

# Groundcover Comparison and Recommendations

## Comparison of loose-fill ground surfacing materials

	Organic Loose Material	Inorganic Loose Material
<b>Material</b>	Pine bark, shredded bark nuggets, wood chips, cocoa shell mulch	Sand, pea gravel, shredded/recycled rubber
<b>Advantages</b>	<ul style="list-style-type: none"> <li>• Low initial cost</li> <li>• Ease of installation</li> <li>• Less abrasive than sand</li> </ul>	<ul style="list-style-type: none"> <li>• Ease of installation</li> <li>• Does not promote microbial growth</li> <li>• Generally nonflammable (except rubber products)</li> </ul>
<b>Issues to consider</b>	<ul style="list-style-type: none"> <li>• With time, these materials may decompose and lose their cushioning effect</li> <li>• Materials can be displaced by strong winds or the playing action of children thereby reducing cushioning effect</li> <li>• Susceptible to microbial growth when wet</li> <li>• Can get thrown around</li> <li>• Some children are allergic to bark dust</li> </ul>	<ul style="list-style-type: none"> <li>• Initial cost varies (transport can be costly)</li> <li>• Sand and pea gravel may be displaced by the playing action of children thereby reducing the cushioning effect</li> <li>• Can be swallowed, blown or thrown – potentially leading to injury</li> <li>• Easily spreads outside the containment area</li> <li>• Rubber may have an unpleasant smell</li> </ul>

## Recommended Groundcover

Type of Groundcover	Attributes/Concerns
<b>Shredded/ Recycled Rubber</b>	<ul style="list-style-type: none"> <li>• Readily absorbs shocks</li> <li>• Available in lighter colors to avoid excessive heating</li> <li>• 6 inches compressed material will protect from falls up to 10 feet</li> </ul>
<b>Engineered Wood Fiber/ Wood Chips</b>	<ul style="list-style-type: none"> <li>• Falls rarely result in injury</li> <li>• Readily absorbs shock</li> <li>• 9 inches compressed material will protect from falls up to 10 feet</li> </ul>

## Cautionary Groundcover

Type of Groundcover	Attributes/Concerns
<b>Sand</b>	<ul style="list-style-type: none"> <li>• Readily absorbs shocks in warm temperatures</li> <li>• Less to no shock absorption when cold/frozen</li> <li>• Can attract animals (e.g. ants, spiders)</li> <li>• Some animals may use as litter box</li> <li>• 9 inches compressed material will protect from falls up to 4 feet</li> </ul>
<b>Pea Gravel</b>	<ul style="list-style-type: none"> <li>• Considered a choking hazard for infants and toddlers</li> <li>• Avoid gravel with sharp edges</li> <li>• 9 inches compressed material will protect from falls up to 5 feet</li> </ul>

## Not Recommended

Type of Groundcover	Concerns/Attributes
<b>Concrete/ Patio Brick</b>	<ul style="list-style-type: none"> <li>• Falls from short distances can result in injury</li> <li>• Surface does not absorb shock</li> </ul>
<b>Grass (Sod)</b>	<ul style="list-style-type: none"> <li>• Falls from short distances can result in injury</li> <li>• Surface does not absorb shock</li> </ul>
<b>Bark Mulch</b>	<ul style="list-style-type: none"> <li>• Decomposes readily</li> <li>• High prevalence of microbial growth when wet</li> </ul>

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