



ENGINEERED
FOR HOCKEY

Facilities guidance

HOCKEY5S COURTS

VER. 03



FIH HOCKEY5s

Welcome

Hockey is well known for its fast pace, technical skills, and social inclusiveness. Versions of the game are played outdoors and indoors in both formal and informal environments. The 2018 Global Hockey Survey conducted by the FIH showed that there are over 30 million people playing hockey around the world.

HOCKEY5s is a small-sided, predominantly outdoor, format of the game. It is simple and flexible enough to be played by anybody, anywhere. This guide has been written to help you provide facilities for this great form of hockey.

The game is played on a court – the specific type will depend on the level of play it is being used for. For the introductory and Community levels of play, the key to court design is flexibility and the courts providing whatever works best for you. For higher levels of competitive and tournament play, a more controlled approach is needed to provide teams with certainty about the type of court they will compete on. Based on these principles, three categories of court are described in this guide:

Community – courts intended for introductory and informal HOCKEY5s.

Competition – courts intended for competitive play at local and regional levels

Tournament – courts intended for major competitions played at national or international levels.

About this guide

HOCKEY5s courts need to provide an enjoyable and safe place for people to play, whilst being able to withstand high levels of use and the effects of weathering. It is, therefore, important that they are designed and constructed suitably using good quality materials. This guide has been written to assist those considering a HOCKEY5s facility. It describes what is required and provides examples of good practice. It should be read in conjunction with the Part 3 of our *Hockey Turf and Field Standards* (available at www.fih.ch/facilities), which describes the detailed design and construction requirements for HOCKEY5s courts. This Standard is intended to help architects, consultants, and contractors that are designing and building hockey facilities. It has requirements for three categories of court:

FIH Category 1 HOCKEY5s Court	Tournament courts intended for major competitions
FIH Category 2 HOCKEY5s Court	Courts intended for regional, national, and local competitions

FIH Category 3 HOCKEY5s Court

Courts intended for community and informal play

Areas intended for introductory and informal forms of HOCKEY5s fall outside the scope of the Standard, but the principles described can be applied when appropriate.

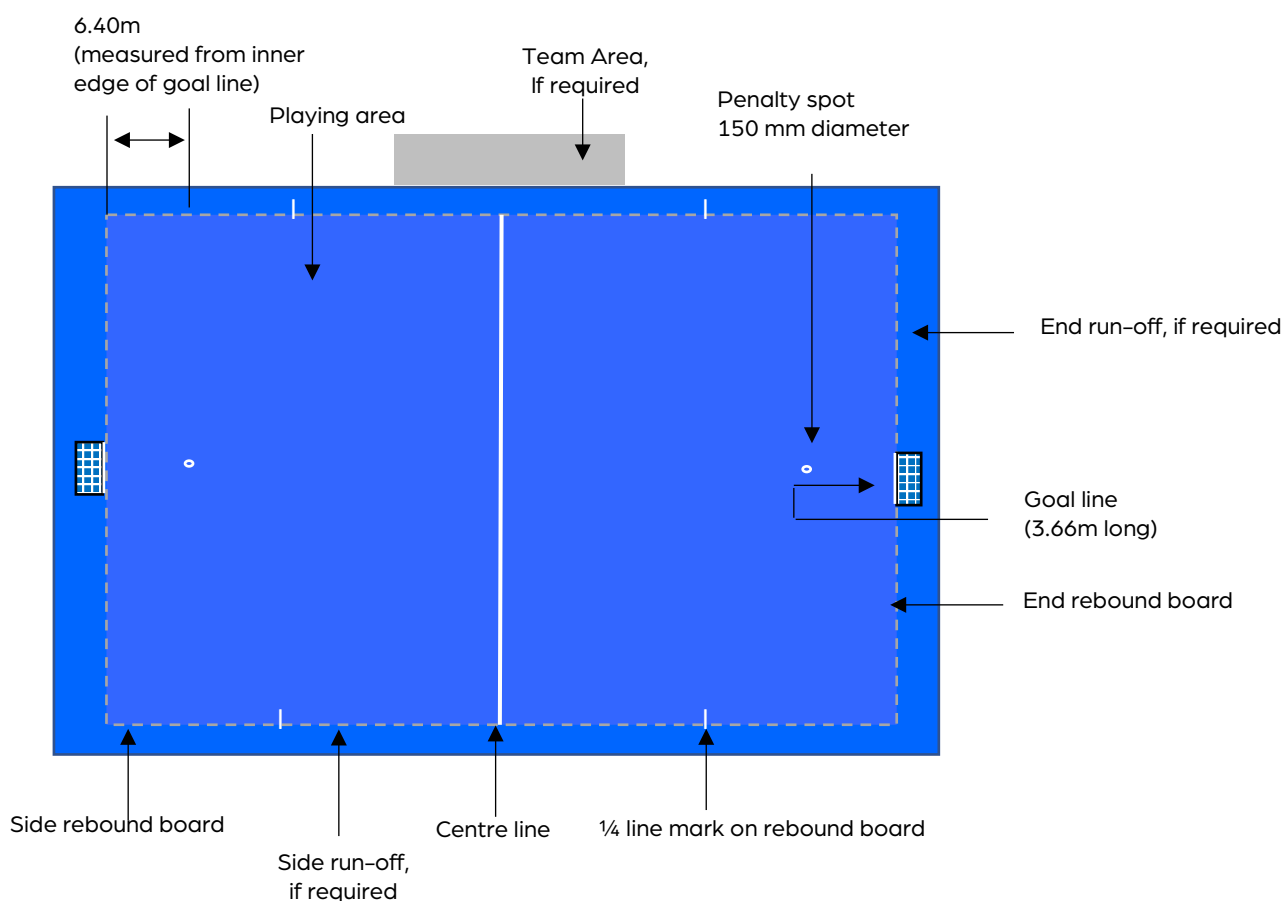
The *Hockey Turf and Field Standards* are part of the FIH's Quality Programme (www.fih.ch/qp). The programme provides internationally recognised standards that ensure the appropriate qualities of performance and longevity for hockey facilities, irrespective of whether they are intended for community development, international competition, or anything in between.

The FIH Quality Programme also recognises FIH certified companies that manufacture high quality hockey surfaces, and contractors that have a proven ability to build great hockey facilities. The FIH recommends that those investing in hockey facilities always use FIH Quality Programme accredited companies.



Court layouts & dimensions

The layout of a HOCKEY5s court is shown on the drawing below. The ends and sides of the playing area are normally defined by rebound boards. These can be free-standing or mounted onto fencing enclosing the court. Perimeter run-offs are only required if there is a risk of players leaving the playing area and colliding with perimeter structures (light columns, team benches, etc). If the rebound boards are mounted on the perimeter fencing, run-offs are not needed. To aid spectator viewing, courts that are likely to host international competitions should be based on a layout that includes perimeter run-offs. For higher level competitions and tournaments, an area adjacent to one side of the court should be provided for substitutes and team benches.



The size of a court will depend on the level of play it is designed for. FIH recommended sizes are:

		Community	Competition	Tournament
Court size	Length	Minimum 32.0 m	Between 36.0 m & 48.0 m	40.0 m
	Width	Minimum 18.0 m	Between 19.0 m & 34.5 m	23.76 m
Perimeter margin	Required	Optional	Optional	Normally required
	Ends	minimum 2.0 m		
	Sides	minimum 2.0 m		

Ideally the length of the court should be approximately 1.7 x the width.

Smaller courts may be used for the Community and Competition categories if the court is only intended for young players (under 11s etc.).

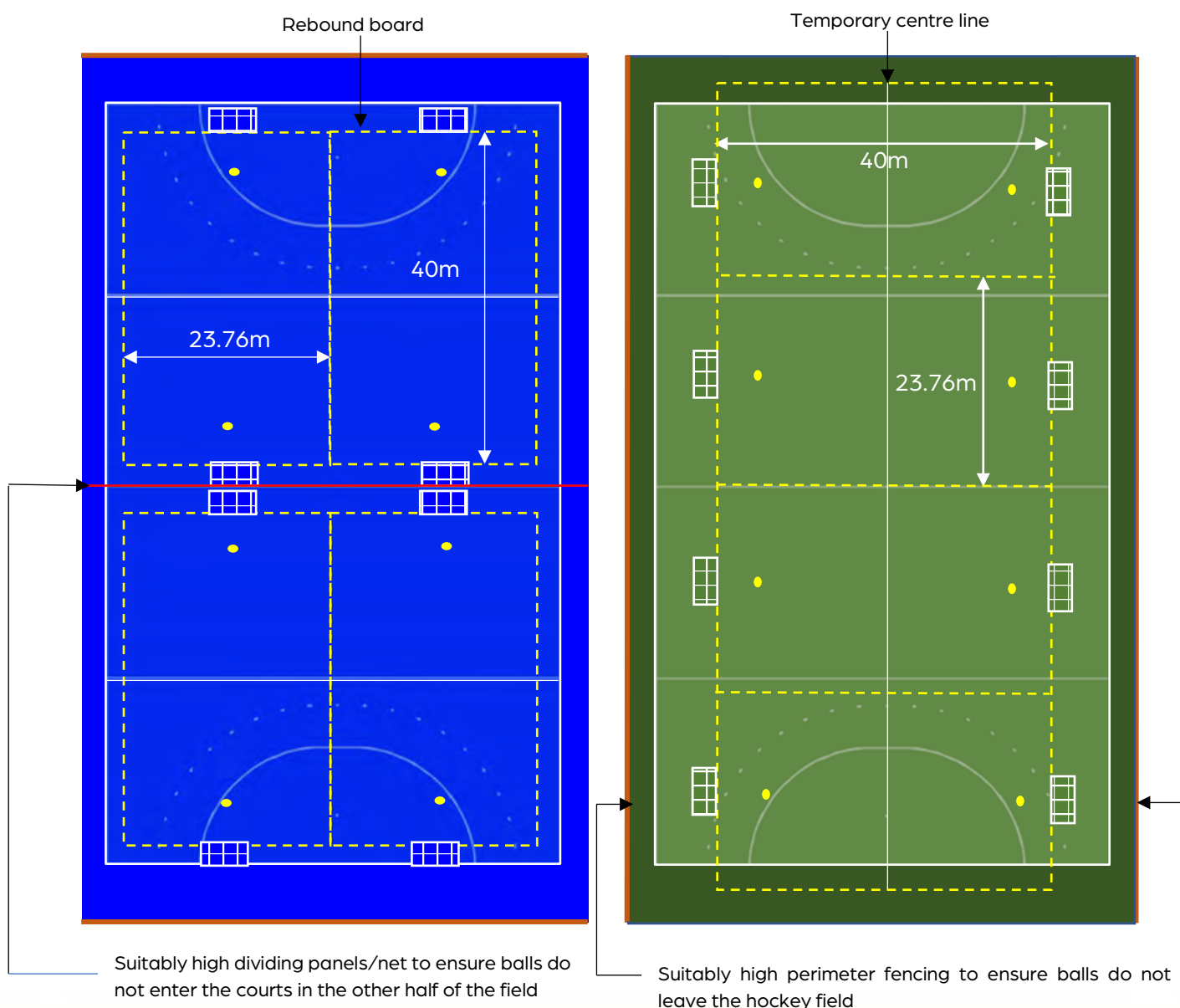
The court is marked with a centre line, two goal lines between the goal posts, and two penalty spots. The court markings should be white in colour, unless the court has markings for several sports, in which case a suitable alternative colour may be used. The lines should be 75mm wide. Penalty spots are 150 mm in diameter and positioned on the central axis of the court, 6.40 m from the inside edge of each goal line. To aid Umpires and players, the positions of the court's quarter lines should be marked (normally by tape) onto the side rebound board on each side of the court).



Overlaying courts on an 11 a-side hockey pitch

Up to four courts can be positioned on an 11 a-side hockey field. The length and width of a court will normally be determined by the length of the individual rebound boards; as these are often 2 m long, multiples of these create courts that are either 38 m, 40 m, or 42 m, in length. A hockey goal is 3.76 m wide (post to post), so the courts are often 23.76 m wide (goal + five boards each side).

If the field has a central division net or pitch-dividers are available (to ensure balls leaving one court do not hit a player on the other half of the field), the courts can be aligned with the main field and utilise the 23m lines as centre lines. If a field does not have a central division net/pitch-dividers, the courts can be aligned at 90° to the main field, but this does require temporary centre lines to be marked.



Depending on how a field is used, the court markings (goal lines within the goal posts, penalty spots and possibly centre lines) can be incorporated into the playing surface, be temporarily painted onto the surface, or be throw-down rubber lines, etc.

Handy Hint – When positioning courts side by side, double-sided central rebound boards can be used, reducing equipment costs, and shortening set-up times.



Stand-alone courts

As more and more people play HOCKEY5s, the demand for court time grows. For many, setting up courts on an existing sports field is the simplest solution, but this is not always possible, especially when the field is already used extensively, or there is no field available. This is leading to HOCKEY5s being played on dedicated courts. These are either courts built exclusively for HOCKEY5s, or multi-sport courts, on which HOCKEY5s is just one of a number of sports played.

Building a HOCKEY5s court has a number of advantages including:

- Lower cost – being much smaller than an 11 a-side pitch, the cost of a new court is much lower, making them more affordable for many
- Always available, meaning play can happen whenever people want – no time lost setting up the court before play and removing at the end of the session
- Simpler to combine use with other sports
- Allows use of surplus land that is not large enough for a full-size pitch

To reduce construction costs, stand-alone courts do not need to have perimeter run-offs and the rebound boards can be mounted directly onto the perimeter fencing.



When designing the fencing for a stand-alone court the following should be considered:

Fencing height – as with many ball sports, there is always a risk of balls leaving the court. As a hockey ball is hard and may be travelling quickly, it is imported that balls leaving the court do not injure anyone or damage anything outside the court. If a risk of injury or damage is likely to exist, fencing heights should be selected to minimise this. 4.5 m is often used, especially behind the goals and 3.0m along the sides.

Handy Hint – when 4.5m high fencing is not practical, ball catch netting strung across the roof of the court is another way of keeping balls in the court area.

Fencing type – courts may be enclosed using different types of fencing mesh including twin-bar, weldmesh, chainlink or ball stop netting. Whilst twin-bar and weld mesh are the most durable, their stiffness means there is an increased risk of balls bouncing off them and accidentally hitting a player. The noise of balls repeatedly hitting the fence might also be an issue with neighbours, etc.

Ball catch netting is the cheapest fencing mesh, but it is also the least durable. It is, therefore, often used for higher sections of fencing that are less likely to be repeatedly hit by balls.

Goals – if the fencing forms the perimeter of the court it is important to ensure the design allows for the goals; these can either be free standing goals that are positioned in recesses or be goals built into the fence. When the goals are created as part of the fence, it is not essential they have hockey-back boards, although they do help to protect the fencing from repeated ball strikes.



Multi-sport courts

Ensuring a sports court is financially sustainable is often crucial to its funding and long-term success, whilst, for others, maximising the use of available space is the key to increasing sport's provision in a neighbourhood. These trends make the concept of multi-sports courts attractive to those investing and funding community and education sports facilities. The court surfacing will determine which sports can be played satisfactorily. Sand dressed hockey turfs laid over the correct type of shockpad (see the [FIH GEN Sports Pitch Design Guide](#) for details) on a court area measuring 46.3 m x 34.75m can accommodate:

- 1 HOCKEY5s court
- 1 Futsal or mini-soccer pitch
- 3 tennis courts (aligned at 90° to the HOCKEY5s court)
- 2 Netball courts (aligned at 90° to the HOCKEY5s court)

If there is no need to cater for tennis and netball, a court of 40 m by 20m is large enough for HOCKEY5s and Futsal.

Handy Hint – When designing a multi-sport court, it is important to consider equipment storage. Portable tennis posts and nets and netball goals are bulky items, so a suitable store will be needed close to the court.

Handy Hint – HOCKEY5s goals are slightly larger than Futsal goals, so you will need to decide which sport has priority, especially if permanently fixed goals are used.

Handy Hint – the shooting circle on a Futsal court is similar to that used for 11 a-side hockey, allowing it to be used for training.



Tournament courts

The precise requirements for a tournament court will normally be detailed in the Venue Specifications issued by the tournament organisers. A typical layout used at top level international competitions will often comprise:

- a. Court playing area measuring 40.0 m x 23.76 m
- b. FIH Approved free standing rebound boards
- c. International standard hockey goals
- d. Run-offs measuring 3.0 m at the ends and 2.0 m on the sides
- e. Side fencing – minimum 1.0 m high
- f. End fencing – 7.0 m high if spectators are seated behind goals, or 4.5 m if not
- g. Team benches x 2, each with seating for six people (four players and two team staff)
- h. Technical Officials booth
- i. Floodlighting
- j. Spectator seating
- k. Emergency vehicle access to playing area
- l. Score board



YOG2018 Buenos Aires – image by OIS/IOC

Playing surfaces

It is important that the playing surface allows the game to be played safely; provides adequate foot grip and is ideally not too hard or abrasive when players fall on it. Non-filled or sand dressed hockey turfs are the preferred form of surfacing, especially for courts intended for higher level competitions. For community and lower level competitions, courts may be surfaced with any type of suitable surface, including:

- Sand filled synthetic turf & textile sports surfaces
- Long pile (FIH 3G Multi-sport category)
- Natural grass
- Polymeric sports surfaces
- Interlocking plastic sports tiles
- Cushioned acrylic sports surfaces

To ensure suitable performance and durability it is recommended the hockey turf is an FIH Approved product. A list of these is available at www.fih.ch/hockeyturf.



Rebound boards

An important part of a HOCKEY5s court are the rebound boards. Not only do they keep the ball in play, but they are an integral part of the game, as players can use them tactically as a "sixth player".

Different types of rebound board are used including commercially produced and "home-made". They may be freestanding, or fence mounted.

The key features of the boards are:

- Between 100mm and 250 mm high
- They allow the ball to rebound back into play with a predictable bounce
- They do not fall over or move excessively out of line when hit by balls
- They do not create an injury risk to players, including trip hazards, entrapment points, sharp edges, or rough surfaces, etc.
- They do not impede surface drainage when used on courts that rely on water flowing across the surface to perimeter drains

Although preferable, if it is not possible to provide rebound boards, this should not prevent a form of HOCKEY5s being played. Defining the playing area with flexible plastic piping, throw-down lines, plastic cones, etc, still allows a fun version of the game to be played.



Handy hint – when buying portable boards, do not forget to include a trolley to help moving them.

FIH Approved Rebound Boards have been tested and shown to have the desired levels of performance, and acceptable durability. They should always be used on Tournament Courts and are recommended for Competition category courts.

There are two classes of FIH Approved Board:

Class 1 boards are 250 mm high and are designed to stay aligned during play. They are most often used where visual alignment of the boards is important.

Class 2 boards are designed to allow the easy setting up and removal of courts. Each board weighs less than 10 kg and may be between 150mm and 250 mm in height. Due to their lighter weight and simple methods of attachment, Class 2 boards may move out of alignment as a result of balls repeatedly hitting them



Goals

HOCKEY5s goals are exactly the same as those used for 11 a-side hockey. When 11 a-side goals are not available, lightweight, pop-up goals or back-board training frames can be used, especially when courts are overlaid on full size pitches or grass areas.

It is important that goals do not create hazards or cause injury. They should also be anchored in accordance with the manufacturer's instructions, and due to entrapment risks, cup hooks should never be used to attach the goal net.

FIH Approved goals are independently tested to ensure they are robust, good quality, safe goals. **It is recommended that whenever new goals are being purchased, they are FIH Approved.** Details of FIH Approved goals can be found at www.fih.ch/qp.



Floodlighting

Good, sustainable HOCKEY5s courts are fundamental to the development of playing opportunities. With dedicated courts now being built, there is an increasing desire to use them over an extended period each day and this will often entail the use of artificial sports lighting. However, it is important that the lighting is of an appropriate quality for three fundamental reasons:

- to ensure the safety of players and others involved in the game
- to ensure the effective use of the money spent on capital and operating costs
- to be environmentally sensitive to the surrounding neighbourhood.

The following is a summary of the lighting recommendations given in the FIH's guide to *Sports Lighting for Non-Televised Outdoor Hockey* (2021 edition).

- Class 1 is considered suitable for high-level national and international competitions
- Class 2 is often used for training and club competitions

Handy hint – The lighting requirements for televised competitions will normally be detailed in the event's venue specifications.



Construction considerations

The design and cost of a new HOCKEY5s court will be greatly influenced by many factors and general guidance on what should be considered when constructing any type of hockey facility are given in the *FIH Facilities Guidance – Outdoor Hockey Facilities*.

The specific quality criteria and standards applicable for Competition and Tournament HOCKEY5s courts are given in Part 3 of our *Hockey Turf and Field Standards*.

Building HOCKEY5s courts to the demanding standards and performance tolerances required to enable the game to be played safely, requires specialist skills. To help you select a company that has a proven record of building high quality hockey facilities, the FIH Quality Programme (www.fih.ch/hockeyturf) includes the certification of specialist contractors.

Handy hint – appoint either an FIH Certified Field Builder or an FIH Preferred Supplier to build your HOCKEY5s courts.



Maintaining your courts

All sports surfaces need maintaining; there is no such thing as a maintenance free surface. Failure to maintain a surface will shorten its expected lifespan. It will lead to a deterioration in performance, with it eventually possibly becoming hazardous or unsafe to use. Failure to maintain the surface will also invalidate the manufacturer's warranty.

The types of surface recommended for HOCKEY5s require moderate levels of care and maintenance

Handy hint – as it is hard work brushing a court by hand, many find the use of a ride-on minitractor or quad bike with specialist brushes, a more workable method.

Typically, a court should be brushed at least weekly to remove any debris or dirt before it works into the pile of the carpet – failure to do so can result in moss or algae becoming established with an undesirable effect on foot grip and drainage.

Sinking funds

A sinking fund should be established as soon as a new court is brought into use, to ensure that sufficient funds are available to replace the playing surface when it reaches the end of its life in 8 to 10 years' time



Summary of court requirements

HOCKEY5s can be played on courts set-up on an existing sports fields or on purpose-built sports courts. This guide describes the design criteria and features that need to be considered for the different types of court. Table 1 provides an overview of these requirements.

		Community	Competition	Tournament
Court size	Length	Minimum 32.0 m	Between 36.0 m and 48.0 m	40.0 m
	Width	Minimum 18.0 m	Between 18.0 m and 35 .0 m	23.76 m
		Ideally the court length should be about 1.7 times the court width		
Perimeter margin	Ends	Optional – size as used on tournament courts	Optional – size as used on tournament courts	Minimum 2.0m on each end
	Sides			Minimum 2.0m on each side
Playing surface		Any suitable surface	Hockey turf or any other surface allowed by local competition rules	FIH approved sand dressed or non-filled wet hockey turf
Colour of playing surface		Any suitable colour	Green or blue	Blue preferred
Additional line markings or logos on court		No restrictions	Permitted, but may not be allowed by competition rules	Not normally permitted

		Community	Competition	Tournament	
Rebound boards	Type	Any as allowed by local competition rules (including courts without boards)	To be determined by local competition rules. FIH Approved recommended	FIH Approved – Class to be determined by competition rules	
	Height	Whatever is available	Preferably 250 mm (minimum 150 mm)	250 mm	
Goals		Any suitable goal	Standard hockey goal	FIH Approved hockey goal	
Sports lighting		Optional – if provided should comply with FIH Class II for non-televised hockey	Optional – if provided should comply with FIH Class II for non-televised hockey	Non-televised	FIH Class I ¹
				Televised	Minimum FIH TV3
FIH court certification		Optional	Recommended	Required	
Fencing heights		Fencing heights should be determined by assessing the risk of injury or damage occurring when balls leave the court. The risk is greater at the ends of a court than along the sides.			
		Stand-alone courts (no spectator provision) – The fencing is often 4.5m at the ends and between 1m and 3 m high along the sides.			
		Tournament courts – If spectators are in tiered seating, positioned behind the goals, the fencing should be 7 m high. If there are no spectators, fencing should be at least 4.5m high. The height of side fencing will also be determined by the proximity of spectators. Providing there is a 2 m wide run-off outside the playing area, 1 m high fencing is often used.			

¹ Facilities Guidance – Sports Lighting for Non-Televised Outdoor Hockey, 2021 edition

FIH facilities guidance – helping you win

This Guide is part of a series of facilities documents produced by the FIH.

Other information that might assist you is available at

www.fih.ch/facilities. It includes:

- Facilities Guidance – Outdoor Hockey Facilities
- Facilities Guidance – GEN 2 multi-sports areas
- Facilities Guidance – HOCKEY5s courts
- Facilities Guidance – Sports Lighting for Non-Televised Outdoor Hockey
- Facilities Guidance – Sports Lighting for Televised Outdoor Hockey
- Facilities Guidance – Hockey Field Irrigation
- Facilities Guidance – Indoor Hockey

- Hockey Turf and Field Standards Part 1 – FIH Approved Hockey Turfs
- Hockey Turf and Field Standards Part 2 – 11 a-side hockey fields
- Hockey Turf and Field Standards Part 3 – HOCKEY5s Courts
- Hockey Turf and Field Standards Part 4 – Temporary Overlay Pitches (TOPS)

- FIH Approved Field Equipment – Hockey Goals
- FIH Approved Field Equipment – HOCKEY5s Rebound Boards
- FIH Approved Field Equipment – Team Shelters
- FIH Approved Field Equipment – Technical Officials Booths
- FIH Approved Field Equipment – Indoor Hockey goals
- FIH Approved Field Equipment – Indoor Hockey side-boards

Use of this guide

Whilst every effort has been made to ensure the accuracy of the information contained in this publication, any party who makes use of any part of the Guide in the development of a hockey facility shall indemnify the International Hockey Federation (FIH), its servants, consultants or agents against all claims, proceedings, actions, damages, costs, expenses and any other liabilities for loss or damage to any property, or injury or death to any person that may be made against or incurred by the FIH arising out of or in connection with such use.

Compliance with the requirements detailed in this Guide by a User does not of itself confer on that User immunity from their legal obligations but does constitute acceptance of the terms of this disclaimer by that User.

FIH reserve the right to amend, update or delete sections of this Standard at any time, as they deem necessary.

Any questions about this Guide should be addressed to facilities@fih.ch



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