

"How to Choose Synthetic Turf."

For Your Backyard Putting Green

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Wow, this question would have been a lot easier years ago, when the only choice was a sand filled, polypropylene green, but with the advent of new technology, it's a little more complicated. I hope I can help you cut through some of this confusion in this article.

In the 23 plus years I've been in this business I've seen just about every type of outdoor synthetic green made. There's a lot more to know about choosing a synthetic turf for your backyard putting green than just; should it be nylon yarn or polypropylene yarn. Although it's very important to know which style of yarn to choose, equally important are the ways the synthetic turf is manufactured and the type of

infill used. In this article I will focus on these 3 important considerations.

Of course the installation method and base material are paramount to a successful installation, but I'm just going to focus on "How to Choose Synthetic Turf" for your backyard putting green.

Nylon or Polypropylene? This has been debated many times over. There are many advantages and disadvantages of both. I'd like to point out some important points that you may not have previously heard of or considered.

The first consideration is whether or not you'll be hitting long shots to the green. Polypropylene greens are better for holding shots from a distance...but it's not because of the yarn composition, it's because polypropylene greens allow more room for infill material that is spread in-between the yarn fibers during installation. The infill material is what takes the kinetic energy off the ball at impact, not the yarn composition. The more infill material in the green, the longer the shot it will accept. You can still hit shots of say 25 yards to a Nylon green, but you better add some extra infill material. Problem is the amount of infill is limited on Nylon greens. This is due to "Moisture Regain" problems which we'll discuss later.

Okay, so you've decided you're not going to use your green for hitting long balls, but just for chipping and putting. So what should you choose? This is the 64 thousand dollar question! Below are the Pro's and Con's, and then my 2 cents...for whatever that's worth! :)

NYLON VS. POLYPROPYLEN GREENS

	NYLON	POLY.	STEVE'S 2 CENTS
Truest Ball Roll	X		The ball always rolls on the fibers, not the infill material. And because it's denser more fibers come in contact with ball and fibers are curled over.
Truest Ball Roll Over Time	X		The "spring back" nature of nylon safeguards against matting keeping the ball roll consistent. Polypropylene gets soft over time and lays over causing inconsistent ball roll.
Accepts Long Shots		X	Hands down, Polypropylene.
Durability	X		The toughest yarn fiber in the world is nylon, but well maintained polypropylene greens will last a very long time. It's a putting green, not a football field.
Natural Appearance		X	Polypropylene looks more natural. Nylon has the tendency to streak, but still looks good.
Less Maintenance	X		Polypropylene has far more maintenance due to the fact that the majority of the product is infill instead of synthetic fibers. Polypropylene infilled greens are also susceptible to mold and fungus growth. Nylon greens require infill, but it's so minute that it's not a factor. See infill considerations below.
Less Mold, Mildew	X		The Infill material in a polypropylene green which is mostly sand promotes mold and mildew growth. But if you're in the desert or dry regions, not a factor.
Less Expansion /Contraction Problems		X	The biggest negative to nylon greens. The "moisture regain" characteristics in nylon greens causes the turf to expand and contract. This can be mitigated by "pre-shrinking" the green before installation. This is done by watering the green everyday for a couple of weeks before installation.
No Size Limitations		X	Due to the fact that nylon has the "moisture regain" problem, it could be risky to install a nylon green that is 30' or 30' or larger.

Manufacturing Considerations

Not all synthetic turf is created equal! There are some important factors when it comes to synthetic turf quality.



Nylon Greens: Some nylon greens will show the inherent streaks more than others. This is usually a quality issue. But sometimes even the highest quality nylon yarn has streaking problems. I've also seen some nylon greens that have inconsistent ball roll in one direction, but it rolls perfect in the other direction. Most of the manufacturing plants have corrected this problem, but again, there are some out there that haven't.

The most important factor when choosing nylon green is the backing. Because of the fact that nylon greens are susceptible to expansion and contraction, which causes puckering and wrinkling, a quality backing is extremely important! The best backing is a rubberized backing. If you can see the stitches on the back of a nylon green, this means you don't have the reinforced extra backing you need! If you don't have the reinforced rubber backing you'll have problems! Unless of course you're gluing your nylon green to concrete.

A quality nylon turf product also has a higher bulk rate on the material, which in turn makes a denser product. When the fibers see heat and draw down, they are closer together. So I'm sure you're asking yourself, "How do you know if the product you're trying to buy has a higher bulk rate?" The answer is you really can't tell. My suggestion is that you buy from a reputable synthetic turf company, like ours of course, but also the reputable synthetic turf company's that are featured in here in *Residential Putting Green Magazine*.

My suggestion is to get samples and roll the ball on all directions to see if it's consistent. Check out the backing; make sure it has an extra reinforced backing!



Polypropylene Greens: A quality polypropylene green will have sheared tops, which means the tips of the fibers are sheared. Naturally, the ball roll is better when the tops are sheared..

Another consideration is the denier of the polypropylene fiber. The most popular denier sizes are 5700 and 7600 denier. Denier is the bulk reading of the yarn. Denier is measured by combining the width and thickness of the yarn fiber. The higher the denier, the bulkier the fiber. The 5700 fiber is softer and will perform better from the start. The 7600 denier fiber takes a longer "break-in" period but eventually relaxes. As far as durability I don't think there's that much different. If the surface was used as a dog run or

play area, the 7600 denier might outlast the 5700 denier a bit, but this is a putting green, so really, wear-ability is a non-factor.

Buy From a Reputable Turf Company! The most important factor of choosing the right turf is buying from a reputable turf company. A company that stands behind their product!

Infill Considerations

Nylon and Polypropylene both require infill. Although the amount of infill needed between the two are drastically different. Nylon greens require a minimum of 1.25 pounds per square foot of fine silica sand. This gives the green the needed ballast to help the turf adhere to the base material, especially over undulations. Because of the fact that the silica sand sits at the very bottom of the turf, you never see it, and never creates a maintenance issue.

Polypropylene greens are dependant on infill. Many turf companies use silica sand as the stand alone infill, but I recommend a blend of silica sand with another material that will prevent the silica sand from becoming hard and compacted. Ask your turf company what they use to battle the compaction. I also recommend colored rounded top dressing sand for the very top. Green is the most popular color, but black and/or a combination of green and black top dressing is typical.

Steve Walker is the CEO and founder of ProGreen International, Inc. ProGreen has been in business since 1987 and has over 50 dealers in the U.S. and worldwide. © Copyright 2009, ProGreen International, Inc. All Rights Reserved.

