



Custom Designs Are Easy With Poured-in-Place

Because the rubber and urethane components are mixed and applied on site, school colors, logos, games and/or geometric shapes permanently incorporated into the surface are practical options. Surface America offers 20 standard solid colors and 4 standard color combinations.

Any colors can be mixed in combination with another color or mixture of colors to achieve a blended, speckled look. A percentage of black mixed with a color or multiple colors camouflages dirt and reduces the price. All other factors being equal, the higher the percentage of black in the top surface mix, the lower the price.

Urethane Choices: Throughout the industry, the urethane binder that encapsulates the granules is produced in two forms: aromatic (standard pricing) and aliphatic (up-charge). It is never required to use aliphatic binder, but from an aesthetic standpoint particularly advisable to

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The Courts Hand Down Judgement On Loose Fill vs. Poured-in-Place.

ADA Playground Surface-Related Complaints and Litigation ...

Even as far back as 1993, loose infill manufacturers have been lobbying to get their products accepted as an ADA-compliant surface material for playgrounds. Just enough strides were made to have some park & recreation departments and school districts install these materials. Complaints were filed with the U.S. Departments of Justice and Interior Office of Civil Rights to warrant investigations. They found that "wood chip" surface material is inaccessible when used for the accessible routes through the playground. This resulted in municipalities and school districts being required to replace the loose infill with an accessible surface material. A class action lawsuit was filed against Mt. Diablo Unified School District in California. The lawsuit charged the school district had violated the ADA by using woodchips as surfacing material for its school playgrounds. In 2007, the issue made national headlines when the school district was found to be in violation of the settlement by using an engineered wood fiber product for its playground surfaces. The plaintiff sought to

have the loose infill surface product replaced with a "unitary" rubber surface, which the school district estimated at a cost of \$2.7 million.

Letter from U.S. Department of Interior

In a 1999 letter from an Office of Civil Rights investigator for the U.S. Department of Interior National Park Service, the investigator stated, "We do not find pea gravel to be an accessible surfacing material. Pea gravel consists of small and loose particles, which do not meet the requirements for a firm, stable and slip-resistant surface..."

Surface America's PlayBound™ is IPEMA certified. To verify product certification, visit www.ipema.org



In the interest of public safety, IPEMA (International Playground Equipment Manufacturers Association) provides 3rd party Product Certification services for U.S. and Canadian public play equipment and public play surfacing materials in the U.S. The services provide for the validation of a participant's certification of conformance to the standards.

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consider its use with colors such as blue, pearl, purple and gray because aromatic binder "yellows" slightly upon exposure to ultraviolet rays. This thin layer of urethane wears off with foot traffic and weathering typically within two to six months.

A Choice Worth Considering: Aliphatic binder comes with added cost, but added benefits, too. Upgraded ingredients in the formulation lead to superior performance throughout the system's life.

- Greater resistance to wear and tear from foot traffic and the elements
- Outstanding tensile strength
- "Clear as water" appearance makes the surface vibrant and the rubber true to color

Ask for a quotation and compare the added cost to the added value. The characteristics of aliphatic binder and the increased cost apply industry wide.

Providing a Safe and Accessible Playground...



Playground with loose fill material ALWAYS ends up with "dished out" areas at critical fall locations.



Poured-in-Place will not move, therefore, providing easy access for wheelchairs and crutches.

Cost Comparison for Poured-in-Place vs. Loose Fill

(using a 1,600 sq. ft. surface over seven years for comparison)

Poured-in-Place Surface: *Where you need it, when you need it.*

Excavation	
4" of dirt	\$2,100
Base Construction	
1,600 sq. ft. x \$5 per sq. ft.	\$8,000
Curb	
4" concrete curb of 160 lineal feet x \$11	\$1,760
Surface	
2.5" rubber materials for 1,600 sq. ft. x \$8.50	\$13,600
ADA Access Ramp	
None needed	\$0
7-Year Maintenance Cost	
None needed	\$0
TOTAL 7-YEAR COST	\$25,460

Woodchips & Other Loose Fill Surfaces:

Inadequate material depth in key areas.

Excavation	
72 cubic yards x \$115	\$8,280
Base Construction	
None needed	\$0
Curb	
4" concrete curb of 160 lineal feet x \$11	\$1,760
Surface	
72 cubic yards of woodchips delivered/installed x \$75	\$5,400
ADA Access Ramp	
Needed	\$1,000
7-Year Maintenance Cost	
Maintenance & Replenishment	\$68,600*
TOTAL 7-YEAR COST	\$85,040

* Maintenance & Replenishment Cost

Woodchips and other loose fill surfaces require ongoing and routine maintenance that includes replenishment of materials and labor to level disburbed materials so that shock attenuation that meets critical fall height is achieved. The following estimate is realistic, and despite the costs, still does not ensure adequate fall protection.

Labor: 10 hours/wk x 15 dollars/hr x 52 weeks/yr x 7 yrs	\$54,600
Material (delivered & installed): 2,000 dollars/yr x 7 yrs	\$14,000
Total	\$68,600