## **International Floorball Federation**

# Major changes to Material Regulations

Certification Rules for IFF-marking of Floorball Equipment SPCR 011

## **Edition 2016**

Interpretation of the Material Regulations. If the need to interpret Material Regulations between two editions occurs, can this be done 2 times / year (in May and December).

Valid from July 1, 2016

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## 1.3.2 **IFF**-Marking

Marking is to contain the certification mark-as shown below. Stick manufactures are allowed to print the certification mark as a part of the Brand name / Model name sticker / print, see point 1.3.2.1. The certification mark's type and placement for each product type is to be in line with the following:

Stick	sticker on the shaft of the stick, between the grip binding and shaft / blade attachment point.
Blade	embossed mark on the blade's surface, see point 1.3.2.4.
Ball	embossed mark on the ball's surface, see point 1.3.2.4.
Goals	sticker around the goal crossbar.
Rink	sticker on the back of each sideboard section.
Facemask	sticker on the inside or outside.
	(other requisite markings see appendix 26, only valid within the European Union).

Sizes: 37±2 mm x 15±2 mm, for sticks. 45 x 19 mm, facemasks. 90 x 38 mm, for goals and rinks

(see appendix 5, Order form for certification marks).



Certification marking for Goals, Rinks and Facemasks.



**Certification marking for sticks.** (layout of the self-printed colour version)



**Certification marking for sticks.** (layout of the self-printed grey scale version)



Certification marking for sticks. (optional layout of the self-printed black and white version)

XXXXXX	= The certification- or family certification- number of the stick.
YY	= The manufacturing year.

E.g. 105804/06

Products that have been certified and began production of the period October to December are permitted to be labelled with the following year marking.

Technical information:

Size	Colour code PMS	
37±2 mm x 15±2 mm.	Yellow:	109 (yellow)
	Green:	355 (green)
	Blue:	2915 (light blue)
	Black:	Black

## 1.3.2.6 Uniformed stick measurement

The length of the stick has to be uniformed. The length to be communicated to the customers is the length of the stick measured as described in appendix 1 point 5.2.4. Stick length can be but don't need to be printed on the shaft; the stick length can be shown on a separate sticker or on the knob. Companies have to adopted the new marking requirement not later than 1<sup>st</sup> of July 2012, see point 2.1.1. Make sure that all new sticks produced after July 1 2014 is carrying the new uniformed stick measurement.

#### 1.3.2.8 Shaft certificate

Only the shaft characteristics are specified in the certificate. All brand/model names linked to the certificate are to be found in the database of Certified Floorball Equipment. All brand/model names placed on the market must be registered in the database.

## **1.7** Modification of Certified Product

The holder of this certificate shall, before making any alteration to the design or materials, notify SP in writing of such intended alterations. SP will decide on the resulting necessary response: examples of such response include renewed testing and modification of the certificate.

A change of product name will result in a need to modify the certificate. Certificates may show several names for the same product. It applies to balls, goals, rinks, face-masks and goggles. For sticks, all modification of brand and model names that are connected to the certificate will be done by revising the database of certified Floorball equipment.

## **1.13 Rules for exemptions**

The number of exemptions should be kept as low as possible, in order to simplify the situation for the referees. A large number of exemptions also weaken the system of Certified Floorball Equipment. But in some cases, dispenser may need to be used, and these cases are listed below:

Apply for an exemption is possible in the following cases:

- If a new requirement is introduced and new ways of working is needed.
- If a new requirement is introduced and engraving is needed,
- If a new requirement is introduced and long lead times are required.
- Minor deviations from the requirements that are deemed to still be safe to play with.

Apply for an exemption is not possible in the following cases:

- Requests to mix shafts and blades between different brands.
- Requests to sell out stocks.

An administrative fee of CHF 300 is to be paid for each exemption.

## 2.1 Stick incl. the Blade

## 2.1.1 Stick Design

The following sentence has been added to text: "The grip line is to have a good contrast to the background colour".

2.2 Ball

## 2.2.6 Rebound

The ball's rebound is to be  $790 \pm 50$  mm.

## 2.3 Goal

Beside the official match goal (1600 x 1150 mm) three other goal sizes (1200 x 900 mm, 900 x 600 mm and 600 x 450 mm) can be certified. Goals (1 of each type) are tested to SP-method 1506, point 5.4 (see appendix 1), and are assessed according to following requirements.

## 2.3.1 General Design

The goals are to be red and constructed with metal tubing. The goal is to be designed without a metal bar for holding the drop-net. If the goals are not designed as single unit, the metal tubes is to have a fixed mounting to each other by means of pre-fabricated holes, using self-locking screws or nuts (unfixed are prohibited). The fixed mounting is to have no sharp outstanding points. The drop net is to cover the entire width of the goal, be placed  $200 \pm 25$  mm behind the upper bar and permanently fixed at the top. There is no restriction regarding net colours.

## 2.3.2 Goal Dimensions

The goal is to be designed with dimensions according to appendix 12. The radii of the goal, excluding those at the base of the goal, should not be under the diameter of the tubing. All of the dimensions must conform to the standard.

	<u>1600 x 1200</u>	<u>1200 x 900</u>	<u>900 x 600</u>	<u>600 x 450</u>
a) goal width	$1600 \pm 2 \text{ mm}$	1200 ± 2 mm	$900 \pm 2 \text{ mm}$	600 ± 2 mm
b) goal height	$1150 \pm 2 \text{ mm}$	<mark>900 ± 2 mm</mark>	$600 \pm 2 \text{ mm}$	450 ± 2 mm
c) back bar diameter	$20\pm2$ mm	<mark>20 ± 2 mm</mark>	$20 \pm 2 \text{ mm}$	20 ± 2 mm
d) goal frame diameter	$32 \pm 1 \text{ mm}$	<mark>22 ± 2 mm</mark>	$22 \pm 2 \text{ mm}$	<u>22 ± 2 mm</u>
e) lower goal depth	$650\pm20\ mm$	$520 \pm 20 \text{ mm}$	$480 \pm 20 \text{ mm}$	420 ± 20 mm
f) goal corner radius	$100 \pm 20 \text{ mm}$ (radius of central axis)			
g) upper goal depth	$400\pm50\ mm$	350 ± 50 mm	$300 \pm 50 \text{ mm}$	$250 \pm 50 \text{ mm}$
2.3.3 Goal Weight				

The goal with net is to weigh:	<u>1600 x 1200</u>	<u>1200 x 900</u>	<u>900 x 600</u>	<u>600 x 450</u>
0	$12 \pm 1.0 \text{ kg}$	<mark>6 ± 1.0 kg</mark>	3 ± 0,5 kg	3 ± 0,5 kg

## 2.3.4 Pad Discoloration onto Playing Surface

The pads should not leave traces of paint on the playing surface, apply to all goal sizes. The pads are to be white.

## 2.3.5 Drop Net Strength

Net and erection device are to be intact, apply to all goal sizes.

#### 2.3.6 Net Mesh Size

The mesh should be min 40 x 40 mm and max 50 mm x 50 mm, apply to all goal sizes.

### 2.3.7 Drop Net Length

The drop net length is to be such that the bottom edge hangs between a min of 0 mm and a max of 50 mm from the playing surface, apply to all goal sizes.

## 2.4 Rink

## 2.4.7 Rink weight per running meter

<mark>Maximum 5,5 kg</mark>

## 2.5 Face Mask

## 2.5.1 Face Mask Size

A measuring gauge, as described in SP-method 1506, point 5.6.2.3 (see appendix 1), should not be able to be inserted in any of the facemask's mesh openings whereby contact with the dummy head occurs. The size of stick blade measuring gauge is  $70 \times 8$  mm.

#### Guidelines for the measurement of grille openings in the match situation

Guidelines for the measurement of grille opening in the match situation should be viewed as a rough method to measure and may not always reflect a correct result, if the grille doesn't have an IFF marking on it, which means it is approved, if it has not been tempered with.

The grille openings must in most cases never be measured to more 70mm in any direction. In some grilles all grille openings are not rectangular, but have other shapes (eg, sharply tapered or eye formed). If you measure these types of grille openings to a value exceeding 70mm; then it is also important to measure the opening perpendicular to the long opening at that part of the grille opening exceeding 70mm. The perpendicular measured value must not be larger than 8mm.

## 4 Subsequent surveillance

## 4.1 Application

Supervisory inspection is carried out by taking / or testing samples of products at the manufacturer's warehouse or by market surveillance. Checks are also made to all sampled certified products, to see if the brand and/or model is/are noted on certificates, if marking is correctly applied etc. The certificate holder may also report defects found during own inspection (see point 4.6).

Supervisory control means that the sampling and / or testing of the products is carried out at the manufacturer's warehouse for free and in according to a specified sampling / testing plan. The sampling of certified products can also take place by purchase on the open market, and can be performed by SP and / or IFF.

Supervisory inspection includes a requirement for the certificate holder to; on request submit inspection records for inspection.

## 4.2 Testing and Inspection

#### 4.2.1 Sampling

Sampling shall be carried out in such a way as to ensure that all certified products are inspected approximately once in every five years.

#### Sampling volume and frequency plan

Product type	Number shaft certificates Frequency and Volume		No. of items to sample	
<b>Sticks</b>	≥ 10 certificates	1 time / year, 4 models	3 of each model.	
	$\geq 5 < 10$ certificates	1 time / 2 years, 3 models		
	< 5 certificates	1 time / 3 years, 2 models		
<b>Balls</b>	≥ <u>1</u>	1 time / 5 years, all models	5 of each model.	
<mark>Goals</mark>	≥ <u>1</u>	1 time / 5 years, all models	1 of each model.	
<mark>Rinks</mark>	≥ <u>1</u>	1 time / 5 years, all models	2 straight sections $+ 1$ curve.	
Face masks	<mark>≥1</mark>	1 time / 5 years, all models	1 of each model.	

#### 4.2.2 Test methods and requirements

Testing in respect of the following characteristics will be carried out in accordance with SP Method 1506, and the results will be assessed as described in Chapter 2.

Product type	Attribute		
	design		
	dimensions (a-, b-, c-, d-, f- and h- dimensions)		
Sticks	shaft rigidity		
	shaft impact strength		
	weight		
	dimension (the a- dimension)		
Balls	surface fineness (at the joint)		
	breaking stress		
	rebound		
Goals	dimensions		
	drop net length		
	weight		
Rinks	dimensions		
	radii		
	section fit		
Face masks	impact strength		

### 4.2.3 Inspection of marked equipment

Supervisory inspection of certified products involves inspection of all marked equipment at the place of sampling or purchase, to determine whether the make and/or type of equipment are recorded on the certificate, if marking is correctly applied etc.

## 4.2.4 Examination of after request submitted inspection records

Supervisory inspection includes a requirement for the certificate holder to; after request submit inspection records for inspection.

## 5.7 Recall of Certificate

IFF can, with immediate effect, by a written resolution, request SP to, permanently or temporarily, recall a certificate if:

e) the certificate holder has not paid the invoices for the IFF's certification mark.

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## Methods for Verification of Equipment Criteria for Floorball

## Method Description

Prepared by Lars-Åke Henriksson Issued 2015-05-05 **SP Technical Research Institute of Sweden** Department of Chemistry and Materials Technology Borås 2015

## 5.3 Ball

5.3.7 Rebound

## 5.3.7.1 Equipment

When testing, use a ball release device, which operates smoothly without imparting any spin to the ball and which allows the ball to be dropped vertically from the specified height.

Acoustic recording apparatus, comprising a microphone and timing device, and giving a reading accurate to within 1 ms.

The device is to be activated acoustically by the sound from the first bounce of the ball and deactivated by the sound from the second bounce, the time between these events being denoted *T*, in seconds.

## 5.3.7.2 Samples

Five balls.

## 5.3.7.3 Implementation

Set the ball gate device at the appropriate drop height for the ball,  $2000 \pm 10$  mm.

Ensure that the drop gate has a slight inclination and a hole with  $\emptyset$ 73 ± 0,5 / 0mm and a length of 30 ±2mm where the ball will drop down.

Drop the ball through the ball gate onto a stable metal plate with a smooth surface of minimum size 500 x 500 mm and minimum thickness 10 mm.

The ball drop is to be at random.

If the second bounce is within 50 mm from the edge of or outside the plate, exclude the drop and perform a new drop.

Record the time, T, between the first and second bounces.

Calculate the height, H, to which the ball rebounds using the following equation: H =  $1,23(T-K_1)^2$ 

 $1,23 = g (9,82)/8 \quad (H = \frac{gt^2}{2} \quad t = \frac{A}{2} \qquad H = \frac{g(\frac{A}{2})^2}{2} > \frac{g\frac{A^2}{4}}{2} > \frac{gA^2}{8} = 1,23A^2)$ 

T = time between the first and second bounces.

 $K_1$  = correction factor (for measuring the sound when the ball leaves the surface)

Repeat the test 10 times and calculate the mean value of the rebound.

#### 5.3.7.4 Results

The results are reported as individual values rounded off to 1 cm.

## 5.5 Rinks

#### 5.5.8 Rink Weight per running meter

#### 5.5.8.1 Equipment

Scale with accuracy  $\pm 10$  g.

#### 5.5.8.2 Samples

Two rink sections.

#### 5.5.8.3 Implementation

The rink sections are weighed on the scale. The length of each rink section is measured and the weight per running meter is calculated as a mean value of the two rink sections.

#### 5.4.3.4 Results

Rink weight per running meter is reported in kg to one decimal point.