- C. Exterior Corners: <Job formed only.>
- D. Interior Corners: <Job formed only.>
- E. Ends: Pre-molded.
- 2.3 RESILIENT BASE (RB1, RB2, RB3, RB4)
  - A. Resilient Base:
    - 1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
      - a. Johnsonite
        - 1) Designation (RB1): Tight lock for resilient flooring.
        - 2) Designation (RB2): Tight lock for carpet floors without spacer tab.
        - 3) Designation (RB3): Tradition cove base.
        - 4) Designation (RB4): Millwork base, Madalay.
      - b. Approved equivalent
  - B. Resilient Base Standard: ASTM F 1861
    - 1. Material Requirement: Type TP (rubber, thermoplastic.)
    - 2. Manufacturing Method: Group I (solid, homogeneous.)
    - 3. Style:
      - a. Designation (RB1): Wedge-Shaped Toeless.
      - b. Designation (RB2): Wedge-Shaped Toeless.
      - c. Designation (RB3): Covered Toe Profile.
      - d. Designation (RB4): Millwork.
  - C. Minimum Thickness:
    - 1. Designation: (RB1):1/4" tapered
    - 2. Designation (RB3): 1/8"
    - 3. Designation (RB4): .375"
  - D. Height:
  - 1. Designation (RB1): 4-3/8" (4-1/4" face) 2.
  - 2. Designation (RB2): 4-1/2" (4-1/4" face).
  - 3. Designation (RB3): 4".
  - 4. Designation (RB4): 6".
  - E. Lengths: Coil in manufacturer's standard length.
  - F. Outside Corners: Job formed. Comply with manufacturer's installation procedure.
  - G. Inside Corners: Job formed. Comply with manufacturer's installation procedures.
  - H. Finish: As indicated.

### I. Colors and patterns: Mercer- 104 "Fudge"

### 2.4 ACCESSORIES

- A. Provide reducer strips, transition strips, and other accessories required in the Work from the same manufacturer as the resilient wall base. The following accessories are products of Johnsonite and are listed to establish configuration, size, and shape of items only.
  - 1. Where scheduled in colors matching base, provide accessories from the same color run to assure acceptable match.
- B. Accessories:
  - 1. Carpet Reducer Strip: EG-XX-G.
  - 2. Resilient Flooring Reducer Strip: RRS-XX.
  - 3. Transition Strip; Resilient to Carpet: CTA-XX.
  - 4. Transition Strip; Carpet to Ceramic: CCA-XX.
- C. Provide accessories in proper thickness to accommodate adjacent flooring materials.

# 2.5 INSTALLATION ACCESSORIES

- A. Concrete Slab Primer: Non-staining type as recommended by flooring manufacturer.
- B. Trowelable Underlayments and Patching Compounds: Latex modified, Portland cement based formulation provided or approved by flooring manufacturer for applications indicated.
- C. Stair Tread Nose Filler: Two part epoxy compound recommended by resilient tread manufacturer to fill nosing substrates not conforming to tread contours.
- D. Adhesives: Water resistant type recommended by manufacturer to suit resilient flooring product and substrate conditions indicated.

# PART 3 - EXECUTION

- 3.1 PREPARATION
  - A. Examine areas where installation of products specified in this Section will occur, with Installer present, to verify that substrates and conditions are satisfactory for installation and comply with manufacturer's requirements and those specified in this Section.
  - B. Comply with manufacturer's installation specifications for preparing substrates indicated to receive products indicated.
  - C. Use trowelable leveling and patching compounds per manufacturer's directions to fill cracks, holes, and depressions in substrates.
  - D. Use stair tread nose filler per tread manufacturer's directions to fill nosing substrates not conforming to tread contours.
  - E. 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 terrazzo or concrete grinder, a drum sander, or a polishing machine equipped with a heavy duty wire brush.

- F. Broom or vacuum clean substrates to be covered immediately before installing products specified in this Section. Following cleaning, examine substrates for moisture, alkaline salts, carbonation, or dust.
- G. Apply concrete slab primer, if recommended by flooring manufacturer, prior to applying adhesive. Apply according to manufacturer's directions.

## 3.2 INSTALLATION

- A. Installation shall meet or exceed all applicable federal, state and local requirements, referenced standards and conform to codes and ordinances of authorities having jurisdiction.
- B. All installation shall be in accordance with manufacturer's published recommendations.
- C. Install products specified in this Section using methods indicated according to manufacturer's installation directions.
- D. Apply resilient wall base to walls, columns, pilasters, casework, and other permanent fixtures in rooms and areas where base is required. Install wall base in lengths as long as practicable. Tightly adhere wall base to substrate throughout length of each piece, with base in continuous contact with horizontal and vertical substrates.
  - 1. On masonry surfaces or other similar irregular substrates, fill voids along top edge of resilient wall base with manufacturer's recommended adhesive filler material.
  - 2. Install inside and exterior corners before installing straight pieces.
  - 3. Form inside corners on job from straight pieces of maximum lengths possible by cutting an inverted V shaped notch in toe of wall base at the point where corner is formed. Shave back of base where necessary to produce snug fit to substrate.
  - 4. Form outside corners on job from straight pieces of maximum lengths possible by shaving back of base at point where bending will occur. Remove a strip perpendicular to length of base and only deep enough to produce a snug fit without bends, whitening, or removal of more than half the thickness of wall base.
- E. Place resilient accessories so they are butted to adjacent materials of type indicated and bond to substrates with adhesive. Install reducer strips at edges of flooring that otherwise would be exposed.
- F. Apply resilient accessories to stairs as indicated and according to manufacturer's installation instructions.

#### 3.3 CLEANING AND PROTECTION

- A. Perform the following operations immediately after completing installation:
  - 1. Remove visible adhesive and other surface blemishes using cleaner recommended by manufacturers of resilient product involved.
  - 2. Sweep or vacuum floor thoroughly.
  - 3. Do not wash floor until after time period recommended by manufacturer.
  - 4. Damp mop resilient accessories to remove black marks and soil.
  - 5. Apply protective floor polish to resilient accessories that are free from soil, visible adhesive, and surface blemishes.

- a. Use commercially available cross linked, acrylic product acceptable to resilient accessory manufacturer.
- b. Coordinate selection of floor polish with Owner's maintenance service.
- B. Protect flooring against mars, marks, indentations, and other damage from construction operations and placement of equipment and fixtures during remainder of construction period. Use protection methods indicated or recommended by manufacturer of resilient product involved.
- C. Clean products specified in this Section not more than four (4) days prior to dates scheduled for inspections intended to establish date of Substantial Completion in each area of Project. Clean products using method recommended by manufacturer.
  - 1. Strip protective floor polish that was applied after completing installation, prior to cleaning.
  - 2. Reapply floor polish after cleaning.

# END OF SECTION 09 65 13

### SECTION 09 65 16 - VINYL/LUXURY VINYL TILE

### PART 1 - GENERAL

#### 1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General Conditions, apply to this Section.
- B. Specifications throughout all Divisions of the Project Manual are directly applicable to this Section, and this Section is directly applicable to them.

#### 1.2 REFERENCE STANDARDS

- A. The latest published edition of a reference shall be applicable to this Project unless identified by a specific edition date.
- B. All reference amendments adopted prior to the effective date of this Contract shall be applicable to this Project.
- C. All materials, installation and workmanship shall comply with all applicable requirements and standards.

# 1.3 QUALITY ASSURANCE

- A. Installer Qualifications: Engage Installer that is certified by floor covering manufacturer as competent in the technique for heat welding seams.
- B. Single Source Responsibility for Vinyl/Luxury Vinyl Tile: Obtain each type, color, and pattern of floor covering from a single source with resources to provide products of consistent quality in appearance and physical properties without delaying progress of the Work.
- C. Special Requirements of Regulatory Agencies: Submit certification that system complies with VOC (Volatile Organic Compounds) requirements and regulations of the Environmental Protection Agency (EPA), Occupational Safety and Health Administration (OSHA), State, County, City, and local Air Control District.
- D. Standard of Quality Sample: After approval of submittals and prior to proceeding with the Work of this Section, at a location determined by **COUNTY**, lay Vinyl/Luxury Vinyl Tile of not less than 100 square feet including not less than 10 lineal feet of resilient base. Demonstrate cutting and trimming techniques around obstructions. The Work will be reviewed by Owner and Architect and, upon approval, will become the standard upon which the quality of materials and workmanship will be judged.

#### 1.4 SUBMITTALS

- A. Samples:
  - 1. Samples for initial selection purposes in form of manufacturer's color charts consisting of actual sections of Vinyl/Luxury Vinyl Tile coverings showing full range of colors and patterns available for each different product indicated.
  - 2. Samples for verification purposes in form of 6 inch by 9 inch sections of each different color and pattern of Vinyl/Luxury Vinyl Tile covering product specified, showing full range of variations expected in these characteristics.

#### SECTION 09 68 00 - CARPET

#### PART 1 - GENERAL

#### 1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General Conditions, apply to this Section.
- B. Specifications throughout all Divisions of the Project Manual are directly applicable to this Section, and this Section is directly applicable to them.

#### 1.2 REFERENCE STANDARDS

- A. The latest published edition of a reference shall be applicable to this Project unless identified by a specific edition date.
- B. All reference amendments adopted prior to the effective date of this Contract shall be applicable to this Project.
- C. All materials, installation and workmanship shall comply with all applicable requirements and standards.

## 1.3 QUALITY ASSURANCE

- A. Carpet Surface Burning Characteristics: Provide carpet identical to that tested for the following fire performance characteristics, per test method indicated below, by UL or other testing and inspecting organizations acceptable to authorities having jurisdiction. Identify carpet with appropriate markings of applicable testing and inspecting organization.
  - 1. Test Method: DOC FF 1 70.
  - 2. Rating: Pass.
- B. Factory Runs: Provide Carpet from one factory run and one dye lot with colors and shades guaranteed to be uniform throughout the entire area run for type of carpet specified.
- C. Vermin and Dampproofness: Provide moth and vermin proofed carpet, compatible with installation over concrete slab on grade floors.

#### 1.4 SUBMITTALS

- A. Shop Drawings:
  - 1. Layout and seaming diagrams:
    - a. Indicate pile or pattern direction and locations and types of edge strips.
    - b. Indicate columns, doorways, enclosing walls or partitions, built in cabinets, and locations where cutouts are required in carpet.
    - c. Show installation details at special conditions.
- B. Samples:

- 1. Samples for verification purposes in manufacturer's standard size, showing full range of color, texture, and pattern variations expected. Prepare samples from same material to be used for the Work. Submit the following:
  - a. 12 inch square samples of each type of carpet material required.
  - b. Two (2) full-size samples of each carpet tile required.
  - c. 12 inch long samples of each type exposed edge stripping and accessory item.
  - d. 6 inch square samples of each type of carpet cushion.

## 1.5 DELIVERY, STORAGE AND HANDLING

- A. Deliver materials to Project Site in original factory wrappings and containers, labeled with identification of manufacturer, brand name, and lot number.
- B. Store materials in original undamaged packages and containers, inside well ventilated area protected from weather, moisture, soilage, extreme temperatures, and humidity. Lay flat, blocked off ground. Maintain minimum temperature of 68 degrees F (20 degrees C) at least three days prior to and during installation in area where materials are stored.

## 1.6 EXTRA MATERIALS

- A. Furnish extra materials matching products installed, packaged with protective covering for storage and identified with labels describing contents. Deliver extra materials to Owner's storage location at The University of Texas, MD Anderson Cancer Center, Physical Plant, 7777 Knight Road.
  - 1. Refer to Section 01 78 46 for Maintenance Material Requirements.

#### 1.7 PROJECT CONDITIONS

- A. Substrate Conditions: No condensation within 48 hours on underside of 4 foot by 4 foot polyethylene sheet, fully taped at perimeter to substrate.
- B. Substrate Conditions: pH of 9 or less when substrate wetted with potable water and Hydrion paper applied.

## 1.8 WARRANTY

- A. General Warranty: The special warranty specified in this Section shall not deprive the Owner of other rights the Owner may have under other provisions of the Contract Documents and shall be in addition to, and run concurrent with, other warranties made by the Contractor under requirements of the Contract Documents.
- B. Special Carpet Warranty: Submit a written warranty executed by carpet manufacturer and Installer agreeing to repair or replace carpet that does not meet requirements or that fails in materials or workmanship within the specified warranty period. Failures include, but are not limited to:
  - 1. Wear: Carpet materials shall evidence no more than 10 percent loss of face fiber.
  - 2. Edge Raveling: Carpet material shall exhibit no edge ravel, snags, and runs under normal use.
  - 3. Delamination: Carpet materials shall not delaminate from primary or secondary backing.

- 4. Shrinkage: Carpet materials shall show no shrinkage.
- C. Warranty Period: Five (5) years from date of Substantial Completion.

## PART 2 - PRODUCTS

# 2.1 GENERAL

- A. All materials shall meet or exceed all applicable referenced standards, federal, state and local requirements, and conform to codes and ordinances of authorities having jurisdiction.
- B. The notes and schedules on the Drawings establish manufacturer and model/design required for the Project. Provide the products listed unless Architect approves products of other manufacturer specifically for this Project.

# 2.2 MANUFACTURERS

A. To establish standards of manufacture, operation, performance, and appearance, drawings and specifications are based on the specific manufacturer's products and color/patterns shown on the Drawings. If accepted in advance by the Architect, and provided compliance with requirements, products of other manufacturers may also be acceptable:

### 2.3 CARPET MATERIALS

- A. Carpet Type I: Tandus Centiva Tatami III
- B. Carpet Type II: Tandus Centiva Color Spectrum
- C. Carpet Type III: Tandus Abrasive Action II
- D. Carpet Type IV: Tandus Centiva Aftermath II
- E. Carpet Type V: Tandus Centiva Assertive Series

## 2.4 ACCESSORIES

- A. Tackless Carpet Stripping: Water resistant plywood in strips, 3/8 inch or 9/32 inch thick, as required to match cushion thickness and in compliance with CRI 104, 11.3.
- B. Carpet Edge Guard: Extruded aluminum carpet edge similar to #416 by National Guard Products Inc., mill finish aluminum.
- C. Seaming Cement: Hot melt adhesive tape or similar product recommended by carpet manufacturer for taping seams and butting cut edges at backing to form secure seams and to prevent pile loss at seams.
- D. Carpet Adhesive: Non-solvent based, water resistant, and non-staining as recommended by carpet and carpet tile manufacturer to comply with flammability requirements for installed carpet and compatible with substrate.
- E. Trowelable Underlayments and Patching Compounds: Latex modified, Portland cement based formulation provided or approved by floor covering manufacturer for applications indicated.

#### **PART 3 - EXECUTION**

#### 3.1 PREPARATION

- A. Clear away debris and scrape up cementitious deposits from concrete surfaces to receive carpet; apply sealer to prevent dusting.
- B. Patch holes and level to a smooth surface. If previous finish chemically stripped, reseal concrete. Seal powdery or porous surfaces with sealer recommended by carpet manufacturer.
- C. Patch holes and cracks. Sand to level. Remove wax. Seal surface with sealer recommended by carpet manufacturer.
- D. Replace missing pieces of existing resilient flooring or patch to level. Cut out peaked sheet goods seams and fill with latex underlayment.
- E. Remove chemical finish on terrazzo; patch grout lines and cracks to level with latex underlayment.

#### 3.2 INSTALLATION

- A. Installation shall meet or exceed all applicable federal, state and local requirements, referenced standards and conform to codes and ordinances of authorities having jurisdiction.
- B. All installation shall be in accordance with manufacturer's published recommendations.
- C. Dry fit sections of carpet prior to application of adhesive.
- D. Apply adhesive uniformly to substrate in accordance with manufacturer's instructions. Butt edges tight to form seams without gaps.
- E. Adhere perimeter tiles and partial tiles with a full spread of adhesive. Dry fit cut tiles and apply adhesive to tile back after tile has been cut. In corridor areas, use full tiles down the center and cut perimeter tile borders.
- F. Direct Glue-Down Installation: Comply with CRI 104, Section 8: "Direct Glue-Down."
- G. Carpet with Attached-Cushion Installation: Comply with CRI 104, Section 10: "Attached Cushion."
- H. Stair Installation: Comply with CRI 104, Section 12: "Carpet on Stairs."
- I. Comply with manufacturer's recommendations for seam locations and direction of carpet; maintain uniformity of carpet direction and lay of pile. At doorways, center seams under door in closed position; do not place seams perpendicular to door frame, in direction of traffic through doorway. Do not bridge building expansion joints with continuous carpet.
- J. In rooms or areas whose smallest dimension is less than the standard roll width of the specified carpet, install only full widths of carpet. No seams in such areas will be permitted.
- K. Extend carpet under removable flanges and furnishings and into alcoves and closets of each space.
- L. Provide cutouts where required, and bind cut edges where not concealed by protective edge guards or overlapping flanges.
- M. Install carpet edge guard where edge of carpet is exposed; anchor guards to substrate.

- N. Fit sections of carpet prior to application of adhesive. Trim edges and butt cuts with seaming cement.
- O. Apply adhesive uniformly to substrate in accordance with manufacturer's instructions. Butt edges tight to form seams without gaps. Roll entire area lightly to eliminate air pockets and ensure uniform bond.

## 3.3 CLEANING

- A. Remove adhesive from carpet surface with manufacturer's recommended cleaning agent.
- B. Remove and dispose of debris and unusable scraps. Vacuum with commercial machine with face beater element. Remove soil. Replace carpet where soil cannot be removed. Remove protruding face yarn.
- C. Vacuum carpet.

# 3.4 PROTECTION

A. Provide final protection and maintain conditions, in a manner acceptable to manufacturer and installer, to ensure carpet is not damaged or deteriorated at time of Substantial Completion.

# END OF SECTION 09 68 00