

Arizona Luxury Lawns & Greens

Where the Environment and Technology Meet™

AZLUXURLAWNS.COM Office -480-991-0196 Fax - 480-991-1004

50 THINGS YOU NEED TO KNOW ABOUT ARTIFICIAL TURF

14850 N 83rd Place Scottsdale, Arizona 85260

www.arizonaluxurylawns.com

TABLE OF CONTENTS

1.) How synthetic grass is made	3
2.) What synthetic grass is made from	3
3.) The history of synthetic grass	3-4
4.) How artificial grass gained fame	4
5.) Denier: what it means and why it's important	4
6.) Face weight: What it is and What it Means	4
7.) Drainage rate: why it matters and how it helps	5
8.) The Many shapes of synthetic grass blades	5
9.) Non-Galvanized nail vs. Galvanized nail	6
10.) The Thatch Revolution: What it did for synthetic grass	6
11.) Tuft binds: why it's important	6
12.) Fading.....	6
13.) How synthetic grass helps the environment	6
14.) Seaming Tape VS Nails-When to use them	7
15.) A Typical Synthetic Grass Installation	7
16.) A Typical Pet Installation	8
17.) A Typical Putting Green Installation	8
18.) A Typical Playground Installation	8
19.) Cleaning Your Turf: when is it necessary and how you do it	8
20.) How To clean up after your pets	8-9
21.) Top Three Odd Ball Spots for Synthetic Grass	9
22.) How long synthetic turf will last	9
23.) How to dispose synthetic turf	9
24.) Turf Infill: When to use what product	9-10
25.) Rebates	10
26.) Home Owner's Association	10
27.) Property Value	10
28.) Turf Rolls	11
29.) Why Choose Synthetic Grass for your Property	11
30.) Wild Animals	11
31.) Playground Surfaces	11
32.) Stains, Mold, Bacteria	11
33.) Weed Growth	12
34.) Temperature of Grass in Extreme Climates	12
35.) Extreme Weather Conditions	12
36.) Flammability	12
37.) Contractor's License: Why it's necessary	12
38.) Tools of the trade.....	12-13
39.) Natural Lawn Vs. Synthetic Lawn costs	13
40.) Three Generations of Artificial Turf	13
41.) Turf Backing	13-14
42.) Three Things to Consider with an Artificial Grass System	14
43.) Seaming: How to and what is the best method	14
44.) Pavers, Walkways and Driveways: What to consider when "turving" around these items	14
45.) Synthetic Turf is not just Green	15
46.) What to look for in an installer	15
47.) Warranty.....	15
48.) Who are the main extruders of synthetic grass	15
49.) How AZLL Synthetic Grass is Packaged and Shipped	16
50.) Why AZLL.....	16

1. HOW SYNTHETIC GRASS IS MADE:

Ever wonder how simple plastic becomes your beautiful lawn? It all starts with white plastic pellets that act as the base material which are combined with green pellets that hold the colors, U.V. stabilizers and additives.

Equipment melts the plastic together and extrudes it through a perforated steel plate. The strands exit the steel plate into a trough of water which solidifies the synthetic grass mixture. A machine pulls the strands through a large pulley and keeps them separated while they move on to the next station. Rollers stretch the strands until they become as thin as real grass. Spools hold the synthetic grass strands. Once a spool has been filled, different color strands are woven together to form multiple synthetic yarns. The yarn is prevented from slackening by traveling through guides while it is wound around a giant spool.

Mesh fabric merges with synthetic sheeting while the synthetic yarn travels through a tubing to a tufting machine. A tufting machine is like a giant sewing machine and contains over 200 needles to hook the yarn through the sheeting.

While the turf is being tufted, small knives underneath cut the ends to make the yarn appear like grass blades. The backing is moved to a coating roller which picks up adhesive to apply to the turf's backing.

The adhesive is dried in both open air as well as an enclosed setting. As the turf exits the drying, hot pins burn holes into the turf for drainage.

After undergoing multiple inspection points, including measuring the turf fiber length and minor trimming, the turf is moved to a device that simulates football cleats to affirm the turf's durability.

This comprehensive video featured on the Discovery Channel's hit show "How it's Made" takes you through each step of the synthetic grass process, as well: <http://www.youtube.com/watch?v=b91cXZ112uQ>

2. WHAT IS SYNTHETIC GRASS MADE FROM:

Through years of research and development, synthetic grass has been modified and transformed into what we now know as "third generation" synthetic grass, according to the Synthetic Turf Council.

It's through this constant evolution, synthetic grass has become the high quality material we know today for most landscape installations.

The actual green blade of synthetic grass is comprised of a polyethylene material, a common form of plastic that can be found in items such as bottles and plastic bags. The polyethylene comes in a solid pellet form and is heated down along with any color tones and UV resistant additives.

The thatch layer of synthetic grass is made from a polypropylene, polyethylene or nylon material. The thatch layer provides the turf with an added layer of support and blade recovery.

Synthetic grass blades are inserted into the backing in rows through a tufting machine, which is basically a huge sewing machine with hundreds of needles. This machine gives the grass blades and thatch a more secure hold which also increases the turf's life and durability.

3. THE HISTORY OF SYNTHETIC GRASS:

What began as a part of a solution to help improve inner city youth's physical fitness in the 1950's, sprouted into an entire industry dedicated to synthetic grass production.

The Ford Foundation's Education Facilities Laboratory, in conjunction with Monsanto Industries and Chemstrand, encouraged the use of synthetic fiber carpeting in schools. From 1962 through 1966, The Creative Group, Chemstrand's research organization, tested the synthetic turf carpet surfaces for flammability, water drainage and resistance as well as durability regarding foot traction.

3. THE HISTORY OF SYNTHETIC GRASS (CONT.):

The first large synthetic grass installation took place in 1964 at Moses Brown School in Providence, Rhode Island. The grass was referred to as "Chemgrass."

In 1965 Houston's Astrodome was in dire need of a consistent playing field as environmental conditions did not permit a decent atmosphere for natural grass growth. In lieu of the field often coated with green paint among the dirt and patches of grass, Astrodome developer Judge Hofheinz consulted Monsanto about installing Chemgrass.

The Major League Baseball Team the Houston Astros began their season in 1966 throwing pitches and knocking out homeruns on top of Chemgrass, formally re-named "Astroturf," the household name known to much of America today. Invented by James M. Faria and Robert T. Wright of the Chemstrand Company, Astroturf's first generation synthetic grass showcased tightly curled nylon fibers woven into a foam backing.

A Trademark patent was officially issued for artificial turf on July 25, 1967.

Following the Astrodome's success, Indiana State University installed artificial turf for the first outdoor stadium in 1967. Artificial turf became a surface success that continued to climb slowly but surely through the 1970's with sports arenas throughout the United States and Canada. Cincinnati's Riverfront Stadium, Philadelphia's Veterans Stadium as well as Pittsburgh's Three River Stadium followed the artificial turf trend.

As the 1970's came into full swing, the artificial turf industry followed the shag carpet trend and introduced "shag turf." The longer yarns were created from a softer polypropylene material, much more user-friendly than its first generation predecessor. Sports like field hockey benefited from this surface, however soccer was left in the dust due to the soccer ball's reaction on the grass surface.

Fast forward to the middle of the 1990's to third generation artificial turf which featured a much softer polyethylene blade fiber. This turf is what you will find on any residential, commercial or sports landscape today. The third generation synthetic grass also features longer fibers spaced farther apart as well as a "thatch," or dead grass yarn positioned between the grass blades and the backing. For ideal turf form, function and stability, infill is spread throughout for an added extra comfort while providing adequate foot traction.

4. HOW ARTIFICIAL GRASS GAINED FAME:

Artificial turf captured America's attention after Astroturf installed the first generation of synthetic grass for the Houston Astrodome's baseball field in 1966. This installation set a precedent for many sports fields across America that could not otherwise maintain natural grass.

Through peaks and valleys of media scrutiny along many product modifications, second and third generation artificial grass became a staple for FIFA at the 2010 World Cup Games in South Africa. In addition to taking root on the lawns of American homeowners, synthetic grass has since replaced Hollywood's infamous red carpet several times, including the Teen Choice Awards, the Latin Grammy's, and other large Hollywood parties in order to encourage the "go green" lifestyle throughout.

5. DENIER: WHAT IT MEANS AND WHY IT'S IMPORTANT:

By definition a turf's denier measures the density of the turf fibers. According to Merriam Webster's definition, denier is a unit of fineness for yarn equal to the fineness of a yarn weighing one gram for each 9000 meters.

6. FACE WEIGHT: WHAT IT IS AND WHAT IT MEANS:

Face weight is determined by the weight of fibers within the product and does not include the weight of the backing. Face weight can sometimes determine how much a product is worth, depending on the amount of product. It is most commonly thought that the heavier the product's face weight, the more the product will cost.

7. DRAINAGE RATE: WHY IT MATTERS AND HOW IT HELPS:

Drainage systems are primarily designed to allow water to percolate through the backing of the turf and drain through the base layer into the water table. Most synthetic grass backing is perforated with holes that measure approximately 1/2centimeter in diameter and can drain at a rate of 28 inches per hour.

With the exception of most synthetic putting greens, nearly all landscape turf is perforated and allows for easy drainage. A good drainage system can not only help with clean up, but it will also help prevent spores and bacteria from building up within the synthetic grass.

8. THE MANY SHAPES OF SYNTHETIC GRASS BLADES:

Synthetic grass can be created with so many different colors and various blade heights, however, within the extrusion process, much like the way you would squeeze out playdough with different shapes, there are several types of synthetic grass blade shapes. Each of these blade shapes serves a different purpose and creates a different effect for your lawn.



Turfs that have oval shaped fibers are commonly found in many different landscape installations. These fibers feel soft to the touch while still maintaining durability.



Synthetic turf that features a diamond de-lustered shape maintains a soft but sturdier feel. It works ideally as a landscape grass for commercial and residential areas.



Shaped like the letter 'V', the Vista blade creates a more durable and strong feel and allows for the turf, as a whole, to have stronger durability.



The 30 'W' fiber is a strong fiber that can withstand large amounts of pressure and helps the turf, as a whole, bounce back to its original state. The blade offers multiple support points which allows for greater durability and a "memory" effect. The turf will bounce back to its original state, despite the surface weight.



The Flattened Oval with Spine turf fiber gives turf a realistic appearance and creates a stronger blade core.



The omega blade shape can be found most often in pet turfs as well as shorter pile heights.



The Mini C-shaped blade gives the turf a natural look and helps the synthetic grass feel soft to the touch. This blade shape can be applied on any installation, however, it is most commonly found on residential and commercial property landscapes.



Shaped like the letter 'W,' the Mini "W" blade shape creates higher durability, as a whole. Used widely for areas with high foot traffic, the Mini W blade is ideal for any playgrounds, sports field or landscape.



The "M" shaped blade creates more durability making the turf ideal for heavy foot traffic. Used primarily for areas that experience high amounts of foot traffic, the "M" blade is great for landscapes with high amounts of foot traffic.

9. NON-GALVANIZED NAIL VS. GALVANIZED NAIL:

Galvanized nails are nails that are coated with a protective zinc oxide layer to prevent rust and are commonly used in outdoor projects. With a typical synthetic turf installation involving nails, installers might use non-galvanized nails because this product does not have the outer coating and will therefore, rust.

When the nail rusts, it will swell which helps secure the turf to the base layer. Non-galvanized nails are ideal for synthetic grass installations.

10. THE THATCH REVOLUTION: WHAT IT DID FOR SYNTHETIC GRASS:

Invented about nine years ago, a synthetic grass thatch layer was added to the synthetic grass that ultimately revolutionized a landscape's look and feel. Made from polypropylene, polyethylene or nylon, the thatch layer helps with synthetic grass blade recovery while the brown, green or tan color tones break up the synthetic grass.

11. TUFT BINDS: WHY IT'S IMPORTANT:

A tuft bind is the force, measured in pounds, that is required to pull a tuft from the turf backing. This is also known as a "tuft lock." An ideal tuft bind measurement for synthetic grass is 10 pounds or more of force to pull the monofilament from the backing.

It is within the synthetic grass construction process that an adhesive glue is coated to the back of the synthetic turf. In order for synthetic grass to have a secure and strong backing, the coating must be done with the right elements.

A coated backing is most commonly comprised of either a urethane material or a latex material.

12. FADING:

Most technologically advanced synthetic grass products feature built-in U.V. inhibitors. These U.V. inhibitors are incorporated within the yarn process and will allow the yarn to hold color even in the most harsh and sunny conditions. The turf color is designed to last 10 to 15 years.

13. HOW SYNTHETIC GRASS HELPS THE ENVIRONMENT:

Throughout recent years, synthetic grass has been utilized as an alternative to natural grass. Not only does synthetic grass stay green all year long, but it also aids in multiple aspects of environmental conservation.

1. Water Conservation: Within the past few years, many states across the nation and world suffer from extreme drought and water rationing is unfortunately becoming commonplace. According to the Southern Nevada Water Authority, one square foot of synthetic grass can save up to 55 gallons of water in one year.

2. Pesticides: It may rid your plants and grass of annoying bugs, weeds and other overgrowth, however, pesticide chemicals have proven harmful side-effects that not only hide in your lawn but eventually seep into your local water table. According to the Cancer Research Center-UK, studies suggest pesticides could be linked to cancers such as leukemia, brain tumors, breast and prostate cancer.

3. Carbon Emissions: Gas-powered gardening equipment like lawnmowers represent five percent of air pollution in the U.S., according to the Environmental Protection Agency. A synthetic lawn requires minimal upkeep with gas-powered gardening equipment and therefore would eliminate the need for these items.

A synthetic lawn not only benefits the end user, it has multiple environmental advantages. By eliminating water and chemical waste as well as reducing carbon emissions, artificial turf can be the solution to many on-going environmental problems.

14. SEAMING TAPE VS NAILS: WHEN TO USE WHAT:

In a synthetic turf installation, it is important to consider which form of binding to use for certain types of jobs. For the large majority of landscape installations, many synthetic grass installers will use nails and staples as opposed to the sticky alternative, glue and seaming tape. When using nails and staples, the seams are easier to manipulate. However, certain scenarios require the alternative combination of seaming tape and glue:

1. Playground fields
2. Sports fields

Both of these will require seaming tape and glue in lieu of the potentially high activity that can occur on these surfaces. However, staples and nails are still required to fasten the outside edges of these surfaces.

For more information about installing turf using nails and staples, please watch this video:
<http://www.youtube.com/watch?v=IOaL9vLGUe8>

15. A TYPICAL SYNTHETIC TURF INSTALLATION:

Synthetic grass installation can be basic, however, no two synthetic grass installs are done exactly the same way. There will always be unique situations for each install, however, there are basic differences for specific synthetic grass needs. A typical synthetic grass installation can last anywhere between one to three days.

For a basic synthetic grass installation, consider these steps:

Step 1: Pre Installation: Remove existing materials and rough grade the area to create a solid sub base. Rough grade the area to uncover everything underneath, including electric wiring, irrigation and pipes. Cap sprinklers at the pipe level to avoid any kind of leakage. Install bender board to provide a clean separation for plants and turf.

Step 2: Base Preparation: Install 1/2" or less crushed base to allow for proper drainage. Install this layer three inches deep. Distribute base and make sure it is level to account for any sloping areas. Install drainage area. A smooth base will account for the surface level appearance for the project.

Step 3: Compacting Base: Compact base by vibrating, tamping and rolling the gravel. This ensures the base is solid so nails can be driven into the turf.

Step 4: Weed Retardant Layer (optional): The weed cloth layer prevents any growth from coming up out of the base through the turf. This layer is not recommended if the installation involves pet usage. Overlap weed cloth edges by six inches and secure with as many flat head nails as possible to prevent the cloth's movement. Trim the cloth to fit the area and leave a quarter inch gap along the hardscape or border areas to allow for easier tucking.

Step 5: Laying Turf: Find a straight edge of the turf or a perpendicular edge for alignment. Square to fit the area and minimize cutting and fitting on all four sides. Secure the turf edges with nails to hold it in place. *Remember to soldier the turf towards your privileged viewpoint, in other words, consider the natural blade direction of the grass.

Step 6: Custom Fitting Turf: Over cut the turf by one inch along the edges to provide excess turf necessary for tucking. If there are doubts, cut the turf fatter than estimated as it can be trimmed later. Use a seaming tool to seam edges together. Cut the seams in an S-shape to avoid the turf pushing up. Install nails ever six inches along the edges and drive them ³/₄ of the way down. Remember to move the surrounding fibers with another nail or staple, then tap the nail head all the way to the backing. Use U-shaped nails for the seams to join the turf edges together.

Step 7: Tucking Turf: Hide the edges of your turf against the hardscape by using a metal bar known as a "wonder bar."

Step 8: Apply Infill: Use a power brush to force grass blades up in order for infill to be applied. Apply your specified infill layer. The infill layer acts as a balance to hold the blades upright and provides the turf with more weight.

Step 9: Final Groom: Power brush the turf once again to lightly force infill granules into the base of the turf. Remove any excess debris.

16.A TYPICAL PET INSTALLATION:

Artificial turf deodorizer is applied on top of the base layer in order to neutralize the ammonia smell emitted from pet urine. A drainage membrane will be layered on top of the base in order to account for proper drainage. Proceed with a typical synthetic grass installation and incorporate Durafill mixed with more artificial turf deodorizer. A typical synthetic grass installation for pets can take between one and three days to complete, depending on the square footage of the install.

17.A TYPICAL PUTTING GREEN INSTALLATION:

Compact base 1-2 inches thicker than your standard base. Always use road base first to compact and isolate putting green area only. Install 1/8 inch of silica sand on top of the compacted base layer.

If you are using a Polyputt or Nylon putting green, set the cups at the grade level. If you are using a Trueputt product, set the cups 5/8 inch above the final grade level. Cut and shape the green and attached your fringe. Use a viber plate to distribute the sand infill into the putting green materials.

A typical Nylon or Polyputt installation will take one day to complete, whereas a typical TruePutt installation will take two to three days to complete.

18.A TYPICAL PLAYGROUND INSTALLATION:

Always refer to the safety specifications beforehand. Frame your turf area with wood panels. Level your base and place playground padding over top of the base layer. When laying the playground pads down, leave between 1/8 -1/4 inch between each pad to allow for the pad's expansion and contraction. Be sure nail each individual pad down to the base from the middle of the pad. Place your synthetic grass on top of the playground pads and nail turf to the framed area with deck screws or finished nails. Be sure to use a non-abrasive infill, such as Durafill, which will disinfect. If your turf needs to be seamed together, use seaming tape and glue, as opposed to nails, in order to avoid potential injury for children.

A typical synthetic grass playground installation with padding will take about two days to complete.

19. CLEANING SYNTHETIC TURF: WHEN IT'S NECESSARY AND HOW YOU DO IT:

Now that you've forgone the lawn mower and have opted for artificial turf, maintaining your lawn, putting green or commercial property can be efficient and easy. We've broken it down for you into several easy ways you might consider when cleaning your beautiful evergreen lawn.

Here are a few guide lines for cleaning your synthetic grass landscape:

- Although debris can often make your lawn appear that much more natural, according to the Association of Synthetic Grass Installers, eventually, you will need to rake the lawn as you would a normal grass lawn to clear away any debris' decomposition. A carpet rake or a leaf blower are great tools for this type of clean up! Depending on your location, a simple weekly cleaning should do the trick!
- There may be certain areas of your landscape that might not stand as tall due to extra foot traffic. Simply use a broom or a brush and brush against the natural grain to help each blade stand up.

20. HOW TO CLEAN UP AFTER YOUR PETS:

If you have a synthetic grass lawn that is frequently used by your furry friends, some special attention is required once they "do their business." Here are a few turf cleaning tips that will make you and your pet happy and your turf last longer and smell fresh:

1. If your pet's waste is solid:

After the waste dries, remove as you would normal grass, then rinse. If the waste is loose, remove and spot treat with the appropriate disinfecting cleaner, such as any enzyme cleaner, distilled Turf Fresh or vinegar.

20. HOW TO CLEAN UP AFTER YOUR PETS (CONT.):

2. If your pet's waste is liquid:

Although liquid waste will be more difficult to locate on your turf, it is best to assume your animal is using the entire area. Attached the sprinkler setting to any hose nozzle will allow the water to be evenly distributed through the entire turf system (turf, infill, backing and base materials).

What to avoid when cleaning up after your pet:

1. Harsh acids
2. Cleaners containing alcohol
3. Pressurized water

By avoiding these items, you can preserve your turf so it will last longer!

21. TOP THREE ODD BALL SPOTS FOR SYNTHETIC GRASS:

Synthetic grass continues to become more than a commodity for home owners and commercial property owners across the nation. It's a great way to conserve water, prevent harmful chemicals from entering our natural resources and saves thousands of dollars over time. However, synthetic grass has not only become common place for landscapes.

Creative thinkers have taken this product to a whole new level by introducing fake grass to places where regular grass cannot otherwise take root.

1. Rooftop Gardens:

The world doesn't have to be gray, brown or black on top of your roof! Greater metropolitan cities like New York, Los Angeles and Chicago have adopted the "rooftop garden" as a way to incorporate eco-friendly designs to the otherwise monotone sky scapes.

2. Household items:

From puppy pads to pillows, synthetic grass can be found on all types of home items. Companies adopt the green look for their sandals, porch rugs and other indoor/outdoor furniture.

3. Walls:

Synthetic grass is not just for your landscape! The wide world of Pinterest showcases areas such as outdoor wall scapes, patios, even bedroom headboards that are synthetic grass.

22. HOW LONG DOES SYNTHETIC TURF LAST?

Although no certified manufacturer guarantees synthetic grass to last more than eight years, high quality artificial turf can last between 10 to 15 years, depending on the wear and tear.

23. HOW TO DISPOSE OF ARTIFICIAL TURF ONCE REPLACEMENT IS NEEDED:

Once your landscape needs a replacement, your turf can be disposed at any landfill. Future technology is steadily working towards a more recyclable material.

24. TURF INFILL: WHEN TO USE WHAT PRODUCT:

In the turf world, there are many different types of infill and each one of these products serves a different purpose and specifically pairs with certain products. In the turf world, "infill" is defined as the layer comprised of sand or rubber used on top of the turf between the fibers for ballast and cushion.

Listed here are the top three infill types used for synthetic grass and putting green installations:

24. TURF INFILL: WHEN TO USE WHAT PRODUCT (CONT.):

1. Durafill

Durafill is an acrylic coated sand and most widely used by installers across the nation for its non-abrasive and anti-microbial properties. Not only does Durafill inhibit the growth of bacteria within the turf, the green color blends in with the blades and because of the outer coating, it will not harm the turf. Once the sand granule is coated with the green acrylic, Durafill's outer layer eliminates the granule's angular outer edges, which can be abrasive for synthetic grass.

Durafill typically comes in both large and small granule sizes. The large granule is primarily used for a typical synthetic grass landscape installation as opposed to the small granule, which is utilized in putting green installations.

2. Sand

Sand infill is most commonly comprised of a quartz base and comes in large and small granule sizes. The large granules are used primarily for any standard synthetic turf landscape installation, whereas the smaller granule sized sand is used as infill for most synthetic putting green installations.

3. Crumb Rubber

Crumb Rubber is most commonly made from recycled car and truck tires and is free of metals. Crumb rubber infill is typically used for a synthetic turf sports field installation or installations that involve playgrounds or areas of high traffic.

25. REBATES:

For the past few years, synthetic turf has been accepted as an alternative landscape by communities across the United States. Much of the nation remains in a stagnate drought which has a stranglehold specifically on the United States southwestern region.

According to University of California Irvine's Center for Hydrologic Modeling, the average lawn needs about 34,000 gallons, or 670 bathtubs full of water to be maintained.

As a result, states such as California, Nevada, Arizona and Texas offer rebates through their local water district and/or community to help stave drought conditions.

If your city offers synthetic turf or turf removal rebates, check with your local city and water district for rebates.

For example some programs such as the SoCal Water Smart offer turf removal which is a great start for water-saving landscapes.

The Las Vegas Valley Water District offers rebates for turf removal and water efficient landscaping.

Be sure to submit your applications and stay current with your local water district rebates!

26. HOME OWNERS ASSOCIATION:

California residents have been working with Home Owners Associations for years regarding synthetic turf. Each individual association will have different regulations regarding artificial grass. Before you decide to install artificial turf, check with your HOA to avoid any unnecessary penalties or fines.

27. PROPERTY VALUE:

There has been no conclusive research that would suggest synthetic turf has an actual effect on your home's property value. Home owners have their own value for synthetic grass and often examine the pros and cons of synthetic turf for their future property.

28. TURF ROLLS:

Most artificial grass comes either 15 feet or 12 feet wide, depending on the type of product. The turf can be cut up to 100 feet long and can be cut according to your needs and some facilities charge a cutting fee. It is typically stored in a temperate climate inside a warehouse as a roll and will be shipped or delivered to your location packaged as such.

29. WHY CHOOSE SYNTHETIC GRASS FOR YOUR PROPERTY:

1. Low maintenance: Once it's installed, artificial turf requires very little mowing or watering.
2. No need for a lawnmower: Lawnmowers become costly, need repair and make up five percent of the country's air pollution.
3. No fertilizers or weed killers: Synthetic turf will only require certain types of infill to help the blades stand tall. SGW infill products are safe and non-toxic to people and the environment.
4. Environmentally friendly: Not only does synthetic grass help air quality by eliminating gardening equipment, it also saves a ton of water, in both quality and quantity. According to the Sacramento Bee, a typical natural turf lawn requires 55 gallons of water per square foot per year, which equals 44,000 gallons of water for an 800 square foot lawn. With artificial grass, you can save up to 660,000 gallons over 15 years!
5. Forget about pulling weeds! Most synthetic turf companies offer specific weed fabric designed to block weeds from creeping through your synthetic grass.
6. Long lasting: Synthetic grass can last up to 15 years before needing to replace it. Most synthetic turf products are built with the latest synthetic turf technology are designed to withstand high amounts of foot traffic and all types of weather conditions.
7. Superior Drainage: Unlike natural grass, synthetic grass drains at a higher rate and will not accrue mud or pot holes. It will also dry faster and provide more outdoor time for fun activities or sport team practice.
8. Strong and durable: Most artificial turf blades are tufted into the polyurethane backing and each individual blade is designed to handle large amounts of foot traffic. Feel free to play all kinds of activities on your synthetic grass.
9. Looks beautiful: Synthetic grass always appears perfectly groomed and remains green year round.
10. Saves Time: Instead of spending the weekends manicuring the lawn, you can spend more time relaxing on your yard!

30. WILD ANIMALS:

Wild animals avoid synthetic grass because there is no nutritional benefit for them. Rabbits and gophers will no longer be able to build their homes in your synthetic turf. Pesticides are a thing of the past as synthetic grass resists insects, as well. With the lack of organic materials, bugs and wild life will venture elsewhere to find nourishment.

31. PLAYGROUND SURFACES:

Many synthetic grass companies carry a variety of synthetic grasses that can fit any playground surface. Underneath the turf surface, you will find lawn padding that cushions any fall. Typically, turf companies offer two types of lawn padding for those spills and thrills:

- Medium density foam: 5 foot fall rating
- High density foam: 8 foot fall rating

32. STAINS, MOLD, BACTERIA:

Artificial turf has a perforated backing and because of this type of backing, a consistent rinse of your turf will wash away dirt and debris and keep the product clean.

Most artificial turf is made from polyethylene and will not absorb stains, although it is recommended to wipe or rinse spills with water.

33. WEED GROWTH:

Most weeds cannot penetrate a synthetic grass backing, especially if you insert a weed barrier cloth before your artificial grass is installed over the base. However, due to its high absorbency, a weed barrier cloth is not recommended for an installation that might involve animals. If a weed sneaks through the synthetic turf perforation, simply spray weed killer or pull it out.

34. TEMPERATURE OF SYNTHETIC GRASS IN EXTREME CLIMATES:

Synthetic grass is often found in areas with extreme climates because it is a more consistent landscape that will maintain durability and does not require constant upkeep for the sought-after manicured appearance. Although synthetic turf does not stay as cool as natural grass in extreme heat conditions, a simple water spray will help cool down artificial grass in a few seconds.

35. EXTREME WEATHER CONDITIONS:

Although faux grass is best known as a landscape option for areas that experience drought or dry climates, synthetic grass is also ideal for any area that withstands large amounts of rainfall. Turf will percolate water faster than natural grass, which it will subsequently dry faster than natural grass. Artificial turf leaves no mud mess which allows sports teams more practice time and less mess for clothing and homes.

If the environment experiences snowy conditions, once the snow melts, the excess water will percolate and the turf may require a touch up with a rake or powerbroom.

For areas prone to mudslides or storm surge, try to take as much debris off of the turf as possible, until the grass blades are visible. For mudslide debris, it may require a power washer and infill may have to be re-applied.

36. FLAMMABILITY:

Synthetic grass is nonflammable. If artificial grass is exposed to extreme heat, such as fire, it will simply melt and not catch ablaze. Synthetic turf is often used at airports on landing strips and other fire-prone areas.

37. CONTRACTOR'S LICENSE:

Requirements vary throughout the nation's states, however, in California, a D-12 license is considered a state contractor's license and in Arizona a K-5 is a contractor's license. By meeting certain requirements set by your state government, it will only make you or your customer feel more secure in your synthetic grass landscape installations. Without a licensed contractor, you become personally responsible for what happens on your property.

38. TOOLS OF THE TRADE:

Installing artificial turf involves careful preparation along with certain tools to efficiently execute a turf job. Every installer has their own method and some installation companies might utilize a variety of tools, however, a few items are necessary to properly install artificial turf.



Power Broom: A stiff bristled broom used to fluff turf back to its original state.



Compactor: A machine used to compact the surface of decomposed granite or base rock.

38. TOOLS OF THE TRADE (CONT.):



Water Roller: This tool is used to smooth a putting green or increase the ball speed. It is a lawn roller filled with water.



Super Seamer Tool: This S-shaped tool creates a smooth surface that makes turf easy to seam pieces together. It alleviates the common synthetic turf "Mohawk effect" in four easy steps.

39. NATURAL LAWN COSTS VS SYNTHETIC LAWN COSTS:

Although the introductory cost of installing a natural lawn is less than half a synthetic lawn's initial cost, a customer can potentially realize their return on investment in about 2.5 years.

For a typical 1,200 square foot natural grass lawn, the installation will cost about \$2.50 per square foot, which totals at \$3,000. With an irrigation system, the cost can add up to \$4,500.

A standard 1,200 square foot synthetic grass lawn can cost about \$8.00 per square foot and requires an initial investment of about \$10,800.

After natural grass lawn maintenance, which includes irrigation, fertilization, chemicals, irrigation repairs, the total annual cost adds up to approximately \$2,268.

A synthetic lawn requires little water along with an annual power brush cleaning to fluff the blades, which will cost about \$175. The choices to save money, time and water are yours!

40. THREE GENERATIONS OF ARTIFICIAL TURF:

Like many things in general, artificial turf has and continues to experience an evolutionary growth in order to accommodate customer's needs in an ever-expanding market. Since the early 1960's, artificial turf has made appearances on sport fields and has moved onward to home lawns. There are three total generations for artificial turf:

1. First Generation: Created in the 1960's from polypropylene, first generation synthetic turf was cheaper and softer than nylon and was featured as tightly curled fibers.

2. Second Generation: In the 1970's, second generation turf was introduced with longer fibers that imitated the natural grass look. Sand infill was also included in the installation to help the blades stand up.

3. Third Generation: What we know as present day synthetic turf, the third generation features longer fibers that are spaced further apart and are made with the much softer polyethylene. A polypropylene, polyethylene and nylon thatch were incorporated to add a realistic "dead grass" appearance along with extra cushioning. Modifications for infill products have made it possible for synthetic turf to last longer and stay cleaner throughout the years.

As with most things, synthetic turf products continue to grow with the industry supply and demand. Products and formulas evolve to bring top quality products to the surface.

41. TURF BACKING:

High quality synthetic turf needs to have a top notch backing to keep the fibers intact. The industry offers many different types of synthetic turf backing for specific purposes. There are two layers of backing involved with synthetic grass:

41. TURF BACKING (CONT.)

1. Primary backing: The material where the turf is looped through. The most common types of backing are referred to as:

- K29 (most common)
- 13 Pie
- 15 Pie
- D12

2. The coating: This is what locks in the tuft bind after the fiber is tufted through. It occurs after the tufting process and is cooked into the backing at high temperatures.

Hot melt coating is the exception, which is done by an adhesive

The most common forms of coating are:

- Polyurethane
- Latex
- Hot Melt

In the United States, the most common form of coating is polyurethane, whereas Europe will often use a latex backing.

42. THREE THINGS TO CONSIDER WITH AN ARTIFICIAL GRASS SYSTEM:

1. Does your synthetic grass color choice complement your surrounding environment? Before you proceed with your installation, make sure the colors you have chosen blend with your surrounding natural foliage.

2. Does your synthetic turf provide drainage? With exception of some putting greens, synthetic grass should have a perforated backing that will provide efficient drainage for your landscape. Good drainage is imperative for your landscape installation.

3. Industry standards: Turf quality, Contractor's license, warranty: When you invest in high quality products, your synthetic grass landscape will last longer and will require less maintenance. Always seek an installer with a contractor's license in order to avoid certain legal issues that may arise. Always find out if your synthetic grass products come with a warranty!

43. SEAMING: HOW TO AND WHAT IS THE BEST METHOD:

Artificial turf does not always lay perfect, no matter how big or small the job. Turf pieces need to be cut and seamed together with special care so as to avoid the Mohawk affect. One particular tool known as the "Super Seamer" is an 'S' shaped seaming tool that will create a surface that's smooth. The turf seams will disappear.

44. PAVERS, WALKWAYS, DRIVEWAYS: WHAT TO CONSIDER FOR "TURFING: AROUND THESE THINGS:

Installing synthetic turf in between pavers and other hardscape can create a beautiful visual symmetry to your landscape. Synthetic turf and pavers can not only brighten up an otherwise standard hardscape, it can also create a beautiful design aspect to your lawn or commercial property. Here are a few things to consider when "turfing" around pavers and hardscape:

1. The turf must go the same grain direction: Similar to installing wood, synthetic grass also follows a grain direction so the look remains consistent.

2. Use a "Pro" turf: A thicker face weight will allow extra wear and tear on your hardscape. For example, when you install synthetic grass between concrete pavers on a driveway, a pro turf will allow more foot and car traffic and will have a faster recovery time.

3. Remember: Which ever hardscape you decide to set the turf between, the hardscape must be down 1/4" to 1/2".

4. Order more turf than the actual installed square footage.

45. SYNTHETIC TURF IS NOT JUST GREEN:

The grass is not always greener...it can be pink, blue, black, tan or brown! A turf's color tone is often incorporated in pellet form with the polyethylene base pellets. The two are melted together and then extruded into faux grass.

Many sports teams have utilized color synthetic grass in the past for logos and fields, however, people are becoming more creative with incorporating color turf into certain landscapes, playgrounds or poolside ground cover. Whatever the creative fancy, color turf can add a vibrant touch to any application or product.

46. WHAT TO LOOK FOR IN A INSTALLER

An installer/distributor should actively provide you with the following materials, service, tools and conditions:

- Intro to the industry
- Industry knowledge
- Business Strategies
- Marketing Materials
- Product Quality
- Product Variety
- Installation Training
- Lead Generators
- Product Knowledge
- Warranties
- Customer Service
- Sales Rep

47. STANDARD INDUSTRY WARRANTY:

While most synthetic grass companies offer a certain type of warranty for their artificial turf products, AZ Luxury Lawns offers a 10-15 year manufacturer and a 10 year installation warranty to customers, as this is standard within the industry. The SGW warranty covers any manufacturing issue that could arise.

48. THE MAIN SYNTHETIC GRASS YARN EXTRUDERS:

Yarn extrusion is defined as the process of transforming liquid plastic into individual solid fibers by pushing the liquid plastic through a fixed cross sectional profile that is designed to form each individual blade of turf. For example, a turf blade can be extruded with a 'W' shaped profile or a 'U' shaped profile. In the world of yarn extrusion, these companies are the main producers of the latest in synthetic turf technology:

Royal TenCate: As the world's leading producer of high quality synthetic grass fibers, Royal TenCate develops and manufactures synthetic grass fibers, primary backing and infill materials for synthetic turf systems. With the latest in turf design, TenCate features grass blades of all shapes and specs while incorporating "Cool Yarn" technology as well as U.V. inhibitors within their artificial grass materials. Their grass products are featured as a line called "TigerTurf" and is distributed across the continents. Synthetic Grass Warehouse is the exclusive North American distributor of this popular turf line.

Bonar: Based in Belgium and the United Kingdom, Bonar Yarns is one of the major players in synthetic grass yarn extrusion. They feature "Ultra technology" which focuses on durability, resilience and skin friendliness. "CoolGrass" technology is focused on the surface temperature of their products through light reflective technology.

Mattex: Based out of the Jeddah, Kingdom of Saudi Arabia. In the present day, Mattex has two facilities, one in Jeddah and one in Dubai as well as warehouse locations around the world. They focus primarily on carpet and synthetic grass backings.

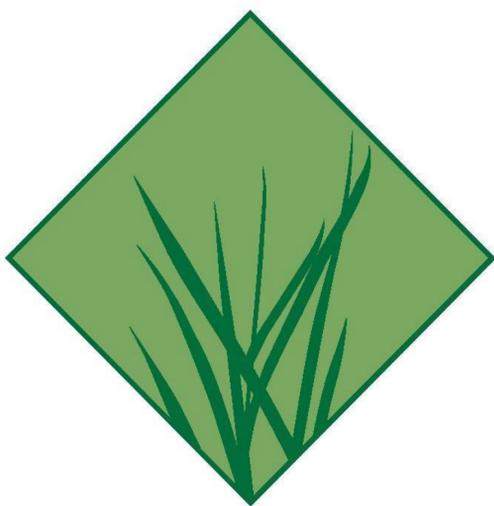
49. HOW SGW SYNTHETIC GRASS IS PACKAGED AND SHIPPED:

After you place your order you also might wonder what happens after you hang up the phone or send the email. We have broken the process down into nine basic steps:

1. Place your order
2. Order is printed and processed through our system and your sales rep.
3. After your sales rep informs the warehouse crew, the warehouse pulls your turf from our racks with a carpet pole forklift.
4. The turf is cut from the plastic wrapping and is inspected for any potential defects or damages.
5. The turf roll is measured according to your specifications
6. The turf roll is cut with an AccuCut Q9 carpet machine, free of charge.
7. The turf roll is re-wrapped in heavy duty plastic.
8. A shipping label or a pick up label is placed on your roll.
9. The roll is either shipped or placed in a UFS truck, car, wagon, airplane ... but we don't recommend skateboards, scooters or pogo sticks.

50. WHY AZ LUXURY LAWNS:

For more than ten years, AZ Luxury Lawns supplies only top quality products along with the best service the synthetic grass industry has to offer! When you choose AZ Luxury Lawns, you choose the highest quality source for synthetic grass products and services.



Arizona Luxury Lawns & Greens

Where the Environment and Technology Meet™

AZLUXURLAWNS.COM Office -480-991-0196 Fax - 480-991-1004