

Synthetic Turf in Public Open Space – Guidelines for Decision-Makers

This document answers frequently asked questions about the draft Synthetic Turf in Public Open Space – Guidelines for Decision-Makers

What is synthetic turf?

Synthetic turf was developed as an alternative to natural turf that requires no mowing and provides a durable surface. It can be used by a range of sport disciplines and is a common feature in outdoor playgrounds worldwide.

Contemporary synthetic turf fields primarily consist of a pavement base, shock pad to reduce the risk of injury, turf carpet made of artificial grass blades (made of polyethylene or polypropylene) stitched through a woven mat and infill, which helps keep the blades upright, and improves grip and drainage. Common types of infill include crumbed rubber, sand and cork.

Why use synthetic turf?

Synthetic turf surfaces are becoming increasingly popular. In the United States, early adopters include gridiron and athletics in the 1960s and hockey in the 1970s. In Australia, lawn bowls and tennis adopted the surfaces from the 1980s. Several sports that traditionally play on grass surfaces have recently adopted synthetic turf technology, including football, rugby union, Australian rules football, rugby league, Gaelic football and cricket.

Installing synthetic surfaces as an alternative to natural turf fields in public open space is one way to meet growing demand for sports fields and to support greater levels of formal sport participation. Synthetic turf fields often allow longer hours of play than natural turf alternatives. Synthetic fields are also installed due to preferences by specific sporting codes and to align with competition standards.

Both natural turf and synthetic turf sporting fields can be designed, configured and managed in a range of ways that support different performance levels and uses. The performance and user experience of each surface type is strongly influenced by the maintenance regime and funding levels allocated to upkeep.

How many fields are made of synthetic turf?

The NSW Chief Scientist and Engineer's independent review (November 2022) identified that 181 synthetic turf fields (3.8%) out of a total of 4,669 playing fields were synthetic turf.

Who approves the use of synthetic turf?

Most synthetic turf in NSW is used for the development of recreation areas and facilities. These works are carried out by a determining authority – usually a government agency or local council – which is responsible for their development and maintenance.

In these cases, development consent is not required where the proponent is also the determining authority for the proposed works (under the State Environmental Planning Policy (Transport and Infrastructure) 2021), and installing synthetic turf can be assessed by a Review of Environmental Factors (REF) under Division 5.1 of the *Environmental Planning and Assessment Act 1979* (EP&A Act).

What is the NSW Department of Planning, Housing and Infrastructure's role in the use of synthetic turf?

Our role is to oversee the planning legislation and provide guidance (working closely with other government agencies) on the use of synthetic turf in public open space. To date we have produced 2 related reports:

- Synthetic Turf Study in Public Open Space (2021)
- NSW Chief Scientist and Engineer's (CSE) independent review into the design, use and impacts of the use of synthetic turf in public open spaces.

Why have we released these guidelines?

Given the ongoing pressure on public open space and the need to adapt to community changes, the draft *Synthetic Turf in Public Open Space – Guidelines for Decision-Makers* have been prepared to support councils and other stakeholders to determine the best place for use of synthetic surfaces as an alternative to natural turf in public open space. Through thoughtful consideration and consultation, decision-makers can ensure that their choices align with the values and aspirations of the community, fostering harmony between innovation and nature in public open space.

The department has collaborated with councils, key stakeholders and industry to develop the draft guidelines.

What will the draft guidelines do?

The draft guidelines are designed to assist decision-makers, planners and sports field managers who may be considering synthetic turf as an alternative to natural grass. They will also support designers, delivery agents and open space managers to plan and deliver the best outcome for their community.

The guidelines focus only on synthetic turf used for sporting purposes – they do not include synthetic turf in private or residential settings, streetscapes or play spaces. The document can be used during a particular stage of a project or through the whole project from planning to delivery.

The draft guidelines explain:

- the pressures on public open space and the types of surfaces that can be considered to meet community use needs.
- what to consider when planning and designing sports field surface selection.
- how to achieve best practice when planning, designing and delivering public open space.

Developed in partnership with local government, sporting bodies and industry experts, the draft guidelines offer strategies and case studies to inform decision-makers.