SECTION 09650

RESILIENT FLOORING

PART 1 - GENERAL

1.1 SUMMARY

- A. This Section includes the following:
 - 1. Resilient wall base and accessories.
 - 2. Linoleum floor coverings with fibrous backing.

1.2 SUBMITTALS

- A. Product Data: For each type of product specified.
- B. Samples for Selection: Manufacturer's color charts consisting of units or sections of units showing the full range of colors and patterns available for each type of product indicated.
 - 1. For resilient accessories, manufacturer's standard-size samples, but not less than 12 inches (300 mm) long, of each resilient accessory color and pattern specified.
- C. Product Certificates: Signed by manufacturers of resilient products certifying that each product furnished complies with requirements.
- D. Maintenance Data: For resilient flooring to include in the maintenance manuals specified in Division 1.

E. LEED Submittal:

- 1. Credit MR 2.1 and 2.2: Comply with Division 1 Section "Construction Waste Management."
- 2. Product Data for Credit MR 4.1 and Credit MR 4.2: For products having recycled content, documentation indicating percentages by weight of postconsumer and preconsumer recycled content.
 - a. Include statement indicating costs for each product having recycled content.
- 3. Credit MR 5.1: Product Data indicating location of material manufacturer for regionally manufactured materials.
 - a. Include statement indicating cost and distance from manufacturer to Project for each regionally manufactured material.
- 4. Credit EQ 4.1: Manufacturers' product data for interior sealants, including printed statement of VOC content and material safety data sheets.

2.1 MANUFACTURERS

A. Available Products: Subject to compliance with requirements, products that may be incorporated into the Work include, but are not limited to, those indicated in the following paragraphs of Part 2.

2.2 LINOLEUM FLOOR COVERINGS

- A. Linoleum: Where this designation is indicated, provide linoleum floor covering with backing complying with the following:
 - 1. Available Products: As follows:
 - a. Marmoleum by Forbo: Real.
 - 2. Color and Pattern: Allow for two colors and some patterns as selected by Architect from manufacturer's full range of colors and patterns produced for linoleum floor covering complying with requirements indicated.
 - 3. Composition: Linseed oil, wood flour, rosin binders and dry pigments.
 - 4. Static Coefficient of Friction: Ramp Surfaces: Minimum 0.6.
 - 5. Overall Thickness: 2.0 mm.
 - 6. Wearing Surface: Smooth.
 - 7. Backing: Jute.
 - 8. Sheet Width: 6.5 feet (1.98 m).
 - 9. Seaming Method: Chemical welded.

2.3 RESILIENT ACCESSORIES

- A. Rubber Base: Where this designation is indicated, provide rubber wall base complying with FS SS-W-40, Type I and the following:
 - 1. Products: As follows:
 - a. Armstrong World Industries
 - b. Johnsonite.
 - 2. Color and Pattern: As selected by Architect from manufacturer's full range of colors and patterns produced for rubber wall base complying with requirements indicated.
 - 3. Style: Cove with top-set toe.
 - 4. Minimum Thickness: 1/8 inch (3.2 mm).
 - 5. Height: 4 inches (101.6 mm).
 - 6. Lengths: 120 feet (36.6 m) long.
 - 7. Outside Corners: Job formed.
 - 8. Inside Corners: Job formed.
 - 9. Surface: Smooth.
- B. Rubber Accessory Molding: Where this designation is indicated, provide rubber accessory molding complying with the following:
 - 1. Available Products: As follows:
 - a. Johnsonite.
 - 2. Color: As selected by Architect from manufacturer's full range of colors produced for vinyl accessory molding complying with requirements indicated.
 - 3. Transition Strip between VCT and Carpet/Ceramic Tile: CE-XX-A by Johnsonite or approved substitute.

- 4. Transition Strip between Sheet Flooring and VCT: CD-XX-C by Johnsonite or approved substitute.
- 5. Reducer Strip between Concrete and VCT: RRS-XX-C by Johnsonite or approved substitute.

2.4 INSTALLATION ACCESSORIES

- A. Trowelable Leveling and Patching Compounds: Latex-modified, portland-cement-based formulation provided or approved by flooring manufacturer for applications indicated.
- B. Adhesives: Water-resistant type recommended by manufacturer to suit resilient products and substrate conditions indicated.
- C. Chemical Bonding Compound: Product of floor covering manufacturer for chemically bonding seams.

PART 3 - EXECUTION

3.1 PREPARATION

- A. General: Comply with resilient product manufacturer's written installation instructions for preparing substrates indicated to receive resilient products.
- B. Use trowelable leveling and patching compounds, according to manufacturer's written instructions, to fill cracks, holes, and depressions in substrates.
- C. Remove coatings, including curing compounds, and other substances that are incompatible with flooring adhesives and that contain soap, wax, oil, or silicone, using mechanical methods recommended by manufacturer. Do not use solvents.
- D. Broom and vacuum clean substrates to be covered immediately before product installation. After cleaning, examine substrates for moisture, alkaline salts, carbonation, or dust. Do not proceed with installation until unsatisfactory conditions have been corrected.

3.2 LINOLEUM FLOOR INSTALLATION

- A. General: Comply with linoleum floor covering manufacturer's written installation instructions.
- B. Unroll linoleum floor coverings and allow them to stabilize before cutting and fitting, if recommended in writing by manufacturer.
- C. Lay out linoleum floor coverings to comply with the following requirements:
 - 1. Maintain uniformity of linoleum floor covering direction.
 - 2. Arrange for a minimum number of seams and place them in inconspicuous and low-traffic areas, and not less than 6 inches (150 mm) away from parallel joints in flooring substrates.
 - 3. Match edges of linoleum floor coverings for color shading and pattern at seams according to manufacturer's written recommendations.
 - 4. Avoid cross seams.

- D. Scribe, cut, and fit linoleum floor coverings to butt neatly and tightly to vertical surfaces and permanent fixtures, including built-in furniture, cabinets, pipes, outlets, edgings, door frames, thresholds, and nosings.
- E. Extend linoleum floor coverings into toe spaces, door reveals, closets, and similar openings.
- F. Maintain reference markers, holes, and openings that are in place or marked for future cutting by repeating on finish flooring as marked on subfloor. Use chalk or other nonpermanent, nonstaining marking device.
- G. Install linoleum floor coverings on covers for telephone and electrical ducts, and similar items in finished floor areas. Maintain overall continuity of color and pattern with pieces of flooring installed on covers. Tightly adhere edges to perimeter of floor around covers and to covers.
- H. Adhere linoleum floor coverings to flooring substrates to comply with floor covering manufacturer's written instructions, including those for trowel notching, adhesive mixing, and adhesive open and working times.
 - 1. Produce completed installation without open cracks, voids, raising and puckering at joints, telegraphing of adhesive spreader marks, and other surface imperfections.
- I. Chemically Bonded Seams: Chemically bond seams with bonding compound, permanently fusing sections into a seamless floor covering. Prepare seams and apply compound according to manufacturer's written instructions and ASTM F 693 to produce tightly fitted seams without gaps, overlays, or excess bonding compound on floor covering surfaces.
- J. Hand roll linoleum floor coverings in both directions from center out to embed floor coverings in adhesive and eliminate trapped air. At walls, door casings, and other locations where access by roller is impractical, press floor coverings firmly in place with flat-bladed instrument.

3.3 RESILIENT ACCESSORY INSTALLATION

- A. General: Install resilient accessories according to manufacturer's written installation instructions.
- B. Apply resilient wall base to walls, columns, pilasters, casework and cabinets in toe spaces, locker bases, and other permanent fixtures in rooms and areas where base is required.
 - 1. Install wall base in lengths as long as practicable without gaps at seams and with tops of adjacent pieces aligned.
 - 2. Tightly adhere wall base to substrate throughout length of each piece, with base in continuous contact with horizontal and vertical substrates.
 - 3. Do not stretch base during installation.
 - 4. On masonry surfaces or other similar irregular substrates, fill voids along top edge of resilient wall base with manufacturer's recommended adhesive filler material.
 - 5. Form outside corners on job from straight pieces of maximum lengths possible, without whitening at bends. Shave back of base at points where bends occur and remove strips perpendicular to length of base that are only deep enough to produce a snug fit without removing more than half the wall base thickness.
 - 6. 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 a snug fit to substrate.

- C. Place resilient accessories so they are butted to adjacent materials and bond to substrates with adhesive. Install reducer strips at edges of flooring that would otherwise be exposed.
 - 1. Locate reducer strips or transition strips to line up centered under doors, unless noted otherwise.

3.4 CLEANING AND PROTECTING

- A. Perform the following operations immediately after installing resilient products:
 - 1. Remove adhesive and other surface blemishes using cleaner recommended by resilient product manufacturers.
 - 2. Sweep or vacuum floor thoroughly.
 - 3. Do not wash floor until after time period recommended by flooring manufacturer.
 - 4. Damp-mop floor to remove marks and soil.
- B. Clean floor surfaces as soon as possible after installation. Clean products according to manufacturer's written recommendations.
 - 1. After cleaning, apply polish to floor surfaces to provide protective floor finish according to flooring manufacturer's written recommendations. Coordinate with Owner's maintenance program.

END OF SECTION