#### **Standards**

The standards for tennis courts are established by the International Tennis Federation (ITF) Standards and can be accessed on the ITF website, ITF Technical Facilities Guide.

# **KEY HIGHLIGHTS**

#### What you need to know

- Tennis court orientation should be north-south to minimise impact of rising and setting sun on a participant.
- New courts must adhere to the minimum run off requirements and ITF court dimensions.
- All courts shall feature a surface fall of a maximum of 1% for appropriate drainage purposes.
- Appropriate subgrade preparation is essential in ensuring the integrity of the overlying pavement. The subgrade should provide a stabilised, non-reactive foundation on which pavement materials for the tennis court can be constructed.
- Maintenance is vital to ensure the longevity and playability of all court surface types.
- Tennis netting and posts should be set to specific sizing and dimension and should be maintained to ensure longevity.

# 3.1.1 COURT ORIENTATION, LAYOUT AND GEOMETRY

## **Overview**

Court layout and geometry is dependent on existing site constraints including spatial availability, existing buildings, terrain and in-ground services (Refer to **2.3 - Site Assessment** for a definition of these terms).

The following sections provide an overview on court:

- Orientation
- Layout (court dimensions)
- Geometry.

### Orientation

The orientation of a tennis court is an important when planning and designing tennis facilities to minimise glare impacting on play from rising and setting sun.

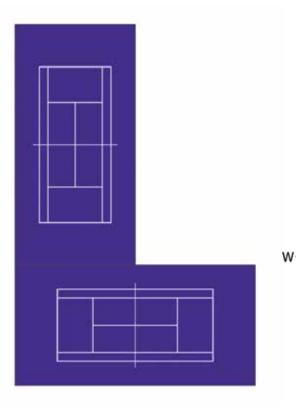
The optimum tennis court orientation, to reduce impacts of glare on players, is north-south in Australia.

Where a north-south court orientation is not achievable, consideration should be given to use of buildings, trees or other design treatments surrounding the court to minimise glare.

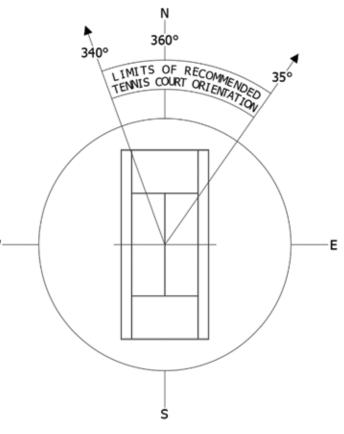
Orientating courts both north-south and east-west at the one tennis facility should be avoided where possible to prevent visual distraction, refer to **Figure 3.1.2 Incorrect Court Orientation**. The ideal limits of court orientation are shown in **Figure 3.1.3 Preferred Court Orientation**.

# **SECTION 3** FACILITY PLANNING, DESIGN DELIVERY AND MAINTENANCE

#### Figure 3.1.2 Incorrect court orientation



### Figure 3.1.3 Preferred court orientation



The orientation of a tennis court should ideally be between 20° west of north and 35° east of north.

Y

nΩIII

For facilities intending to host high level, national or international events, Tennis Australia must be consulted during the design phase. It is important to also consider all other infrastructure requirements in addition to court dimensions.

# Layout (Court Dimensions)

The standard dimensions of a tennis court referred to as the Principal Playing Area (PPA) are 23.77m x 10.97m plus additional run-off zones. The extent of the court run-offs which determines Total Playing Area (TPA) is dependent on the standard of competition intended to be played at the facility (i.e. greater run-off required for higher standard of competition) and the needs of the intended court users (e.g. greater run-off recommended for wheelchair tennis).

Refer to Figure 3.1.5 Playing Areas.

# Table 3.1.1 TF Court Dimensions and Runoffs

The following table provides a summary of the ITF's single court dimensions and runoffs for international and recreational use.

Dimension	Club/ Recreation (minimum)	International (minimum)	International (preferred)
Total Playing Area (TPA)	34.75m x 17.07m	36.57m x 18.29m	40.23m x 20.11m
Principle Playing Area (PPA)		23.77m x 10.97m	
Run-off at back of court	5.49m	6.4m	8.23m
Run-off at side of court	3.05m	3.66m	4.57m
Distance between multiple courts (unfenced)	3.66m	n/a	n/a



Refer to the ITF website for further information of court dimensions.

ITF Technical Facility Guide - courts dimensions

It is vital that all new court builds or court refurbishments are constructed to meet required dimensions, including minimum run-offs.



It is recommended that additional area be added to the above TPAs to allow for construction tolerances.

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# Figure 3.1.4 Court dimensions

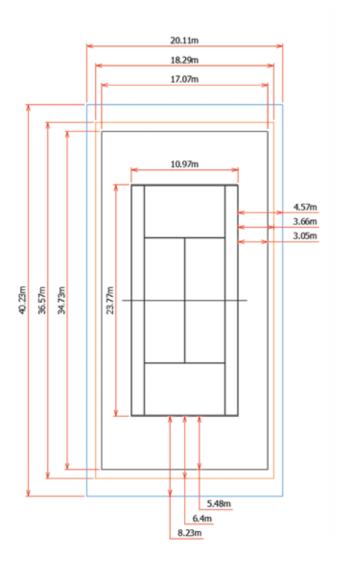
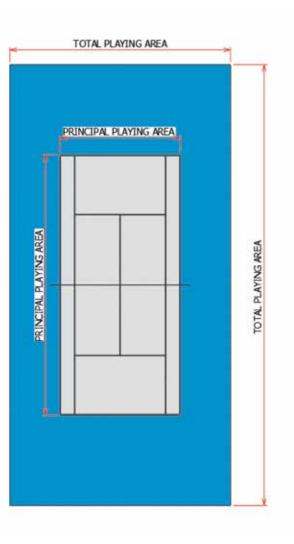


Figure 3.1.5 Playing areas

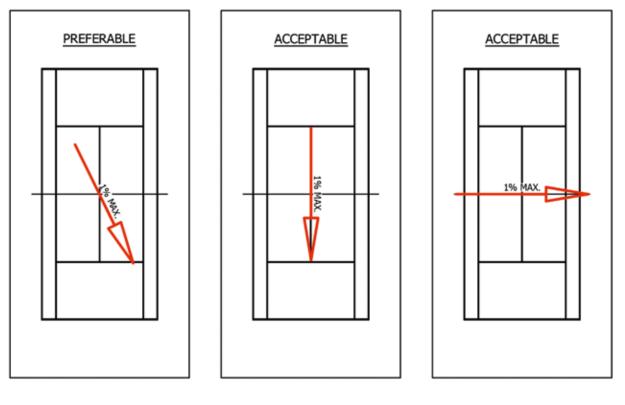


#### Geometry

For drainage purposes, it is vital for courts to include a surface fall to aid with draining water from the surface. A maximum grade of 1% is recommended as outlined in **Figure 3.1.6 Preferred Surface Grade Slope**. The preferred grade of the options presented is diagonal. Site constraints may dictate a flatter court gradient, and therefore it is important to consider the surface type to determine if it will be an appropriate option for effective drainage.

In the case of clay / red porous and natural grass courts, a shallower grade is recommended to minimise the erosion of top dressing. There is reduced concern with these court types collecting water across the surface due to their porous nature, which provides vertical drainage.

## Figure 3.1.6 Preferred surface grade slopes



A maximum of 1% cross fall in any direction, as shown in Figure 3.1.6 should be achieved in all court renewal upgrades or new court developments. The preferred surface grade is diagonal. Further information can be found at www.itftennis.com/technical/courts/court-testing/slope-and-planarity.aspx