

## SECTION 09650 – RESILIENT 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. Interlocking, static dissipative/conductive, adhesive-free vinyl tile (SelectTile ESD™).
- B. Related Sections include the following:
  - 1. Reference Division 9 for "Wood –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. Performance Characteristics: Provide tiles that meet the following:
  - 1. Abrasion Resistance: Less than 0.4 grams (0.9%) at 1000 cycles using a 500 gram H-18 wheel (ASTM D-3389).
  - 2. Shore A Hardness of 93 (+/- 5) per ASTM D-2240.
  - 3. Meets Federal Specification SS-T-321B for Type III flooring.
  - 4. Critical Radiant Flux Classification: Not less than 0.22 W/sq. cm., per ASTM E 648
  - 5. Solvent/Stain Resistance: Comply with ASTM F-925-96.
  - 6. Resistance
    - a. For Static Dissipative Tiles – Resistance of  $1 \times 10^6$  to  $1 \times 10^9$  Ohms.
    - b. For Conductive Tiles – Resistance of  $2.5 \times 10^4$  to  $1 \times 10^6$ .

#### 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, and pattern of flooring indicated, 5.5-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. Source Limitations: Obtain each type 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.
- B. 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.
- C. 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 per manufacturers instructions.
- 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 install 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 65 degree F (21degree C) or more than 95 degree F (35 degree 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 55 degree F (13 degree C) or more than 95 degree F (35 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 RESILIENT FLOOR TILE

A. Product: Subject to compliance with requirements, provide the following:

1. "SelecTile ESD™" as manufactured by SelecTech, Inc. (877-738-4537).

B. Material: Static Dissipative/Conductive Vinyl Composite

C. Style: Solid surface.

D. Installation Method: Free lay with visible interlock.

E. Surface Texture: **[Smooth] [Raised Disk] [Raised Diamond]**.

F. Size: 24 inches (610 mm) square (nominal).

G. Thickness: 1/4 inch (6.4 mm).

H. Weight: Not less than 6 pounds (2.72 kg) per tile.

2.2 ACCESSORIES

A. Border Tiles: Interlocking, beveled tiles that transition from the face of flooring surface to the surface below it with a straight outside edge and for use where flooring corners and edges do not abut vertical surfaces.

B. Trowelable Leveling and Patching Compound: Latex-modified, hydraulic-cement-based formulation approved by flooring manufacturer.

C. Barrier Coating: Provide "Nu-Flor #500" as manufactured by W.F. Taylor or an approved equal by the 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, scale, and foreign deposits
- 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, or stain floor covering.
- 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 and seal with barrier coating

### 3.3 FLOORING INSTALLATION, GENERAL

- A. Mix tiles from several boxes to avoid adverse color variations in the final installation. Open several boxes at one time to ensure that color variations do not occur in one area.
- B. Scribe, cut, and fit flooring to butt neatly and tightly to vertical surfaces, equipment anchors, floor outlets, and other interruptions of floor surface. Review manufacturers instructions for circumstances in which greater space may be recommended.
- 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 center marks established with principal walls.
  - 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-half of a tile at perimeter.
  - 2. Lay tiles as follows room axis, unless otherwise indicated.
    - Square with the room axis.
    - At a 45 degree angle.
    - At indicated.

### 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.
- 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 hardboard panels over flooring and under objects while they are being moved. Slide or roll objects over panels without moving panels.

END OF SECTION 09650