



## TECHNICAL SPECIFICATIONS

### 1. PRODUCT NAME

- The Evolution of Rubber Tile - Commercial Flooring
  - Foundation Color Group
  - Imagination Color Group

### 2. SUPPLIER

The Tyred Flooring Company

### 3. PRODUCT DESCRIPTION

#### Composition&Materials

THE TYRED FLOORING COMPANY Evolution Flooring is a non-vulcanized, non-laminated tile product with homogeneous color, composed of 100% post-consumer recycled SBR (styrene butadiene rubber) combined with low odour EPDM (ethylene propylene diene monomer) rubber granules, bound with proprietary slow-cured MDI polyurethane binder. (Essential for superior elasticity and long term durability.)

All tiles are produced in block form (not cut from rolled material) sliced and precision cut using computerized numerically controlled (CNC) water-based equipment. Thickness tolerance is a maximum of +/- 0.5mm. (Interlocking tiles are fully reversible.)

THE TYRED FLOORING COMPANY Recycled Rubber Tiles are FloorScore<sup>(R)</sup> certified under the criteria developed by the Resilient Floor Covering Institute (RFCI) and certified by Scientific Certification Systems (SCS), Inc. Registration # SCS-FS-02144.

#### Special Considerations:

- Use caution when choosing high color products for sport applications.
- High color product not recommended for use where ice skates are used.
- In areas with heavy rolling loads, a minimum of 6mm glue down product is recommended.
- Interlocking tiles recommended for use in dry, temperature controlled environments only.
- In areas where pallet jacks are used, premature wear may occur. Glue down installation only.
- Not suitable for use in food preparation zones.
- Diversey Carefree sealer recommended for use in difficult to clean areas.

**Product Information:**

<b><u>Squarecut (glue down installation)</u></b> 38" x 38" = 10.02 ft <sup>2</sup> 96.5 cm x 96.5 cm = 0.93 m <sup>2</sup>		<b><u>Interlock (no glue required)</u></b> 37" x 37" = 9.5 ft <sup>2</sup> 94 cm x 94 cm = 0.88 m <sup>2</sup>	
THICKNESS		THICKNESS	
4 mm	5/32"	8 mm	5/16"
6 mm	1/4"	10 mm	3/8"
8 mm	5/16"	12 mm	1/2 "
10 mm	3/8"		
12 mm	1/2 "		

**NOTE:**

1. All measurements are subject to nominal variation.
2. Thickness tolerance of  $\pm 0.5$  mm.

**Non-standard sizes:**

The Tyred Flooring Company Evolution Tiles can be cost effectively precision cut to custom sizes. All custom pieces are cut from Standard 38" x 38" tile. Thickness variation may be greater than  $\pm 0.5$  mm on custom sizes.

Contact The Tyred Flooring Company for details and pricing.

**Colors:**

See website

- Foundation Color Group – 29 standard colors.
- Imagination Color Group – 40 standard colors.

**Custom colors:**

- Combine Black SBR rubber with up to 5 different EPDM color granules chosen from the color pallet. • Full block multiples required for custom color orders. Block multiples based on tile thickness chosen:

- |   |                                   |
|---|-----------------------------------|
| ○ 4mm - Less than 60% total color = 38 tiles  | Greater than 60% color = 37 tiles |
| ○ 6mm - Less than 60% total color = 23 tiles  | Greater than 60% color = 22 tiles |
| ○ 8mm – Less than 60% total color = 18 tiles  | Greater than 60% color = 17 tiles |
| ○ 10mm – Less than 60% total color = 15 tiles | Greater than 60% color = 14 tiles |
| ○ 12mm – Less than 60% total color = 12 tiles | Great than 60% color = 11 tiles   |

**4. DESIGN & BASIC USE**

The Tyred Flooring Company Evolution Commercial Flooring is designed for use in a multitude of retail and commercial applications. Excellent impact and sound absorbing qualities make it ideal for corporate offices, libraries, and retail establishments. The extreme durability of this product results in flooring that will outlast the alternatives, making it the product of choice for high use commercial facilities.

Please contact The Tyred Flooring Company for information on custom designed logos.

**Limitations**

The following chemicals may cause damage to the surface and should be avoided: kerosene, solvents, grease, auto oil, vegetable oil/fat, and highly concentrated acids and/or bases.

This product is not suitable for service environments that have heavy vehicular traffic, rolling or sliding machinery, or similar uses unless fully adhered.

## 5. INSTALLATION METHODS

- a) Squarestyle - fully adhered, use THE TYRED FLOORING COMPANY recommended adhesives. See adhesive manufacturers' recommendation for moisture tolerance.
- b) Interlockstyle – loose lay, no adhesive required. For indoor use, no moisture present, no rolling loads.

Refer to **THE EVOLUTION** OF RUBBER TILE Installation & Maintenance Guidelines for information relating to sub-surfaces listed:

- 1) Concrete sub-surface
- 2) Wooden sub-surface

NOTE: THE TYRED FLOORING COMPANY Evolution Commercial Flooring should not be installed over carpet.

## 6. TECHNICAL DATA

Test Standards by the 'American Society for Testing and Materials' (ASTM) and others:

- AATCC 134-06 Electrostatic Propensity of Flooring Material
- ASTM C501 Standard Test Method for Relative Resistance to Wear of Rubber Tile by the Taber Abraser
- ASTM D2047 Standard Test Method for Coefficient of Friction of Polish-Coated Floor Surfaces as Measured by the James Machine
- ASTM D2240 Standard Test Method for Rubber Property-Durometer Hardness
- ASTM D3676 Standard Specification for Density Rubber Cellular Cushion Used for Carpet or Rug Underlay
- ASTM D395B Standard Test Methods for Rubber Property-Compression Set
- ASTM D412 Standard Test Methods for Vulcanized Rubber and Thermoplastic Rubbers and Thermoplastic Elastomers - Tension
- ASTM D5116 Standard Guide for Small-Scale Environmental Chamber Determinations of Organic Emissions from Indoor Materials/Products. (V.O.C.)
- ASTM E648-97 Standard Test Method for Critical Radiant Flux of Floor-Covering Systems Using a Radiant Heat Energy Source
- ASTM F137-03 Standard Test Method for Flexibility of Resilient Flooring Materials with Cylindrical Mandrel Apparatus
- ASTM F150 Standard Test Method for Electrical Resistance of Conductive and Static Dissipative Resilient Flooring
- ASTM F1914-98 Standard Test Method for Short-Term Indentation and Residual Indentation of Resilient Floor Covering
- ASTM F925-97 Standard Test Method for Resistance to Chemicals of Resilient Flooring
- ASTM F970-87 Standard Test Method for Static Load Limit
- ASTM G21 Standard Practice for Determining Resistance of Synthetic Polymeric Materials to Fungi
- Phillips Roll Chair Test Method for Numeric Rating of Surface Structure
- Federal Standard 101B/NFPA 99 12-4.1.3.8 –Static Decay Test Method 4046
- California Specification 01350 (CHPS Compliant for VOC Emissions) - Emission tests are performed following California Dept. of Health Services Standard Practice for the Testing of Volatile Organic Emissions from Various Sources Using Small-Scale Environmental Chambers, CA/DHS/EHLRB/R-174, 07/15/04  
([http://www.cal-iaq.org/VOC/Section01350\\_7\\_15\\_2004\\_FINAL\\_PLUS\\_ADDENDUM-2004-01.pdf](http://www.cal-iaq.org/VOC/Section01350_7_15_2004_FINAL_PLUS_ADDENDUM-2004-01.pdf))

Physical /Chemical PropertiesA) **THE EVOLUTION** OF RUBBER TILE: Upto50%Color (E43,E44,E45,E46,E58,E62,E63)

<u>TESTPROCEDURE</u>	<u>DESCRIPTION</u>	<u>ACHIEVEDVALUES</u> (Subject to nominal variation)
AATCC 134-06 C501 ASTM D2047	Electrostatic Propensity Taber Abrasion (H-22) Static Coefficient of Friction (James Machine method)	POS 1.6 KV ASTM 0.8% wt. Loss Dry 1.04, Wet 1.05
ASTM D2240 ASTM D3676 ASTM D395B ASTM D412 ASTM D5116 ASTM E648-97 (New York Test Procedure) ASTM F150 (NFPA 99)	Hardness Shore A Durometer Density Foam Test Summary Compression Set Under Force Tensile Strength Material Emissions – VOC Critical Radiant Flux Electrical Resistance – Burroughs - Surface to Surface - Surface to Ground	64 to 65 Indentation hardness 66 lbs/cu. ft. 96.3% recovered 290.2 lbs/sq. in. Pass Class II 1.5 x 10 <sup>10</sup> ohms average 4.6 x 10 <sup>10</sup> ohms average
ASTM F1914-98 ASTM F1914-98 ASTM F970-87	Short Term Indentation Residual Indentation Static Load	.025 inch (6.0%) Loss .007 inch (1.7%) Loss .000 inch (0.0%) residual compression
ASTM F925-97	<u>Chemical Resistance</u> • 5% acetic acid • 70% isopropyl alcohol • Mineral oil • 5% sodium hydroxide • 5% hydrochloric acid • 5% ammonia • Bleach • 5% phenol • Gasoline • Kerosene • Sulphuric acid • Olive Oil	No change No change No change No change No change No change No change No change No change Slight No change No change
ASTM G21 <u>Other Tests:</u>	Mold Growth on Surface	No Mildew after 14 days
CA 01350	Phillips Roll Chair Test VOC Emissions – Section 01350	Structure – no change Pass

B) **THE EVOLUTION** OF RUBBER TILE: Over50%Color (allcolors other than listed in (A))

<u>TEST PROCEDURE</u>	<u>DESCRIPTION</u>	<u>ACHIEVEDVALUES</u> (Subject to nominal variation)
ASTM C501 ASTM D2047	Taber Abrasion (H-22) Static Coefficient of Friction (James Machine method)	4% wt. Loss Dry .85, Wet 1.01
ASTM D2240 ASTM D3676 ASTM D395B ASTM D412 ASTM D5116 ASTM E492 ASTM E648-97 (New York Test Procedure) ASTM F137-03	Hardness Shore A Durometer Density Foam Test Summary Compression Set Under Force Tensile Strength Material Emissions – VOC Impact Sound Transmission Critical Radiant Flux Flexibility	59 to 62 Indentation hardness 78.3 lbs/cu. ft. 95% recovered 186 to 292 lbs/sq. in. Pass 4mm = IIC 57 / 8mm = IIC 59 Class I 6mm Mandrel PASSES
ASTM F150 (NFPA 99)	Electrical Resistance – Burroughs - Surface to Surface - Surface to Ground	1.9 x 10 <sup>11</sup> ohms average 3.9 x 10 <sup>11</sup> ohms average
ASTM F970-87	Static Load	.042 inch (10.6%) residual compression

ASTM F925-97

Chemical Resistance

• 5% acetic acid	No change
• 70% isopropyl alcohol	No change
• Mineral oil	No change
• 5% sodium hydroxide	No change
• 5% hydrochloric acid	No change
• 5% ammonia	No change
• Bleach	No change
• 5% phenol	No change
• Gasoline	No change
• Kerosene	No change
• Sulphuric acid	No change
• Olive Oil	No change
Mold Growth on Surface	No Mildew after 28 days

ASTM G21

Other Tests:

CA 01350

VOC Emissions – Section 01350 Pass

Copies of test reports and additional product information are available upon request.

## 7. WARRANTY

The standard warranty period is 10 years from date of shipment. Please, see THE TYRED FLOORING COMPANY's limited warranty for particulars of coverage.