

| FINISH SCHEDULE | | | | | | | | |
|-----------------|-----------------|--|-------------|-------------|----------|---------|---------|---------|
| FLOOR | DESIGNATION | | FLOOR | | WALLS | CEILING | | REMARKS |
| | ROOM NUMBER | SPACE NAME / DESCRIPTION | FINISH | BASE | ALL | EXPOSED | PTD GMB | 1 |
| FIRST | 101B | LOWER LOBBY | CT1 | CT1 COVE | PTD | - | ● | - |
| | 105 | ELEVATOR MACHINE RM | CONC SEALED | RUBBER COVE | PTD | - | ● | - |
| | 106 | STORAGE | CONC SEALED | RUBBER COVE | PTD | - | ● | - |
| | 107 | CUSTODIAL | CONC SEALED | CT1 COVE | PTD | - | ● | - 1 |
| | S1 | STAIR 1 | CONC SEALED | RUBBER COVE | PTD | - | ● | - 1 |
| | S2 | STAIR 2 | CONC SEALED | RUBBER COVE | PTD | - | ● | - |
| SECOND | 201B | UPPER LOBBY | CT1 | CT1 COVE | PTD | - | ● | - |
| | 201/224 | 2ND FLOOR NORTH/RECEPTION/RECEPTIONIST | LVT | WOOD | PTD | ● | - | - |
| | 202 | 2ND FLOOR SOUTH | LVT | WOOD | PTD | ● | - | - |
| | 203A | ROOF DECK | - | - | - | - | - | - |
| | 204 | 2ND FLOOR TOWER | EXISTING | EXISTING | EXISTING | ● | - | - 1 |
| | 205 | TELECOM | CONC SEALED | RUBBER COVE | PTD | - | ● | - |
| | 206 | STORAGE | VCT | RUBBER COVE | PTD | 1 | ● | - |
| | 210 | OFFICE | CARPET TILE | WOOD | PTD | ● | - | - |
| | 211 | OFFICE | CARPET TILE | WOOD | PTD | ● | - | - |
| | 212 | OFFICE | CARPET TILE | WOOD | PTD | ● | - | - |
| | 213 | OFFICE | CARPET TILE | WOOD | PTD | ● | - | - |
| | 214 | BREAKROOM | LVT | WOOD | PTD | ● | - | - |
| | 215 | ASSISTANT DIRECTOR | CARPET TILE | WOOD | PTD | ● | - | - |
| | 216 | EXECUTIVE DIRECTOR | CARPET TILE | WOOD | PTD | ● | - | - |
| | 217 | CONFERENCE ROOM | CARPET TILE | WOOD | PTD | ● | - | - |
| | 218 | MEN RESTROOM | CT4 | CT4 COVE | CT2 | - | ● | - 2 |
| | 219 | WOMEN RESTROOM | CT4 | CT4 COVE | CT2 | - | ● | - 2 |
| | 220 | OFFICE | CARPET TILE | WOOD | PTD | ● | - | - |
| 221 | OFFICE | CARPET TILE | WOOD | PTD | ● | - | - | |
| 222 | ELECTRICAL | CONC SEALED | RUBBER COVE | PTD | - | ● | - | |
| 223 | MECHANICAL ROOM | CONC SEALED | RUBBER COVE | PTD | ● | - | - | |

FINISH LEGEND:
CARPET TILE (FLOOR):

CERAMIC TILE 2
CT1 (FLOOR):
CT2: (WALL)
CT3: (WALL)
CT4: (FLOOR)
LVT (FLOOR): LUXURY VINYL TILE

WOOD (BASE):

GRANITE (SILL):

VCT (FLOOR):

PLASTIC LAMINATE CABINETS:

COUNTER:

PAINT
PAINT 1 (WALLS):

PAINT 2 (WALLS):

PAINT 3 (WALLS):

PAINT 4 (CEILING):

RUBBER COVE (BASE):

SOLID SURFACE:

NOTES:

1. PROVIDE EPOXY PAINT FINISH AT ALL WALLS AND CEILINGS AT 'WET' AREAS, U.O.N.
2. REFER TO REFLECTED CEILING PLAN FOR CEILING HEIGHTS

REMARKS:

1. EXISTING. NO WORK IN THIS AREA.
2. WALLS HAVE CT3 ACCENT TILE. REFER TO A4.00
3. TILE 2 WAINSCOT ON 2 WALLS. REFER TO A4.00

Project Title:
FIRE STATION #2 - INTERIOR REHABILITATION

Project Number:
B-30579 PHASE 2B

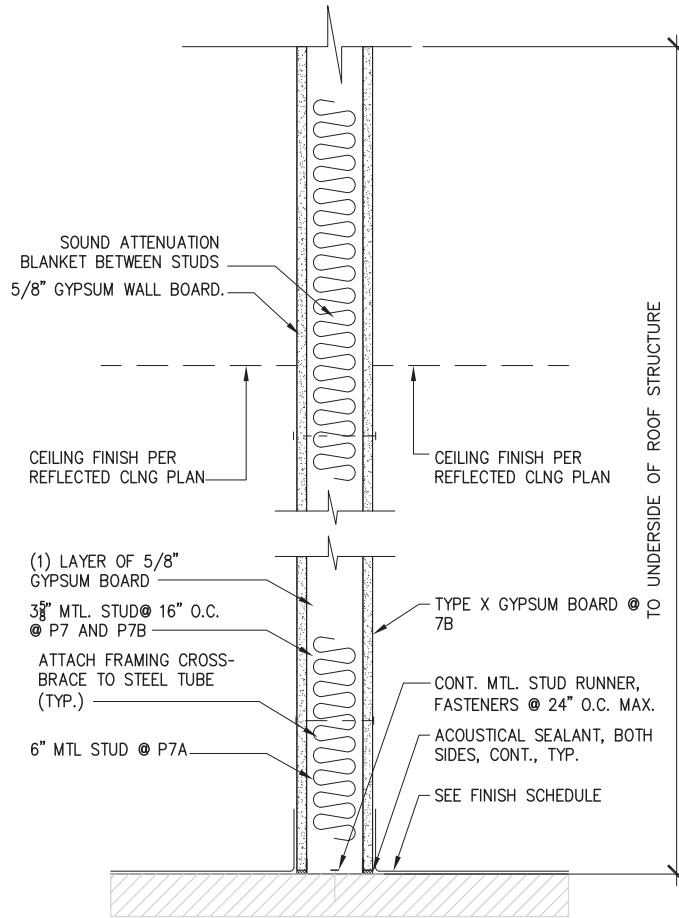
Sketch No:
SK - 1

Drawing Title:
DOOR + FINISH SCHEDULE & DETAILS
SHEET A7.00

Date Issued: 12-06-11



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MIAMI, FLORIDA 33133 (305)445-3765



MTL. STUD PARTITION
NON LOAD BEARING - MIN. STC = 50

- P7** — 3 5/8" MTL. STUD
NON FIRE-RATED
- P7A** — 6" MTL. STUD
NON FIRE-RATED
- P7B** — 8" MTL. STUD
NON FIRE-RATED
- P7C** — 3 5/8" MTL. STUD: ONE SIDE W/
DRYWALL ONLY -NON FIRE-RATED

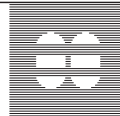
Project Title:
FIRE STATION #2 – INTERIOR REHABILITATION

Project Number:
B-30579 PHASE 2B

Sketch No:
SK - 2

Drawing Title:
**WALL / PARTITION TYPES
 SHEET A6.00**

Date Issued: 12-06-11



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| DESIGNATION | | DOOR | | | | | | FRAME | | | REMARKS | | |
|-------------|-------------|--------------------------|------------------|--------|--------|-----------|----------|--------------|-------|----------|---------|-------|-----------|
| DOOR NUMBER | ROOM NUMBER | SPACE NAME / DESCRIPTION | ELEVATION / TYPE | SIZE | | | MATERIAL | | | MATERIAL | JAMB | HEAD | THRESHOLD |
| | | | | WIDTH | HEIGHT | THICKNESS | WOOD | HOLLOW METAL | GLASS | | | | |
| 101B | 101B | LOWER LOBBY (EXIST.) | EXIST | EXIST. | EXIST. | EXIST. | - | - | - | - | EXIST | EXIST | F 7 |
| 1000 | 100 | EXISTING FIRST FLOOR | B | 3'-0" | 7'-0" | 1-3/4" | - | ● | - | - | 1A | 1A | D |
| 105 | 105 | ELEVATOR MACHINE RM | B | 3'-0" | 7'-0" | 1-3/4" | - | ● | - | - | 3 | 3 | D 1 |
| 107 | 107 | CUSTODIAL | F | 3'-0" | 7'-0" | 1-3/4" | - | ● | - | - | 1B | 1B | D |
| S2A | S2 | STAIR 2 | EXIST | EXIST. | EXIST. | EXIST. | - | - | - | - | EXIST | EXIST | D 7 |
| S2C | S2 | STAIR 2 | EXIST | EXIST. | EXIST. | EXIST. | - | - | - | - | EXIST | EXIST | D 7 |
| 201 | 201 | UPPER LOBBY | D | 3'-0" | 7'-2" | 1/2" | - | ● | - | - | 4 | 5A | B 3 |
| 205 | 205 | TELECOM | B | 3'-0" | 7'-0" | 1-3/4" | - | ● | - | - | 3 | 3 | D |
| 206 | 206 | STORAGE | B | 3'-0" | 7'-0" | 1-3/4" | - | ● | - | - | 1B | 1B | E |
| 210 | 210 | OFFICE | E | 3'-0" | 7'-2" | 1/2" | - | - | ● | - | 4 | 5A | A 3, 5 |
| 211 | 211 | OFFICE | E | 3'-0" | 7'-2" | 1/2" | - | - | ● | - | 4 | 5A | A 3, 5 |
| 212 | 212 | ASSISTANT DIRECTOR | E | 3'-0" | 7'-2" | 1/2" | - | - | ● | - | 4 | 5A | A 3, 5 |
| 213 | 213 | OFFICE | E | 3'-0" | 7'-2" | 1/2" | - | - | ● | - | 4 | 5A | A 3, 5 |
| 214 | 214 | BREAK ROOM | G | 3'-9" | 7'-2" | 1/2" | - | - | ● | - | - | 6A | - 4, 5 |
| 215 | 215 | ASSISTANT DIRECTOR | E | 3'-0" | 7'-2" | 1/2" | - | - | ● | - | 4 | 5A | A 3, 5 |
| 216 | 216 | EXEC. DIRECTOR | E | 3'-0" | 7'-2" | 1/2" | - | - | ● | - | 4 | 5A | A 3, 5 |
| 216A | 216A | EXEC. DIRECTOR | E | 3'-0" | 7'-2" | 1/2" | - | - | ● | - | 4 | 5A | A 3, 5 |
| 217 | 217 | CONFERENCE ROOM | A | 3'-1" | 7'-2" | 1/2" | - | - | ● | - | 4 | 5A | - 2, 3, 5 |
| 218 | 218 | MEN RESTROOM | F | 3'-0" | 7'-0" | 1-3/4" | ● | - | - | - | 1A | 1A | B |
| 219 | 219 | WOMEN RESTROOM | F | 3'-0" | 7'-0" | 1-3/4" | ● | - | - | - | 1A | 1A | B |
| 220 | 220 | OFFICE | E | 3'-0" | 7'-2" | 1-3/4" | - | - | ● | - | 4 | 5A | A 3, 5 |
| 221 | 221 | OFFICE | E | 3'-0" | 7'-2" | 1-3/4" | - | - | ● | - | 4 | 5A | A 3, 5 |
| 222 | 222 | ELECTRICAL ROOM | B | 3'-0" | 7'-0" | 1-3/4" | ● | - | - | - | 1A | 1A | C |
| 223 | 223 | MECHANICAL ROOM | C | 3'-0" | 7'-0" | 1-3/4" | ● | - | - | - | 1A | 1A | C 6 |

2

SECTION 09300
TILE – Rev 2 - 12-6-11

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Tile.
 - 1. Porcelain ceramic tile.
- B. Mortar and setting materials.
- C. Grout.
- D. Membranes, including but not limited to:
 - 1. Waterproofing membranes.
 - 2. Membrane at walls.
- e. Cementitious backer board as tile substrate.

1.02 RELATED SECTIONS

- A. Section 07900 - Joint Sealers.
- B. Section 09260 - Gypsum Board Assemblies: Installation of tile backer board.
- C. Section 10800 - Toilet Accessories.
- D. Section 14201 - Passenger Elevator.
- E. Section 15420 - Drainage and Vent Systems: Floor drain; roof drain.

1.03 SUBMITTALS

- A. General:
 - 1. For submittal procedures, refer to Section 2 - General Terms and Conditions and Section 3 - Supplemental Terms and Conditions.
 - 2. Submittals for this section are to be coordinated with submittals required in Sections 07140 and 14201.
- B. Product Data: Provide manufacturers' product data sheets and installation instructions for each of the following:
 - 1. Tile (porcelain ceramic tile, porcelain mosaic tile, and flexible concrete tile).
 - a. Include physical and performance characteristics.
 - b. Mark to identify each type, size, and shape required.
 - 2. Mortar and grout materials.
 - a. Include manufacturer's instructions for mixing and installing.
 - b. Include ISO 13007 classification for each type grout and mortar to be used; coordinate with shop drawings to indicate which product will be used in each designated application.
 - 3. Joint sealer and backer materials for use in movement joints.
 - 4. Tile backer board materials.
 - 5. Drainage mat.
 - 6. Membranes (e.g., secondary waterproofing membrane) and associated products.
 - 7. Shower pan liner.

- C. Shop Drawings:
1. Shop drawings for this section are to be coordinated with elevator cab submittals required in Section 14201.
 - a. Provide elevator manufacturer with elevator cab floor recess depth dimension required for tile floor installation, and weight (dead load) of tile floor assembly.
 2. Indicate field-verified dimensions for all surfaces to receive tile; coordinate with tile layout.
 3. For each type installation, indicate applicable TCNA tile installation method.
 - a. Indicate compliance with specified reference standards for materials and installation specifications.
 - b. Where installation method includes options or alternatives, indicate selected options and alternatives.
 - c. Indicate thickness of setting materials, and coordination with related components (e.g., door threshold, floor drain, etc.).
 - d. Indicate ISO 13007 classification for grout and mortar to be used in each designated application.
 4. Indicate accessory materials, including but not limited to patching and leveling compound, waterproofing, shower pan liner, cement backer units, joint sealer, grout, etc.
 5. Indicate tile layout, patterns, color arrangement, perimeter conditions, junction with dissimilar materials, movement joints, shower curb/threshold, and setting details.
 - a. Indicate alignment of floor, base and wall joints.
 6. Indicate interface between materials specified in this section and materials specified elsewhere, including but not limited to sheet metal flashing, shower drains, floor drains, promenade roof drains, railing assemblies, Portland cement plaster, and door thresholds.
- D. Samples:
1. Selection Samples:
 - a. Tile: For each type of tile (except tile for which color and finish is specified), submit manufacturer's complete range of color samples (including samples of all Price Groups), for Consultant's initial selection.
 - b. Grout: For each type of grout, submit manufacturer's complete set of color samples for Consultant's initial selection.
 2. Verification Samples: Mount selected tile and apply selected grout on plywood panels; each sample panel to be 24 x 24 inches (600 x 600 mm) in size, illustrating tile pattern, color variations, and grout joint size variations for each of the following conditions:
 - a. Panel A: Interior dry area, floor tile.
 - b. Panel B: Interior wet area, wall tile w/ one movement joint.
 - c. Panel C: Interior wet area, floor tile w/ one movement joint.
 - d. Panel D: Exterior; floor tile w/ one movement joint.
- E. Maintenance Data: Include recommended cleaning methods, cleaning materials, stain removal methods, and polishes and waxes.

1.04 QUALITY ASSURANCE

- A. Maintain one copy of TCNA (HB) and ANSI A108 Series/A118 Series on site.

- B. Manufacturer Qualifications: Company specializing in manufacturing the types of products specified in this section, with minimum 5 years of documented experience.
- C. Installer Qualifications:
 - 1. General: Company specializing in performing tile installation, with minimum of 5 years of documented experience.
 - 2. Exterior Tile Installer: Contractor shall have minimum 5 years experience in successful installation of exterior plaza deck roofing systems.
 - a. Coordinate with requirements specified in Section 07140.
 - b. If requested by Consultant or Project Manager, provide evidence of previous project experience with contact information for City.
 - 3. Contractor shall be authorized by manufacturer to offer specified system warranty.
- D. Certifications:
 - 1. Manufacturer's Certificate: Certify that products meet or exceed specified requirements.
 - 2. Recycled Content Certification: Provide third-party (e.g., Scientific Certification Systems) certification to verify recycled content claims.

1.05 WARRANTY

- A. Manufacturer's System Warranty: Manufacturer shall warrant that system components, including but not limited to primary waterproof membrane, drainage mat, thick mortar bed, wire reinforcing mesh, secondary waterproofing membrane, bond coat mortar, grout and joint sealant, will be free from manufacturing defects and will not break down or deteriorate under normal usage during the specified warranty period.
 - 1. Manufacturer agrees to make, or cause to be made at its own expense, repairs necessary to replace portions of the installation deemed to be defective.
 - 2. Warranty Period: Twenty-five (25) years from the effective date of Substantial Completion.
- B. Manufacturer's Watertightness Warranty: Manufacturer shall warrant that the system will not fail to resist penetration of water.
 - 1. Manufacturer agrees to make, or cause to be made at its own expense, repairs necessary to correct leaks resulting from ordinary wear and tear and the effects thereof and improper workmanship by the installer.
 - 2. Warranty Period: Ten (10) years, commencing on the effective date of Substantial Completion.
 - 3. Exception: Tile installations within Interior Dry Areas (i.e., Office, Ship's Store, Telephone, Mail, Lobby, Reading Rm, Closet, Breakroom, Conference Rm, Manager, Supervisor, Dockmaster, Reception, and Roof Access) are not required to be watertight.

1.06 DELIVERY, STORAGE, AND HANDLING

- A. Protect adhesives from freezing or overheating in accordance with manufacturer's instructions.

1.07 ENVIRONMENTAL REQUIREMENTS

- A. Do not install adhesives in an unventilated environment.
- B. Maintain ambient and substrate temperature of 50 degrees F (10 degrees C) during installation of mortar materials.

PART 2 PRODUCTS

2.01 MANUFACTURERS

- A. Porcelain Ceramic Tile and Porcelain Mosaic Tile:
 - 1. Basis of Design: **Daltile Verdana Series**
 - 2. Other Manufacturers: Subject to contract requirements, equivalent products manufactured by one of the following may be used:
 - a. American Olean: www.americanolean.com.
 - b. Crossville: www.crossville.com**
 - c. Summitville Tiles, Inc: www.summitville.com.
- B. Drainage Mat, Thick Mortar Bed, Wire Reinforcing Mesh, Secondary Waterproofing Membrane, Bond Coat Mortar, Grout, and Joint Sealant:
 - 1. General:
 - a. Products shall be by a single source manufacturer.
 - 2. Basis of Design: Laticrete International, Inc.: www.laticrete.com.
 - a. Local Rep.: Patrick Blackburn; Blackburn Enterprise; 6951 Lakeside Rd. West Palm Beach, FL 33411; Tel. (cell): 561-324-7589; email: patrick@blackburnenterprise.com.
 - 3. Other Manufacturers: Equivalent systems by other manufacturers may be submitted for consideration in accordance with requirements for substitutions.
- C. Grout Sealer:
 - 1. Custom Building Products: www.custombuildingproducts.com.
 - 2. Southern Grouts & Mortars, Inc.: www.sgm.cc.
- D. Cement Backer Units (CBU):
 - 1. United States Gypsum Company: www.usg.com.
 - 2. Custom Building Products: www.custombuildingproducts.com.

2.02 PORCELAIN CERAMIC TILE

- A. General:
 - 1. All porcelain ceramic tile products shall be by the same manufacturer.
 - 2. Porcelain ceramic tile shall be as defined in, and shall conform to the requirements of, ANSI A137.1.
 - 3. Performance Requirements:
 - a. Breaking Strength (ASTM C 648): Minimum 350 lbf.
 - b. Bond Strength (ASTM C 482): Minimum 200 psi.
 - c. Water Absorption (ASTM C 373): Maximum 0.10 percent.
 - d. Abrasion Wear (ASTM C501): Minimum 270 lbf.
 - e. Chemical Resistance (ASTM C 650): Resistant (unaffected).
 - f. Scratch Hardness (MOH's Scale): 6.
- B. Wall Tile Type **CT-2 / CT-3**
 - 1. Product: **Daltile – Verdana Series**

2. Size and Shape: **6.5 x 6.5** inches (nominal), square.
 3. Thickness: **3/8** inch.
 4. Edges: Square.
 5. Surface Finish: Unpolished
 6. Colors: Two colors, to be selected by Consultant from manufacturer's complete range. – **80% field / 20% Accent**
- C. ~~Wall Tile Type 2:~~
- ~~1. Product:~~
 - ~~2. Size and Shape:~~
 - ~~a. Type 2A: 6 x 12 inches (nominal), square.~~
 - ~~b. Type 2B: 4 x 12 inches (nominal), square.~~
 - ~~c. Type 2C: 3 x 12 inches (nominal), square.~~
 - ~~3. Thickness: 5/16 inch.~~
 - ~~4. Edges: Square.~~
 - ~~5. Surface Finish: Unpolished; Crossville "Cross-Shoon" (UPS), or equal.~~
 - ~~6. Colors: Two colors, to be selected by Consultant from manufacturer's complete range.~~
- D. Floor Tile Type 1: **CT-1 / CT-4**
1. Product: **Daltile – Verdana Series**
 2. Size and Shape: **13 x 13** inches (nominal), square.
 3. Thickness: **3/8** inch.
 4. Edges: Square.
 5. Surface Finish: Unpolished and Polished
 6. Coefficient of Friction (ASTM C 1028):
 - a. Dry: 0.6, minimum.
 - b. Wet: 0.6, minimum.
 7. Colors: Two colors, to be selected by Consultant from manufacturer's complete range.
 - b. Wet: 0.6, minimum.
- E. Wall Base Tile: **CT-1 cove base**
1. Product: **Daltile – Verdana Series**
 2. Size and Shape: **6 x 13** inches (nominal); cove base.
 3. Thickness: **3/8** inch.
 4. Edges: Square.
 5. Surface Finish: Same as Wall Tile.
 6. Colors: Four colors, to be selected by Consultant from manufacturer's complete range.
- F. Trim: Matching shapes in sizes coordinated with wall tile.
1. Applications: Use matching trim in the following locations:
 - a. Open Edges: Bullnose; 4 x **20** inches.
 - b. Top of Wainscot: Bullnose; 4 x **20** inches.
 - c. Floor to Wall Joints: Cove base; refer to Wall Base Tile.
 - d. Inside Corners, except Wall-To-Wall Tile: Square jointed; no special trim piece required.
 - e. Inside Corners, Wall-To-Wall Tile: Square jointed; no special trim piece required.
 - f. Inside Corners, Cove Base-To-Cove Base Tile: Inside cove base corner

- trim; 1 x 6 inches; refer to Wall Base Tile.
- g. Outside Corners, Cove Base-To-Cove Base Tile: Outside cove base corner trim; 1 x 6 inches; refer to Wall Base Tile.
- 2. Product: Use matching trim pieces from the same product series as Wall Tile.
- 3. Surface Finish: Same as Wall Tile.
- 4. Colors: Trim color shall match color of adjacent Wall Tile or Base Tile, as applicable (e.g., Cove Base-To-Cove Base Tile trim shall match Wall Base Tile).

2.03 MORTAR & SETTING MATERIALS

- A. General:
 - 1. Shall contain anti-microbial protection to inhibit the growth of stain-causing mold and mildew in the substrate.
 - 2. Primers, fillers, and reinforcement as required by manufacturer for application and substrate condition.
 - 3. Mortar materials shall conform to specified warranty requirements.
- B. Thick Bed Mortar: Latex-portland mortar complying with ANSI A118.4, and as follows:
 - 1. General:
 - a. Shall be compatible with mortar bond coat materials.
 - b. Suitable for bonded or unbounded, screeded or sloped, and interior or exterior applications.
 - c. Consistency of Mix: Screed mortar.
 - 2. Performance Requirements (28 days):
 - a. Compressive Strength (ANSI A118.4 and ASTM C 109): Minimum 4,000 PSI.
 - b. Flexural Strength (ASTM C 348): Minimum 1,100 PSI.
 - c. Pull-out: Minimum 300 PSI.
 - 3. Acceptable Product: 226 Thick Bed Mortar gauged with 3701 Mortar Admix by Laticrete, or equal.
- C. Thin-set / Bond Coat Mortar:
 - 1. Thin-set / Bond Coat Mortar Type 1 (Floor): Latex-portland mortar complying with ANSI A118.4 and ISO 13007; C2-E-S2.
 - a. Acceptable Product: Permalastic System by Laticrete, or equal.
 - 2. Thin-set / Bond Coat Mortar Type 2 (Wall): Latex-portland mortar complying with ANSI A118.4 and ISO 13007; C2-T-E-S1.
 - a. Acceptable Product: StayFlex 500 or 254 Platinum by Laticrete, or equal.
- D. Epoxy Mortar:
 - 1. Epoxy Mortar Type 1: 100 percent solids, epoxy setting mortar complying with ANSI A118.3 and ISO 13007; RG.
 - a. Performance Requirements (ANSI A118.3):
 - (1) Tensile Strength: Minimum 1,700 psi.
 - (2) Compressive Strength: Minimum 6,000 psi.
 - (3) Thermal Shock Resistance: Minimum 1,200 psi.
 - (4) Shrinkage: Maximum 0.1 percent.
 - b. Product: Latapoxy SP-100 by Laticrete, or equal.

2. Epoxy Mortar Type 2: 100 percent solids, epoxy setting mortar complying with ANSI A118.3 and ISO 13007; R2.
 - a. Performance Requirements (ANSI A118.3):
 - (1) Tensile Strength: Minimum 1,400 psi.
 - (2) Compressive Strength: Minimum 5,000 psi.
 - (3) Thermal Shock Resistance: Minimum 600 psi.
 - (4) Shrinkage: Maximum 0.1 percent.
 - b. Working Properties (70 degrees F):
 - (1) Application Layer Thickness Range: 1/8 inch (3 mm) to 3/8 inch (9 mm).
 - c. Product: Latapoxy 300 by Laticrete, or equal.

2.04 GROUT MATERIALS

- A. General:
 1. Shall contain anti-microbial protection to inhibit the growth of stain-causing mold and mildew or mildew.
 2. Grout materials shall conform to specified warranty requirements.
 3. Color(s): As selected by Consultant.
- B. Grout Type 1 (Interior Dry Areas): Premium-grade, pre-blended, polymer-modified sanded portland-cement tile grout for joints in wet- or dry-area applications, complying with ANSI A118.6 and ISO 13007; CG2WA.
 1. Acceptable Product: PermaColor by Laticrete, or equal.
- D. Grout Type 2 (Interior Wet Areas and Elevator): Premium-grade, non-sagging, stain-free, reaction resin grout for joints in wet-area applications, complying with ANSI A118.3 and ISO 13007; RG.
 1. Acceptable Product: Latapoxy SP-100 by Laticrete, or equal.
- E. Grout Type 3 (Exterior): Premium-grade, pre-blended, polymer-modified sanded portland-cement tile grout for joints in wet- or dry-area applications, complying with ANSI A118.6 and ISO 13007; CG2WA.
 1. Acceptable Product: Same as specified in Section 07650.

2.05 MEMBRANE MATERIALS

- A. General:
 1. Membrane materials shall conform to specified warranty requirements, and shall be compatible with other materials used in the assembly.
- B. Synthetic Rubber Waterproofing Membrane: Refer to Section 07140.
- C. Secondary Waterproof Membrane: Thin, flexible, seamless load-bearing waterproofing/ crack isolation membrane formed from a single component, self-curing, liquid rubber polymer; shall not require the use of fabric in the field, coves or corners.
 1. Physical and Performance Requirements:
 - a. Hydrostatic Test, 7-day (ANSI A118.10): Pass.
 - b. Tensile Strength, 7-day (ANSI A118.10): 265 to 300 PSI (1.8 to 2.0 MPa).
 - c. Water Immersion, 7-day (ANSI A118.10): 95 to 120 PSI (0.7 to 0.83 MPa).
 - d. Shear Bond, 7-day (ANSI A118.10): 200 to 275 PSI (1.4 to 1.9 MPa).

- e. Shear Strength, 28-day (ANSI A118.10): 214 to 343 PSI (1.5 to 2.3 MPa)
 - f. System Crack Resistance Test (ANSI A118.12.5.4): Pass (High).
 - g. Water Vapor Transmission (ASTM E 96, Procedure B): 0.515 grams/h-ft².
 - h. Water Vapor Performance (ASTM E 96, Procedure B): 1.247 perms.
 - i. Service Rating (TCNA; ASTM C 627): Extra Heavy/cycles 1-14.
2. Acceptable Product: Laticrete Hydro Ban, or equal.
- D. Crack Suppression Membrane: Thin, cold-applied, two-part system consisting of a liquid rubber and reinforcing fabric; for interior or exterior use on floors and walls whenever hairline cracking or spider-webbing occurs in the substrate, and over shrinkage and other non-structural cracks up to 1/8 inch in width. Materials shall be non-toxic, non-flammable, and non-hazardous during storage, mixing, application, and when cured.
- 1. Physical and Performance Requirements:
 - a. System Crack Resistance (ANSI A118.12 5.4): Pass at 1/8 inch (3 mm).
 - b. Elongation (ASTM D 751; 17.1): 20 to 30 percent.
 - c. Breaking Strength, Cut Strip Method (ASTM D751; 16.1): 1700 to 1900 psi (11.72 to 13.10 MPa).
 - d. Nominal Dry Thickness (LIL 1013): 0.020 inch (0.51 mm)
 - e. 28 day Quarry/Concrete Shear Strength (ANSI A118.12 5.1.5): 125 psi (0.86 MPa), minimum.
 - f. Point Load (ANSI A118.12 5.2): 3200 lbf (14 kN), minimum.
 - g. Service Temperature Range (LIL 1016): -20 to 280 degrees F (-28 to 137 degrees C).
 - h. Service Rating (TCNA/ASTM C 627): Extra Heavy/cycles 1-14.
 - i. Total VOC Content: Less than 0.05 mg/m³.
 - 2. Acceptable Product: Laticrete Blue 92 Anti-fracture Membrane, or equal
- E. Membrane at Walls: Membrane (ANSI A-2.1.8) of # 15 roofing felt or 4-6-mil polyethylene film is required behind CBU.

2.06 MOVEMENT JOINT MATERIALS

- A. General:
 - 1. Joint Cleaner: Non-corrosive and non-staining type, recommended by sealant manufacturer; compatible with joint forming materials.
 - 2. Primer: Non-staining type, recommended by sealant manufacturer to suit application.
- B. Bond Breaker: Pressure sensitive tape recommended by sealant manufacturer to suit application.
- C. Backup Strip: A flexible and compressible type of closed cell foam polyethylene, butyl rubber, or open cell and closed cell polyurethane, rounded to contact sealant, as shown in TCNA Method EJ171 details, and as recommended by sealant manufacturer.
 - 1. Backup strip must fit neatly into the joint without compacting and to such a height to allow a sealant depth of 1/2 the width of the joint.
 - 2. Sealant must not bond to the backup material.
- D. Joint Sealant: High-performance, one-component, neutral-cure, 100-percent

silicone sealant designed for ceramic tile applications.

1. Shall conform to ASTM C 920, Type S, Grade NS, Class 25, Use NT, Use I, Use M, Use G.
2. Adhesion: Shall conform to ASTM C 794.
3. Shall be equipped with fungicides to resist mold and mildew growth.
4. Shall be resistant to pool chemicals.
5. Colors: To be selected by Consultant from manufacturer's complete range.
6. Product: Latisil by Laticrete, or equal.

2.07 ACCESSORY MATERIALS

- A. Patching and Leveling Compounds: Latex-portland mortar complying with ANSI A118.4 and designed for screeds, patching and leveling beds, and scratch/plaster coats; suitable for repairing subfloors in commercial and institutional applications.
 1. General:
 - a. Products containing gypsum are not acceptable.
 2. Interior Patching and Leveling Compound: Engineered, polymer-modified, fiber-reinforced, cement-based, skimcoating and patching compound.
 - a. Thickness: Featheredge to 1/2-inch.
 - b. Performance Requirements (28 days):
 - (1) Compressive Strength (ASTM C 109): Minimum 3,500 PSI.
 - c. Acceptable Products: 816 Latipatch by Laticrete, or equal.
 3. Interior Self-leveling Underlayment: High-strength, self-leveling, cement-based underlayment and repair mix.
 - a. Thickness: Featheredge to 1-1/2 inches.
 - b. Performance Requirements (28 days):
 - (1) Compressive Strength (ASTM C 109): Minimum 4,400 PSI.
 - (2) Flexural Strength (ASTM C 348): Minimum 1,100 PSI.
 - c. Acceptable Products: 86 Latilevel by Laticrete, or equal.
 4. Exterior Patching and Leveling Compound: Refer to Section 07140.
- B. Reinforcing:
 1. Wire Reinforcing: 2 inch x 2 inch (50 x 50 mm) x 16 ASW gauge or 0.0625 inch (1.6mm) diameter galvanized steel welded wire mesh complying with ASTM A 185 and ASTM A 82.
 2. Reinforcing Mesh: 2 x 2 inch (50 x 50 mm) size weave of 16/16 wire size; welded fabric, galvanized; complying with ASTM A 185.
 3. Glass Fiber Mesh Tape: 2-inch (50 mm) wide self-adhesive fiberglass mesh tape.
- C. Grout Sealer: Water-based grout sealer designed to resist water, oil and acid-based contaminants, and to simplify maintenance.
 1. General:
 - a. Shall not change the appearance of the grout.
 - b. Shall allow moisture vapor transmission.
 - c. Suitable for cementitious sanded or unsanded grout joints, interior and exterior applications, and walls or floors.
 - d. Expected Wear Duration: 5 years, minimum.
 2. Product: As recommended by grout manufacturer.
- D. Cementitious Backer Board: ASTM C 1325, ANSI A118.9; High density,

cementitious, glass fiber reinforced.

1. Thickness: 1/2 inch or 5/8 inch, as indicated on drawings; if not indicated, provide 1/2 inch.
 2. Product:
 - a. DUROCK Brand Cement Board, by United States Gypsum Company.
 - b. Wonderboard, by Custom Building Products.
 - c. Accepted equal.
- E. Fasteners (for attaching Cementitious Backer Board panels to stud framing): Non-corrosive and non-oxidizing, hot-dipped galvanized fasteners conforming to ASTM A 653. Refer to Section 09260 for additional requirements.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Sub-floor Surfaces:
1. Verify that sub-floor surfaces are:
 - a. Smooth and flat within the tolerances specified for that type of work and are ready to receive tile.
 - b. Dust-free and free of substances which would impair bonding of setting materials to sub-floor surfaces.
 2. Test concrete sub-floor surfaces for moisture emission rate and alkalinity; obtain instructions if test results are not within the following limits:
 - a. Moisture Emission Rate: Not greater than 3 lb per 1000 SF (7.1 kg per 100 sq m) per 24 hours when tested using calcium chloride moisture test kit for 72 hours.
 - b. Alkalinity: pH range of 5-9.
 3. Verify that required floor-mounted utilities are in correct location.
 4. Verify that elevator floor recess conforms to depth indicated in the submittals for that part of the work (refer to Section 14201).
- B. Wall Substrate Surfaces:
1. Solid Substrate: Verify that wall substrate surfaces are smooth and flat within the tolerances specified for that type of work, are dust-free, and are ready to receive tile.
 2. Stud Framing: Verify that support metal and framing systems are installed to meet tolerances specified in Section 09111 or Section 09260, as applicable, and ready for installation of cementitious backer board.

3.02 PREPARATION

- A. General:
1. Protect surrounding work from damage.
 2. Vacuum clean surfaces and damp clean.
 3. Seal substrate surface cracks with filler. Level existing substrate surfaces to acceptable flatness tolerances.
- B. Concrete and Masonry:
1. Cleaning:
 - a. Chip out loose material, clean off all oil, grease dirt, adhesives, curing compounds, and other deterrents to bonding by mechanical method, or

- by using products specifically designed for cleaning concrete and masonry.
 - b. Use self-contained power blast cleaning systems to remove curing compounds and steel trowel finish from concrete slabs where ceramic tile will be installed directly on concrete surface with thin-set materials.
 - c. Steam cleaning or the use of acids and solvents for cleaning will not be permitted.
 - 2. Patching and Leveling:
 - a. Mix and apply patching and leveling compound in accordance with manufacturer's instructions.
 - b. Fill holes and cracks and align concrete floors that are out of required plane with patching and leveling compound.
 - 1) Thickness of compound as required to bring finish tile system to elevation shown.
 - 2) Float finish, except finish smooth for elastomeric waterproofing.
 - 3) At substrate expansion, isolation, and other moving joints, allow joint of same width to continue through underlayment.
 - c. Apply patching and leveling compound to concrete and masonry wall surfaces that are out of required plane.
 - d. Apply leveling coats of material compatible with wall surface and tile setting material to wall surfaces, other than concrete and masonry that are out of required plane.
- C. Cementitious Backer Board / Cementitious Backer Units (CBU):
 - 1. Prior to installation of CBU, install membrane (ANSI A.2.1.8) over entire wall area where CBU is to be installed; refer to TCNA (HB) Method W244 and CBU manufacturer's instructions for additional information.
 - 2. Install CBU in accordance with ANSI A108.11, CBU manufacturer's instructions, and applicable requirements of the Florida Building Code.
 - 3. Install CBUs horizontally or vertically to minimize joints, with end joints over framing members.
 - a. CBUs with rounded edges: Face rounded edge away from studs, to form a V-joint for joint treatment.
 - 4. Secure CBUs to each framing member with screws spaced not more than 8 inches (200 mm) on center and not closer than 1/2 inch (13 mm) from the edge of the CBU, or as recommended by CBU manufacturer. Install screws so that the screw heads are flush with the surface of the backer unit.
 - 5. Where CBU joins waterproofing, lap backer unit over turned up waterproof system. Install fasteners only through top one-inch of turned up waterproof systems.
 - 6. Remove polyethylene wrapping from CBUs and separate to allow for air circulation.
 - a. Allow moisture content of backer units to dry down to a maximum of 35 percent before applying joint treatment and tile.
 - 7. Joint Treatment:
 - a. Do not install joint treatment for seven days after installation of CBU, to allow time for moisture content of backer units to dry down.
 - b. Fill horizontal and vertical joints and corners with latex-Portland cement mortar. Apply 2-inch wide glass fiber mesh tape over joints and corners, and embed with same mortar.

- c. Leave 1/4 inch (6 mm) space for sealant at lips of sinks or other plumbing receptors.
- D. Elevator Cab Floor: Prepare steel substrate in accordance with mortar manufacturer's instructions (e.g., Laticrete TDS 146).
 - 1. Inspect steel for any signs of rust or corrosion. Clean, remove, passivate steel in accord with steel manufacturer's guidelines to ensure that rust / corrosion is completely removed prior to tiling.
 - 2. Ensure that surfaces to be tiled are sound, clean and free of dust, dirt, oil, grease, sealers, curing compounds, laitance, efflorescence, form oil, loose plaster, paint, and any other bond breaking material or debris. Clean metal surfaces with a strong detergent to ensure that all manufacturing oils are removed, rinse completely and allow it to dry.

3.03 INSTALLATION - GENERAL

- A. Install tile and grout in accordance with applicable requirements of ANSI A108.1 through A108.13, manufacturer's instructions, and TCNA (HB) recommendations.
- B. Lay tile to pattern indicated; if pattern is not indicated, lay tile to pattern as directed by Consultant after verification of field dimensions. Do not interrupt tile pattern through openings, except as otherwise indicated.
- C. Workmanship:
 - 1. Lay-out tile work so that no tile less than one-half full size is used. Make all cuts on the outer edge of the field.
 - 2. Set tile firmly in place with finish surfaces in true planes. Align tile flush with adjacent tile unless shown otherwise.
 - 3. Form intersections and returns accurately.
 - 4. Form internal angles square and external angles bullnosed, except as otherwise indicated.
 - 5. Cut and fit tile to penetrations through tile, leaving sealant joint space. Form corners and bases neatly. Align floor, base and wall joints.
 - 6. Cut and drill tile neatly without marring surface.
 - 7. Cut edges of tile abutting penetrations, finish, or built-in items:
 - a. Fit tile closely around electrical outlets, piping, fixtures and fittings, so that plates, escutcheons, collars and flanges will overlap cut edge of tile.
 - b. Seal tile joints water tight, around electrical outlets, piping fixtures and fittings before cover plates and escutcheons are set in place; refer to Section 07900 for additional information.
 - c. Completed work shall be free from hollow sounding areas and loose, cracked or defective tile.
 - d. Remove and reset tiles that are out of plane or misaligned.
 - e. Floors:
 - 1) Extend floor tile beneath casework and equipment, except built-in casework units mounted in wall recesses.
 - 2) In areas where floor drains occur, slope to drains where shown.
 - 3) Shove and vibrate tiles over 8 inches (200 mm) square to achieve full support of bond coat.
 - f. Walls:
 - (1) Cover walls and partitions, including pilasters, furred areas, and freestanding columns from floor to ceiling, or from floor to nominal

- wainscot heights shown with tile.
 - (2) Finish reveals of openings with tile, except where other finish materials are shown or specified.
 - (3) At window openings, provide tile stools and reveals, except where other finish materials are shown or specified.
 - (4) Finish wall surfaces behind and at sides of casework and equipment, except those units mounted in wall recesses, with same tile as scheduled for room proper.
8. Joints:
- a. Keep all joints in line, straight, level, perpendicular and of even width, unless shown otherwise.
 - b. Joint Width:
 - (1) Grout Joints: 1/8 inch (3 mm), except as otherwise indicated.
 - (a) Grout Joints - Flexible Concrete Tile Floors: 1/16 inch.
 - (2) Movement Joints: 1/4 inch (6 mm), except as otherwise indicated.
- E. Place tile joints uniform in width, subject to variance in tolerance allowed in tile size. Make joints watertight, without voids, cracks, excess mortar, or excess grout.
- F. Sound tile after setting. Replace hollow sounding units.
- G. Keep control joints free of adhesive or grout. Apply sealant to joints.
- H. Allow tile to set for a minimum of 48 hours prior to grouting.
- I. Grout tile joints.
- J. Apply silicone sealant to junction of tile and dissimilar materials, junction of dissimilar planes, and movement joints.

3.04 INSTALLATION - TILE

- A. Interior Dry Areas
- 1. Floor: Install in accordance with TCNA (HB) Method F113.
 - a. Mortar Bond Coat: Thin-set / Bond Coat Mortar Type 1.
 - b. Tile: Floor Tile Type 1.
 - c. Grout: Grout Type 1 with Grout Sealer.
 - 2. Wall: N/A.
 - 3. Wall Base: N/A.
- B. Interior Wet Areas,
- 1. Floor: Install in accordance with TCNA (HB) Method F114.
 - a. Bonded Waterproof Membrane: Waterproof Membrane or Waterproof / Crack Isolation Membrane, per membrane manufacturer's recommendation; slope to drain.
 - b. Mortar Bond Coat: Thin-set / Bond Coat Mortar Type 1.
 - c. Tile: Floor Tile Type 2; slope to drain.
 - d. Grout: Grout Type 3 with Grout Sealer.
 - 2. Wall: Install in accordance with TCNA (HB) Method W244C.
 - a. Membrane: #15 roofing felt or 6-mil polyethylene film, installed between Cementitious Backer Board and studs.
 - b. Cementitious Backer Board.
 - c. Mortar Bond Coat: Thin-set / Bond Coat Mortar Type 2.

- d. Tile: Wall Tile Type 1; also, Wall Tile Type 2 at locations indicated on drawings.
- e. Grout: Grout Type 2.
- 3. Wall Base: Install in accordance with TCNA (HB) Method W244C.
 - a. Membrane: #15 roofing felt or 6-mil polyethylene film, installed between Cementitious Backer Board and studs.
 - b. Cementitious Backer Board.
 - c. Mortar Bond Coat: Thin-set / Bond Coat Mortar Type 2.
 - d. Tile: Wall Base Tile.
 - e. Grout: Grout Type 2.
- C. Elevator:
 - 1. Floor: Install in accordance with tile and mortar manufacturers' instructions.
 - a. Mortar Bond Coat: Epoxy Mortar Type 2.
 - (1) Provide mortar thickness as necessary to establish overall tile floor system installation equal to depth of elevator cab floor recess (i.e, mortar thickness shall equal elevator cab floor recess depth less tile thickness).
 - b. Tile: Floor Tile Type 4.
 - c. Grout: Grout Type 2.
 - 2. Wall: N/A.
 - 3. Wall Base: N/A.

3.05 INSTALLATION - MOVEMENT JOINTS

- A. Provide continuous movement joints in accordance with TCNA (HB) Method EJ171 at each of the following locations:
 - 1. Where tile work abuts restraining surfaces (e.g., perimeter walls, dissimilar floors, curbs, columns, pipes, ceilings), and where changes occur in backing materials.
 - 2. Where joints occur at changes in plane of tile work, including but not limited to the following:
 - a. Joints at junctions between adjacent walls (e.g., inside corner where wall tile meets wall tile).
 - b. Joints between walls and floors (e.g., where bottom of cove base tile meets floor tile).
 - c. Joints between columns, walls and floors.
 - d. Expansion and control joints.
 - 3. All expansion, control, construction, and cold joints in the construction shall continue through the tile work, including such joints at vertical surfaces.
 - a. Joints through tile work directly over structural joints must not be narrower than the structural joint.
- B. Installation:
 - 1. Movement joints shall be located over all cold joints and saw-cut control joints.
 - 2. To insure that location of joints in tile work align with existing joints in substrate, joints in tile work should be constructed during installation of mortar beds and/or tile, rather than saw-cutting joints after installation.
 - 3. Keep movement joint cavities open and free of dirt, debris, grout, mortar, and setting materials.

4. Set compressible back-up strip when mortar is placed or utilize removable wood strip to provide space for backup after mortar has cured.
5. Install sealant after tile work and grout are dry. Follow sealant manufacturer's recommendations.

C. Joint Width: 1/4 inch, unless otherwise indicated.

3.06 TOLERANCES

- A. Subsurface Tolerances: In order to accomplish grout joints of the width specified, variation in the substrate must be minimal. Therefore, Contractor shall comply with TCNA (HB) guidelines for "Subsurface Tolerance," and the following criteria:
1. Concrete Sub-floor (Substrate for Floor Tile):
 - a. Finish slab free from small hollows or bumps and graded to the elevations called for, with depressions in floors between high spots not greater than 1/8 inch below a 10-foot straightedge in accordance with ACI 302 Surface Finish Tolerance, and not more than 1/4 inch between opposite exterior walls, unless otherwise called for on the Drawings.
 - b. Subsurface shall not vary by more than 1/16 inch over 1 foot, nor more than 1/32 inch between adjoining edges.
 2. CMU/Concrete Wall (Substrate for Wall Tile / Wall Base Tile):
 - a. Variation from required plane of the backer board surface shall not exceed 1/8 inch in 10 feet.
 - b. Subsurface shall not vary by more than 1/16 inch over 1 foot, nor more than 1/32 inch between adjoining edges.
 3. Cementitious Backer Board (Substrate for Wall Tile / Wall Base Tile):
 - a. Variation from required plane of the backer board surface shall not exceed 1/8 inch in 10 feet.
 - b. Subsurface shall not vary by more than 1/16 inch over 1 foot, nor more than 1/32 inch between adjoining edges.

3.07 CLEANING

- A. Clean tile and grout surfaces.

3.08 PROTECTION OF FINISHED WORK

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

END OF SECTION

SECTION 09651
RESILIENT TILE FLOORING (LUXURY VINYL TILE)

PART 1 GENERAL

1.01 SUMMARY

- A. Section Includes:
1. Luxury Vinyl Tile (LVT)
 2. Floor finish options
 3. Accessories

1.02 REFERENCES

- A. American Society for Testing and Materials (ASTM):
1. ASTM F 1700 – Solid Vinyl Floor Tile.
 2. ASTM E 648 - Test Method for Critical Radiant Flux of Floor-Covering Systems Using a Radiant Heat Energy Source; 2004.
 3. ASTM E 662 - Test Method for Specific Optical Density of Smoke Generated by Solid Materials; 2005.
 4. ASTM C 1028 – Slip Resistance- >0.70
 5. ASTM F 970 – Static Load – Modified 1000 PSI- 0.005”
 6. ASTM F 925 – Chemical Resistance
 7. ASTM F1515 – Light Stability

1.03 SUBMITTALS

- A. For submittal procedures, refer to Section 2 - General Terms and Conditions and Section 3 - Supplemental Terms and Conditions.
- B. Product Data:
1. Submit properly identified product data, including installation instructions before starting work.
 2. Manufacturer's Safety Data Sheet (MSDS) for adhesive.
- C. Samples: Submit manufacturer's standard size samples of each type, color, and finish of resilient flooring and required accessories including full range of flooring color and pattern variations available from proposed manufacturer.
- D. Quality Control Submittals: Provide manufacturer's printed document indicating compliance to slip-resistant coefficient requirements.
- E. Test Reports: Submit copies of test reports including test results indicating that moisture emission rate and alkalinity of concrete sub-floor surfaces are within limits recommended by resilient flooring manufacturer and certifying that concrete sub-floor is suitable and ready for resilient flooring installation.
- F. Maintenance Instructions: Submit manufacturer's written instructions for recommended maintenance practices for installed resilient flooring to include:
1. Schedule: Frequency and type of maintenance defined.
 2. Equipment: Equipment and tools specified by generic language or

- 3. manufacturer's name.
- 3. Materials: Chemicals required to maintain flooring by brand name, quantities, and proper solutions.

1.04 QUALITY ASSURANCE

- A. Slip Resistance:
 - 1. Vinyl composition tile flooring shall comply with [Coefficient of Friction \(COF\) specified in this Section](#).
 - 2. Non-compliance with specified slip-resistance requirements (i.e., Coefficient of Friction) will be grounds for removal and disposal of installed flooring system, properly preparing the floor substrate, and installation of required slip-resistant flooring system at no expense to the Board.
- B. Taber Abrasionmeter Testing:
 - 1. The weight loss of each tile shall average no more than 0.60 grams when ten tiles are abraded with aluminum oxide grit and a S-39 leather wheel for 2000 cycles according to ASTM F 510.

1.05 DELIVERY, STORAGE, AND HANDLING

- A. Deliver products in manufacturer's unopened original dry packaging, with tags and labels intact.
- B. Provide equipment and personnel to handle materials to prevent damage from dropping, careless storage, and handling.
- C. Store material in weather protected space with temperature between 65 and 90 degrees F.

1.06 SITE CONDITIONS

- A. Maintain room and material temperature between 65 degrees F. and 90 degrees F. for at least 48 hours before, during, and 48 hours after installation. Maintain a minimum 65 degrees F. thereafter. Painting shall be completed, air-conditioning operational, and exterior thresholds installed.

1.07 WARRANTY

- A. Limited One (1) Year Manufacturers Warranty and Limited (10) Year Commercial Wear Warranty.
- B. Installer shall warrant in writing to correct conditions due to faulty installation or replace defective materials after project completion.

PART 2 PRODUCTS

2.01 MATERIALS

- A. Luxury Vinyl Tile (LVT):
 - 1. Manufacturers:
 - a. [Procedo Flooring \(Sylvanna Click Flooring\)](#)
www.procedoflooring.com
 - b. [Toli International \(Lightwood\)](#) – www.toli.com
 - c. [Halo Floors \(Woods\)](#) – www.cbcflooring.com

2. Basis of Design – Procedeo Flooring –Slyvanna Click Flooring.
 3. 7.25 inches x 48 inches x .200-inch, natural wood look
 4. Color and Pattern: To be Selected by A/E. Provide patterns and colors by manufacturer.
- B. Accessories:
1. Metal Transition (edge) Thresholds: Pemko #173A, Pemko #174C, or accepted equivalent.
 2. Tile Adhesive: Non-toxic, waterproof, stabilized type as recommended by resilient tile flooring manufacturer, complying with EPA requirements.
 3. Sub-floor Filler/Underlayment: Cementitious based or white pre-mix latex underlayment; type recommended by flooring manufacturer.
 - a. Latex and powder shall be from the same manufacturer, and as recommended by the manufacturer.
 4. Primers and Adhesives: Waterproof; types recommended by flooring manufacturer.
 5. Sealer and Wax: Types recommended by flooring manufacturer.

PART 3 EXECUTION

3.01 INSPECTION

- A. Do not proceed with the work of this section until conditions detrimental to the proper and timely completion off the work have been corrected in an acceptable manner.
- B. Verify that sub-floor surfaces are smooth and flat within tolerances are ready to receive resilient flooring.
- C. Verify that wall surfaces are smooth and flat within tolerances specified in Section 09250, are dust-free, and are ready to receive resilient base.
- D. Verify that sub-floor surfaces are dust-free, and free of substances which would impair bonding of adhesive materials to sub-floor surfaces.
- E. Verify that concrete sub-floor surfaces are ready for resilient flooring installation by testing for moisture emission rate and alkalinity in accordance with ASTM F 710; obtain instructions if test results are not within limits recommended by resilient flooring manufacturer and adhesive materials manufacturer.
- F. Verify that required floor-mounted utilities are in correct location.

3.02 PREPARATION

- A. Comply with ASTM F 710, manufacturer's recommendations, and as specified for surface preparation.
- B. Concrete shall be smooth, flat, and level, with maximum surface variations not exceeding **1/8-inch in a 10-foot radius**.
 1. Remove sub-floor ridges and bumps; grind down ridges and other irregularities.
 2. Fill cracks, holes, and depressions with Sub-floor Filler/Underlayment as recommended by the flooring manufacturer.

- C. Seal concrete slabs to receive interlocking rubber flooring.
- D. Remove paint, oils, bond breakers, waxes, and sealers from surface. Inorganic solvents are not to be used.
- E. Moisture Tests:
 - 1. Determine whether the concrete slab is adequately dry for resilient flooring installation.
 - 2. Test concrete slabs in new construction or existing slabs on grade for manufacturer's allowable moisture content by one of the following:
 - a. The protimeter electrical conductivity survey master moisture test instrument.
 - b. Calcium chloride test.

3.03 INSTALLATION

- A. Lay interlocking rubber flooring over sealed concrete floor without adhesives.
- C. Layout:
 - 1. Butt tightly to vertical surfaces, thresholds, nosings, and edges.
 - 2. Scribe, as necessary, around obstructions to produce neat joints, laid tight, even, and straight.
 - 3. Extend flooring into toe spaces, door reveals, into closets, and similar openings.
 - 4. Install border tiles next to walls of not less than one half tile and of approximately equal size around the perimeter of the room.
- D. Fill surface imperfections such as cracks, depressions, or rough areas with underlayment.
 - 1. Provide ventilation in areas where adhesive is being used. When natural ventilation is inadequate, use safety-spark-proof fans and prohibit smoking.
- E. Transition (Edge) Strips:
 - 1. Install metal transition (edge) thresholds with concrete screws at 6 inches o.c. wherever exposed edges of resilient flooring materials occur.
 - 2. Where resilient flooring stops at doorways, set transition thresholds directly under the door in its closed position.

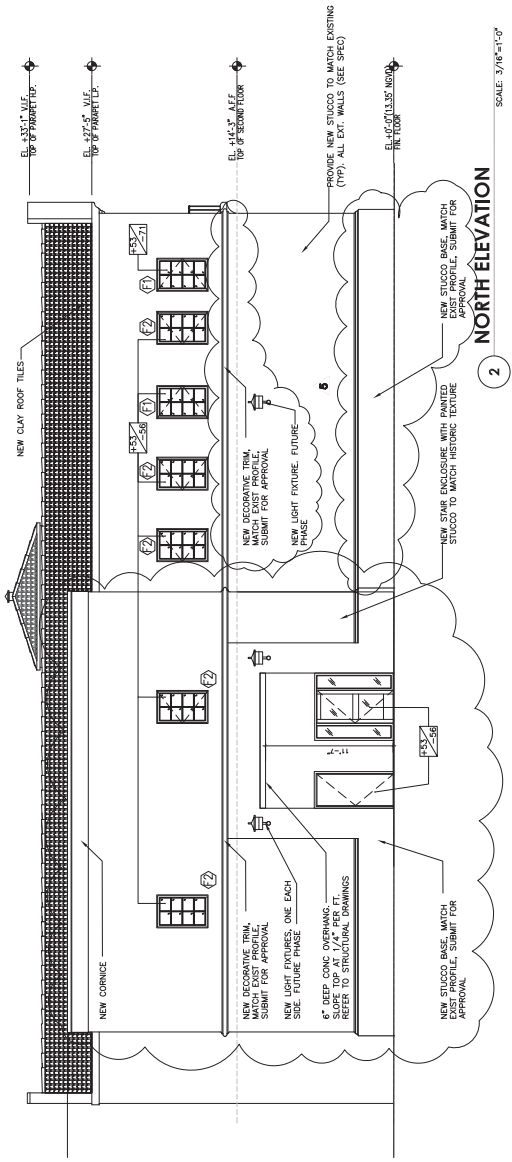
3.04 CLEANING AND PROTECTION

- A. Remove other soiling from floors and adjacent surfaces, using neutral type cleaners as recommended by resilient flooring manufacturer.
 - 1. Do not use acids or other caustic solutions as cleaning agents.
- B. Before allowing traffic, protect installed flooring from damage by covering with clean, heavy duty building paper from time of cleaning until all work in the area is complete.

END OF SECTION

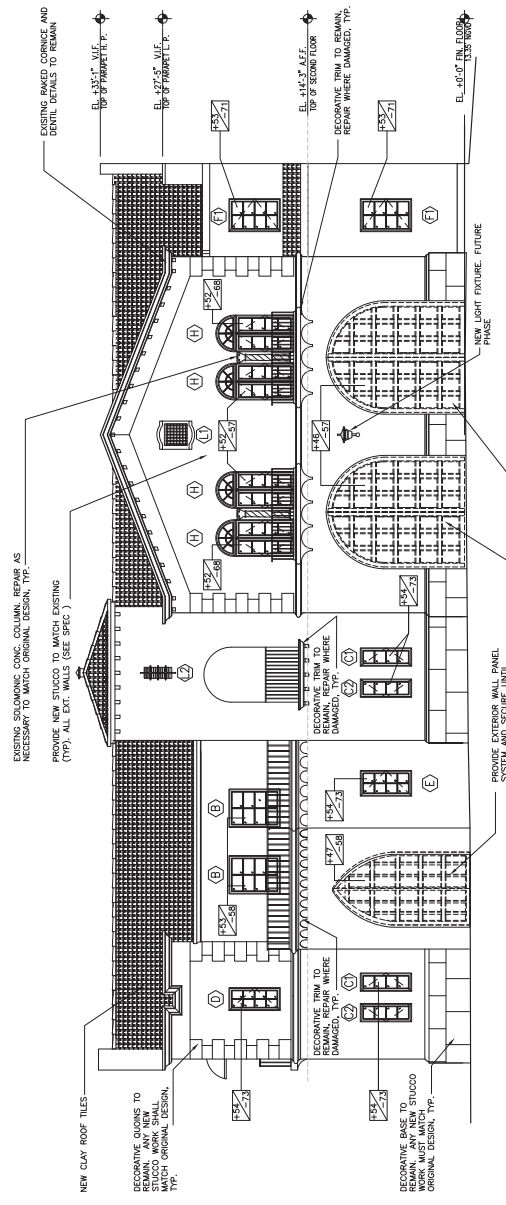
For Reference Only

| |
|--|
| <p>GENERAL STUCCO NOTES:</p> <p>1. ALL DAMAGED EXISTING STUCCO TO BE REMOVED. NEW STUCCO TO BE APPLIED TO MATCH EXISTING. WHERE STUCCO IS NOT REMOVED, THE JOINT OF NEW & EXISTING STUCCO SHALL MATCH ORIGINAL.</p> |
| <p>DRAWN BY: _____</p> <p>CHECK BY: _____</p> <p>APPROVED BY: _____</p> <p>ISSUE DATE: 16 NOV 2009</p> <p>REVISION DATE: _____</p> <p>DATE: _____</p> |
| <p>1-20-2010</p> <p>4-16-2010</p> <p>1-28-2011</p> <p>5-23-2011</p> |
| <p>MICHAEL ASSOCIATES</p> <p>1000 BAYVIEW BLVD., SUITE 1000</p> <p>MIAMI, FL 33134</p> |
| <p>DATE: 7/9/2009</p> <p>BY: JAM</p> <p>NO: 008079</p> |



2 NORTH ELEVATION

SCALE: 3/16"=1'-0"



1 SOUTH ELEVATION

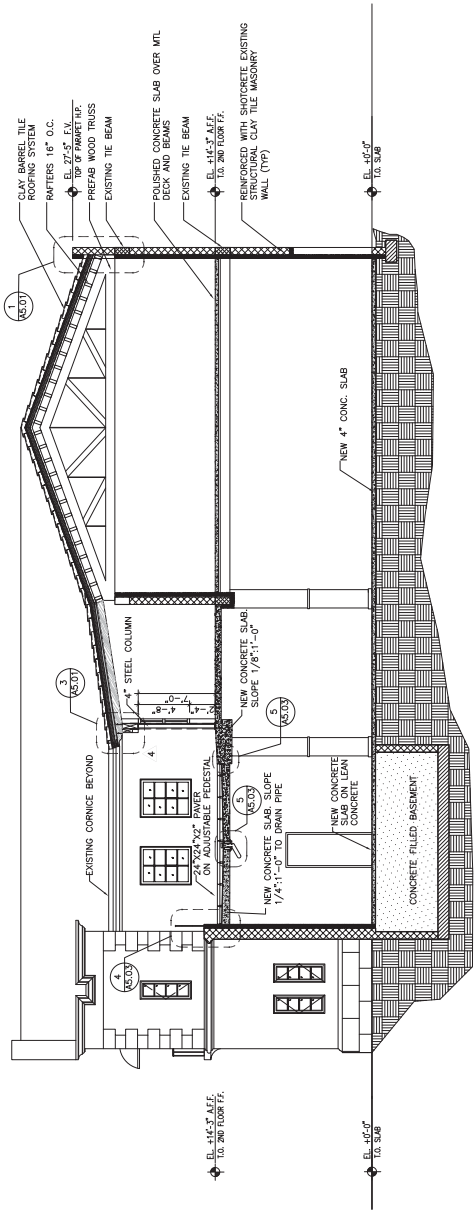
SCALE: 3/16"=1'-0"

| | |
|---|---|
| <p>CONSTRUCTION DOCUMENTS PHASE 2A</p> | <p>A6.01</p> |
| <p>DRAWING TITLE: EXTERIOR ELEVATIONS</p> | <p>SHEET NO. _____</p> |
| <p>PROJECT TITLE: FIRE STATION NO. 2</p> | <p>OWNER: CITY OF MIAMI</p> |
| <p>101 NORTH MIAMI AVENUE</p> <p>MIAMI, FLORIDA 33134</p> | <p>SCALE: 3/16" = 1'-0"</p> <p>AT THE BOTTOM PROCEEDING WITH WORK</p> |
| <p>ROOF REPLACEMENT & ASSOCIATED STRUCTURAL REPAIRS</p> | <p>DATE: 7/9/2009</p> |

For Reference Only

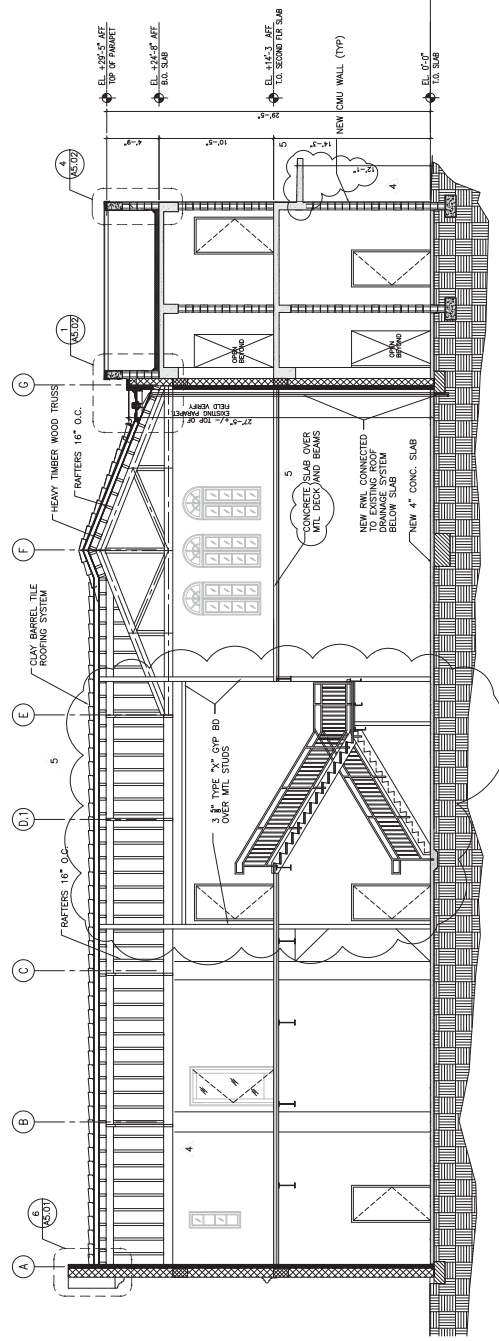
| | | | |
|--|--|---|--|
| DRAWING TITLE: FIRE STATION NO. 2 ROOF REPLACEMENT & ASSOCIATED STRUCTURAL REPAIRS | | PROJECT TITLE: CITY OF MIAMI | |
| DRAWINGS TITLE: BUILDING SECTIONS | | SCALE: 1/4" = 1'-0" <small>NOTE: DIMENSIONS SHALL MEASURE TO THE CENTERLINE UNLESS OTHERWISE NOTED</small> | |
| SHEET NO.: A7.01 | | SHEET NO.: 3 | |

| | | | |
|---|--|---|---|
| DRAWN BY: CHKD BY: APPO BY: ISSUE DATE: REVISED DATE: NEW DATE: BID SET - JUNE 2010 JAN 26, 2011 5-25, 2011 | MICHAEL ASSOCIATES 1000 BAYVIEW BLVD., SUITE 1000 MIAMI, FL 33134 PH: 305.575.1100 WWW.MICHAEL.COM | JAMF 7/9/2011 10/2/11 10/2/11 10/2/11 10/2/11 | 1401 NORTH MIAMI AVENUE MIAMI, FLORIDA 33134 |
|---|--|---|---|



2 BUILDING SECTION

SCALE: 3/16" = 1'-0"



1 BUILDING SECTION

SCALE: 3/16" = 1'-0"