

SECTION 096519 - RESILIENT TILE FLOORING**PART 1 - GENERAL****1.1 RELATED DOCUMENTS**

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section Includes:
 - 1. Solid vinyl floor tile (Luxury Vinyl Tile or LVT)
 - 2. Extruded aluminum tile accessories.
- B. Related Requirements:
 - 1. Section 096513 "Resilient Wall Base and Accessories" for resilient wall base and accessories installed with resilient tile.

1.3 ACTION SUBMITTALS

- A. Product Data: For each type of product.
- B. Shop Drawings: For each type of floor tile. Include floor tile layouts, edges, columns, doorways, enclosing partitions, built-in furniture, cabinets, and cutouts.
 - 1. Show details of special patterns.
- C. Samples for Initial Selection: For each type of floor tile indicated.

1.4 INFORMATIONAL SUBMITTALS

- A. Qualification Data: For Installer.

1.5 CLOSEOUT SUBMITTALS

- A. Maintenance Data: For each type of floor tile to include in maintenance manuals.

1.6 MAINTENANCE MATERIAL SUBMITTALS

- A. Furnish extra materials that match products installed and that are packaged with protective covering for storage and identified with labels describing contents.
 - 1. Floor Tile: Furnish one box for every 50 boxes or fraction thereof, of each type, color, and pattern of floor tile installed.

1.7 QUALITY ASSURANCE

- A. Installer Qualifications: A qualified installer who employs workers for this Project who are competent in techniques required by manufacturer for floor tile installation and seaming method indicated.
 - 1. Engage an installer who employs workers for this Project who are trained or certified by floor tile manufacturer for installation techniques required.

1.8 DELIVERY, STORAGE, AND HANDLING

- A. Store floor tile and installation materials in dry spaces protected from the weather, with ambient temperatures maintained within range recommended by manufacturer, but not less than 50 deg F or more than 90 deg F. Store floor tiles on flat surfaces.

1.9 FIELD CONDITIONS

- A. Maintain ambient temperatures within range recommended by manufacturer, but not less than 70 deg F or more than 95 deg F, in spaces to receive floor tile during the following time periods:
 - 1. 48 hours before installation.
 - 2. During installation.
 - 3. 48 hours after installation.
- B. After installation and until Substantial Completion, maintain ambient temperatures within range recommended by manufacturer, but not less than 55 deg F or more than 95 deg F.
- C. Close spaces to traffic during floor tile installation.
- D. Close spaces to traffic for 48 hours after floor tile installation.
- E. Install floor tile after other finishing operations, including painting, have been completed.

PART 2 - PRODUCTS

2.1 SOLID VINYL FLOOR TILE (Luxury Vinyl Tile)

- A. Manufacturer: See Finish Schedule for manufacturer and types of each floor tile required.
- B. Tile Standard: ASTM F 1700.
 - 1. Class: Class III (printed film vinyl tile)
 - 2. Type: Type B (embossed surface).
- C. Thickness: See published specifications from tile manufacturer for overall thickness including backing and wear layer(s).
- D. Size: As indicated on Finish Schedule.
- E. Colors and Patterns: As indicated on Finish Schedule

2.2 INSTALLATION MATERIALS

- A. Trowelable Leveling and Patching Compounds: Latex-modified, portland cement based or blended hydraulic-cement-based formulation provided or approved by floor tile manufacturer for applications indicated.
- B. Adhesives: Water-resistant type recommended by floor tile and adhesive manufacturers to suit floor tile and substrate conditions indicated.
 - 1. Adhesives for Textured Solid Vinyl Tile: Provide only those adhesives recommended by tile manufacturer for applicable substrates. NO SUBSTITUTIONS.

2.3 ACCESSORIES

- A. Stair Nosings: Where indicated, provide extruded aluminum profiles designed to protect the exposed edges of solid vinyl floor tile used for the tread and riser finish.
 - 1. Manufacturer: Provide stair nosings by Schluter Systems L.P., 194 Pleasant Ridge Road.; Plattsburgh, NY 12901-5841; 800-472-4588
 - 2. Product: Schluter-VINPRO-STEP: Stair Nosing profile with flat exposed vertical face and, 7/16 inch (11 mm) wide ribbed squared exposed top surface and integrated perforated tapered anchoring leg.
 - a. Profile Height: As required to coordinate with tile selection and setting system.
 - b. Finish: Brushed Chrome Anodized.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine substrates, with Installer present, for compliance with requirements for maximum moisture content and other conditions affecting performance of the Work.
 - 1. Verify that finishes of substrates comply with tolerances and other requirements specified in other Sections and that substrates are free of cracks, ridges, depressions, scale, and foreign deposits that might interfere with adhesion of floor tile.
- B. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 PREPARATION

- A. Prepare substrates according to floor tile manufacturer's written instructions to ensure adhesion of resilient products.
- B. Concrete Subfloors: Verify that concrete slabs comply with ASTM F 710 and the following:
 - 1. Slab substrates are dry and free of curing compounds, sealers, hardeners, and other materials that may interfere with adhesive bond. Determine adhesion and dryness characteristics by performing bond and moisture tests recommended by resilient tile manufacturer.
 - 2. Subfloor finishes comply with requirements specified in Section 033000 "Cast-in-Place Concrete" for slabs receiving resilient tile.
 - 3. Subfloors are free of cracks, ridges, depressions, scale, and foreign deposits.
 - 4. Moisture Test Methods: A moisture test is essential on all concrete floors. Two methods are recognized. ASTM F 1869 (calcium chloride test) or ASTM F 2170 (relative humidity). Care should be taken to follow proper testing procedures for both to insure accuracy. Testing should be performed in several areas including the perimeter of the room, at columns, and wherever else moisture might occur. The moisture level from the concrete should not exceed 6.0 lbs./1000 sq. ft. (CC) or 75% relative humidity in a 24 hour time period. If the concrete exceeds the moisture limitations, the installation should not proceed until the problem is corrected. After remediation, always retest to ensure that the problem has been corrected.
 - 5. PH Test: Ph levels are important. Concrete slab shall have a ph level not to exceed 9.0 before, during, and after installation.
- C. Fill cracks, holes, and depressions in substrates with trowelable leveling and patching compound; remove bumps and ridges to produce a uniform and smooth substrate.
- D. Do not install floor tiles until they are the same temperature as the space where they are to be installed.
 - 1. At least 48 hours in advance of installation, move resilient floor tile and installation materials into spaces where they will be installed.
- E. Immediately before installation, sweep and vacuum clean substrates to be covered by resilient floor tile.

3.3 FLOOR TILE INSTALLATION

- A. Comply with manufacturer's written instructions for installing floor tile.
- B. Lay out floor tiles from center marks established with principal walls, discounting minor offsets, so tiles at opposite edges of room are of equal width. Adjust as necessary to avoid using cut widths that equal less than one-half tile at perimeter.
 - 1. Lay tiles square with room axis except where special floor patterns are indicated which might preclude a room axis orientation.
- C. Match floor tiles for color and pattern by selecting tiles from cartons in the same sequence as manufactured and packaged, if so numbered. Discard broken, cracked, chipped, or deformed tiles.
 - 1. Solid Vinyl Tile: Pre-blend tile before installation begins. Lay tiles in pattern as shown and recommended by manufacture to achieve designs indicated.

- D. Scribe, cut, and fit floor tiles to butt neatly and tightly to vertical surfaces and permanent fixtures including built-in furniture, cabinets, pipes, outlets, and door frames.
- E. Extend floor tiles into toe spaces, door reveals, closets, and similar openings. Extend floor tiles to center of door openings.
- F. Maintain reference markers, holes, and openings that are in place or marked for future cutting by repeating on floor tiles as marked on substrates. Use chalk or other nonpermanent marking device.
- G. Adhere floor tiles to flooring substrates using a full spread of adhesive applied to substrate to produce a completed installation without open cracks, voids, raising and puckering at joints, telegraphing of adhesive spreader marks, and other surface imperfections.

3.4 CLEANING AND PROTECTION

- A. Comply with manufacturer's written instructions for cleaning and protecting floor tile.
- B. Protect floor tile from mars, marks, indentations, and other damage from construction operations and placement of equipment and fixtures during remainder of construction period.
- C. Cover floor tile until Substantial Completion.

END OF SECTION 096519