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### **DIVISION 9 Finishes - SECTION 09 65 00 Resilient Flooring**

#### **Forest Rx, Strait Rx, Cosmos Rx, Infinity Rx & Crossings Rx Vulcanized Composition Rubber-Backed Sheet Vinyl**

#### **Unbacked Forest 2mm, Strait 2mm, Cosmos 2mm, Infinity 2mm & Crossings 2mm Sheet Vinyl**

## **PART 1.0- GENERAL**

### **1.1 SUMMARY**

- A. The work of this section includes:
  - 1. Vulcanized Composition Rubber-backed sheet vinyl:
    - Forest Rx, Strait Rx, Cosmos Rx, Infinity Rx & Crossings Rx
  - 2. Unbacked 2mm sheet vinyl:
    - Forest 2mm, Strait 2mm, Cosmos 2mm, Infinity 2mm & Crossings 2mm
  - 3. Sanitary Base
  - 4. Weld rod
- 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), European Committee for Standardization (EN) and International Organization for Standardization (ISO)
  - 1. See – Part 2.0 PROPRIETARY PRODUCTS below
- E. Collaborative of High-Performance Schools (CHPS) Section 01350
  - 1. Low emitting materials criteria for use in a typical classroom
- F. Leadership in Energy and Environmental Design – LEED™
  - 1. International Organization for Standardization™ document, ISO 14021 - Provides guidance on the terminology, symbols, testing and verification methodologies that an organization should use for self-declaration of the environmental aspects of its products and services.

### **1.3 SYSTEM DESCRIPTION**

- A. Performance Requirements: Provide rubber backed and unbacked sheet vinyl 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. LEED: Provide documentation of how the requirements for credit will be met.
  - 1. List of proposed materials with recycled content. Indicate pre-consumer and post-consumer content.
  - 2. Product data and certification letter indicating percentage of recycled content for both pre-consumer and post-consumer content.
  - 3. Recycled content is defined in accordance with the International Organization for Standardization document, ISO 14021 Environmental labels and declarations.
    - a. Post-consumer material - waste materials diverted from the waste stream after consumer or commercial use.
    - b. Pre-consumer material - materials diverted from the waste stream during the manufacturing process. Excluded are regrind, rework, and scrap.
- C. Product Data: Submit product data, including manufacturer's guide specifications product sheet, for specified products.
- D. Shop Drawings: Submit shop drawings showing layout, profiles and product components, including anchorage, accessories, finish colors, patterns and textures.
- E. Samples: Submit selection and verification samples for finishes, colors and textures.
- F. Quality Assurance Submittals: Submit the following:
  - 1. Certificates: If required, certification of performance characteristics specified in this document shall be provided by the manufacturer.
  - 2. Manufacturer's Instructions: Manufacturer's installation instructions.

**Specifier Note:** Coordinate paragraph below with Part 3.5 Field Quality Requirements Article herein. Retain or delete as applicable.

- 3. Manufacturer's Field Reports: Manufacturer's field reports specified herein.

- G. 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.

**Specifier Note:** Paragraph below should list obligations for compliance with specific code requirements particular to this section. General statements to comply with a particular code are typically addressed in Conditions of Contract and Division 1 Regulatory Requirements Section. Regulatory Requirements: [specify applicable requirements of regulatory agencies].

- B. Mock-Ups: Install at project site a job mock-up using acceptable products and manufacturer-approved installation methods. Obtain Owner 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.

- C. 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.
- D. 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.

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

#### 1.9 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 resilient 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.

## PART 2.0 - PROPRIETARY 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.

#### 2.1 PROPRIETARY PRODUCT(S)

- A. ECOsurfaces flooring and accessories
  - 1. Forest Rx, Strait Rx, Cosmos Rx, Infinity Rx & Crossings Rx Vulcanized Composition Rubber-backed resilient sheet vinyl flooring and accessories.
  - 2. Forest 2mm, Strait 2mm, Cosmos 2mm, Infinity 2mm & Crossings Rx unbacked Sheet Vinyl flooring and accessories
  - 3. Weld Rod
  - 4. Sanitary Base

### 2.3.1 Forest Rx, Strait Rx, Cosmos Rx, Infinity Rx & Crossings Rx – Vulcanized Composition Rubber-Backed Sheet Vinyl

<b>Forest Rx, Strait Rx, Cosmos Rx, Infinity Rx &amp; Crossings Rx – Vulcanized Composition Rubber-Backed Sheet Vinyl</b>		
Overall thickness of 7mm, consisting of a 5mm, 6015H Vulcanized Composition Rubber backing, fusion bonded to a heterogeneous, PUR enhanced, 2mm vinyl surface layer		
Performance Criteria	Test Method	Result
Sheet Dimensions	Manufacturer	Overall thickness of 7mm, consisting of a 5mm, 6015H Vulcanized Composition Rubber backing and a 2mm vinyl surface layer with a 0.7mm print film layer and a 1.23mm (0.048") backing ply. Standard roll sizes 6 ft (72") wide by 30 LF [1.828 m by 9.144 m]
Sheet Standard Tolerances	Manufacturer	Width: +3/4" - 0"   Length: +1% - 0"   Thickness: ± .4 mm
Static Load Limit	ASTM F970	Pass
Dynamic Rolling Load	ASTM F2753	10,000 cycles: No Damage, No Change
Coefficient of Friction	ASTM D2047	> 0.6
Chemical Resistance	ASTM F1303-99	Excellent
Abrasion resistance	EN 649/EN ISO 10582	Group T / Type 1
Dimensional Stability	ASTM F-2199	+ 0.40%
Behavior to Fire	ASTM E-648	Class I
Light Fastness	ISO 105-B02 (Method 3)	> 6
Resistance to Light	ASTM F-1515	Pass
Resistance to Heat	ASTM F-1514	Pass
FloorScore		Pass
VOCs/ CHPS/ CA 01350	ASTM D5116	Pass

### 2.3.2 Unbacked Forest 2mm, Strait 2mm, Cosmos 2mm, Infinity 2mm & Crossings 2mm Sheet Vinyl

<b>Unbacked 2mm Forest 2mm, Strait 2mm, Cosmos 2mm, Infinity 2mm &amp; Crossings Sheet Vinyl</b>		
2mm heterogeneous, PUR enhanced, vinyl sheet		
Performance Criteria	Test Method	Result
Sheet Dimension	Manufacturer	2mm thick with a print film layer of 0.7mm (0.028") and a 1.23mm (0.048") backing ply.
Static Load Limit	ASTM F970	750
Coefficient of Friction	ASTM D2047	> 0.6
Chemical Resistance	ASTM F1303	Excellent
Abrasion resistance	EN 649/EN ISO 10582	Group T / Type 1
Indentation Recovery	EN 433	< 0.10mm (<0.003")
Behavior to Fire	ASTM E-648	Class I
Light Fastness	ISO 105-B02 (Method 3)	> 6

**2.3.3 Weld Rod**

<b>Vinyl Weld Rod</b>		
<b>Performance Criteria</b>	<b>Test Method</b>	<b>Result</b>
Material	Manufacturer	Vinyl
Dimensions	Manufacturer	Standard lengths of 328 LF [100 M] by 3mm in thickness.

**2.3.4 Sanitary Wall Base**

<b>Sanitary Wall Base</b>		
<b>Performance Criteria</b>	<b>Test Method</b>	<b>Result</b>
Material	Manufacturer	Thermoplastic rubber
Dimensions	Manufacturer	Thickness: 110" (2.8 mm) Length: 25 ft. Shipped as 6" (15.2cm) x 25 LF (7.62 M) coil. Folds for installation to 4" (10.16 cm) high and 2" wide (5.0 cm) toe. coils.
Resilient Wall Base	ASTM F-1861	Meets Type TP, Group 1 (solid) Standard Specification for Resilient Wall Base
Behavior to Fire	ASTM E 84/NFPA 255	Class B
Behavior to Fire	ASTM E-648 /NFPA 253	Class I

**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 Vulcanized Composition Recycled resilient flooring materials from a single manufacturer.

**PART 3.0 - EXECUTION**

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

**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].

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

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

- A. Flooring Installation: Comply with ECOsurfaces Technical Manual for installation procedures and techniques.
- 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

**Specifier Note:** Edit paragraph below. Establish number and duration of periodic site visits with Owner and manufacturer and specify below. Consult with manufacturer for services required. Coordinate paragraph below with Division 1 Quality Assurance Section and Part 1 Quality Assurance Submittals herein. Delete if manufacturer's field service not required.

- A. Manufacturer's Field Services: Upon Owner's request, provide manufacturer's field service consisting of product use recommendations and periodic site visit 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 finish surfaces from damage during construction.

**Specifier Note:** Retain article below to suit project requirements. Article may be used to describe specific criteria requirements of similar products or equipment.

### 3.8 SCHEDULES

**Specifier Note:** Retain paragraph below to suit project requirements. Reference a schedule or include a schedule as an attachment, which indicates where to locate products and equipment.

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

**END OF SECTION**