



## TECHNICAL SPECIFICATIONS SPORT MAT FLOORING

### 1. PRODUCT NAME

- Sport Mat Flooring

### 2. SUPPLIER

The Tyred Flooring Company

### 3. PRODUCT DESCRIPTION

#### Composition & Materials

The Tyred Flooring Company Sport Mat Flooring is a non-vulcanized, non-laminated tile product with homogeneous color, composed of 100% postconsumer recycled SBR (styrene butadiene rubber) combined with low odour EPDM (ethylene propylene diene monomer) rubber granules, bound with a proprietary slow-cured MDI water-based polymer. (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.)

Our 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 # SCSFS02144.

#### Special Considerations:

- **Fitness Centers:** recommend minimum 8mm thickness interlocking Sport Mat Flooring, no adhesive required.
- **Ice Arena Applications:** recommend minimum 10mm thickness square cut, fully adhered, Sport Mat Flooring for all areas excluding players boxes and walk off areas. THE TYRED FLOORING COMPANY recommended for these areas. *Stone Line and Elite Line are not recommended for ice arena applications.*
- **Golf Course Applications:** recommend minimum 8mm thickness, Sport Mat Flooring for all areas excluding high pivot zones. THE TYRED FLOORING COMPANY product recommended for these areas.
- **Ski Resort Applications:** recommend minimum 8mm thickness rubber square cut, fully adhered, Sport Mat Flooring for all indoor areas. THE TYRED FLOORING COMPANY product recommended for outdoor areas.
- **Elite Line:** not suitable for heavy use areas.

**Product Information:**

<b>Square cut (glued down installation)</b>		<b>Interlock (no adhesive required)</b>	
38" x 38" = 10.02 ft <sup>2</sup>		37" x 37" = 9.5 ft <sup>2</sup>	
96.5 cm x 96.5 cm = 0.93 m <sup>2</sup>		94 cm x 94 cm = 0.88 m <sup>2</sup>	
<b>THICKNESS</b>		<b>THICKNESS</b>	
*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 "		
* <i>Glue down installation recommended.</i>			

**NOTE:-**

1. All measurements are subject to nominal variation.
2. Thickness tolerance of ± 0.5 mm.

**Colors** – EPDM color granules may be added to the black SBR to provide color and design (“speckled”).

STANDARD COLORS 10%, 30%, 50% SPECKLING INTENSITY	TWO COLOR COMBINATIONS & METRO LINE	GRANITE FLEX LINE	STONE LINE	ELITE LINE	DÉCOR COLLECTION
<ul style="list-style-type: none"> <li>• RED</li> <li>• GREEN</li> <li>• BLUE</li> <li>• GREY</li> <li>• BEIGE</li> <li>• BROWN</li> </ul>	<ul style="list-style-type: none"> <li>• 10% BLUE/ GREY</li> <li>• 10% BLUE/ GREEN</li> <li>• 10% BEIGE/ GREY</li> <li>• 10% RED/ GREY</li> <li>• METRO GREY</li> <li>• METRO BLUE</li> <li>• METRO GREEN</li> <li>• METRO BEIGE</li> </ul>	<ul style="list-style-type: none"> <li>• RED</li> <li>• RED/ GREY</li> <li>• RED/ BEIGE</li> <li>• GREEN</li> <li>• GREEN/ GREY</li> <li>• GREEN/ BEIGE</li> <li>• GREY</li> <li>• GREY/ GREY</li> <li>• GREY/ BEIGE</li> </ul>	<ul style="list-style-type: none"> <li>• SEA STONE/ BLUE</li> <li>• SEA STONE/ GREENS</li> <li>• SEA STONE/ TURQUOISE</li> <li>• EARTH STONE/ BEIGE</li> <li>• EARTH STONE / ORANGE</li> <li>• EARTH STONE/ RED</li> </ul>	<ul style="list-style-type: none"> <li>• TUSCANY GREY</li> <li>• GILBRALTAR GREY</li> <li>• SAHARA BEIGE</li> <li>• SUNSET RED</li> <li>• TROPICAL GREEN</li> <li>• MEDITERRANEAN BLUE</li> </ul>	<ul style="list-style-type: none"> <li>• AZTEK EMPIRE</li> <li>• DEEP SEA</li> <li>• INDEPENDENCE</li> <li>• MAYAN SANDS</li> <li>• NIGHT SKY</li> <li>• LUNAR SHOWERS</li> </ul>

**4. DESIGN & BASIC USE**

Sport Mat Flooring is designed for use in sport and commercial facilities. Excellent impact and sound absorbing qualities make it ideal for use in fitness and ski facilities. It is resistant to skate and spike traffic, thus performs well in ice arenas, locker rooms and golf courses. The extreme durability of this product results in flooring that will outlast the alternatives making it the product of choice for high use facilities.

Uses are not limited to the above.

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 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) **Square style** - fully adhered, use THE TYRED FLOORING COMPANY recommended adhesives.  
See adhesive manufacturers' recommendation for moisture tolerance.

b) **Interlock style** - loose lay, no adhesive required. For indoor use, no moisture present, no rolling loads.

Refer to THE TYRED FLOORING COMPANY **Sport Mat Flooring Installation & Maintenance Guidelines** for information relating to sub-surfaces listed:

- 1) Concrete subsurface
- 2) Wooden subsurface

**NOTE: SPORT MAT FLOORING, SQUARE CUT OR INTERLOCK, SHOULD NOT BE LAID ON TOP OF CARPET AS THE FLOOR WILL SHIFT AND MOVE.**

## 6. TECHNICAL DATA

### **Test Standards for: American Society for Testing and Materials (ASTM)**

- **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 E492** Standard Test Method for Impact Sound Transmission
- **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 Mandre 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.
- **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/R174, 07/15/04  
[http://www.caliaq.org/VOC/Section01350\\_7\\_15\\_2004\\_FINAL\\_PLUS\\_ADDENDUM200401.pdf](http://www.caliaq.org/VOC/Section01350_7_15_2004_FINAL_PLUS_ADDENDUM200401.pdf).

### **Physical / Chemical Properties**

A) **STANDARD COLORS**: 100% black, 10%, 30%, 50% EPDM speckle, 2color combinations, Metro Line, Granite Flex Line, & Décor Collection.

<b><u>TEST PROCEDURE</u></b>	<b><u>DESCRIPTION</u></b>	<b><u>ACHIEVED VALUES</u></b> (Subject to nominal variation)
AATCC 13406	Electrostatic Propensity	POS 1.6 KV
ASTM C501	Taber Abrasion (H22)	0.8% wt. Loss
ASTM D2047	Static Coefficient of Friction (James Machine method)	Dry 1.04, Wet 1.05
ASTM D2240	Hardness Shore A Durometer	64 Indentation hardness
ASTM D3676	Density Foam Test Summary	66.0 lbs/cu. ft.
ASTM D395B	Compression Set Under Force	990% to 96.3% recovered

ASTM D412	Tensile Strength	290.2 lbs/sq. in.
ASTM E492	Impact Sound Transmission	4mm IIC 57/6mm IIC 59 Call Tyred
ASTM E648	Critical Radiant Flux	Flooring for results 6mm Mandrel
ASTM F137	Flexibility	PASSES
ASTM F150 (NFPA 99)	Electrical Resistance – Burroughs	
	- Surface to Surface	10 <sup>10</sup> ohms average
	- Surface to Ground	10 <sup>10</sup> ohms average
ASTM F1914-98	Short Term Indentation	.025 inch (6.0%) Loss
ASTM F1914-98	Residual Indentation	.007 inch (1.7%) Loss
ASTM F970-87	Static Load	.000 inch (0.0%) residual compression
ASTM F925-97	<b><u>Chemical Resistance</u></b>	
	• 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	Slight
	• Sulphuric acid	No change
	• Olive Oil	No change
ASTM G21	Mold Growth on Surface	No Mildew after 14 days

**Other Tests:**

CA 01350 VOC Emissions	Phillips Roll Chair Test	Structure-no change
	Indoor Air Quality	Section 01350 Pass

*Sport Mat Flooring meets the VOC Emission requirements as a low-emitting material in the Collaborative for High Performance Schools rating system (CHPS Designed & CHPS Verified). Also the testing requirements are met for USGBC LEED for Commercial Interiors and for New Construction and Major Renovation, IEQ Credit 4.3 Low-Emitting materials -Flooring Systems, Options 1 and 2.*

**B) STONE LINE: Earth Stone and Sea Stone**

**TEST PROCEDURE**

**DESCRIPTION**

**ACHIEVED VALUES**

ASTM D2047	Static Coefficient of Friction (James Machine method)	(Subject to nominal variation) Dry .81, Wet .90
ASTM D2240	Hardness Shore A Durometer	62 Indentation hardness
ASTM D3676	Density Foam Test Summary	77.7 lbs/cu. ft.
ASTM D395B	Compression Set Under Force	95.3% recovered
ASTM D412	Tensile Strength	292.2 lbs/sq. in.
ASTM D5116	Material Emissions – VOC	Pass
ASTM F137	Flexibility	6mm Mandrel PASSES
ASTM E648	Critical Radiant Flux	Call Tyred Flooring for results
ASTM F150 (NFPA 99)	Electrical Resistance – Burroughs	
	- Surface to Surface	10 <sup>11</sup> ohms average
	- Surface to Ground	10 <sup>11</sup> ohms average
ASTM F97087	Static Load	.030 inch (7.3%) residual compression
ASTM F92597	<b><u>Chemical Resistance</u></b>	
	• 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
ASTM G21	Mold Growth on Surface	No Mildew after 28 days
CA 01350 VOC Emissions	Indoor Air Quality	Section 01350 Pass

*Sport Mat Flooring meets the VOC Emission requirements as a low-emitting material in the Collaborative for High Performance Schools rating system (CHPS Designed & CHPS Verified). Also the testing requirements are met for USGBC LEED for Commercial Interiors and for New Construction and Major Renovation, IEQ Credit 4.3 Low-Emitting materials Flooring Systems, Options 1 and 2.*

**C) ELITE LINE: Sunset Red, Mediterranean Blue, Gibraltar Grey, Tropical Green, Sahara Beige, Tuscany Grey.**

<u>TEST PROCEDURE</u>	<u>DESCRIPTION</u>	<u>ACHIEVED VALUES</u>
ASTM C501	Taber Abrasion (H22)	(Subject to nominal variation) 4.0% wt. Loss
ASTM C423	Sound Absorption/Noise Reduction Coefficient	4mm/6mm 0.05
ASTM D2047	Static Coefficient of Friction (James Machine method)	Dry .85, Wet 1.01
ASTM D2240	Hardness Shore A Durometer	59 Indentation hardness
ASTM D3676	Density Foam Test Summary	78.3 lbs/cu. ft.
ASTM D395B	Compression Set Under Force	94.7% recovered
ASTM D412	Tensile Strength	186.1 lbs/sq. in.
ASTM E492	Impact Sound Transmission	4mm IIC 57/6mm IIC 59
ASTM E648	Critical Radiant Flux	Call The Tyred Flooring Company for results
ASTM F137	Flexibility	6mm Mandrel PASSES
ASTM F150 (NFPA 99)	Electrical Resistance – Burroughs	
	- Surface to Surface	10 <sup>11</sup> ohms average
	- Surface to Ground	10 <sup>11</sup> ohms average
ASTM F97087	Static Load	.042 inch (10.6%) residual compression
ASTM G21	Mold Growth on Surface	No Mildew after 28 days
CA 01350 VOC	Emissions Indoor Air Quality	Section 01350 Pass

*Sport Mat Flooring meets the VOC Emission requirements as a low-emitting material in the Collaborative for High Performance Schools rating system (CHPS Designed & CHPS Verified). Also the testing requirements are met for USGBC LEED for Commercial Interiors and for New Construction and Major Renovation, IEQ Credit 4.3 Low-Emitting materials Flooring Systems, Options 1 and 2.*

**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.