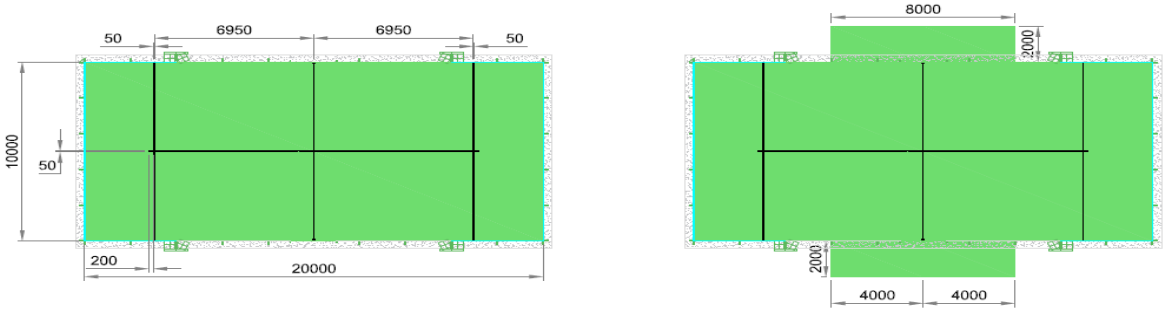
PADEL COURT CONSTRUCTION GUIDANCE NOTE

Padel is a form of tennis that is easy to play, fun and extremely sociable. It is played mainly in a doubles format on an enclosed court about a third of the size of a tennis court and can be played in groups of mixed ages and abilities. This guidance note is to provide some general guidance on how to plan, build and operate padel courts. To view all the most up to date technical details for padel court construction - visit the Codes of Practice page on the Sports and Play Construction Association (SAPCA) website.

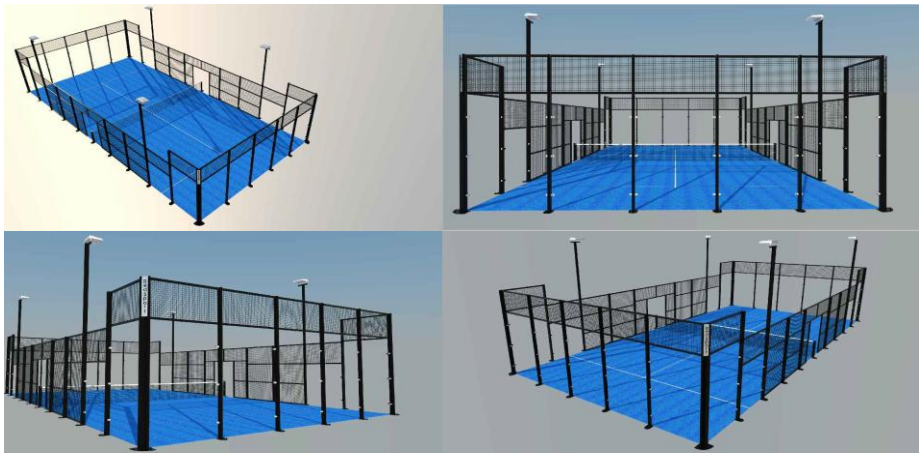
WHAT IS A PADEL COURT?

A padel court playing area is 20m x 10m wide and is marked with two service lines and a centre line that crosses over the service line by 10cm as indicated on the left-hand diagram. The net is 10 metres long and 0.88 high at the centre, rising to 0.92 metres at the ends and attached to two lateral posts with a maximum height of 1.05 metres. The out of court area is indicated in the right-hand diagram below. This area only needs to be considered where elite level tournaments are planned.



SURROUNDING ENCLOSURE AND REBOUND WALLS

All padel courts require rebound ends (with fencing above) to a total height of 4.0m. The first 3.0m, from playing surface level, can comprise any transparent or solid material (glass, bricks, etc.) which does not affect ball rebound, with the upper 1.0m comprising weldmesh fencing 50mm x 50mm mesh with the inner face being the horizontal mesh. Some examples of a padel court can be seen below.



The transition between adjacent mesh and glass internal surfaces should be flush and neither surface should protrude further than the other as irregular ball rebound will result.

If glass is to be used for the rebound ends then the thickness can either be 10mm (for indoor courts) or 12mm toughened glass (for outdoor courts). Glass rebound panels shall incorporate counter sunk fixings to avoid affecting ball bounce and all shall be individually kite marked to the European Standard. Glass and weld mesh panels are supported by steel posts or framed steel panels with base plates for fixing to the concrete ring beam.

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The side elevations will incorporate a central opening for player access on one or both sides, or where the out of court play area (8.00m x 2.00m overall) is to be incorporated for elite tournaments. Openings for access may be single or double arrangement. To allow wheelchair access to either end of the court, the spacing between the net post and the enclosure must be a minimum of 1.2m on either side of the court.

RING BEAM, SUB-BASE CONSTRUCTION & WARRANTIES

The sub-base construction should comprise a suitable free draining non frost susceptible aggregate sub-base average 250mm depth with 65mm depth of porous asphalt installed above in two separate layers. The sub-base can be installed with a maximum single or dual plane gradient of 1:100 or alternatively the court may be constructed to a level gradient with a suitable fall established to the formation level. An internal surface water drainpipe should be incorporated with an outfall through the perimeter ring beam to the outfall position. The supporting posts are fixed with base plates to a perimeter reinforced concrete ring beam. The upper surface of the ring beam will finish at the same level as the underlying court sub-base construction.

The reinforced concrete ring beam, court sub-base and drainage must be designed by a UK qualified structural engineer and include a suitable cross section profile, with due consideration of the wind loads for the locality of the site and any other relevant loads (spectators). UK structural engineers also design to the relevant design codes and will provide a design warranty for the foundations. A venue should engage a structural engineer at the start of the design process so that the foundation and drainage requirements can be included in a tender package. This design must be backed by the structural engineers' professional indemnity insurance. If a venue employs a contractor for both design and construction (or where this is implied) then the contractor should also carry their own professional indemnity insurance in relation to the design of the perimeter ring beam. Padel court manufacturer's warranties do not usually cover structural failure of the perimeter enclosure, only failure of the individual components in terms of wear and corrosion. A warranty of 10 years should be provided by all installers.

The UK has much higher corrosion rates than in Continental Europe and therefore all metal used in the construction of the court should have galvanised steelwork with subsequent zinc electro plating after fabrication.

SPORTS WHEELCHAIR ACCESS

All enclosures **must allow** a clear access to the court of **1.2m for sports wheelchairs**. This should be checked before a venue places an order with a contractor.

SYNTHETIC SURFACING

The padel court playing surface should comprise a single tone sand-dressed synthetic surface (either fibrillating or monofilament tufts) manufactured in accordance with UNE 41958 IN.

FLOODLIGHTING

Padel courts can either be lit by the use of integrated or extended fence posts as part of the surrounding fence enclosure inset by 4.0m from the back of the court; or by the use of standalone floodlight columns outside of the padel court enclosure. All light fittings shall be installed to create a minimum 6.0m high clear space above the padel court playing area. The minimum lighting performance standards for padel courts are defined as follows:-

Venue Type	**Minimum illumination at ground level (Z=0)**
National/International Competition	500 lux (E av) with 0.7 uniformity
Regional competition and recreational use	300 lux (E av) with 0.5 uniformity

Lighting designs shall use a calculation grid spacing of 1.0m x 1.0m (or lesser) dimension over the playing area centred on the net line. Lighting designs provided by designers and manufacturers should fully reveal the tilt angles of the fittings in order to provide information concerning potential glare issues to adjacent property owners.

SIZE OF ENCLOSURE & COSTS

The table below indicates dimensions for the external ensure of the courts. This includes a nominal surface ring beam size of 400mm (width) for the court enclosure. The design of the ring beam and drainage will be site specific and the depth and shape of the ring beam below ground will need to be designed by a structural engineer. In addition the dimensions below include a 1.5m gap in between the courts, but does not include an outer play area.

Number of Courts	**Min Size of Area Required for External Courts**	
	Length (m)	Width (m)
1 Court	20.80	10.80
2 Courts	20.80	22.3
3 Courts	20.80	33.8
4 Courts	20.80	45.3
5 Courts	20.80	56.8
6 Courts	20.80	68.3

The table below provides some indicative costs for the installation of padel courts. They should be used as a guide because location and site conditions will determine final cost. These costs have been determined using delivered project costs (2025) and include some site specific costs incurred (ex. VAT and fees).

Number of Courts	**1**	**2**	**3**	**4**
Courts with lights	£36,000	£70,000	£100,000	£128,000
Ring Beam, court base, ducting & drainage	£35,000	£78,000	£110,000	£140,000
Total	**£71,000**	**£148,000**	**£210,000**	**£268,000**

PLANNING CONSENT

The construction of a padel court will require formal planning consent to be issued by the relevant Local Authority. For further information on how to obtain planning please refer to the LTA planning guidance note. The site developer will be responsible for obtaining planning consent and this will be excluded from most contractors' quotations. Careful consideration of the location of proposed padel courts should be given in relation to the impact of noise and light on adjacent residential properties. If a residential property is within 50m of the padel court then it is likely that noise and light surveys will be required and these need to be undertaken by specialist consultants. It is recommended that venues consider the location and design of the courts to mitigate noise and light as well as engaging neighbours on padel plans before and during the planning application process.

If a project is located on greenfield land then Biodiversity Net Gain (BNG) legislation will be mandatory for the development as part of the planning process. The legislation states that new development must deliver a 10% increase in biodiversity value. A planning consultant will be able to provide further advice regarding the BNG planning process.

HOW TO APPROACH YOUR PROJECT

If you are starting out on construction project, it is inevitable you will have a lot of questions, and it can be a daunting prospect. These steps should help in developing a padel tennis facility.

1. Measure your site to see if your proposed padel development can fit. You could use the Google Maps "measure distance" function, the GPS Fields Area Measure app, or a tape measure on site.
2. Develop a business plan that provides information on how the facility will be managed and sustainable *(Please see LTA guidance note on how to write a business plan).*
3. Develop a budget cost plan and establish how the project will be funded. If required, engage with funding partners and submit funding applications. Check the criteria of each funding partner and make sure you have adequate tenure on your site to develop the project.
4. Engage consultants to develop a project specification and apply for planning permission *(For further information on how to apply for planning please refer to LTA guidance note).*
5. Obtain 3 quotations from SAPCA members. It is recommended that a main contractor is used to construct the entire project. This will provide the venue with a single warranty for the development. (please see section below for further info).
6. Once planning permission has been received, finalise all funding for the project. If funders require security, then engage solicitors to establish legal security on the site.
7. Gain written permission from funders to start on site and make sure all planning permission has been discharged.
8. Manage the project on site and drawdown funding. Once the project is complete, obtain the operation and maintenance manuals form the contractor.

HOW TO DESIGN AND TENDER YOUR PROJECT

Once the location of the court has been decided, the most important part of the design is the safety of the users of the court. As padel courts have glass walls and potentially canopies, they should be treated as a structure which requires professional consultants to design site specific foundations for the courts, that take into account the existing ground conditions and wind strengths.

Before looking to obtain prices from contractors a tender of works needs to be produced alongside a pricing document. This can then be issued to contractors who can price the project against the required specification. This document will enable a venue to receive quotes against the specification and enable them to compare quotes fairly from contractors.

An example specification for an outdoor padel court can be seen below. The LTA would expect this to be provided as a minimum by professionally qualified consultants/contractors to enable a venue to tender the project and place an order with a contractor. The template below can be used as the basis to tender a project, but it will need to be revised to take account the specific site details.

Specification	Price (£)	Comments
The specification for the foundation/type of court must be designed by structural engineer and included in the tender. The engineer is to provide a site-specific foundation design. The engineer must have PI insurance to cover the design of the foundation.		Foundations for outdoor court must consist of a ring beam or below ground foundation. A steel plated or above ground foundation must not be used for a permanent outdoor court.
Drainage		A structural engineer must be engaged to design the drainage for the courts. If a canopy is proposed to cover the courts, then in some areas of the country the water discharge is not allowed directly into drains or soakaways and therefore attenuation is required.
Padel Court designed and constructed in line with the SAPCA code of practice. (Use the minimum specification in the comments section to help form your tender specification)		The minimum specification for the construction of outdoor padel court is: • All toughened glass to be 12mm thick with toughened BS EN Kitemark to each panel • The front face of toughened glass shall align with the front face of weldmesh • Minimum wall thickness to support posts and floodlight columns to be a minimum of 3mm • Minimum wall thickness to support posts and floodlight columns to be a minimum of 3mm • All enclosures must allow clear access to the court of 1.2m for sports wheelchairs. • All components to have certificate confirming steel corrosions protection and have a minimum warranty period against corrosion of 5 years. All bolt, washer and nut fixings to be stainless steel. • The court should have a warranty for a minimum of 10 years.
Padel court foundation and play surface should be designed to the SAPCA code of practice.		The contractor must supply the specification of the court and this should be in line with the SAPCA code of practice. As a minimum a new court should have: • 150mm of free draining stone. • The asphalt binder and surface courses should be produced, transported and laid in accordance with clause 2.14 of the SAPCA Code of Practice for the Construction and Maintenance of Tennis Courts (3rd Edition, April 2018). The binder course should be laid to a compacted depth of 40mm and the surface course laid to compacted depth of 25mm. The playing surface should comply with UNE 147201: 2024 Sports surfaces for the practice of padel. The preferred yarn type is monofilament, but fibrillated is acceptable.
Floodlights are to be designed and installed to the SAPCA Code of Practice for Padel courts.		The contractor must supply a lighting data pack that meets the minimum lighting standards as detailed in this document.
Tournament quality nets and posts		
Utilities		The contractor is to state the cost of providing or connecting electricity to the floodlights. A qualified electrician should be used to install the floodlights.
Preliminaries		This should include access to the site, welfare temporary access.
Total (£)		

TENDERING PROCESS

There are a number procurement options for tendering the project and the venue should select a procurement option that meets their requirements. However, there are some basic rules that should be used in tendering for the project. The list below provides some general information that should be followed to enable a venue to obtain prices that can provide courts to the correct specification, assess value for money and allow a fair comparison between contractors. If a venue is applying for an LTA loan, then it is expected that a priced specification (such as the table above) is completed by a minimum of 3 contractors and the contractor is to provide the relevant information. A competent contractor should be able to provide the necessary details to complete the tender.

1. The applicant is required to engage the necessary professional consultant to prepare a specification, set of drawings and pricing document that can be issued to all contractors. It is recommended that the contractors are SAPCA registered. If they are not, then the venue should ask the contractor how many projects have been undertaken in the UK and provide details of these projects. The venue should visit at least one site where the contractor has installed courts to ask for feedback on the court installed.
2. The tender must be fair to all contractors and therefore if a specification is changed or further information is provided then this information should be supplied to all contractors. If a contractor requests further information, then the response to the question should be shared with all contractors.
3. It is recommended that the contractor is to visit the site and meet with the venue before they tender for the project. This is for them to understand the site specifics, agree access and confirm that they understand the scope of works.
4. The tender must have an issue date and a tender return date. If a contractor cannot meet the tender return date, then the tender should be deemed as non-compliant unless the venue wants to issue an extension of time. If an extension of time is granted, then this must be given to all contractors.
5. The tender should also include the type of contract, access requirements, hours of working, discharge of any planning conditions, programme dates and any other specific site information that the contractor should be aware of.
6. Tenders should not be reviewed until the end of the tender period. The tender should be evaluated against the specification and the additional information provided. If a tender does not meet the specification or a contractor has not provided the relevant documentation, then it should be deemed as non-compliant. The pricing document and information provided will allow for the venue to select a contractor
7. Once a venue has selected a contractor, they should communicate their decision to all contractors and if required share the final costs of all contractors.
8. Following the tender process the venue can enter into contract with the contractor.

COVERED FACILITIES

There are a range of closed or open-sided structures available which can be used to cover padel courts at a more economical cost than a tradition building, tensile structure or airhall. Typically, they comprise steel or timber portal frames constructed with a single or double skin membrane roof. Some structures come in with a fully enclosed roof and walls, others as a canopy type design.

If the courts are to be covered by a structure with the courts be spanned from front to the back of the courts (spanning from the end of court to the other end of the court) then the clear height of the structure at the end of the courts should be a minimum of 6m. For this type of structure, the height above the net line should be a minimum of 8m.

If the courts are to be covered from side to side (spanning side elevation to side elevation) then the height of the structure at the sides should a minimum of 6m and have a clear height of 8m at the highest point of the ridge (above the centre point of the net). This type of structure can be referred to as a modular design.

The supporting frame (legs) sits outside the padel enclosure and it is feasible for the sports lighting fittings to be incorporated into the structure. When selecting a structure to cover a padel court, consideration should be given to the overall minimum height of the structure and the location of the supporting columns, so as not to interfere with play or the out of court area (where incorporated), avoid foundation clashes with the court foundation or restrict the provision for wheelchair access.

For covering a single padel court a modular design is often seen as the affordable option, however, this design requires a larger footprint due to interim column positions. If your project is looking to cover more than a single padel court, then consideration should be given to the layout and shape of the structure across multiple courts.

All steel supporting components for structures and canopies in the UK should be hot dip galvanised for maximum longevity and protection against the climate. The structure and its foundations should be designed by a structural engineer. Planning approval will be required for the development of an indoor structure or canopy in line with UK planning laws. Building control will be required for fully enclosed indoor structures and may also be required for canopies, to sign off the design and installation of the structure and its foundations. Canopy roof and wall membranes should have a minimum design life of 15 years and the frame should have a design life of 20 years. It is recommended that the foundations and drainage proposals are designed by an independent structural engineer who can provide a design warranty. The design of the structure covering the courts needs to take into account the ring beam of the courts, the type and foundation size of the structure, the out of play court area (if applicable) and the drainage design. All these factors can have an impact on the size of the width and length of the structure.

The table below provides some indicative costs for the installation of a canopy over padel courts, and should only be used as a guide because location and site conditions will determine final cost.

Number of Courts	**1**	**2**	**3**	**4**
Canopy Foundation and drainage	£20,000	£30,000	£43,000	£56,000
Canopy (including 3m rain screen)	£75,000,	£140,000	£205,000	£260,000
Total	**£95,000**	**£170,000**	**£248,000**	**£316,000**

An example of specification for a canopy over a padel court can be seen below. This is what the LTA would expect as a minimum to be provided by a contractor to enable a venue to place an order. The template below can be used as the basis to tender a project, but it will need to be revised to take account the specific site details.

Specification	**Price (£)**	**Comments**
The specification for the foundation/structure/material strength of the canopy must be designed or reviewed by a structural engineer. The engineer is to provide a site-specific foundation design. The engineer must have Professional Indemnity insurance to cover the design of the foundation.		The canopy foundations are to be designed to avoid the padel court ring beam, allow for out of play area (if required) and sports wheelchair access **of 1.2m**. The specification must be site specific and generic designs are not acceptable.
Drainage		For venues that are looking to install a canopy or cover over the courts, a structural engineer should be engaged to design the drainage for the courts. In some areas of the country the water discharge from canopies is not allowed to be directed into drains or soakaways and therefore attenuation is required.
Canopy specification		The canopy design is to meet the engineers structural design as specified. All steel supporting components for structures and canopies in the UK should be hot dip galvanised for maximum longevity and protection against the climate.

		Canopy roof and wall membranes should have a minimum design life of 15 years.
Floodlights are to be designed and installed to the SAPCA Code of Practice for Construction of Padel courts (if installed off the canopy).		The contractor must supply a lighting data pack that meets the minimum lighting standards as detailed in this document
Utilities (if required)		The contractor is to state the cost of providing or connecting electricity to the floodlights. A qualified electrician should be used to install the floodlights.
Preliminaries		This should include access to the site, welfare temporary access
Total (£)		

TOURNAMENT FACILITIES

If a venue is planning to run elite level tournaments then consideration should be given to out of play areas as shown in the diagram on page 1. Under FIP Official Game Rules Elite competition will require the court to have out of play areas. These areas are not able to be shared with adjacent courts. The majority of competitions can take place with either shared out of play areas or no out of play areas. The venue should consider the level of competition they wish to deliver before deciding on whether to build out of play areas. Venues that are focused on participation and domestic competition (unless specified in competition guidelines) are unlikely to need out of play areas.

If courts are covered then consideration needs to be given to the height of clear opening above the courts. Elite competition will require a minimum height of 8m over the netline.

OPERATIONAL CONSIDERATIONS

Adding padel courts may require a change to the way you manage your venue, court allocation and bookings. Although each venue is different, below are areas to consider:-

- The majority of padel courts are operated on a pay and play basis, but consideration needs to be given to organised activity.
- Think about your court rates for peak off peak and coaching.
- We would recommend that padel venues install a gate access system so that access can be controlled remotely.
- Running costs for LED lights are approx. £1 per hour per court, but is dependent on the configuration and type of lamp.
- The LTA's recommended sinking fund for padel courts is £1,500 per court per year to cover court surface, lamp and column replacement. You should plan to resurface your courts every 5 years, but this will vary based on levels of use.
- Venues should consider additional sinking fund contributions for the court structure, glass and canopy (where relevant) based on the operation and maintenance manuals provided by the contractor and the design life of each element.

PADEL CONTRACTORS

The LTA recommends that venues use contractors who can build the whole system including the foundations and installation of the floodlights. The LTA has partnered with the Sports and Play Construction Association (SAPCA) to develop a technical code of practice. This document provides all the technical details to build a padel court and the link to the code of practice is on page 1. The LTA recommends that venues use SAPCA tennis court contractors who specialise in the construction of a Padel courts, or an experienced padel contractor who has been installing courts for over 3 years and can provide a portfolio of installed courts. Please see the link below for details:
https://sapca.org.uk/members/

MAINTENANCE OF PADEL COURT

At the completion of each project the contractor should provide an operation and maintenance manual. This manual should provide details the maintenance requirement for the court and also the canopy. The maintenance of the court should be strictly adhered to. If regular maintenance is not adhered to this could invalidate the warranty of the court and court covering.

In general, proper maintenance of padel courts is essential to ensure their longevity, safety, and optimal playing conditions. Regular inspections and upkeep prevent structural issues and enhance player experience. This general guidance note outlines key maintenance tasks.

REGULAR MAINTENANCE TASKS

1. **Surface Maintenance (weekly)**
   - **Cleaning:** Remove debris, leaves, and dirt from the playing surface using a soft broom or blower.
   - **Water Drainage:** Ensure the drainage system is functioning properly to prevent water accumulation.
   - **Artificial Turf Care:** Regularly brush the turf to maintain even distribution of infill and prevent flattening.
   - **Damage Inspection:** Check for signs of wear, rips, or loose seams and repair as necessary.

2. **Glass Panel and Metal Structure Maintenance (weekly)**
   - **Glass Panels:** Inspect for cracks or chips. Clean with a mild detergent and water to remove dirt and stains.
   - **Metal Structure:** Check for rust or corrosion, especially in joints and connection points. Apply protective coatings as needed.
   - **Net and Posts:** Ensure nets are in good condition, properly tensioned, and posts are securely fixed.

3. Bolt and Fastener Checks (Every 6–12 Months)
- **Inspection:** Examine all bolts, screws, and fasteners securing the metal frame and glass panels.
- **Tightening:** Use appropriate tools to tighten loose bolts to prevent movement and potential hazards.
- **Replacement:** Replace any worn or corroded bolts to maintain structural integrity.

4. Seasonal Maintenance
- **Weather Protection:** In adverse weather conditions, ensure court structures are reinforced if necessary and that there are no loose objects close to the court which could get blown into the glass structure. **Winter Care:** Remove snow and ice carefully to prevent damage to the surface and glass panels.

5. Record Keeping
- Maintain a log of all inspections and maintenance activities. Document any repairs, replacements, and issues to track court conditions over time.
- Inform contractor as soon as possible if there are any concerns or damage to the courts.