

PolySoft Surfacing – Fact Sheet

Overview

PolySoft is a seamless site-applied, poured-in-place, surfacing system suitable for a broad range of applications including playgrounds and wet areas. Made from polyolefin pebbles using the latest and most sophisticated manufacturing techniques available, PolySoft is produced with only the highest grade raw materials and UV resistant pigments. Our strict commitment to quality and service ensures every PolySoft project performs accordingly.

PolySoft surfacing system is made up of polyolefin plastomer based pebbles combined with two part aliphatic binders and uses water based epoxy or aromatic urethane primers for surfacing preparation. The system is provided in kit-form, apportioned with components that are weighed and pre-packed in accordance with job-site requirements to help reduce human error and provide better onsite quality control. PolySoft pebbles can also be provided separately in non-kit form for use in PolySoft 'Versatex' applications.

PolySoft surfacing can be used in a range of applications including:



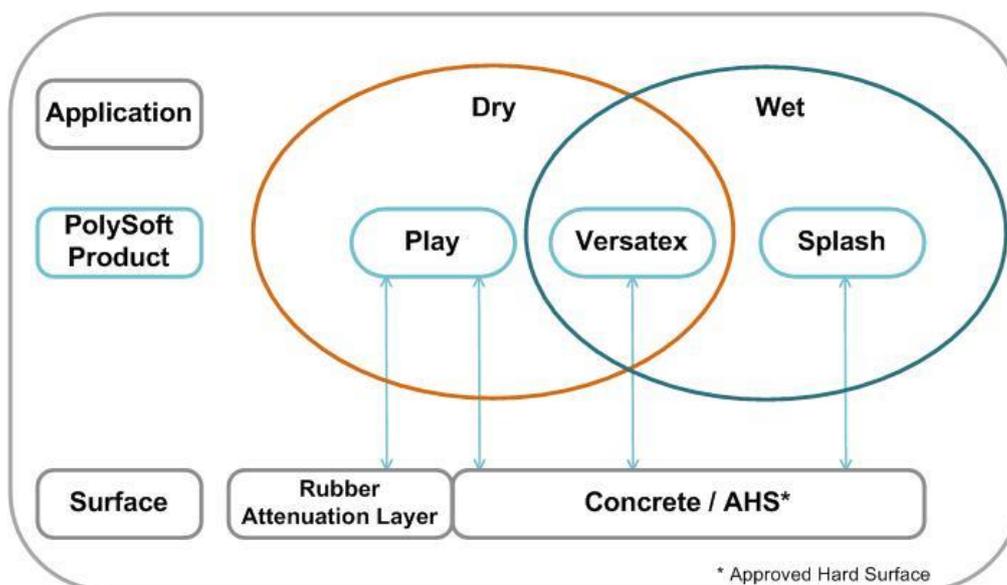
PLAY: Porous over Rubber Attenuation Layer **OR**, Concrete / AHS¹. (Standard 8-10mm / (approx.) 3/8")
 ➤ Suitable for Dry environments only



SPLASH: Porous over Concrete /AHS. (Standard 8-10mm / (approx.) 3/8")
 ➤ Suitable for Wet and Dry applications



VERSATEX: Non Porous over Concrete /AHS. (Standard 4-6mm / (approx.) 3/16")
 ➤ Tactile, resilient finish. Suitable for both Wet and Dry applications



¹ AHS. Approved Hard Surfaces



PolySoft Play is a soft-fall surface best suited for areas specifically designed for engaging play and recreational areas. It is only suitable for DRY applications and can be installed over a rubber attenuation layer (recommended) or over concrete / AHS. PolySoft 'Play' is '**NOT**' suitable for areas exposed to heavy water use or areas that may become submerged in water. For areas with moderate to high exposure to water, please refer to PolySoft 'SPLASH'.

Environment: Ideal Applications for PolySoft 'Play' can include:

Playgrounds – Pathways – Courtyards – Building Entrances – Rooftops – Garden Landscapes – Gym Floors and more.

Colour Options: PolySoft 'Play' is ideal to use with ALL 18 colours in our range. Please refer to PolySoft Colour guide on our website: <http://polysoftsurfaces.com/polysoft-surfaces-color-range/>. *Colour Recommendation:* Use an identical colour of small pebble to one of the colours selected in the larger pebble.

Benefits include: Excellent impact attenuation; Fungal resistant; Excellent skid resistance; Hygienic and easy to clean; Superior UV resistance; cooler than traditional finishes; 18 vivid colours to choose from with hundreds of colour mix combinations. Superior lateral strength. Highest quality aliphatic polyurethane. Non-toxic (no heavy metals).



PolySoft Splash is a highly rated slip resistant surface best suited for areas with moderate to high exposure to water and recreational areas. It is suitable for wet applications and can only be installed over concrete or an approved hard surface (AHS). PolySoft does not recommend or warrant 'Splash' for full submersion in water.

Environment: Ideal applications for PolySoft 'Splash' can include:

Water Playgrounds – Water Parks – Waterslide Entrances – Splash-Pads – Hydrotherapy Pool Concourses – Pool Decks – Pool Surrounds – Spray Park – Wet Area Pathways and more.

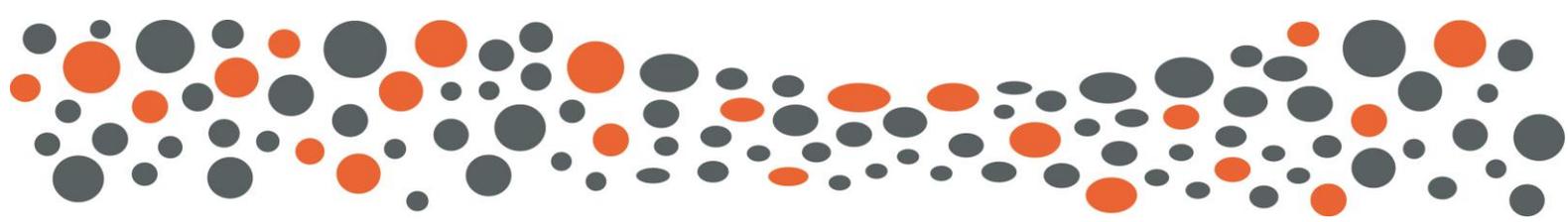
Colour Options: PolySoft recommends using only selected colours available in our colour range chart. Please refer to your PolySoft representative for details of recommended colour ranges. Certain colours perform better in an aquatic environment than others. PolySoft cannot warrant performance of the product where the recommended colours for 'Splash' are not used in the aquatic 'wet' environment. *Colour Recommendation:* Use an identical colour of small pebble to one of the colours selected in the larger pebble.

Benefits include: Fungal and chlorine resistant; Excellent skid resistance; Hygienic and easy to clean; Superior UV resistance; Cooler than traditional finishes; Selected vivid colours to choose from with hundreds of colour mix combinations. Superior lateral strength. Highest quality aliphatic polyurethane. Non toxic (no heavy metals).

➤ PolySoft 'Splash' **PLUS**

The PolySoft credo of continuous improvement has always been to deliver the best technology to the surfacing markets. Advances in algacide technologies allow PolySoft to offer a differentiated product line which has shown positive results in hindering microbial growth on the surface from the first day of application. The antimicrobial protection cannot leach from the PolySoft surface, nor be wiped or washed away. PolySoft offer this differentiated grade as **PolySoft PLUS**.

The active constituent in **PolySoft PLUS** has been successfully tested against over common bacterial organisms. Laboratory testing has shown that **PolySoft PLUS** can significantly reduce bacteria growth. **PolySoft PLUS** results have also shown the bacteria have not developed resistance over time. **PolySoft PLUS** is safe, effective and permanent for the control of harmful bacteria, mould and fungi.



Although the current PolySoft surface will not support the growth of fungi and algae, like any other porous flooring surfaces, this may occur over time under appropriate conditions. The result is that surfaces become unclean, unhygienic and even odorous. In aquatic parks and similar, alga and/or fungi growth will most likely occur when incoming water controls are absent or not regulated, or where general cleaning protocols are less than what might be classed as ‘best practice’. Whilst algae and/or fungal growth are normally observed by way of colour change on the surface, removal may not be a short or simple process, especially if not commenced as soon as the growth becomes apparent. Porous surfaces in food preparation areas, or shower areas, may also change colour and ultimately produce offensive odours if not regularly cleaned and sanitised. Simple chlorination of the water source is not a ready solution if algae or fungi have already taken hold. Even relatively high chlorine dosage will seldom kill algae and mould spores, although the colour will be bleached and thus less evident to the observer.

To our potential clients, if you can benefit by specifying a ‘premium surface’ for public environments such as playgrounds, water parks, walkways or for food preparation and catering, then you are now able to further differentiate your surface in terms of cleanliness and hygiene. Simply ask for more information on **PolySoft PLUS**.

➤ PolySoft ‘Splash’ **EXTRA**

In direct response to customer demand for aquatic surfacing with superior lateral strength, whilst maintaining resiliency in high impact areas, we are pleased to introduce **PolySoft EXTRA**.

With the continued development of play equipment in aquatic environments PolySoft has recognised the need to adapt its technology to meet with this ever changing playscape. Water dump buckets for instance have become much larger and higher than previous years, subjecting the surface directly underneath to incredible stress. From pitting to total delamination, prior to PolySoft Extra traditional soft surfaces would eventually succumb to this tremendous pinpoint force. With PolySoft’s Research and Development Team constantly at work to find solutions and improvements to the surfacing market, the use of increased PolySoft’s aliphatic binder content within the PolySoft system, with a diluted PolySoft aliphatic binder top coat has proven to effectively increase surface strength underneath structures as water dump buckets and high traffic areas.

The result is the development of **PolySoft EXTRA**, the answer to your waterpark’s high impact area’s woes.



PolySoft Versatex is a highly resilient surface best suited for areas that require a tactile finish. It is suitable for both dry and wet applications and can only be installed over concrete or an approved hard surface (AHS). PolySoft does not recommend or warrant ‘Versatex’ for full submersion in water.

Environment: Ideal applications for PolySoft ‘Versatex’ can include:

Pathways – Pool Surrounds – Food Processing – Change Areas – Ablution Blocks and more

Colour Options: PolySoft recommends using only selected colours available in our colour range chart. Please refer to your PolySoft representative for details of recommended colour ranges. Certain colours perform better in an aquatic environment than others. PolySoft cannot warrant performance of the product where the recommended colours for ‘Versatex’ are not used in the aquatic ‘wet’ environment.

Benefits include: Fungal and chlorine resistant; Excellent skid resistance; Hygienic and easy to clean; Superior UV resistance; Cooler than traditional finishes. Superior lateral strength. Highest quality aliphatic polyurethane. Non-toxic (no heavy metals).

Preparation

Before starting preparation and installation of any PolySoft product, please check that you have sufficient materials for the surface area being covered – please refer to the coverage estimates in the ‘Materials’ section below. Site preparation is critical to any coating application to ensure maximum benefit from your PolySoft installation.

Concrete Surface: For optimal adhesion concrete must be cured for at least 28 days prior to installation and comply with recommended moisture content – humidity < 3%. Thin film repairs using cement based products must be left to cure in accordance with the manufacturers specifications, then surface ground and grime and residues removed to leave a final medium course surface. Cementitious self-levelling and similar repair mixes SHOULD NOT be used in chlorinated /immersion conditions of service. Any surface repairs below areas intended for PolySoft installation, including crack repairs, should be carried out using approved epoxy compounds, and allowed to cure in accordance with the manufacturer’s instructions. Concrete should be tested for correct adhesion prior to installation. New concrete should be finished with a light broom texture. Falls to drains must be between 2 and 4 % and drains must be no more than 10 meters apart.

Compacted Base Course: Minimum 100mm base of road base material DGB 20 with at least 3 % cement content, watered and mechanically compacted. With variations in surface undulations to be a maximum of 10-20mm. Where PolySoft is to be laid directly over a 10-20mm rubber layer must be applied, consisting of recycled black SBR pebble at a ratio of 1:5 aromatic binder by weight (e.g. 1kg of Binder to 5kg of rubber layer).

Rubber Base Layer: Depth of the base material is the responsibility of the installer to ensure it complies with the playground manufacturer’s directive and all local requirements. Mix and apply base layer and or primer to PolySoft specifications. This layer is to be laid as a single surface with minimal joins. Avoid dry joins when installing. Once rubber base layer has fully cured, prime the surface using PolySoft primer and apply the PolySoft wear layer in accordance to specifications. It is not recommended for water to be applied as catalyst for the rubber base layer especially if indoors. If outdoor temperature is above 25 degrees Celsius, the surface can be misted. However, any evaporation of excess water being used on the surface can significantly reduce work time of PolySoft.

Maintenance

PolySoft customers have the option of taking up a periodic maintenance service, carried out by authorised installers, when purchasing any PolySoft flooring system. This will help to ensure you get the best possible performance from your flooring products. Please speak to your installer or a PolySoft representative about periodic maintenance service options. With regular maintenance, your PolySoft investment will retain the inherent high standards of wear and appearance for many years. Here are the essential tips for maintaining your PolySoft product so that it performs at its best. For comprehensive guidelines please refer to the PolySoft Maintenance Guide, available from your PolySoft representative.

- For general washing, it is important to use a neutral pH detergent only and to refrain from any aggressive machinery or chemicals.
- Spillage should be dealt with as soon as practically possible. When spillage or soiling occurs, maintenance can be a simple remedial clean:
 - Dry soiling – When a dry spillage occurs, maintenance is a simple sweep or vacuum
 - Wet soiling – When a wet spillage occurs, it should first have the bulk of the spillage removed, wiped or mopped. If the soiling is over a larger area. PolySoft can be treated with a neutral pH detergent then hosed down
- Where a contamination is established or extensive a remedial clean can be undertaken by applying a neutral detergent using a mop and bucket. Agitate well with a soft/medium broom, then hose off. NOTE: Use of any solvent chemicals is not recommended.

- For specific care and maintenance guidelines such as working with pressure washers and removal of fungal growth, mould, algae, tannin, rust, calcium deposits etc., please refer the full PolySoft Maintenance Guide available from your PolySoft representative.
- (PolySoft Splash Only). Where required, re-apply Roll Coat. Apply two coats of aliphatic binder top coat diluted 30% with xylene (1.72Kg/3.79 lbs. of Xylene for 5.74Kg/12.65 lbs. of Binder) with nap roller.

Post Installation

- Do not walk or place any objects on surface for at least 24-48 hours, so as to allow surface to be fully cured.
- After 48 hours, please ensure the surface is thoroughly flushed with water to aid in the elimination of trowel release residue build-up.
- (PolySoft Versatex) - Allow to cure overnight before sealing.

MATERIALS

PolySoft is a site-applied and poured in place surfacing system supplied in kit form or as pebbles only.

Granular composition includes;

- Small Pebbles
- Large Pebbles

Kit form system and surface preparation materials include the following components:

1. POLYSOFT SURFACING KIT: (x1)

- I. PolySoft Pebbles. Ratio. **3:1** - Large to small pebbles. Supplied in pre-packed quantities;
 - a. 3 x 30lb/14kg bags of large pebbles. Total: 90lb/42kg large pebble to,
 - b. 1 x 30lb/14kg bag of small pebbles. Total: 30lb/14kg small pebble
- II. PolySoft Binder.
 - a. Aliphatic Binder Part A (5.28kg/11.64lb)
 - b. Aliphatic Binder Part B (0.42Kg/0.93lb)

*Coverage estimates (per kit supplied): At 8mm/0.31in minimum pour. (approx.): **6m²/65² ft.***

2. POLYSOFT (SURFACE / SUBSTRATE) PREPARATION MATERIALS

I. PolySoft Primers

- a. **CONCRETE / AHS** surfaces only. Two Part Water Based Epoxy (20kg/44lb)
 - i. Part A Epoxy (10kg/22lb)
 - ii. Part B Catalyst (10kg/22lb)

Coverage Guide: (approx.) 100m² – 200m² (1077 - 2153² feet)

RUBBER substrates only. MDI Polyurethane Primer (20kg/44lb)

Coverage Guide: (approx.) 80m² – 100m² (862-1076² feet)

II. PolySoft HTR Gel Coat - Suitable for vertical application only either Wet or Dry (Standard 8-10mm - 3/8")

- a. **Specified** Non-porous over Concrete / AHS. Flexible Epoxy Gel (16.1kg/35.5lb)



- i. PART A HTR Gel (14kg/30.9lb)
- ii. PART B HTR Gel Hardener (2.4kg/5.3lb)

Coverage Guide: (approx.) 16 - 24m² (170-215² ft.)

III. PolySoft Plus – Suitable for Play and Splash applications where surface could be prone to fungi/algae growth

- a. **Suitable for all surfaces.** PolySoft Binder (included in PolySoft Surfacing kit)
 - i. Aliphatic Binder Part A (5.28kg/11.64lb)
 - ii. Aliphatic Binder Part B (0.42kg/0.93lb)
- b. PolySoft Plus Additive
 - i. PolySoft Plus additive (20gm/0.71oz)

Coverage Guide: (approx.) 6m²(65² ft.)

IV. PolySoft Extra - Suitable for Splash Applications subjected to high impact areas (i.e. underneath dump buckets)

- a. **Specified** Concrete / AHS surfaces only. PolySoft Binder
 - i. Aliphatic Binder Part A (5.28kg/2.47lb) (included in PolySoft Surfacing kit)
 - ii. Aliphatic Binder Part B (0.42kg/0.93lb) (included in PolySoft Surfacing kit)
 - iii. Aliphatic Binder Part A (1.12kg/11.64lb) Additional
 - iv. Aliphatic Binder Part B (0.08kg/0.18lb) Additional

Coverage Guide: (approx.) 6m²(65² ft.)

- b. PolySoft two-part aliphatic polyurethane top coat
 - i. Aliphatic Binder Part A (5.28kg/11.64lb)
 - ii. Aliphatic Binder Part B (0.42kg/0.93lb)
 - iii. Xylene (not supplied by PolySoft)

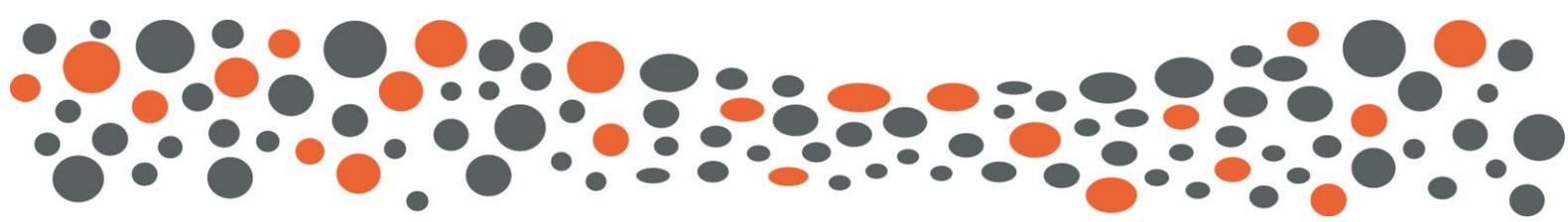
Coverage Guide: (approx.) 3m² – 5m² per ltr (30-50² ft.)

Note on Coverage estimates: Coverage will vary depending on the type and condition of the surface being prepared. The estimates provided above are to be used as a guide only.

The correct ratio of product mix and proper surface preparation is critical to ensure maximum performance of PolySoft surfacing.

Warranty

PolySoft products come with a limited three (3) year warranty on all 'PLAY' applications and a limited two (2) year warranty on 'SPLASH' & 'VERSATEX' applications. All PolySoft product warranties are subject to, among other things, correct site/sub-surface/substrate preparation and installation by PolySoft authorised and or certified installers in accordance with instructions detailed in the PolySoft Installation Instruction Manual. *Installers must provide PolySoft with a comprehensive pre- installation site evaluation, including weather conditions, prior to the commencement of any installation. Full details of PolySoft Site Evaluation requirements are available on request from your PolySoft representative. Failure to provide PolySoft with a pre-installation site evaluation may result in voiding your warranty.* Please refer to the full warranty and purchase conditions available on our website for detailed information on all product warranties and terms and conditions of sale. The guidelines contained herein are designed to achieve the best possible outcome and performance for your PolySoft application. Adhering to the recommended preparation and maintenance procedures will help to ensure you get the best experience from your Polysoft surface.



Applicable Standards and Codes

- AS/NZ 4422:1996 Playground Surfacing – Specifications, Requirements and Test Methods
- ASTM F-1292-09 & ASTM F-1292-13 Playground Surfacing – Specifications, Requirements and Test Methods
- AS/NZ 1530.3 1999 Simultaneous Determination of Ignitability, Flame Propagations, Heat Release and Smoke Release – Specifications, Requirements and Test Methods
- AS/NZ 4586:2004 – Slip Resistance Classification – Specifications, Requirements and Test Methods
- EN 1176-2008
- EN 14809- Vertical Deformation- Specifications, Requirements and Test Methods
- ASTM F1951-14 Determination of Accessibility of PolySoft System under and Around Playground Equipment

FAQ's

What is the product made of?

At a basic level PolySoft is a plastic. Not just any plastic, but a uniquely formulated polyolefin specifically designed for play areas and water parks. Superior to existing alternatives, colourful and meeting the challenges presented in a demanding environment.

How does PolySoft colour rate on the UV scale?

All PolySoft colour pigments conform to a level 8 on the blue wool scale of UV performance, which is the highest achievable result. Please discuss with your PolySoft representative the PolySoft Splash colour range.

What is the cure time recommended before a surface of both products can be walked on?

In most cases the surface can be walked on 24 hours after application. Low temperatures and low humidity may increase this time. In a water park environment avoid turning on aquatic water for at least 72 hours. The surface should be checked and if tacky should be allowed additional time to cure. PolySoft is fully cured 7 days after installation.

What is the expected life span with an ideal installation?

We would suggest an estimated life span of 5-10 years for a wet installation. As with all flooring applications good house-keeping will prolong and enhance the appearance and longevity of your PolySoft installation.

What does PolySoft suggest as drainage requirements over concrete?

Site specific requirements should be taken into consideration by the design engineer. PolySoft recommends a min. fall of 2cm - 7/8" per lineal metre (3ft) to drains. In porous applications drain design should allow water to flow from both the surface and the substrate levels.

What happens in relation to claims of defective product?

PolySoft will replace defective product at no charge. PolySoft reserves the right to inspect claimed defects. It is the responsibility of the installer to send samples of defective product to PolySoft for evaluation.

(Play) What is the suggested base material to use for soft-fall impact attenuation?

PolySoft does not specify a particular underlay system. Various compositions have been tested with our PolySoft system and all comply with AS/NZ 4422:1996. However, we would recommend underlay density be as high as practical while maintaining required impact attenuation properties.

(Splash) Why do we not warrant PolySoft Splash over cushion?

As PolySoft has no control over base materials used we are unable to warrant such applications. The base material and installation of same can have a profound effect on the performance of PolySoft experience suggest that rubber and aromatic binders can break down from prolonged exposure to chlorine, which will have a negative impact on the PolySoft wear layer surface.

(Splash) What are the most common issues experienced with surface performance in an aquatic environment?

Substrate or concrete not being cured properly; Insufficient blasting or grinding of concrete surface; Moisture retention within substrate; Poor water-flow or inadequate drainage.