

## SERENA® ISOLATION MAT 3-PART SPECIFICATION Product Guide Specification

### PART 1 GENERAL

#### 1.1 SECTION INCLUDES

A. Section Includes: Roll rubber floor surfacing.

**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, equipment, fencing, substrate preparation and similar work is provided by others and is described in other sections. Consult with manufacturer for specific substrate preparation requirements. Edit, retain or delete paragraph below to suit project requirements and specifier practice.

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

**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.

#### 1.2 RELATED SECTIONS

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

1. ASTM C423 Standard Test Method for Sound Absorption and Sound Absorption Coefficients by the Reverberation Room Method.

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2. ASTM C518 Standard Test Method for Steady-State 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 Standard Test Method for Static Coefficient of Friction of Polish-Coated Floor Surfaces as Measured by the James Machine.
5. ASTM E413 Standard Classification for Rating Sound Insulation.
6. ASTM E492 Standard Test Method for Laboratory Measurement of Impact Sound Transmission Through Floor- Ceiling Assemblies Using the Tapping Machine.
7. ASTM F137 Standard Test Method for Flexibility of Resilient Flooring Materials with Cylindrical Mandrel Apparatus.
8. ASTM F142 Standard Test Method for Indentation of Resilient Floor Tiles (McBurney Test).
9. ASTM F150 Standard Test Method for Electrical Resistance of Conductive and Static Dissipative Resilient Flooring.
10. ASTM F710 Standard Practice for Preparing Concrete Floors to Receive Resilient Flooring.
11. ASTM F925 Standard Test Method for Resistance to Chemicals of Resilient Flooring.
12. ASTM F970 Standard Test Method for Static Load Limit.

**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.

### 1.3 System Description

A. Performance Requirements: Provide a single layer roll rubber floor surfacing system, which has been designed, manufactured and installed to meet the following criteria:

1. Tensile Strength, lb/in<sup>2</sup> (ASTM D412): 200 minimum.
2. Flexibility, 1/4" (6 mm) Mandrel (ASTM F137): Pass.
3. Static Load, 1000 psi (ASTM F970): Less than 0.020" (0.5 mm).
4. Coefficient of Friction (ASTM D2047): Greater than 0.6.
5. McBurney Indentation, 1 minute at 77 degrees F (25 degrees C) (ASTM F142): Less than 0.120" (3 mm).
6. Static Dissipation (ASTM F150): Between 106 ohms and 109 ohms.
7. Chemical Resistance (ASTM F925):
  - a. 5% Acetic Acid: No change.
  - b. 70% Isopropyl Alcohol: No change.
  - c. Mineral Oil: No change.
  - d. 5% Sodium Hydroxide: No change.
  - e. 5% Hydrochloric Acid: No change.
  - f. 5% Ammonia: No change.
  - g. Bleach: No change.

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- h. 5% Phenol: No change.
  - i. Gasoline: No change.
  - j. Sulfuric Acid: No change.
  - k. Kerosene: No change.
  - l. Olive Oil: No change.
8. Ambient Noise Reduction, Sabin/ft<sup>2</sup> (ASTM C423): 0.10.
  9. Thermal Conductivity, Btu/(ft<sup>2</sup> i& h i& jF) (ASTM C518): Approximately 0.406.
  10. Impact Insulation Class (ASTM E492): 45 minimum.
  11. Sound Transmission Coefficient (ASTM E413): 45 minimum.

**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.

#### 1.4 SUBITTALS

- A. General: Submit listed submittals in accordance with Conditions of the Contract and Division 1 Submittal Procedures Section.
- B. Product Data: Submit manufacturer's product data and installation instructions.
- C. Verification Samples: Submit manufacturer's standard verification samples of 9" x 9" (229 x 229 mm) minimum.
- D. Quality Assurance/Control Submittals: Submit the following:
  1. Certificate of qualifications of the floor surfacing installer.
- 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.

#### 1.5 SUBMITTALS

- 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.

#### 1.6 DELIVERY, STORAGE, AND HANDLING

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- A. 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.

## 1.7 PROJECT/SITE CONDITIONS

- A. Environmental Requirements: Install floor-surfacing system when minimum ambient temperature is 40 degrees F (1 degree C) and maximum ambient temperature is 90 degrees F (32 degrees C).

**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.

## 1.8 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 subparagraph below with manufacturer's warranty requirements.

1. Warranty Period: 5 years from date of substantial completion.

## 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.

### 2.1 SERENA® ISOLATION MAT ROLL RUBBER FLOOR SURFACING SYSTEM

- A. Manufacturer: Soundproofing Company, Inc.

1. Contact:

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Soundproofing Company, INC.  
1311 Straits Dr. Bay City, MI 48706  
Toll Free: (800) 397-8791  
Web Site: [www.soundproofingcompany.com](http://www.soundproofingcompany.com)  
E-Mail: [info@soundproofingcompany.com](mailto:info@soundproofingcompany.com)

**Specifier Note:** Retain, edit or delete paragraphs below to suit project and specifier practice.

Proprietary Products/Systems. Roll rubber floor surfacing system, including the following:

1. Serena Isolation Mat - Sound Acoustical Underlayment

- a. Material:  
Combination of 100% post-consumer recycled SBR (styrene butadiene rubber) 1  
100% postindustrial recycled EPDM (ethylene propylene diene monomer) rubber.
- b. Size: 48" (1219 mm) wide ;& [Custom lengths to suit project (Specify requirements.)].
- c. Thickness (Metric and Approximate Inch Measure): [2mm (1/16")] [4.8mm (3/16")] [9mm (3/8")].
- d. Color: 100% Black

**Specifier Note:** Custom color orders for full cylinder production are available. Orders can be placed in any of the thicknesses below in up to 30% color (70% black). These color portions can be virtually any combination of available EPDM colors.

- A. Installation Method: Indoor fully adhered] [Indoor with one of a number of approved adhesives.  
Avoid Oil-based adhesives.

**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.

## 2.2 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.

## 2.3 ACCESSORIES

Provide accessory items as follows:

- 1. Polyurethane Adhesive - Material: One-part polyurethane.

## PART 3 EXECUTION

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

### 3.1 MANUFACTURER'S INSTRUCTIONS

- A. Comply with the instructions and recommendations of the floor-surfacing manufacturer

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

### 3.2 EXAMINATION

- A. Site Verification of Conditions: Verify that substrate conditions are suitable for installation of the floor surfacing system.
- B. Do not proceed with installation until unsuitable conditions are corrected.

**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 or asphalt substrate is level or uniformly sloped since surface variations will be telegraphed through to the roll rubber surface.

B. Prepare floor substrates to comply with the requirements of ASTM F710.

**Specifier Note:** Coordinate article below with manufacturer's recommended installation requirements. Retain appropriate language for adhesive or loose-laid installation.

### 3.04 INSTALLATION

- A. Do not proceed with floor surfacing installation until all applicable site work, including substrate preparation, fencing, equipment installation and other relevant work, has been completed.
- B. For outdoor installations, avoid placement when large temperature swings during the time between adhesive application and final curing are expected, as gapping between rolls may result.
- C. For indoor installations, lay out rolls on floor along wall that will minimize cuts and waste. Allow material to lie flat approximately 12 hours to adjust to room temperature.
- D. Adhesive Installations: Where first roll will be placed, on solid nonporous substrates, apply one-part polyurethane adhesive at a rate of approximately 75 ft<sup>2</sup>/gal (1.88 m<sup>2</sup>/L) using a 3/32" (2.4 mm) notched trowel. On open asphalt, apply adhesive at a rate of approximately 65 ft<sup>2</sup>/gal (1.63 m<sup>2</sup>/L) using a 1/8" (3.2 mm) notched trowel.
  - 1. Do not allow adhesive to contact the upper surface of the material or to flow up through joints.

2. For about 1 hour, periodically roll each piece with a 100 lb (45 kg) carpet roller. Weight down any areas that appear to resist bonding to substrate.
3. To ensure tight joints, when butting 1 roll to the next, overlap joints by approximately 1/4" (6.4 mm) and work the joint back by hand to eliminate overlap.
4. For indoor adhesive installations, maintain constant temperature for at least 12 hours after flooring installation to avoid contraction or expansion.

**Specifier Note:** Specify the final actions required to clean installed equipment or other completed work to properly function or perform. Coordinate article below with Division 1 Execution Requirements (Cleaning) Section.

### 3.05 CLEANING

Initial Cleaning: After completion of installation and before acceptance by Owner, perform the following cleaning operations:

1. Remove all surface soil, debris, sand and grit by sweeping, dusting, mopping or vacuuming.
2. Scrub floor with a neutral detergent (pH 7 - 8.5) using a buffer or auto-scrubber with a soft nylon brush or lint-free damp mop, changing water frequently.
3. Remove soiled solution with auto-scrubber or wet-vacuum.
4. Allow floor to dry thoroughly, not less than 6 - 8 hours.

**Specifier Note:** Specify provisions for protecting work after installation but prior to acceptance by the owner. Coordinate article below with Division 1 Execution Requirements Section.

### 3.06 PROTECTION

A. Protect the installed surface from damage resulting from subsequent construction activity on the site using kraft paper, plastic sheet or other appropriate means.

END OF SECTION

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