

**SECTION 09 65 19
RUBBER TILE FLOORING**

PART 1 - GENERAL

1.1 DESCRIPTION

This section specifies the physical characteristics and installation of solid rubber tile flooring, and accessories.

1.2 RELATED WORK

- A. Color and pattern and location in room finish schedule: Section 09 06 00, SCHEDULE FOR FINISHES.
- B. Resilient Base: Section 09 65 13, RESILIENT BASE AND ACCESSORIES.

1.3 SUBMITTALS

- A. Submit in accordance with Section 01 33 23, SHOP DRAWINGS, PRODUCT DATA, AND SAMPLES.
- B. Manufacturer's Literature and Data:
 - 1. Description of each product. Include full technical specifications with product testing results.
 - 2. Resilient material manufacturer's recommendations for adhesives, underlayment, and primers.
 - 3. Application and installation instructions.
 - 4. Maintenance Instructions.
 - 5. Product Warranty.
- C. Samples:
 - 1. Tile: 300 mm by 300 mm (12 inches by 12 inches) for each type, pattern and color.
 - 2. Edge and ADA Reducer Strips: 150 mm (6 inches) long, each type.
- D. Shop Drawings:
 - 1. Layout of patterns shown on the drawings and in Section 09 06 00, SCHEDULE FOR FINISHES.
 - 2. Edge and ADA reducer strip locations showing types and detail cross sections.
- E. Test Reports:
 - 1. Abrasion resistance: Depth of wear for each tile type and color and volume loss of tile, certified by independent laboratory. Tested per ASTM F510.
 - 2. Fire and Smoke Testing: Copies of fire (ASTM-E648) and smoke (ASTM-E662) testing by certified independent lab.
- F. Installer's Proof of Certification:
 - 1. Documentation of rubber tile manufacturer's certification of installer for requirements of this project or documentation of

certification in resilient flooring installation by INSTALL
(International Standards & Training Alliance).

1.4 DELIVERY

- A. Deliver materials to the site in original sealed packages or containers, clearly marked with the manufacturer's name or brand, type, pattern number and color, production run number and date of manufacture.
- B. Materials from containers which have been distorted, damaged or opened prior to installation will be rejected.
- C. Deliver materials in advance of installation to condition materials to the manufacturer's recommend temperature prior to installation.

1.5 STORAGE

- A. Store materials in weathertight and dry storage facility.
- B. Protect from damage from handling, water, temperature and construction operations.

1.6 APPLICABLE PUBLICATIONS

- A. The publications listed below form a part of this specification to the extent referenced. The publications are referenced in the text by the basic designation only.
- B. American Society for Testing and Materials (ASTM):
 - D4078-02 (2008).....Water Emulsion Floor Finish
 - E648-10.....Critical Radiant Flux of Floor Covering Systems
Using a Radiant Energy Source
 - E662-09.....Specific Optical Density of Smoke Generated by
Solid Materials
 - E1155-96 (R2008).....Determining Floor Flatness and Floor Levelness
Numbers
 - F510-93 (R 2008).....Resistance to Abrasion of Resilient Floor
Coverings Using an Abrader with a Grit Feed
Method
 - F710-08.....Preparing Concrete Floors to Receive Resilient
Flooring
 - F1344-10.....Rubber Floor Tile
- D. Federal Specifications (Fed. Spec.):
 - SS-T-312.....Tile Floor: Asphalt, Rubber, Vinyl and Vinyl
Composition

PART 2 - PRODUCTS

2.1 GENERAL

- A. Furnish product type, materials of the same production run and meeting following criteria.

- B. Use adhesives, underlayment, and primers recommended by the floor's resilient material manufacturer.
- C. Critical Radiant Flux: 0.45 watts per sq. cm or more, Class I, per ASTM E 648.
- D. Smoke density: Less than 450 per ASTM E662.

2.2 RUBBER TILE

- A. ASTM F1344, Class 1, homogenous rubber tile, B, through mottled, 610 mm (24 inches) square, 3 mm (1/8 inch) thick.
- B. To meet ASTM F1344-10's Table 1 Characteristics and Tests.
- C. Color and pattern uniformly distributed throughout tile.
- D. Smooth wearing surface base thickness 3 mm (.12") thick.
- E. Where rubber tile is used provide tiles with a minimum of 90% post consumer rubber.

2.3 ADHESIVES

- A. Comply with applicable regulations regarding toxic and hazardous materials Green Seal (GS-36) for commercial adhesive.
- B. Use low-VOC adhesive during installation. Water based is preferred over solvent based adhesives.

2.4 PRIMER (FOR CONCRETE SUBFLOORS)

As recommended by the adhesive and tile manufacturer.

2.5 LEVELING COMPOUND (FOR CONCRETE FLOORS)

- A. Provide cementitious products with latex or polyvinyl acetate resins in the mix. Product to include a moisture barrier.
- B. Determine the type of underlayment selected for use by the condition to be corrected.

2.8 CLEANERS AND SCRUBBER PADS

- A. Cleaners as recommended by floor tile manufacturer.
- B. Scrubber pads to be as specified by floor tile manufacturer.

2.9 EDGE AND REDUCER STRIPS

- A. Edge strips to be 28 mm (1-1/8 inch) wide unless shown otherwise.
- B. ADA Reducer strip: 2.5" to 4" wide, Rubber, ADA wheelchair compliant. Reducers to be designed to provide a smooth wheeled transition between flooring material heights on each side of reducer strip.

PART 3 - EXECUTION

3.1 PROJECT CONDITIONS

- A. Maintain temperature of materials a minimum of 22 °C (70 °F,) for 48 hours before installation.

- B. Maintain temperature of rooms where work occurs between 21 °C and 27 °C (70 °F and 80 °F), for at least 48 hours, before, during and after installation.
- C. Do not install flooring until building is permanently enclosed and wet construction in or near areas to receive tile materials is complete, dry and cured.

3.2 SUBFLOOR PREPARATION

- A. Verify that concrete slabs comply with ASTM F710. At existing slabs, determine levelness by F-number method in accordance with ASTM E1155. Overall value shall not exceed as follows:
FF30/FL20
- B. Correct conditions which will impair proper installation.
- C. Fill cracks, joints and other irregularities in concrete with leveling compound that contains a moisture barrier:
 - 1. Do not use adhesive for filling or leveling purposes.
 - 2. Do not use leveling compound to correct imperfections which can be corrected by spot grinding.
 - 3. Trowel to smooth surface free of trowel marks, pits, dents, protrusions, cracks or joints.
 - 4. Leveler with moisture barrier to have a minimum thickness of .010 inch.
- D. Clean floor of oil, paint, dust, and deleterious substances: Leave floor dry and cured free of residue from existing curing or cleaning agents.
- E. Concrete Subfloor Testing:
Determine Adhesion and dryness of the floor by bond and moisture tests as recommended by ASTM F710-08.
- F. Perform additional subfloor preparation to obtain satisfactory adherence of flooring if subfloor test patches allows easy removal of tile.
- G. Prime the concrete subfloor if the primer will seal slab conditions that would inhibit bonding, or if priming is recommended by the tile or adhesive manufacturers.
- H. Preparation of existing installation shall include the removal of existing resilient floor and existing adhesive. Do not use solvents to remove adhesives.

3.3 INSTALLATION

- A. Install in accordance with manufacturer's instructions for application and installation unless specified otherwise.
- B. Mix tile from at least two containers. An apparent line either of shades or pattern variance will not be accepted.
- C. Tile Layout:

1. If layout is not shown on drawings, lay tile symmetrically about center of room or space with joints aligned.
 2. No tile shall be less than 150 mm (6 inches) and of equal width at walls.
 3. Place tile pattern in the same direction; do not alternate tiles.
 4. Do not install tiles over building expansion joints.
- D. Trim tiles to touch for the length of intersections at pipes and vertical projections, seal joints at pipes with waterproof cement.
- F. Apply bead of clear silicone where tiles abut door frames and at tile edge under exterior door thresholds.
- E. Application:
1. Apply adhesive uniformly with no bare spots.
 - a. Conform to RFC1-TM-6 for joint tightness and for corner intersection unless layout pattern shows random corner intersection.
 - b. More than 5 percent of the joints not touching will not be accepted.
 2. Roll tile floor with a minimum 45 kg (100 pound) roller. No exceptions.
 3. The Resident Engineer may have test tiles removed to check for non-uniform adhesion, spotty adhesive coverage, and ease of removal. Install new tile for broken removed tile.
- F. Installation of Edge and ADA Reducer Strips:
1. Use an edge strip where two floorings of equal thickness abut.
 2. Use an ADA Reducer Strip between floorings of different thicknesses.
 3. Locate edge and ADA reducer strips under center line of doors unless otherwise shown.
 4. Set resilient edge and ADA reducer strips in adhesive per manufacturer recommendations to create a smooth transition.

3.4 CLEANING AND PROTECTION

- A. Clean adhesive marks on exposed surfaces during the application of resilient materials before the adhesive sets. Exposed adhesive is not acceptable.
- B. Keep traffic off resilient material for a minimum 72 hours after installation.
- C. Clean flooring materials installation:
1. Follow rubber tile manufacturer's recommended initial cleaning/maintenance instructions using recommended cleaning

equipment and materials. Work to take place a minimum of 72 hours after installation.

2. Do not apply wax or floor finisher to this product.

- D. When construction traffic occurs over tile, cover resilient materials with reinforced kraft paper properly secured and maintained until removal is directed by Resident Engineer. At entrances and where wheeled vehicles or carts are used, cover tile with plywood, hardboard, or particle board over paper, secured and maintained until removal is directed by Resident Engineer.
- E. When protective materials are removed and immediately prior to acceptance, replace any damage tile, re-clean resilient materials, and buff floors per manufacturer's maintenance instructions.

3.6 LOCATION

- A. Unless otherwise specified or shown, install tile flooring, on floor under areas where casework, laboratory and pharmacy furniture and other equipment occurs, except where mounted in wall recesses.
- B. Extend tile flooring for room into adjacent closets and alcoves.

3.7 ADDITIONAL MATERIALS FOR FUTURE REPAIRS

- A. Provide full size tile units equal to 3 percent of the total floor tiles purchased for each tile color as materials for future repairs. All product to be cartoned and labeled with manufacturer's name, product number, production run number, color and project name.
- B. Deliver to VA Interior Designer's designated storage area.

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