

SECTION 09 65 66

RESILIENT ATHLETIC FLOORING – RECYCLED RUBBER MOLDED TILES

PART 1 GENERAL

1.1 SUMMARY

- A. The work of this section includes:
 - 1. Ecore Athletic Everlast Recycled Rubber Molded Tiles
 - 2. Quad Blok 4.74" x 4.74" Connection System
 - 3. Adhesive
- B. Related Sections: Section(s) related to this section include:
 - 1. Concrete Substrate: Division 3 Concrete Section(s)

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 D412 Standard Test Methods for Vulcanized Rubber and Thermoplastic Rubbers and Thermoplastic Elastomers – Tension
 - 2. ASTM F137 Standard Test Method for Flexibility of Resilient Flooring Materials with Cylindrical Mandrel Apparatus
 - 3. ASTM F970 Standard Test Method for Static Load Limit
 - 4. ASTM D2047 Standard Test Method for Static Coefficient of Friction of Polish-Coated Floor Surfaces as measured by the James Machine
 - 5. ASTM F925 Standard Test Method for Resistance to Chemicals of Resilient Flooring
 - 6. ASTM C423 Standard Test Method for Sound Absorption and Sound Absorption Coefficients by the Reverberation Room Method
 - 7. ASTM C518 Standard Test Method for Steady-State Thermal Transmission Properties by Means of the Heat Flow Meter Apparatus
 - 8. ASTM E492 Standard Test Method for Laboratory Measurement of Impact Sound Transmission Through Floor-Ceiling Assemblies Using the Tapping Machine
 - 9. ASTM E413 Classification for Rating Sound Insulation
 - 10. E2129 Standard Practice for Data Collection for Sustainability Assessment of Building
 - 11. Products
 - 12. Everlast UltraTile GUIDE SPECIFICATIONS Ecore

13. ASTM D5116 Standard Guide for Small-Scale Environmental Chamber Determinations of Organic Emissions from Indoor Materials/Products
14. ASTM D297 Standard Practice for Rubber Products – Chemical Analysis
15. ASTM D3676 Standard Specification for Rubber Cellular Cushion used for Carpet or Rug Underlay
16. ASTM D395 Standard Test Methods for Rubber Property – Compression Set
17. ASTM F710 Standard Practice for Preparing Concrete Floors to Receive Resilient Flooring
18. ASTM F2170 Standard Test Method for Determining Relative Humidity in Concrete Floor Slabs Using in situ Probes
19. ASTM F1292 Standard Specification for Impact Attenuation of Surfacing Materials within the Use Zone of Playground Equipment

C. Federal Test Method Standard 101B Test Methods for Packaging Materials

1. Method 4046 Electrostatic Properties of Materials

D. Collaborative of High Performance Schools (CHPS) Section 01350

1. Low-emitting materials criteria for use in a typical classroom

E. South Coast Air Quality Management District (SCAQMD) Rule #1168

1. VOC standards for adhesive and sealant applications

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. 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.

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3. 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: Submit certificate, indicating qualification.
2. Manufacturer's Qualifications: Manufacturer capable of providing field service representation during construction and approving application method.

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: 4' x 4'
2. 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: (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.

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- 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. 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: Fifteen (15) years commencing on Date of Substantial Completion.

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 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.
 - 3. Cleaning: Furnish flooring manufacture's neutral cleaner for initial cleaning and maintenance of the finished floor surface.

PART 2 PROPRIETARY MANUFACTURER/PRODUCTS

2.1 MANUFACTURER: Ecore

- A. Address: 715 Fountain Ave., Lancaster, PA 17601; Telephone: (800) 322-1923; (717) 295-3400; Fax (717) 295-3414; Email: info@ecoreathletic.com

2.2 PRODUCTS

- A. Ecore Athletic Everlast 1" UltraTile Recycled Rubber Molded Tiles
 - 1. 1" tile configuration consists of a high density wear surface with cylindrical support feet that allow for maximum resilience and water drainage.
 - 2. Recycled rubber and ColorMill® EPDM bound in the underlayment and wear surfaces with a wear-resistant polyurethane.
 - 3. 24" x 24" and an overall thickness of 1"
 - 4. 16.5 pounds nominal
 - 5. Color from manufacturer's standard colors and special logo/graphic inlays. Architect is to select color. Refer to plans for color.
- B. Quad Blok 4.74" x 4.74" Connection System
 - 1. Quad Blok is a formulation of high quality post-consumer recycled rubber granules encapsulated in a wear and water-resistant elastomeric network.
 - 2. 4.74" x 4.74" x 15/32" (12 cm x 12 cm x 12 mm) at 72° F
 - 3. .19 lbs. each
- C. E-Grip III one-component polyurethane adhesive
 - 1. E-Grip III is a one-component urethane moisture cured, non-sag permanently elastic adhesive that has excellent adhesion to elastomers, concrete, and wood and is engineered for indoor and outdoor applications.
 - 2. One-component urethane
 - 3. Moisture cured
 - 4. 4 gallon pail-56 lbs, 1 gallon pail-28 lbs, 10.1 oz cartridge
 - 5. Medium grey
 - 6. VOC content: 0 lb/gal calculated
 - 7. Application temp: 40° F - 100° F
 - 8. Relative Humidity (RH) Test (ASTM F2170) = Maximum 85%
 - 9. Shelf Life: 12 months
 - 10. Working Time: 30-40 minutes
 - 11. Trowel: 1/16" x 1/16" x 1/16" square notch
1/8" x 1/8" x 1/8" square notch
 - 12. Coverage Rate: 95 ft²/ gal – 1/16" x 1/16" x 1/16"
60 ft²/ gal – 1/8" x 1/8" x 1/8"

2.3 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 any technical bulletins, product installation instructions, and product packaging 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: Prepare per manufacturer's requirements. Start of work indicates acceptance of existing surface conditions.

3.4 ERECTION / INSTALLATION / APPLICATION / CONSTRUCTION

- A. Recycled Rubber Flooring Installation: Comply with ECORE Athletic Installation Manual for installation procedures and techniques.

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: Two (2) visits, one (1) at beginning of install and one (1) at completion.

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.

END OF SECTION

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