

### 3.1.4 COURT SURFACES

Tennis is played on a variety of surfaces, which have their own unique playing characteristics. This section will provide an overview of the key considerations for surface selection, various surface types, lifecycle and construction overview of each option.

#### Surface Types

Tennis Australia's National Court Surface Policy classifies court surfaces into the following categories:

- Acrylic
- Clay / Red Porous
- Grass
- Sand Filled Artificial Clay
- Synthetic Grass / Sand Filled Artificial Grass (SFAG)
- Other (asphalt, carpet, hybrid clay / wood).

These surfaces will be discussed in the more detail in the following sections.

#### Court surface comparison

The following table provides a summary of tennis court surfaces options. Court surface options are discussed in greater detail throughout this section.

#### Key Considerations

Prior to determining the preferred court surface for a facility, it is necessary to consider the following advantages / disadvantages of the surface:

- User group preferences
- Level and type of use (e.g. tournaments)
- Surface performance
- Local weather conditions and environment



Lifecycles provided in the table are indicative and heavily dependent on a range of factors including (but not limited to) levels of court usage, maintenance regimes and climatic conditions.

Refer to individual court surface sections for further information.

- Suitability of ground conditions
- Installation costs / budget constraints
- Ongoing maintenance requirements and costs
- Environmental impacts
- Replacement costs.

#### ITF Classifications

The ITF has developed a Court Pace Classification to assist in determining the speed of surfaces for different systems and types. Surfaces are classified into the following categories, according to the surfaces Court Pace Rating (CPR):

- Category 1 (slow)
- Category 2 (medium-slow)
- Category 3 (medium)
- Category 4 (medium-fast)
- Category 5 (fast).

The CPR is calculated using a ball projecting apparatus to measure velocities and temperatures in which the ball interacts with each surface.

See Image 3.1.4 ITF Court Pace Classifications.

# SECTION 3

## FACILITY PLANNING, DESIGN DELIVERY AND MAINTENANCE

**Table 3.1.2**  
Court surface comparisons

Court Surface	Preferred Pavement	Estimated Surface Lifespan
<b>Acrylic</b>	<ul style="list-style-type: none"> <li>• Flexible pavement with asphalt wearing layer on top</li> <li>• Rigid concrete</li> </ul>	7 - 10 years
<b>Natural clay / red porous</b> (Includes Italian, Conipur, Har-Tru and En-Tout-Cas)	<ul style="list-style-type: none"> <li>• Flexible crushed rock pavement</li> </ul>	25+ years
<b>Synthetic filled surfaces</b> (includes sand filled artificial grass (SFAG) and synthetic clay )	<ul style="list-style-type: none"> <li>• Flexible crushed rock pavement with an asphalt wearing surface</li> <li>• Flexible crushed rock pavement (cement stabilised if required)</li> <li>• Rigid concrete.</li> </ul>	8 - 12 years
<b>Natural Grass Courts</b>	<ul style="list-style-type: none"> <li>• N/A</li> <li>• Compacted free draining crushed rock base with sub-soil drainage (determined by climatic and environmental factors)</li> </ul>	30+ years

**Image 3.1.4**  
ITF Court Pace Classifications





The products included on the ITF Classified Surfaces lists are based on a court pace rating. The classified list is provided on the ITF website: **ITF Court Pace Classification**.

ITF Classifications do not imply any form of ITF approval or endorsement.



Refer to the ITF website for surface descriptions: **ITF Surface Descriptions**

This information shall be used as a guide only, and in conjunction with this document to assist in the court surface selection process.



It is important to consider the dominant sport when selecting the product to be installed, as some products are better suited to sports than others. For example, netball acrylic surfaces contain a higher content of sand to create more grip due to the need to play in wet conditions.

## ITF Surface Descriptions

The ITF have developed descriptions (including performance, use, advantages and disadvantages) of the various court surface options to provide guidance on surface selection.

## Multi-use Facilities

If the facility is to provide multi-use courts for the wider community, the selection of court surface should also consider the other sports. Common examples include shared tennis / netball on acrylic hard courts or shared tennis / hockey on Sand Filled Acrylic Grass (SFAG) courts.

Key considerations in providing multi-purpose surfaces include:

- Use of dominant line marking to suit the main sport or activity utilising the surface
- Court programming
- Maintenance and renewal responsibilities
- Use of off court shared spaces.

Refer to section **3.1.8 Multi-use venues** for more information.

## Lifecycle

The lifecycle of a court surface is heavily dependent on the following:

- Level of usage
- Level of maintenance
- Quality of initial construction (e.g. subgrade preparation, method of construction, quality of materials)
- Environmental factors (e.g. UV exposure, animal excrements).

Refer to each individual court surface description for expected surface life expectancy and additional factors that may impact surface performance and longevity.