SECTION 096519 – RESILIENT TILE FLOORING

PART 1 – GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

A. Section Includes:

1. Solid vinyl floor tile
2. Rubber floor tile
3. Vinyl composition floor tile.

1.3 ACTION SUBMITTALS

A. Product Data: For each type of product.

B. Sustainable Design Submittals:

1. Product Data: For adhesives, indicating VOC content
2. Laboratory Test Reports: For adhesives indicating compliance with requirements for low-emitting materials.
3. Product Data: For chemical-bonding compounds, indicating VOC content.

C. Shop Drawings: For each type of floor tile. Include floor tile layouts, edges, columns, doorways, enclosing partitions, built-in furniture, cabinets, and cutouts

1. Show details of special patterns.

D. Samples: Full-size units of each color and pattern of floor tile required.

1. For heat-welding bead, manufacturer's standard-size Samples, but not less than 9 inches (230 mm) long, of each color required.

E. Samples for Initial Selection: For each type of floor tile indicated.

F. Samples for Verification: Full-size units of each color and pattern of floor tile required.

1. For heat-welding bead, manufacturer's standard-size Samples, but not less than 9 inches (230 mm) long, of each color required.

G. Welded-Seam Samples: For seamless-installation technique indicated and for each flooring product, color, and pattern required; with seam running lengthwise and in center of 6-by-9-inch (150-by-230-mm) Sample applied to a rigid backing and prepared by Installer for this Project.
1.4 INFORMATIONAL SUBMITTALS
   A. Qualification Data: For Installer.

1.5 CLOSEOUT SUBMITTALS
   A. Maintenance Data: For each type of floor tile to include in maintenance manuals.

1.6 MAINTENANCE MATERIAL SUBMITTALS
   A. Furnish extra materials that match products installed and that are packaged with protective covering for storage and identified with labels describing contents.
      1. Floor Tile: Furnish one box for every 50 boxes or fraction thereof, of each type, color, and pattern of floor tile installed.

1.7 QUALITY ASSURANCE
   A. Installer Qualifications: A qualified installer who employs workers for this Project who are competent in techniques required by manufacturer for floor tile installation and seaming method indicated.
      1. Engage an installer who employs workers for this Project who are trained or certified by floor tile manufacturer for installation techniques required.

1.8 DELIVERY, STORAGE, AND HANDLING
   A. Store floor tile and installation materials in dry spaces protected from the weather, with ambient temperatures maintained within range recommended by manufacturer, but not less than 65 deg F or more than 85 deg F. Store floor tiles on flat surfaces.

1.9 FIELD CONDITIONS
   A. Maintain ambient temperatures within range recommended by manufacturer, but not less than 65 deg F or more than 85 deg F, in spaces to receive floor tile during the following time periods:
      1. 48 hours before installation.
      2. During installation.
      3. 48 hours after installation.

   B. After installation and until Substantial Completion, maintain ambient temperatures within range recommended by manufacturer, but not less than 55 deg F or more than 85 deg F.

   C. Close spaces to traffic during floor tile installation.

   D. Install floor tile after other finishing operations, including painting, have been completed.
PART 2 – PRODUCTS

2.1 PERFORMANCE REQUIREMENTS

A. Fire-Test-Response Characteristics: For resilient tile flooring, as determined by testing identical products according to ASTM E 648 or NFPA 253 by a qualified testing agency.
   1. Critical Radiant Flux Classification: Class I, not less than 0.45 W/sq. cm.

B. Flooring products shall comply with the requirements of the California Department of Public Health’s “Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from indoor Sources Using Environmental Chambers.”

2.2 SOLID VINYL FLOOR TILE

A. Basis-of-Design Product: Subject to compliance with requirements, provide Johnsonite; A Tarkett Company; or comparable product by one of the following:
   1. Rikett
   2. Armstrong
   3. Burke Flooring
   4. Johnsonite (Tarkett)
   5. ECO Nights

B. Tile Standard: ASTM F 1700
   1. Class: [Class I, monolithic vinyl tile] [Class III, printed film vinyl tile].
   2. Type: [A, smooth surface] [B, embossed surface].

C. Thickness: 0.125 inch

D. Size: 12 by 12 inches & 24 by 24 inches

E. Seamless-Installation Method.

F. Colors and Patterns: [As indicated by manufacturer’s designation. As selected by School from full range of industry colors.]

G. Test data:
   1. Flexibility, ASTM F 137: Passes with no cracks/breaks around 1 inch (25.4 mm) mandrel.
   2. Dimensional Stability, ASTM F 2199: 0.020 in./lin. Ft. (0.51 mm/305 mm) maximum.
   5. Static Coefficient of Friction, ASTM D 2047: Minimum 0.6 SCOF.
   7. Static Load Limit, ASTM F 970: Passes 250 psi with no greater than 0.005 inch residual indentation.
2.3 RUBBER FLOOR TILE

A. Basis-of-Design product: Subject to compliance with requirements, provide Johnsonite; A Tarkett Company; [Roundel] [992] – or comparable product by one of the following:

1. Johnsonite.
2. Roppe.
3. Armstrong.
5. Rikett.

B. Tile Standard: ASTM F 1344, [Class I-A, homogeneous rubber tile, solid color] [Class I-B, homogeneous rubber tile, through mottled].

C. Hardness: Not less than 85 as required by ASTM F 1344, measured using Shore, Type A durometer per ASTM D 2240.

D. Wearing Surface: [Smooth] [Textured] [Molded pattern].

1. Molded-Pattern Figure: [Raised discs] [Raised squares] [Arbor] [Hammered] [Leather] [Raised Round].

E. Thickness: 0.125 inch (3.2 mm).

F. Size: 12 by 12 inches or 24 by 24 inches.

G. Colors and Patterns; As indicated by manufacturer’s designations. As selected by School from full range of industry colors.

H. Test data:

1. Hardness, ASTM D 2240: Passes with minimum 85 shore A.
3. Abrasion Resistance, ASMT D 3389: Less than 1 gram loss after 1000 cycles.
5. Dimensional Stability, ASTM D 3389: Does not exceed 15%.
6. Squareness, ASTM F 2055: Maximum 0.010 inches (0.254 mm)
7. Static Coefficient of Friction, ASTM D 2047: Minimum 0.8 SCOF.
8. Static Load Limit, ASTM F 970: Passes 250 psi with no greater than 0.005 inch residual indentation.

2.3 INSTALLATION MATERIALS

A. Trowelable Leveling and Patching Compounds: Latex-modified, portland cement based or blended hydraulic-cement-based formulation provided or approved by floor tile manufacturer for applications indicated.

B. Adhesives: Water-resistant type recommended by floor tile and adhesive manufacturers to suit floor tile and substrate conditions indicated.

1. Adhesives shall have a VOC content of 12 or less.
2. Adhesives shall comply with the testing and product requirements of the California Department of Public Health’s “Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources Using Environmental Chambers.”

3. Basis-of-Design Product: [Johnsonite 965 Flooring and Tread Adhesive] [Johnsonite 975 Two-Part Urethane Adhesive] [Johnsonite 996 Two-Part Epoxy Adhesive] [Tarkett 100 Clear Thin Spread Adhesive] [Tarkett 940 Two-Part Polyurethane Adhesive] [Tarkett 122 SpraySmart Adhesive]

PART 3 – EXECUTION

3.1 EXAMINATION

A. Examine substrates, with Installer present, for compliance with requirements for maximum moisture content and other conditions affecting performance of the Work.

1. Verify that finishes of substrates comply with tolerances and other requirements specified in other Sections and that substrates are free of cracks, ridges, depressions, scale, and foreign deposits that might interfere with adhesion of floor tile.

B. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 PREPARATION

A. Prepare substrates according to floor tile manufacturer's written instructions to ensure adhesion of resilient products.

B. Concrete Substrates: Prepare according to ASTM F 710.

1. Verify that substrates are dry and free of curing compounds, sealers, and hardeners.
2. Remove substrate coatings and other substances that are incompatible with adhesives and that contain soap, wax, oil, or silicone, using mechanical methods recommended by floor tile manufacturer. Do not use solvents.
3. Alkalinity and Adhesion Testing: Perform tests recommended by floor tile manufacturer. Proceed with installation only after substrate alkalinity falls within range on pH scale recommended by manufacturer in writing, but not less than 5 or more than 10 pH.
4. Moisture Testing: Proceed with installation only after substrates pass testing according to floor tile manufacturer's written recommendations, but not less stringent than the following.
   a. Perform anhydrous calcium chloride test according to ASTM F 1869. Proceed with installation only after substrates have maximum moisture-vapor-emission rate of [5 lb of water/1000 sq. ft.] in 24 hours.
   b. Perform relative humidity test using in situ probes according to ASTM F 2170. Proceed with installation only after substrates have a maximum 80 percent relative humidity level.

C. Access Flooring Panels: Remove protective film of oil or other coating using method recommended by access flooring manufacturer.

D. Fill cracks, holes, and depressions in substrates with trowelable leveling and patching compound; remove bumps and ridges to produce a uniform and smooth substrate.

E. Do not install floor tiles until they are the same temperature as the space where they are to be installed.
1. At least 48 hours in advance of installation, move resilient floor tile and installation materials into spaces where they will be installed.

F. Immediately before installation, sweep and vacuum clean substrates to be covered by resilient floor tile.

3.3 FLOOR TILE INSTALLATION

A. Comply with manufacturer's written instructions for installing floor tile.

B. Lay out floor tiles from center marks established with principal walls, discounting minor offsets, so tiles at opposite edges of room are of equal width. Adjust as necessary to avoid using cut widths that equal less than one-half tile at perimeter.

1. Lay tiles [square with room axis] [at a 45-degree angle with room axis] [in pattern indicated]

C. Match floor tiles for color and pattern by selecting tiles from cartons in the same sequence as manufactured and packaged, if so numbered. Discard broken, cracked, chipped, or deformed tiles.

1. Lay tiles [with grain running in one direction] [with grain direction alternating in adjacent tiles (basket-weave pattern)] [in pattern of colors and sizes indicated].

D. Scribe, cut, and fit floor tiles to butt neatly and tightly to vertical surfaces and permanent fixture including built-in furniture, cabinets, pipes, outlets, and door frames.

E. Extend floor tiles into toe spaces, door reveals, closets, and similar openings. Extend floor tiles to center of door openings.

F. Maintain reference markers, holes, and openings that are in place or marked for future cutting by repeating on floor tiles as marked on substrates. Use chalk or other nonpermanent marking device.

G. Install floor tiles on covers for telephone and electrical ducts, building expansion-joint covers, and similar items in finished floor areas. Maintain overall continuity of color and pattern between pieces of tile installed on covers and adjoining tiles. Tightly adhere tile edges to substrates that abut covers and to cover perimeters.

H. Adhere floor tiles to flooring substrates using a full spread of adhesive applied to substrate to produce a completed installation without open cracks, voids, raising and puckering at joints, telegraphing of adhesive spreader marks, and other surface imperfections.

I. Roll flooring in both directions using 100 lb (45 kg) three-section roller. Use hand roller in area not reached by 100 lb (45 kg) floor roller.

J. Seamless Installation:

1. Heat-Welded Seams: Comply with ASTM F 1516. Rout joints and heat weld with welding bead to permanently fuse sections into a seamless flooring. Prepare, weld, and finish seams to produce surfaces flush with adjoining flooring surfaces.

2. Chemically Bonded Seams: Bond seams with chemical-bonding compound to permanently fuse sections into a seamless flooring. Prepare seams and apply compound to produce tightly fitted seams without gaps, overlays, or excess bonding compound on flooring surfaces.
3.4 CLEANING AND PROTECTION

A. Comply with manufacturer's written instructions for cleaning and protecting floor tile.

B. Perform the following operations immediately after completing floor tile installation:
   1. Remove adhesive and other blemishes from exposed surfaces.
   2. Sweep and vacuum surfaces thoroughly.
   3. Damp-mop surfaces to remove marks and soil.

C. Protect floor tile from mars, marks, indentations, and other damage from construction operations and placement of equipment and fixtures during remainder of construction period.
   1. No traffic for 24 hours after installation.
   2. No heavy traffic, rolling loads, or furniture placement for 72 hours after installation.
   3. Wait 72 hours after installation for performing initial cleaning.

D. Maintenance: A Regular maintenance program must start after the initial cleaning.

END OF SECTION 096519
PRODUCT SPEC PAGE

STANDARD EXCELON® Imperial® Texture | MultiColor™

Vinyl Composition Tile (VCT)

Product Information

<table>
<thead>
<tr>
<th>Construction</th>
<th>Product Line</th>
<th>International Specifications</th>
<th>Overall Thickness</th>
<th>Factory Finish</th>
<th>Installation</th>
<th>Maintenance Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vinyl Composition Tile</td>
<td>Imperial Texture MultiColor</td>
<td>ASTM F1066 – Class 2 Through Pattern ISO 10595 Type II</td>
<td>1/8 in. (3.2 mm)</td>
<td>Fast Start®</td>
<td>Full Spread Adhesives S-515, S-525, S-700, S-750 &amp; S-240, Flip® Spray Adhesive</td>
<td>Polish</td>
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</table>

Packaging

<table>
<thead>
<tr>
<th>Tile Size</th>
<th>Tile per Carton/Coverage</th>
<th>Shipping Weight per Carton</th>
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<tbody>
<tr>
<td>12 in. x 12 in. (305 mm x 305 mm)</td>
<td>45 - 45 ft² (4.18 m²)</td>
<td>Approx. 63 lbs./carton (28.6 kg)</td>
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</table>

Product Structure

Exclusive Fast Start® Factory Finish

Through-Color/Pattern Wear Layer

TESTING

Performance

<table>
<thead>
<tr>
<th>Test Method</th>
<th>Requirement</th>
<th>Performance vs. Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASTM F 386</td>
<td>Nominal ± 0.005 in.</td>
<td>Meets</td>
</tr>
<tr>
<td>ASTM F 2055</td>
<td>± 0.016 in. per linear foot</td>
<td>Meets</td>
</tr>
<tr>
<td>ASTM F 2055</td>
<td>0.010 in. max</td>
<td>Meets</td>
</tr>
<tr>
<td>ASTM F 1914</td>
<td>≥ 0.006 in. to ≤ 0.015 in.</td>
<td>Meets</td>
</tr>
<tr>
<td>ASTM F 1914</td>
<td>&lt; 0.032 in.</td>
<td>Meets</td>
</tr>
<tr>
<td>ASTM F 1265</td>
<td>No cracks beyond limit</td>
<td>Meets</td>
</tr>
<tr>
<td>ASTM F 1304</td>
<td>1.0 in. minimum</td>
<td>Meets</td>
</tr>
<tr>
<td>ASTM F 2199</td>
<td>≤ 0.024 in. per linear foot</td>
<td>Meets</td>
</tr>
<tr>
<td>ASTM F 925</td>
<td>No more than slight change in surface dulling, attack or staining</td>
<td>Meets</td>
</tr>
<tr>
<td>ASTM F 1514</td>
<td>△E not greater than 8.0</td>
<td>Meets</td>
</tr>
<tr>
<td>ASTM F 970</td>
<td>≤ 0.005 in.</td>
<td>Meets</td>
</tr>
<tr>
<td>ASTM E 648</td>
<td>0.45 W/cm² or more Class I</td>
<td>Meets</td>
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<tr>
<td>ASTM E 662</td>
<td>450 or less</td>
<td>Meets</td>
</tr>
<tr>
<td>CAN/ULC S102.2</td>
<td>Use dependent</td>
<td>Flame Spread - 0 Smoke Developed - 30</td>
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</tbody>
</table>
## PRODUCT SPEC PAGE

**STANDARD EXCELON® Imperial® Texture | MultiColor™ Vinyl Composition Tile (VCT)**

### Maritime Usage

<table>
<thead>
<tr>
<th>IMO Resolution A653 (16)</th>
<th>Passes</th>
</tr>
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<tbody>
<tr>
<td>Surface Flammability IMO MSC.61(67) Annex 1 Part 5 and Annex 2</td>
<td>Passes</td>
</tr>
<tr>
<td>Smoke and Toxicity IMO MSC.61(67) Annex 1 Part 2 and Annex 2</td>
<td>Compliant</td>
</tr>
<tr>
<td>Safety Of Life at Sea (SOLAS)</td>
<td>Approved</td>
</tr>
<tr>
<td>United States Coast Guard</td>
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</table>

### Sustainability

#### Certification Attribute

- Low-Emitting Material
- Environmental Product Declaration (EPD)
- Plant Quality

#### Performance vs. Requirements

<table>
<thead>
<tr>
<th>Material Ingredients (Option 1)</th>
<th>LEED v4</th>
<th>ISO 14021</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recycled Content</td>
<td>Content disclosure to 1000 ppm</td>
<td>Contains recycled content</td>
</tr>
</tbody>
</table>

### Limited Warranty

5-year Commercial Warranty when installed in accordance with Armstrong’s Guaranteed Installation Systems manual, F-5061.

### Links

- **Installation Instructions**: [ArmstrongFlooring.com/flooring-downloads](http://www.ArmstrongFlooring.com/flooring-downloads)
- **Email Techline**: [ArmstrongFlooring.com/flooring-techline](http://www.ArmstrongFlooring.com/flooring-techline)
- **Visit Floor Expert**: [floorexpert.com](http://www.floorexpert.com)

* *Flip® Spray Adhesive is Cradle to Cradle Silver certified.*

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**IMO Resolution A653 (16)**

- **Surface Flammability**: IMO MSC.61(67) Annex 1 Part 5 and Annex 2
- **Smoke and Toxicity**: IMO MSC.61(67) Annex 1 Part 2 and Annex 2

**Safety Of Life at Sea (SOLAS)**

- United States Coast Guard

**Low-Emitting Material**

<table>
<thead>
<tr>
<th>Certification Attribute</th>
<th>Standard</th>
<th>3rd party Certification/Certifier</th>
</tr>
</thead>
<tbody>
<tr>
<td>CDPH v1.1 (2017) a.k.a. CHPS 01350</td>
<td>FloorScore/SCS</td>
<td></td>
</tr>
<tr>
<td>ISO 14025</td>
<td>Yes/ASTM International</td>
<td></td>
</tr>
<tr>
<td>ISO 9001</td>
<td>Yes/SAI Global</td>
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</tr>
</tbody>
</table>

**Environmental Product Declaration (EPD)**

- ISO 14025
- Yes/ASTM International
- Yes/SAI Global

**Plant Quality**

- ISO 9001
- Yes/SAI Global

**Performance Standard Requirement**

- **TVOC Range**: CDPH v1.1 (2017) a.k.a. CHPS 01350
- **Low Emitting Adhesives**
  - S-515: Less than 50 g/L
  - S-525: 0 g/L
  - S-700: 0 g/L
  - S-750: 0 g/L
  - S-240: 0 g/L
  - *Flip® Spray Adhesive*: 0 g/L

**Material Ingredients (Option 1)**

- **LEED v4**
- **ISO 14021**

**Sustainability**

**Recycled Content**

- **ISO 14021**
- **Contains recycled content**

**Safety Of Life at Sea (SOLAS)**

- United States Coast Guard Approved

**United States Coast Guard Approved**

- IMO Resolution A653 (16)
- IMO MSC.61(67) Annex 1 Part 5 and Annex 2
- IMO MSC.61(67) Annex 1 Part 2 and Annex 2
- Safety Of Life at Sea (SOLAS)

**Sustainability**

- **Certification Attribute**
  - Low-Emitting Material
  - Environmental Product Declaration (EPD)
  - Plant Quality

**Standard**

- CDPH v1.1 (2017) a.k.a. CHPS 01350
- ISO 14025
- ISO 9001

### Performance vs. Requirements

<table>
<thead>
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<th>Requirement</th>
<th>Performance vs. Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>TVOC Range</td>
<td>Meets</td>
</tr>
<tr>
<td>Low Emitting Adhesives</td>
<td>Meets (See Armstrong Product Declaration)</td>
</tr>
</tbody>
</table>
Resilient EcoFitness Multifunctional Athletic Rubber Flooring

1. PROPRIETARY PRODUCT/MANUFACTURER

1.1 Proprietary Product: Resilient EcoFitness Multifunctional Athletic Rubber Floor Tiles - A.D.A. Compliant – FloorScore Certified

1.2 Manufacturer:
Burke Flooring
2250 South Tenth Street
San Jose, California 95112
Phone: (800) 447-8442
   (352) 357-4119
Fax: (352) 357-9660
Samples: Ext 1031
Web: www.burkeflooring.com

1.3 Proprietary Product Description:

1.3.1 Construction: Burke EcoFitness Flecksibles and Naturals Multifunctional Athletic Rubber Floor Tiles are manufactured from a composition of recycled truck tire crumb rubber encapsulated in a urethane binder and designed for sports and fitness flooring, as well as other interior applications.

EcoFitness Flecksibles contains 73% post consumer recycled content and is available in solid black or black with 17% EPDM colored chips. The EcoFitness Flecksibles Collection is available in interlocking tiles, as well as 4’ x 25’ and 4’ x 50’ coiled lengths.

EcoFitness Naturals creates a unique appearance by bonding a colored UV cured polyurethane wear layer to an 88% post consumer recycled content performance back layer. Naturals are only available in interlocking tiles.

Both Flecksibles and Naturals can contribute to LEED credits.

1.3.2 Physical Characteristics:

EcoFitness Flecksibles Interlocking Rubber Floor Tile (Solid and Speckled Color):
Thickness: .375” (3/8”) (10 mm)
Size: 28.5” x 28.5” (72.4 cm x 72.4 cm)
Weight: 11.28 lbs (5.1 kg)/tile

EcoFitness Flecksibles Rubber Sheet Flooring (Solid and Speckled Color):
Thickness: .375” (3/8”) (10 mm)
Sizes: 4’ x 25’ (10 cm x 7.6 m)
   4’ x 50’ (10 cm x 15.2 m)
Weight: 2 lbs (.9 kg)/sq. ft.

EcoFitness Naturals Interlocking Rubber Floor Tile (Solid Color):
Thickness: .375” (3/8”) (10 mm)
Size: 28.5” x 28.5” (72.4 cm x 72.4 cm)
Weight: 11.28 lbs (5.1 kg)/tile

2. PRODUCT PERFORMANCE AND TECHNICAL DATA

2.1 Hardness: ASTM D 2240: ≥ 55 Shore A

2.2 Abrasion Resistance: ASTM D 3389: < 1.0 gm loss

2.3 Slip Resistance: ASTM D 2047: COF ≥ 0.5

2.4 Static Load Limit: ASTM F 970: 250 PSI

2.5 Impact Insulation: ASTM E 989: IIC = 54

2.6 Flammability - ASTM D-2859 (Pill Test) - Passed;
   Char Diameter = not measurable

2.7 Chemical Resistance: ASTM F 925: Passed - 5% Acetic acid, 70% Isopropyl alcohol, Sodium hydroxide solution (5% NaOH), Hydrochloric acid solution (5% HCl), Sulfuric acid solution (5% H2SO4), Household ammonia solution (5% NH4OH), Household bleach (5.25% NaOCl), Disinfectant cleaner (5% active phenol)

3. INSTALLATION

The installation of Burke Rubber Floor Tiles should not begin until the work of all other trades has been completed, especially overhead trades. The areas to receive flooring materials shall be clean and fully enclosed. The area should
be maintained at a minimum of 65°F and a maximum of 75°F for 48 hours before the installation, during the installation and for 48 hours after the installation is completed. The flooring materials and adhesives shall be conditioned in the same manner. Wood subfloors must have a minimum 18" (47 cm) of cross ventilated space between the bottom of the joist and ground. Exposed earth crawl spaces should be sealed with a polyethylene moisture barrier. Subfloors should meet local and national building codes. Trade associations, such as the American Plywood Association (APA), offer structural guidelines for meeting various code requirements. Single Wood and Tongue and Groove subfloors should be covered with 1/4" (6.4 mm) or 1/2" (13 mm) APA approved underlayment plywood. Use 1/4" (6.4 mm) thick underlayment panels for boards with a face width of 3" (76 mm) or less. For boards wider than 3" (76 mm) face width use 1/2" (13 mm) underlayment panels. Countersink nail heads and fill depressions, joints, cracks, gouges, and chipped edges with a good quality Portland cement based patching compound. Do not install over OSB (Oriented Strand Board), particle board, chipboard, lauan, or composite type underlayment. Concrete shall be prepared utilizing ASTM F 710, Practice for Preparing Concrete Floors and Other Monolithic Floors to Receive Resilient Flooring. Floors shall be smooth, flat, permanently dry, clean, and free of all foreign material such as dust, paint, grease, oils, solvents, curing and hardening compounds, sealers, asphalt, and old adhesive residue. Floor covering shall not be installed over expansion joints. It is essential that moisture tests be taken on all concrete floors regardless of age and grade level. One test should be conducted for every 1,000 sq. ft. of flooring and the results not exceed 5 lbs. per 1,000 sq. ft. in 24 hours when tested in accordance with ASTM F 1869 Standard Test method for Measuring Vapor Emission Rate of Concrete Subfloor using Anhydrous Calcium Chloride or 80% when tested accordance with ASTM F 2170 Standard Test Method for Determining Relative Humidity in Concrete Floor Slabs using in situ Probes. If the tests results exceed the limitations, the installation must not proceed until the problem has been corrected.

3.1. Adhesives:

**Burke #BR-710 One Part Urethane Adhesive:**
- **Trowel:** 1/8" V-notched trowel
  - (Approximately 125 - 150 sq. ft/gal)

**Burke #BR-721 Two-Part Epoxy Adhesive:**
- **Trowel:** 1/16" square-notched trowel
  - (Approximately 125 - 150 sq. ft/gal)

**Burke #BR-725 Two-Part Urethane Adhesive:**
- **Trowel:** 1/16" square-notched trowel
  - (Approximately 125 - 150 sq. ft/gal)

4. INSTALLATION MANUAL
Refer to Burke Rubber Floor Tile installation instructions for complete installation details.

5. AVAILABILITY AND COST
Available through authorized Burke distributors nationwide.

6. WARRANTY
Limited 5 year wear warranty available. For complete details, contact Burke or an authorized Burke distributor.

7. MAINTENANCE
72 hours after installation is completed, initial maintenance procedures must be implemented in accordance with manufacturer's requirements. Refer to Burke Rubber Tile Installation Instructions for complete maintenance details.

8. TECHNICAL SERVICES
**Samples:** Submittal samples for verification and approval available upon request from Burke. Samples shall be submitted in compliance with the requirements of the Contract Documents. Accepted and approved samples shall constitute the standard materials which represent materials installed on the project.

For current Installation and Maintenance Instructions, Product Specifications, and other technical data, visit us on the web at www.BurkeFlooring.com or contact Burke at 1-800-447-8442.
DIVISION 9 - SECTION 09 65 00
ECOnights® Recycled Rubber Commercial Flooring

PART 1.0- GENERAL
1.1 SUMMARY
A. The work of this section includes:
   1. Recycled rubber resilient sheet flooring
   2. Recycled rubber resilient floor tile/interlocking tile
   3. 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):
   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
   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 F710 Standard Practice for Preparing Concrete Floors to Receive Resilient Flooring
13. ASTM F1869 Standard Test Method for Measuring Moisture Vapor Emission Rate of Concrete Subfloor Using Anhydrous Calcium Chloride

C. European Committee for Standardization (EN)
   1. EN12235 Determination of vertical ball behavior.

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

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 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. 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.
   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. 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.
   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 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 MANUFACTURER: Ecore

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 DISTRIBUTOR: Ecore Commercial Flooring

A. Address: 119 South Tree Drive, Lancaster, PA 17603; Telephone: (877) 326-7873, (717) 299-5035; Fax: (717) 394-1937; Email: info@ecorecommercialflooring.com

2.3 PROPRIETARY PRODUCT(S)

A. ECOsurfaces Recycled Rubber Resilient Flooring and adhesives manufactured by Ecore for commercial applications.
   1. ECOnights recycled rubber resilient [sheet] [tile] flooring
   2. ECOnights recycled rubber resilient [interlocking tile] flooring
   3. E-Grip III a single-component, zero-VOC, urethane, adhesive

2.3.1 ECOnights Recycled Rubber Resilient [sheet] [tile] Flooring

A. Product Name: The non-laminated, single-ply, rubber surface furnished under this specification shall be Ecore’s ECOnights Recycled Rubber Flooring.

B. Material: Made from a formulation of high quality post-consumer recycled rubber granules encapsulated in a wear and water-resistant elastomeric network with multiple colored reprocessed ColorMill EPDM rubber.

C. Sheet Dimension: ECOnights rolled rubber surface specify an overall thickness of 3/8" nominal [8 mm] standard in 4’ by 25’ [1.2 m by 7.62 m] 1/8” [3.2 mm] non-standard in 4’ by 50’ [1.2 m by 15.24m] 1/4” [6 mm] custom order in 4’ by 25’ [1.2m by 7.62 m]

D. Sheet Weight: (3.2mm) 0.7 lb/ft² [3.4 kg/m²], (6mm) 1.3 lb/ft² [6.4 kg/m²], (8mm) 1.8 lb/ft² [8.6 kg/m²]

E. Sheet Standard Tolerances:
   Roll width: +¾” - 0”
   Roll length: +1% - 0”
   Thickness: ± .3 mm

F. Tile Dimension: ECOnights custom tile products specify an overall thickness of 1/8” [3.2 mm] custom order in 24” x 24” tile width
   1/4” [6 mm] custom order in 24” x 24” tile width
G. Tile Weight: (3.2mm) 0.7 lb/ft² [3.4 kg/m²], (6mm) 1.3 lb/ft² [6.4 kg/m²]
H. Tile Standard Tolerances: Thickness: ± .3 mm; Width ± 0.5%
I. Colors: Specify color from manufacturer’s standard colors, custom colors, or special logo/graphic inlays.
J. Tensile Strength (ASTM D412): 200 lb/in² min.
K. Flexibility (ASTM F137): Pass ¼" mandrel
L. Static Load Limit (ASTM F970): 400 lb/in² < 0.005 in.
M. Coefficient of Friction: > 0.9
N. 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
O. Force Reduction Class I
P. Ball Rebound Pass
Q. Noise Reduction Coefficient: 0.10 sabine/ft² Single layer 8mm 10% EPDM
R. Thermal Conductivity (ASTM C518): Approximately 0.406 Btu-in/hr-ft²°F
S. Impact Insulation Class: 49 – 1 layer 9mm SBR on 6” reinforced concrete slab, no ceiling
T. Sound Transmission Coefficient: 51 – 1 layer 9mm SBR on 6” reinforced concrete slab, no ceiling
U. Sustainability (ASTM E2129): Data collected
V. VOC Washington State IAQ Test: Pass
W. CHPS/CA 01350 (ASTM D5116): Pass

2.3.2 ECONights Recycled Rubber Resilient [interlocking tile] Flooring

A. Product Name: The non-laminated, single-ply, rubber surface furnished under this specification shall be Ecore’s ECONights Recycled Rubber Flooring.
B. Material: Made from a formulation of high quality post-consumer recycled rubber granules encapsulated in a wear and water-resistant elastomeric network with multiple colored reprocessed ColorMill EPDM rubber.
C. Interlocking Tile Dimension: ECONights interlocking tile specify an overall thickness of 3/8” nominal [8mm] standard in 23” x 23” tile width
1/4” [6 mm] custom in 23” x 23” tile width
D. Interlocking Tile Weight: (6mm) 1.3 lb/ft² [6.4 kg/m²], (8mm) 1.8 lb/ft² [8.6 kg/m²]
E. Interlocking Standard Tolerances: Thickness: ± .3 mm; Width ± 0.5%
F. Colors: Specify color from manufacturer’s standard series colors
2.3.3 E-Grip III One-Component Urethane Adhesive

A. Product Name: The one-part urethane adhesive under this specification shall be Ecore’s E-Grip III one-component urethane adhesive.

B. Material: 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.

C. Adhesive Type: One-component urethane

D. Adhesive Cure System: Moisture cured

E. Weight: 4 gallon pail-56 lbs; 2 gallon pail-28 lbs; 10.1 oz cartridges

F. Color: Medium grey

G. VOC Content: 0 lb/gal calculated

H. Freeze/Thaw: Stable

I. Application Temperature: 40° F - 100° 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: > 500° F

M. Shelf Life: 12 months

N. Working Time: 30-40 minutes

O. Trowel: 1/16” x 1/32” x 5/64” U-notch

1/16” x 1/16” x 1/16” square notch

P. Coverage Rate: 120 ft² / gal. – 1/16” x 1/32” 5/64”

95 ft² / gal. – 1/16” x 1/16” x 1/16”

Q. SCAQMD Rule #1168 0 lb./gal. calculated

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


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 is 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
VI NYL COMPOSITION T I LE

1. PROPRIETARY PRODUCT/MANUFACTURER
1.1. Proprietary Product: Vinyl Composition Tiles designed for durability and commercial interiors.

1.2. Manufacturer:
Tarkett
30000 Aurora Rd.
Solon, Ohio 44139
Phone: (800) 899-8916
(440) 543-8916
Tech: Ext 9297
Web: www.tarkettna.com
E-mail: info@johnsonite.com

1.3. Proprietary Product Description:
1.3.1. Construction: Azrock VCT and Azrock TexTile VCT are manufactured from a homogeneous composition of high quality additives, and colorants to meet the performance requirements of ASTM F 1066, Standard Specification for Vinyl composition Tile, Class 2 (Through pattern) and Class 1 (Solid Color).

1.3.2. Styles:
- V-XXX (Azrock VCT & Azrock TexTile)

1.3.3. Physical Characteristics:
- Overall thickness: 1/8” (3.17 mm)
- Size: 12” X 12” (30.5 cm x 30.5 cm)
- Quantity: 45 tiles / carton
- 45 sq. ft. (4.18 m²) / carton
- Weight: 1.4 lbs. / sq. ft. (64 lbs. / carton)

2. PRODUCT PERFORMANCE AND TECHNICAL DATA
2.1. Heat Stability (ASTM F 1514): ΔE < 8
2.2. Size/Squareness (ASTM F2055): Passes
2.3. Deflection (ASTM F1304): Passes
2.4. Impact Resistance (ASTM F1265): Passes
2.5. Dimensional Stability (ASTM F2199): Passes
2.6. Chemical Resistance (ASTM F925): Passes
2.7. Static coefficient of friction (ASTM D 2047): 0.5 SCOF
2.8. Residual Indentation (ASTM F1914): Conforms
2.9. Static Load Limit (ASTM F 970): Passes 150 psi with less than 5 mils (0.005”) residual indentation
2.10. Fire Performance (ASTM E 648 Flooring Radiant Panel): Class 1

3. INSTALLATION
See Vinyl Composition Tile flooring installation instructions for complete details.

3.1. Adhesive:
- Tarkett 100 Clear Thin Spread Adhesive Coverage:
Porous Substrate: 250-300 sq. ft./gal.
- Tarkett 975 Two-Part Polyurethane Adhesive Coverage:
Porous & Non-porous Substrate: 225-250 sq. ft. per gallon
- Tarkett 901 SpraySmart Adhesive Coverage:
200 sq. ft. per container (1,200 sq. ft. per carton)

4. AVAILABILITY AND COST
Available through authorized Tarkett distributors nationwide.

5. WARRANTY
Limited 5 year warranty. For complete details, contact Tarkett or an authorized Tarkett distributor.

6. MAINTENANCE
72 hours after installation is completed, initial maintenance procedures must be implemented in accordance with manufacturer's requirements. Refer to Vinyl Composition Tile Maintenance Instructions for complete maintenance details.

7. TECHNICAL SERVICES
Samples: Submittal samples for verification and approval available upon request from Tarkett. Samples shall be submitted in compliance with the requirements of the contract documents. Accepted and approved samples shall constitute the standard materials which represent materials installed on the project.

For current Installation and Maintenance Instructions, Product Specifications, and other technical data, visit us on the web at www.tarkettna.com or contact Tarkett at 1-800-899-8916.
Solid Color Rubber Floor Tiles

1. PROPRIETARY PRODUCT/MANUFACTURER

1.1. Proprietary Product: Minerality Resilient Rubber Floor Tiles, A.D.A. Compliant.

1.2. Manufacturer:
Tarkett
30000 Aurora Rd.
Solon, Ohio 44139
Tech: Ext 9297
Web: www.tarkettna.com
E-mail: info@johnsonite.com

1.3. Proprietary Product Description:

1.3.1. Construction: Johnsonite MicroTone Rubber Floor Tiles are manufactured from a homogeneous composition of 100% synthetic rubber, high quality additives, and colorants to meet the performance requirements of ASTM F 1344, Class 1-A and 1-B Standard Specification for Rubber Floor Tile.

Johnsonite Rubber Floor Tiles are designed for interior applications only and not recommended for environments where the product will be exposed to animal fats, vegetable oils, or petroleum based materials (e.g.: commercial kitchens). Johnsonite rubber floor tiles require the use of chair pads or chairs with casters designed for resilient flooring in work stations or similar environments. Johnsonite rubber floor tiles are not warranted against cuts or lack of protection under caster wheels designed for carpeting or other types of flooring.

1.3.2. Styles:
- Artistic Square Rubber Floor Tile (ART-XXX): 0.125" (3.17 mm) thickness (Not available in 12" x 12")
- Bamboo Rubber Floor Tile (BMRT): 0.125" (3.17 mm) thickness, (Not available in 12" x 12")
- Brushed Rubber Floor Tile (BR): 0.125" (3.17 mm) thickness (Not available in 12" x 12")
- Circulinity Effervescent™ Rubber Tiles (CEF): 0.125" (3.17 mm) thickness (Not available in 12" x 12")
- Circulinity Fast Lane™ Rubber Tiles (CFL): 0.125" (3.17 mm) thickness (Not available in 12" x 12")
- Circulinity Round-A-Bout™ Rubber Tiles (CRB): 0.125" (3.17 mm) thickness (Not available in 12" x 12")
- Cubis Rubber Floor Tile (CRT): 0.125" (3.17 mm) thickness (Not available in 12" x 12")
- Circulinity Tricycle™ Rubber Tiles (CTR) Rubber Tiles, .125" (3.17 mm) thickness (Not available in 12" x 12")
- Concrete Rubber Floor Tile (CO): 0.125" (3.17 mm) thickness (Not available in 12" x 12")
- Smooth Surface Rubber Landing Tile (C-Smooth): 0.125" (3.17 mm) thickness
- Circulinity Tic-Tac-Toe™ Rubber Tiles (CTT): 0.125" (3.17 mm) thickness (Not available in 12" x 12")

1.3.3. Physical Characteristics:

2. PRODUCT PERFORMANCE AND TECHNICAL DATA

2.1. Abrasion Resistance (ASTM D 3389): < 1.0 gm weight loss
2.2. Hardness (ASTM D 2240): Not less than 85 Shore A
2.3. Slip Resistance (ASTM D 2047): Meets or Exceeds a static coefficient of friction of 0.8
2.4. Color Heat Stability (ASTM F 1514): < 8.0 ∆E
2.5. Acoustical (ASTM E 492 - Impact Insulation Class):
- 40 IIC for 0.125" (3.17 mm) thickness tiles
- 35 IIC for 0.080" (2 mm) thickness tiles
2.6. Static Load Limit (ASTM F 970): Passes at 250 psi
2.7. Fire Resistance (ASTM E 648 - Critical Radiant Flux): Class 1
2.8. Smoke Development (ASTM E 662): < 450
2.9. Chemical Resistance (ASTM F 925): Passes - 5% Acetic acid, 70% Isopropyl alcohol, Sodium hydroxide solution (5% NaOH), Hydrochloric acid solution (5% HCl), Sulfuric acid solution (5% H2SO4), Household ammonia solution (5% NH4OH), Household bleach (5.25% NaOCl), Disinfectant cleaner (5% active phenol).
Solid Color Rubber Floor Tiles

Product Specification

3. INSTALLATION
   See rubber tile flooring installation instructions for complete details.

3.1. Adhesives:
   - Tarkett 965 Adhesive Coverage:
     Porous Substrate: 125-150 sq. ft. per gallon
     Non-porous Substrate: 150-175 sq. ft. per gallon
   - Tarkett 996 Two-Part Epoxy Adhesive Coverage:
     Porous & Non-porous Substrate: 150-175 sq. ft. per gallon
   - Tarkett 975 Two-Part Polyurethane Adhesive Coverage:
     Porous & Non-porous Substrate: 150-175 sq. ft. per gallon
   - Tarkett 901 SpraySmart Adhesive Coverage:
     Porous & Non-porous Substrate: 80 sq. ft. per can (480 sq. ft. per carton)

4. AVAILABILITY AND COST
   Available through authorized Tarkett distributors nationwide.

5. WARRANTY
   Limited 5 year warranty. For complete details, contact Tarkett or an authorized Tarkett distributor.

6. MAINTENANCE
   72 hours after installation is completed, initial maintenance procedures must be implemented in accordance with manufacturer's requirements. Refer to rubber tile maintenance instructions for complete maintenance details.

7. TECHNICAL SERVICES
   Samples: Submittal samples for verification and approval available upon request from Tarkett. Samples shall be submitted in compliance with the requirements of the contract documents. Accepted and approved samples shall constitute the standard materials which represent materials installed on the project.

For current Installation and Maintenance Instructions, Product Specifications, and other technical data, visit us on the web at www.tarkettna.com or contact Tarkett at 1-800-899-8916.
1. PROPRIETARY PRODUCT/MANUFACTURER

1.1. Proprietary Product: Triumph Rubber Multi-functional and Sports Floor Tiles designed specifically for weight room, ice rinks, and other high impact applications. Skate-and-spike resistant product.

1.2. Manufacturer:
Tarkett
30000 Aurora Rd.
Solon, Ohio 44139
Phone: (800) 899-8916
(440) 543-8916
Web: www.tarkettna.com
E-mail: info@johnsonite.com

1.3. Proprietary Product Description:

1.3.1. Construction: Johnsonite Triumph Rubber Multi-functional and Sports Floor Tiles are manufactured of dual durometer layers composed of 100% synthetic and natural rubber, high quality additives, and colorants.

All Johnsonite Triumph Rubber Multi-functional and Sports Floor Tiles are designed for interior applications only and not recommended for environments where the product will be exposed to animal fats, vegetable oils, or petroleum based materials (e.g.: commercial kitchens).

1.3.2. Physical Characteristics:

Square Tiles (Glue down tiles): 24” x 24” (61 cm X 61 cm), .375” (9.5 mm) thickness, wear layer thickness of 0.090” (2.3 mm), 13.3 lbs (6.0 kgs) per tile, 40 lbs (18 kgs) per carton, 3 tiles per carton [12 ft² (1.1 m²)], 4 ft² per tile

Interlocking Tile (Loose lay): 24” x 24” (61 cm X 61 cm) net, .375” (9.5 mm) thickness, wear layer thickness of 0.090” (2.3 mm), 12.6 lbs. (5.7 kg) per tile, 38 lbs (17.2 kgs) per carton, 3 Interlocking tiles per carton [11 ft² (1.03 m²)], 3.67 ft² per tile

SlideLock™ Tile (studded back): 24” x 24” (61 cm x 61 cm) net, .375” (9.5 mm) thickness, wear layer thickness of 0.090” (2.3 mm), 12.8 lbs (5.8 kgs) per tile, 38 lbs (17.2 kgs) per carton, 3 SlideLock tiles per carton [12 ft² (1.1 m²)], 4 ft² per tile

1.3.3. Styles:

SMH - Triumph Hammered Surface Rubber Multi-functional and Sports Floor Square Edge Tiles

SMHI - Triumph Hammered Surface Rubber Multi-functional and Sports Floor Interlocking Tiles

SMHS - Triumph Hammered Surface Rubber Multi-functional and Sports Floor SlideLock Tiles

2. PRODUCT PERFORMANCE AND TECHNICAL DATA

- Abrasion Resistance: ASTM D 3389 – less than 1 gram weight loss.
- Acoustical: ASTM E 492 (Impact Insulation Class) - 59 IIC
- Hardness: ASTM D 2240 – 70 Shore A
- Slip Resistance: ASTM D 2047 – Meets or Exceeds a static coefficient of friction of 0.8
- Basketball Recovery: DIN 18032 – 99%.
- Static Load Limit: ASTM F 970 – Passes at 250 PSI.
- Fire Resistance: ASTM E 648/NFPA 253 (Critical Radiant Flux) Class 1
ASTM E 662/NFPA 258 (Smoke Density), less than 450
- Chemical Resistance: ASTM F 925 – Passes
5% Acetic Acid, 70% Isopropyl Alcohol, 5% Sodium Hydroxide, 5% Hydrochloric Acid, 5% Ammonia, Bleach, 5% Phenol, and Sulfuric Acid.

3. INSTALLATION

See Johnsonite installation instructions for complete details.

3.1. Adhesives:
- Important: adhesives not recommended for SlideLock tiles.

3.2. Adhesives for Square Edge Tile Only:

- Tarkett 965 Adhesive Coverage:
  Porous Substrate: 75-100 sq. ft. per gallon
  Non-porous Substrate: 75-100 sq. ft. per gallon

- Tarkett 975 Two-Part Polyurethane Adhesive Coverage:
  Porous & Non-porous Substrate: 150-175 sq. ft. per gallon

- Tarkett 901 SpraySmart Adhesive Coverage:
  Porous & Non-porous Substrate: 80 sq. ft. per can (480 sq. ft. per carton)

- Installation Manual: Refer to Johnsonite Triumph Rubber Multi-functional and Sports Floor Tiles Installation Instructions for complete installation details.

4. AVAILABILITY AND COST

Available through authorized Tarkett distributors nationwide.

5. WARRANTY

Limited 5 year warranty. For complete details, contact Tarkett or an authorized Tarkett distributor.

6. MAINTENANCE

72 hours after installation is completed, initial maintenance procedures must be implemented in accordance with manufacturer’s requirements. Refer to Triumph maintenance instructions for complete maintenance details.
7. TECHNICAL SERVICES

Samples: Submittal samples for verification and approval available upon request from Tarkett. Samples shall be submitted in compliance with the requirements of the contract documents. Accepted and approved samples shall constitute the standard materials which represent materials installed on the project.

For current Installation and Maintenance Instructions, Product Specifications, and other technical data, visit us on the web at www.tarkettna.com or contact Tarkett at 1-800-899-8916.