EVERLAST® SPORTS SURFACING with NIKE GRIND

1” UltraTile™ (Patent No. 6,623,840)

GUIDE SPECIFICATIONS

Manufactured in the U.S.A. by:

ecore™ INTERNATIONAL

Revised 12.16.11 to include Patent No. Supercedes all previous versions. Check website for updates.

1-888-383-7655 – www.everlastsportssurfacing.com

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Division 9: Section 09 65 66
RESILIENT ATHLETIC SURFACING
(EVERLAST® with Nike Grind® UltraTile™ – Recycled Rubber Molded Tiles)

PART 1.0 – GENERAL

1.1 SUMMARY

A. The work of this section includes:

1. EVERLAST® with Nike Grind® 1” UltraTile™ Recycled Rubber Molded Tiles
2. Adhesives

B. Related Sections: Section(s) related to this section include:

1. The work specified in this Section consists of the installation of EVERLAST with Nike Grind
1” UltraTile in accordance with these specifications, and in conformity with the dimensions and notes shown in the plans.

Specifier Note: Article below may be omitted when specifying manufacturer’s proprietary products and recommended installation. Retain Reference 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 but is merely a listing of references used. Article below should list only those industry standards used in this section. Standards listed by reference, including revisions by issuing authority, form a part of this specification section to extent indicated.

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. ASTM E2129 Standard Practice for Data Collection for Sustainability Assessment of Building Products

11. ASTM D5116 Standard Guide for Small-Scale Environmental Chamber Determinations of Organic Emissions From Indoor Materials/Products

12. ASTM F150 Standard Test Method for Electrical Resistance of Conductive and Static Dissipative Resilient Flooring

13. ASTM D297 Standard Practice for Rubber Products – Chemical Analysis

14. ASTM D3676 Standard Specification for Rubber Cellular Cushion used for Carpet or Rug Underlay

15. ASTM D395 Standard Test Methods for Rubber Property – Compression Set

16. ASTM F710 Standard Practice for Preparing Concrete Floors to Receive Resilient Flooring

17. ASTM F1869 Standard Test Method for Measuring Moisture Vapor Emission Rate of Concrete Subfloor Using Anhydrous Calcium Chloride

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. American Association of Textile Chemists and Colorists

1. Technical Manual 134 Electrostatic Propensity of Carpets

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

1. Method 4046 Electrostatic Properties of Materials

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

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

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

1. VOC standards for adhesive and sealant applications

G. 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 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. LEED: Provide documentation of how the requirements for credit will be met.

1. List of proposed materials with recycled content. Indicated 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.

Specifier Note: Retain paragraph below to suit project requirements; otherwise, delete paragraph below.

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. Repetitive statements should be avoided.

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 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.

2. 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.

Specifier Note: Coordinate article below with Conditions of the Contract and with Division 1 Closeout Submittals (Warranty) 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 paragraph below with manufacturer's warranty requirements.

1. Warranty Period: (Specify term) years commencing in 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.

Specifier Note: Revise paragraph below specifying size and percentage as required for project.

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.

PART 2.0 – PROPRIETARY MANUFACTURER/PRODUCTS

Specifier Note: Retain article below for proprietary method specification. Add protect 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 MANUFACTURER: ECORE International™

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

2.2 PROPRIETARY PRODUCT(S)

A. EVERLAST with Nike Grind UltraTile Recycled Rubber Molded Tiles and Adhesives manufactured by ECORE for indoor commercial applications.

1. EVERLAST with Nike Grind 1" UltraTile Recycled Rubber Molded Tiles (Patent No. 6,623,840)

2. E-Grip™ III, a one-component polyurethane adhesive

2.3.1 EVERLAST 1" UltraTile Recycled Rubber Molded Tiles (Patent No. 6,623,840)

A.	Product Name:	The factory molded modular surfacing system furnished under this specification shall be ECORE's EVERLAST with Nike Grind **1" UltraTile** Recycled Rubber Molded Tiles.
B.	Physical: maximum	1" UltraTile configurations consist of a high density, wear surface; cylindrical support feet that allow underside cable routing, resiliency, and water drainage, as well as twelve molded perimeter dowel holes that accept specially designed barbed dowel pins to promote ease of installation.
C.	Material:	Made from 100% recycled SBR (Styrene-Butadiene Rubber) tire rubber, Nike Grind, and ColorMill® EPDM granules bound in both underlayment and wear surfaces with a wear and weather resistant polyurethane.
D.	Component:	1" UltraTile is a factory-molded surface composed of high quality rubber granules bound with a wear and weather resistant polyurethane. The polyurethane binder is composed of MDI (diphenylmethane diisocyanate) isocyanate and polyether (polypropylene glycol) polyols. TDI (toluene diiocyanate) isocyanate or catalysts based on lead or mercury are not utilized. Rubber granules are blends of ground rubber particulates specially blended to enhance tile strength, durability, and energy absorption characteristics. All coloring pigments are inorganic oxides. Pigments based on cadmium are not utilized.
E.	Tile Dimension:	EVERLAST with Nike Grind 1" UltraTile tile products shall be 24" x 24" and an overall thickness of 1".
F.	Tile Weight:	4.0 lb/ft² (19.5 kg/m²)
G.	Tile Standard Tolerances:	Width: ± 2 mm Thickness: ± 3 mm
H.	Colors:	Specify color from manufacturer's standard colors, custom colors, or special logo/graphic inlays.
I.	Wear Surface Density:	60.0 lbs/cu. ft. min.

J.	Coefficient of Thermal Expansion:	1.10 x 10^{-3} in./ft.-ºF
K.	Void Volume:	13% min.
L.	Water Permeation Rate:	0.045 cm./sec.
M.	Tear Resistance: (ASTM D624, Die C)	13.13 kN/m
N.	Abrasion:	.1 or 0.20 mg loss/cycle (ASTM D3389, 2000 cycles, H18 Wheels)
O.	Accelerated Aging:	105% Tensile Retention, 87% Elongation Retention (DIN 1835 Part 6, 2000 hrs. H18 Wheels)
P.	Tensile Strength: (ASTM D412)	200lb/in² min.
Q.	Flexibility: (ASTM F137)	pass ¼" mandrel
R.	Static Load Limit: (ASTM F970)	400 lb/in² < 0.005 in.
S.	Coefficient of Friction: (ASTM D2047)	> 0.9
T.	Chemical Resistance: (ASTM F925)	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
U.	Noise Reduction Coefficient: (ASTM C423)	0.10 sabine/ft²
V.	Thermal Conductivity: (ASTM C518)	approximately 0.406 Btu-in/hr-ft²-ºF
W.	Impact Insulation Class: (ASTM E492)	49
X.	Sound Transmission Coefficient: (ASTM E413)	51
Y.	Sustainability: (ASTM E2129)	data collected
Z.	VOC Washington State IAQ Test: (ASTM D5116)	pass
AA.	CHPS/CA 01350: (ASTM D5116)	pass

2.3.2 E-Grip™ III One-Component Polyurethane Adhesive

A.	Product Name:	The one-part urethane adhesive under this specification shall be ECORE's **E-Grip™ III** one component polyurethane adhesive.
B.	Material:	E-Grip III 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 lb/gal calculated
H.	Freeze/Thaw:	stable
I.	Application Temperature:	40º F - 100º F
J.	Calcium Chloride Test: (ASTM F1869)	Maximum 5.5 lbs per 1,000 sq. ft. in 24 hrs.
K.	Relative Humidity (RH) Test (ASTM F2170)	Maximum 85%
L.	Flashpoint:	> 500º F
M.	Shelf Life:	12 months
N.	Working Time:	30-40 minutes
O.	Trowel:	1/16" square notched trowel (1)
P.	Coverage Rate:	95 ft² per gallon (1/16" square notched trowel)
Q.	SCAQMD Rule #1168:	0 lb/gal.

(1) For indoor installation on concrete or plywood subfloors only. See EVERLAST 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 3.0 - 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. Recycled Rubber Flooring Installation: Comply with EVERLAST Technical Manual for installation procedures and techniques for EVERLAST 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

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 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 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

ECORE International reserves the right to make updates to this manual at any time.
For the most updated version please visit www.everlastsportssurfacing.com