

TENNIS AND NETBALL COURTS

Multi-use venues are a practical solution to support a range of sports and make effective use of available community infrastructure. Tennis has several compatible sports in which multi-use line marking can be implemented including netball, basketball and hockey. The type of tennis court surface will ultimately determine the suitability for other sport line marking.

Implementing management models with shared services for multi-use venues can deliver the following benefits:

- Pooling of resources.
- Additional opportunity to generate income leading to greater sustainability.
- Year-round venue usage.
- Greater community benefit through increased accessibility.
- Potential to attract new participants.
- Increased community social networks and partnerships.
- Increased funding opportunities.

Shared Tennis and Netball Courts

Where tennis and netball courts are shared, consideration needs to be given to the:

1. **space available to meet Minimum Dimensional Requirements,**
2. **Base and Sub-Surface Composition,**
3. **Surface Type,**
4. **Line Marking,**
5. **Court Lighting,**
6. **Court Furniture and Equipment**



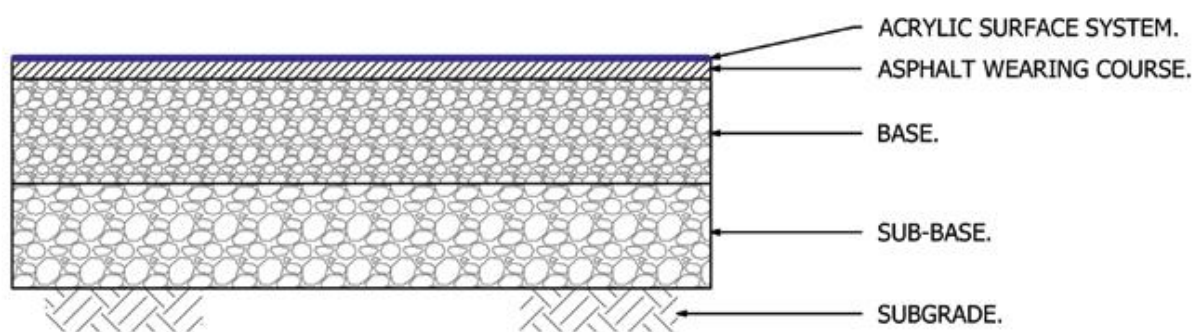
1. MINIMUM DIMENSIONAL REQUIREMENTS & RECOMMENDATIONS

	Tennis Courts	Netball Courts
Standard Court Size (i.e. Playing Area)	Length: 23.77m Width: 10.97m	Length: 30.5m Width: 15.25m
Minimum Run off Zone Dimensions	Sideline: 3.05m, Baseline: 5.48m, Between courts: 3.66m	Sideline: 3.05m, Baseline: 3.05m, Between courts: 3.66m
Preferred Surface	<ul style="list-style-type: none"> • Acrylic/asphalt • Synthetic grass/crushed rock • Grass • Red Porous (Clay) 	<ul style="list-style-type: none"> • Acrylic/asphalt • Sprung wooden floor boards (indoor only)
Minimum Lighting Levels for Competition	350 lux	200 lux
Fencing Requirements	Behind Court: 3.0m or 3.6m high Side of Court: 1.2m or same as back	N/A

2. BASE AND SUB-SURFACE COMPOSITION

The most common multi-use court surface is an acrylic hard court with an asphalt base as this provide a practical option for most levels of play for both tennis and netball, is easy to clean and maintain and is ideally suited for line marking paint for multiple sports' courts.

The pavement for this court surface option is, unless engineering conditions dictate otherwise, is a flexible pavement with an asphalt wearing surface. The following figures provide a typical cross section for the pavement options.



Concrete pavement courts have in the past been used in South Australia however is not preferred when considering new or reconstructed facilities. It is a rigid structure, more costly to surface / resurface and maintain playing, has fast court speed and less comfortable for the players.

3. SURFACE TYPE

Generally, in Australia there are three types of acrylic surfacing systems:

- Non-cushioned
- Liquid applied cushion
- Mat laid cushion
 - Fixed Laid Mat
 - Loose Laid Mat

The key difference between a cushioned and non-cushioned acrylic surface is the layers of cushioned elements within the acrylic system. The cushioning can be provided as a prefabricated roll (mat laid) or an in-situ poured product (liquid applied) spread in layers until the desired thickness is achieved. Cushioned systems can provide a higher level of shock absorption, however are more expensive to construct.

Regardless if the system is non-cushioned, liquid applied cushion or mat laid cushion, well maintained acrylic surfaces have a life expectancy of between 8 - 10 years, which will result in an asphalt pavement life expectancy is 25+ years, with manufacturers typically offering an acrylic product warranty of between 3 – 5 years, depending on the product.

4. LINE MARKING

While there is no preferred or standard colour for line marking on courts used by multiple sports, line marking colours often represent the speed of play and ball movement with the lightness or brightness of the line marking. For example the faster the ball, the lighter the line marking. Common line marking colours are:

Sport	Line marking Colour
Tennis	White
Netball	Yellow
Basketball	Black
Volleyball	Red
Tennis Hot Shots (Blended Lines)	Lighter or darker version of the same colour family as the court colour

Tennis and Netball Courts can be marked either as:

- One netball court with a tennis court centrally overlaid within (1 tennis court/1 netball court)
- Two tennis courts with a netball court centrally overlaid (2 tennis courts/1 netball court)

Tennis Blended Lines

Blended lines are an easy way to incorporate Tennis Hot Shots specific programming into clubs and venues without making significant changes to existing infrastructure. They are also a cost effective way of supporting junior participant development and can be added to existing full sizes tennis court surfaces with relative ease.

5. COURT LIGHTING

Quality court lighting assists to increase the capacity and use of courts over 12 months of the year. It enables diversity in programming and activities, assists in maximising usage and introduces new revenue streams to venue operations.

Lighting for tennis and netball should be designed and installed so that visual tasks by participants, officials and spectators can be performed clearly, comfortably and safely. Parameters that determine the effectiveness of lighting systems are:

- Suitable luminance and colour contrasts over the playing area
- Sufficient light to all parts of the playing area
- Correct distribution of light
- Adequate glare control
- Surrounding pathway and gate entry localised lighting to the court

Achievement of these objectives is determined by quality and quantity of lighting installed by qualified sports lighting specialists.

Lighting Types

There is a range suitable court lighting equipment on the Australian market, with different systems providing various cost and operational benefits. Types of light sources commonly used in tennis and netball are:

- High Pressure Discharge (Metal Halide (MH))
- Light Emitting Diodes (LED)

In comparison Metal Halide, LED technology is now recognised as the preferred lighting option due to performance outputs, operational advantages, cost efficiencies and environmental benefits.

LED is generally an improvement on MH through:

- Luminous efficacy (how well the light source produces visible light)
- Ongoing running costs
- Estimated lifespan
- Colour appearance and rendering
- Size and shape of the source (visual appearance)
- Light source run-up and restrike times
- Ability to control luminaires using control management system or similar (including controllability / dimming).

All court lighting must meet the appropriate Australian Standards and approval of the land owner and local council.

6. COURT FURNITURE AND EQUIPMENT

Fencing

Court fencing performs a number of functions:

- Retaining balls inside the court
- Dividing court playing areas
- Providing safety and security
- Windbreak support
- Signage display
- Safe child management within a contained area

Access to the courts should be provided for:

- Disability access
- Maintenance vehicles
- Emergency situations

It is important to have gates installed in appropriate locations around the venue to ensure ease of access.

All fencing should meet the appropriate Australian Standards including the effects of wind loading factors and should approval of the land owner / local council.

Net posts covers

The ability to remove the net posts for both tennis netball is vital to ensure the alternative sport can play without restriction. Net Post Sleeve Covers are used to keep debris out of net post sleeves when the net posts are removed and to ensure a safe surface is available for play.

Shelters

All venues should have courtside seating options available. The number of courts can assist in determining the type and preferred capacity of seating provision. Seating can be bench or chair style in grandstand format or rows, both fixed and portable. Consideration for other users of the courts must be considered so flexible arrangements are preferred.

Squeegees and sponges

Generally acrylic surfaces require the least regular maintenance of all court surfaces. To ensure the performance and longevity of the acrylic surface, it is recommended a regular maintenance regime is undertaken. Regular removal debris and foreign matter, and standing water is required. Suitable squeegees and sponges will remove the standing water to ensure stains are not evident and any moisture seepage is minimised.