



SECTION 09651 – RESILIENT TILE FLOORING

Rikett's™ brand reputation, environmental stewardship, and commitment to excellence as a solutions partner ensures a quality customer experience. Rikett's™ extensive collection of commercial resilient flooring features sophisticated patterns and colors that coordinate with each other, and represent fresh concepts for intelligently designed space.

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Resilient tile flooring

1.2 RELATED SECTIONS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and DIVISION 01 General Requirements.
- B. Section 03300 – Cast in Place Concrete
- C. Section 035416 – Hydraulic Cement Underlayment: For leveling of existing concrete slabs.
- D. Section 06100 – Rough Carpentry: Plywood subflooring and underlayment.
- E. Section 07260 – Vapor Retarders: Moisture remediation.
- F. Section 079200 – Joint Sealants: For exposed movement joints.
- G. Section 079513 – Expansion Joint Cover Assemblies: For expansion joint assembly penetrating through tile flooring.
- H. Section 09653 - Resilient Base and Accessories: For resilient base, reducer strips, and other accessories installed with resilient floor coverings.

1.3 REFERENCES

- A. ASTM International and equivalent EN or GB standards.
 - 1. ASTM D 2047 - Standard Test Method for Static Coefficient of Friction of Polish-Coated Flooring Surfaces as Measured by the James Machine.
 - 2. ASTM E 84 - Standard Test Method for Surface Burning Characteristics of Building Materials.
 - 3. ASTM E 648 - Standard Test Method for Critical Radiant Flux of Floor-Covering Systems Using a Radiant Heat Energy Source.
 - 4. ASTM E 662 - Standard Test Method for Specific Optical Density of Smoke Generated by Solid Materials.
 - 5. ASTM F 137 - Standard Test Method for Flexibility of Resilient Flooring Materials with Cylindrical mandrel Apparatus.
 - 6. ASTM F 386 - Standard Test Method for Thickness of Resilient Flooring Materials Having Flat Surfaces.
 - 7. ASTM F 410 - Standard Test Method for Wear Layer Thickness of Resilient Floor Coverings by Optical Measurement.



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8. ASTM F 536 - Standard Test Method for Size of Resilient Floor Tile by Dial Gage Method.
9. ASTM F 710 - Standard Practice for Preparing Concrete Floors to Receive Resilient Flooring
10. ASTM F 925 - Standard Test Method for Resistance to Chemicals of Resilient Flooring.
11. ASTM F 970 - Standard Test Method for Static Load Limit.
12. ASTM F 1700 - Standard Specification for Solid Vinyl Floor Tile.
13. ASTM F 1869 - Standard Test Method for Measuring Moisture Vapor Emission Rate of Concrete Subfloor Using Anhydrous Calcium Chloride.
14. ASTM F 2170 - Standard Test Method for Determining Relative Humidity in Concrete Floor Slabs Using In Situ Probes.
15. Resilient Floor Covering Institute (RFCI) - Recommended Work Practices for Removal of Resilient Floor Coverings

PART 2 SPECIFICATIONS FOR LUXURY VINYL TILE

2.1 SUBMITTALS

- A. Submit under provisions of Section 01300. **Note: Check with Spec Writer to see if Section 1300 is the correct reference section!**
- B. Product Data: Submit three copies of manufacturer's data sheets on each product to be used, including:
 1. Preparation instructions and recommendations.
 2. Storage and handling requirements and recommendations.
 3. Installation methods.
 4. Maintenance recommendations.
- C. Selection Samples: For each finish product specified, two sets of each type, colors and finish of resilient flooring and accessory required, indicating full range of color and pattern variation as proof of application compliance.
- D. Verification Samples: For each finish product specified, three complete sets of each type, colors and finish of resilient flooring and accessory required, indicating color and pattern of actual product, including variations, as proof of application compliance.
- E. Certification: Upon request by Architect manufacturer to provide third party written test results of physical characteristics and performance attributes performed by an independent laboratory.
- F. Closeout Submittals: Submit three copies of the following:
 1. Maintenance and operation data includes – methods for maintaining installed products, and precautions against cleaning materials and methods detrimental to finishes and performance.



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2. Warranty documents specified herein.

G. Flame Spread Certification: Submit manufacturer's certification that resilient flooring furnished for areas indicated to comply with required flame spread rating has been tested and meets or exceeds indicated or required standard.

H. LEED Documentation Submittals:

1. Submit all relevant information relating to the most current LEED standards in effect at the time of project design.

2.2 QUALITY ASSURANCE

A. Manufacturer Qualifications: Whenever possible, provide each type of resilient flooring and accessories as recommended by the flooring manufacturer, including recommended primers, adhesives, sealants, finish accessories and leveling compounds.

B. Installer Qualifications: Minimum five years of experience and completed at least three projects of similar magnitude, material and complexity. Upon request, provide project references including contract names and telephone numbers for three projects.

C. Mock-Up: Provide a mock-up for evaluation of surface preparation techniques and application workmanship.

1. Finish areas designated by Architect.

2. Do not proceed with remaining work until workmanship, color, sheen and finished appearance are approved by Architect.

2.3 DELIVERY, STORAGE, AND HANDLING

A. Store products in manufacturer's unopened packaging until ready for installation.

B. Flooring material and adhesive shall be acclimated to the installation area, within manufacturer's recommended temperature range, for a minimum of 48 hours prior to installation.

C. Store cartons of tile products flat and squarely on top of one another, not on edge.

D. Store and dispose of hazardous materials, and materials used with hazardous materials, in accordance with requirements of local authorities having jurisdiction.



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2.4 PROJECT CONDITIONS

- A. Environmental Requirements/Conditions: In accordance with manufacturer's recommendations. Areas to receive flooring shall be clean, dry, level, fully enclosed, weather tight with the permanent HVAC set at a uniform temperature of at least 68 degrees F (20 degrees C) 72 hours prior to and during and for not less than 48 hours after installation. The flooring material shall be conditioned in the same manner prior to installation. Ambient temperature shall not exceed 100 degrees F (38 degrees C) after installation.
- B. Close spaces to traffic and trades during resilient flooring installation and for a period of time after installation as recommended in writing by the manufacturer.
- C. Install resilient flooring materials and accessories after other finishing operations, including painting, have been completed.
- D. Where demountable partitions and other items are indicated for installation on top of resilient flooring material, install flooring material before these items are to be installed.

2.5 WARRANTY

- A. Provide manufacturer's standard warranty against manufacturing defects and wearing.

2.6 EXTRA MATERIALS

- A. Deliver to Owner extra materials from same production run as products installed. Package products with protective covering and identify with descriptive labels. Comply with Division 1 closeout submittals requirements.
 - 1. Quantity: Furnish quantity of flooring units equal to 2 percent of amount installed.
 - 2. Delivery, Storage and Protection: Comply with Owner's requirements for delivery, storage and protection of extra materials. Store according to manufacturer's recommendations.

PART 3 PRODUCTS

3.1 MANUFACTURERS

- A. Acceptable Manufacturer: Rikett America, 17700 Castleton Street, Suite 558, City of Industry, CA 91748. Phone: 855-745-3887. Fax: 855-745-3887. Email: service@rikett.net
 - 1. Substitutions: Not permitted.



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3.2 RESILIENT TILE FLOORING

- A. Resilient Tile Flooring: Luxury Vinyl Tile by Rikett with the following characteristics:
1. Construction: High performance polyurethane top layer, clear wear layer, high-res image layer, reinforced commercial flooring base, commercial backing layer.
 2. Reference Specification: ASTM F 1700, Class III Printed Film Vinyl Tile; Type A: Smooth Surface; Type B: Embossed Surface. Equivalent specifications from EN or GB are acceptable.
 3. Physical Characteristics:
 - a. ASTM F 536 Size:
 - i. Standard plank - 6 inches by 36 inches – All dry back Reso Wood patterns.
 - ii. Standard plank – 5.75 inches x 35.75 inches – All Reso Click.
 - iii. Standard tile – 18 inches x 18 inches (All Reso Stone and Abstract patterns).
 - iv. Standard tile – 12 inches x 24 inches (Warm Travertine and Cool Travertine).
 - b. ASTM F 386 - Overall Thickness:
 - i. Commercial Specification 0.100 in., (2.5mm), dry back.
 - ii. Residential Specification 0.080 in., (2.0mm), dry back.
 - iii. Residential / Light Commercial Specification 0.200 in., (5.0mm), Click.
 - c. ASTM F 410 - Wear Layer Thickness:
 - i. Commercial Specification 0.55mm. (22 mil).
 - ii. Residential and Click Specification 0.30 in. (12 mil).
 - d. ASTM D 2047 - Slip Resistance: Exceeds ADA and OSHA recommendations.
 - e. ASTM F 970 - Residual Indentation: Passes.
 - i. Commercial Specification > 1,000 psi.
 - ii. Residential Specification > 250 psi.
 - f. ASTM F 137 - Flexibility: Passes.
 - g. ASTM F 1514 - Resistance to Heat: Passes.
 - h. ASTM F 1515 - Resistance to Light: Passes.
 - i. ASTM F 925 - Resistance to Chemicals: Passes.
 4. Fire Test Data:
 - a. ASTM E 648 Critical Radiant Flux: > 0.45 watts / cm², NFPA Class I.
 - b. ASTM E 662 Smoke Density: < 450 - Passes.
 5. Product Item Number and Name:
 - a. Rikett RESO Luxury Resilient Tile:
 - i. Color: To Be Selected.

3.3 ADHESIVE

- A. Rikett recommends the following adhesives to install its dry-back planks and tiles on concrete and wood substrates:
- a. Mapei Ultrabond ECO® 360 Hard Setting Adhesive www.mapei.us
 - b. Spray-Lock® 6500 as an alternate to trowel adhesives www.spraylock.com.



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- c. Aquaflex by Formulators for high Moisture Vapor Emissions or for top down water.
www.formulators.com
- B. Rikett LVT with the Unilin Click System does not require any adhesive.
- C. Use of Alternate Adhesives - Should Rikett LVT be installed with adhesives other than those recommended by Rikett, all adhesive related performance problems are the responsibility of the manufacturer of the alternate adhesive used. Support for product performance claims and warranty coverage for all approved adhesive systems is provided solely by the alternate adhesive manufacturers.

PART 4 EXECUTION

4.1 EXAMINATION

- A. Do not begin installation until substrates have been properly prepared.
- B. If substrate preparation is the responsibility of another contractor, notify Architect of unsatisfactory preparation before proceeding.
- C. The installation of the resilient flooring shall not begin until the work of all other trades has been completed, especially overhead trades.
- D. Areas to receive flooring shall be adequately lighted during all phases of the installation process.

4.2 PREPARATION

- A. Clean surfaces thoroughly prior to installation.
- B. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions.
- C. Concrete Substrates: Prepare according to ASTM F 710. The Contractor shall verify to the Owner and installer a minimum of 30 days prior to the scheduled resilient flooring installation the following substrate conditions. All substrate testing shall be documented and submitted to the Architect and Owner before commencement of the flooring installation.
 - 1. Verify that substrates are dry and free of curing compounds, sealers, and hardeners.
 - 2. Remove substrate coatings and other substances that are incompatible with adhesives and that contain soap, wax, oil, or silicone, using mechanical methods recommended by manufacturer. Do not use solvents.
 - 3. Alkalinity and Adhesion Testing: Perform tests recommended by manufacturer. Proceed with installation only after substrates pass testing.



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4. Moisture Testing: Perform tests recommended by manufacturer and as follows. Proceed with installation only after substrates pass testing.
 - a. Perform alkalinity testing. Proceed with installation only if maximum pH is below the acceptable level as recommended by the adhesive manufacturer.
 - b. Perform anhydrous calcium chloride test, ASTM F 1869. Proceed with installation only after substrates have maximum moisture-vapor-emission rate as recommended by the adhesive manufacturer.
 - c. Perform relative humidity test using in situ probes, ASTM F 2170. Proceed with installation only after substrates have a maximum relative humidity level measurement as recommended by the adhesive manufacturer.

- D. Contingency for High Moisture Readings: If at the time of testing the moisture readings are in excess of the specified adhesive limits the Contractor will use a moisture remediation solution recommended by Rikett.

- E. Moisture Remediation: Basic Steps as Follows.
 1. Removal of all floor coverings, adhesives residue, curing compounds, parting compounds or other surface contaminants by mechanical means (shot blasting, grinding or other methods recommended by the recommended moisture solution manufacturer).
 2. Identification and treatment of all cracks and joints, by the moisture solution manufacturer's approved methods.
 3. Application of the moisture solution shall be designed and warranted for the purpose of controlling excessive concrete moisture vapor emission, top down water and the alkali character of the concrete.
 4. See Rikett recommendations for moisture solution products.
 5. Follow manufacturer's instructions on all moisture solution products

4.3 INSTALLING RESILIENT TILE AND PLANK PRODUCTS

- A. General:
 1. The permanent HVAC system is turned on and set to a minimum of 68 degrees F (20 degrees C) for a minimum of 72 hours prior to, during and after installation. After the installations, the maximum temperature shall not exceed 100 degrees F.
 2. Do not stack more than 5 cartons high.
 3. Flooring material and adhesive shall be acclimated to the installation area for a minimum of 48 hours prior to installation.
 4. Only Rikett recommended adhesives may be used.
 5. For Rikett recommended troweled adhesives only use a Gundlach FFA Trowel: 1/32 inch by 1/16 inch by 1/32 inch U-notch trowel only.
 6. Material shall always be visually inspected prior to installation. Any material installed with visual defects will not be considered a legitimate claim as it pertains to labor cost.



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7. All material shall be from the same or consecutive batch numbers. For directional materials, install tiles running in same direction (arrows are on back of tile), unless otherwise directed by the architect. Ensure that all ASTM and RFCI recommendations for sub-floor and jobsite conditions are met prior to beginning the installation. Once the installation is started, Contractor and installer have accepted those conditions.
8. Do not commence installation without reading the most current installation instructions available at www.rikett.net.

B. Layout and Installation:

1. Rikett LVT tile and plank - install using conventional tile and plank installation techniques.
2. Carefully determining where to begin tile or plank installations produces professional looking results.
3. It is customary to center rooms and hallways so borders are not less than half a tile or plank.
4. In hallways and small spaces, it may be simpler to work lengthwise from one end using a center reference line as a guide.
5. Make sure cut edges are always against the wall. For Unilin Click systems, allow 1/4 –inch clearance from the walls and columns.

C. Adhesive Application:

1. Use only the Rikett recommended adhesive and a Gundlach FFA trowel - 1/32 inch by 1/16 inch by 1/32 inch (.75 mm by 1.5 mm by .75 mm) U-notch trowel. Always follow the manufacturer's directions on the adhesive label.
2. After placing the material into the adhesive, roll in both directions with a minimum 100 lb. roller.

4.4 PROTECTION

- A. Protect materials from construction operations until date of Final Completion or Owner occupancy, whichever occurs first.
- B. Protect installed products until completion of project. Cover the newly installed floor with non-staining Kraft paper and protective boards to protect it from damage from other trades.
- C. Follow adhesive manufacturer's instruction for the minimum cure time required before permitting foot traffic, heavy traffic and rolling loads.
- D. Touch-up, repair or replace damaged products before Substantial Completion.



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4.5 MAINTENANCE

A. Safety Precautions

1. When performing any wet maintenance, always use wet floor signs and caution tape.
2. Refer to each product's MSDS for use of personal protective equipment.

B. Immediately After Installation:

1. Keep all foot traffic off the new floor for 12 hours.
2. Keep all furniture, fixtures and rolling traffic off the new floor for 48 hours.
3. Use plywood, or other hard protective materials, when moving heavy objects over the new floor.
4. Remove adhesive residue with clean white cloth dampened with mineral spirits. Do not use harsh solvents.
5. Follow with water rinse.
6. Wait 72 hours (3 days) before wet-washing the new floor. This will allow the adhesive to cure.

C. Newly Installed Floor Care

1. Sweep and/or dust mop the floor thoroughly to remove all dirt and grit. Do not use treated mops or compounds.
2. Damp mop or auto scrub using a medium to heavy dilution pH neutral floor cleaner using a new red pad. Follow label instructions on floor cleaner.
3. Rinse the floor thoroughly with clean water. Allow to dry completely.

D. Optional Maintenance Procedure:

1. If you wish to seal the floor tile seams, apply 2 medium coats of suggested floor finish using a new applicator mop. Allow each coat to dry before applying a new coat. Follow floor finish label instructions.
2. The most current maintenance recommendations can be downloaded from www.rikett.net

END OF SECTION

RED NOTE: Be sure to obtain the latest version of this Guide Specification.

This Guide Specification is not a completed document ready for use. It must be edited, deleting, adding, or modifying text, as required to suit project requirements.

The professional stamping and the contracting parties of the Contract Documents are responsible for the accuracy of issued project specifications, including any use of this Rikett Resilient Tile Flooring Guide Specification.

RIKETT AMERICA SHALL NOT BE LIABLE FOR DAMAGES ARISING OUT OF THE USE OF THIS GUIDE SPECIFICATION.

END OF SECTION