

Eco-\$mart, Inc.

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Eco-Rubber

TECHNICAL SPECIFICATIONS

PLAYGROUND RUBBER TILES & **PlayTiles®**

1. PRODUCT NAME

- Playground Tiles
- PlayTiles (logo tiles)

2. MANUFACTURER

Dinoflex Group Limited Partnership
P.O. Box 3309
Salmon Arm, B.C. Canada V1E 4S1

3. PRODUCT DESCRIPTION

Composition & Materials

Eco-Rubber Playground Rubber Tiles are made from a combination of 100% post-consumer recycled SBR (styrene butadiene rubber), Pigment or EPDM (ethylene propylene diene monomer) rubber, and polyurethane binder. Colored toppings are made from either EPDM granules or SBR granules mixed with pigment. All colored toppings are approximately 1/2" (12 mm) thick, the SBR granules making up the remainder of the tile.

Eco-Rubber Playground Rubber Tiles and accessories:

A. Rubber Tiles come in two sizes and three thicknesses to meet your specific requirements.

Tile Size:	Thickness:	Fall Height:
1. 19½" x 19½" = 2.64 ft² <i>49.5 cm x 49.5 cm = 0.24 m²</i> (¼ meter square tile)	<ul style="list-style-type: none">• 1½" / 38 mm• 2¼" / 57 mm• 3½" / 89 mm	<ul style="list-style-type: none">• up to 4 ft.• up to 6 ft.• up to 10 ft.
2. 24" x 24" = 4 ft² <i>61 cm x 61 cm = 0.37 m²</i> (2' x 2' square tile)	<ul style="list-style-type: none">• 1½" / 38 mm• 2¼" / 57 mm• 3½" / 89 mm	<ul style="list-style-type: none">• up to 4 ft.• up to 6 ft.• up to 10 ft.

NOTE: All measurements are subject to nominal variation.

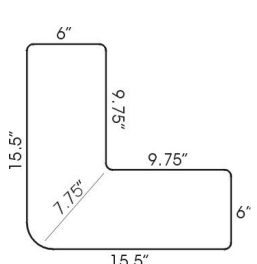
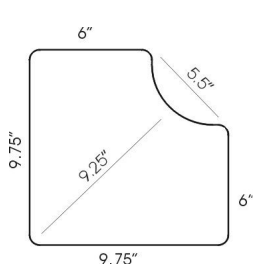
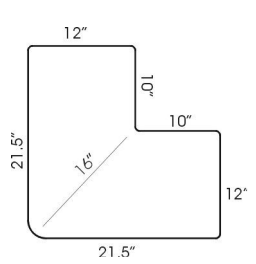
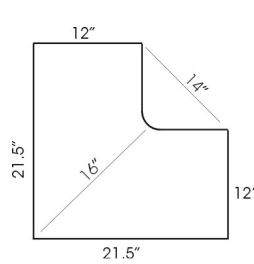
B. Wedges & Wedge Tiles are used around the perimeter of an area to create a transition. They can be adhered to the edge of the tile and/or glued to the sub-surface. Different colored wedges can be used to create a "warning strip".

Dimensions:

1½" / 38mm transition wedge tile:	19½" long x 19½" wide = 2.64 sq. ft. 49.5 cm long x 49.5 cm wide = 0.245 m ²
1½" / 38mm transition wedge:	19½" long x 6" wide = .81 sq. ft. 49.5 cm long x 15.2 cm wide = 0.075 m ²
2¼" / 57mm transition wedge:	19½" long x 6" wide = .81 sq. ft. 49.5 cm long x 15.2 cm wide = 0.075 m ²
3½" / 89mm transition wedge:	19½" long x 12" wide = 1.63 sq. ft. 49.5 cm long x 30.5 cm wide = 0.151 m ²

C. Corner wedges, designed for use on all 90° angles.**Dimensions:** (available in outside and inside format)

1½" / 38mm outside corner wedge:	9¾" long (inside edge) x 6" wide = .41 sq. ft. 24.8 cm long x 15.2 cm wide = 0.038 m ²
1½" / 38mm inside corner wedge:	9¾" long (outside edge) x 6" wide = .41 sq. ft. 24.8 cm long x 15.2 cm wide = 0.038 m ²
2¼" / 57mm outside corner wedge:	9¾" long (inside edge) x 6" wide = .41 sq. ft. 24.8 cm long x 15.2 cm wide = 0.038 m ²
2¼" / 57mm inside corner wedge:	9¾" long (outside edge) x 6" wide = .41 sq. ft. 24.8 cm long x 15.2 cm wide = 0.038 m ²
3½" / 89mm outside corner wedge:	10" long (inside edge) x 12" wide = .83 sq. ft. 25.4 cm long x 30.5 cm wide = 0.077 m ²
3½" / 89mm inside corner wedge:	21½" long (outside edge) x 12" wide = 1.79 sq. ft. 54.6 cm long x 30.5 cm wide = 0.167 m ²

			
1½" & 2¼" outside corner	1½" & 2¼" inside corner	3½" outside corner	3½" inside corner

D. Wheelchair Ramps are designed to meet ADA requirements for ramp standards.**Dimensions:**

2¼" / 57mm wheelchair ramp:	24" long x 39" wide 61 cm long x 99 cm wide
3½" / 89mm wheelchair ramp:	39" long x 39" wide 99 cm long x 99 cm wide

E. Half Tiles are designed so that the area can be installed in a staggered layout.**F. Finishing Kits** are furnished to fill in cuts around posts and play structure mounts at the end of a project to give a clean finished look.**G. Interlocking Pins** are 4" long and 5/8" in diameter. These are included with every order, four per tile, at no charge.**H. PlayTiles® & Custom Logos** are designed to create fun and games. Several PlayTile series are available, as well as single PlayTiles. Some of the series available are:

- Hopscotch
- Traffic symbols
- Animal crackers
- Space travel
- Alphabet (lower & upper case)
- Four square game

COLORS:

• 100% Black	• Terra Cotta Red Pigment	• Forest Green Pigment
	• Stone Beige Pigment	• Teak Brown Pigment

Note: Nominal variation in color occurs in all pigmented products. Pigmented tiles are not recommended for high traffic areas because of potential pigment loss.

Standard Colors:				
25% Speckled EPDM		50% Speckled EPDM		75% Speckled EPDM
• Green	• Red	• Beige	• Orange	• Brown

Interlocking Pins:

The Playground Tiles are supplied with interlocking pins. These are included with every order, four per tile.

4. DESIGN & BASIC USE

- a) Eco-Rubber Playground Rubber Tiles are used outdoors as surfacing around and underneath play structures. DINO FLEX Playground Rubber Tiles have been tested for fall height and head impact criteria according to ASTM guidelines and follow the guidelines set up by ADA and CPSC.
- b) Eco-Rubber Playground Rubber Tile “interlocking system” which provides an easy, self-aligning installation feature that does not require adhesive.
- c) Eco-Rubber Playground Rubber Tiles can be installed over sub-surfaces which include concrete, asphalt, wood, and well compacted granular bases. Other sub-surfaces shall be approved by Eco-Rubber.
- d) The sub-surface must be evaluated and approved by the installer prior to installation. Specifically, but not exclusively referring to gradient and drainage.

5. INSTALLATION METHODS

Refer to **Eco-Rubber Playground Rubber Tiles & PlayTiles® Installation & Maintenance Guidelines** for information relating to sub-surfaces listed:

- 1) Concrete sub-surface
 - 2) Asphalt sub-surface
 - 3) Wooden sub-surface
 - 4) Compacted granular base
- a) Perimeter containment.
 - b) Perimeter gluing only.
 - c) Total glue down on hard surface or filter cloth.
 - d) Compacted granular base.

Use adhesives recommended by Eco-Rubber. Refer to Eco-Rubber Playground Rubber Tiles & **PlayTiles®** Installation & Maintenance Guidelines for more information.

6. INSTALLATION CONDITIONS

- a) Lay out all the tiles to be installed the next day on or near the sub-surface. Allow tiles to equalize to average ambient temperature for about 12 hours
- b) Materials shall be protected from weather extreme temperatures, solvents, and sources of damage prior to and during installation.

7. TECHNICAL DATA

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

- **ASTM C1028** Standard Test Method for Determining the Static Coefficient of Friction by the Horizontal Dynamometer Pull-Meter Method.
- **ASTM F1292-99** Standard Specification for Impact Attenuation of Surface Systems Under and Around Playground Equipment.
- **ASTM E648** Standard Test Method for Critical Radiant Flux of Floor-Covering Systems Using a Radiant Heat Energy Source.

Physical / Chemical Properties

TEST PROCEDURE	DESCRIPTION	ACHIEVED VALUES (Subject to nominal variation)
ASTM C1028-84	Static Coefficient of Friction	Dry .67, Wet .64
ASTM 1292-99	Shock absorbing properties tested between 32 and 120 F°, G-Max and HIC measured may not exceed 200 and 1000 respectively at a given fall height.	1½" 4 ft 2¼" 6 ft 3½" 10 ft

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

8. INSTALLATION & MAINTENANCE PROCEDURES

Use a qualified or certified installer with experience installing similar recycled rubber surfacing products. Refer to Eco-Rubber Tiles and Playground Rubber Tiles & **PlayTiles®** Installation & Maintenance Guidelines.

9. AVAILABILITY & COST

Availability

Please contact Eco-\$mart for information on availability.

Cost

Contact Eco-\$mart for a quote.

10. WARRANTY

The standard warranty period is 5 years from date of shipment. Please, see the Eco-Rubber limited warranty for particulars of coverage.

11. TECHNICAL SERVICES

Contact Eco-mart for more information, where a staff of trained customer service personnel offers design assistance and technical support.

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