

**SECTION 09 65 00
RESILIENT FLOORING**

PART 1 - GENERAL

1.1 SUMMARY

- A. Provide resilient flooring as shown and specified. Work includes:
 - 1. Providing resilient tile flooring, resilient base and stair accessories.
 - 2. Providing edge strips, adhesives and accessories to complete the work.
- B. Related Sections:
 - 1. Section 01 11 Summary of Work:
 - 2. Section 02 41 95 Selective Demolition: Removal of existing carpet floor finishes.

1.2 REFERENCES

- A. Reference standards:
 - 1. ASTM:
 - a. ASTM E648-00 "Critical Radiant Flux of Floor Covering Systems Using a Radiant Heat Energy Source."
 - b. ASTM E662-03 "Specific Optical Density of Smoke Generated by Solid Materials."
 - c. ASTM F710-98 "Practice for Preparing Concrete Floors and Other Monolithic Floors to Receive Resilient Flooring."
 - d. ASTM F1066-99 "Specification for Vinyl Composition Tile."
 - e. ASTM F1861-02 "Specification for Resilient Base."
 - f. ASTM F2169-00 "Specification for Resilient Stair Treads."

1.3 SUBMITTALS

- A. Submit manufacturer's product data and installation instructions for each type of resilient flooring, base and accessory required.
- B. Submit full size samples of resilient tile flooring of each type, color and pattern selected to illustrate the full range of color variations. Provide 6" lengths of resilient base and stair accessories.
- C. Submit manufacturer's certification that resilient flooring furnished complies with required fire test performance and has been tested and meets indicated requirements.
- D. Submit manufacturer's written instructions for recommended maintenance practices for each type of resilient flooring, base and accessory material required.

1.4 QUALITY ASSURANCE

- A. Provide each type of resilient flooring, base and accessory material produced by one manufacturer, including recommended primers, adhesives, sealants and leveling compounds. Provide all materials from same production run. Colors shall be uniform throughout.
- B. Flooring and stair accessory products shall meet ADA Accessibility Guidelines Requirements for static coefficient of friction when installed in accordance with manufacturer's guidelines.
- C. Fire test performance: Provide materials complying with referenced standard fire tests.
 - 1. ASTM E662: Specific optical density, less than 450.
 - 2. ASTM E648 (Radiant Panel): Critical Radiant Flux, Class 1, greater than 0.45 watts/sq. cm.

1.5 DELIVERY, STORAGE AND HANDLING

- A. Deliver materials in manufacturer's original, unopened labeled containers.
- B. Store, protect and handle resilient flooring materials in accordance with manufacturer's recommendations to prevent damage, soiling and deterioration.
- C. Store materials in areas to receive resilient flooring for a minimum of 48 hours before installation.

1.6 PROJECT CONDITIONS

- A. Maintain uniform room temperature range not less than 70 degree F in areas to receive resilient flooring for minimum 48 hours before installation and 48 hours after installation.
 - 1. Provide adequate lighting and ventilation during installation and clean-up.
 - 2. Protect adjoining surfaces from damage and soiling.
- B. Field Measurements: Field verify measurements. Do not scale drawings or calculate area sizes and quantities from dimensions shown

1.7 WARRANTY

- A. Provide flooring manufacturer's 5-year material warranty against defects in flooring materials.

1.8 MAINTENANCE

- A. Provide 3% of each type, pattern and color of resilient flooring, base and stair accessory materials supplied for replacement and maintenance purposes.
 - 1. Furnish full and unopened boxes of resilient tile flooring and amount of adhesive necessary for installation.
 - 2. Furnish not less than 10 linear feet for every 200 linear feet or fraction thereof, of each type and color of base and stair accessory.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Manufacturers:
 - 1. Resilient tile: Armstrong World Industries or equal by Azrock Floor Products; Mannington Commercial Inc. or Tarkett Inc.
 - 2. Resilient base and stair accessories: Johnsonite, or equal by BurkeMercer Flooring Products, PRF Group Activa or Roppe Rubber corp.

2.2 RESILIENT FLOORING MATERIALS

- A. Colors and patterns: As selected by the Associate Architect from manufacturer's full color range. Provide a minimum of two different colors for each type of resilient floor tile and base required.
- B. Resilient tile: Armstrong "Excelon Imperial Texture" through-pattern design vinyl composition tile complying with ASTM F1066, Class 2, Composition 1, 1/8" gage, 12" x 12".
 - 1. Colors and patterns: As selected by the Associate Architect from manufacturer's full color range. Provide a minimum of two different colors for each type of resilient floor tile and base required
- C. Resilient base: Johnsonite rubber wall base complying with ASTM F1861, Type TP, Group 1, 4" high, 1/8" gage solid rubber, coved. Provide long lengths rolls. Job form internal and external corners.

1. Colors and patterns: Johnsonite "Blue Lagoon" 92

2.3 ACCESSORIES

- A. Edge strips: Solid vinyl or rubber composition, tapered or bullnose, color matching flooring or as selected by the Associate Architect, not less than 1" wide.
- B. Concrete slab primer: Non-staining type, compatible with adhesive, as recommended by flooring manufacturer.
- C. Leveling compound: Non-staining latex type, compatible with flooring, as recommended by the flooring manufacturer.
- D. Adhesives: Waterproof, stabilized type as recommended by the resilient flooring manufacturer to suit material and substrate condition.
 1. Resilient flooring: Waterproof, stabilized type as recommended by the resilient flooring and base manufacturer to suit material and substrate conditions.
 2. Resilient base and stair accessories: Waterproof, rubber floor adhesive as recommended by the resilient base and stair accessory manufacturer to suit material and substrate conditions.
- E. Cleaning and finishing materials: Neutral cleaner, non-slip wax finish as recommended by the floor material manufacturer.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine substrates and installation conditions. Do not proceed with resilient flooring work until unsatisfactory conditions have been corrected.
- B. Concrete Subfloors: Verify concrete slabs comply with ASTM F 710 and the following:
 1. 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.
 2. Subfloor surfaces shall be smooth, level, at the required finish elevation, with not more than 1/8" in 10'-0" variation. Finish of subfloors comply with tolerances and other requirements specified in Section 03 30 00 Cast-In-Place Concrete for slabs receiving resilient flooring.
 3. Subfloors are free of cracks, ridges, depressions, scale, and foreign deposits of any kind.
- C. Installation constitutes acceptance of existing conditions and responsibility for satisfactory performance.

3.2 PREPARATION

- A. Before installing flooring, broom or vacuum clean substrate surfaces and inspect the subfloor.
 1. Use leveling compound as recommended by flooring manufacturer for filling small cracks and depressions.
 2. Perform bond and moisture tests on concrete slabs to determine that concrete surfaces are sufficiently cured and are ready to receive flooring.
 3. Apply concrete slab primer, if recommended by flooring manufacturer, before application of adhesive. Apply in compliance with manufacturer's recommendations.
- B. Install resilient flooring only after all finishing operations, including painting, have been completed and permanent heating and ventilating systems are operating. Building air temperature and relative humidity shall be within resilient flooring manufacturer's recommended limits.

3.3 INSTALLATION

- A. Install resilient flooring and accessories with adhesive in strict compliance with the manufacturer's recommendations. Butt tightly to vertical surfaces, thresholds, nosings and edgings. Scribe around obstructions and to produce neat joints, laid tight, even and straight. Extend flooring into toe spaces, door reveals and into closets and similar openings.
- B. Resilient tile flooring:
 - 1. Lay resilient tile flooring with joints tight, in true alignment and parallel to walls of rooms and corridors.
 - 2. Lay tile symmetrically about centerlines of space, without pattern or borders. Adjust layout to avoid use of cut widths less than one-half tile at room perimeter.
 - 3. Match tile for color by using in manufactured and packaged sequence. Lay tile with grain pattern as directed by the Associate Architect.
 - 4. When indicated, provide patterns and borders utilizing feature tile and strips.
 - 5. Broken, cracked, chipped, or deformed tiles are not acceptable.
 - 6. Extend resilient flooring continuously under cabinets.
- C. Resilient base: Install resilient base at walls, columns, pilasters, casework and equipment as scheduled. Install in as long lengths as practicable. Provide job formed internal and external corners with joints a minimum of 18 inches from corners. Install wall base at all fixed equipment and cabinets.
 - 1. Tightly bond base to substrate throughout length of each piece, with continuous contact at horizontal and vertical surfaces.
 - 2. On masonry surfaces, or other irregular substrates, fill voids along top edge of resilient wall base with manufacturer's recommended adhesive filler material.
- D. Install edge strips at every location where resilient flooring terminates without covering thresholds or where edges would otherwise be exposed. Center under door level at openings.
 - 1. Provide resilient edge strips tightly butted to flooring and secured with adhesive.

3.4 CLEANING AND PROTECTION

- A. After flooring has set, clean thoroughly. Remove excess adhesive or other surface blemishes from flooring, using neutral type cleaners as recommended by the flooring manufacturer. Apply one coat of non-slip wax finish and buff.
- B. Prohibit all foot and wheel traffic from using installed resilient flooring for 48 hours. Protect installed flooring from damage and staining with heavy duty non-staining kraft paper or other covering at all traffic lanes. Protect completed work from traffic and damage until final acceptance.

END OF SECTION 09 65 00