

PART I GENERAL

1.01 RELATED DOCUMENTS

- A. Drawings and general provisions of the Agreement, including General and Supplementary Conditions, and Division 01 of the Project Manual, apply to work of this Section.

1.02 SUMMARY

- A. This Section includes the following:
 - 1. Vinyl Composition Tile (VCT).
 - 2. Static Dissipative Tile (SDT)
 - 3. Transition Strips.
 - 4. Related Accessories.
- B. Related Sections: The following Sections contain requirements that relate to this Section:
 - 1. Section 033000 - Cast-In-Place Concrete
 - 2. Section 090561.13 - Moisture Vapor Emission Control
 - 3. Section 096513 - Resilient Base and Accessories
 - 4. Section 096513.23 - Resilient Stair Treads
 - 5. Section 096519.23 - Luxury Vinyl Tile

1.03 STANDARDS

- A. All work of this section shall conform to industry standards and/or manufacturer's recommendations.
- B. Resilient Floor Covering Institute (RFCI) Handbook.
- C. ASTM F710 "Standard Practice for Preparing Concrete Floors to Receive Resilient Flooring".
- D. ASTM F1066 "Standard Specification for Vinyl Composition Floor Tile".

1.04 SUBMITTALS

- A. Pursuant to Section 013300 - Submittal Procedures.
- B. Pursuant to Section 016000 – Product Requirements
- C. Product Data: Manufacturer's technical data for each type of resilient flooring and accessory.
- D. Samples for Initial Selection Purpose: Manufacturer's standard and custom color charts in form of actual sections of resilient flooring, including accessories, showing full range of colors and patterns available for each type of resilient and rubber flooring required. The Architect shall select the colors, patterns, and textures from the manufacturer's complete range of standard and custom colors.
- E. Maintenance Instructions: Submit two (2) Copies of manufacturer's recommended maintenance practices for each type of resilient flooring and accessory provided.
- F. LEED Submittals:
 - 1. Credit MR 4.1 and MR 4.2: Provide documentation indicating how the requirements of Credit MR 4.1 and MR 4.2 will be met.
 - a. List of proposed materials with recycled content. Indicate post-consumer recycled content and pre-consumer recycled content for each product having recycled content.

- b. Product data and certification letter indicating percentages by weight of post-consumer and pre-consumer recycled content for products having recycled content.
- 2. Credit EQ 4.1: Provide manufacturer's product data for installation adhesives, including printed statement of VOC content.

1.05 QUALITY ASSURANCE

- A. Experienced workers familiar with the work and according to manufacturers' recommendations and/or industry standards shall perform all work of this section.
- B. Provide each type of resilient flooring and accessories as produced by a single manufacturer, including recommended primers, adhesive, sealants, and leveling compounds.

1.06 PRODUCT DELIVERY, STORAGE AND HANDLING

- A. Pursuant to manufacturers published instructions.
- B. Protect against moisture exposure and damage.
- C. Store and install only where space temperatures are within resilient materials manufacturer's specified range. Thereafter, maintain resilient materials manufacturer's specified environmental conditions.

1.07 PROJECT CONDITIONS

- A. Maintain minimum temperature of 65-degrees F in spaces to receive resilient flooring for at least 48 hours prior to installation, during installation, and for not less than 48 hours after installation. Store resilient flooring materials in spaces where they will be installed for at least 48 hours before beginning installation. Maintain minimum temperature of 55 degrees F in areas where work is completed.
- B. Install resilient flooring and accessories after other finishing operations, including painting, have been completed. Do not install resilient flooring over concrete slabs until the installation of the moisture vapor emission control membrane is complete.

1.08 MANDATORY TESTING

- A. Hardened concrete to receive resilient flooring shall be tested using anhydrous calcium chloride test for measurement of vapor emissions.
 - 1. Three (3) tests shall be required for initial 2,000 sq. ft. and one (1) additional test for each 1,000 sq. ft. of floor over 2,000 sq. ft.
 - 2. All tests must be done simultaneously.
 - 3. Resilient flooring shall not be installed unless tests meet or exceed manufacturer's recommendations for their adhesive and flooring.
 - 4. Test must be performed by an independent testing agency.
 - 5. Testing agency shall supply three (3) copies of test results to the Architect.

1.09 EXTRA MATERIALS

- A. Furnish extra materials from same production run as products installed.
- B. Contractor shall furnish a summary of the quantity of each color and tile size installed.
- C. Furnish an extra 3% of each tile type, shape, size, gloss, and color in clean, clearly marked containers for Owner's use.

PART 2 PRODUCTS

2.01 TILE, VINYL COMPOSITION

- A. Acceptable Manufacturers
 - 1. Armstrong World Industries, Inc. (Basis of Specification)
 - 2. Johnsonite
 - 3. Tarkett
 - 4. Architect approved equivalent.
- B. Provide Imperial® Texture Standard EXCELON® Tile Flooring manufactured by Armstrong World Industries, Inc., having a nominal total thickness of 1/8"/0.125in., 12" x 12", composed of polyvinyl chloride resin binder, plasticizers, fillers, and pigments with colors and texture dispersed uniformly throughout its thickness. Vinyl composition tile shall conform to the requirements of ASTM F 1066, Class 2 - through pattern.
 - 1. Surface Design: Smooth.
 - 2. Field and Accent Colors: As selected by the Architect from manufacturer's full range of colors.
- C. Static Dissipative Tile (SDT™) Tile Flooring manufactured by Armstrong World Industries, Inc., in color selected from the range currently available from Armstrong World Industries, Inc., having nominal total thickness of 1/8", 12" x 12", composed of polyvinyl chloride resin binder, plasticizers, fillers, and pigments with colors and texture dispersed uniformly throughout its thickness. Vinyl composition tile shall meet size, thickness, indentation, impact, dimensional stability, resistance to chemicals, and squareness requirements of ASTM F 1066, Class 2 - through pattern.
 - 1. Surface Design: Smooth.
- D. Pattern, if any, shown on drawings.

2.02 ACCESSORY MATERIALS

- A. Adhesive: Resilient flooring manufacturers required for each product, substrate, and location; must meet manufacturer's warranty requirements.
- B. Leveling and Underlayment Compound:
 - 1. Where required- as recommended by the moisture vapor emission control manufacturer.
 - 2. Latex cementitious type as required by moisture emission control manufacturer. Minimum 28-day compressive strength: 4000-lb./sq. ft.
- C. Transition Strips
 - 1. ROPPE #22 Reducer Strip.
 - 2. ROPPE #195 Feature Strip.
 - 3. Colors as selected by Architect.

PART 3 EXECUTION

3.01 INSPECTION

- A. The Installer shall inspect subfloor surfaces to determine that they are satisfactory. A satisfactory subfloor surface is defined as one that is smooth and free from cracks, holes, and ridges. Coatings preventing adhesive bond, and other defects impair performance or appearance.

- B. Perform bond and moisture tests on concrete subfloors to determine if surfaces are sufficiently cured and dry as well to ascertain presence of curing compounds.
- C. Do not allow resilient flooring work to proceed until subfloor surfaces are satisfactory.

3.02 PREPARATION

- A. Test substrate to ensure proper dryness.
- B. Prepare subfloor surfaces as follows:
 - 1. Use leveling, and patching compounds as recommended by resilient flooring manufacturer for filling small cracks, holes, and depressions in subfloors. Maximum surface variation: 1/8-inch in 10-feet in any direction.
 - 2. Remove coatings from subfloor surfaces that would prevent adhesive bond, including curing compounds incompatible with resilient flooring adhesives, paint, oils, waxes and sealers.
- C. Vacuum surfaces to be covered and inspect floor.
- D. Apply vapor reduction membrane in accordance with Specification Section 090561.13 - Moisture Vapor Emission Control.

3.03 INSTALLATION

- A. Standards: Manufacturer's published instructions taking special care to avoid damaging the moisture vapor emission membrane and tape system.
- B. Lay tile and related materials so that fields or patterns center on areas, so that tile at opposite edges of room are of equal width.
 - 1. Adjust pattern that edge pieces are not less than 1/2 tile size.
 - 2. Lay tile square to room axis, unless otherwise shown.
- C. Match tiles for color and pattern by using tile from cartons in same sequence as manufactured and packaged, if so numbered.
- D. Lay materials true to line, level, and with tight joints. Scribe, cut, and tightly fit materials to and around permanent fixtures, equipment, pipes, and bases. Extend resilient flooring into toe spaces, door reveals, and into closets and similar openings.
 - 1. Lay tile with grain running in opposite directions.
- E. Tightly cement resilient flooring to subbase (using full spread of adhesive applied in compliance with flooring manufacturer's directions) without open cracks, voids, raising and puckering at joints, telegraphing of adhesive spreader marks, or other surface imperfections. Hand roll resilient flooring at perimeter of each covered area to assure adhesion.
- F. Maintain reference markers, holes, or openings that are in place or plainly marked for future cutting by repeating on finish flooring as marked on subfloor. Use chalk or other non-permanent marking device.
- G. After installation, remove excessive adhesive pursuant to resilient material manufacturer's published instructions.

3.04 INSTALLATION OF ACCESSORIES

- A. At SDT install copper grounding strips into adhesive in strict accordance with manufacturer's written instructions.
- B. Place resilient edge strips tightly butted to flooring and secure with adhesive. Install edging strips at edges of flooring which would otherwise be exposed and extends beyond.
- C. Do not install VCT after wall tile installation.
- D. Rubber Molding Accessories: Butt to adjacent materials and tightly adhere to substrates throughout length of each piece. Install reducer strips at edges of floor coverings that would otherwise be exposed.

3.05 CLEANING AND PROTECTION

- A. Sweep and vacuum tile surfaces thoroughly.
- B. Scrub the floor with a neutral detergent solution to remove black marks and excessive soil. Thoroughly rinse and allow to air dry. DO NOT wash floor until time period recommended by resilient flooring manufacturer and moisture vapor emission control manufacturer has elapsed to allow resilient flooring to become well sealed in adhesive.
- C. Remove any excess adhesive or other surface blemishes, using appropriate cleaner recommended by resilient flooring manufacturers.
- D. Apply three coats of a high-quality commercial floor polish. Follow manufacturer's printed instructions.
- E. Protect flooring against damage during construction period to comply with resilient flooring manufacturer's directions.
- F. Protect resilient flooring against damage from rolling loads for initial period following installation by covering with plywood or hardboard. Use dollies to move stationary equipment or furnishing across floors.
- G. Cover resilient flooring with un-dyed, untreated building paper until inspection for Substantial Completion.

END OF SECTION