



Field Face-Off: Natural Grass vs. Recycled Rubber Turf — Which Scores Higher?

Overview

Grass fields

Grass fields offer a range of options, with costs depending on the type of grass and soil base. While some grass options are more affordable than synthetic turf fields, they all **require ongoing maintenance**, including watering, mowing, and chemical treatments, and often **provide fewer hours of use over time**.

Recycled rubber turf fields

In contrast, synthetic turf fields have a higher initial cost but **offer greater durability and playability with minimal maintenance**. Although they require periodic carpet replacement, they can accommodate significantly more hours of use, making them a **practical choice for high-frequency play and areas with unpredictable weather**.

Initial installation costs

The initial capital cost for grass fields varies depending on the type of grass and soil base.

The type of grass that is chosen depends on climate and impacts both the initial cost and the total hours of use. Bermuda grass, particularly on a sand base, offers excellent drainage and durability in warm climates, while Kentucky Bluegrass is preferable in cooler climates where aesthetics are a priority.

Field Type	Initial Capital Cost
Bermuda (sand base)	\$530,000
Kentucky BG (sand base)	\$580,000
Bermuda (native soil)	\$150,000
Cool Season (native soil)	\$75,000
Synthetic turf fields with recycled rubber	\$1,125,000

Maintenance and Replacement Costs

Grass fields

Maintenance costs for natural grass fields can vary widely. Over a 20-year period, these **costs typically range from \$500,000 to \$1,000,000**, depending on the type of grass and climate. This equates to roughly \$25,000 to \$50,000 per year.

These maintenance costs include expenses for watering, where a standard football or soccer field may consume between 500,000 to 1,000,000 gallons of water annually. **Labor costs, including gardening and field marking, are an estimated \$23,000 per year**, while the average annual cost for fertilizers, fungicides, herbicides, topdressing, and paint is about \$17,000. Additionally, grass fields require mowing 2-5 times per week, depending on the season and type of grass.

Recycled rubber turf fields

On the other hand, **synthetic turf fields have far lower maintenance costs**. They require no watering, fertilizers, or mowing, leading to significant cost savings. In fact, **turf fields have a positive water footprint**. The Salt Lake County Council in Murray City, Utah, estimated that converting a natural grass field to **synthetic turf can save two million gallons of water per year per surface**, which equates to over 16 million gallons of water over the field's expected lifetime.

Field Type	Maintenance Costs Over 20 Years	Frequency of Replacement	Replacement Costs Over 20 Years
Natural grass	\$500,000 to \$1,000,000	Major grass rehabilitation is recommended after 12 years	\$120,000 to \$300,000
Synthetic turf fields with recycled rubber	\$206,000	With proper maintenance, turf carpets would need to be replaced only once in a 20-year period	\$640,000

Reality Check

When looking at total costs over 20 years, natural grass fields tend to be less expensive upfront, depending on the type of grass, but have higher maintenance costs. On the other hand, **synthetic turf fields offer superior durability and consistent playability in all weather conditions**. This reduces the risk of cancellations and **ensures a reliable playing surface**.

Turf fields have a utilization rate that can be up to 10 times greater than that of natural grass fields. As a result, the long-term cost per hour of use for synthetic turf is substantially lower compared to grass fields, **making turf a more cost-effective option over time**.

Field Type	20-Year Total Costs	Annual Hours of Use	20-Year Net Cost Per Hour of Use
Natural grass	\$635,000 to \$1,680,000	300 to 600	\$105 to \$140
Synthetic turf fields with recycled rubber	\$1,971,000	2,300	\$42