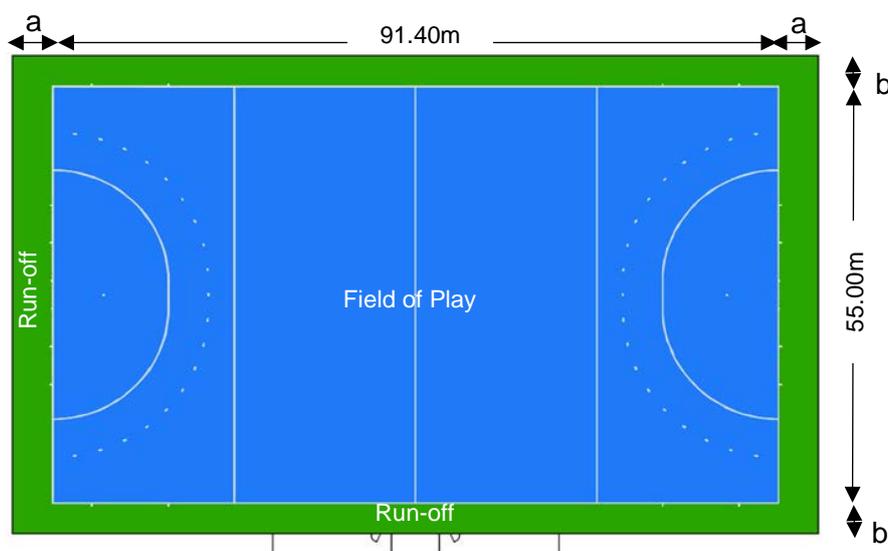


## Hockey Field Developments FAQs

### 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 hockey turf as the FOP. The outer part may be surfaced with hockey turf 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 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.

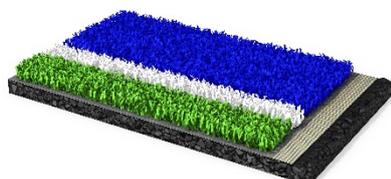
## Hockey Field Developments FAQs

### What is hockey turf?

A synthetic turf surface designed primarily for hockey.

### 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 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** 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.

### 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

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### What colours can a hockey field be?

The 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).

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.

When selecting a colour it is important to check that the particular yarn colour has been tested as part of the FIH Product Approval process, as this helps verify that the yarns have adequate resistance to ultra violet degradation, which can be a major cause of premature failure in synthetic turf surfaces.

### 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?

## Hockey Field Developments FAQs

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 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.

### How much water is required to wet a field?

Global category products are tested under FIH standard wetting conditions of applying a 3mm depth of water uniformly onto the surface (on a full size field this equates to approximately 18,000 litres). If the manufacturer wishes, the surface can also be certified for use with a reduced amount of water. This differs product to product. For a global field to be certified the field requires an irrigation system that is able to apply the required volume of water uniformly across the field within eight minutes (to allow watering at the half-time interval).

### 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 product is FIH approved?



# Facilities Guidance Notes



## Hockey Field Developments FAQs

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A full list of FIH Approved Products is available at [www.fih.ch/hockeyturf](http://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, 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 a comprehensive guide to lighting hockey fields. This may be downloaded at [www.fih.ch/hockeyturf](http://www.fih.ch/hockeyturf) - using the *Additional Facility and Equipment Resources* tab.

### 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 pitch play needs to be considered. A variety of different mesh types and ball catch netting are



# Facilities Guidance Notes



## Hockey Field Developments FAQs

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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](mailto:facilities@fih.ch) and on the FIH website at [www.fih.ch/hockeyturf](http://www.fih.ch/hockeyturf).