



# SURFACES WEBINAR

- **Please stay on mute**
- **Ask questions in chat**
- **Webinar - recorded and shared**
- **Slides shared**

# AGENDA

1. DESIGN CONSIDERATIONS
2. TYPES OF SURFACE
3. POROUS MACADAM
4. ARTIFICIAL GRASS
5. ARTIFICIAL CLAY
6. FENCING
7. HOW TO APPROACH YOUR PROJECT
8. OPERATIONAL CONSIDERATIONS
9. FUNDING
10. Q&A

# DESIGN CONSIDERATIONS

	Recommended (Indoor* & Outdoor)	Minimum (Outdoor only)
Length	36.58 (m)	34.75 (m)
Width		
1 court	18.29	17.07
2 courts	33.54	31.70
3 courts	48.77	46.33
4 courts	64.01	60.96
5 courts	79.24	75.59
6 courts	94.47	90.22

## ➤ Size

## ➤ Location

- Levels
- Soil type/poor drainage
- Trees, roots, overhanging branches
- Wind
- Weeds
- Orientation

## ➤ Surface Selection – Type of Player, porous, type of use

## ➤ Future Expansion

## ➤ Floodlights

## ➤ Indoor Courts



# TYPES OF SURFACE

## ➤ **Acrylic**

- Performance surface laid on a dense madam surface
- Non Porous primarily used 8 – 10 months a year
- £55k - £60k per court

## ➤ **Clay**

- Performance surface laid on a stone or ash and clinker base with graded clay levels rolled to produce a hard top surface that enables slide.
- Continual maintenance required used 8 months per annum
- £60k per court + irrigation system £10k

## ➤ **Porous Asphalt**

## ➤ **Artificial Grass**

## ➤ **Artificial Clay**

# POROUS ASPHALT

## Playing Characteristics

### Ball-surface:

Speed of court:	Slow
Height of ball bounce:	High
Trueness of bounce:	Almost uniform, however this will decrease with age of surface course

### Ball spin:

Topspin	Yes
Slice	Little

### Player-surface:

Footing:	Firm footing. (Foothold will inevitably be affected when the surface is damp or wet, especially in certain, usually transitory, conditions, such as heavy morning dew or light drizzle. A degree of care needs to be exercised by the players in these conditions).
Traction:	Non-slip
Player Comfort:	Non-shock absorbing (hard)

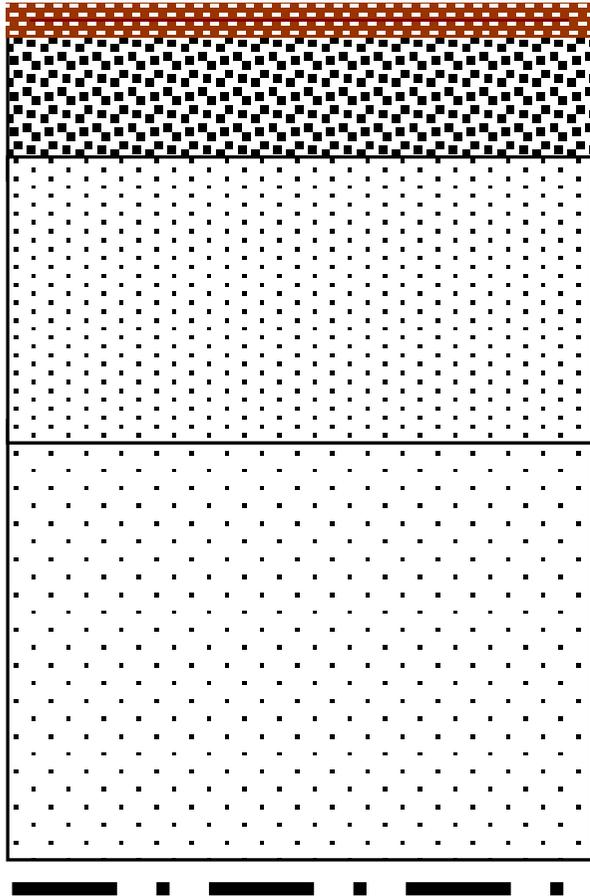


Most popular surface with 80% of the courts in the UK Porous Asphalt.

## Key Features

- Lowest cost surface - £40k per court
- Life expectancy - 10 years
- Repaint - 5 years
- Sinking fund £1200 per annum
- All year round play
- Wide range of player use
- Low maintenance

# POROUS ASPHALT CONSTRUCTION



Acrylic or polyurethane Colour Coat (see Surface Coating section)

25mm open grade porous asphalt **surface course** consisting 6mm diameter aggregate. Tolerance of surface course 8mm under a 3 metre straight edge.

40mm compacted **binder course** of 10mm, 14mm or 20mm open graded asphalt

Minimum 150mm compacted depth of 28mm diameter non-frost-susceptible, free draining **aggregate**  
Depth may need to be increased to suit local ground conditions

Geotextile membrane

Excavate to remove topsoil

Establish 1:120 fall to formation in a single plane long or cross fall.

Compact formation

# ARTIFICIAL GRASS

## Playing Characteristics

### Ball-surface

Speed of court:	Medium slow to very fast, according to type of product, age & condition
Height of ball bounce:	Medium to low
Trueness of bounce:	Variable depending on carpet design

### Ball Spin

Topspin:	Little
Slice:	Yes

### Player-surface

Footing:	Generally firm footing, but can have partial slide depending on type of product and condition.
Traction:	Mainly non-slip but can be variable and slippery when dry or badly maintained.
Shock Absorption:	Most sand-filled products have reasonable shock absorption qualities.



## Key Features

- Installed on top of a porous asphalt
- Two main types of carpet – tufted (sand filled) , needle punch textile (sand dressed).
- Pile Height, Low 10mm, medium 15mm
- Life expectancy - 8 years
- Carpet cost £15k, new court - £55k
- Sinking fund £1800 per annum
- All year round play
- Recreation bias
- Medium maintenance – sand distribution & rejuvenate 5 – 6 years

# ARTIFICIAL CLAY

Playing Characteristics Ball Surface	
Speed of Court:	Slow – Medium
Height of Ball Bounce:	Medium
Trueness of Bounce	Almost consistent – providing infill levels are maintained
Ball Spin	
Topspin Slice	Yes Yes
Player Surface	
Footing: Traction: Shock Absorption:	Sliding Non Slip Medium-Soft



## Key Features

- Carpet installed on top of a porous asphalt
- Overfilled by 1mm – 3mm red sand
- Monofilament Yarn
- Life expectancy 8 - 10 years
- Carpet cost £15k, new court - £55k
- Sinking fund £1800 per annum
- All year round play
- Performance & Recreation bias
- Medium maintenance – drag mats daily, top up sand, rejuvenation 5-6 years
- Type of sand critical

# FENCING

There are 3 main types of fencing chainlink, roll weld mesh and rigid panel



## Chainlink

- Angle or tubular post system
- 2.75m high 50mm x 3.25 gauge
- Tubular system better for windbreaks especially with top, bottom and/or medium rails
- Easily vandlaised
- £110 per linear metre

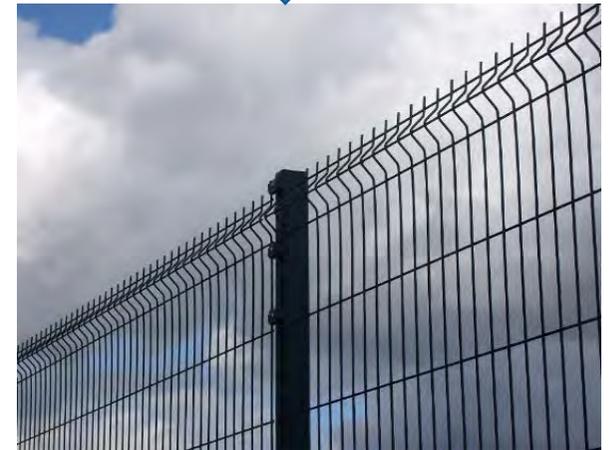
## Rigid Panel Weld Mesh

- Strongest type of fencing
- Hollow section box system
- Used with windbreaks
- Most secure used for park sites and mugas
- £150 per linear metre



## Roll Weld Mesh

- Tubular post
- 2.75m high 50mm x 3.5 gauge
- Used with windbreaks especially with bracing
- More secure, often used in park sites vandlaised
- £130 per linear metre



# HOW TO APPROACH YOUR PROJECT

1. Player test a range of surfaces and speak to venues who have installed the surface to obtain their experiences of playability and maintenance.
2. Engage a tennis court specialist to undertake a review of the site to see if the courts can be built to the required standard and to make sure that the foundation is adequate to install the surface. This should include soil samples for a new court to ascertain what foundation depth of stone will be required or foundation samples of the existing court to see if the current foundations are adequate for a new court surface.
3. After a site visit the court specialist will then be able to provide a specification in which the club can use to tender the project.
4. The LTA recommends that the project should be tendered to 3 or more SAPCA contractors for the works.
5. The venue to appoint the contractor and manage the works. If specific elements of the court construction such as slip resistance or pace then further testing by a tennis court consultant can undertake these works.

# PLANNING CONSENT

- Resurfacing courts does not normally require planning consent however it is worth checking with the Local Authority that planning consent is not required if a venue is changing the construction, colour or level or the surface.
- If installing new or replacing fencing then this could require planning permission and it is worth checking with the Local Authority if planning permission will be required.
- Floodlighting schemes will require a formal planning consent.

# OPERATIONAL CONSIDERATIONS

- How will you operate the courts?
  - ClubSpark SmartAccess system
- Looking after your court surface
  - Furniture & machinery – Plywood
  - Chewing Gum and Drinks
  - Petrol, Oils and Solvents
  - Salt and De Icers
  - First 12 months – Hot Weather
- Nets and Netposts
- Weeds
  - Seek specialist advice – Some treatments can only be handled by specialists
  - Treat straight away before established



## **ClubSpark for LTA registered venues**

Simple set up for booking, memberships and more.  
Find out what ClubSpark can offer your venue.

# LTA QUICK ACCESS LOANS

- Quick Access Loan (QAL) provides interest free loans from £25,001 up to £250,000.
- Affordable repayment term (5-10 years).
- Funding from LTA Trust – projects must clearly demonstrate community accessibility and participation growth.
- Priorities – low cost indoor structures and floodlights.
- We will not fund the resurfacing of courts as a standalone project.
- Applicants to contribute towards the project cost through reserves, fundraising, applying for other funding sources.
- Webinar recording on LTA website.

# FUNDING SOURCES

- Sport England
- Crowdfunding
- Charitable trusts
- Landfill trusts – entrust, Biffa
- CSR funding - Aviva
- Local Authority - s106/CIL funding
- Conduct local searches in your area

# VENUE SUPPORT TOOLKIT

LTA's venue support hub - providing information, resources and support to help you manage, develop and grow your tennis venue and get more people playing tennis.

- **Club Management** – Succeed with the right structure, leadership and plan.
- **Membership Growth** - Understanding your members and visitors needs and wants is key to the creation of new products and playing opportunities at your club
- **Membership Retention** –Resources to help you focus on strategy to retain members, build loyalty and how you can start tracking your own attrition or churn rate.
- **Financial Sustainability** - assure your club's future through strong financial management.
- **Programming and Court Utilisation** – Maximise court usage; sweating your assets
- <https://www.lta.org.uk/workforce-venues/tennis-venue-support/>
- Venue Registration and the benefits of registration
- Dedicated delivery network and [venue webinars](#)



The screenshot shows the 'Venue Support Toolkit' website. At the top, there is a header with the title 'Venue Support Toolkit' and a welcome message: 'Welcome to the LTA's venue support hub - providing the information, resources and support to help you manage, develop and grow your tennis venue and get more people playing tennis.' Below the header, there are three main content blocks. The first block is titled 'Coronavirus (COVID-19) - Advice for venues' and features a close-up image of tennis balls. The second block is titled 'Venue Registration' and features an image of a tennis court. The third block is titled 'Club Forum Webinars' and features a large blue 'REGISTER' button with a mouse cursor pointing to it. Each block has a brief description and a right-pointing arrow icon.

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# COURT CONSULTANTS

The LTA use 2 court consultants whose details are below:-

- LEE WEST - SPORTS FACILITY PLANNING AND DESIGN LTD  
TEL: 07770 366259, email: [office@sfpad.co.uk](mailto:office@sfpad.co.uk).
- PHIL KEELEY – LABOSPORT TEL: 07833 757576, email:-  
[phil.keeley@labosport.com](mailto:phil.keeley@labosport.com)
- There are a number of other consultants that work across the sports industry that could be used for tennis and these include: Sports Surfaces, Sports labs, MUGA UK

# Q&A