure.
 C. Install edge moldings at perimeter of acoustical ceiling area and at locations where necessary to conceal edges of acoustical units.
 1. Attach moldings to substrate at intervals not over 16" o.c. and not more than 3" from ends.
 2. Leveling with ceiling suspension system to tolerance of 1/8" in 12' 0". Miter corners accurately and connect securely.
 D. Install acoustical panels in coordination with suspension system, with edges concealed by support of suspension members. Scribe and cut panels to fit accurately at borders and at penetrations.
 E. Install hold-down clips in all areas.

09510.34 ADJUST AND CLEAN:
 A. Clean exposed surfaces of acoustical ceilings including trim: edge moldings, and suspension members, comply with manufacturer's instructions for cleaning and touchup of minor finish damage.

END OF SECTION

SECTION 10000 SPECIALTIES

10000.1 RELATED DOCUMENTS:
 A. Drawings, Specifications, Division 1 and Contract

10000.12 DESCRIPTION OF WORK:
 A. Building specialties include the following items:
 1. Portable fire extinguishers.
 2. Toilet accessories including grab bars, mop rack, and monitor poles.

10000.13 QUALITY ASSURANCE:
 A. Provide portable fire extinguisher units conforming to ANSULF 711.

10000.14 COORDINATION:
 A. Coordinate the work with the placement of interval wall reinforcement to receive anchor attachments.
 B. Coordinate locations of the work with other work to avoid interference and to assure proper operation and servicing units.

SECTION 09800 FIBERGLASS REINFORCED POLYESTER PANELS (FRP)

09800.1 GENERAL:
 Provide fiberglass reinforced polyester panels (FRP) as indicated, specified and required.

09800.2 RELATED DOCUMENTS:
 Drawing, Specification Division 9 and Contract

09800.3 SUBMITTALS:
 A. Submit samples for review 12" x 12" sample of FRP board and 12" length of trim cap. Submit in accordance with Section 01300 Submittals.

09800.4 PRODUCT HANDLING:
 Deliver product to jobsite with all finish surfaces protected against scratches, stains and all damage. Lay panels and trim flat in original containers raised off floor away from moisture. Fabricate Reinforced Polyester (FRP) Panels: Panels shall be 4' x 8' or 4' x 12' fiberglass reinforced polyester panels. FRP panels shall be installed with 8' or 10' with honing molding, adhesive and sealant as supplied by the Commercial Division, Mississinon Corporation, Dover, Ohio. Material must be applied strictly in accordance with the printed installation instructions provided.

09800.5 INSTALLATION:
 Install per manufacturer's instructions, including sealant in moldings. Prepare all surfaces for proper installation against clean untreated smooth sanded taped gypsum board. Room temperature during installation must be 60 degrees or above. Place FRP board before final base is installed. Panels shall be flush, level and plumb. All trim and joints shall be level, plumb and true. Use large 4 x 10 or 4 x 8 panels so as to create no seams in small rooms. (10'-0" dimension or less). In larger rooms, coordinate panels seams with Architect.

09800.6 CLEANUP:
 Clean panels and trim for final acceptance with products as recommended by manufacturer. Protect from damage until construction is complete. Remove all scrap, debris and packaging from site.

END OF SECTION

SECTION 10155 TOILET COMPARTMENTS

10155.1 GENERAL:
10155.11 RELATED DOCUMENTS:
 A. Drawings, Specifications, Division 1 and Contract

10155.12 DESCRIPTION OF WORK:
 A. The extent of work includes:
 1. Division 7 "Joiner Sealants" for sealants installed in perimeter joints between louver frames and adjoining construction.

10155.3 EXECUTION:
10155.31 EXAMINATION:
 A. Examine substrates and other conditions under which installation is to occur, and notify Architect of conditions detrimental to proper and timely completion of work.

10155.32 INSTALLATION:
 A. Install accessories and fire extinguisher units in accordance with manufacturer's instructions using fasteners which are appropriate to substrate and recommended by manufacturer unit. Install units plumb and level, firmly anchored in locations indicated.
 B. Install all items in accordance with manufacturer's instructions, ANSI A117.1, ADA, and local codes.

10155.33 ADJUST AND CLEAN:
 A. Adjust units for proper operations and verify that hardware mechanisms function smoothly.
 B. Clean and polish all exposed surfaces of factory finished units after removing protective coatings.

END OF SECTION

SECTION 10200 LOUVERS & VENTS

PART 1 GENERAL

1.01 Summary
 A. Furnish and install louvers, blind screens, blank-off panels, structural supports and attachment brackets as shown on the drawings, as specified, and as needed for a complete and proper installation.
 B. The louvers to be furnished include the following:
 1. Drainable fixed extruded louvers.
 C. Related items include:
 1. Division 7 "Joiner Sealants" for sealants installed in perimeter joints between louver frames and adjoining construction.

1.02 References

A. Air Movement and Control Association International, Inc.
 1. AMCA Laboratory 5001-99 Laboratory Methods of Testing Louvers for Rating
 2. AMCA Publication 501 Application Manual for Louvers
 B. The Aluminum Association Incorporated
 1. Aluminum Standards and Data
 2. Specification and Guidelines for Aluminum Structures
 C. American Society of Civil Engineers
 1. Minimum Design Loads for Buildings and Other Structures
 2. American Society for Testing and Materials
 1. ASTM B209
 2. ASTM B211
 3. ASTM B221
 4. ASTM E90-90
 E. Architectural Aluminum Manufacturers Association
 1. AAAMA 900 Voluntary Specifications and Test Methods for Sealants
 2. AAAMA 605-2 Voluntary Specification for High Performance Organic Coatings on Aluminum Extrusions and Panels.
 3. AAAMA 1181 Method for Curtain Wall Fasteners
 4. AAAMA 2605-98 Superior Performing Organic Coatings on Aluminum Extrusions and Panels.
 F. Canadian Standards Association
 1. CAN/S157-M83 Strength Design In Aluminum
 2. S136-94 Cold Formed Steel Structural Members

1.03 Submittals

A. Product Data:
 1. Air flow and water entrainment performance test results.
 2. Material types and thickness.
 B. Shop Drawings
 1. Provide elevations, sections and specific details for each louver.
 2. Show anchorage details and connections for all component parts.
 3. Include signed and sealed structural calculations.
 C. Submittal color chips for approval.