

TECHNICAL SPECIFICATION 2/2016

Edition B/27.09.2016

1. PRODUCT: PLAYGRAN FLEXIBLE TILES

PURPOSE: FLEXIBLE TILES – PLAYGRAN is a component designed for paving recreation, sports fields, playgrounds, sidewalks, terraces, balconies, etc. Designed to increase the safety and protection against slipping and falling.

MATERIAL: EPDM, SBR GRANULATE RUBBER, PU resin

DIMENSIONS: 1000mm x 500mm x 30mm 1000mm x 500mm x 50mm 1000mm x 500mm x 70mm 1000mm x 500mm x 100mm

WEIGHT:
 Tile height 30 mm – 12.6 kg (25.2 kg/m²)
 Tile height 50 mm – 15.5 kg (31.0 kg/m²)
 Tile height 70 mm – 23.4 kg (46.8 kg/m²)
 Tile height 100 mm – 26.5 kg (53.0 kg/m²)



COLOUR: Dye – Red Green Black
 EPDM cover - Red RAL 2013 Green RAL 6011 Grey RAL 7042
 Orange RAL 2011 Blue RAL 5003 others on client's request

SHAPE: Rectangle area (0.5 m²) is provided with hemispherical shapes or grooves to ensure flexibility and drainage. The edges of each product are provided with holes for dowels. On the upper side there is an apparent fugue every 500 mm.

Number of dowels: 12 pieces/m²



OTHER PHYSICAL SPECIFICATIONS:

PARAMETERS	VALUE	UNIT	METHOD/STANDARD
Tensile strength	≥ 0.8	MPa	PN-ISO 37
Hardness	65±5	°ShA	PN-80/C-04238
Density	0.80-0.85	g/cm ³	PN-ISO 2781
Deformation after compression	17	%	According to the guidelines for bumpers
Abrasion resistance	≤ 2000	mg	Taber's device (Abrader)
Electrical insulation	≥ 1	GΩ	Test voltage - 250V
Fracture resistance (low temperatures)	No fractures		Temp. -40°C, 24 h
Resistance to acids and solvents	No changes		Immersion in acids and solvents (time 120h)
PU Resin content	≤10	%	
Granulate content	>90	%	
Dimensional tolerance - length	-5	mm	Nominal dimension
Dimensional tolerance - width	-3	mm	Nominal dimension
Weight tolerance	±0.2	kg	Nominal weight
HIC (Head Injury Criterion)			
30 mm height flexible tile	1.0	m	PN-EN 1177:2009
50 mm height flexible tile	1.5	m	PN-EN 1177:2009
70 mm height flexible tile	2.0	m	PN-EN 1177:2009
100 mm height flexible tile	3.0	m	PN-EN 1177:2009
COLOUR CHANGE (resistance to artificial aging) (Exposure in accordance with BS-EN 14836 2005)			
Orange EPDM flexible tile	4*	GREYSCALE	BS EN 20105-A02 1995
Blue EPDM flexible tile	4*	GREYSCALE	BS EN 20105-A02 1995

* A study was conducted in a professional laboratory SPORTS LABS. The permissible value for the surface at playgrounds and sports fields is greater than or equals to 3.
PLAYGRAN flexible tile has a very good resistance to weather, UV radiation, oxygen and ozone in the air.
PLAYGRAN tiles arranged into surfaces are water-permeable.

2. CERTIFICATION:

National Institute of Hygiene Certificate – PLAYGRAN EPDM flexible tile HK/B/0976/01/2016
Certificate of Compliance OBAC no. OBAC/0177/CZ/15
Certificate of Compliance OBAC no. OBAC/0411/CZ/16

Meet requirements:

PN-EN 1177:2009, PN-EN 1176-1:2009, PN-EN 1176-7:2009

Colour fastness testing EN ISO 20105-02

The whole production process takes place in accordance with the PN-ISO 9001:2009 system

3. WAREHOUSING:

PACKAGING:

- Tiles are stacked on 100x100 cm pallets, protected by black foil, bundled by polypropylene tape
- Quantity – 60 pieces/30 m² on the pallet
- Possible another way of packaging (on request)

IDENTIFICATION:

Product – a production label on the underside (year/month/day/shift)

Pallet of products - product name, amount of product, quantity, pallet identification number, date of packaging, quality control stamp

STORAGE:

PLAYGRAN flexible tiles should be stored on pallets in a protective foil and be protected from external atmospheric conditions. Storage tiles for an extended period of time is possible only in closed and ventilated (dry) areas after removing the protective foil.

Storage temperature: up to 40°C

SAFETY AND FIRE PROTECTION:

Storage and use of flexible tiles must meet all requirements for storing and using rubber materials.

4. ASSEMBLY:

Tile assembly can be carried out on concrete, asphalt or other well-compacted surface that guarantees the stability of the tile and its geometry. The surface should be levelled and frost resistant. The slope of the surface should amount 0.5% for proper drainage of water. In terms of row arrangement a following row should be halfway through of the length of the previous row. The gaps between the tiles should not be greater than 5 mm. It is recommended to minimize the gap as much as possible.

Flexible tiles can be interconnected with dowels and, if necessary, additionally glued.

In most cases the interconnection with dowels is sufficient which equals reduction in assembly time.

Tiles should be spot-glued on attributable carrier layers. This prevents tiles from unexpected movement.

Limiters should be put on two opposite (diagonal) corners prior assembly on unbound surface in order to facilitate levelling and precise location.

The work should be carried out at temperatures above 5°C and in the absence of precipitation.

3 cm flexible tiles – due to flat construction, tiles should be assembled only on concrete or asphalt surfaces. Additionally, tiles should be spot-glued (by mounting glue) to its concrete surface in order to prevent from rolling up corners.

5. OPERATION RULES - see the warranty for PLAYGRAN flexible tiles.