



# ARCHITECTURAL SPECIFICATIONS

## **Rubberflex G-Force Playground Safety Surfacing for all Fall Zones Rubberflex “Interlocking” G-Force Playground Safety Surfacing for 6’ and 8’ Fall Zones**

### **A. GENERAL**

- 1) **Description** - Langhorn Flooring Concept, Inc. shall provide all necessary material components and installation instructions required to install the G-Force Playground safety surfacing.
- 2) **Quality Assurance** -
  - a) G-Force Playground Safety Tiles shall be warranted by the manufacturer, Langhorn Flooring Concept, Inc., for any defects in material and workmanship for a period of 10 years from the date of purchase. b. ISO 9001-2000 registered company.
  - b) Manufactured in the U.S.A.
- 3) **Design & Use** -
  - a) G-Force Playground Safety Tiles are designed to provide an impact absorbing resilient safety surface which is utilized in the fall area or safety zones around playground equipment.
  - b) G-Force Back Playground Safety Tiles meet the Consumer Product Safety Commission (**CPSC**) and American with Disability Act (**ADA**) requirements tested by the American Society for Testing and Material (**ASTM**) methods. All Langhorn Flooring Concepts, Inc. tiles meet the Head Injury Criteria (**HIC**) tests for applicable fall heights and are certified by the International Play Equipment Manufacturers Association (**IPEMA**).
  - c) G-Force Playground Safety Tiles shall be installed over acceptable substrates. Acceptable substrate systems include asphalt, concrete and compacted non-porous flooring surfaces. Other substrates shall be approved by Langhorn Flooring Concept, Inc.
  - d) The structural performance and conditions of the substrates shall be evaluated and approved by the installer prior to the installation of the G-Force Back Playground Safety Tiles. Installer shall also evaluate and approve the required drainage and gradient prior to installation of the safety surfacing.
- 4) **Submittals** –
  - a) G-Force playground safety surfacing samples shall be submitted by Langhorn Flooring Concept, Inc.
- 5) **Delivery, Storage and Handling** -
  - a) All materials shall be delivered in good condition in the original packaging materials with product information intact. All materials shall be delivered in good condition in the original packaging materials with product information intact.
  - b) Materials shall be protected from weather and the adhesives used to secure the materials shall be stored in temperatures of 40°F (4°C) or higher.

- c) Materials shall not be subjected to solvents or other damaging chemicals.
- 6) **Installation Conditions –**
- a) At the time of installation, ambient air temperature shall be 40° (4°C) or higher.
  - b) Materials shall be protected from weather, solvents and other damage prior to and during installation and during the adhesive curing process.
- 7) **Alternative and Allowances -**
- a) Resilient rubber surfaces to be considered equal to G-force playground safety surfacing shall be approved by the Architect in writing prior to the bid date.

## **B. PRODUCTS**

### **Dimensions**

Tiles 24" x 24" (Thickness will vary depending on fall height requirements)

### **Features**

- Resilient rubber surface made exclusively from re-claimed rubber
- Water permeable design for dry play surface
- "100 leg" egg-carton pattern bottom for greater fall protection
- Easy urethane adhesive (glue down) installation
- Meets or exceeds ADA & CPSC requirements & ASTM tests
- 1-in-6 Slope transitions and corners
- 1-in-12 Slope ADA ramps
- Virtually maintenance free
- Tile Locking Option: 6' and 8' Fall Height. Overlapping male and female junction. All four sides. Available with interlocking beveled edges.

### **Colors**

Standard Color Top Tiles: Black, Cascade Green, Denim Blue, and Cayenne Red  
Solitude Collection EPDM Topped Tiles: Rainforest Green, Streamside Blue and Desert Clay Red

Elements Collection EPDM Topped Tiles: Alpine Meadow Green, Crater Lake Blue, Sandy Beach Tan and Sunburst Red

(Custom multi-color EPDM Topped available)

(See representative for details)

- 1. General –** G-Force Playground Safety Tiles, transition pieces, adhesives and other components shall be obtained exclusively from Langhorn Flooring Concept, Inc. or its authorized dealers.

### **Materials –**

- a) G-Force Playground Safety Tiles shall be produced in a square configuration in 24" x 24" size with hollow vertical cavities and comprised of 100 "legs" on the bottom (2 1/4", 2 1/2", 3 1/2", 4") and a color top surface. Each tile is 4 square feet and is comprised of rubber obtained exclusively from the recycling of re-claimed tires. Uniform density throughout prevents particulate separation and provides maximum resilience and adhesive attachment.
- b) Fall Protection - Shall have been tested and passed for shock attention under ASTM F 1292-99 G-Max and HIC (Head Injury Criteria) for the appropriate/corresponding fall height.
- c) Shall have the following technical specification:
 

ABRASION RESISTANCE (ASTM D 4060)	Durability: Wear Index-657 Avg.
TEAR STRENGTH (ASTM D 624)	Durability: 124 lbf/in. & psi avg.
COEFFICIENT OF FRICTION* (ASTM C 1028)	0.65 dry, 0.63 wet
WATER PERMEABILITY*	0.27 gal/min/sq. yd.
LEAD CONTENT (ASTM D 4004)	CPSIA Approved
WEATHERIZATION TEST (ASTM C 67 & D 573)	There were no signs of failure of the play tiles after the freeze-thaw and drying conditioning FALL
HEIGHT CRITERIA (ASTM F 1292-99)	G-Force Playground Tiles met their respective design fall height criteria.

Note: ASTM = American Standard for Testing Materials

\*Test conducted on Color Top and EPDM material

**Disclaimer:** The values shown represent current independent and production laboratory-taken tests for the 24" x 24" tiles only.

## **EXECUTION**

1. **Inspection** - Installer shall evaluate the substrate's structural integrity and performance prior to the installation of G-Force Playground Safety Tiles. All architects, engineers, and contractors shall be notified of all discrepancies. Work shall not continue until all unsatisfactory conditions are rectified.
2. **Installation** - G-Force Playground Safety Tiles shall be cut, aligned and installed as required onto the substrate with sufficient adhesive as recommended according to the manufacturer's guidelines.