

## SECTION 09651 – Resilient Tile Flooring

### PART 1 - GENERAL

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.
2. SUMMARY
  - A. This Section includes the following:
    1. Interlocking, molded, modular vinyl 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.
3. PERFORMANCE REQUIREMENTS
  - A. Static Coefficient of Friction: Provide products per ASTM D 2047 for level surfaces.
  - B. Americans with Disabilities Act (ADA): Whether indicated or not, the products specified herein must comply with Americans with Disabilities Act Guidelines (ADAG) 302 Floor or Ground Surfaces
  - C. OSHA's General Requirements for Walking & Working Surfaces.
  - D. Recycled Content: Minimum 70%
  - E. Performance Characteristics: Provide tiles that meet the following:
    1. ASTM F-1700, Standard Specification for Solid Vinyl Tile 2020 Class II Type A or B, (except as to size, thickness and squareness, which standards are specific to a 12" x 12" VCT Tile)
    2. ASTM F-970 Static Load Resistance – meets requirements.
    3. ASTM E 648 Critical Radiant Flux: >0.45 watts/cm<sup>2</sup> – Pass – Class 1
    4. ASTM E 662 Smoke Density: ≤ 450 – Pass
    5. ASTM D 2047 Static Coefficient of Friction: Meets OSHA and ADA requirements.
    6. ASTM D-3389 – Abrasion Resistance: Less than 0.1 grams at 1000 cycles using a 500-gram H-18 wheel.
    7. ASTM D-2240 – Shore A Hardness of 86 (+/- 5) per.
    8. ASTM F-925. – Solvent/Stain Resistance: Complies
    9. SEFA Chemical Resistance Testing – 24 hour - Excellent
    10. Meets California Protocol 1350 for VOC emissions - California Dept. of Public Health Standard Method v1.2
    11. Meets LEED v4.1 ID+C, BD+C – low emitting floor systems
    12. Meets (CHPS) 2019 Core Criteria 3.0 EQ C6.1.2 – low emitting material – classroom and private office.

#### 4. SUBMITTALS

- A. Product Data: Provide product data for each type of product indicated.
- B. Shop Drawings: Provide shop drawings indicating installation details including floor patterns made by varying colors of tiles, layout details, colors, border widths, locations and sizes of floor inserts and a seam diagram.
- 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 manufacturer's recommended maintenance data for each type of flooring indicated to include in maintenance manuals specified in Division 1.

#### 5. QUALITY ASSURANCE

- A. Product Characteristics: Interlocking floor tiles shall be made from a minimum of 70 (Seventy) percent recycled materials.
- B. Seams: Interlocking floor tiles shall use a hidden vertical interlock resulting in a monolithic floor appearance. Openly visible jigsaw puzzle edge interlocks or dovetail interlocks are not acceptable.
- C. 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. Products manufactured by the same manufacturer in the same production runs are preferred.
- D. 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.
- E. Mockups: Before installing tiles, install mockups to demonstrate aesthetic effects, qualities of materials and project 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 when the material is ready to be installed in a mockup.
  - 3. Obtain Architect's approval of mockups before starting work.
  - 4. Demonstrate the proposed range of aesthetic effects, electrical performance and workmanship.
  - 5. Approved mockups may become part of the completed Work if undamaged at time of Substantial Completion.

#### 6. DELIVERY, STORAGE, AND HANDLING

- A. Deliver materials in original packages and containers, with seals unbroken, bearing manufacturer's labels indicating brand name, lot numbers 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 install products until they are at the same temperature as the space where they are to be installed.

7. PROJECT CONDITIONS

- A. Install products after other interior finishing operations, including painting, are complete.
- B. Provide as follows:
  - 1. Maintain a temperature of not less than 70 degrees F (21degrees C) or more than 85 degrees F (35 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 55 degrees F (13 degrees C) or more than 95 degrees F (35 degrees C).

8. EXTRA MATERIALS

- A. Furnish extra materials described below that match products installed and 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 labeled as Extra Materials.

PART 2 - PRODUCTS

2.1. SPECIALTY INTERLOCKING MODULAR FLOOR TILE

- A. Product: Subject to compliance with requirements, provide the following:
  - 1. "FreeStyle BioLock " Hammered surface as manufactured in the USA by SelecTech, Inc. [www.freestyleflooring.com](http://www.freestyleflooring.com). Phone: (877-738-4537).
    - a. Material: Virgin and recycled vinyl.
    - b. Style: Solid surface.
    - c. Gloss Level – Semi Gloss
    - d. Surface – Commercial Grade UV Cured Polyurethane Coating
    - e. Installation Method: Interlocking - Monolithic
    - f. Size: 18.5 inches (470 mm) square (nominal).
    - g. Thickness: 0.34 inch (8.6 mm).
    - h. Weight: Not less than 5.1 pounds (2.3 kg) per tile.
    - i. Color and Pattern as selected by the Architect. **(Note to Architect: Select color as needed. Delete unwanted items.)**

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|----|------|----|------|
| 1) | C201 | 4) | C208 |
| 2) | C206 | 5) | C210 |
| 3) | C207 | 6) | C211 |

2.2. ACCESSORIES

- A. Trowelable Leveling and Patching Compound: Latex-modified, hydraulic-cement-based formulation approved by flooring manufacturer.
- B. Transitions: Use transitions and edging as recommended by the flooring manufacturer.
- C. Liquid Tight Seam Sealer – as recommended and supplied by flooring manufacturer.
- D. Rubber Sanitary Toe Wall Base – as recommended by the flooring manufacturer.

## PART 3 - EXECUTION

### 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.

### 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.

### 3. FLOORING INSTALLATION, GENERAL

- A. Install in accordance with manufacturer's instructions and warranty conditions and to meet specified performance requirements.
- B. Scribe, cut, and fit flooring to butt neatly and tightly to vertical surfaces, equipment anchors, floor outlets, and other interruptions of floor surface.
- 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.

### 4. TILE INSTALLATION

- A. Lay out tiles from squared guidelines established with principal walls at one corner of the room.
  - 1. Ignoring minor wall offsets, lay out so tiles at opposite edges of room are of equal tile widths. Adjust as necessary to avoid using cut widths narrower than one-third of a tile at perimeter.
  - 2. Lay tiles as follows, unless otherwise indicated.
    - a. Begin in a corner with top interlocks facing the corner and bottom interlocks facing the open room area,

- b. Align the tiles square with the room axis.
    - c. Install in a pyramid fashion
  - 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.
  
- 5. CLEANING AND PROTECTING
  - A. Perform the following operations immediately after installing flooring products:
    - 1. Sweep and vacuum floor thoroughly.
    - 2. The floor can be cleaned immediately after installation.
    - 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 (optional). This is not required for floors with polyurethane coatings.
  
  - B. Throughout the project and until completion, protect flooring against soil, stains, construction debris, marks, indentations, and other damage from construction operations and placement of furniture, equipment and fixtures during the 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 on protective panels without moving panels.
    - 2. To avoid unnecessary damage to your floor, use legs, glides, casters and wheels designed for use on resilient flooring, (not carpet), on your furniture, fixtures and equipment.
    - 3. Use protective pads or coverings on the legs and glides of furniture fixtures and equipment to prevent them from scratching the floor.

END OF SECTION 09651