**Resilient Flooring Specification**

**SECTION 09 65 19
Resilient Tile Flooring**

# Part 1 - General

## 1.01 Summary

A. Section Includes:

1. Flooring and accessories as shown on the drawings and schedules and as indicated by the requirements of this section.

B. Related Documents

1. Drawings and General Provisions of the Contract (including General and Supplementary Conditions and Division 1 sections) apply to the work of this section.

C. Related Sections:

1. Other Division 9 sections for floor finishes related to this section but not the work of this section

2. Division 3 Concrete; not the work of this section

3. Division 6 Wood and Plastics; not the work of this section

4. Division 7 Thermal and Moisture Protection; not the work of this section

## 1.02 References

A. Aproduct A|LVT installation instructions

B. ASTM International:

1. ASTM F 790 Standard Test Method for Static Load Limit

2. ASTM F2199 Standard Test Method for Determining Dimensional Stability of Resilient Floor Tile after Exposure to Heat

3. ASTM F 710 Standard Practice for Preparing Concrete Floors to Receive Resilient Flooring

4. ASTM F 1482, Standard Guide to Wood Underlayment Products Available for use under Resilient Flooring

5. ASTM F 1700 Standard Specification for Solid Vinyl Tile

6. ASTM F 1861 Standard Specification for Resilient Wall Base

7. ASTM F1914 Standard Test Methods for Short-Term Indentation and Residual Indentation of Resilient Floor Covering

8. ASTM F 2170 Standard Test Method for Determining Relative Humidity in Concrete Floor Slabs Using in situ Probes

9. ASTM F925 Standard Test Method for Resistance to Chemicals of Resilient Flooring

10. ASTM F2055 Standard Test Method for Size and Squareness of Resilient Floor Tile by Dial Gage Method

11. ASTM F1514 Standard Test Method for Measuring Heat Stability of Resilient Flooring by Color Change

C. Resilient Floor Covering Institute

 1. RFCI FloorScore® IAQ Certification

## 1.03 System Description

A. Performance Requirements:

Provide flooring which has been manufactured, fabricated and installed to performance criteria certified by manufacturer without defects, damage, or failure.

B. Administrative Requirements

1. Pre-installation Meeting: Conduct an on-site pre-installation meeting to verify project requirements, substrate conditions, manufacturer's installation instructions and manufacturer's warranty requirements. Comply with Division 1 Project Management and Coordination (Project Meetings) Section.

2. Pre-installation Testing: Conduct pre-installation testing as follows:

a. ASTM F 2170 Standard Test Method for Determining Relative Humidity in Concrete Floor Slabs Using in situ Probes. Moisture test results shall not exceed 75% RH.

C. Test Installations/ Mock-ups:

Install at the project site a job mock-up using acceptable products and manufacturer approved installation methods, including concrete substrate testing. Obtain Owner's acceptance of finish color, texture and pattern, and workmanship standards.

1. Mock-Up Size: 5’ x 5’

2. Maintenance: Maintain mock-up during construction for workmanship comparison; remove and legally dispose of mock-up when no longer required.

3. Incorporation: Mock-up may be incorporated into the final construction with Owner's approval.

D. Sequencing and Scheduling

1. Install flooring and accessories after the other finishing operations, including painting, have been completed. Close spaces to traffic during the installation of the flooring.

2. Do not install flooring over concrete slabs until they are sufficiently dry to achieve a bond with the adhesive, in accordance with the manufacturer's recommended bond, moisture tests and pH test.

## 1.04 Submittals

A. Tech Data

Submit shop drawings, manufacturer's technical data, and installation and maintenance instructions.

B. Samples

Submit the manufacturer's standard samples showing the required colors for flooring and applicable accessories.

C. MSDS

Submit Material Safety Data Sheets (MSDS) available for flooring product, adhesives, patching/leveling compounds, floor finishes and cleaning agents.

D. Closeout

Closeout Submittals: Submit the following:

1. Operation and Maintenance Data: Operation and maintenance data for installed products in accordance with Division 1 Closeout Submittals (Maintenance Data and Operation Data) Section. Include methods for maintaining installed products, and precautions against cleaning materials and methods detrimental to finishes and performance.

2. Warranty: Warranty documents specified herein

## 1.05 Quality Assurance

A. Responsibility

Single-Source Responsibility: provide types of flooring and accessories recommended by one manufacturer, including leveling and patching compounds, and adhesives.

B. Select Installer

Select an installer who is competent in the installation of resilient vinyl tile flooring.

## 1.06 Delivery, Storage, and Handling

 A. Deliver the flooring to the installation site in manufacturer’s original packaging. Indicate the project name and handling instructions on the outside of the boxes.

 B. Comply with manufacturer’s ordering instructions and lead time requirements to avoid construction delays.

 C. Deliver materials in good condition to the jobsite in the manufacturer’s original unopened containers that bear the name and brand of the manufacturer, project identification, and shipping and handling instructions.

 D. Store materials in a clean, dry, enclosed space off the ground, protected from harmful weather conditions and at temperature and humidity conditions recommended in the manufacturer’s installation instructions. Protect adhesives from freezing. Store flooring, adhesives and accessories in the spaces where they will be installed for at least 48 hours before beginning installation. Follow all storage and handling instructions from adhesive and accessory manufacturers.

## 1.07 Project Conditions

A. Temperature

Maintain a minimum temperature in the spaces to receive the flooring and accessories of 65°F (18°C) and a maximum temperature of 79°F (26°C) for at least 24 hours before, during, and for not less than 24 hours after installation. Thereafter, maintain a minimum temperature of 55°F (13°C) in areas where work is completed. Protect all materials from the direct flow of heat from hot-air registers, radiators, or other heating fixtures and appliances.

## 1.08 Warranty

A. Resilient

Resilient Flooring: Submit a written warranty executed by the manufacturer, agreeing to repair or replace resilient flooring that fails within the warranty period.

B. Rights

The Warranty shall not deprive the Owner of other rights the Owner may have under other provisions of the Contract Documents and will be in addition to and run concurrent with other warranties made by the Contractor under the requirements of the Contract Documents.

C. Validation

For the Warranty to be valid, this product is required to be installed using the appropriate manufacturer instructions. Product installed not using the specific instructions from the manufacturer will void the warranty.

## 1.09 Maintenance

## A. Deliver extra materials to Owner. Furnish extra materials from same production run as products installed. Packaged with protective covering for storage and identified with appropriate labels.

##  1. Quantity: Furnish quantity of flooring units equal to 3% of amount installed.

##  2. Delivery, Storage, and Protection: Comply with Owner’s requirements for delivery, storage, and protection of extra material, in conjunction with manufacturer’s instructions for delivery, storage, and handling.

# Part 2- Products

## 2.01 Manufacturer

A. Aproduct A|LVT

 Sales Representative Mid-Atlantic: Robert Resh; rresh@asurface-dc.com

## 2.02 Resilient Tile Flooring Materials

A. Products

Provide Luxury Vinyl Tile Flooring manufactured by Aproduct

1. Description: A layered construction consisting of a tough, clear, wear layer protecting a high-fidelity print layer on a vinyl backing. Protected by a UV-cured polyurethane finish, the wear surface is embossed with different textures to enhance each of the printed visuals. Colors are insoluble in water and resistant to cleaning agents and light.

2. Luxury Vinyl Tile shall conform to the requirements of ASTM F 1700, 'Standard Specification for Solid Vinyl Tile", Class III, Type B - Embossed Surface.

**SPECIFIER NOTE: SELECT CONFIGUARTION BELOW**

Aproduct A|LVT

Style: Urban Woods

Style number: APLD

**Size: [6” x 36” / 6” x 48” / 10” x 60”] nominal**

**Overall thickness: [2mm / 2.5mm / 3.0mm]**

**Wear layer: [8mil / 12mil / 20mil / 27mil]**

Color: as indicated on plans

## 2.03 Product Substitution

A. Substitutions

Substitutions: No substitutions permitted because of the specific attributes listed in Section 2.02.

## 2.04 Adhesives

A. Use proper Henry adhesive as recommended in A|LVT installation instructions.

## 2.06 Accessories

A. Patching

For patching, smoothing, and leveling monolithic subfloors (concrete, terrazzo, quarry tile, ceramic tile, and certain metals), use proper Ardex material as recommended in A|LVT installation instructions. Consult your local Ardex representative for non-standard applications.

B. Transition

Provide transition/reducing strips tapered to meet abutting materials.

C. Threshold

Provide threshold of thickness and width as shown on the drawings.

D. Resilient Edge Strips

Provide resilient edge strips of width shown on the drawings, of equal gauge to the flooring, homogeneous vinyl or rubber composition, tapered or bullnose edge, with color to match or contrast with the flooring, or as selected by the Architect from standard colors available.

E. Metal Edge Strips

Provide metal edge strips of width shown on the drawings and of required thickness to protect exposed edges of the flooring. Provide units of maximum available length to minimize the number of joints. Use butt-type metal edge strips for concealed anchorage, or overlap-type metal edge strips for exposed anchorage. Unless otherwise shown, provide strips made of extruded aluminum with a mill finish.

# Part 3 - Execution

## 3.01 Manufacturer's Instructions

A. Compliance

Compliance: Comply with manufacturer's product data, including technical bulletins, product catalog, installation instructions, and product carton instructions for installation and maintenance procedures as needed.

## 3.02 Examination

A. Site Verification

Site Verification of Conditions: Verify substrate conditions (which have been previously installed under other sections) are acceptable for product installation in accordance with manufacturer's instructions (i.e. moisture tests, bond test, pH test, etc.).

B. Visual Inspection

Visually inspect flooring materials, adhesives and accessories prior to installation. Flooring material with visual defects shall not be installed and shall not be considered as a legitimate claim.

C. Examine Subfloors

Examine subfloors prior to installation to determine that surfaces are smooth and free from cracks, holes, ridges, and other defects that might prevent adhesive bond or impair durability or appearance of the flooring material.

D. Inspect Subfloors

Inspect subfloors prior to installation to determine that surfaces are free from curing, sealing, parting and hardening compounds; residual adhesives; adhesive removers; and other foreign materials that might prevent adhesive bond. Visually inspect for evidence of moisture, alkaline salts, carbonation, dusting, mold, or mildew.

E. Reporting

Report conditions contrary to contract requirements that would prevent a proper installation. Do not proceed with the installation until unsatisfactory conditions have been corrected.

F. Failure Warning

Failure to call attention to defects or imperfections will be construed as acceptance and approval of the subfloor. Installation indicates acceptance of substrates with regard to conditions existing at the time of installation.

## 3.03 Preparation

A. Smooth Surfaces

Subfloor Preparation: Smooth concrete surfaces, removing rough areas, projections, ridges, and bumps, and filling low spots, control or construction joints, and other defects with Ardex floor preparation as recommended by the flooring manufacturer. Refer A|LVT installation instructions for additional information on subfloor preparation.

B. Subfloor Cleaning

Subfloor Cleaning: Remove paint, varnish, oils, release agents, sealers, and waxes. Remove residual adhesives as recommended by the flooring manufacturer. Remove curing and hardening compounds not compatible with the adhesives used, as indicated by a bond test or by the compound manufacturer's recommendations for flooring. Avoid organic solvents. Refer to the A|LVT installation instructions for additional information on subfloor preparation.

C. Standard Moisture Test

Perform subfloor moisture testing in accordance with ASTM F 2170, ‘Standard Test Method for Determining Relative Humidity in Concrete Slabs Using in-situ Probes’. Refer to A|LVT installation instructions for slab moisture limits. On installations where both the Percent Relative Humidity and the Moisture Vapor Emission Rate tests are conducted, results for both tests shall comply with the allowable limits recommended by manufacturer. Do not proceed with flooring installation until results of moisture tests are acceptable. All test results shall be documented and retained

D. pH Test

Concrete pH Testing: Perform pH tests on concrete floors regardless of their age or grade level. All test results shall be documented and retained.

E. Wood Subfloor

Wood subfloors: refer to A|LVT installation instructions for information on installation over wood subfloors.

F. Surface Cleaning

Surface Cleaning: Vacuum or broom-clean surfaces to be covered immediately before the application of flooring. Make subfloor free from dust, dirt, grease, and all foreign materials.

## 3.04 Installation of Flooring

A. Install flooring in strict accordance with the latest A|LVT installation instructions. Failure to comply may result in voiding the manufacturer's warranty listed in Section 1.08

B. Wall to Wall

Install flooring wall to wall before the installation of floor-set cabinets, casework, furniture, equipment, movable partitions, etc. Extend flooring into toe spaces, door recesses, closets, and similar openings as shown on the drawings.

C. Pan-type

If required, install flooring on pan-type floor access covers. Maintain continuity of color and pattern within pieces of flooring installed on these covers. Adhere flooring to the subfloor around covers and to covers.

D. Scribe

Scribe, cut, and fit to permanent fixtures, columns, walls, partitions, pipes, outlets, and built-in furniture and cabinets.

E. Roll

Roll with a 100-pound (45.36 kilogram) roller in the field areas Refer to specific rolling instructions of the flooring manufacturer.

F. Tools

Install flooring with adhesives, tools, and procedures in strict accordance with the manufacturer's written instructions. Observe the recommended adhesive trowel notching, open times, and working times.

## 3.05 Installation of Accessories

A. Top Set

Apply top set wall base to walls, columns, casework, and other permanent fixtures in areas where top-set base is required. Install base in lengths as long as practical, with inside corners fabricated from base materials that are mitered or coped. Tightly bond base to vertical substrate with continuous contact at horizontal and vertical surfaces.

B. Voids

Fill voids with plastic filler along the top edge of the resilient wall base or integral cove cap on masonry surfaces or other similar irregular substrates.

C. Resilient Edge Strips - Butted

Place resilient edge strips tightly butted to flooring, and secure with adhesive recommended by the edge strip manufacturer. Install edge strips at edges of flooring that would otherwise be exposed.

D. Metal Edge Strips

Apply **[butt-type] [overlap]** metal edge strips where shown on the drawings, **[before] [after]** flooring installation. Secure units to the substrate, complying with the edge strip manufacturer's recommendations.

## 3.06 Cleaning

## A. Clean and maintain flooring in strict accordance to manufacturer’s recommended cleaning and maintenance instructions. Failure to comply may result in voiding the manufacturer's warranty listed in Section 1.08.

## 3.07 Protection

A. Protection

Protect installed flooring as recommended by the flooring manufacturer against damage from rolling loads, other trades, or the placement of fixtures and furnishings.