

Pour-in-Place Surfacing (Playgrounds)

Summary

- Rate of Placement: 2 to 4 inches thick
- Rubber Type: Ambient #30 mesh to ¼-inch
- Tires Used: 3 to 6 tires per square yard
 - Example: For a 50-foot by 50-foot (2,500-square-foot) playground with surfacing 4 inches deep, 1,670 scrap tires could be used
- Safety Comparison: Thickness required for a critical height of 7 feet is 50% less than wood mulch, and 67% less than pea gravel

Pour-in-place playground surfacing is composed of rubber mixed with a polyurethane binder. This mixture is placed over a stone or concrete base with trowels and is allowed to cure. Pour-in-place playground surfacing has many advantages over other playground cover materials. In addition to being safer, being more sanitary, and requiring less maintenance, it can result in cost savings over the life of the playground compared to wood mulch. This type of application utilizes approximately 3 to 6 scrap tires per square yard.



- Advantages
 - Prevents injuries from playground falls
 - Does not decompose or discolor
 - Six-times heavier than wood mulch
 - Does not float, wash, or blow away at all
 - Dust- and insect-free
 - Does not harbor bacteria like wood and gravel
 - Lower LIFECYCLE cost than wood mulch
 - Beneficially utilizes waste tires
- Disadvantages
 - Lack of awareness (general public and public officials) and lack of access to specifications
 - Higher initial cost than wood mulch
 - Higher cost than gravel

- Sources
 - Asphalt Rubber Technology Service (ARTS) Pour-in-Place Playground Specifications (2002)
 - Surface America, Inc. PLAYBOUND™ Poured-in-Place Specifications (www.surfaceamerica.com/playpoured.htm)
 - Handbook for Public Playground Safety by the U.S. Consumer Product Safety Commission, Publication # 325 (www.cpsc.gov/cpscpub/pubs/325.pdf)