



Life Floor® 3-Part Specification

Section 096113

PART 1 GENERAL

1.01 SUMMARY

A. Section Includes: EVA-rubber copolymer tile wet area surfacing system.

Specifier Note: Revise paragraph below to suit project requirements. If a reader of this section could reasonably expect to find a product or component specified in this section, but it is actually specified elsewhere, then the related section number(s) should be listed in the paragraph below. In the absence of related sections, delete paragraph below.

Specifier Note: Site materials and methods, drainage, attractions, fencing, substrate preparation and similar work are provided by others and are described in other sections. Edit, retain or delete paragraph below to suit project requirements and specifier practice.

A. Related Sections: Division 2 Sitework Sections: Materials and Methods, Excavation, Asphalt Paving, Concrete Paving, Sub-Drainage, Storm Drainage, Fencing, Playground Equipment and Structures.

Specifier Note: Article below may be omitted when specifying manufacturer's proprietary products and recommended installation. Retain References Article when specifying products and installation by an industry reference standard. If retained, list standard(s) referenced in this section. Indicate issuing authority name, acronym, standard designation and title. Establish policy for indicating edition date of standard referenced. Conditions of the Contract or Division 1 References Section may establish the edition date of standards. This article does not require compliance with standard. It is a listing of all references used in this section.

1.02 REFERENCES

A. American Society for Testing and Materials (ASTM):

1. ASTM C1028-07 Standard Test Method for Determining Static Coefficient of Friction of Ceramic Tile and Other Like Surfaces by the Horizontal Dynamometer Pull-Meter Method:1.02



2. ASTM E648-03 is for “Standard Test Method for Critical Radiant Flux of Floor-Covering Systems Using a Radiant Heat Energy Source – Passed

3. ASTM E303 Standard Test Method for Measuring Surface Frictional Properties Using the British Pendulum Tester - Rustic Board Pattern: 43.40; Slate Pattern: 34.90; Slate Smooth: 33; Ripple Pattern: 44.75

4. ASTM F1292 Standard Specification for Impact Attenuation of Surface Systems Under and Around Playground Equipment: Critical Fall Height 1’ or More.

5. Toxic Characteristic Leaching Procedure (TCLP) (RCRA) by Method 3010

Specifier Note: Article below should be restricted to statements describing design or performance requirements and functional (not dimensional) tolerances of a complete system. Limit descriptions to composite and operational properties required to link components of a system together and to interface with other systems.

1.03 SYSTEM DESCRIPTION

A. Performance Requirements: Provide a single layer EVA-rubber copolymer tile wet area surfacing system which has been designed, manufactured and installed to meet the following criteria:

1. Shock Attenuation (ASTM F1292) – 3/8” meets 1’ critical fall height; 7/8” meets 4’ critical fall height; 1 1/4” meets 6’ critical fall height

a. Gmax - Less than 200.

b. Head Injury Criteria - Less than 1000.

2. Flammability (ASTM E648) – Class 1

3. Toxic Characteristic Leaching Procedure (TCLP) (RCRA) by Method 3010 – Pass.

Specifier Note: Article below includes submittal of relevant data to be furnished by Contractor before, during or after construction. Coordinate this article with Architect’s and Contractor’s duties and responsibilities in Conditions of the Contract and Division 1 Submittal Procedures Section.



1.04 SUBMITTALS

A. General: Submit listed submittals in accordance with Conditions of the Contract and Division 1 Submittal Procedures Section. Please contact manufacturer.

B. Product Data: Submit manufacturer's product data and installation instructions.

C. Verification Samples: Submit manufacturer's standard verification samples of 24" x 24" minimum.

D. Quality Assurance/Control Submittals: Submit the following:

1. Certificate of qualifications of the certified installers.

E. Closeout Submittals: Submit the following:

1. Warranty documents specified herein.

Specifier Note: Article below should include statements of prerequisites, standards, limitations and criteria that establish an overall level of quality for products and workmanship for this section. Coordinate article below with Division 1 Quality Assurance Section.

1.05 QUALITY ASSURANCE

A. Qualifications: Utilize an installer having experience with projects of similar scope and complexity.

Specifier Note: Article below should include specific protection and environmental conditions required during storage. Coordinate article below with Division 1 Product Requirements Section.

1.06 DELIVERY, STORAGE & HANDLING

A. General: Comply with Division 1 Product Requirement Section.

B. Delivery: Deliver materials in manufacturer's original, unopened, undamaged containers with identification labels intact.

C. Storage and Protection: Store materials protected from exposure to harmful environmental conditions and at a minimum temperature of 20 degrees F (-7 degrees C) and a maximum temperature of 100 degrees F (38 degrees C).



Specifier Note: In article below, state physical or environmental limitations or criteria for installation such as weather, temperature, humidity, ventilation or illumination required for proper installation or application.

1.07 PROJECT/SITE CONDITIONS

A. Environmental Requirements: Install surfacing system when minimum ambient temperature is 40 degrees F (1 degree C) and maximum ambient temperature is 90 degrees F (32 degrees C). Do not install in rain.

Specifier Note: Coordinate article below with Conditions of the Contract and with Division 1 Closeout Submittals (Warranty) Section. Use this article to require special or extended warranty or bond covering the work of this section.

1.08 WARRANTY

A. Project Warranty: Refer to Conditions of the Contract for project warranty provisions.

B. Manufacturer's Warranty: Submit, for Owner's acceptance, manufacturer's standard warranty document executed by authorized company official. Manufacturer's warranty is in addition to, and not a limitation of, other rights Owner may have under contract documents.

C. Proper drainage is critical to the longevity of the Life Floor® surfacing system. Inadequate drainage will cause premature breakdown of the system in affected areas; and void the warranty.

Specifier Note: Coordinate subparagraph below with manufacturer's warranty requirements.

1. Warranty Period: Life Floor warrants all 7/8" and 3/8" thick Life Floor for a term of five years from the date of delivery. Life Floor warrants all 3/16" thick Life Floor tiles for a term of three years from the date of delivery. Limitations to the warranty period include areas of extreme traffic defined as areas with annual traffic of 250,000 users or greater. Life Floor warrants all tiles in areas of extreme traffic for a term of two years from the date of delivery.



PART 2 PRODUCTS

Specifier Note: Retain article below for proprietary method specification. Add product attributes, performance characteristics, material standards and descriptions as applicable. Use of such phrases as “or equal” or “or approved equal” or similar phrases may cause ambiguity in specifications. Such phrases require verification (procedural, legal and regulatory) and assignment of responsibility for determining “or equal” products.

2.01 EVA-rubber Copolymer Wet Area Surfacing System

Specifier Note: Retain or delete paragraph below per project requirements and specifier’s practice.

A. Proprietary Products/Systems. EVA-rubber copolymer tile wet area surfacing system, including the following:

1. Life Floor®:

a. Material: Life Floor® is a factory-molded surface composed of EVAtrax™, an ethyl vinyl acetate copolymer. **Specifier Note:** The type of attraction determines the required tile thickness. Depending on ASTM F1292 requirements for critical fall height 6’ select tile thickness from optional thicknesses 1 ¼”. Specify project requirements below and coordinate with working drawings.

b. Thickness and Weight: 3/8” standard: 2lb or 0.9kg; 7/8”: 4.4lbs or 2kg

c. Color:

1. Life Floor® Patterns: [Slate] [Ripple] [Rustic Board]

2. Life Floor® Colors: [Sepia] [Terra Cotta] [Maple] [Firecracker] [Tiki] [Mojave] [Gobi] [Sandbar] [Sandstone] [Ivory] [Porcelain] [Coral] [Ocean] [Bluebird] [Aviator] [Iceberg] [Iris] [Thistle] [Heron] [Foghorn] [Kestrel] [Bluestone] [Boulevard] [River Rock] [Onyx] [Evergreen] [Olive] [Turquoise] [Lily pad] [Limelight] [Sunshine].

Specifier Note: Edit Article below to suit project requirements. If substitutions are permitted, edit text below. Add text to refer to Division 1 Project Requirements (Product Substitutions Procedures) Section.

2.02 PRODUCT SUBSTITUTIONS

A. Substitutions: No substitutions permitted.



Specifier Note: Specify subordinate or secondary items that aid and assist primary products specified above or are necessary for preparation or installation of those items.

PART 3 EXECUTION

Specifier Note: Revise article below to suit project requirements and specifier's practice.

3.01 MANUFACTURER'S INSTRUCTIONS

A. Comply with the instructions and recommendations of the manufacturer.

Specifier Note: Specify actions to physically determine that conditions are acceptable to receive primary products of the section.

3.02 EXAMINATION

A. Site Verification of Conditions: Verify that substrate conditions are suitable for installation of the EVA-rubber copolymer wet area surfacing system.

B. Do not proceed with installation until unsuitable conditions are corrected.

C. Proper drainage is critical to the longevity of the Life Floor® surfacing system. Inadequate drainage will cause premature breakdown of the poured system in affected areas; and void the warranty.

Specifier Note: Specify actions required to physically prepare the surface, area or site or to incorporate the primary products of the section.

3.03 PREPARATION

A. Surface Preparation: Ensure that the concrete, metal, wood, tile, or fiberglass substrate is level or uniformly sloped since surface variations will be telegraphed through to the rubber tile surface.

B. Concrete Preparation:

1.) Concrete must conform to ACI 302 standards, be dry, fully cured (28 days), a minimum density of 100 lbs per ft³ as well as having a compressive strength greater than 3000 psi for residential installations and 4350 psi for commercial installations.



2.) The substrate must be dry, structurally sound, and dimensionally stable. It should be free of any substance or condition that may reduce or prevent the adhesive bond to substrate. This includes, but is not limited to, concrete sealers, curing agents, dirt, wax, tar, paint, and loose toppings. If the surface contains these substance they must be mechanically removed. The use of solvents (with the exception of acetone), adhesive remover or acid etching is not recommended.

3.) Concrete porosity should be noted. It is always a good practice to perform bond tests before large scale installations. Excessively absorbent (porous) or rough concrete surfaces can cause an increase in adhesive usage. Surface grinding can be used to smooth an excessively porous or rough surface.

4.) New concrete surfaces should be hand troweled finished, or power but not a burned power troweled finish (often called a light broom finish). A smooth steel-trowled finish can reduce adhesion and greatly extend product setting times. If needed mechanical shot-blasting can be used to roughen an excessively smooth surface. Overtrowled slabs are not acceptable.

5.) Substrate should be sloped properly towards drains to allow for proper drainage. Refer to the Model Aquatic Health Code (MAHC) for sloping requirements for your application and facility.

6.) Concrete surface prep: Remove protrusions, bumps and ridges by grinding or chipping. Repair, fill & level cracks, holes, depressions, rough or chipped areas of substrate. Slab to have a light broom finish (hand troweled finish, or power finish. Not a burned power, troweled finish) when tile is installed.

Note: A high alkali slab (with a 10 to 14 ph) can signify a moisture problem. If a ph problem is found, the slab should be tested for moisture.

Specifier Note: Coordinate article below with manufacturer's recommended installation requirements.

3.04 INSTALLATION

A. Contact manufacturer for installation.