

Artificial Turf

For the “traditional” green manicured lawn look all year round without using a lot of water, fertilizer or maintenance, artificial turf is a water saving choice. While artificial or synthetic turf is not for every garden, it is another alternative to the water hungry lawn. Some types are just for looks and can be placed in hard to grow accent areas in the garden



while other varieties are designed for recreational activities and putting greens.

The advantages and disadvantages of artificial turf

Synthetic grass was first introduced in the 1960s for professional sports teams, and is now widely used in all levels of sports for indoor and outdoor fields. Although it is still more costly than natural turf in the short term, the cost has come down as technologies have improved, making artificial turf a realistic option for homeowners today.

The advantages of artificial turf are that it doesn't need water, fertilizer, or mowing. It holds up to wear and tear far better than natural grass. Many are dog durable and gopher proof (there are no roots to eat). It's safe for children and pets with regards to not twisting ankles in gopher holes. It's easy to clean with a hose and doesn't attract bugs and pests. You can't get grass stains and it won't have bare or brown spots.

However, artificial turf does have its disadvantages. It tends to get hotter than natural grass in the mid-day sun and materials on the surface don't break down as easily. The production and transportation of artificial turf releases more greenhouse gases than the maintenance of natural turf. It will need to get replaced and disposed of in a landfill since most types cannot be recycled. Despite the advances in technology, less expensive types of artificial turf and infill still may not have as much give as grass.

See the two contrasting industry websites for more information about the advantages and disadvantages of artificial turf.

The Synthetic Turf Council www.syntheticurfCouncil.org/ presents the advantages of artificial turf, mostly for recreational fields. See “Why Synthetic Turf?” for example.

The Lawn Institute www.thelawninstitute.org/ has more information on the disadvantages of artificial turf.

Materials

Artificial turf is constructed in much the same way as the carpet in your home. There are two major components – fibers (the blades) and backing (where the blades are attached). Artificial grass lawn or ‘turf’ products are manufactured using a wide variety of materials. Polypropylene and polyethylene are some of the yarn fibers used to create the blades. Nylon is not used anymore since it poses a health risk and breaks down more easily.

Synthetic grass yarn or fibers are stitched or ‘tufted’ into many different types of backing. Urethane, Dura-Flow, Bio-Cell and Enviro-Cell are just a few of the options available. Each backing type for artificial grass lawn products has its benefits. If you have dogs a certain durable backing is recommend for the turf. If you want to play football or sports another backing type is recommended. One type of backing on the market is *Enviro-Cell Backing*. It is a soy-based backing and is one of many environmentally conscious choices for the artificial turf lawn. This type of backing is completely permeable and doesn’t rely on the holes drilled in it or perforations for drainage. *Urethane backing* is the most common and least expensive artificial turf backing. It looks like black plastic with holes drilled in it (perforated) for drainage. This is a petroleum based product and will not pass recycling and environmental standards in the near future for synthetic grass lawn products.



Two side views of ornamental artificial turf with tufted infill for texture. Photo from Artificial Lawns Direct

Installation

Proper installation is crucial for ensuring a long lifespan for your artificial lawn. Before the turf can be installed, your lawn area may need to be contoured and configured for proper drainage. A layer of good draining aggregate should be laid down and compacted below the turf for secure installation. A mesh weed barrier goes over the aggregate layer and prevents weeds from taking root. The turf is rolled out, glued with special adhesives at seams and then nailed into the ground with long steel shanks. The edges are often finished off with a landscape border that helps secure the turf to the ground. Professional installation is recommended for long lasting stability. A contractor that meticulously prepares a site may charge more – but the extra cost is well worth it.



Turf is laid down over the aggregate and weed barrier and glued at the seams before securing to the ground. Photo from Soquel Creek Water District

Once installed, turf can be fluffed up with an infill or have “built-in” infill to give it body and texture. Decide whether the lawn is just for looks or for playing on and how much you want to spend to make a decision about infill and padding types. The most common infills for recreational uses are recycled rubber but other types of infills are becoming more widely available that keep the surface cooler and are more natural. Different types of sand are also used but don’t give as much of a cushion below your feet. The infill helps hold down the turf and prevents wrinkling as well as provides a light barrier to ensure a longer life for the backing. Infill is worth the money if your lawn gets a lot of use, particularly from kids playing. But it’s not worth the expense if your grass is just for show or on a steep slope. Consider the above material and installation costs when determining your budget. There’s a significant upfront investment required with artificial turf. However, over the life of an artificial lawn, the cost can be recouped through maintenance savings.

Maintenance

While it doesn't need to be watered to stay green it will need to be hosed every now and then to keep it clean and fresh looking. Occasional weeding will be needed as seeds will take root in the infill. Raking it will fluff up the blades and redistribute the infill. If it is damaged, parts of it can be replaced just like a carpet.



This Santa Cruz home had a thirsty grass lawn before it was replaced with very real-looking artificial turf and bordered by drought tolerant plants on a drip system. It now uses only about 60 gallons of water a month. During the summer the homeowner will notice a significant reduction in water use since the lawn will need no water. Designed and installed by Wade Petrini of Artificial Lawns Direct.

Life expectancy and durability

Generally, artificial turf lasts beyond 20 years with proper upkeep, and potentially up to 30 years. Many dealers offer warranties of 8 years or more. Most varieties of turf have a coating to protect against UV rays and prevent fading. Turf that has been installed in the mountains, where rain and snow fall heavily has no flooding issues if the site is prepared with good draining base rock. Wind is not a worry since the turf is secured to the ground. Central Coast sun can get very hot, so during midday direct sun, the grass may feel hot to the touch. Certain infills may reduce

heat absorption. The grass does not retain heat in the shade or darkness like rock does. The turf can easily take even the hottest direct sunlight without damage providing that there isn't any strong reflection or sun magnification.

Tips for buyers

- Be wary of quality – there's a big difference between outdoor carpet and artificial turf. Just because the turf is green doesn't mean it will hold up to years of high traffic.
- Make sure the artificial turf you choose comes with a warranty of at least 8 years. Although it should actually last much longer, 8 years is a reasonable standard in the industry for a warranty.
- Set a budget ahead of time and stick to it. Don't forget to factor in maintenance costs, no matter how minimal. If you don't want to be bothered with raking or rinsing the turf occasionally, keep in mind that you will have to pay someone to do it.

The synthetic turf industry is continually rolling out new turf styles, backing and infill choices each year. Contact a local synthetic turf supplier for more current information.

Content provided by Artificial Lawns Direct in Scotts Valley and BuyerZone.com