



All You Wanted to Know but Were Afraid to Ask About Tot Lot Surfacing

Playgrounds are an essential part of each child’s world and are a crucial part of community planning considerations. A playground should take into account the topography of the site (including proper drainage and elevation), as well as the relationship to adjacent streets, street structure and pedestrian access.

The goal for any good playground is for it to be unique, attractive, functional and above all safe. Protective surfacing under and around all playground equipment is the most critical safety factor in any playground environment. Falls from the equipment are the most common type of injury and while playgrounds are getting safer a larger percentage of playgrounds are not considered safe.

So which of the ground coverings is the most reliable and cost effective for your community? There are many different options to consider when looking at the protective surfacing for your playground environment. The most important aspect is to determine what your maximum protection you need based on the critical height of your playground equipment.* The playground equipment manufacturer would have this information.




We have looked at the pros and cons of available safety ground materials from the standard wood chips and mulch to the more technologically advanced rubberized mulch chips and poured-in-place rubberized mats. While the long-term duration of the rubberized chips and mats is appealing, many will find that the extreme cost for the community may seem high.

We’ve broken down costs from initial installation to a projected 10 year cost analysis which would include any yearly maintenance costs.

Call us at Blade Runners if you have any questions on the right Tot Lot solution for you.

* The Critical height for a surfacing material is defined as: THE MAXIMUM HEIGHT FROM WHICH THE INSTRUMENTED METAL HEADFORM, UPON IMPACT, YIELDS BOTH A PEAK DECELERATION OF NO MORE THAN 200 G’S AND A HIC OF NO MORE THAN 1,000 WHEN TESTED IN ACCORDANCE WITH THE PROCEDURE DESCRIBED IN ASTM F1292.

TYPES	PROS	CONS	Initial Install Cost	10 yr. Cost Analysis for 500ft. tot lot
Wood Chips (8-12 inch standard)	<ul style="list-style-type: none"> • ADA , ASTM, and CPSC certified • 100% natural – no chemicals • More natural appeal 	<ul style="list-style-type: none"> • Harmful objects can hide in material such as rocks, branches or other • Kids can kick, throw and 	<ul style="list-style-type: none"> • \$600 	<ul style="list-style-type: none"> • \$2,400

	<ul style="list-style-type: none"> 8 year expectancy with proper maintenance 	<ul style="list-style-type: none"> swallow Can attract insects and will decompose over time. Requires maintenance. Can be sharp and uncomfortable 		
<p>Engineer Wood Fiber: Often referred to as Tot Lot Chips (8-12")</p>	<ul style="list-style-type: none"> ADA , ASTM, and CPSC certified 100% natural – no chemicals More natural appeal 8 year expectancy with proper maintenance 	<ul style="list-style-type: none"> Same as above: Main difference from wood chips are the chips are reground to be softer with fewer sharp edges. More expensive than regular wood chips – same durability 	<ul style="list-style-type: none"> \$900 	<ul style="list-style-type: none"> 3,100
<p>Playground Carpet Mulch (8-12 inch standard)</p>	<ul style="list-style-type: none"> ADA  Accessible Passes all safety standards if at appropriate depth Softer 	<ul style="list-style-type: none"> Harmful objects can hide in material such as rocks, branches or other Kids can kick, throw and swallow Can attract insects and will decompose more quickly over time. Requires maintenance - yearly. Can cause more mess 	<ul style="list-style-type: none"> \$900 	<ul style="list-style-type: none"> \$3,100
<p>Rubber Tire Chips "Soft Rubberized Mulch" (4-6 inch standard)</p>	<ul style="list-style-type: none"> Lifetime guarantee Will not attract insects Non Toxic Uses recycled rubber products Dries quickly 	<ul style="list-style-type: none"> Not always ADA  Accessible – can sink Can be thrown, displaced Use reputable company that has completely removed any metal from 	<ul style="list-style-type: none"> \$4,000 	<ul style="list-style-type: none"> \$5,000

		<ul style="list-style-type: none"> rubber Harmful objects can hide in material 		
Tiled Rubber Mat (2.5-3.75")	<ul style="list-style-type: none"> Consistent shock absorbancy – not displaced Highly ADA compliant 	<ul style="list-style-type: none"> Air and water cannot permeate as easily encouraging habitat for rodents Shrinkage, cracking of surface Safety height drop can be limited due to thickness Excessive cost to establish level tot lot 	<ul style="list-style-type: none"> \$8,000 	<ul style="list-style-type: none"> \$8,000
Poured-in-Place Technology (recycled shredded tires covered with layer of granular rubber bound with polyurethane binder) 2inches is standard thickness	<ul style="list-style-type: none"> Permeable to air and water 2-5 year manufacture guarantee 20 years life expectancy of product ADA compliant 	<ul style="list-style-type: none"> Shrinkage, cracking of surface Surface got hard Repairs hard to get in timely manner Requires testing 	<ul style="list-style-type: none"> \$8,000 	<ul style="list-style-type: none"> \$8,000

	COSTS	
Wood Chips	\$.59/sq.ft.	\$19/sq cubic yard
Soft Rubberized Mulch	\$3.6 per sq. ft.	
Poured-in-place	\$8-10 per square foot	
Tiled rubberized mats	\$9 per square foot	