## SECTION 09650 RESILIENT FLOORING

# PART 1 GENERAL

### 1.1 SECTION INCLUDES:

- A. Resilient tile flooring
- B. Resilient base
- C. Resilient stair nosing, treads, risers and skirting

#### 1.2 REFERENCES

- A. ASTM E84 Standard Test Method for the Surface Burning Characteristics of Building Materials
- B. ASTM F1066 Vinyl Composition Floor Tile, Composition 1, Class 2 through pattern
- C. FS L-F-1641 Floor Covering, Translucent or Transparent Vinyl Surface, with Backing
- D. FS L-F-475 Floor Covering, Vinyl Surface (Tile), with Backing
- E. FS RR-T-650 Treads, Metallic and Non-metallic, Non-skid.
- F. FS SS-W-40 Wall Base: Rubber and Vinyl Plastic.

# 1.3 SUBMITTALS

- A. Submit under provisions of Section 01300.
- B. Shop Drawings: Indicate seaming plan, borders and patterns.
- C. Product data: Provide data on specified products, describing physical and performance characteristics; sizes, patterns and colors available.
- D. Samples: Submit two samples 12" x 12" in size illustrating color and pattern for each floor material for each color specified.
- E. Submit two 12" long samples of base and stair material for each color specified.
- F. Manufacturer's Installation Instructions: Indicate special procedures, perimeter conditions requiring special attention.

#### 1.4 REGULATORY REQUIREMENTS

A. Conform to applicable code for flame/smoke rating requirements.

#### 1.5 DELIVERY, STORAGE, AND HANDLING

- A. Deliver, store, protect and handle products to site under provisions of Section 01600.
- B. Protect roll materials from damage by storing on end.

#### 1.6 ENVIRONMENTAL REQUIREMENTS

- A. Store materials 3-days prior to installation in area of installation to achieve temperature stability.
- B. Maintain ambient temperature required by adhesive manufacturer 3-days prior to, during, and 24 hours after installation of materials.

# 1.7 MAINTENANCE DATA

A. Submit under provisions of Section 01700.

B. Maintenance Date: Include maintenance procedures, recommended maintenance materials, and suggested schedule for cleaning, stripping, and re-waxing.

# PART 2 PRODUCTS

### 2.1 MATERIALS - TILE FLOORING

- A. Vinyl Composition Tile (VCT): ASTM F1066; Class 2
  - 1. Thickness: <sup>1</sup>/<sub>8</sub>".
  - 2. Design: marbleized.
- B. Rubber Tile: FS ASTM F 1344, Type II; Class B
  - 1. Minimum Thickness: 3/16".
  - 2. Design: flat.
- C. Feature Strips: Of same material as tile.
- D. LEED qualifying materials will be considered on an individual basis, verify with the Florida Tech Project Representative.

#### 2.2 MATERIALS - STAIR COVERING

- A. Stair Treads: FS RR-T-650, Composition A, Type II, full width and depth of stair tread in one piece; return down edge of tread with tapered thickness.
  - 1. Material: rubber.
  - 2. Thickness:  $\frac{1}{4}$ ".
  - 3. Pattern: raised.
  - 4. Design: smooth nosing.
- B. Stair Risers: Maintain height and length in one piece:
  - 1. Sheet Material: rubber.
  - 2. Thickness: <sup>1</sup>/<sub>8</sub>".
- C. Stair Nosing: 2<sup>5</sup>/<sub>8</sub>" horizontal return, 1<sup>3</sup>/<sub>8</sub>" return down edge of tread, full width of stair tread in one piece:
  - 1. Material: rubber.
  - 2. Thickness: 3/16".
  - 3. Pattern: smooth.
- D. Stair Skirting: Maintain width sufficient to provide 2" above stair nose, measured perpendicular to stair slope:
  - 1. Sheet Material: rubber.
  - 2. Thickness: <sup>1</sup>/<sub>8</sub>".
  - 3. Pattern: smooth.

#### 2.3 MATERIALS - BASE

- A. Base: FS SS-W-40, Type I, top set coved or toeless; formed external corners:
  - 1. Material: Rubber.
  - 2. Height: 4".
  - 3. Thickness:  $\frac{1}{8}$ " thick.
  - 4. Length: Roll.
- B. Base Accessories: Pre-molded end stops of same material, size and color as base.

# 2.4 ACCESSORIES

- A. Sub-floor Filler: Portland cement-based latex underlayment; type recommended by the flooring manufacturer.
- B. Primers and Adhesives: Waterproof; types recommended by flooring manufacturer.
- C. Edge Strips: Flooring material.
- D. Sealer and Wax: Types recommended by flooring manufacturer. Coordinate with the Florida Tech Janitorial Contractor for product compatibility.
  - 1. Sealer and wax applied shall meet or exceed the ADAAG slip resistance coefficient of 0.6 on static surfaces and 0.8 on ramps, and submit documentation to the Architect and Owner.

# PART 3 EXECUTION

# 3.1 EXAMINATION

- A. Verify concrete floors are dry to maximum moisture content of 7%, and exhibit negative alkalinity, carbonization, or dusting, follow manufacturer's instructions. Perform tests for calcium chloride and PH should be performed to verify that calcium chloride is less than 5 pounds/1,000 square feet and that the PH is greater than 5, but less than 9. Provide documentation of test results to the Florida Tech Project Representative.
- B. Verify floor and lower wall surfaces are free of substances that may impair adhesion of new adhesive and finish materials.

# 3.2 PREPARATION

- A. Remove sub-floor ridges and bumps. Fill minor or local low spots, cracks, joints, holes, and other defects with sub-floor filler to achieve smooth, flat, hard surface.
- B. Prohibit traffic until filler is cured.
- C. Scrape all and any materials and debris from concrete surface before installing any finish floor tile or sheets goods.
- D. Vacuum clean substrate
- 3.3 INSTALLATION TILE FLOORING
  - A. Install in accordance with manufacturer's instructions.
  - B. Mix tile from container to ensure shade variations are consistent when tile is placed.
  - C. Spread only enough adhesive to permit installation of materials before initial set.
  - D. Set flooring in place; press with heavy roller to attain full adhesion.
  - E. Lay flooring with joints and seams parallel to building lines to produce symmetrical tile pattern.
  - F. Install tile to selected pattern. Allow minimum 1/2 full size tile width at room or area perimeter.
  - G. Terminate flooring at centerline of door openings where adjacent floor finish is dissimilar.
  - H. Install resilient edge strips at unprotected or exposed edges and where flooring terminates.
  - I. Scribe flooring to walls, columns, cabinets, floor outlets and other appurtenances to produce tight joints.
  - J. Install flooring in pan type floor access covers. Maintain floor patterns.
  - K. At movable partitions, install flooring under partitions without interrupting floor pattern.
  - L. Install feature strips, edge strips and floor markings where indicated. Fit joints tightly.

#### 3.4 INSTALLATION - BASE

A. Fit joints tight and vertical. Maintain minimum measurement of 18" between joints.

- B. Miter internal corners. At external corners, 'V' cut back of base strip to 2/3 of its thickness and fold. At exposed ends, use pre-molded units.
- C. Install base on solid backing. Bond tight to wall and floor surfaces.
- D. Scribe and fit to doorframes and other interruptions.
- 3.5 INSTALLATION STAIR COVERING
  - A. Install stair nosing, stair treads and stair risers in one piece for full width and depth of tread.
  - B. Install stair skirting configured tight to stair and stringer profile.
  - C. Adhere over entire surface. Fit accurately and securely.

# 3.6 CLEANING

- A. Clean work under provisions of 01700.
- B. Remove excess adhesive from floor, base and wall surfaces without damage.
- C. Clean, seal and wax floor and base surfaces in accordance with manufacturer's instructions. Apply a minimum of 2-coats of acrylic polish at installation. Apply, prior to final acceptance, 4 additional coats of polish. Coordinate with Florida Tech Janitorial Contractor for product compatibility and application rate.

# 3.7 PROTECTION OF FINISHED WORK

- A. Protect finished work.
- B. Prohibit traffic on floor finish for 48 hours after installation.

# END OF SECTION