

## Playground Surface Material Selection

The chart below summarizes the CPSC comments regarding various categories of playground surfacing material. In general, hard materials and soil are not recommended. Compact materials should only be used under equipment whose maximum height is five feet or less. Organic or inorganic loose materials both provide excellent protection with organic materials providing more protection.

The drawback of organic and inorganic loose materials is that they are effective only if they are properly maintained. This requires frequent grading and leveling in order to maintain a suggested depth of six inches. A boundary framework, which helps to keep the material beneath the equipment, will lessen the amount of maintenance required. These materials also require maintenance to eliminate insects, animal excrement, and other litter.

Playground Surfacing Materials

	<b>Organic Loose</b> <i>(Pine bark nuggets, shredded bark, etc.)</i>	<b>Inorganic Loose</b> <i>(Sand, pea gravel, shredded tires, etc.)</i>	<b>Compact</b> <i>(Outdoor rubber mats, synthetics, etc.)</i>	<b>Soil/Grass</b>	<b>Concrete/Asphalt</b>
<b>Cushioning Potential</b>	Depends on air trapped within and between particles  May decompose or mix with dirt over time and lose cushioning properties	May combine with dirt of other matter reducing cushioning properties	Depends upon the foundation or surface over which the material is installed  Rubber mats generally provide protection from falls that are 5 feet or less	Minimal protection	None
<b>Environmental Effects</b>	Cushioning decreased by rainy or humid weather  Materials may freeze when wet  Wet materials may promote the growth of communicable diseases	Cushioning decreased by rainy or humid weather  Some materials (i.e., sand) may freeze when wet  Some types of rocks release dust and are difficult to walk on	Attractive targets for defacing, ignition, or other vandalism	May freeze and harden	Varied
<b>Maintenance</b>	Frequent grading and leveling necessary to maintain depth  Necessary to eliminate insects, animal excrement, and litter		Little required	Grass is difficult to maintain in heavy traffic areas	Little required
<b>Other</b>	Highest cushioning potential of all surfacing materials	Washed round pea-sized gravel makes a good surface	Must be used on level, uniform surface	Better than concrete or asphalt but generally not recommended	<b>NOT RECOMMENDED</b>