### **SECTION 09650 - RESILIENT FLOORING**

### City of San Diego, CWP Guidelines

#### PART 1 -- GENERAL

- 1.1 WORK OF THIS SECTION
  - A. The WORK of this Section includes providing resilient flooring and appurtenances, complete.
- 1.2 RELATED SECTIONS
  - A. The WORK of the following Sections applies to the WORK of this Section. Other Sections of the Specifications, not referenced below, shall also apply to the extent required for proper performance of this WORK.
    - 1. Section 03300 Cast-in-Place Structural Concrete
- 1.3 CODES
  - A. The WORK of this Section shall comply with the current editions of the following codes as adopted by the City of San Diego Municipal Code:
    - 1. Uniform Building Code
- 1.4 SPECIFICATIONS AND STANDARDS
  - A. Except as otherwise indicated, the current editions of the following apply to the WORK of this Section:
    - 1 Federal Specifications:

L-F-475	Floor Covering Vinyl, Surface (Tile and Roll), With Backing
MMM-A-110	Adhesive, Asphalt, Cut-back Type (For Asphalt and Vinyl Asbestos Tiles)
SS-T-312	Tile, Floor Asphalt, Rubber Vinyl and Vinyl Composition
SS-W-40	Wall Base: Rubber, and Vinyl Plastic

- 2. Commercial Standards:
  - ASTM D 570 Test Method for Water Absorption of Plastics
  - ASTM D 638 Test Method for Tensile Properties of Plastics
    - ASTM E 84 Test Method for Surface Burning Characteristics of Building Materials
- 1.5 SHOP DRAWINGS AND SAMPLES

- A. The following shall be submitted in compliance with Section 01300:
  - 1. Samples: Color and texture samples of floor and stair covering materials. The samples shall be clearly marked to show the manufacturer's name and product identification. Color selection and texture selection will be from manufacturer's full range of products.
  - 2. Shop Drawings: Shop drawings showing cuts and seaming layout.
  - 3. Manufacturer's Information: Manufacturer's catalogue containing technical literature, installation instructions, and maintenance instructions.
- 1.6 PRODUCT DELIVERY, STORAGE, AND HANDLING
  - A. **Delivery of Materials:** Manufactured materials shall be delivered in original, unbroken packages, containers, or bundles, bearing the name of the manufacturer.
  - B. **Storage:** All materials shall be carefully stored as recommended by the manufacturer in an area that is protected from deleterious elements. Storage shall be in a manner that will prevent damage to the products and marring of their finishes.

## PART 2 -- PRODUCTS

- 2.1 GENERAL
  - A. The resilient flooring products shall be in accordance with the manufacturer's published specifications and these Specifications. Products and items not specifically indicated shall be manufacturer's standard products.
  - B. The CONSTRUCTION MANAGER will select the color and texture from the manufacturer's full range of materials within each category indicated. More than one color and texture of each material may be selected for application.

### 2.2 ACCESSORY MATERIALS

- A. Accessory materials which are necessary for proper installation and for problem areas shall be as recommended or specified in the manufacturer's published specifications and installation instructions and shall be provided as part of the WORK.
- B. Adhesive and Primer: Adhesives and primer shall conform to Federal Specifications-MMM-A-110, and be approved by the manufacturer of the floor covering or wall base being used. The adhesive shall be resistant to both alkali and moisture and shall be capable of securely holding the floor covering or wall base firmly in place and hermetically sealing and binding the joints.

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NTS: Other resilient flooring materials, patterns and/or colors may be specified when a special design feature is required.

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### 2.3 RESILIENT MATERIALS

## A. Resilient Tile

- 1. Vinyl Tile
  - a. Resilient reinforced composition tile shall be 12-inch by 12-inch by [1/8] [3/32]inch tile conforming to Federal Specifications SS-T-312, for [Type IV, Composition 1 and 2].
  - b. The selection of vinyl composition tile will be made from all [Type III, solid vinyl] [and] [Type IV, vinyl composition] tiles except deep pattern tile such as brick, tile, and slate, manufactured by the resilient flooring manufacturer.
- 2. Rubber Tile
  - Homogenous rubber tile molded with a face design profile of circles or squares with beveled edges, and conforming to Federal Specification SS-T-312, Type II. Flame spread rating per ASTM E 84 shall be 25 or less.
  - b. The rubber flooring shall be composed of 100 percent synthetic, virgin rubber (Styrene Butadiene), mineral aggregates, fine organic stabilizing agents, faderesistant pigmentation, migrating wax, and dirt-expelling agents. The Styrene Butadiene content of the flooring shall be not less than 40 percent. There shall be no reground rubber, natural rubber, coarse fillers, or sand in the content of the floor. Fire-retardant shall be added if required to obtain the fire-rating.
  - c. The rubber floor shall perform as follows:

Tensile Strength - ASTM D 638, not less than 1,160 lb psi

Elongation - ASTM D 638, not less than 234

Water Adsorption - ASTM D 570, 0.27 percent

Shore Hardness "A" - 83 plus or minus 5

Resistance to Abrasion - ASTM F510, Taber Abrasion, Caliber H-18 Wheels, 500 grams/1,000 cycles, not greater than 0.455 gram weight loss.

- d. The material shall be chemical-resistant (i.e.,  $H_2SO_4$ -30 percent, no effect) and self-waxing for easy maintenance and shall be no larger in size than 1 meter by 1 meter.
- B. **Sheet Vinyl:** Sheet vinyl shall be 0.085-inch thick conforming to Federal Specifications L-F-475 for Type II, Grade A. Sheet vinyl shall be of solid color or shall be a random multisized cube design of solid vinyl cubes and vinyl filler which provides a subdued background.
- C. **Top Set Base:** Top-set base shall be 1/8-inch thick by 4 inches high (unless otherwise indicated) vinyl cove base or non-cove base at soft flooring, conforming to Federal Specifications SS-W-40, with matching factory-formed corner units.

D. **Edging:** Resilient edging shall be 1-inch minimum width rubber or vinyl and shall be installed between the resilient floor and exposed concrete floors. Thickness and color shall match the flooring.

### E. Stair Materials:

- 1. Riser shall be smooth self-coved rubber riser covering the full riser.
- 2. Stringer base shall be non-coved vinyl material 1/8-inch thick by height required and shall match the base material and color.
- 3. Stair covering shall include covering for treads, risers, and stringer bases. Tread material shall be a diamond safety design, molded rubber tread which covers the full tread and has a smooth border across the rear edge and shall have square molded nose.
- F. **Fillers and Levelers:** Floor filling and leveling materials shall be as recommended by the flooring material manufacturers for the job conditions.

## 2.4 MANUFACTURERS

- A. Products shall be of the following manufacture and type (or equal):
  - 1. Vinyl tile:

Azroek Floor Products Kentile Floors

2. Rubber flooring:

Melflex Products Mondo USA Inc. R.C. Musson

3. Stair tread:

R.C. Musson Rubber Company's "No. 600" Roppe Rubber Corp.'s "Diamond Safety Tread"

4. Stair riser:

R.C. Musson Rubber Company's "No. 505 CR" Roppe Rubber Corp.'s "Stair Tread Riser Coved"

# PART 3 -- EXECUTION

- 3.1 GENERAL
  - A. All materials, including primer, fillers, and adhesives, and all installation procedures shall be as recommended by the manufacturer.

B. The manufacturer's published recommendations and specifications shall be followed for accessory materials, installation, and problem areas.

## 3.2 SURFACE PREPARATION

A. The CONTRACTOR'S installer shall perform such additional operations as necessary to overcome any latent condition adversely affecting the installation. Surfaces accepted by the installer for its work shall become its entire responsibility. It shall be the installer's responsibility to ensure that no noticeable variation in the finish plane of the completed installation exists. All filling and leveling work including grinding of concrete surfaces, if necessary, shall be provided for the sub-floor surfaces to make them even and level prior to installation of the finish flooring.

### 3.3 INSTALLATION

- A. **Resilient Tile Flooring:** Resilient flooring tiles shall be provided and installed over the entire floor area indicated, including beneath all appliances and movable fixtures, into knee spaces, and in all adjacent closets and storage areas.
- B. **Sheet-Type Flooring:** Resilient flooring, sheet-type, shall be laid in sheets as large as possible with a minimum number of joints, cuts, and seams.
- C. **Base:** Base shall be installed in full standard lengths; piecing will not be allowed. End stops and internal and external corner pieces shall be preformed. Base shall be left free of buckles and bulges. There shall be no gaps at top and bottom. Base shall have a solid backing so that it cannot be pushed in by chairs or other objects. Bases shall be provided in all appliance spaces, knee spaces, recesses, behind movable fixtures, and in all adjacent closets and storage areas.
- D. **Stringer Base:** Stairs shall be provided with stringer bases along walls at covered stairs unless otherwise indicated. Metal stairs with side stringers and concrete stairs with concrete walls, curbs, or base need not be provided with stringer bases. Height of stair base shall be as necessary to align with top adjacent wall base at top of nose.

### 3.4 CLEANING AND PROTECTION

- A. **Cleaning and Waxing:** Just prior to acceptance of the project the resilient flooring shall be thoroughly cleaned and finished with 2 coats of non-slip wax in accordance with the printed recommendations of the manufacturer. Each coat shall be buffed after it has been laid down.
- B. **Protection:** The flooring shall be provided with protection after installation, as specified in the printed recommendations of the manufacturer.
- 3.5 EXTRA MATERIALS
  - A. The CONTRACTOR shall furnish the CONSTRUCTION MANAGER with not less than 2 percent of extra flooring material and bases for each 100 square feet of area or wall for repair work.
  - B. Extra materials shall be wrapped to in plastic and paper, and shall be marked to indicate the product for easy identification.