Child's Play
synthetic play surfaces

What Makes Child's Play SBR Surfaces Different Than Other Systems?

Safety surfacing poses unique challenges. Intensity of the sun's rays and ultraviolet light can cause clear polyurethane binders to yellow with age and harden resulting in loss of resilience. Colored EPDM granules encapsulated with binder will also appear to have changed their color. Child's Play surfaces have been engineered to minimize these problems.

1) Other synthetic surfaces are installed over concrete or asphalt bases to prevent settling of the surface.

With our unique methods of base preparation, we can eliminate expensive asphalt and concrete bases and in many cases work with existing materials. Our methods and systems ensure a stable base even when converting existing sand or pea gravel areas. We examine each site individually to determine proper drainage requirements and the best method of base construction. Particular attention is made to the base to ensure that it will drain and support the surface without settlement. We guarantee it.

2) Why do you see cracks in the surface?

Cracking can be a result of inferior binders and excess stress on the top layer. Not all binders are designed for playground surfaces. For example, binders used for running tracks typically contain too many extenders in the product. When the binders cure and are exposed to the sun's ultraviolet light, shrinkage occurs resulting in cracking.

The types of rubber used and thickness of the surface may also contribute to cracking. With a very soft base mat and a thin surface (3/8" or less), the surface is subjected to impact stress and the binder may not be strong or resilient enough to resist cracking. Continued impact loading and wearing of the surface layer will result in extensive cracking.

Our binders are specifically designed for safety surfacing applications and have less extenders and provide more elongation and elasticity than a typical binder. The pigmentation in our surface binders reflects U.V. which extends the life of the binder. For added elasticity and smoother surface texture, we recommend the use of strand rubber in the surface layer. Unlike crumb rubber, strand rubber particles interlock resisting tearing and cracking that can occur when a surface is under maximum stress while providing a smoother surface for infant use.

4) Why are we experiencing discoloration of the rubber?

In 99% of cases, the binder used to coat EPDM crumb will yellow shortly after being installed. It's the thin layer of binder that is yellowing - all aromatic binders will yellow. Some binders yellow faster than others. With exposure to ultraviolet rays, EPDM granules start to oxidize and develop a thin white film that results in color changes. There are ways of eliminating this problem:

- Change from an aromatic binder to an aliphatic binder. This binder is substantially more expensive than an aromatic binder however (about 3 times the cost!)
- Avoid expensive EPDM rubber crumb. By utilizing a pigmented binder, we add a solid color to the surface system. The pigments in the binder eliminate yellowing of the binder. Over time, a simple recoating of binder will bring the vibrant colors back and extend the life of the surfacing system itself

5) Poured-in-place systems are just too expensive for our budget!

The main reason for installing a poured-in-place system on a playground is to provide all weather fall protection. Unfortunately, most systems in use today are designed with aesthetic considerations first and performance secondary. Designers incorporate designs and colors to a play area and typically do this by specifying EPDM rubber particles. For the colors to show, EPDM granules need to be encapsulated with clear binders. U.V. resistant aliphatic binders are too expensive so most installers use aromatic binders. EPDM granules can increase the cost of a surface by up to $4.00 per sq. ft. more than SBR granules. Aliphatic binders are 3 times the price!

Base construction can also increase costs. A safety surface's purpose is to absorb impact energy. Installing concrete or asphalt under a poured-in-place surface is not necessary. A properly compacted, draining stone base is less expensive than asphalt or concrete and will absorb more impact energy, increasing the impact attenuation qualities of the entire system.

6) Why is a Child's Play SBR surface more economical?

Designing surfacing systems with EPDM granules and extensive pattern and color choices can make the cost of a poured-in-place surface prohibitive. Our standard SBR surface does not use EPDM granuals and our binders are pigmented either terra cotta or forest green which are soft, earthy, natural colors.

At Child's Play, we engineer our systems for performance, economy, and aesthetics. We use pigmented binders that are specifically designed for playground systems with added elongation and elasticity. The pigment in the binders adds color to the surface and greatly reduces the degradation of the binder from ultraviolet light. For our standard SBR surfaces, we use strand rubber particles that offer superior resilience and strength. The surface is tougher to tear and much smoother than a granulated surface making it much more comfortable for infant use. We also install a minimum 1/2" surface thickness providing more resistance to tearing and cracking as well as load distribution to the base.

It's quite simple... we provide the safest, most economical surfacing for your money!

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