

**SECTION 09 6519
RESILIENT TILE FLOORING**

PART 1 GENERAL

1.01 SUMMARY

A. Section Includes

1. Resilient Tile Flooring
2. Installation Accessories
 - a. Adhesives
 - b. Finishes & Cleaners

B. Related Requirements

1. Section 01 4000, Quality Requirements
2. Section 01 6116, Volatile Organic Compound (VOC) Content Restrictions: SCS FloorScore® certification documentation
3. Section 01 7000, Execution & Closeout Requirements
4. Section 01 7419, Construction Waste Management & Disposal
5. Section 07 9513, Expansion Joint Cover Assemblies
6. Section 07 9200, Joint Sealants

1.02 SUBMITTALS

- A. See Section 01 3000 - Administrative Requirements, for submittal procedures.
- B. Product Data
 1. Technical Data
 2. Installation & Maintenance
 3. Warranty
 4. Reclamation Program
 5. Safety Data Sheets (SDS) for accessories
 6. LEED v4 Submittals
 7. Health Product Declaration (HPD) v2.0 and/or Declare Label
- C. Selection Samples: Submit manufacturer's complete set of color samples for Architect's initial selection.
- D. Verification Samples: Submit two samples, 4 inches x 4 inches (101mm x 101mm) in size, illustrating color and pattern for each resilient flooring product specified.

1.03 QUALITY ASSURANCE

- A. Comply with applicable laws and possess valid licenses, registrations, and/or certificates required by federal law, including but not limited to licenses, registrations, and/or certificates required to:
 1. Conduct business in the designated locale.
 2. Perform the contract work it seeks to perform.
- B. Manufacturer Qualifications: Company specializing in manufacturing products specified in this section, with not less than ten years of documented experience.
- C. Installer Qualifications: Professional-flooring contractors showing successful LVT installations in similar size and scope. **Provide technical certifications, qualifications and resources, including equipment, personnel and financial resources, to perform the referenced contract.**

1.04 WARRANTY

- A. See Section 01 7800, Closeout Submittals, for additional warranty requirements.
- B. Aspecta® One Warranty - 20-Year Limited Non-Prorated Commercial Material Warranty. Coverage includes:
 1. 100% Cost of Material for the entire duration of Warranty (20 Years).
 2. Pro-Rated Cost of Labor (Fair-Market Value) for the first 10 Years.
 3. One-Time Transferability of Warranty.

1.05 DELIVERY, STORAGE, AND HANDLING

- A. Upon receipt, immediately remove any shrink-wrap and check material for damage, and that the material is of the correct style, color, quantity and run number(s).

- B. General Storage
 1. Store all materials flat and off of the floor in an acclimatized, weather-tight space between 65°-85°F (18°-29°C).
 2. Do not double stack pallets.

1.06 FIELD CONDITIONS

- A. Acclimate material at jobsite between 65°-85°F (18°-29°C) and 35%-85% RH for 48 hours prior to installation. Temperature and relative humidity should also be maintained at the same levels during installation, and after installation.
- B. Spread unopened cartons no more than 6 cartons high and at least 4 inches (101mm) apart.
- C. Keep away from heating and cooling ducts and direct sunlight.
- D. If permanent HVAC is not operational, temporary means should be used to maintain the recommended temperature and relative humidity levels.
- E. Close areas to traffic during installation of flooring and accessories.

PART 2 PRODUCTS

2.01 MANUFACTURERS

- A. Metroflor Corporation
 1. Address: 15 Oakwood Avenue, Norwalk, CT 06850.
 2. Contact: To find the Aspecta® Commercial Sales Specialist that services your area – visit <http://www.aspectafl flooring.com/industry-tools/representative-search/>.
- B. Substitutions: Not permitted

2.02 RESILIENT TILE FLOORING

- A. Aspecta® One - Luxury Vinyl Plank & Tile
 1. Substitutions: Not permitted
- B. Patterns (**Note to Specifier: List by SKU and include the Collection Name, Pattern Name, Size & Emboss associated with each SKU**).
 - 1.
 - 2.
 - 3.
- C. Physical Properties:
 1. Construction: Solid Plank & Tile - Phthalate-Free, Formaldehyde-Free, and made from 100% Virgin Vinyl.
 2. Wear Layer Thickness: 22mil (0.55mm).
 3. Total Thickness (Gauge): 0.098 inch (2.5mm).
 4. Finish: Urethane Coating with Ceramic Bead Particles.
- D. Manufacturing, Performance, and Safety Standards
 1. ASTM F1700, Classification - Class III, Type B.
 2. ASTM F386, Thickness - Passes Requirements.
 3. ASTM F410, Wear Layer Thickness - Passes Requirements for Commercial Classification.
 4. ASTM F2421/F2055, Size & Squareness - Passes Requirements.
 5. ASTM F1914, Residual Indentation - Surpasses Requirements.
 6. ASTM F137, Flexibility - Surpasses Requirements.
 7. ASTM F2199, Dimensional Stability - Surpasses Requirements.
 8. ASTM F925, Chemical Resistance - Passes Requirements.
 9. ASTM F1514, Resistance to Heat - Surpasses Requirements.
 10. ASTM F1515, Resistance to Light - Surpasses Requirements.
 11. ASTM E648 / NFPA 253, Critical Radiant Flux - Class I.
 12. ASTM E662 / NFPA 258, Smoke Density (Flaming & Non-Flaming) - Passes Requirements.
 13. CHPS/CA Section 01350 & ASTM D5116 - Passes Requirements.
 14. ASTM F963, Sec. 4.3.5.2(2)(B), Heavy Metals - Passes Requirements.
 15. ASTM D2047, Coefficient of Friction (Dry) - ≥0.6.
 16. ASTM F970, Static Load Limit - ≥1,000 Lbs. (Surpasses Requirements).
 17. ASTM D4060, Abrasion Resistance - ≥20,000 cycles (Varies with Emboss).

18. ASTM D7823/CPSC-CH-C1001-09.3, Phthalates - Meets CPSIA Guidelines.
 19. ASTM E90 & ASTM E413, Airborne Sound Transmission Loss - Sound Transmission Class (STC) 61.
 20. ASTM E492 & ASTM E989, Impact Sound Transmission (Floor-Ceiling Assemblies) - Impact Insulation Class (IIC) 70.
- E. Sustainability and Affiliations:
1. Product Sustainability:
 - a. FloorScore® / CHPS 01350.
 - b. VOC Content Limits: As specified in Section 01 6116.
 - c. NSF/ANSI 332 Gold.
 - d. LEED v4 - Potential Contributions Towards Certification:
 - 1) MR Prerequisite 2, Construction & Demolition Waste Management Planning.
 - 2) MR Credit 2, Environmental Product Declarations (EPD).
 - 3) MR Credit 4, Material Ingredients.
 - 4) MR Credit 5, Construction & Demolition Waste Management.
 - 5) EQ Credit 2, Low-Emitting Materials: Flooring Systems.
 - 6) IN Credit 1, Innovation - Pilot Credit.
 - e. Green Globes - Potential Contributions Towards Certification:
 - 1) Section 3.1 - Project Management (Subsection 3.1.1.2.2.6), IDP Performance Goals for Construction Waste Diversion.
 - 2) Section 3.5 - Materials & Resources (Subsection 3.5.2.2.1.1), Prescriptive Path for Interior Fit-Outs.
 - 3) Section 3.5 - Materials & Resources (Subsection 3.5.4.1), Construction Waste.
 - 4) Section 3.7 - Indoor Environment (Subsection 3.7.2.1.4), Volatile Organic Compounds: Floors & Floor Coverings.
 - 5) Section 3.7 - Indoor Environment (Subsection 3.7.5.1.3), Acoustic Comfort Design - STC.
 - 6) Section 3.7 - Indoor Environment (Subsection 3.7.5.1.4), Acoustic Comfort Design - IIC.
 - f. The WELL Building Standard v1 - Potential Contributions Towards Certification:
 - 1) Air - Feature 04 (VOC Reduction), Part 3(a): Flooring.
 - 2) Air - Feature 25 (Toxic Material Reduction), Part 2(b): Flame Retardant Limitation - Flooring.
 - 3) Air - Feature 25 (Toxic Material Reduction), Part 3(a): Phthalate (Plasticizers) Limitation - Flooring.
 - 4) Air - Feature 28 (Cleanable Environment), Parts 1(a)(b)(c) - Material Properties - High-Touch & Non-Porous Surfaces.
 - 5) Air - Feature 28 (Cleanable Environment), Part 2(a) - Cleanability.
 - 6) Mind - Feature 97 (Material Transparency), Parts 1(a)(b): Material Information.
 - 7) Mind - Feature 97 (Material Transparency), Part 2(a): Accessible Information.
 2. Affiliations - Manufacturer Member Bodies and/or Sponsorships:
 - a. ASTM International
 - b. Canada Green Building Council (CaGBC)
 - c. Flooring Contractors Association (FCICA)
 - d. Green Building Initiative (GBI)
 - e. Health Product Declaration Collaborative (HPDC)
 - f. International Interior Design Association (IIDA)
 - g. International Living Future Institute (ILFI)
 - h. Multilayer Flooring Association (MFA)
 - i. North American Association of Floor Covering Distributors (NAFCD)
 - j. Resilient Floor Covering Institute (RFCI)
 - k. Southface Energy Institute
 - l. U.S. Green Building Council (USGBC)
 - m. World Floor Covering Association (WFCA)

2.03 ACCESSORIES

A. Adhesives

1. Refer to the Aspecta® One Installation Guide/Manual for the recommended Prevail® Adhesive(s) to use for installation.
 2. Substitutions: Not permitted
 3. Sustainability – The following qualifications are met by all Prevail® Adhesives recommended for use in the installation of Aspecta® One, **except when noted**:
 - a. FloorScore® / CHPS 01350 / SCAQMD 1168.
 - b. VOC Content Limits: As specified in Section 01 6116.
 - c. LEED v4 - Potential Contributions Towards Certification:
 - 1) EQ Credit 2, Low-Emitting Materials: Adhesives & Sealants.
 - 2) MR Credit 3, Building Product Disclosure and Optimization - Sourcing of Raw Materials; **Applies only to PR-6000 (Prevail® Pressure Sensitive Adhesive)**.
 - d. Green Globes - Potential Contributions Towards Certification:
 - 1) Section 3.7 - Indoor Environment (Subsection 3.7.2.1.1), Volatile Organic Compounds: Adhesives & Sealants.
 - e. The WELL Building Standard v1 – Potential Contributions Towards Certification:
 - 1) Air - Feature 04 (VOC Reduction), Parts 2(a)(b): Interior Adhesives & Sealants.
- B. Finishes & Cleaners
1. Refer to the Aspecta® One Installation Guide/Manual for the recommended Prevail® Finishes & Cleaners.
 2. Substitutions: Not permitted.
 3. Sustainability
 - a. CARB.
 - b. VOC Content Limits: As specified in Section 01 6116.

PART 3 EXECUTION

3.01 EXAMINATION PER SECTION 01 7000 AND AS FOLLOWS:

- A. Install flooring and accessories after other operations (including painting) have been completed.
- B. Acceptance of Conditions: Carefully examine all installation areas with Installer/Applicator present, for compliance with requirements affecting Work performance.
 1. Verify that field measurements, product, adhesives, substrates, surfaces, structural support, tolerances, levelness, temperature, humidity, moisture content level, pH, cleanliness and other conditions are as required by the manufacturer, and ready to receive Work.
- C. Verify that substrate is contaminant-free (including old adhesives and abatement chemicals).
- D. Test substrates as required by manufacturer to verify proper conditions exist.

Note to Specifier: Coordinate and edit requirements to the project substrates present. Refer to standard version of this specification for requirements per substrate, including:

 1. **Concrete**
 2. **Wood**
- E. Verify that required floor-mounted utilities are in correct location.

3.02 PREPARATION

- A. Prior to installation, the flooring installer should plan and attend an on-site construction meeting with the General Contractor, Architect and Property Owner to review all requirements and inspect site conditions as outlined in the manufacturer's installation document, as well as to review the requirements of ASTM F710 and any relevant building codes, or local, state, or national regulations.
- B. Flooring installation should not begin until all site conditions have been assessed, testing has been completed and subfloor conditions have been approved.
- C. Prepare per manufacturer's written instructions, SECTION 01 7000, and as follows:
 1. Prepare substrates to ensure proper adhesion of Luxury Vinyl Plank & Tile.
 2. **Concrete Substrates:** Prepare substrate per ASTM F710 and Manufacturer's Installation Guide/Manual.
 3. **Wood Substrates or Panel Type Underlayment:**

- a. Wood subfloors require an underlayment (double layer construction) with a minimum total thickness of 1 inch (25mm) and minimum of 18 inches (457mm) of well ventilated space beneath.
 - 1) Crawl spaces shall be insulated and protected by a vapor barrier.
 - b. Use minimum 0.25 inch (6mm) thick APA-rated "underlayment grade" plywood with a fully sanded face or other underlayment panel that is appropriate for the intended usage. Install and prepare panels and seams according to the manufacturer's instructions.
4. **Existing and other substrates:**
- a. Refer to manufacturer's professional installation guide and or contact manufacturer, as special conditions may exist.

3.03 INSTALLATION

- A. Installation per manufacturer's written instructions, SECTION 01 7000, and as follows:
 - 1. Layout shall be specified by Architect, Designer, or End User.
 - 2. Follow layout and ensure installation reference lines are square.
 - 3. Install movement joint systems per manufacturer's instructions and per SECTION 07 9513 and SECTION 07 9200.
 - 4. Adhesives: Refer to manufacturer's instructions.

3.04 FIELD QUALITY CONTROL

- A. Site tests and Inspections per SECTION 01 4000 and as follows:
 - 1. Inspect flooring installation for non-conforming work, including (but not limited to) the following:
 - a. Lack of adhesion.
 - b. Bubbles, loose tiles or raised edges.
 - c. Dirt and debris underneath flooring.
 - d. Excessive gaps.
 - e. Improper substrate preparation (as indicated by telegraphing).
 - f. Damage to tiles, including: dents/indentations, cuts, cracks, burns or punctures.
- B. Non-conforming work per General Conditions and as follows:
 - 1. Repair or replace damaged material if not acceptable to the Architect.

3.05 CLEANING

- A. Waste Management per SECTION 01 7000 or 01 7419, and as follows:
 - 1. Coordinate material reclamation program with manufacturer, if applicable.
- B. Provide Progress Cleaning per manufacturer's written instructions and SECTION 01 7000.
- C. Provide Final Cleaning immediately prior to Substantial Completion inspection per manufacturer's written instructions and SECTION 01 7000.

3.06 MAINTENANCE

- A. Initial maintenance per flooring manufacturer's written instructions.

3.07 PROTECTION

- A. Protect materials from construction operations until date of Final Completion or Owner occupancy, whichever occurs first.
 - 1. Protect finished floor from abuse and damage by using heavy, non-staining kraft paper, drop cloths, or equivalent. Use additional, non-damaging protective materials, as needed.
 - 2. Light foot traffic on a newly installed floor can be permitted after 24 hours.
 - 3. Keep heavy traffic and rolling loads off the newly installed LVT flooring for 48 hours. Protect the floor from rolling loads by covering with protective boards.

END OF SECTION