

SECTION 09650 - RESILIENT FLOORING**PART 1 - GENERAL****A. SUMMARY**

1. This Section includes the following:
 - a. Vinyl composition floor tile.
 - b. Plywood underlayment on plywood subfloors indicated to receive resilient floor tile. (Dining Room, Staff Apartment and Apartment 5 only).
 - c. Vinyl Wall Base.
 - d. Vinyl accessories.
 - e. Resilient Stair treads, and risers.

B. RELATED SECTIONS

1. Division 3, Concrete.
2. Division 6, Rough Carpentry.

C. SUBMITTALS

1. General: Submit samples for selection purposes in form of actual tiles or sections of tiles showing full range of colors and patterns available for each type of resilient floor tile indicated.

D. DELIVERY, STORAGE, AND HANDLING

1. Deliver tiles and installation accessories to Project site in original manufacturer's unopened cartons and containers each bearing names of product and manufacturer, Project identification, and shipping and handling instructions.
2. Store flooring materials in dry spaces protected from the weather with ambient temperatures maintained between 50 deg F (10 deg C) and 90 deg F (32 deg C).
3. Store tiles on flat surfaces. Move tiles and installation accessories into spaces where they will be installed at least 48 hours in advance of installation whenever possible.

E. PROJECT CONDITIONS

1. Maintain a minimum temperature of 70 deg F (21 deg C) in spaces to receive tiles for at least 48 hours prior to installation, during installation, and for not less than 48 hours after installation. After this period, maintain a temperature of not less than 55 deg F (13 deg C).
2. Do not install tiles until they are at the same temperature as the space where they are to be installed.
3. Close spaces to traffic during tile installation.

F. SEQUENCING AND SCHEDULING

1. Install tiles and accessories after other finishing operations, including ceiling replacement, have been completed.
2. Do not install tiles over concrete slabs until the slabs are sufficiently dry following abatement procedures to bond with adhesive as determined by tile manufacturer's recommended bond and moisture test.

G. COLORS

1. Architect will select from manufacturer's standard colors.
 - a. Rubber flooring: Architect will use one color for stair stringer, second color for tread, and third color for riser, from manufacturer's standard range of colors.

H. EXTRA MATERIALS

1. Deliver extra materials to Owner. Furnish extra materials described below that match products installed, are packaged with protective covering for storage, and are identified with appropriate labels.
 - a. Vinyl Composition Tile: Furnish quantity of full-size units equal to 2.0 percent of amount installed of each color and type of tile installed.

PART 2 PRODUCTS

A. MANUFACTURERS AND MATERIALS

1. Vinyl Composition Tile: Tarkett "Expressions", or approved equal.
 - a. Approved equal: Armstrong, Standard Excelon, Imperial Texture (1/8 inch gage); or equivalent series by Congoleum or Azrok.
 - b. Conforming to FS SS-T-312, Type IV, Composition I; marbled pattern; 12 x 12 inch size by 1/8" thick.
 - c. Color: Architect will select up to three (3) colors from manufacturer's full range.

2 RUBBER FLOOR TILE

- A. Rubber Floor Tile: ASTM F 1344.
 1. Norament 825C as manufactured by Nora Rubber Flooring, Freudenberg Building Systems, Inc.
 2. Burke Mercer Flooring Products.
 3. Roppe Corporation.
 - B. Class: I-A (homogeneous rubber tile, solid color).
 - C. Hardness: Manufacturer's standard hardness, measured using Shore, Type A durometer per ASTM D 2240.
 - D. Wearing Surface: Low profile disc or hammered at Dining room in pattern as indicated.
 - E. Thickness: 0.125 inch.
 - F. Size: 19.68 by 19.68 inches.
 - G. Fire-Test-Response Characteristics:
1. Critical Radiant Flux Classification: Class I, not less than 0.45 W/sq. cm per ASTM E 648.
 2. Underlayment: 1/4 inch thick x 4' x 4', B-C hardwood veneer plywood, void free, equal to "Superply" high performance underlayment panels.
 3. Vinyl Wall Base: Johnsonite, or approved equal.
 - a. Coved with standard toe; 1/8 inch gauge; 6 inches high, matte finish.
 - b. Color: Selected by the Architect from manufacturer's standard colors.
 - c. Prefabricated outside corners.
 4. Rubber Stair system:
 - a. Resilient Stair Treads: R. C. Musson Rubber Co., Johnson Rubber Co., Flexco Div., Burley Mercer, R.C.A. or approved Equal.
 - (1) Rubber: 1/8" molded nose: One piece full width and depth of stair tread; square safety design treads and tile, sand backs. Treads shall have black abrasive strip for visual impaired. Tread nosing shall match the acute angle of the stair riser/tread configuration as shown for a smooth application. Treads, risers and stringer skirting to be all by same manufacturer and a coordinated group of products.
 - (2) Tread/Riser: Johnsonite VIRTR-Rd with 2 inch grit strip, or equal.
 5. ACCESSORIES/ADHESIVES/SEALERS
 - a. Subfloor Filler: Silpro Speedtop, acrylic modified cement based patching and leveling material or equal, or as recommended by manufacturer. (Gypsum based products not acceptable).
 - b. Primers and Adhesives: Waterproof; low VOC; of types recommended by resilient material manufacturer for specific material.
 - c. Sealer and Wax: To match owners maintenance product line and as recommended by resilient flooring material manufacturer for material type and location. For the purposes of bidding, anticipate the use of the following:
 - (1) Base coats (2 coats): Butcher's "Iron Stone."

- (2) Finish coats (4 coats): Butchers "Benchmark."
- b. Edge guards and transitions: Extruded or molded heavy-duty vinyl of size and profile required and detailed. Accessories shall be two-piece where providing transition coverage from one type of finish flooring to another, with a minimum of 2-inch wide anchorage flange; provide items selected from manufacturer's full range of standard colors.

PART 3 - EXECUTION

A. EXAMINATION

1. General: Examine areas where installation will occur, with Installer present, to verify that substrates and conditions are satisfactory for tile installation and comply with tile manufacturer's requirements and those specified in this Section.
2. Concrete Subfloors: Verify that concrete slabs comply with ASTM F 710 and the following:
 - a. Slab substrates are dry and free of curing compounds, sealers, hardeners, and other materials whose presence would interfere with bonding of adhesive. Determine adhesion and dryness characteristics by performing bond and moisture tests recommended by tile manufacturer.
 - b. Slabs are free of cracks, ridges, depressions, scale, and foreign deposits of any kind.
3. Wood Subfloors:
 - a. Install underlayment in accordance with manufacturer's recommendations.
4. Walls: Verify that areas to receive vinyl base are smooth, and comply with manufacturer's recommendations.
5. Do not proceed with installation until unsatisfactory conditions have been corrected.

B. PREPARATION

1. General: Comply with manufacturer's installation specifications to prepare substrates indicated to receive tile.
2. Use trowelable leveling and patching compound specified, per tile manufacturer's directions to fill cracks, holes, and depressions in substrates.
3. Broom or vacuum clean substrates to be covered by tiles immediately before tile installation, if necessary. Following cleaning, examine substrates for moisture, alkaline salts, carbonation, or dust.
4. Remove coatings, including curing compounds, and other substances that are incompatible with flooring adhesives and that contain soap, wax, oil, or silicone, by using a drum sander, or a polishing machine equipped with a heavy-duty wire brush.
5. Apply concrete slab primer, if recommended by flooring manufacturer, prior to applying adhesive. Apply according to manufacturer's directions.

C. INSTALLATION

1. Resilient Tile:
 - a. General: Comply with tile manufacturer's installation directions and other requirements indicated that are applicable to each type of tile installation included in Project.
 - b. Lay out tiles from center marks established with principal walls, discounting minor offsets, so tiles at opposite edges of room are of equal width. Adjust as necessary to avoid using cut widths at perimeter that equal less than one-half of a tile. Install tiles square with room axis, unless otherwise indicated.
 - c. Match tiles for color and pattern by selecting tiles from cartons in same sequence as manufactured and packaged, if so numbered. Cut tiles neatly around all fixtures. Discard broken, cracked, chipped, or deformed tiles.
 - d. Lay tiles in basket weave pattern with grain direction alternating between, reversed in adjacent tiles.

- e. Scribe, cut, and fit tiles to butt tightly to vertical surfaces, permanent fixtures, built-in furniture including cabinets, pipes, outlets, edgings, thresholds, and nosings.
 - f. Extend tiles into under Kitchen appliances, toe spaces, door reveals, closets, and similar openings.
 - g. Extend tiles under Laundry appliances and counters.
 - h. 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 nonpermanent marking device.
 - i. Adhere tiles to flooring substrates without producing open cracks, voids, raising and puckering at joints, telegraphing of adhesive spreader marks, or other surface imperfections in completed tile installation.
 - j. Use full spread of adhesive applied to substrate in compliance with tile manufacturer's directions including those for trowel notching, adhesive mixing, and adhesive open and working times.
2. Base:
 - a. Fit joints tight and vertical. Maintain minimum measurement of 18 inches between joints.
 - b. Miter internal corners. Wrap outside corners with joints no closer than 12 inches from corner. Where not feasible to apply around corners use corner pieces.
 - c. Install base on solid backing. Adhere tightly to wall and floor surfaces. Exercise extreme care to apply adhesive over entire area and up to top edge, but not on the wall or floor areas not covered by base.
 - d. Scribe and fit to door frames and other obstructions.
 - e. Install straight and level to variation of plus or minus 1/8 inch over 10 feet.
 2. Stair Tread System:
 - a. Install stair treads and risers, one piece for full width of tread
 - b. Adhere over entire surface and fit accurately and securely.
 - c. Fit tread nosing firmly against step nosing. Fill all gaps with epoxy caulking compound.
- I. CLEANING AND PROTECTION
1. Perform the following operations immediately after completing installation:
 - a. Remove visible adhesive and other surface blemishes using cleaner recommended by tile manufacturers.
 - b. Sweep or vacuum floor thoroughly.
 - c. Do not wash floor until after time period recommended by resilient floor tile manufacturer.
 - d. Damp-mop tile to remove black marks and soil.
 - e. Protect flooring against mars, marks, indentations, and other damage during remainder of installation period. Use protection methods indicated or recommended by tile manufacturer.
 2. Do not move heavy and sharp objects directly over tiles. Place plywood or hardboard panels over tiles and under objects while they are being moved. Slide or roll objects over panels without moving panels.
 3. Resilient Tile:
 - a. Seal tiles with 2 coats of specified sealer not less than 4 days prior to dates scheduled for inspections intended to establish date of Substantial Completion in each area of Project.
 - b. Top coat and burnish floor tile with specified product, applied as recommended by manufacturer, immediately after sealer has reached adequate cure/dryness.

END OF SECTION 09650