

096500 - RESILIENT FLOORING

SECTION 096500

RESILIENT FLOORING

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Resilient tile flooring.
- B. Resilient base.
- C. Resilient stair accessories.
- D. Resilient moldings, transition and edge strips
- E. Installation accessories.

1.02 RELATED REQUIREMENTS

- A. Section 090561 - Common Work Results for Flooring Preparation: Removal of existing floor coverings, cleaning, and preparation.

1.03 REFERENCE STANDARDS

- A. ASTM E648 - Standard Test Method for Critical Radiant Flux of Floor-Covering Systems Using a Radiant Heat Energy Source; 2023.
- B. ASTM F150 - Standard Test Method for Electrical Resistance of Conductive and Static Dissipative Resilient Flooring; 2006 (Reapproved 2018).
- C. ASTM F1700 - Standard Specification for Solid Vinyl Floor Tile; 2020.
- D. ASTM F1861 - Standard Specification for Resilient Wall Base; 2021.

1.04 SUBMITTALS

- A. Product Data: Provide data on specified products, describing physical and performance characteristics; including sizes, patterns and colors available; and installation instructions.
- B. Shop Drawings: Indicate floor patterns
- C. Selection Samples: Submit manufacturer's complete set of color samples for Owners selection.
- D. Verification Samples: Submit 1 full size sample, illustrating color and pattern for each resilient flooring product specified.
- E. Certification: Prior to installation of flooring, submit written certification by flooring manufacturer and adhesive manufacturer that condition of subfloor is acceptable. F. Installer's Qualification Statement.
- G. Maintenance Data: Include maintenance procedures, recommended maintenance materials, and suggested schedule for cleaning, stripping, and re-waxing.
- H. Maintenance Materials: Furnish the following for Owner's use in maintenance of project.
 - 1. See Section 016000 - Product Requirements, for additional provisions.
 - 2. Extra Flooring Material: 2 boxes of each type and color or as specified by owner per project
 - 3. Extra Wall Base: 1 roll, 100 linear feet of each type and color.

1.05 QUALITY ASSURANCE

- A. Installer Qualifications: Company specializing in installing specified flooring with minimum five
(5) years documented experience.

1.06 DELIVERY, STORAGE, AND HANDLING

- A. Upon receipt, immediately remove any shrink-wrap and check materials for damage and the correct style, color, quantity and run numbers.
B. Store all materials off of the floor in an acclimatized, weather-tight space.
C. Maintain temperature in storage area between 55 degrees F and 90 degrees F. D. Protect roll materials from damage by storing on end
E. Do not double stack pallets.

1.07 FIELD CONDITIONS

- A. Store materials for not less than 48 hours prior to installation in area of installation at a temperature of 70 degrees F to achieve temperature stability. Thereafter, maintain conditions above 55 degrees degrees F.
- ## F. PART 2 PRODUCTS

2.01 TILE FLOORING

- A. Vinyl Tile: Solid vinyl with color and pattern throughout thickness OR Printed film type, with transparent or translucent wear layer.
1. Manufacturers:
 - a. Armstrong Flooring
 - b. Johnsonite, a Tarkett Company
 - c. Mannington Commercial
 - d. Interface
 - e. Substitutions: Any substitutions must be submitted to owner for review and approval.
 2. Minimum Requirements: Comply with ASTM F1700, of Class III, Type B corresponding to type specified.
 3. Critical Radiant Flux (CRF): Class I, not less than 0.45 watt per square centimeter, when tested in accordance with ASTM E648 or NFPA 253
 4. Mold and Microbial Resistance: Highly resistant when tested in accordance with ASTM D6329
 5. VOC Content Limits: As specified in Section 016116.
 6. Plank or Square Tile size based on standard manufacturer offerings.
 7. Wear Layer Thickness: 30 mil (0.76 mm) minimum
 8. Total Thickness: 0.098" (2.5mm)
 9. Pattern: As indicated on drawing or as selected by owner from manufacturer's full and standard range.
 10. Color: As indicated on drawing or as selected by owner from manufacturer's full and standard range
- B. Vinyl Composition Tile: Homogeneous, with color extending throughout thickness; 1.
Manufacturers:

- a. Armstrong Flooring; Excelon SDT; ; Premium Excelon Crown Texture; ; Premium Excelon Feature Tile; ; Premium Excelon Stonetex; ; Safety Zone Tile; ; Standard Excelon Imperial Texture
 - b. Johnsonite, a Tarkett Company
- 2. Minimum Requirements: Comply with ASTM F1066, of Class corresponding to type specified.
- 3. Critical Radiant Flux (CRF): Minimum 0.45 watt per square centimeter, when tested in accordance with ASTM E648;
- 4. Size: << 12 by 12 inch; or rectangular tile
- 5. VOC Content Limits: As specified in Section 016116.
- 6. Thickness: 0.125 inch
- 7. Pattern: To be selected by Owner from Manufacturer's standard range 8. Color: To be selected by Owner

2.02 RESILIENT BASE

- A. Resilient Base Type TV, vinyl, thermoplastic or Type TP, rubber, thermoplastic; Cove
 - 1. Manufacturers: Single manufacturer for resilient wall base moldings, transitions and edge strips.
 - a. Flexco Corporation
 - b. Johnsonite, a Tarkett Company
 - c. Mannington Commercial
 - d. Roppe Corporation
 - e. Substitutions: Provide substitutions along with full product data to owner for review.
 - 2. Style: Cove
 - 3. Height: 4 inches or as required to match adjacent existing conditions
 - 4. Thickness: 0.125 inch 5. Finish: Satin
 - 6. Length: Roll.
 - 7. Color: To be selected by Owner from manufacturer's full; standard range.

2.03 ACCESSORIES

- A. Primers and Adhesives: Waterproof; types recommended by flooring manufacturer.
- B. Adhesive for << Vinyl; Rubber; and _____>> Flooring:
- C. Moldings, Transition and Edge Strips:
 - 1. Manufacturers:
 - a. Johnsonite, a Tarkett Company
 - b. Mannington Commercial
 - c. Schluter-Systems
 - 2. Products Profiles and Dimensions: Provide transitional moldings accessories as required for ADA and for finishing installed product. Applications include but are not limited to the following:
 - a. Transition Strips
 - b. Nosings for carpet or resilient flooring
- D. Sealer and Wax: Types recommended by flooring manufacturer.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Verify that surfaces are flat to tolerances acceptable to flooring manufacturer, free of cracks that might telegraph through flooring, clean, dry, and free of curing compounds, surface hardeners, and other chemicals that might interfere with bonding of flooring to substrate.
- B. Verify that wall surfaces are smooth and flat within the tolerances specified for that type of work, are dust-free, and are ready to receive resilient base.
- C. Cementitious Subfloor Surfaces: Verify that substrates are ready for resilient flooring installation by testing for moisture and alkalinity (pH).
 - 1. Test in accordance with Section 090561.
 - 2. Obtain instructions if test results are not within limits recommended by resilient flooring manufacturer and adhesive materials manufacturer.
 - 3. Follow moisture and alkalinity remediation procedures in Section 090561.
- D. Verify that required floor-mounted utilities are in correct location.

3.02 PREPARATION

- A. Remove existing resilient flooring and flooring adhesives; follow the recommendations of RFCI (RWP).
- B. Prepare floor substrates for installation of flooring in accordance with Section 090561.
- C. Prepare floor substrates as recommended by flooring and adhesive manufacturers.
- D. Remove subfloor ridges and bumps. Fill minor low spots, cracks, joints, holes, and other defects with subfloor filler to achieve smooth, flat, hard surface.
- E. Prohibit traffic until filler is fully cured.
- F. Clean substrate.

3.03 INSTALLATION - GENERAL

- A. Starting installation constitutes acceptance of subfloor conditions.
- B. Install in accordance with manufacturer's written instructions.
- C. Adhesive-Applied Installation:
 - 1. Spread only enough adhesive to permit installation of materials before initial set.
 - 2. Place copper grounding strip in conductive adhesive and apply additional adhesive to top side of strip before installing static control flooring. Allow strip to extend beyond flooring in accordance with static control flooring manufacturer's instructions. Refer to Section 260526 for grounding and bonding to building grounding system.
 - 3. Fit joints and butt seams tightly.
 - 4. Set flooring in place, press with heavy roller to attain full adhesion.
- D. Loose-Laid Installation: Set flooring in place in accordance with manufacturer's instructions.
- E. Where type of floor finish, pattern, or color are different on opposite sides of door, terminate flooring under centerline of door.
- F. Install edge strips at unprotected or exposed edges, where flooring terminates, and where indicated.
 - 1. Metal Strips: Attach to substrate before installation of flooring using stainless steel screws.
 - 2. Resilient Strips: Attach to substrate using adhesive.
- G. Scribe flooring to walls, columns, cabinets, floor outlets, and other appurtenances to produce tight joints.
- H. Install flooring in recessed floor access covers, maintaining floor pattern.

- I. At movable partitions, install flooring under partitions without interrupting floor pattern.

3.04 INSTALLATION - TILE FLOORING

- A. Mix tile from container to ensure shade variations are consistent when tile is placed, unless otherwise indicated in manufacturer's installation instructions.
- B. Lay flooring with joints and seams parallel to building lines to produce symmetrical pattern.
- C. Install square tile to ashlar pattern, or other, as determined by Owner. Allow minimum 1/2 full size tile width at room or area perimeter.
- D. Install plank tile with a random offset from adjacent rows.

3.05 INSTALLATION - RESILIENT BASE

- A. Comply with manufacturer's written instructions for installing resilient base.
- B. Fit joints tightly and make vertical.
- C. Install resilient base in lengths as long as practical without gaps at seams and with tops of adjacent pieces aligned
- D. Apply resilient base to walls, columns, pilasters, casework and cabinet in toe spaces and other permanent fixtures where base is required.
- E. Miter internal corners. At external corners 'V' cut back of base strip to 2/3 of its thickness and fold or use premolded units- preferred.
- F. Install base on solid backing. Bond tightly to wall and floor surfaces.
- G. Scribe and fit to door frames and other interruptions.
- H. Do not stretch resilient base during installation

3.06 CLEANING

- A. Remove excess adhesive from floor, base, and wall surfaces without damage.
- B. Clean in accordance with manufacturer's written instructions.

3.07 PROTECTION

- A. Prohibit traffic on resilient flooring for 48 hours after installation.

END OF SECTION