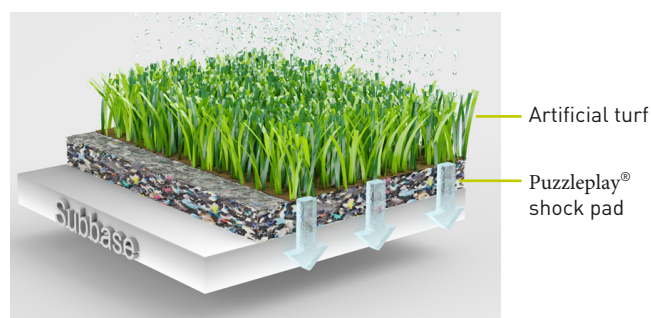


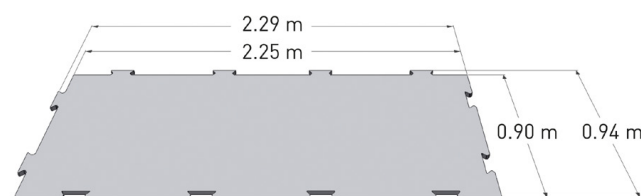
GENERAL INFORMATION



Artificial turf system with Puzzleplay® shock pad



Puzzle shaped sheets



Dimensions sheet

ENVIRONMENT, HEALTH AND SAFETY CREDENTIALS

Cross-linked polyolefins are chemically stable by nature. Any compounds contained in the material will not be released during the lifetime of the product. Puzzleplay® can be safely used for any artificial grass system. The products do not leach chemicals that pose a risk for the environment and/or human health.

Puzzleplay® complies with:

- The European Community:
 - Regulation No 1272/2008 of the European Parliament and of the Council on Classification, Labelling and Packaging of substances and mixtures (CLP).
 - Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH).
- The state of California's Code of Regulations (CCR):
 - Title 22 'Social Security' – Division 4.5 'Environmental Health Standards for the Management of Hazardous Waste'.
 - Title 27 'Environmental Protection' - Division 4 'Office of Environmental Health Hazard Assessment' - Chapter 1 'Safe Drinking Water and Toxic Enforcement Act of 1986' (Proposition 65).
- Toxicology requirements from ESTC (ESTO) Shock pad Working Group's 'Performance Guide for Shock pad'.

TECHNICAL DATA

Physical characteristics	Tolerance	Puzzleplay® Value	Unit	Standard
Thickness at 2 kPa (0.3 psi) load	+/- 1	12	mm	EN-ISO 9863-1*
Mass per unit area	+/- 0.4	1.8	kg/m ²	EN-ISO 9864*

* As modified by Safefloor Products

Required characteristics International Sports Associations		Puzzleplay® Value	Unit	Standard
Tensile strength	> 0.15	0.26	MPa	EN 12230
Water infiltration rate [IA]	> 180	36,000	mm/h	EN 12616

Performance characteristics		Puzzleplay® Value	Unit	Standard
Force reduction		-	%	AAA**
Energy restitution		-	%	AAA**
Vertical deformation		-	mm	AAA**
Shock absorption		-	%	EN 14808
Vertical deformation		-	mm	EN 14809
Critical fall height (Head Injury Criterion ~ 1000)		-	m	EN 1177
Thermal resistance (R-value)		0.24	m ² .K/W	EN 12667

** Advanced Artificial Athlete

INSTALLATION DISCLAIMER

- Installation of Puzzleplay® must be done under the code of good workmanship. Safefloor does not accept any liability for the design, or construction of any facilities, or actions of any parties employed, as a result of, or in connection with, any information provided in this document.
- It is recommended that the subbase is designed and approved by an architect or civil engineer, based on the geotechnical and meteorological conditions of the site and any (local) restrictions to the drainage discharge.
- Although Puzzleplay® can be installed on any kind of subbase, as long as the construction itself is strong enough to hold installation and maintenance equipment, it is advised that the subbase has a minimum undrained shear strength of at least 50 kN/m² (BS 1377, part 7) or a minimum California Bearing Ratio of 5% (BS 1377, part 4) or equivalent.
- The regularity of the surface of the subbase should be within 10 mm under a 3 m straight edge.
- When a Puzzleplay® "D" variant (for lateral drainage) is applied, the slope of the surface of the subbase should be at least 0.5%, although 1.0% is better. When the surface of the subbase can rinse out, it is recommended to use a liner (foil or geotextile).
- One of the inherent properties of Puzzleplay® is the expansion/shrinkage under influence of temperature. To limit the impact of expansion/shrinkage during installation and to prevent shrinkage after completion of the installation, the Puzzleplay® Installation Manual must be followed in its entirety.
- Puzzleplay® is produced in a controlled environment, enabling to measure the sheet sizes in stable conditions. Therefore we can maintain a tolerance in sheet length of - 0.5% / +1.0% at a temperature of 20 °C. Please be aware that measuring the sheet size in different conditions can lead to different outcomes regarding the expansion/shrinkage properties.
- The textile of the Puzzleplay® should not be exposed to UV-radiation (i.e. daylight) for more than 1 month.
- It is advised to install the synthetic turf within 1 week after installation of the Puzzleplay®.
- The synthetic turf shall not be glued (or in any other way be attached) to the Puzzleplay®, since the Puzzleplay® needs to be able to expand/contract without any hampering.
- It is strongly recommended to stabilize the synthetic turf with at least 15 kg/m² (~3.1 lbs/ft²) of sand, or (preferably) to use a turf with a fiberglass reinforced backing.
- In any case, it is advised to fix the turf to the perimeter of the field (according to the guidelines of the turf supplier).
- During installation of the Puzzleplay® or after installation (when installing and filling the synthetic turf) it is allowed to drive over the Puzzleplay® with installation equipment/machines. The load (per tyre) of the installation equipment shall be less than 40 psi (~276 kN/m²) for short time frames [e.g. driving over the surface]. Vehicles that are temporarily parked on the surface should have a load of less than 20 psi (~138 kN/m²) per tyre.

GENERAL DISCLAIMER

- This Puzzleplay® product data sheet provides general product properties and is not related to specific sportfield and playground installation regulations. Relevant Puzzleplay® shock pad installation instructions can be found in the Puzzleplay® installation recommendation guide. Please note there are separate installation manual for Puzzleplay®-Sport and Puzzleplay® for Playgrounds products.
- The given information is based on (independent) measurements and (where possible) based on average values measured over a long and representative period. Additional information can be made available upon request.
- Great attention to the accuracy of this document was taken during its compilation. This publication supersedes and replaces all previous datasheets. Safefloor cannot, however, guarantee the total accuracy of the information included. If you have any doubts or further questions please do not hesitate to contact us by phone +45 86151925

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