



nottssport<sup>®</sup>///:  
Synthetic Surfacing / Multi-Sports

Design a Multi-Use Games Area in Minutes!  
Our step-by-step guide to planning a bespoke sports and games facility

[www.nottssport.com](http://www.nottssport.com)



## Your guide to creating a tailor-made MUGA

Multi-Use Games Areas – or MUGAs – are the cost-effective way to provide a wide range of sports and activities in one self-contained area. Notts Sport's high-quality MUGA solutions comprise key components to create just the right performance for activities such as football, tennis, hockey and basketball, topped by a durable synthetic turf surface available in a choice of energetic colours.

This handy guide takes you through all the options to create a first-rate MUGA up to the size of two tennis courts and tailor-made to your needs.

Simply look at each step, choose the best option for your facility, and complete the checklist attached to the back cover of this brochure.

## The Notts Sport® Service

**Notts Sport® is a leading specialist in the design and supply of synthetic surfacing systems for sport, play and leisure. The company has over 25 years' experience in providing non-turf technology for cricket, tennis, hockey and football as well as children's play and landscape environments.**

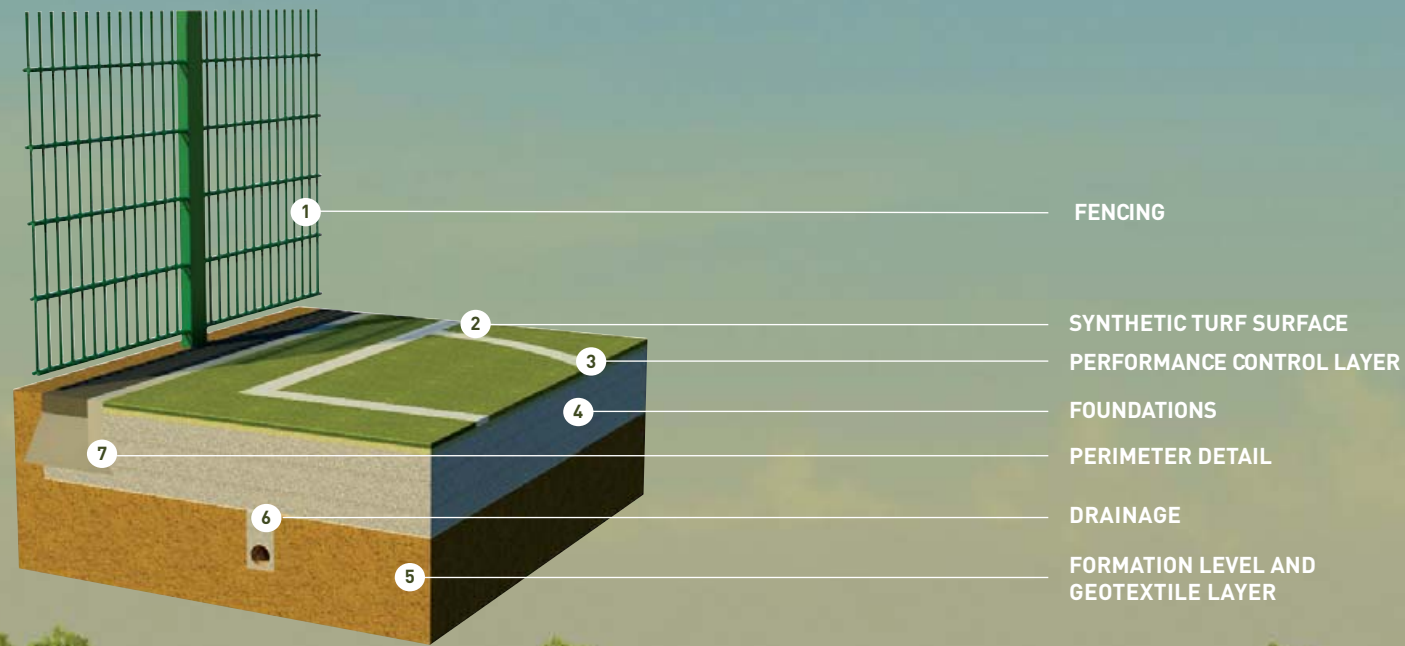
By choosing Notts Sport® for your project you can benefit from expert advice and assistance from the design stage to installation and aftercare. Our experienced team is here to offer a guiding hand to help turn your dream project into a reality.

Since launching its first MUGA brochure in 2006, Notts Sport® has helped to guide hundreds of installations throughout the UK and worldwide and has built up an impressive client portfolio, working with local authorities, schools, clubs and sports bodies.

Notts Sport® offers a complete Design & Advisory Service at no up-front fee or cost to the customer. This service is a foundation of the Notts Sport® ethos and is included to ensure its products are always installed to the highest standards and that every project is a success.

# To play at your best, play on the best!

Consistent performance, low maintenance and a user-friendly design are key components of a top-class MUGA. Here's how they add up to a facility that will keep on playing for years



**1. FENCING:** Keep the ball in play and your MUGA secure with smart steel mesh perimeter fencing and rebound kickboards.



**2. SYNTHETIC TURF SURFACE:** Good looking, durable, low-maintenance surfaces are loved by players and groundskeepers alike.



**3. PERFORMANCE CONTROL LAYER:** Choose from a range of base options to suit the performance standards of sports and activities you wish to support.



**4. FOUNDATIONS:** While keeping a very level playing field and helping absorb impact, stone aggregate foundations ensure faster drainage for post-rain play.



**5. FORMATION LEVEL AND GEOTEXTILE LAYER:** The underlying ground is levelled, compacted and covered by a geotextile layer which helps to keep the stone aggregate foundations in place.



**6. DRAINAGE:** A network of underground perimeter drains helps channel rainwater from the facility.



**7. PERIMETER DETAIL:** Tidy and tamper-resistant edging ensures the synthetic turf carpet stays sound over its lifetime.



## Step 1: Choose Your Base

The sports and activities you would like your MUGA to provide will determine your choice of base. There are two types available, the Dynamic Pitch Base and the Engineered Pitch Base.

**DYNAMIC PITCH BASE:** The Dynamic Pitch Base is made from layers of compacted and levelled stone aggregate. This offers a highly stable foundation over which the performance/shock pad layer is fitted. The aggregate also provides additional shock absorption for high-impact sports such as football and hockey.



**ENGINEERED PITCH BASE:** The Engineered Pitch Base consists of bitumen-bound macadam laid over compacted and levelled stone aggregate. This 'bound' base provides a cost-effective option for sports requiring controlled ball bounce such as netball, basketball and tennis.



## Step 2: Pick a Perimeter Kerb

Your choice of perimeter should be determined by how secure your MUGA facility will be – for example, will it be open to the public and unsupervised, or limited to supervised classes or club users?

SINGLE LINE KERB



DOUBLE LINE KERB



**SINGLE LINE KERB:** A Single Line Kerb is an ideal standard for the majority of synthetic turf facilities. This traditional, cost-effective perimeter detail helps to ensure the longevity and tamper-resistance of the surface, by holding it in place flush with the surrounding ground and preventing surrounding vegetation encroaching onto the playing surface.

**DOUBLE LINE KERB:** A Double Line Kerb provides a superior-strength, tamper-resistant edge by enclosing the perimeter of the synthetic turf between two precast concrete kerbs and securing it below ground level. This finish also prevents surrounding vegetation encroaching onto the playing surface.

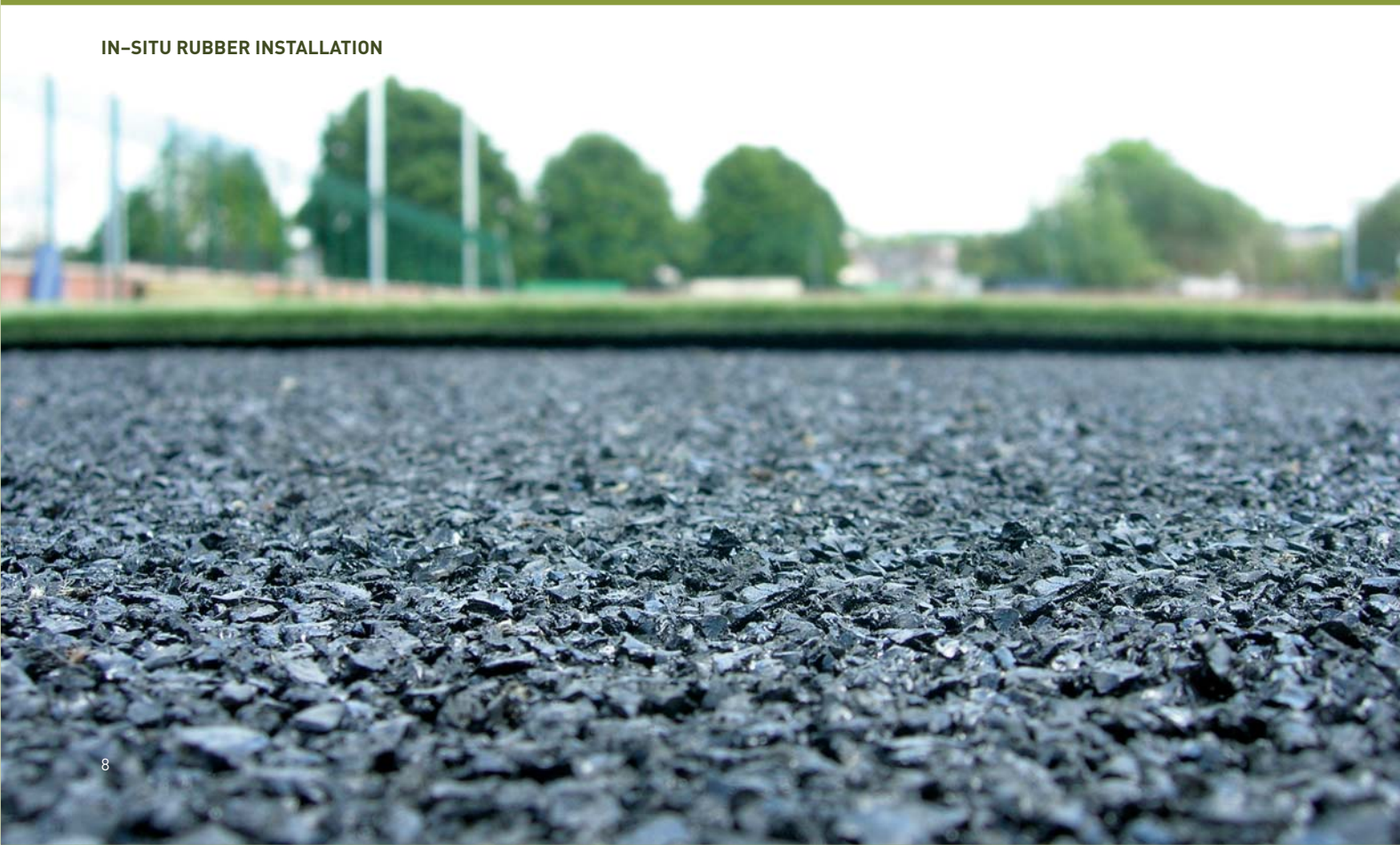




SAND ENVELOPE SYSTEM® INSTALLATION

### Step 3: Decide on Performance

The shockpad layer will control your MUGA's playing performance for different sports and activities. It will also play a big part in determining the lifespan of the facility, and your project cost.



IN-SITU RUBBER INSTALLATION

### SAND ENVELOPE SYSTEM®

Playing performance is regulated by a layer of sand, sandwiched between two NottsFilm® membranes to keep it clean and in place. This sits above a Dynamic stone aggregate base. The performance layer is covered by synthetic turf.

- Longer lifespan (equivalent to 2 synthetic turf surfaces)
- Long-term cost-effectiveness
- True multi-use performance for a wide variety of sports
- Very porous for playability after rain

### NOTTSPAD® SP

The shock-absorbing NottsPad® is laid over a Dynamic or Engineered Pitch Base. The shockpad performance layer is topped by synthetic turf.

- Longer lifespan (equivalent to 2 synthetic turf surfaces)
- Long-term cost-effectiveness
- Quicker installation time and reduced construction costs
- Very porous for playability after rain

### IN-SITU RUBBER

Playing performance is controlled by the rubber layer (typically 15mm for football/hockey and development-level tennis/netball). This is laid over an Engineered Pitch Base and the rubber is topped by synthetic turf.

- Rubber will typically need replacing at time of synthetic turf surface
- Lower initial cost but higher long-term
- Installation requires safety restrictions for use of resins and binders
- Reduced playability after rain

Shockpad Options	Activities Supported	Typical Lifespan	Base Option
Sand Envelope System®		25+ years	dynamic
NottsPad® SP		20 years	dynamic & engineered
In-situ rubber		10-12 years	engineered

## Step 4: A Choice of Toppings

The synthetic turf surface you choose will be largely determined by the activities your MUGA will offer. The surface can also offer additional protection for the underlying performance layer, increasing its lifespan and long-term cost-effectiveness.



### SAND-DRESSED TURFED GRASS

Sand-dressed turf grass has the shortest lifespan of the surfaces available and will need more frequent maintenance as it ages.

- Most impressive visual appearance when new
- Maintenance frequency increases over time
- Tufts wear quicker than sand-filled
- Seaming construction method carries risk of splitting



### SAND-FILLED TURFED GRASS

Sand-filled turf grass is popular, with a medium life span and requires regular maintenance to sustain quality.

- Well-know, popular grass typed with decent lifespan
- Quality degenerates quickly without regular maintenance
- Risk of split seams after installation
- Repairs are costly and difficult

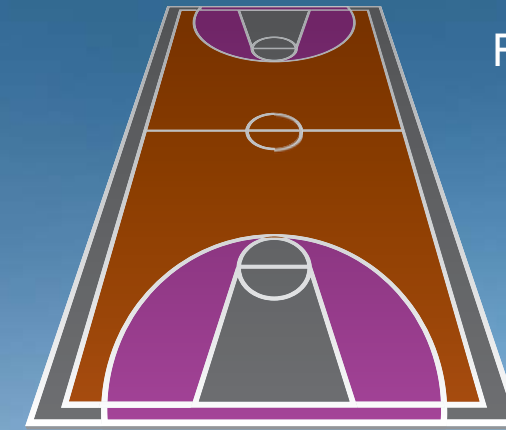


### VHAF® NOTTSSWARD® NEEDLE-PUNCHED GRASS

Needle-punched grass has the longest lifespan with better drainage and requires the lowest frequency of maintenance.

- Versatile surface with longer lifespan
- Higher resistance to damage and lower maintenance
- Excellent drainage
- Significantly reduced risk of split seams

Synthetic Turf options	Activities Supported	Typical Lifespan
Sand-dressed turf grass	football                      hockey                      netball                      rugby training (non contact)                      athletics training (no spikes)                      general ballgames (eg. softball)                      aerobic activities	8-10 years
Sand-filled turf grass	football                      hockey                      tennis (elementary level)                      rugby training (non contact)                      athletics training (no spikes)                      general ballgames (eg. softball)                      aerobic activities	10 years
VHAF® NottsSward® Needle-punched grass	football                      hockey                      tennis (elementary level)                      basketball                      netball                      rugby training (non contact)                      athletics training (no spikes)                      general ballgames (eg. softball)                      aerobic activities	10-12 years



## Footprint Options

Your MUGA surface can be designed to suit the activities on offer, with inlaid lines used to mark out different sports and games.

VHAF® NottsSward® is also available 15 energetic shades – from Grass Green to Sunset Orange – offering vast scope for using colour. They can also be used to complement urban or rural landscapes.

Your organisation's name or a revenue-earning sponsor's logo can be inserted into the playing surface.



## Step 5: Set Your Perimeters

A perimeter fence will not only retain the ball during play, but also greatly improve the security of your MUGA.

The two fencing options available can feature rebound boards (or denser mesh) to the lower levels, and are fitted with high-quality lockable gates. Your choice of fencing will largely depend on budget and the activities the MUGA will be used for.



**ROLLED WELDED MESH:** Ideal where there is no requirement for a rebound capability, although timber rebound boards or higher density mesh can be incorporated into the design to provide this feature. Rolled welded mesh is also better suited to 'low-impact' use, in which there is little chance of a football being kicked at it regularly from close range

**PANELLED RIGID MESH:** The most robust, durable and vandal-resistant option available and ideal for all MUGAs, especially where football is the predominant activity. Where rebound performance is necessary, the lower 1.2m is constructed from a denser mesh. This is also very valuable for public-use or school facilities in which a clear view of the facility is beneficial.

## Step 6: Go into Extra Time with Floodlights

Floodlights can add many hours of extra playing time to your facility, particularly in winter. This can help to bring in extra revenue and allow for a more flexible programme of activities to be played, and a wider range of groups to be accommodated.

**RAISE-LOWER COLUMN FLOODLIGHTS:** The column can be quickly lowered to ground level using a simple counterbalance unit. This makes routine maintenance easier and safer. A large poured-concrete foundation is used to support each column.

**STATIC COLUMN FLOODLIGHTS:** This economical alternative requires the groundsman or engineer to use an appropriate vehicle to lift them up to carry out maintenance. Pre-cast tubular foundations are sunk into a deep circular excavation to support each column. public-use or school facilities in which a clear view of the facility is beneficial.



## Step 7: Get in Touch!

We hope this brochure helps to illustrate all the components that make up a great MUGA, and that you have already started to build up an idea of what your new facility will be like.

Of course, if you have any questions at this stage, simply give us a call and we will be happy to help.

Alternatively, if you have filled out the checklist on the opposite page, you can return it to us and we'll contact you about the next step – turning your choices into a detailed project design.

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Stamp  
Here

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# Your MUGA Options

1. What best describes the surface of the proposed area? (please tick)

grass  bare ground  asphalt  concrete

2. What is/was it used for?

.....

3. Do you have planning permission?

yes  no  n/a

4. Do you have funding grants?

yes  no  n/a

5. Your design choices:

<b>BASE:</b>
<b>KERB EDGING:</b>
<b>SHOCKPAD:</b>
<b>SYNTHETIC GRASS:</b>
<b>FENCING:</b>
<b>FLOODLIGHTING:</b>

Other comments:

.....  
.....

Name .....

Position.....

Organisation .....

Address .....

.....

.....

Tel.....

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