



# FIH Indoor Hockey World Cup Field of Play Specifications

Version 1.0

## Introduction

The men's and women's FIH Indoor World Cups (IHC) are hockey's leading indoor competitions, so it is very important that the facilities provided for the tournament meet the needs and expectations of the competing athletes, media, spectators and sponsors. This specification therefore describes the requirements for the field of play including the playing surface, sports equipment and lighting.

This specification does not describe important aspects that are normally covered by national regulations and building standards (such as flammability regulations for the playing surface, etc) and it is the responsibility of the host to ensure any such regulations are also complied with.

## Number of pitches

The number of competition pitches required will depend on the format and match scheduling for the IHC, which will be agreed by the FIH and host

Ideally, in addition to the competition pitch(s) the venue will also have a training pitch that can be used by teams during the tournament. Where this is not possible, off-site training at another venue may be provided.

## Dimensions

Each competition pitch should satisfy the requirements shown in Table 1.

Table 1 – Dimensions			
		Competition pitch(s)	Training pitch
Field of play		44.0 m x 22.0 m	Min 40.0 m x 20.0 m
Run-offs	Sides (minimum on each side)	2.0 m	1.0 m
	Ends (minimum on each side)	3.0 m	3.0 m
Team bench area (minimum depth)		2.0 m	-
Total floor space (minimum)		50.0 m x 28.0 m	46.0 m x 22.0 m

## Type of sports floor

It is very important that the playing surface used provides the levels of comfort and impact protection that the athletes will expect. These properties will be significantly influenced by the base on which it will be laid so it is important the structure of the base is known before an overlay surface is selected.

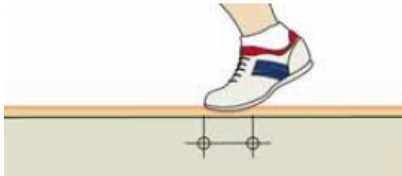
If an existing sports venue is to be used it will most likely have either a point-elastic floor or area-elastic floor (see as shown in Figure 1). If a non-sporting venue is to be used it is likely to have a rigid (concrete or similar) floor.

Rigid floor



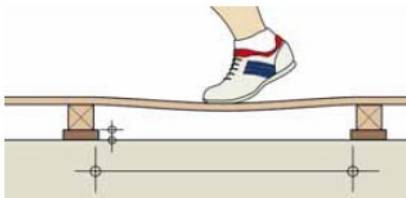
Solid floor (eg concrete) that does not deflect under load and does not provide any (or very little) cushioning or shock absorption.

Point elastic sports floor



Sports floor to which the application of a point force causes deflection only at or close to the point of application of the force.

Area elastic sports floor



Sprung sports floor to which the application of a point force causes deflection over a relatively large area around the point of application of the force

Figure 1 – types of sports floors

The competition pitches must only have line markings for Indoor Hockey and be in good condition with no scuff marks, visible repairs, etc. To ensure this it is likely that a temporary overlay floor covering will be required.

If the base is a rigid concrete slab the overlay surface should comprise an upper playing surface and cushioned underlayer. These could be:

- Polymeric or vinyl sports hall flooring with foam underlayer  
or
- Interlocking plastic tiles laid above a foam or rubber shockpad

If the base is an existing point-elastic sports floor or an area-elastic sports floor, the temporary overlay floor should comprise a:

- Polymeric or vinyl sports hall flooring  
or
- Interlocking plastic tiles

### Floor colour

The floor should have a low gloss or matt finish. Whilst there are no FIH mandatory requirements for the floor colour, blue (RAL colour code 5007 or similar) with a white ball has been found to be most suitable. Alternative colours can be used for the pitch's run-offs.

## Line markings

The pitch(s) should be marked for Indoor Hockey, in accordance with the Rules of Indoor Hockey. Line markings should be 50 mm wide and white in colour. There should be no other line markings on the pitch.

Logos may only be applied to the floor in accordance with the FIH commercial and branding regulations.

## Installation standards

The floor shall be installed to provide a continuous and homogenous playing surface. It shall be flat with no depressions or ridges (maximum gap under a 300 mm straightedge  $\leq \pm 2.0$  mm).

Surface joints must not cause a rolling hockey ball to lift, bobble or deflect from the surface.

The installed floor (overlay and existing structure) shall satisfy the following performance criteria:

Property		Test method	Requirement
Shock absorption	Point elastic flooring	EN 14908 <sup>1</sup>	Between 25 % and 45 % and no individual result shall differ from the mean by more than $\pm 5$ units.
	Area elastic flooring		Between 25 % and 55 % and no individual result shall differ from the mean by more than $\pm 5$ units.
Dry slip resistance		EN 16837 <sup>2</sup>	Between 80 and 110 and no individual test result shall differ from the mean by more than four units

## Goals

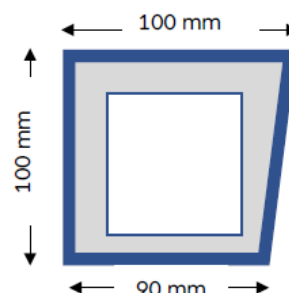
Each pitch shall have three Indoor Hockey goals (one set + one spare). The goals should comply with the technical and safety requirements of the *FIH Construction and Performance Specification for Indoor Hockey Goals*. Ideally the goals will be FIH Approved (see [FIH Quality Programme for Field Equipment | FIH](#) for details). The goals should be fitted with side and back boards. Their colour shall be agreed with the FIH. The goal frame should be white in colour. The goals nets should be of a colour agreed with the FIH.

<sup>1</sup> European Standard EN 14808: Surfaces for sports areas – Determination of shock absorption

<sup>2</sup> European Standard EN 16837: Surfaces for sports areas – Determination of linear shoe/surface friction

## Side-boards

Each pitch shall be fitted with sideboards complying with the *FIH Construction and Performance Specification for Indoor Hockey Sideboards*. They may be made of aluminium, MDF, timber or materials with similar physical properties. Ideally the sideboards will be FIH Approved (see [FIH Quality Programme for Field Equipment | FIH](#) for details). Unless otherwise agreed by FIH the boards shall be white in colour.



In addition to the installed sideboards, the venue shall have a minimum of four replacement boards for each pitch.

## Team Seating

Seating for 12 players for each team shall be provided along one side of the pitch. The seating must not be positioned on the side run-off, but allow players direct access to the pitch .

## Technical Official's table

A TO's table shall be positioned adjacent to the centre line of the pitch, between the two sets of team seating. The table shall measure approximately 5m by 1m and have seating for five officials.

## Lighting

Indoor hockey is a fast game played with a small ball and, as such, places high demands on players in terms of visual performance. Good lighting intensity and uniformity are therefore essential. The lighting should not cause shadowing, be largely glare-free to the player's field of view and maintain a marked contrast between the ball and background.

The following minimum lighting levels should be achieved:

	Competition pitches		Training pitches
	Horizontal	Vertical to main camera	Horizontal
Minimum maintained average illumination	1 000 lux	750 lux	500 lux
Minimum uniformity $E_{min}/\bar{E}_{av}$	0.8	0.70	0.70

$E_{min}$  = minimum illumination  $E_{av}$  = average illumination

Lighting measurements to be made on a 3 m x 3 m test grid.

Details of current or proposed temporarily lighting should be included in the bid documentation.

If overlay lighting is required, it is recommended that venue host seeks guidance from a FIH Certified Lighting Supplier (see [FIH Quality Programme for Sports Lighting | FIH](#) for details).

## Spectator ball catch netting

If spectators are to be seated behind the end-lines, ball catch netting should be suspended behind the run-offs to prevent balls leaving the pitch and striking spectators. The netting mesh size should be no greater than 45 mm.

The height of the netting should be determined after undertaking a risk assessment of the venue. When tiered seating is being used the netting should be at least 5 m in height.

## Further advise

If further information is required on any aspect of this specification, please contact [facilities@fih.ch](mailto:facilities@fih.ch).



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