# OUTDOOR BASKETBALL EQUIPMENT GUIDANCE 



## BASKETBALL EQUIPMENT - OUTDOOR

## INTRODUCTION

This document provides guidance and information in relation to outdoor courts including equipment, surfacing, lighting, fencing and other elements.

Outdoor courts offer the opportunity for players to play and practice on their own, join with friends and play together in casual games of $7 \mathrm{v1}, 2 \mathrm{v} 23 \times 3$ etc. or play a 5 v 5 full court game.

These settings can be used by clubs and recreational players for informal games or more structured competitions, such as $3 \times 3$ tournaments and summer leagues.

Outdoor basketball also offers the opportunity for sports providers to consider small sites that can accommodate facilities for basketball, for example:

- A single backboard and ring placed on flat area with no court markings.
- A single post and backboard set up as part of the perimeter fencing on a MultiUse Games Area (MUGA) with limited court markings.
- Two half courts on a play area too small to accommodate a full-size court.
- Please note, we recommend there should be a total uninterrupted space of at least $9 \mathrm{~m} \times 9 \mathrm{~m}$.


## PLAYING SURFACE

The playing surface needs to be an area of hard standing and fit for purpose. The preferred surface for outdoor basketball is a porous macadam. This is most appropriate as it provides a good ball bounce, is slip resistant and is also suitable for wheelchair basketball.

The porosity enables surface water to drain away quicker.
Polymeric surfaces are also suitable for basketball, however not recommended for wheelchair use.

Sand filled, synthetic turf and needle punch surfaces are not recommended for outdoor basketball.


Provided that the hard surface is in a suitable condition, the most cost-effective way to re-vitalise a court is to just clean, seal and paint it. However, if a new surface is needed, this can be achieved with a new layer of macadam.

Plastic modular floors can also be used for outdoor play. These are most often used in portable events and $3 \times 3$ as they can be easily transported.

Please note, this flooring is designed to be installed onto concrete and if used on grass will need a sub-floor. It also needs to be pinned down to ensure it is safe to use. It is important to keep spare tiles in case originals get damaged or stolen.

## COURT MARKINGS

Research from users of outdoor courts shows the importance of the presence of line markings, especially the correct line markings. While full-size basketball courts ( 28 x 15 m ) or $3 \times 3$ courts ( $15 \times 11 \mathrm{~m}$ ) with appropriate run-offs are preferred, often the space available dictates the size of the playing area and whether a complete court can be marked or whether partial marking is more practical.

It is possible to alter the length or width when developing a MUGA. For example, a MUGA incorporating an outdoor tennis court would increase the length of a basketball court with the basketball post being set as part of the perimeter. This will create a basketball court slightly longer than the official size, but it would still be suitable for recreational and casual basketball to be played.

It is important to note that while the length and width of a court could be accommodated in an outdoor environment, the internal dimensions must remain the same i.e., the 3 -point line, Free Throw line, Keyway/Restricted areas all retain the same dimensions as an official $28 \mathrm{~m} \times 15 \mathrm{~m}$ court.

In larger spaces, it may be possible to include extra baskets, providing more playing opportunities.


Duchess Road court in Sheffield is an example of a larger space ( $38 \mathrm{~m} \times 20 \mathrm{~m}$ ) which allowed for half court baskets increasing the number of hoops and playing opportunities. The longer court length does not change the key dimensions of the 3point line and key area.

Line marking guidance for a full court set up can be seen below:
For a half court set up a 15 m width and $11-14 \mathrm{~m}$ length is recommended. A minimum of 1 m surrounding the court to the nearest obstruction should be provided as a safety run off. The official court markings and dimensions can be seen below for $3 \times 3$ play:


Line Marking Requirements

- All lines should be 5 cm wide
- Lines should be in a contrasting colour to the playing surface and visible to all


Diagram 1 Playing court


## EQUIPMENT

Outdoor equipment needs to be sturdy, well fixed and requires minimum maintenance.
The following equipment guidelines are recommended:

- Only fixed equipment is used at open access courts where players are unsupervised. Portable equipment can be used for organised tournaments such as FIBA $3 \times 3$.
- For fixed baskets, galvanised steel is used for the stand and backboard to prevent rust.
- A standard ring height ( 3.05 metres) should be installed at open access facilities to avoid possible damage/misuse. Ring height is the most important element of the installation.
- Rings installed at junior height of 2.60 m must be robust and secured to the backboard and post in a way that prevents damage to the ring should it be misused.
- Outdoor basketball goals should be manufactured in galvanised steel with either steel, steel mesh, wood, or polypropylene backboards.
- The preferred backboard size should measure $180 \times 105 \mathrm{~cm}$ (official size) or a minimum of $120 \times 90 \mathrm{~cm}$.
- It's recommended that baskets should have at least a 1.2 metre overhang from backboard to stand - a single post stand to hold the backboard is preferred.
- If a double post stand is used, there should be no cross members between the posts below 2.7 metres.
- Outdoor basketball rings should be galvanised and heavy-duty with net fixings and designed for rigours of outdoor unsupervised use.
- Hooks/loops for nets are important and players often cite the presence of a net being important to their playing experience, both from safety perspective and aesthetically.
- Double thickness rings are sometimes used to prevent breakage. However, single rings are still the preferred options for players and can be found in a variety of robust options.
- The supporting post for the backboard should be sunk into 1 metre of concrete with a base-plate inserted to prevent toppling over. See installation guidance for full details.
- Ground sleeves can be used to enable the post to be moved to allow for other sports.
- Depending on the site, the post should have protective padding. However, many "open" sites will be unsupervised and padding by its nature can be vulnerable to damage.
- Backboards offer a great opportunity for designs, branding and sponsorship


Sure Shot Florida adjustable and galvanised, in-ground unit complete with a transparent $180 \times 105 \mathrm{~cm}$ backboard, and flex ring


Sure Shot Gooseneck zinc coated in-ground unit complete with a galvanised steel backboard measuring $135 \times 115 \mathrm{~cm}$ and solid steel powder coated ring


Sure Shot Gladiator zinc coated in-ground unit complete with a galvanised steel backboard measuring $120 \times 90 \mathrm{~cm}$ and solid galvanised ring


Summerfield Park in Birmingham has an example of a full size $180 \times 105 \mathrm{~cm}$ backboard with supporting frame, solid galvanised ring with hooks for nets, complete with custom branding.


Mandela Community Centre Court in Leeds presents an example of a $120 \times 90 \mathrm{~cm}$ galvanised metal Gladiator backboard with solid galvanised ring with hooks for nets, complete with a customised backboard insert.


Hanley Park in Stoke-On-Trent presents an example of a Sure Shot Florida unit, complete with a $180 \times 105 \mathrm{~cm}$ transparent backboard and flex ring

## FENCING

There are a range of suitable options available for fencing and Basketball England have used chain link, 868 mesh as well as more robust fencing depending on the location and needs of the court in the past. Where new fencing is required, 868 (weldmesh) fence system is suggested. The fencing should adhere to BS4102 and galvanised to BSEN10244-2:2009 Class D. Panels and posts need to be powder coated to BS EN 13438:2013 (min. 100 micron).

Surrounding fencing should be a minimum of 3 m in height and should be 1 m away from the playing area. 4 m fencing directly behind the basket is recommended to prevent the ball from going over the playing area. It is also important to consider entrance points and maintenance access when choosing the right fencing for your project.


Duchess Road Court in Sheffield is an example of a 4 m 868 mesh fence system in black, that is used around the court, complete with 1 pedestrian entrance and a double gate for maintenance.

## LIGHTING

Appropriate care should be taken to distribute lighting as uniformly as possible on the playing court. Preferably lighting capacity should be adjustable according to requirements and the different competitions being hosted.

For basketball courts, an average luminance of 100 lux and uniformity (min/average) > 0.5 is required for training and recreational, whereas for local competitions, an average luminance of 200 lux and uniformity (min/average) $>0.6$ is required.

For a basketball half court, an average luminance of 50 lux and uniformity (min/average) $>0.5$ is required for training and recreational, whereas for local competitions, an average luminance of more than 75 lux and uniformity (min/ average) $>0.5$ is required.

Please note, installing new lights would require planning permission.
Timer - light times will often be determined by the site owner and a timer can be used to set times.


George's Park in Birmingham shows an example of floodlighting

## OTHER CONSIDERATIONS

## PAINTING AND ARTWORK

Painting the court and including artwork on the surface is a great way of making a court more attractive and appealing for users. It is important to use the correct type of paint, we would recommend tennis court paint for this use.

Tennis court paint is an acrylic based paint available in a range of colours, offering suitable slip resistance and protecting your court from weather and foot traffic resulting in longer life for your court.

The best time to paint a court is between April and September due to temperature and surface conditions. If you want to use an artist, please make sure you have the right permissions in place.

Friends of parks groups, local clubs and residents, and the council are usually a great place to start in getting the community's input on the court design.

## SURROUNDING AREA

Trees and bushes overhanging the courts can impede play, leave debris and spores on the playing surface and make the surface slippery and unplayable. Consider pruning/trimming these back to allow for safe play and extend the life of the surface.

The most successful outdoor court projects are often the ones that are near other amenities such as a café, toilets, car park and good public transport links.

## ANCILLARY ADDITIONS

The inclusion of a seating area is great for event as it creates a space for the community and family to come and watch play.

Stainless Steel, galvanised benches are recommended to prevent rust, and powder coated to prolong the longevity of the product.


Clapham Common Basketball Court in London gives us an example of a 3-tiered flat bench spectator seating allowing seats for up to 250 people.

Bins are often requested by players as they want to keep the space clean. However, you must consider the maintenance element that comes with installing a new bin, such as its emptying and durability.

## LIGHTING AND NOISE CONSIDERATIONS

Noise pollution from bouncing basketballs could be an issue for local residents if houses are nearby. Consultation with local housing associations and residents is advisable if intending to build an outdoor court in a built-up area.

## FURTHER INFORMATION ON OUTDOOR COURT PROJECT DEVELOPMENT:

## PROJECT SWISH OUTDOOR COURT RENOVATION GUIDE

HOOPSFIX 'HOW TO RENOVATE YOUR LOCAL BASKETBALL COURT' GUIDE

## APPROVED EQUIPMENT PARTNER

Sure Shot are the official basketball equipment supplier to Basketball England and can provide a complete range of backboards, rings, portable baskets, in-grounds, wallmounts and spare parts.

Visit: shop.basketballengland.co.uk
Tel: 01642224444
E-mail: rsg@rsgsport.com for more information on outdoor equipment


