



## Division 9

### Resilient Athletic Surfacing

(RUBBERDECK ROLLS AND TILES – RECYCLED RUBBER)

#### SPECIFICATIONS

	<b>Page</b>
<b>1. General.....</b>	<b>2</b>
1.1 Summary	2
1.2 References	2
1.3 System Description	2
1.4 Submittals	3
1.5 Quality Assurance	3
1.6 Delivery, Storage and Handling	4
1.7 Project Conditions	4
1.8 Warranty	4
<b>2. Products.....</b>	<b>5</b>
2.1 Manufacturer	5
2.2 Proprietary Product(s)	5
2.3.1 RubberDeck Tiles and Rolls – Recycled Rubber Flooring	5
2.3.2 SignaGrip One – Component Polyurethane adhesive	6
2.4 Product Substitutions	7
2.5 Related Materials	7
2.6 Source Quality	7
<b>3. Execution.....</b>	<b>7</b>
3.1 Manufacturer's Instructions	7
3.2 Examination	7
3.3 Preparation	7
3.4 Erection / Installation / Application / Construction	7
3.5 Field Quality Requirements	8
3.6 Cleaning	8
3.7 Protection	8
3.8 Schedules	8
3.9 Maintenance	8



## **PART 1 – GENERAL**

### **1.1 SUMMARY**

- A. Section Includes: Resilient Flooring, including recycled rubber flooring.
  - 1. Types: Types of recycled rubber resilient flooring include:
    - a. Recycled rubber resilient floor tile.
    - b. Recycled rubber resilient roll/sheet flooring.
  - 2. On Adhesives
- B. Related Sections: Section(s) related to this section include:
  - 1. Concrete Substrate: Division 3 Concrete Section(s).
  - 2. Plywood Substrate: Division 6.

### **1.2 REFERENCES**

- A. Standards listed by reference, including revisions by issuing authority, form a part of this specification section to extent indicated. Standards listed are identified by issuing authority, authority abbreviation, designation number, title or other designation established by issuing authority. Standards subsequently referenced herein are referred to by issuing authority abbreviation and standard designation.
- B. American Society for Testing and Materials (ASTM):
  - 1. ASTM C423 Test Method for Sound Absorption and Sound Absorption Coefficients by the Reverberation Room Method.
  - 2. ASTM C518 Test Method for Steady-State Heat Flux Measurements and Thermal Transmission Properties by Means of the Heat Flow Meter Apparatus.
  - 3. ASTM D412 Standard Test Methods for Vulcanized Rubber and Thermoplastic Rubbers and Thermoplastic Elastomers – Tension.
  - 4. ASTM D2047 Test Method for Static Coefficient of Friction of Polish-Coated Floor Surfaces as measured by the James Machine.
  - 5. ASTM E413 Classification for Rating Sound Insulation.
  - 6. ASTM E492 Method for Laboratory Measurement of Impact Sound Transmission Through Floor-Ceiling Assemblies Using the Tapping Machine.
  - 7. ASTM F137 Test Method for Flexibility of Resilient Flooring Materials.
  - 8. ASTM F710 Practice for Preparing Concrete Floors and Other Monolithic Floors to Receive Resilient Flooring.
  - 9. ASTM F925 Test Method for Resistance to Chemicals of Resilient Flooring.
  - 10. ASTM F970 Test Method for Static Load Limit.

### **1.3 SYSTEM DESCRIPTION**

- A. Performance Requirements: Provide recycled rubber resilient flooring, which has been manufactured and installed to maintain performance criteria stated by manufacturer without defects, damage or failure.



## 1.4 SUBMITTALS

- A. General: Submit listed submittals in accordance with Conditions of the Contract and Division 1 Submittal Procedures Section.
- B. Product Data: Submit product data, including manufacturer's guide specifications product sheet, for specified products.
- C. Shop Drawings: Submit shop drawings showing layout, profiles and product components, including anchorage, accessories, finish colors, patterns and textures.
- D. Samples: Submit selection and verification samples for finishes, colors and textures.
- E. Quality Assurance Submittals: Submit the following:
  - 1. Test Reports: Certified test reports showing compliance with specified performance characteristics and physical properties.
  - 2. Certificates: Product certificates signed by manufacturer certifying materials comply with specified performance characteristics and criteria and physical requirements.
  - 3. Manufacturer's Instructions: Manufacturer's installation instructions.
  - 4. Manufacturer's Field Reports: Manufacturer's field reports specified herein.
- F. 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 Operational 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.

## 1.5 QUALITY ASSURANCE

- A. Qualifications:
  - 1. Installer Qualifications: Installer experienced in performing work of this section who has specialized in installation of work similar to that required for this project.
    - a. Certificate: When requested, submit certificate indicating qualification.
  - 2. Manufacturer's Qualifications: Manufacturer capable of providing field service representation during construction and approving application method.
- B. Regulatory Requirements: [Specify applicable requirements of regulatory agencies.]
- C. Mock-Ups: Install at project site a job mock-up using acceptable products and manufacturer-approved installation methods. Obtain Owner's and Architect's acceptance of finish color, texture and pattern, and workmanship standard. Comply with Division 1 Quality Control (Mock-Up Requirements) Section.
  - 1. Mock-Up Size: [Specify mock-up size.]
  - 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 final construction upon Owner's approval.
- D. Pre-installation Meetings: Conduct pre-installation meeting to verify project requirements,



substrate conditions, manufacturer's instructions and manufacturer's warranty requirements. Comply with Division 1 Project Management and Coordination (Project Meetings) Section.

- E. Pre-installation Testing: Conduct pre-installation testing as follows: [Specify substrate testing; consult with flooring manufacturer.]

## **1.6 DELIVERY, STORAGE & HANDLING**

- A. General: Comply with Division 1 Product Requirements Sections.
- B. Ordering: Comply with manufacturer's ordering instructions and lead time requirements to avoid construction delays.
- C. Delivery: Deliver materials in manufacturer's original, unopened, undamaged containers with identification labels intact.
- D. Storage and Protection: Store materials at temperature and humidity conditions recommended by manufacturer and protect from exposure to harmful weather conditions.

## **1.7 PROJECT CONDITIONS**

- A. Temperature Requirements: Maintain air temperature in spaces where products will be installed for time period before, during and after installation as recommended by manufacturer.
- B. Field Measurements: Verify actual measurements/openings by field measurements before fabrication; show recorded measurements on shop drawings. Coordinate field measurements and fabrication schedule with construction progress to avoid construction delays.

## **1.8 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.
  - 1. Warranty Period: [Specify term.] years commencing in Date of Substantial Completion.



## PART 2 – PRODUCTS

### 2.1 MANUFACTURER

A. Address: Signature Fencing and Flooring Systems LLC.  
50 East 42<sup>nd</sup> Street 14<sup>th</sup> Floor New York, NY 10017  
Telephone: (212) 953-1116, (800) 705-1544: Fax (212) 953-1117  
Email: [info@signaturesportsflooring.com](mailto:info@signaturesportsflooring.com)

### 2.2 PROPRIETARY PRODUCT(S)

- A. RubberDeck Tiles and Rolls, manufactured by Signature, for fitness and sports surfacing.
1. RubberDeck Tiles and Rolls - recycled rubber resilient [sheet] [tile] flooring
  2. SignaGrip one-component polyurethane adhesive

#### 2.3.1 RUBBERDECK TILES AND ROLLS – RECYCLED RUBBER FLOORING

- A. Roll Dimension: [48" (1219 mm) x 3/8" nominal (8 mm) standard]; [48" (1219 mm) x 1/4" (6 mm) special]; [48" (1219 mm) x (9mm) special].
- B. Roll Weight: [1.72 lb/ft<sup>2</sup> (8.39 kg/m<sup>2</sup>)]; [1.29 lb/ft<sup>2</sup> (6.30 kg/m<sup>2</sup>)]; [1.95] lb/ft<sup>2</sup> (9.51 kg/m<sup>2</sup>)].
- C. Roll Length: [Specify roll length].
- D. Standard Tolerances: Roll Width +3/4" -0"  
Roll Length +1% -0"  
Thickness +.3 mm -.3 mm
- E. Colors: [Specify color from manufacturer's standard color selection.]
- Product Testing:
- F. Tensile Strength, lb/in<sup>2</sup>: 200 min. (ASTM D412)
- G. Flexibility, 1/4-inch mandrel: Pass. (ASTM F137)
- H. Static Load, 1000 lb/in<sup>2</sup>: Less than 0.020 in. (ASTM F970)
- I. Coefficient of Friction: Greater than 0.9. (ASTM 2047)
- J. Chemical Resistance: 5% Acetic Acid: No Change  
70% Isopropyl Alcohol: No Change  
5% Sodium Hydroxide: No Change  
5% Hydrochloric Acid: No Change  
5% Ammonia: No Change  
Bleach: No Change



5% Phenol: No Change  
Sulfuric Acid: No Change  
(ASTM F925)

- K. Ambient Noise Reduction, Sabin/ft<sup>2</sup>: 0.10 (ASTM C423)
- L. Thermal Conductivity, BTU-in/hr-ft<sup>2</sup>-°F: Approximately 0.406 (ASTM C518)
- M. Impact Insulation Class: 45 minimum. (ASTM E492)
- N. Sound Transmission Coefficient: 45 minimum (ASTM 413)

### **2.3.2 SIGNAGRIP ONE – COMPONENT POLYURETHANE ADHESIVE**

- A. Product Name: The one-part urethane adhesive under this specification shall be Signature's SignaGrip one-component polyurethane adhesive.
- B. Material: SignaGrip is a one-component polyurethane moisture cured, non-sag, permanently elastic adhesive that has excellent adhesion to elastomers, concrete and wood and is engineered for indoor and outdoor applications.
- C. Adhesive Type: One-component polyurethane
- D. Adhesive Cure System: Moisture cured
- E. Weight: 4 gallon pail - 56 lbs  
2 gallon pail - 28 lbs  
10.1 oz. cartridge
- F. Color: Medium grey
- G. VOC Content: 0 (calculated)
- H. Solvents: None
- I. Freeze/Thaw: Stable
- J. Application Temperature: 40°F to 100°F
- K. Calcium Chloride Test allowable: Maximum 5.5 lbs per 1,000 sq. ft. in 24 hrs (ASTM F1869)
- L. Flashpoint: > 500° F
- M. Shelf Life: 12 months
- N. Working Time: 30-40 minutes



- O. Trowel: 1/16" square notched trowel <sup>(1)</sup>
- P. Coverage Rate: 95 ft<sup>2</sup> per gallon (1/16" square notched trowel)
- Q. SCAQMD Rule #1168: 0 (calculated)

<sup>(1)</sup> For indoor installation on concrete or plywood subfloors only. See Signature Sports Flooring Installation Manual for instructions.

## **2.4 PRODUCT SUBSTITUTIONS**

- A. Substitutions: No substitutions permitted.

## **2.5 RELATED MATERIALS**

- A. Related Materials: Refer to other sections listed in Related Sections paragraph herein for related materials.

## **2.6 SOURCE QUALITY**

- A. Source Quality: Obtain recycled rubber resilient flooring materials from a single manufacturer.

# **PART 3 – EXECUTION**

## **3.1 MANUFACTURER'S INSTRUCTIONS**

- A. Compliance: Comply with manufacturer's product data, including product technical bulletins, product catalog installation instructions and product carton instructions for installation.

## **3.2 EXAMINATION**

- A. 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.

## **3.3 PREPARATION**

- A. Surface Preparation: [Specify applicable product preparation requirements.].

## **3.4 ERECTION / INSTALLATION / APPLICATION / CONSTRUCTION**

- A. Recycled Rubber Flooring Installation: Comply with RubberDeck Tiles and Rolls Technical Manual for installation procedures and techniques for RubberDeck Tiles and Rolls - recycled



rubber resilient flooring installation.

- B. Finish Color/Textures/Patterns: [Specify installation finishes coordinated with finishes specified in Part 2 Products.]
- C. Related Products Installation: Refer to other sections listed in Related Sections paragraph herein for related products installation.

### **3.5 FIELD QUALITY REQUIREMENTS**

- A. Manufacturer's Field Services: Upon Owner's request, provide manufacturer's field service consisting of product use recommendations and periodic site visits for inspection of product installation in accordance with manufacturer's instructions.
  - 1. Site Visits: [Specify number and duration of periodic site visits.]

### **3.6 CLEANING**

- A. Cleaning: Remove temporary coverings and protection of adjacent work areas. Repair or replace damaged installed products. Clean installed products in accordance with manufacturer's instructions prior to Owner's acceptance. Remove construction debris from project site and legally dispose of debris.

### **3.7 PROTECTION**

- A. Protection: Protect installed product and finished surfaces from damage during construction.

### **3.8 SCHEDULES**

- A. Schedules: [Specify reference to applicable schedules.]

### **3.9 MAINTENANCE**

- A. Extra Materials: 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 (Maintenance Materials) Section.
  - 1. Quantity: Furnish quantity of recycled rubber flooring units equal to [Specify %.] of amount installed.
  - 2. Delivery, Storage and Protection: Comply with Owner's requirements for delivery, storage and protection of extra materials.

