

SECTION 3

FACILITY PLANNING, DESIGN DELIVERY AND MAINTENANCE

3.5 EQUIPMENT AND ACCESSORIES

Nets, racquets and balls are the fundamental requirements of any tennis activity. In addition to this there is a range of additional on and off court equipment that can improve the existing infrastructure and the playing experience. Courts that are used for limited social play will have different requirements than courts used for coaching or competition. The additional equipment and accessories will be determined by this usage and the surface types.

Equipment and accessories covered in this section are removable or portable, for fixed infrastructure such as net posts and lighting refer to **Section 3.1.6 Supporting Infrastructure**.

This section includes detailed information on the following topics.

3.5.1 Tennis nets

3.5.2 On-court equipment

3.5.3 Off-court equipment

Primary audience

This section has primarily been designed for:

- Community tennis clubs, associations, venue operators and educational institutions
- Local Government.

Definitions

Centre straps and anchors – Centre straps and anchors are devices installed to the centre of the net to assist in ensuring the correct net height is maintained.

Defibrillators – Machine used to control heart fibrillation by application of an electric current to the heart.

Net cables and winding mechanisms – Devices used to alter the high of the net. Winding mechanisms may be inside the net post or external and protruding.

Net footings – Base / foundation to which the net post is inserted. These may be round or square, depending on the type of post to be installed.

Singles sticks – Portable posts that are used to support the tennis net to the correct height for singles play.

Standards

Equipment and accessory specifications should meet International Tennis Federation Basic Permanent Equipment (2017) requirements. <http://www.itftennis.com/technical/facilities/facilities-guide/equipment.aspx>

KEY HIGHLIGHTS

What you need to know

- There is a range of on and off court equipment specifically designed for tennis
- Equipment requirements will be determined by the need, activity types (e.g. competition), service levels and surface type
- Minimum equipment recommended for facilities is nets and brooms / sweepers (for maintenance).

3.5.1 TENNIS NETS

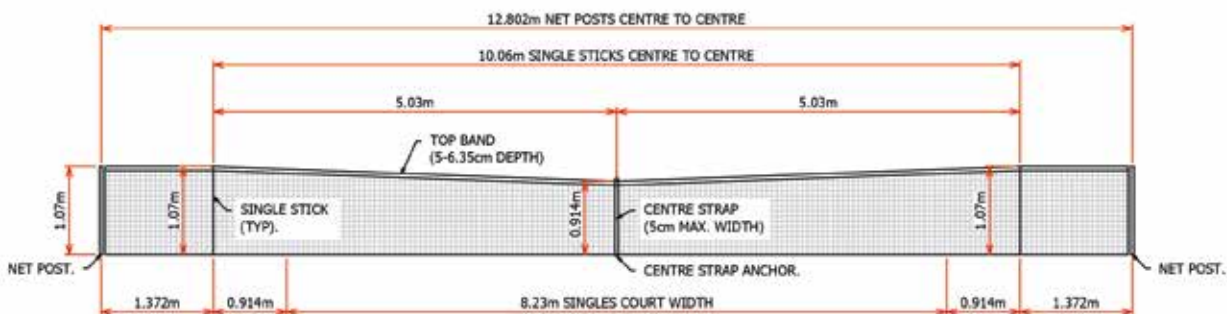
Nets are a required part of play on every tennis court. There are several components of tennis netting that make up a fully functioning net system to achieve the correct dimensions. These include posts and winding mechanisms (see Section 3.1.6), centre straps and anchors, and the net. General considerations for tennis nets are:

- Quality can vary significantly, a good quality net can be expected to last 5-7 years.
 - Varying nets grades are available on the market, with ranges developed to suit various levels of play and environmental factors (e.g. outdoor, indoor, and humid).
 - Nets are available in two drop heights (space between the court and the top of the net); 0.76m or a full drop.
 - The net is not required to touch the court surface; however it is recommended that the space between the two is no greater than 0.6cm.
- Nets should be black in colour with a thick white band at the top.
 - Most tennis nets are made of braided polyethylene, providing effective resistance to the Australian climate.
 - Nets can be provided in single or double braid, with double braiding providing more absorption, the braided nature of net construction ensures they are strong and sturdy.

Netting dimensions

Image 3.5.1 ITF Netting Dimensions provides an overview of the International Tennis Federation (ITF) requirements of netting dimensions. Centre straps ensure that the net remains at the correct height. For information on net posts and winding mechanisms refer to **Section 3.1.6**.

**Image 3.5.1
ITF netting dimensions**



Singles tennis net measurements

Net height centre: 0.914m
Post Height: 1.07m
Net width: 8.23m + 0.914m = 9.144m

Doubles net measurements:

Net height centre: 0.914m
Post Height: 1.07m
Net width: 10.97m + 0.914m = 11.884m

Image 3.5.1
Tennis net



Conducting regular checks of the nets and their associated components will assist in prolonging the lifespan.



See Section 3.1 – Courts for information on net posts and footings.



IMPORTANT INFORMATION

For singles, net posts should be positioned 0.914m (3 feet) outside the court lines. The location of these posts is different for singles and doubles courts due to the different court dimensions of the games.

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Centre straps and anchors

Centre straps ensure the centre measurements of the net meet ITF regulations (Image 3.5.1 ITF Netting Dimensions). Ground anchors secure centre straps to either a concrete base or footing in the middle of the net line via a non-corrosive hook.

- The centre strap should contain a height adjusting non-corrosive buckle that prevents slipping when tensioned. ITF rules state the centre tennis net height should be limited to 0.914m (3 ft.), with a 50mm wide strap.
- Centre straps are not always installed, especially at community level venues.

Net installation

Net installation / assembling will usually depend on the brand of net and the supplier should provide direction accordingly. A general guide the process is:

Image 3.5.2 Centre strap



1. Majority of nets will come with a single loop at one end; attach the loop to the post that does not contain the winding mechanism and stretch the net outward toward to the post that contains the winding mechanism.
2. Attach the unlooped end to the post with the winding mechanism and wind to obtain the required tension.
3. Turn the mechanism until the net is 0.914m (3 feet) high in the centre making sure not to over tension the net as this can apply too much pressure on the posts.
4. Install the centre net strap and attach to the ground anchor (if applicable).

Net maintenance

Tennis nets require maintenance to ensure their durability. Depending on the environment of the net location (i.e. indoor or outdoor, climate, environment etc.) the level of maintenance a net requires may vary.

The following checks and maintenance should be undertaken regularly for tennis nets:

- Wearing of net bands, requiring repair or replacement.
- Corrosion / deterioration of cable wire and centre strap buckles (as applicable) especially in extreme weather conditions.
- Scratches and nicks on net posts that require touch up to prevent corrosion and prolong the lifespan.
- Lubrication of the winding mechanisms of nets regularly to ensure ease of use.



Nets and posts are made durable and long lasting, so do not need to be disassembled and reassembled each day.

3.5.2 ON-COURT EQUIPMENT

There are a variety of products available on the market to assist in creating a greater tennis experience for players, whilst alleviating venue maintenance and management responsibilities.

A brief recommendation regarding on court equipment is listed below to assist clubs and venues in creating and maintaining a welcoming and desirable environment.

Court numbers

Court numbers clearly outline the location of each court and are a requirement for coordinating programming. Court numbers should be:

- Bold and clearly visible.
- Consistent design and font.
- Fixed in the same position of the fencing on all courts.

Directional and instructional signage

Clear signage should be displayed throughout the venue to ensure participants and spectators are aware of the location of amenities, available services and venue policy and procedures. Good quality and well maintained signage significantly contributes to the overall presentation of venues.

Court covers

A range of covers are available to protect court surfaces but are not widely used through Australian community tennis venues. State and Territory Member Associations can provide further guidance on court cover options.

Umpires chairs

Most community level tennis venues do not have specific umpire chairs as they are often not a requirement due

to self-umpiring. For venues holding high level tournaments, umpiring chairs may be made available.

Considerations for umpiring chairs include:

- Materials that will not damage the court surface.
- Positioned to not affect play.
- Desk area to support scoring documentation.
- Umbrella or shade sail for sun protection

Player chairs and shade

Most venues have portable, plastic chairs that are kept in close proximity to the court. This is done so that either the players can carry them on to the court, or the venue can have them placed on the court prior to the match, ready for the players to sit on during a change of ends in their match.

At most community venues, there is no permanent on court seating for players but most venues will provide plastic chairs suitable for player use during matches. Additionally, venues may also provide shade on the back of these chairs to shelter players from elements such as rain, wind and, most prominently, the sun during their matches.

Ball machines

There are a wide range of tennis ball machines available. Machines are used most commonly by tennis coaches and private tennis court owners to project balls for return in practice settings.

Considerations for ball machines are:

- Need / purpose – Ball machines offer a range of features including oscillating, varying speeds, varying trajectories and differing spins on the ball. Therefore, it is important test ball machines prior to purchase.
- Power source (if required) – Check the distance from the court to the nearest

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power source before purchasing machines. Additionally, most machines are now battery operated so it is important to ensure regular testing of batteries is being conducted in addition to having battery replacements available.

- Noise outputs – Consider the noise outputs of ball machines and times of use to minimise potential disruption to the surrounding community.

Ball retrievers

Retrievers are used to minimise ball collection times and eliminate the need to manually gather balls as this can be physically strenuous and repetitive. These come in various forms and sizes and are available from most tennis equipment suppliers. Variations of a ball retriever can include but are not limited to;

- “Sweeper” – A hand held device that you can push/wheel around the court for balls to be picked.
- “Tube/Barrel” – Cylinder in shape with open ends, coaches and players use these by pressing the end of the cylinder onto the ball. Once the cylinder is full of tennis balls they can be returned and emptied into the coaches basket.

Scoreboards

Tennis score boards are available in many shapes and sizes and can be temporary and portable or permanently installed. Electronic and manual options are available.

Windscreens

Windscreens provide wind protection and increase privacy of tennis courts enclosures. Windscreens can also provide an opportunity for club / venue visual advertising and sponsorship.

Windscreens are made from high strength tensile fabrics such as vinyl coated mesh and polypropylene, and have anti-glare properties to minimise sun reflection. Windscreens can be made in a range of weights and grades to suit specified tennis venue environments.

When selecting a windscreen, the following should be considered:

- Level of wind the screen is being installed to block will determine the material, weight and grade.
- Colour of the windscreen to blend with the surrounding environment and not distract participants.
- Advertising should not dominate the entire screen space.
- Strength of the existing fencing and ability to hold the windscreens during high winds.
- Windscreens should be permanently attached to the inside of enclosure fencing to prevent vandalism.

Windscreen installation and maintenance should be guided by suppliers and / or contractor.

Refer to **Section 3.2 Fencing** or more information

Coaching baskets

Coaching baskets are an essential piece of equipment for all levels of coaching for an effective ball retrieving and storage process.

ANZTHS equipment

ANZTHS play usually requires modified equipment such as nets, posts, balls and racquets. Additional information on ANZTHS equipment can be found at: <https://hotshots.tennis.com.au/>

Refer to **Section 3.1.7 ANZ Tennis Hot Shots** for more information

Drag mats, brooms and sweepers

Court brooms and sweepers are designed to:

- Remove court debris (all court surfaces)
- Remove excess surface water (e.g. squeegee for hard courts, absorbent roller for clay)
- Even out surfaces (spread clay and sand on synthetic surfaces)
- Line presentation (e.g. line brooms for clay and synthetic surfaces)

Sweeping should be a part of daily court maintenance.

Drag mats are specifically designed for clay / red porous court maintenance. There are different types for collecting debris and levelling out surfaces, with regular sweeping required to ensure playability. They can be stored on court as shown in **Image 3.5.5**.

Refer to **Section 3.1.5** for more information on court maintenance.

Image 3.5.4
Clay court drag mat



Image 3.5.5
Drag mat storage



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Image 3.5.6
Spreader machine



3.5.3 OFF-COURT EQUIPMENT

Off court equipment should also form part of venue or infrastructure planning provision.

Spectator seating

All tennis venues should have courtside seating options available. Existing infrastructure (e.g. 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.

Temporary seating can be hired and used to meet increased spectator demands during large scale tournaments and events. These are best sought locally to remove shipping / transportation costs.

Waste bins

Waste and recycling bins should be placed around the venue to assist in keeping a clean and presentable site.

First aid kit and defibrillators

First aid kits should be kept on site at all tennis venues. The installation of a defibrillator machine should be considered. The location of the first aid kit and defibrillator should be easily accessible and clearly marked with signage.

Drinking fountains

For the convenience and wellbeing of players and visitors, drinking water should be available around the venue.

Shoe cleaning facilities

Shoe cleaning brushes and / or grates should be provided at venues with clay courts or synthetic surfaces to ensure correct etiquette is observed both on and off court (e.g. transfer of clay / sand in to club house).