

SECTION 09660 – Static Control Flooring

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. This Section includes the following:
 - 1. Free-lay conductive vinyl laminate tile.
- B. Related Sections include the following:
 - 1. Reference Division 9 for Flooring.
 - 2. Reference Division 9 for wall base and accessories installed with specialty resilient flooring.
 - 3. Reference Division 9 for resilient tile or sheet flooring installed in areas other than specialty resilient activity spaces.

1.3 PERFORMANCE REQUIREMENTS

- A. Static Coefficient of Friction: Provide products with the following values as determined by testing identical products per ASTM C 2047 for level surfaces.:
 - 1. Minimum of 0.65.
- B. Americans with Disabilities Act (ADA): Whether indicated or not, the products specified herein must comply with Americans with Disabilities Act Guidelines (ADAG).
- C. Recycled Content: Minimum 20%
- D. Performance Characteristics: Provide tiles that meet the following:
 - 1. Electrical Resistance: 2.5×10^4 to 1.0×10^6 Ohms for Conductive; 1.0×10^6 to 1.0×10^9 Ohms for Dissipative (ESD S7.1)
 - 2. Electrostatic Propensity: <10 volts Conductive; <30 volts Dissipative (ESD STM 97.2)
 - 3. Static Decay: <0.01 seconds Conductive; <0.02 seconds Dissipative (ESD Method 4046)
 - 4. Abrasion Resistance: Less than 0.4 grams (0.9%) at 1000 cycles using a 500 gram H-18 wheel (ASTM D-3389)
 - 5. Shore A Hardness of 88 Shore A (+/- 5) per ASTM D-2240.
 - 6. Meets Standard Specification for Solid Vinyl Tile ASTM F-1700, (except as to size, thickness and squareness, which standards are specific to a 12" x 12" VCT Tile)
 - 7. Critical Radiant Flux Classification (ASTM E648): Meets Standard for Class I Fire Rating
 - 8. Solvent/Stain Resistance: Comply with ASTM F-925-96.

1.4 SUBMITTALS

- A. Product Data: Provide product data for each type of product indicated.
- B. Shop Drawings: Provide shop drawings indicating installation details including border tiles, floor patterns made by varying colors of tiles, layout, colors, widths, and dimensions of game lines, and locations of athletic equipment floor inserts.
- C. Samples: Submit samples for each type, color, and pattern of flooring indicated, 6-inch- (150-mm-) square samples of same thickness and material indicated for the Work.
- D. Maintenance Data: Submit maintenance data for each type of flooring indicated to include in maintenance manuals specified in Division 1.
- E. Tile Test reports: Indicated and interpret test results for compliance of special-purpose tile with specified requirements.

1.5 QUALITY ASSURANCE

- A. Product Characteristics: Flooring tiles shall be made from a minimum of 20 percent recycled materials.
- B. Source Limitations: Obtain each type, color, and pattern of product specified from one source with resources to provide products of consistent quality in appearance and physical properties without delaying the Work.
- C. Fire- Test-Response Characteristics: Provide products with a Class I critical radiant flux classification, as determined by testing identical products per ASTM E 648 by an independent testing and inspecting agency acceptable to authorities having jurisdiction.
- D. Mockups: Before installing tiles, install mockups to demonstrate aesthetic effects and qualities of materials and execution. Install mockups to comply with the following requirements, using materials indicated for the completed Work:
 - 1. Install mockups in the location and of the size indicated or, if not indicated, as directed by Architect.
 - 2. Notify Architect seven days in advance of dates and times when mockups will be installed.
 - 3. Demonstrate the proposed range of aesthetic effects and workmanship.
 - 4. Obtain Architect's approval of mockups before starting work.
 - 5. Approved mockups may become part of the completed Work if undamaged at time of Substantial Completion.

1.6 DELIVERY, STORAGE, AND HANDLING

- A. Deliver materials in original packages and containers, with seals unbroken, bearing manufacturer's labels indicating brand name and directions for storing.
- B. Store materials to prevent deterioration. Store tiles on flat surfaces.
- C. Move products into spaces where they will be installed at least 48 hours before installation, unless a longer conditioning period is recommended in writing by the tile manufacturer. Do not in-

stall products until they are at the same temperature as the space where they are to be installed.

1.7 PROJECT CONDITIONS

- A. Install products after other finishing operations, including painting, are completed.
- B. Provide as follows:
 - 1. Maintain a temperature of not less than 70 degrees F (21degree C) or more than 85 degrees F (29 degrees C) in installation spaces for at least 48 hours before installation, during installation, and for at least 48 hours after installation, unless manufacturer's written recommendations specify longer time periods. After post-installation period, maintain a temperature of not less than 65 degrees F (18 degrees C) or more than 85 degree F (29 degree C).

1.8 EXTRA MATERIALS

- A. Furnish extra materials described below that match products installed and that are packaged with protective covering for storage and identified with labels describing contents.
 - 1. Furnish not less than 1 box for each 50 boxes or fraction thereof, of each type, color, pattern, and size of tile flooring installed.
 - 2. Deliver extra materials to Owner.

PART 2 - PRODUCTS

2.1 SPECIALTY RESILIENT FLOOR TILE

- A. Product: Subject to compliance with requirements, provide the following:
 - 1. "FreeStyle ESD™" as manufactured by SelecTech, Inc. (877-738-4537).
- B. Material: Recycled composite fiber reinforced vinyl.
- C. Style: Solid surface.
- D. Installation Method: Free lay.
- E. Size: 18.5 inches (470 mm) square (nominal).
- F. Thickness: 0.34 inch (8.6 mm).
- G. Weight: Not less than 5.4 pounds (2.4 kg) per tile.
- H. Color and Pattern as selected by the Architect.
 - 1. Off White
 - 2. Platinum
 - 3. Steel Blue
 - 4. Gray

2.2 ACCESSORIES

- A. Trowelable Leveling and Patching Compound: Latex-modified, hydraulic-cement-based formulation approved by flooring manufacturer.
- B. Transitions for floor surface to subfloor, as required, available from flooring manufacturer

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine substrates, areas, and conditions where installation of products will occur, with Installer present, for compliance with manufacturer's requirements. Verify that substrates and conditions are satisfactory for flooring installation and comply with requirements.
- B. Concrete Substrates: Verify that concrete slabs comply with ASTM F 710 and the following:
 - 1. Slab substrates are dry and cured.
 - 2. Substrates are free of cracks, ridges, depressions greater than 1/8"
- C. Wood Subfloor Substrates: Verify the following:
 - 1. Underlayment over subfloor complies with requirements specified in Division 6 Section "Rough Carpentry."
 - 2. Underlayment surface is free of irregularities that may show through surface.
- D. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 PREPARATION

- A. Use trowelable leveling and patching compounds, according to manufacturer's written instructions, to fill cracks, holes, and depressions in substrates.
- B. Broom and vacuum clean substrates to be covered immediately before product installation. After cleaning, examine substrates for moisture, alkaline salts, carbonation, or dust. Proceed with installation only after unsatisfactory conditions have been corrected.
- C. Scrape existing adhesives off the existing floor substrate.

3.3 FLOORING INSTALLATION, GENERAL

- A. Ensure that floor tiles have been fully acclimated prior to installation.
- B. Begin installation rows from corner of room per manufacturer's instructions
- C. Extend floor coverings into toe spaces, door reveals, closets, and similar openings, unless otherwise indicated.

- D. Maintain reference markers, holes, and openings that are in place or marked for future cutting by repeating subfloor markings on finish flooring. Use nonpermanent, non-staining marking device.
- E. Whether indicated or not, provide a minimum of a 3/8-inch gap around the perimeter of the flooring tiles to allow for expansion and contraction.

3.4 TILE INSTALLATION

- A. Lay out tiles from corner of room per manufacturer's instructions.
 - 1. Ignoring minor wall offsets, lay out so tiles at opposite edges of room are of equal width. Adjust as necessary to avoid using cut widths narrower than one-third of a tile at perimeter.
 - 2. Lay tiles as follows room axis, unless otherwise indicated.

Square with the room axis.
- B. Match tiles for color and pattern by selecting them from cartons of the same batch and mixing tiles as recommended in writing by manufacturer.
- C. Ground Floor every 1,000 sq. ft. for concrete or wood subfloor, every 3,000 sq. ft. for access floor, using manufacturers grounding kit and instructions.

3.5 CLEANING AND PROTECTING

- A. Perform the following operations immediately after installing flooring products:
 - 1. Sweep and vacuum floor thoroughly.
 - 2. Do not wash floor until after waiting period recommended in writing by flooring manufacturer.
 - 3. Damp mop floor to remove marks and soil using method and cleaner recommended in writing by flooring manufacturer.
 - 4. Seal floor with an acrylic floor finish using method and sealer recommended in writing by flooring manufacturer.
- B. Protect flooring against mars, marks, indentations, and other damage from construction operations and placement of equipment and fixtures during remainder of construction period. Use protection methods indicated or recommended in writing by flooring manufacturer.
 - 1. Do not move heavy or sharp objects directly over floor surfaces. Place plywood or hard-board panels over flooring and under objects while they are being moved. Slide or roll objects over panels without moving panels.

END OF SECTION 09660