

Introduction

Over recent years there has been an increasing trend of installing artificial grass court surfaces, more correctly referred to as sand filled artificial grass (SFAG). The carpet is available in varying fibre lengths and a range of colours, as is the sand infill. There are a number of brands available in Australia from the tennis court builders using Australian and imported yarn.

What is it made of?

A synthetic grass court is basically a tufted synthetic carpet laid on a base usually constructed of concrete or asphalt, although there are other alternatives. The carpet is then usually filled with sand to occupy the space between the carpet fibres to within about 2mm of the top of the pile. The purpose of the sand is to hold the carpet in place, to provide a firm playing surface and to facilitate the drainage of surface water.

How does it perform?

It is difficult to generalise about the playing characteristics of sand filled artificial grass court surfaces as a single type of surface, due to the number of variations available in the market place. Playing characteristics vary according to type of product, its age and condition. Indicative playing characteristics are:

- Medium slow to very fast ball speed,
- Medium to low ball bounce,

- Variable trueness of bounce depending on carpet design and type & level of sand infill,
- Little topspin,
- With slice,
- Generally firm footing, but can have partial slide,
- Have reasonable shock absorption qualities.

How is it looked after?

All courts including sand filled artificial grass surfaces require maintenance, which is of vital importance if the surface is to remain good to look at, consistent in play, permeable and long-lasting.

Maintenance procedures are designed to ensure that:

- The playing surface is kept clean,
- The playing surface remains consistent to give a true and predictable game,
- Free drainage of surface water,
- Looks attractive and well kept at all times.

These objectives are achieved by:

- Removal of leaves and twigs, etc,
- Regularly grooming to freshen the fibre surface and counteracting sand drift,
- Regular treatment for moss/algae prevention,

Sand Filled Artificial Grass Surface



Basically you look after it by keeping it clean. If plant debris is allowed to remain on the surface for a length of time its decaying can form a drainage inhibiting skin within the surface and provide a medium for moss and algae growth.

The regular removal of any plant debris and other rubbish is recommended. Brushing the surface is a crucial operation if premature loss of pile and deterioration of drainage is to be prevented.

Brushing also helps to overcome compaction and aids redistribution of the sand. The frequency of brushing is dependent on the amount of court use and the amount of plant debris. It cannot be overemphasised that to neglect the brushing of a sand filled artificial grass court surface may have serious long term consequences, even if, in the short term, the court does not appear to suffer.

In certain circumstances moss and algae can become established on a court's surface and are only serious problems if allowed to become established. Since prevention is better than cure, treat the court with a good moss killer algacide at least once a year. Contact your carpet installer for guidance.

Weeds may occasionally appear on the surface, when small they can be removed by hand without damaging the surface. Localised infestations of weed seedling can be treated with a domestic weed killer. Contact your carpet installer for guidance.

Chewing gum and cigarettes should not be

allowed on the court as they have the potential for leaving unsightly marks and damaging the surface. Inadequate maintenance could possibly reduce the life of a sand filled artificial grass surface by as much as half.

Rejuvenation

Rejuvenation involves the removal and replacement of the sand to de-compact the sand and to improve drainage. Generally it should be undertaken at about the half life of the carpet. This would generally be done in the range of 4 to 7 years after installation of a new sand filled artificial grass surface.

Method of replacement

The synthetic grass carpet is removed entirely and replaced with a new synthetic grass carpet and sand infill.

Lifecycle costs

Court owners need to be aware that sand filled artificial grass surfaces, as with any surface, do not last forever. They do have a finite life, which is dependent, in part, on their frequency of use and on how well they are maintained. The cost of installing a sand filled artificial grass surface is dependent on many factors. There is annual maintenance costs, some of these cost can be reduced by volunteers versus maintenance contractors. Also there is periodic maintenance and possible repair costs. Ultimately there is the cost of replacement of the sand filled artificial grass surface. It is essential that court owners understand the ongoing costs (annual, periodic, replacement) and make provision for the future expenses including the ultimate replacement of their court surface.

Sand Filled Artificial Grass Surface



Preferred specifications:

Warranty:	Minimum 8 years
Denier:	Weight of fibre, in grams. Minimum 800 g/sqm
Pile Height:	Length of fibre above backing – no greater than 14mm
Primary Backing:	Polypropylene/polyethylene fabric into which fibre is tufted.
Secondary Backing:	Rubber latex or similar to lock fibres into place
Lines:	Manufactured from the same specification as the synthetic grass material.
Carpet Rolls:	Each roll to be manufactured from the same production run, to ensure uniformity.

FAQ's

What is the lifespan of a sand filled artificial grass?

The life is dependent on a number of factors including, but not limited to, the quality of the carpet and installation, the maintenance regime, the usage of the court. Current generations are expected to last for 7 to 15 years.

Our courts do not drain well, why?

Bad drainage is usually a sign that a court is aging and has a build-up of contaminants in the sand infill and causing it to compact. This compaction effectively blocks water drainage. It may be appropriate to look at rejuvenation of the courts.

How do they handle after rain?

Generally one of the advantages of sand filled artificial grass surface courts is their ability to allow play in all weathers.

Can courts be patched?

Court owners are not encouraged to patch problem areas of sand filled artificial grass courts. This is only an interim measure often based on cost savings. This can often cause more problems than it solves, creating a possible trip risk.

How popular are they?

They are becoming increasingly prevalent as the chosen surface for veteran and older recreational players, because the surface appears easier on the body.

What colour should I choose for my tennis court surface?

Not an easy question to answer. Personal preferences, surface type selected, other local courts and aesthetics all have an influence to a greater or lesser extent. The USTA have conducted tests that show the best colour is that which gives the greatest contrast to the ball. In this case the opposite colour to the yellow / green ball is violet.

Information Sheet

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