Shelby County EMA-IT Building Project

ADDENDUM NO. 5

Date: December 1, 2025

RE: Shelby County EMA-IT Building Project Bid

BID DATE AND TIME:
CHANGED to Tuesday, December 9, 2025 at 2:00 p.m. CST

Location for the bid opening remains the Shelby County Manager's Office, located at 200 West College Street, Room 123, Columbiana, Alabama, 35051

* * * * * * * * * * * * * * * *

Project Manual, Plans and Specifications:

- See attached revised Section 07-2800 – Moisture Barriers
- See attached added Section 09-3000 - Tiling
- See attached added Section 09-9100 - Painting

Questions and Clarifications:

Q1 - Do we need to design build the irrigation system to cover all the sod and seed (or just sod)? Is additional landscaping planned or is it still just the sod and seed based on the alternates?
A1 - There will not be any other landscaping. Sod and permanent seeding only as called out in the plans. Seed and mulch in areas if alternate 1 not accepted per previous addendum. No permanent irrigation is required. Contractor responsible for protecting and watering sod 4 weeks after install per Sod note on Sheet C551.

Q2 Can you provide clarification about the Extruded Parapet Cap noted on page A7 of the drawings?
A2 – There is a better detail on A13. The parapet cap (aka coping) will be approximately 15" wide with a single slope to the interior. Please provide PAC-Continuous Cleat Coping System, 22 gauge steel. Black Kynar painted finish. Equivalent products may be submitted for approval.

Q3 - Can you specify what specifications for coverboard noted on A7?
A3 – See Spec Section 07 5419, Page 15, 2.2B – (1/2" fiberglass faced primed roof board, fully adhered)

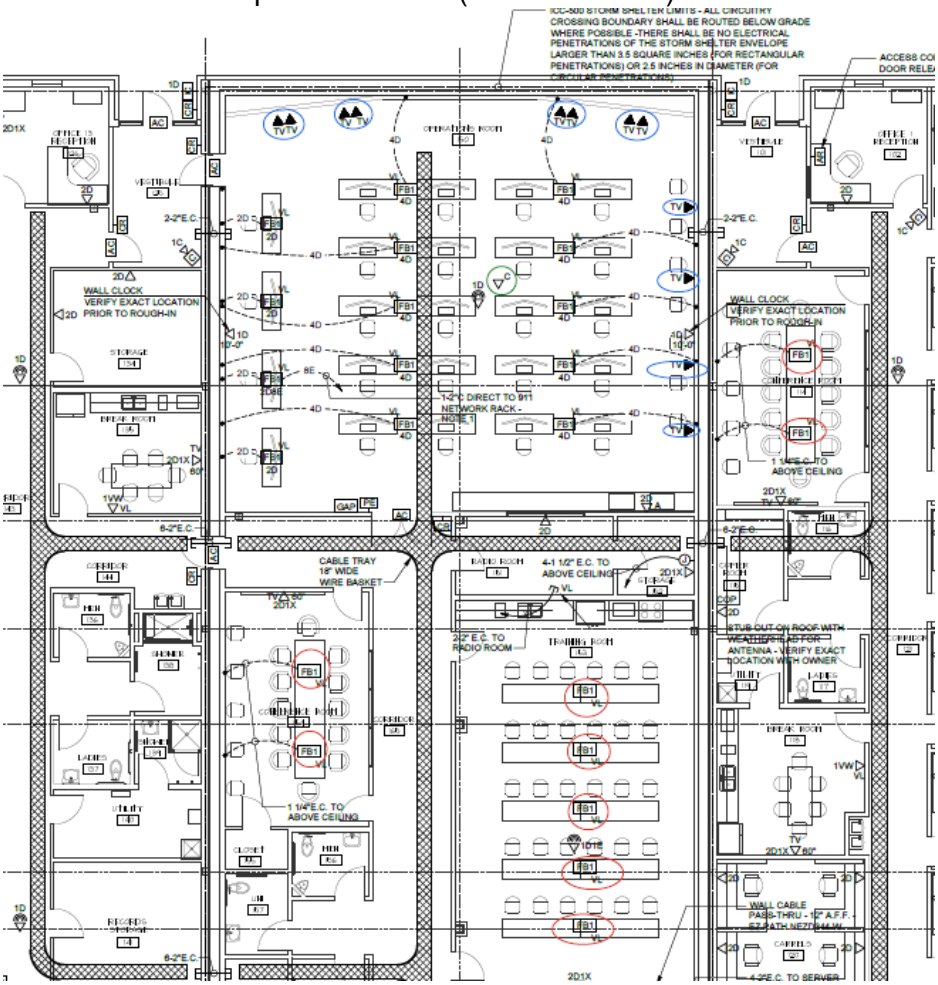
Q4 - We would like some more Information about the Metal panel at the back of the parapet wall on page A8. Do all Parapet walls receive this Metal panel?
A4 – See Addendum # 4 Sheet A5 Wall Material Designations

i. Centria 1W-14A

ii. 22 GA. Galv. Steel, Color 181 Slate Gray.
iii. Entire area at back of parapet walls.

Q5 - PVC roof spec basis of design is Durolast 60 mil with no KEE . There is an approved substitution of 80 mil PVC KEE and a Not approved GAF 60 mil PVC KEE in addendum 3. What is the preferred specification?
A5 - Any substitutions shall meet the physical requirements of the specifications. Ones that have been submitted that meet the requirements have been approved. Ones that do not have been rejected. For example, some manufacturers do not make a 60 mil product that meets the requirements but their 80 mil product line does, therefore they have submitted it.

Q6 - Please clarify what types of cables are required for each outlet circled on E6. 1) How many cables are required for the floor boxes (circled in RED)? 2) What cables are required for the TV outlets if “X” means coax (circled in BLUE) 3) What is the green circle in the middle of the operations room (camera or data)?



A6 - 1) 4 per box
2) Ethernet cables only at those locations (2 per TV)
3) Data

Q7 - For specification section 07-2800, please confirm that item 2.2A is not utilized and the only the weather barrier required is 2.2B, which is Tyvek sheathing or equivalent.
A7 – See Q8, A8 below.

Q8: - Specification section 072800 for moisture barriers describes sheet moisture barriers, similar to a Tyvek product. However, there are exterior metal stud/sheathing locations as well as exterior concrete wall locations. Please clarify the type of moisture barrier to be used at the different types of exterior walls. Also, if a different product is to be used at concrete wall locations, please provide a spec.
A8 – Section 07 2800 MOISTURE BARRIERS.

a. In lieu of WRB sheet products listed, provide a continuous fluid applied WRB at all exterior wall surfaces, including cast-in-place concrete and gypsum sheathing, except as noted below.
b. Do not apply WRB at rear concrete wall, adjacent to the Mechanical Court.
c. Provide a fluid applied air and water barrier membrane with a single component Silyl-Terminated Polymer (STP). Membrane. It shall NOT include a vapor barrier component.
a. Basis of Design: PROSOCO CAT 5 and associated preparation products R-Guard Joint and Seam Filler and R-Guard FastFlash. Coverage rates as recommended by manufacturer.
b. Equal products (STP) from other manufacturers will be considered.
c. SEE ALSO Section 07 5419 PVC ROOFING – FULLY ADHERED 2.2-D for Roof Vapor Barrier over concrete roof deck.

Q9 - The wall legend on sheet A2 calls for 8” 16 ga. 4” C/C metal studs at the ICC wall. Please advise if this wall furr-out is intended to be spaced every 4” on center, or if this is intended to be every 24” similar to other wall types.
A9 – Sheets A1, A2, A3 – WALL LEGEND – INTERIOR PARTITIONS: 8” WALL STUDS: Change 4” C/C to 24” C/C.

Q10 -. Will the 6" slab on grade be reinforced the same as the 4"slab on grade?
A10 – Yes

Q11 - Will additional reinforcements be required around the storm shelter wall block-outs for the column base plates?
A11 - No

Q12 - What is the expected finish on the exposed concrete wall at the Mechanical Court?
A12 - – Section 09 9100 PAINTING

a. For exposed concrete surfaces on the rear wall adjacent to the Mechanical Court, and the 3 court walls:
b. Sherwin Williams LOXON XP. Coverage rates as recommended by manufacturer. Color TBD.
c. Equal products from other manufacturers will be considered.

Q13 - At the Mechanical Court, the roof is open. How will the water drain out of that area?
A13 - There are six 3” galvanized surface drain pipes through the east (plan south) court wall at the floor. Sheets A5, S4.03.

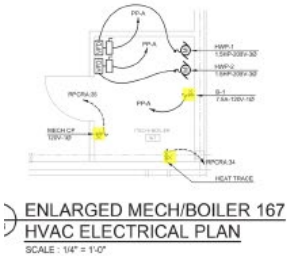
Q14 - Is Xypex or equal required in the concrete shelter walls? Can Stego 10 mil vapor barrier be used in lieu of the Moistop Underslab product that is listed int spec section 03-3000?
A14 - Yes the Xypex is required in the shelter walls. Yes, Moistop Underslab is just the basis of design.

Q15 - In the spec section 03-3000, Section 3.11 Floor Flatness/Levelness Requirements, these requirements do not match ones listed in Note 8 on S1.01. Which should we follow?
A15 - The requirements noted in the General Notes is acceptable.

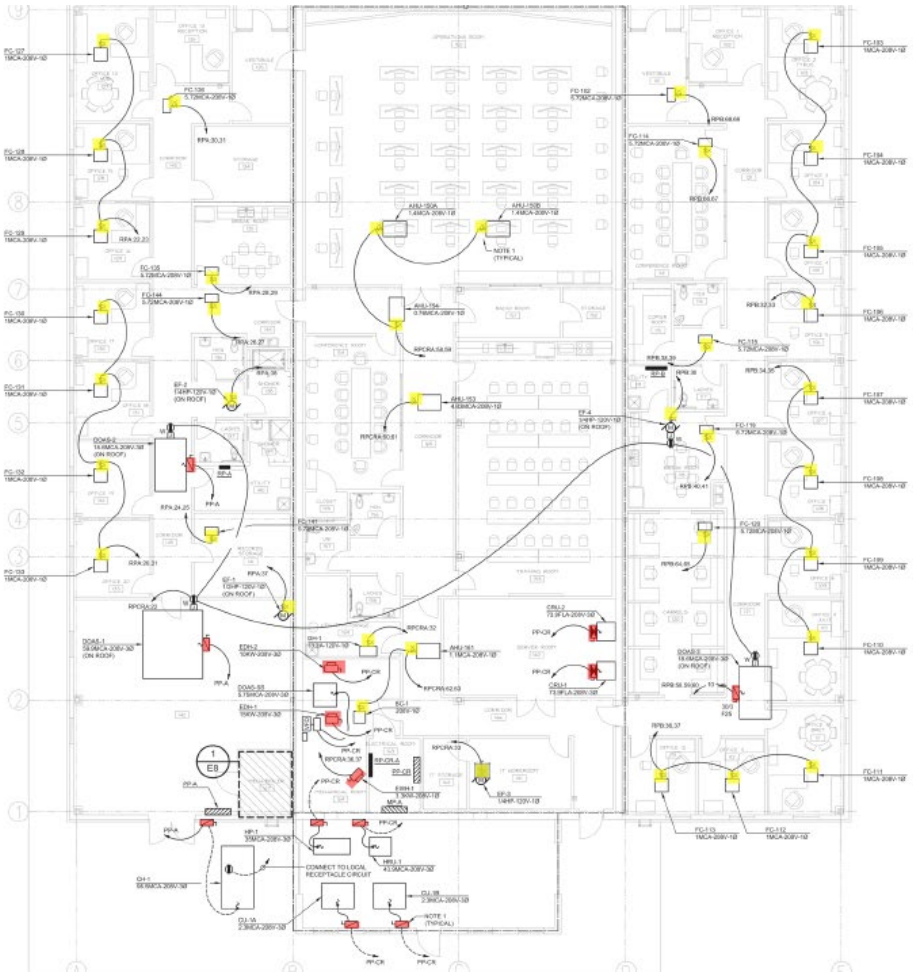
Q16 - Tiling spec section 09-3000 section 3.2F: Please provide further details or specifications for the referenced trim.
A16 - Section 09 3000 TILING - All wall and floor tile to be Dal Tile “Advantage” Series. 12”X24” “Renoir Gray” floor and wall tile. Equal products from other manufacturers will be considered. Provide Schluter radius trim at outside corners and radius floor cove at showers, stainless steel finish.

Q17 - Will the equipment in the Mechanical Court be on individual housekeeping pads?
A17 - Yes. See Sheet M6 Key Notes 4,5.and Sheet E9 Detail E-GEN.

Q18 - On Sheet E8 of the HVAC Electrical Plan, multiple equipment disconnects are shown, including those serving HVAC units and other mechanical equipment. However, the drawings do not indicate the required enclosure rating for these disconnects. No designation such as NEMA 1, NEMA 3R (rain-tight), NEMA 4, or NEMA 4X is provided in the plan notes equipment callouts, or the disconnect symbols on the sheet. We require clarification to ensure proper specification and installation of disconnects in accordance with project requirements and environmental conditions. Please confirm the required enclosure rating for the disconnects highlighted in red on Sheet E8. 1) Are these disconnects to be NEMA 3R (rain-tight)? 2) NEMA 4 / 4 or NEMA 1 (indoor rated)? Reason for asking is these disconnect enclosure ratings affect environmental suitability, code compliance, and procurement. The contract drawings do not currently identify the required rating, and clarification is needed prior to installation. The disconnects in question are highlighted in red below.



ENLARGED MECH/BOILER 167
HVAC ELECTRICAL PLAN
SCALE : 1/4" = 1'-0"



A18 - Per Specification Section 262816-3.1(C), “Switch enclosures shall be rated NEMA I indoors in dry locations and NEMA3R outdoors and in wet areas.” For the switches highlighted in red on the markup, only switches in Mechanical Room 164 shall be considered indoor. Switches for units within Server Room 160 are integral/factory provided.N All other switches shall be considered outdoors. See project specifications for additional requirements for disconnect switches and electrical installation.

Q19 - Please provide a responsibility matrix of owner/GC provided items for electrical equipment referenced in divisions 27 & 28. There have been multiple questions from subcontractors for these divisions (security access controls & structured cabling).
A19 - The question related to cabling was addressed in Addendum #4, Question 2. The question related to the electronic access control scope was addressed in Addendum #4, Question 3. The contractor is responsible for installing a complete system as specified, see plan sheet E13 Access Control System Notes.

End of Addendum

PART 1GENERAL

1.1 SUMMARY

A. Section Includes:
1. Sheet materials for controlling moisture movement at exterior wall assemblies.
2. Sheet underlayment for controlling moisture movement at roof assemblies.
3. Liquid materials for controlling moisture movement at landscape planters.

B. Related Sections:
1. Division 01: Administrative, procedural, and temporary work requirements.

1.2 REFERENCES

A. ASTM International (ASTM):
1. E96/E96M - Standard Test Method for Water Vapor Transmission of Materials.
2. E2178 - Standard Test Method for Air Permeance of Building Materials.
3. E2357 - Standard Test Method for Determining Air Leakage of Air Barrier Assemblies.

1.3 QUALITY ASSURANCE

A. Provide continuous barrier to moisture infiltration, air infiltration and exfiltration, and water vapor transmission, flashed to discharge incidental condensation and water penetration.

1.4 SUBMITTALS

A. Product specification sheets.

PART 2 PRODUCTS

2.1 MANUFACTURERS

A. Acceptable Manufacturers - Sheet Moisture Barriers:
1. W. R. Grace (www.grace.com)
2. Atas International (www.atas.com)
3. DuPont Tyvek (www.dupont.com)

B. Substitutions: Under provisions of Division 01.

2.2 MATERIALS

A. Moisture Barrier:
1. Description: ASTM D1970; polymer modified asphalt laminated to polymer coated synthetic woven material, self adhering, with release paper facing.
2. Thickness: 45 mils
3. Thermal Stability: 240 degrees F.
4. Elongation: Minimum 250 percent, tested to ASTM D412.
5. Tensile strength: Minimum 250 PSI, tested to ASTM D412.
6. Water vapor transmission: Maximum 0.01 grains per square foot, tested to ASTM E96.
7. Air permeance: Maximum 0.0002 CFM per square foot at 0.3 inch water differential pressure, tested to ASTM E2178.
8. Assembly air permeance: Maximum 0.0008] CFM per square foot at 0.3 inch water differential

pressure, tested to ASTM E2357.

B. Weather Resistant Barrier (WRB):

1. Commercial grade air and water barrier designed for use between reinforced gypsum sheathing and metal wall panels. Flash spunbonded high density polyethylene fiber sheets with extended UV protection. Meet or exceed ASHRAE 90.1, IECC, and AASTM E2357.

C. Fluid Applied Weather Resistant Barrier (LWRB):

1. Roll on or spray on membrane, single component Silyl-Terminated-Polymer (STP).
2. Basis of Design: PROSOCO CAT 5 Air and Water Barrier (No Vapor Barrier)
3. Equal products from other manufacturers will be considered.

2.3 ACCESSORIES

A. Joint Tape: Minimum 2 inches wide, pressure sensitive, waterproof, compatible with moisture barrier and of type recommended by moisture barrier manufacturer.

B. Flashing Sheet: Self adhering, rubberized asphalt laminated to HPDE facing, minimum 30 mil thick. Type recommended by moisture barrier manufacturer.

C. Primer: Type recommended by moisture barrier manufacturer.

D. Patching Compound: Type recommended by moisture barrier manufacturer.

PART 3 EXECUTION

3.1 PREPARATION

A. Clean surfaces to receive moisture barrier; remove loose and foreign matter that could impair adhesion or performance.

B. Protect adjacent and underlying surfaces.

C. Fill voids, holes, and cracks over 1/16 inch in width with patching compound; finish flush with adjacent surfaces. Apply one coat of moisture barrier over patched areas and allow to dry.

D. Apply joint tape centered over sheathing joints. Lap ends 2 inches minimum Press to full bond with substrate without voids, wrinkles, bridging, or fishmouths.

1.1 INSTALLATION - SHEET MOISTURE BARRIERS

A. Provide complete and continuous barrier.

B. Apply primer when required by moisture barrier manufacturer.

C. Install moisture barrier without tears, voids, and holes.

D. Begin application at low point; weatherlap succeeding courses minimum 6 inches.

E. Lap ends 6 inches minimum. Tape seal lapped ends and edges.

F. Press to full bond with substrate without voids, wrinkles, bridging, or fishmouths.

G. Seal to door and window frames, around penetrations, and at perimeter.

1.2 APPLICATION - FLUID APPLIED MOISTURE BARRIERS

A. Apply moisture barrier in accordance with manufacturer's instructions.

B. Apply primer to joints in substrate, inside and outside corners, and around perimeter and penetrations. Joint tape over primer; press to full bond with substrate.

C. Apply moisture barrier by roller or spray to continuous and uniform coverage with minimum mil thickness as recommended by manufacturer.

D. Seal to door and window frames, around penetrations, and at perimeter with flashing sheet. Press to full bond with substrate without voids, wrinkles, bridging, or fishmouths.

1.3 FIELD QUALITY CONTROL

A. Inspect moisture barrier for damage just prior to covering.

B. Clean damaged areas and cover with additional moisture barrier material minimum 6 inches larger than damaged area on all sides. Seal to main moisture barrier with continuous tape.

END OF SECTION

PART 1 GENERAL

1.1 SUMMARY

A. Section Includes:
1. Ceramic, Porcelain, Quarry tile floor and wall finishes.
2. Marble thresholds.

B. Related Sections:
1. Division 01: Administrative, procedural, and temporary work requirements.
2. Section 07 9200 - Joint Sealers.

1.2 REFERENCES

A. American National Standards Institute (ANSI):
1. A108/A118/A136.1 - American National Standard for Installation of Ceramic Tile.
2. A137.1 - Specifications for Ceramic Tile.

B. ASTM International (ASTM):
1. A82/A82M - Standard Specification for Steel Wire, Plain, for Concrete Reinforcement.
2. A185/A185M - Standard Specification for Welded Steel Wire Reinforcement, Plain, for Concrete.
3. C144 - Standard Specification for Aggregate for Masonry Mortar.
4. C150 - Standard Specification for Portland Cement.
5. C207 - Standard Specification for Hydrated Lime for Masonry Purposes.
6. C847 - Standard Specification for Metal Lath.
7. C1028 - Standard Test Method for Static Coefficient of Friction of Ceramic Tile and Other Like Surfaces by the Horizontal Dynamometer Pull-Meter Method.
8. D226 - Standard Specification for Asphalt Saturated Organic Felt Used in Roofing and Waterproofing.
9. D227 - Standard Specification for Coal-Tar Saturated Organic Felt Used in Roofing and Waterproofing.
10. D4263 - Standard Test Method for Indicating Moisture in Concrete by the Plastic Sheet Method.
11. D4397 - Standard Specification for Polyethylene Sheeting for Construction, Industrial and Agricultural Applications.

C. Tile Council of North America (TCNA) - Handbook for Ceramic Tile Installation.

D. Resilient Floor Covering Institute (RFCI) - FloorScore Certification Program.

1.3 SUBMITTALS

A. Submittals for Review:
1. Product Data: Manufacturer's installation, cleaning, and maintenance instructions.
2. Samples:
a. Tile: Two Full size samples in each color.
b. Grout: 1/2 x 1/2 x 3 inch long actual samples showing available colors.

1.4 QUALITY ASSURANCE

A. Installer Qualifications: Minimum 10 years documented experience in work of this Section.

B. Tile and Trim Units: Meet ANSI A137.1, Standard Grade.

C. Static Coefficient of Friction for Floor Tile: Minimum 0.60, tested to ASTM C1028 in dry condition.

D. Mockup:
1. Size: 2 x 4 feet.
2. Show: Tile colors and patterns, joint profile, and control joint.
3. Locate where directed.
4. Approved mockup may remain as part of the Work.

1.5 DELIVERY, STORAGE AND HANDLING

A. Deliver mortar, adhesive, and grout containers bearing hallmark certifying compliance with reference standards.

B. Protect adhesive containers from freezing and overheating according to manufacturer's instructions.

1.6 PROJECT CONDITIONS

A. Environmental Requirements: Maintain minimum ambient temperature of 50 degrees F during and after installation.

1.7 MAINTENANCE

A. Extra Materials: 2 % of each tile.

PART 2 PRODUCTS

2.1 MANUFACTURERS

A. Acceptable Manufacturers - Tile:
1. American Marazzi Tile, Inc. (www.marazzitile.com)
2. American Olean Tile Co., Inc. (www.aotile.com)
3. Dal-Tile Corp. (www.daltileproducts.com)
4. Florida Tile Industries, Inc. (www.floridatile.com)
5. Interceramic USA. (www.interceramicusa.com)
6. Summitville Tiles, Inc. (www.summitville.com)
7.

B. Acceptable Manufacturers - Setting and Grouting Materials:
1. BASF Corporation. (www.buildingsystems.basf.com)
2. Bostik, Inc. (www.bostik-us.com)
3. Laticrete International, Inc. (www.laticrete.com)
4. Mapei Corporation. (www.mapei.us)
5. TEC. (www.tecspecialty.com)

C. Substitutions: Under provisions of Division 01.

2.2 MATERIAL

A. Ceramic Tile Basis of Design:

Floor and Wall Tile: DalTile “Advantage” - 12X24

Colors to be selected.

2.3 ACCESSORIES

A. Tile Grout: Mapei, 1/4” grout joint.
1. ANSI [A118.6, polymer modified dry set type, sanded.
2. Color: To be selected from manufacturer's full color range.

B. Joint Sealers: Specified in Section 07 9200.

C. Joint Tape: Waterproof, perforated bedding tape.

D. Thresholds: Class A white marble, honed finish, beveled both sides, radiused from bevels to vertical planes, one piece for full width of door or opening. Comply with ADA/ANSI accessibility requirements.

PART 3 EXECUTION

3.1 PREPARATION

A. Clean surfaces to remove loose and foreign matter that could impair adhesion.

B. Remove ridges and projections. Fill voids and depressions with patching compound compatible with setting materials.

C. Allowable Substrate Tolerances:
1. Thin set method:
a. Maximum variation in substrate surface: 1/8 inch in 8 feet.
b. Maximum height of abrupt irregularities: 1/32 inch.

D. Test concrete substrate to ASTM D4263; do not install tile until surfaces are sufficiently dry.

3.2 INSTALLATION

A. Minimize pieces less than one half size. Locate cuts to be inconspicuous.

B. Lay tile to pattern shown on Drawings furnished by Architect. Do not interrupt tile pattern through openings.

C. Joint Widths: Large size ceramic and ceramic mosaic tile: 3/8 inch.

D. Make joints watertight, without voids, cracks, excess mortar, or excess grout. Align joints in wall and floor of same-sized tile.

E. Fit tile around projections and at perimeter. Smooth and clean cut edges. Ensure that trim will completely cover cut edges.

F. Install Trim:
   1. Inside corners: Cove units.
   2. Outside corners: Bead units.
   3. Base: Base units.
   4. Exposed tile ends: Bullnose units.

G. If matching ceramic trim is not available, use Schluter radius outside corners and radius cove at Showers. Stainless steel finish.

H. Allow tile to set for a minimum of 48 hours before grouting.

I. Grout tile joints in accordance with ANSI A108.10 without excess grout.

J. Control Joints:
   1. Provide control joints at:
      a. Changes in backup material.
      b. Changes in plane.
      c. Over joints in substrate.
      d. Maximum 24 feet on center at interior locations except maximum 12feet at surfaces exposed to direct sunlight.
      e. Maximum 16 feet on center at exterior locations.
   2. Form joints per TCNA Method EJ-171.
   3. Install joint backing and joint sealer as specified in Section 07 9200.

3.3 ADJUSTING

A. Remove and replace pieces that have been damaged during installation.

3.4 PROTECTION

A. Provide protection for completed work using nonstaining sheet coverings.

B. Prohibit traffic on tile floors for minimum 3 days after installation.

END OF SECTION

PART 1 GENERAL

1.1 SUMMARY

A. Section Includes:
1. Surface preparation and field application of paints.

B. Related Sections:
1. Division 01: Administrative, procedural, and temporary work requirements.

1.2 REFERENCES

A. ASTM International (ASTM):
1. D4442 - Standard Test Method for Direct Moisture Content Measurement of Wood and Wood-Base Materials.
2. D6886 - Standard Test Method for Speciation of the Volatile Organic Compounds (VOCs) in Low VOC Content Waterborne Air-Dry Coatings by Gas Chromatograpy.

B. Green Seal, Inc. (GS) 11 - Standard for Paints and Coatings.

C. Master Painters Institute (MPI) - Architectural Painting Specification Manual.

D. Society for Protective Coatings (SSPC) - Painting Manual.

E. South Coast Air Quality Management District (SCAQMD) Rule 1113 - Architectural Coatings.

1.3 SUBMITTALS

A. Submittals for Review:
1. Product Data: Manufacturer's data on materials proposed for use including:
   a. Product designation and grade.
   b. Product analysis and performance characteristics.
   c. Standards compliance.
   d. Material content.
   e. Mixing and application procedures.
2. Samples:
   a. 12 x 12 inch texture samples on gypsum board backing.
3. Paint Schedule: Indicate types and locations of each surface, paint materials, and number of coats to be applied.

1.4 QUALITY ASSURANCE

A. Applicator Qualifications: Minimum 10 years documented experience in work of this Section.

B. Materials, Preparation, and Workmanship: Conform to MPI Painting Manual.

1.5 DELIVERY, STORAGE AND HANDLING

A. Container Labels: Include manufacturer's name, type of paint, brand name, lot number, brand code, coverage rates, surface preparation, drying time, cleanup requirements, color designation, and instructions for mixing and reducing.

B. Paint Materials: Store at ambient temperature from 45 to 90 degrees F in ventilated area, or as required by manufacturer's instructions.

1.6 PROJECT CONDITIONS

A. Do not apply materials when surface and ambient temperatures or relative humidity are outside ranges required by paint manufacturer.

B. Maintain ambient and substrate temperatures above manufacturer’s minimum requirements for 24 hours before, during. and after paint application.

C. Do not apply materials when relative humidity is above 85 percent or when dew point is less than 5 degrees F different than ambient or surface temperature.

D. Provide minimum lighting level of 30 footcandles at substrate surface.

1.7 MAINTENANCE

A. Extra Materials: 5 gallons of each color and sheen.

PART 2 PRODUCTS

2.1 MANUFACTURERS

A. Acceptable Manufacturers:
1. Sherwin Williams. (www.sherwin-williams.com)

B. Substitutions: Under provisions of Division 01.

2.2 MATERIALS

A. Paints:
1. As scheduled at end of Section, or approved substitute.
2. Free from all forms of lead and mercury.

B. Maximum Volatile Organic Compound (VOC) Content for interior paints, coatings, and accessories, tested to ASTM D6886:
1. Primers: 100 grams per liter.
2. Flat paints and coatings: 50 grams per liter.
3. Non-flat paints and coatings: 50 grams per liter.
4. Rust preventative coatings: 100 grams per liter.
5. Clear wood finishes: 275 grams per liter.
6. Stains: 100 grams per liter.
7. Dryfall coatings: 150 grams per liter.

2.3 ACCESSORIES

A. Accessory Materials: Paint thinners and other materials required to achieve specified finishes; commercial quality.

B. Patching Materials: Latex filler.

C. Fastener Head Cover Materials: Latex filler.

2.4 MIXES

A. Deliver paints pre-mixed and pre-tinted.

B. Uniformly mix to thoroughly disperse pigments.

C. Do not thin in excess of manufacturer's recommendations.

D. Re-mix paint during application; ensure complete dispersion of settled pigment and uniformity of color and gloss.

PART 3 EXECUTION

3.1 EXAMINATION

A. Test shop applied primer for compatibility with subsequent coatings.

B. Measure moisture content of surfaces using electronic moisture meter. Do not apply coatings unless moisture content of surfaces are below following maximums:
1. Gypsum board: 12 percent.
2. Masonry and concrete: 12 percent.
3. Wood: 15 percent, measured to ASTM D4442.
4. Concrete floors: 8 percent.

3.2 PREPARATION

A. General:
1. Protect adjacent and underlying surfaces.
2. Remove electrical plates, hardware, light fixture trim, escutcheons, and fittings prior to preparing surfaces or finishing.
3. Correct defects and clean surfaces capable of affecting work of this section.
4. Seal marks that may bleed through surface finishes with shellac.

B. Impervious Surfaces: Remove mildew by scrubbing with solution of trisodium phosphate and bleach. Rinse with clean water and allow to dry.

C. Gypsum Board:
1. Fill minor defects with filler compound. Spot prime defects after repair.

D. Concrete and Masonry:
1. Remove dirt, loose mortar, scale, salt and alkali powder, and other foreign matter.
2. Remove oil and grease with solution of trisodium phosphate; rinse and allow to dry.
3. Remove stains caused by weathering of corroding metals with solution of sodium metasilicate after thoroughly wetting with water. Allow to dry.

E. Concrete Floors:
1. Remove contamination, acid etch, and rinse floors with clear water. Allow to dry.
2. Verify that required acid-alkali balance has been achieved.

F. Galvanized Steel: SSPC Method SP1 - Solvent Cleaning.

G. Uncoated Ferrous Metals: SSPC Method SP2 - Hand Tool Cleaning or Method SP3 - Power Tool Cleaning.

H. Shop Primed Ferrous Metals:
   1. SSPC Method SP2 - Hand Tool Cleaning or Method SP3 - Power Tool Cleaning.
   2. Feather edges to make patches inconspicuous.
   3. Prime bare steel surfaces.

I. Interior Wood:
   1. Wipe off dust and grit.
   2. Seal knots, pitch streaks, and sappy sections with sealer.
   3. Fill nail holes and cracks after primer has dried; sand between coats.

J. Exterior Cement Board:
   1. Remove dust, grit, and foreign matter.
   2. Seal knots, pitch streaks, and sappy sections.

K. Existing Surfaces:
   1. Remove loose, flaking, powdery, and peeling paints.
   2. Lightly sand glossy painted surfaces.
   3. Fill holes, cracks, depressions and other imperfections with patching compound; sand flush with surface.
   4. Remove oil, grease, and wax by scraping; solvent wash and thoroughly rinse.
   5. Remove rust by wire brushing to expose base metal.

3.3 APPLICATION

A. Apply paints in accordance with MPI Painting Manual, Premium Grade finish requirements.

B. Apply primer or first coat closely following surface preparation to prevent recontamination.

C. Do not apply finishes to surfaces that are not dry.

D. Apply coatings to minimum dry film thickness recommended by manufacturer.

E. Apply each coat of paint slightly darker than preceding coat unless specified otherwise.

F. Apply coatings to uniform appearance without laps, sags, curtains, holidays, and brush marks.

G. Allow applied coats to dry before next coat is applied.

H. When required on deep and bright colors apply an additional finish coat to ensure color consistency.

I. Continue paint finishes behind wall-mounted accessories.

J. Sand between coats on interior wood and metal surfaces.

K. Match final coat to approved color samples.

L. Where clear finishes are specified, tint fillers to match wood. Work fillers into grain before set. Wipe excess from surface.

M. Prime concealed surfaces of exterior wood and interior wood in contact with masonry or cementitious materials with one coat primer paint.

N. Mechanical and Electrical Components:
1. Paint factory primed equipment.
2. Remove unfinished and primed louvers, grilles, covers, and access panels; paint separately.
3. Paint exposed and insulated pipes, conduit, boxes, ducts, hangers, brackets, collars, and supports unless factory finished.
4. Do not paint name tags or identifying markings.
5. Paint exposed conduit and electrical equipment in finished areas.
6. Paint duct work behind louvers, grills, and diffusers flat black to minimum of 18 inches or beyond sight line.

O. Do not Paint:
1. Surfaces indicated on Drawings or specified to be unpainted or unfinished.
2. Surfaces with factory applied finish coat or integral finish.
3. Architectural metals, including brass, bronze, stainless steel, and chrome plating.

3.4 ADJUSTING

A. Touch up or refinish disfigured surfaces.

3.5 CLEANING

A. Remove paint from adjacent surfaces.

3.6 PAINT SCHEDULE

A. Types of paint listed herein are set forth as standard of quality and type of coating required for each type of surface.
1. Paint exposed surfaces of types listed in Paint Schedule.
2. Paint other exposed surfaces not specifically listed with not less than two coats of appropriate type of coating.

B. Prime coat may consist of touch up on shop primed and existing surfaces with intact coatings.

SUBSTRATE	MANUFACTURER	PRIMER	TOP COATS
Exterior Surfaces:			
Ferrous and Galvanized Metals		Exterior Alkyd Enamel Primer, 1 coat	Exterior Alkyd Industrial Enamel Semi-Gloss Finish, 2 coats
Cement Board, Opaque Finish		Exterior Latex Enamel Primer, 1 coat	Exterior Latex Enamel Semi-Gloss Finish, 2 coats
Cast -In-Place Concrete Walls			SW LOXON XP or equivalent
Interior Surfaces:			
Gypsum Board, Latex Enamel Finish		Interior Latex Gypsum Board Primer, 1 coat	Interior Latex Enamel Eggshell Finish, 2 coats
Gypsum Board, Knock-down Finish		Interior Latex Gypsum Board Primer, 1 coat	Interior Latex Enamel Eggshell Finish, 2 coats
Ferrous and Galvanized Metals		Exterior Alkyd Enamel Primer, 1 coat	Exterior Alkyd Industrial Enamel Semi-Gloss Finish, 2 coats
Wood, Opaque, Latex Enamel Finish		Interior Latex Wood Primer, 1 coat	Interior Latex Enamel Semi-Gloss Finish, 2 coats
Wood, Transparent Finish		Wood Stain, 2 coats	Clear Polyurethane, 2 coats

END OF SECTION