ay to Grow

Artificial Sod - Go Green, Stay Green & Save Green

by Steve & Cathy Lambert

In June 2009, we wrote an article "Honey, I shrunk the Lawn" on the growing trend of shrinking lawns in local landscapes. One of the alternatives we included in that article was a paragraph about artificial turf. Since then, this market has taken off.

Although water conservation is a big factor, it's by no means the only efficiency afforded by artificial grass. Lawn care, fertilizing, pesticides and mowing accounts for two percent of overall fossil fuel consumption. The U.S. Environmental Protection Agency also attributes lawn care activities for as much as five percent of hazardous air and water pollution.

However, it appears that the real reason people are installing synthetic sod is so they can spend less time maintaining and more time enjoying a lawn that looks good vear-round.

Today's manufactured grass, when properly installed, looks incredibly real and feels quite natural underfoot too.

Another misconception is that artificial lawns are unsafe. Today's synthetic materials, like polyolefin blades and soy based backing, are built to be safe and require little or no infill. These products have multiple layers of blade height, some as tall as 1.5 inches and others short and curly to help hold up the taller blades.

Another common misconception is that these man-made lawns are not pet friendly. Dogs and other pets love rolling around on synthetic lawns, and their owners love that cleaning up after them has never been easier.

Of course, as with most products there are a few draw backs. The number one problem we've experienced is that synthetic sod can get too hot. This only occurs on very hot days, which are few and far between here in Orinda and can be easily solved by watering the sod down. The other complaint is that the surface is much harder than natural sod. This is because most artificial turf is installed on well-compacted gravel. There are now foam padding underlays, which are a great option for use under play structures.

If you decide to go artificial, you'll find

the following installation information to be very valuable.

1. Excavation: First excavate the area to a depth of 4-to 6-inches. After excavation, the soil must be compacted for even drainage and to ensure the turf stays flat, tight and has a natural lay. We often place weed block barrier on top the bare soil to act as a gopher barrier. We don't recommended using chicken wire or aviary wire because it will break down after a few years.

2. Bender Board Installation: How the trim is installed makes the difference between a fake, cheap looking lawn and one that looks natural. The best bender board is made entirely from recycled products. It should measure $3\frac{1}{2}$ by $1\frac{1}{2}$. The best method is to install the plastic bender board around the entire perimeter. This provides a secure edge for the installers to staple the grass to. Galvanized staples should be placed at three-inch intervals. We like to take this process one step further and wrap the turf around the bender board to achieve clean, crisp curves without a highlighted (bender board) edge.

Some companies only install bender board where there are no existing concrete borders, against soft landscape areas that border planters, flower beds, etc. This may result in ripples in your turf which become trip hazards. Leaving edges with no bender board can also allow a space for critters to burrow under the sod.

3. Substrate Installation: Crushed gravel will be brought in to a depth of 4 inches then raked out and compacted to 95 percent compaction. This step provides excellent drainage for your lawn. There should be a slight crown in the middle, which insures proper water run-off. We find it best to add two inches, or more, of decomposed granite on top of the gravel. Don't allow the use of sand for the final layer as it can create a divot in your turf during the nailing process.

4. The Turf: Artificial lawns are basically large carpets. In fact, there are only seven manufacturers of synthetic lawns in the United States and six of them are located in Dalton, Georgia, which is the "carpet capital" of the US.

Synthetic grass comes in 15-foot rolls and has a variety of backings. The best backing options are those made from Polyolefin or a soy based material. Polyolefin is completely permeable throughout, while soy based products have holes punched into them for drainage. The one advantage of the Polyolefin backing is that it functions well as a weed barrier while the hole-punched soy varieties can allow weed growth.

5. Artificial Lawn Installation: Artificial lawn is installed much like carpet and using some of the same tools. The perimeter is stapled in place with a pneumatic staple gun and galvanized staples. The area in the middle, known as the field, will be an-



Today's artificial turf is not your grandmother's bright green patio cover. A wide variety of "grasses" are available for every need.



chored in place with six inch, un-galvanized foundation nails placed at one foot intervals. Un-galvanized nails are used for this process because the rust that ultimately forms on the nails actually binds better with the gravel.

6. Blooming: Once your lawn is in place, the installers will use power brooms to "bloom" the fibers so they stand up straight. If you purchased a no-fill product, this is the final step. If not, the installers will fill in between the blades with green sand and/ or encapsulated nylon.

Once your lawn is installed, the only tools you'll need to maintain it is a nylon rake, which the synthetic grass company should provide, and perhaps (dare I say it?) a leaf blower.