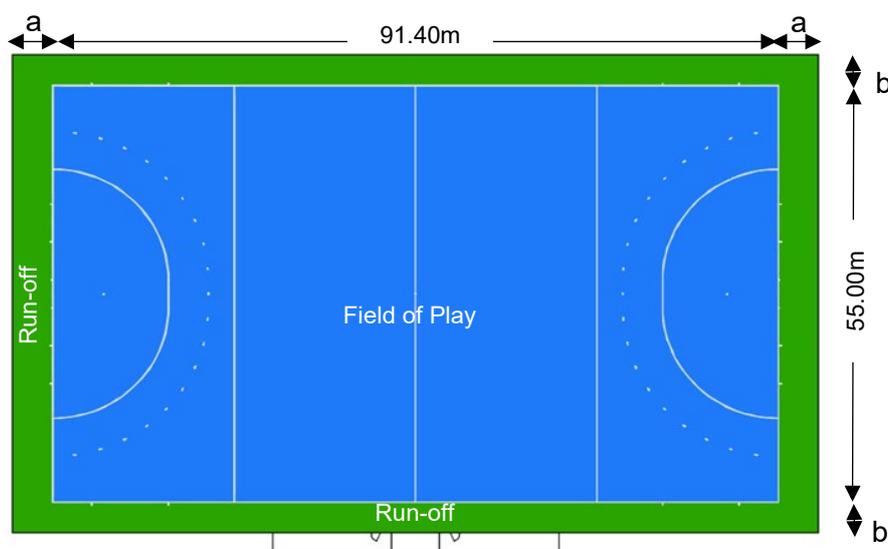


Hockey Field Developments - FAQs

What is the size of a hockey field?

A hockey field comprises the field of play (FOP) - the area within the field markings and run-offs around the perimeter.

The Rules of Hockey specify the size of the FOP and minimum and recommended run-off widths. Wherever possible the recommended widths should be used, and these are mandatory for fields used for higher-level international competitions.



The FOP measures 91.40m by 55.00m. The width of the run-offs should be as detailed below. The inner portion of the run-off should be surfaced with the same type of surface as the FOP. The outer part may be surfaced with same surface as the FOP or a different material (e.g. asphalt paving) providing it is laid flush to the inner run-off.

Run-off dimensions		
End run-offs (a)	Recommended	Minimum
Total (inner and outer portions)	≥ 5.0m	≥ 3.0m
Inner hockey turf run-off	≥ 3.0m	≥ 2.0m
Side run-off (b)		
Total (inner and outer portions)	≥ 3.0m	≥ 2.0m
Inner hockey turf run-off	≥ 2.0m	≥ 1.0m

For FIH Global Elite category fields (as required for some FIH Tier 1 events), an operational margin outside the run-offs is also required. This should be at least 1.0m wide and surfaced with hard paving.

Hockey Field Developments - FAQs

What is hockey turf?

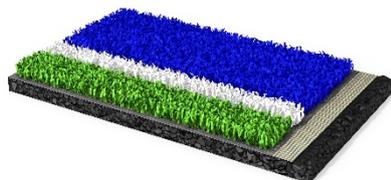
A synthetic turf surface designed primarily for hockey.

Is there a rule which says that hockey has to be played on hockey turf?

No, hockey can be played on any surface, including grass. Actually, grass is being widely used today all over the world.

What types of synthetic turf can be used for hockey?

Choosing the right hockey turf can be difficult. The surface needs to provide the performance required by the players, offer adequate protection to minimise the risk of injury and withstand the damaging effects of use and climate. Recognising there are different requirements for the various levels of hockey being played, the FIH has established three categories of hockey turfs.



FIH Global category surfaces are used for top-level hockey. The surfaces comprise short dense piled carpets laid over some form of shockpad. The surfaces do not contain any infill and currently require watering to achieve their optimum playing conditions.



FIH National category surfaces are those that are suitable for lower level international hockey, national competitions and community hockey. The surfaces typically have slightly longer piles and are less dense than global category surfaces. The pile is normally partly filled with sand. The surfaces may be played on when dry or wet.



Whilst designed for hockey, many forms of national category surfaces can also be used for other sports such as tennis, netball, lacrosse, small-sided football, etc.



FIH Multi-sport 3 category surfaces are surfaces designed for a number of sports including hockey. Primarily based on surfaces with longer piles that are infilled with rubber and sand (often described as third generation or 3G surfaces), the category also includes some forms of sand filled surfaces, needle-punch textile surfaces, etc.

Can international hockey be played on grass?

International hockey will continue to be played on hockey turf. However, in countries where there is only grass, international competitions may be played on that surface, provided that all teams agree.



Hockey Field Developments - FAQs

By doing so, no countries should be excluded from playing an international tournament on the basis that there is no hockey turf available.

Will high-level hockey continue to use water-based fields?

FIH has called up the hockey turf, footwear and ball manufacturers and suppliers to come up with an alternative which will provide a similar playing quality as today but without having to water the field any longer. Of course, this alternative surface shall also ensure that the players' safety requirements are met.

FIH firmly believes that hockey can contribute to a more sustainable environment by stopping the watering of synthetic turf. The objective is that this alternative is found by 2024.

Is it no longer possible to build water-based fields?

It is not the intention of FIH to stop the construction of water-based fields. As it becomes possible for surfaces to satisfy the requirements of top-level play without water, we are sure the market will embrace this advancement with enthusiasm.

There will be a transitional period where international matches and tournaments will be played on existing water-based hockey turfs as well as the new dry turf; but when water-based surfaces come to be re-laid, the new surfaces will be used.

Will be it possible to use water-based hockey turfs after 2024?

It is not the intention of FIH to prevent the use of such fields when they already exist. However, when the time will come to re-lay the surface of the field, FIH urges that the water-based surface is substituted by the alternative solution using no water.

Can hockey played today on hockey turfs that do not require watering?

Yes, within our *Hockey Turf and Field Standards* (available at www.fih.ch/facilities) we have a number of different categories of hockey turf. Only the top 'Global' category requires a field to be watered prior to play.

It is also worth noting that innovations in hockey turf design and sub-field watering systems are already meaning fields can satisfy the requirements of top-level hockey using significantly less water than was the case only a couple of years ago.

Are 3G synthetic turf surfaces suitable for hockey?

Third generation synthetic turf surfaces are designed primarily for football and rugby. They are designed to replicate the playing qualities of natural grass. This means that in regions where hockey is predominately now played on hockey turf the surfaces may be considered slow and inconsistent. In regions where grass (or compacted earth) is still played on, some forms of 3G surfaces can provide acceptable playing surfaces, especially for development level hockey.

Hockey Field Developments - FAQs

What colours can a hockey field be?

FIH currently specify that the colour of the FOP should be a uniform shade of green, or a uniform shade of dark blue (e.g. Signal Blue).

For televised hockey FIH now advocate the use of blue fields with the FOP and run-offs being one colour. For field that will not host televised matches there are no restrictions on the colour of the run-offs, although it should be noted that lighter colours tend to show the dirt more quickly and be more prone to algae growth, a common problem on watered fields.

What other sports can be played on a hockey field?

Although a hockey turf is designed primarily for hockey, hockey fields can be used for a range of other recreational sports including, small sided football, lacrosse, tennis, netball, cricket (with a roll-out mat), athletics training, tag-rugby, rounders, etc. The suitability of the hockey turf for other sports will depend on the type selected and the advice of the manufacturer should be sought along with that of the relevant sport's governing body.

Can I put other line markings on a hockey field?



Yes, the FIH will certify fields with additional markings, but some competition regulations only allow fields to have hockey markings. If there is a desire to host higher-level events on a field, it is recommended you seek advice before putting additional markings onto a field.

Are the dashed lines outside the circle lines still required?

The dashed lines are mandatory for a field being used for FIH Tier 1 events. For all competitions, local rules will apply, and the advice of your national hockey association should be sought.

What is the best orientation for a hockey field?

In order to avoid players facing directly into low afternoon and evening sun, the preferred orientation for a field is approximately north south.

What is the best profile for a hockey field?

The profile of a hockey field is very important. Gradients aid drainage, but if they are too steep, they can have an adverse effect on the consistency of the ball roll. As surface consistency is a key



Facilities Guidance Notes



Hockey Field Developments - FAQs

requirement for hockey and especially at the elite level, the FIH has established recommended gradients as follows:

Longitudinal gradient		Lateral gradient	
Preferred	Maximum	Preferred	Maximum
≤ 0.2%	≤ 1.0%	< 0.4%	< 1.0%

Experience is showing that the latest types of global category hockey turf based on texturised-monofilament pile yarns are particularly sensitive to gradients over 0.6% and the advice of the hockey turf manufacturer should always be sought before designing Global category fields that do not use the preferred gradients.

A number of different profiles are used including single planes (end to end, side to side and diagonal falls), envelope and ridge profiles. When envelope or ridge profiles are used, it is important that the change in gradients do not adversely affect the consistency of ball roll and ridges do not result in a central spine that exceeds the surface regularity of ≤6mm under a 3m straightedge. It is also important that Global category fields have profiles that allow the surface to dry during play consistently. Designs that result in some areas drying more quickly or other areas becoming wetter as water flows towards them are not desirable.

What is an FIH approved product?



A hockey turf that has been independently tested and shown to satisfy the product requirements of the FIH Quality Programme for Hockey Turf. These include an assessment of the surface's ability to provide the correct playing characteristics, to offer adequate player comfort, and to have sufficient durability and resistance to climatic degradation to last for a realistic period.

How do I know if a hockey-turf is FIH approved?

A full list of FIH Approved Products is available at www.fih.ch/hockeyturf.

Why should I use an FIH Preferred Supplier or FIH Certified Field Builder?



The construction of the base and installation of a hockey turf is highly skilled and needs to be undertaken by contractors with the ability to work to demanding tolerances; these are much tighter than those used in general construction works and for other sports such as football or rugby. FIH Preferred Suppliers and FIH Certified Field Builders are companies that specialise in building hockey fields. The companies have a proven ability to construct fields to the standards required for hockey, have appropriate in-house civil engineering expertise for the design and construction of hockey fields,





Facilities Guidance Notes



Hockey Field Developments - FAQs

operate quality management systems to ensure consistency in their work and provide comprehensive maintenance advice to their customers.

What are the benefits of having my field FIH Certified?



By certifying your field, you are not only demonstrating your commitment to the sport of hockey, but you are also benefiting from independent quality assurance of the construction of the field and hockey turf installed, providing reassurance to players, national hockey associations, funding parties and insurance companies. Certification also defines a benchmark that can be used in the event of any warranty claim in the future.

What are the recommended lighting levels for hockey?

The FIH has comprehensive guides to lighting hockey fields. These may be downloaded at www.fih.ch/facilities.

What height of perimeter fencing should be installed?

The height should be determined by undertaking risk assessment of the facility and its intended use. Typically, perimeter fencing will be at least 3m at the ends of the field, rising to 5m behind the goals. When spectators are to be allowed to view from behind a goal the fencing height may need to increase to at least 7m. Side fencing may be as low as 1.0m but cross field play needs to be considered. A variety of different mesh types and ball catch netting are used. The repeated impact of balls hitting the fence at speed can be very damaging so a suitably designed durable fencing system should be selected. It is a false economy to use a low specification fencing system.

Where can I get further advice?

Further advice can be obtained by email at facilities@fih.ch and on the FIH website at www.fih.ch/hockeyturf.

Updated 22-11-2018