



Surfacing

A playground should never be installed without protective surfacing of some type. **Loose-fill should be avoided for playgrounds intended for toddlers.**

Important tips when considering loose-fill materials:

1. Loose-fill materials will compress at least 25% over time due to use and weathering. This must be considered when planning the playground. For example, if the playground will require 9 inches of wood chips, then the initial fill level should be 12 inches.
2. Loose-fill surfacing requires frequent maintenance to ensure surfacing levels never drop below the minimum depth.
3. Good drainage is essential to maintaining loose-fill surfacing. Standing water with surfacing material reduces effectiveness and leads to material compaction and decomposition.
4. Critical height may be reduced during winter in areas where the ground freezes.
5. Never use less than 9 inches of loose-fill material except for shredded/recycled rubber (6 inches recommended). Shallower depths are too easily displaced and compacted.
6. Some loose-fill materials may not meet ADA/ABA accessibility guidelines. For more information, contact the Access Board or refer to ASTM F1951.

The table below shows the minimum required depths of loose-fill material needed based on material type and fall height. The depths shown assume the materials have been compressed due to use and weathering and are properly maintained to the given level.

Minimum compressed loose-fill surfacing depths

Inches Of	Loose Fill Material	Protects to Fall Height (Ft.)
6*	Shredded/Recycled Rubber	10
9	Sand	4
9	Pea Gravel	5
9	Wood Mulch (non-CCA)	7
9	Engineered Wood Fiber	10

**Shredded/recycled rubber loose-fill surfacing does not compress in the same manner as other loose-fill materials. However, care should be taken to maintain a constant depth as displacement may still occur.*

Excerpt from the U.S. Consumer Product Safety Commission [Public Playground Safety Handbook](http://www.cpsc.gov/cpscpub/pubs/325.pdf). View the complete guide at <http://www.cpsc.gov/cpscpub/pubs/325.pdf> for more playground safety information.