
SPORTS PITCH
RECYCLING
SSS
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INSURANCE CLAIMS/FLOOD DAMAGE
For RECLAMATION and possible REINSTALLATION

For INFILL TESTING and INFILL REPLACEMENT

Our recycling process is a solution for sports surfaces approaching their end of life. It offers the best environmental solution for the re-use, re-purposing and recycling of synthetic turf and infills.

Benefits include

- Zero waste going to fields tips or landfill
- Savings as a result of re-use of existing infill and turf
- Recycling is enabled
- Transportation of materials reduced
- Significant savings on installations of quality approved Recycled with performance and installation warranty
- Positive public relations linked to the re-use or donation of Recycled to community projects or feeder schools
- A complete and valid audit trail

This process provides a cost-effective solution to insurance claims linked to sub base issues, defective product and faults arising from natural disasters eg flooding.

Further more, should you have concerns about your 3G rubber infills, we offer infill testing and replacement.

BENEFITS TO *THE ENVIRONMENT*

The value of our recycling process is that it reduces environmental costs and facilitates re-use.

- Zero waste to field tips and landfill.
- Reduced CO^2 emissions linked to transportation.
- Second life for reclaimed carpet and infills. Carpet recycling enabled.
- On-site transparency given to the process.
- A complete and valid audit trail linked to recycling.
- Outcome of traditional rip and roll process - field tipping.

We aim to eliminate the bad practice of field tipping and landfill.

The process ensures reduced carbon emissions through lower material processing and transportation costs.
It also aids the avoidance of environmental and social costs linked to the current practices of land filling and field tipping.

We can assist your organisations' environmental policies linked to sustainability.

Our process eliminates the bad practice of field tipping and landfill

Sand for re-use or re-purposing

Recycled grass, ready for re-use and recycling.

OFF-SITE
CARPET RECYCLING

Professional off-site recycling of the carpet can only take place when infills are removed. Our process, through removing 90% of infill on-site enables the recycling process to commence. Infill free carpet significantly reduces haulage costs, enables professional recycling and totally avoids landfill / field tipping.

The value of processing on-site is:

- Potential re-use of carpets and infills
- Carpets can be fully recycled
- Cost of transportation linked to recycling significantly reduced
- Cost of landfill avoided
- A complete and valid audit trail
- Satisfies environmental legislation linked to sustainability and waste

THE RECYCLING PROCESS

Synthetic carpet that is not fit for re-use or re-purpose is processed at a recycling plant. This recycling process can only be undertaken when the carpet is free from infill - allowing the carpet to be broken down into flock and plastic pellets.

Flock is used as a secondary energy resource in the construction industry (making of cement).
The plastic pellets are then re-used in the manufacture of secondary plastics.

MidUK Recycling is an independent company registered with the Environment Agency.
The company has a proven track record of working with business and councils to achieve a genuine 100% landfill diversion.

THE ON-SITE *RECYCLING PROCESS*

- Site visit to ascertain the quality of the existing materials. If required, an independent laboratory will evaluate the artificial grass carpet, silica and rubber infills.
- The surface is cleaned to remove the top layer of material if contaminated.
- The surface is de-compacted prior to its removal.
- Using specialist cutting equipment, the rolls of carpet are precision cut.
- Specialist machinery is used to process the rolls of turf. Infills are removed and loaded into 1 ton bulk bags, to be stored on site for re-use or relocation.
- The carpet can be reclaimed in rolls of 55m length in 4m or 2m widths. Rolls are tied and secured when removed from the machinery to assist in transportation. The rolls are kept tight and rolled on a plastic core to maintain roll stability.
- The rolls are numbered as they are processed for ease of relocation, re-purposing or recycling.
- Rolls can be removed from site for relocation, re-purposing or recycling.
- Bagged sand (test approved) can be re-used in a new installation or re-purposed.
- Sub-layers/shock-pads are left in existing condition, potentially avoiding the need for replacement.
- New installation or recycled installation can now be undertaken.

OFFICIAL TESTING
FOR RE-USE / REPURPOSING

We employ the services of an independent UKAS ISO 17025 accredited laboratory to ascertain the quality of the existing sports system: artificial grass carpet, the silica infills and rubber infills.

INFILL - SAND & RUBBER

A full grading in line with EN 933-1 & a particle shape assessment in line with BS EN 14955 is carried out to both the sand and rubber infill. Through this testing, we can ascertain if the infill is suitable to be re-installed and meets the correct criteria for FIFA / IRB / FIH / EN.

Bulk density testing of both the rubber and sand infill is also carried out under BS EN 1097-3 1998.

The laboratory also carry out an in house contamination analysis of the infill materials. **This testing ensures that the relocated infill is fit for purpose and meets the stringent standards set by governing bodies.**

INFILL - RUBBER ONLY

Thermogravimetric analysis testing (TGA) ascertains the percentage of non-organic and organic matter in the rubber. This test involves gradually heating a small sample of the rubber to a temperature of 850°C and analysing its performance throughout the process.

CARPET

Samples of artificial grass carpet are tested before being made available to alternative sites. Testing is as follows:

- Tuft withdrawal ISO 4919. This test determines the force required to pull out one "tuft" of artificial grass and is an excellent method of ascertaining the product's future life expectancy.
- Differential scanning calorimetry (DSC) ISO 11357-3 1999. This test allows us to determine the yarn's ability to perform under extreme temperatures and shows the polymer make up of the different pile yarns in the artificial grass carpet.

CASE STUDY / RELOCATION
CHELSEA TRAINING GROUND

Due to technical advances in turf technology, the client upgraded the existing 3G surface as its performance standards had fallen bellow FIFA Pro (FIFA2) as required for elite Category One, Academy status.

The 7-year-old carpet had been professionally maintained so the residual values were substantial. Independent testing confirmed that the artificial carpet was in an excellent condition and achieved tuft withdrawal results consistent with those of a new artificial grass 60mm product.

Thanks to our recycling process, two separate organisations benefitted from recycled installations.

THE BENEFITS

- 350 tons of sand rubber infill re-used.
- 9000 m^2 of carpet re-purposed.
- 3000 m^2 of carpet installed at a Rotherham 5-a-side centre
- 6000 m^2 of carpet relocated to a Ferrers football pitch.
- Zero environmental waste.
- Zero landfill charges.
- Corporate compliance with COP21
- Reduced carbon footprint linked to deliveries and industry supply chain.


Chelsea Training Ground 'Old Pitch'


Recycled carpet ready for re-location


Relocated to Ferrers School

CASE STUDY / RELOCATION
MAYFIELD SCHOOL, LONDON

The Mayfield pitch was taken up and the original 156 tons of specialist sand infill was removed and stored in preparation for re-use into the 3G surface. The rolls of artificial grass were processed and prepared for transportation to the new site.

Our recycling process was performed on the existing 15mm rubber shockpad with ease and no damage. The rolls of artificial grass were cut and rolled to 4 metre width x 55 metre lengths to mirror the original roll plan. This enabled a second life as a full size pitch.

THE BENEFITS

- 200 tons of landfill diverted.
- 30 rolls of 5 months old artificial sports grass prepared for re-use 6400 square metres.
- All specialist 200 million year old river wash sand re-installed into the new 3G pitch (156 tons) to the specification of the new field.
- 19 Arctic Lorries not required (Massive Carbon Saving) reduction of heavy goods into and away from the school access and surrounding area. 2,090 miles of haulage saved!
- 6400 m^2 of carpet reinstalled as sports MUGA surfaces at St Johns on the Hill and Lipson Academy.

CASE STUDY / PRIMARY RE-USE
EVEREST COMMUNITY ACADEMY, BASINGSTOKE

The existing full size sand based MUGA surface was installed in 2007 and was in good condition. However, the Academy's primary focus had shifted towards football. It was decided to change the surface to a 3G turf more suited to football and touch rugby.

The standard approach would have been to rip up the existing MUGA surface and dispose of it at a local landfill site / field tip. However, our recycling process enabled infill materials to be reclaimed and re-used in the Academy's new surface, resulting in savings of £20,000.

THE BENEFITS

- Savings made on the re-use of existing infills enabled the client to install a higher specification 3G surface.
- Secured sale and relocation of the original sand based carpet.
- Prevented 200 tonnes of infill going to landfill / field tip through re-use.
- Reduced carbon footprint linked to deliveries and industry supply chain.
- Ensured project was delivered on time and on budget despite inclement weather.
- 5,500 m^2 of carpet sold for re-use as sports MUGA surface.

REPURPOSE
SAND AND TURF

Grounds staff can use reclaimed sports sand for top dressing into natural turf.
Top dressing, is the layering of sand and soil materials, not fertilisers, onto the surface of a turf / soil system.
Top dressing is used mainly for three reasons -

1. Restoration of a level surface after play or subsidence has affected the surface levels.
2. To create or maintain a desirable (usually coarse) particle size range in the surface soil.
3. To control thatch or the organic matter content at the surface, usually to increase speed, bounce, and resistance to mechanical forces.

The particle size distribution of the top dressing material must be the same or coarser than the soil below it.

The UKAS laboratory testing of reclaimed sand infills verifies particle size.

IMPROVING DRAINAGE AND PLAY

The drainage characteristics and surface playability of topsoil can be improved by adding suitable sand but it should be noted that a high proportion of sand is required to achieve a significant improvement in drainage performance.

For the majority of pitches it is more cost effective to spread a layer of sand on the pitch (typically 25 mm deep) and lightly work this into the surface of the topsoil to improve infiltration and reduce surface damage from wear. This sand layer is particularly effective when combined with secondary silt drainage and sand grooving systems.

OTHER APPLICATIONS

Gardens and external landscaping
- of areas that are high use for leisure purposes or are unsightly.

Existing site applications
- both sand and carpet could be re purposed on site providing walkways, temporary covers and on-site landscaping.

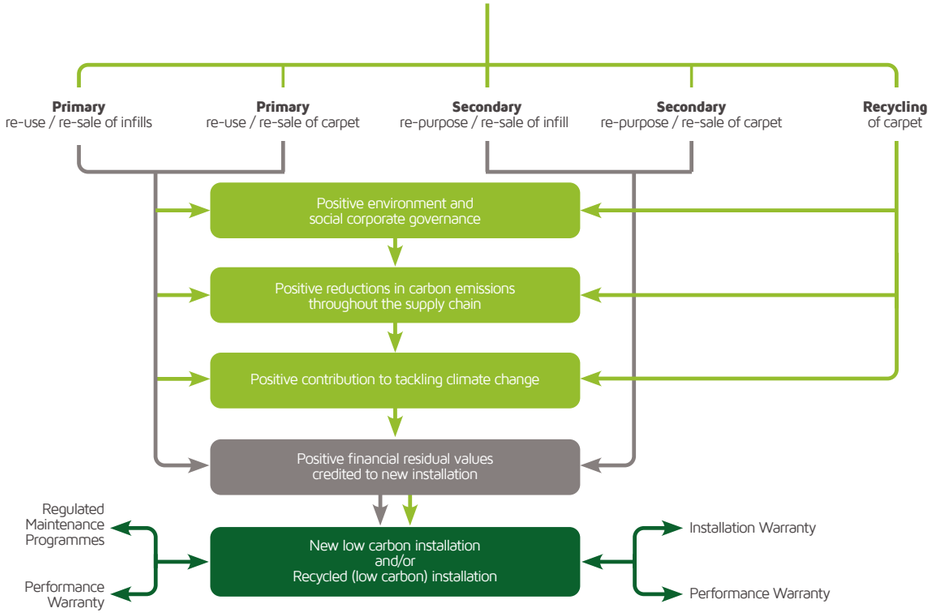
Golf applications
- golf shooting ranges, golf tee areas, golf walk ways, golf bunkers.

Event Grass
- carpet can be re-purposed for a variety of events; exhibitions, concerts, festivals and marquee carpeting.

Equine applications
- sand infills that meet equine standards could be sold on to / or donated to local horse charities or yards for arenas.

PITCH RECYCLING PROCESS

On site reclamation of carpet and infills



We carry stock of recycled grass for tennis, netball, football and hockey with performance and installation warranties.

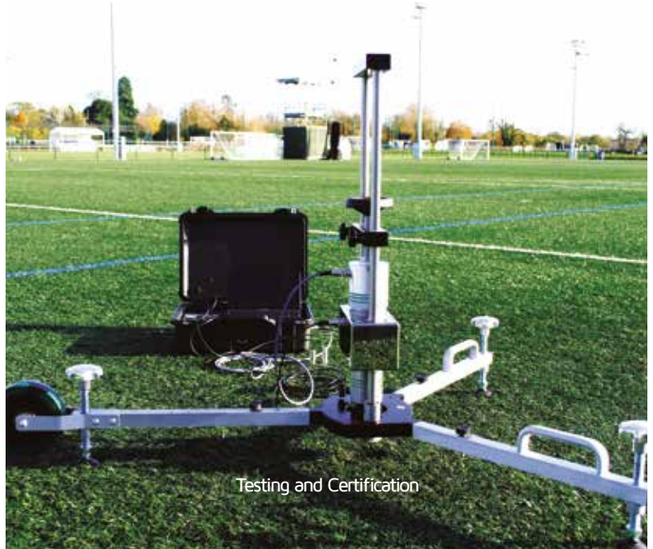
SAND FILLED products are ideal for MUGA areas and can be independently tested to BSEN standards.

SAND DRESSED products are ideal for hockey and can be independently tested to FIH standards.

3G SAND RUBBER PRODUCTS are ideal for rugby, football and 5-a-side / 7-a-side areas and can be independently tested to FA standards.


Sub Base Installation


Carpet Installation


Testing and Certification


Regulated Maintenance

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