The Football Association

Football Goals – Guidance Notes

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1. Foreword

In the past serious and fatal accidents have occurred due to inappropriate use, maintenance, construction, design and/or installation of goals. This document has been produced to inform and advise on 'best practice' to help ensure goals are safe.

There are three British Standards which specify the requirements for goals. It is recommended you obtain and read the Standards. They are:

- BS 8461: Football Goals – Code of Practice for their Procurement, Installation, Maintenance, Storage and Inspection;

- BS 8462: Specification for Goals for Youth Football, Futsal, Mini-soccer and Small-Sided Football;

- BS EN 784: Playing Field Equipment – Football Goals – Functional and Safety Requirements, Test Methods.

Copies of British Standards may be purchased online at the BSI web site www.bsi-global.com.

The FA is primarily concerned with goals used as sports equipment in formal and organised football. Goals that are designed to meet toy standards are intended for that use only. They are not appropriate or indeed suitable for use as sports equipment and consequently not incorporated within this document.

Whilst every effort has been made to ensure the information provided is accurate a facility operator should always make sure that a goal is safe before use and also follow the guidelines outlined by the manufacturer for installation and maintenance. It is also recommended that facility operators keep up-to-date with the latest developments in goalpost safety and refer to the most up-to-date and relevant Standards at all times.

Any party who makes use of any part of this document in the procurement, installation, inspection or maintenance of football goals shall indemnify the Football Association, 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 Football Association arising out of or in connection with such use.

2. Goal sizes

The various laws of football, mini-soccer, Futsal etc specify the size of goal to be used for each versions of the game. Table 1 shows the size of goals recommended by The FA.

Table 1 – Goal sizes	
Type of football	**Size (m)**
Full size (Eleven-a-side)	7.32 x 2.44
Youth football	6.40 x 2.13
Mini-soccer	3.66 x 1.83
Small sided football	4.88 x 1.83 4.88 x 1.12 3.66 x 1.83 3.66 x 1.22 2.44 x 1.22
Futsal	3.00 x 2.00

3. Procurement

Whilst manufactures can make and sell goals and nets irrespective of whether or not they comply to the recommendations of the relevant British Standard only goal posts that fully comply with BS EN 748 (full size goals) or BS 8462 (Youth Football, Futsal, Mini-soccer and Small-Sided Football) should be used for competitive play and training.

When purchasing goals the supplier should be asked to provide an independent test certificate showing that the actual type of goal being purchased (just because one goal in a product range conforms does not mean all the others will) has been tested and meets the requirements of the relevant Standard. The certificate should be retained with the Goal Post Log (see section 9) for future reference.

Goals should only be purchased as a complete unit and if replacement items are required they should always be purchased from the original manufacturer or supplier. If a part of the goal is replaced it is important to ensure the goal still conforms to the appropriate British Standard.

4. Installation

4.1 General

Prior to the installation of a goal it is important to check carefully that it has not been damaged during transit and that all parts are present. If any of the constituent parts appear damaged, or are missing, the goal should not be assembled or used.

Goals should always be installed in accordance with the manufacturer's instructions.

Installation should only be undertaken by, or under the direct supervision of, trained persons with enough experience and with adequate assistance for the size of goal being erected.

4.2 Socketed Goals

Goal post sockets should always be set into concrete foundations. The size of the foundation required is dependent on the ground conditions and always should be in accordance with the manufacturer's instructions for the prevailing conditions. If the ground conditions are unknown, the minimum concrete block size should be either 600mm x 600mm x 600mm or in accordance with the manufacturer's recommendations, whichever is greater. The base of the footing should be square to reduce the risk of overturning. The socket depth should be 460 mm. The top surface of the foundation immediately around the socket should be level to provide strength. The concrete should be rounded gently away from the socket and should then slope downwards at an angle of about 45° as shown in Figure 1.

On natural turf pitches the top of the concrete foundation should be installed at least 40 mm below the surface of the ground to ensure that it stays below ground even if there is erosion or shrinkage.

Goalposts should always be inserted into the sockets to the correct depth, as specified by the manufacturer. For full size goals this should be a minimum depth of 300 mm. Some Manufacturers often fix a label to the goal post to show when the post is properly inserted.

4.2.1 Socket Caps

When not in use sockets should be capped to prevent accidents.

4.2.2 Net Support Posts

The dimensions of the concrete footing for net support posts should be either 400mm x 400mm x 450mm; or in accordance with the manufacture's recommendations, whichever is greater. The socket depth should be 350mm and the net support posts should be inserted to a minimum depth of 300 mm.

Key:

1. Upright
2. Playing surface
3. Concrete block
4. Ground socket
5. Drainage hole (sockets used outdoors)

Note: Dimension α should be in accordance with the manufacturer's instructions 500mm (full size goals) or 500mm (goals described in BS 8642) as appropriate.

Figure 1 – Installation of ground sockets

4.3 Free-standing Goals

Free-standing goals need to be appropriately stabilised in accordance with the manufacturer's instructions.

The most commonly used methods of stabilisation can be significantly affected by poor installation techniques as well as by poor ground conditions. Consequently, the most reliable methods of stabilising free-standing goals are:

(i) by attaching the back bar to permanent fixing points via eyebolts, stainless-steel loops set in concrete blocks (see 4.3.1);

(ii) using suitable attachment points on a permanent fence or wall;

(iii) or using weights attached to the goal's back bar in the correct positions as specified by the manufacturer or integral to the goal (see 4.3.2).

Due to uncertainty in types of ground and/or ground conditions the use of pins, pegs, u-staples or screw-in anchors on natural turf pitches is not generally recommended. However, if there is evidence that they are effective under the worst predictable ground conditions on the site in question then they may be considered.

4.3.1 Anchor Points

The minimum dimensions of the concrete block surrounding the anchor point should be either 500mm x 500mm x 500mm or in accordance with the manufacturer's recommendations, whichever is greater. A typical construction for an eyebolt anchor point is shown in Figure 2.

Figure 2 – Anchor point (eyebolt)

4.3.2 Weights

If weights are to be used as a way of stabilising a goal, the correct number should be employed and they must always be attached to the goal. There are different types of weight including those:

- integral to the support frame ground back bar;
- attached or applied to the support frame ground back bar; and
- positioned on the ground (less than 50 mm away from the rear of the goal) away from the players and attached securely to the rear ground support frame using a short shackle.

The total mass of weights required to stabilise a full size goal can be as much as 150kg and the selection of weights and their mass should be considered in respect of the intended location of the goal and means of moving the weights. The movement of the weights needs to be undertaken with care and in accordance with the health and safety requirements - mechanical aids and safety footwear may be required depending on the size of the individual weights.

4.3.3 Chain and cable attachments

Whatever method is used to stabilize a goal, any attachment chain or a wire cable between the goal and the weight, anchor, eyebolt or other fixing point should be as short as possible and not allow the back bar to lift more than 50 mm from the ground.

The positions at which the goals are attached to their anchors should be as close as possible to the back corners of the support frame. This avoids loading the back bar (which in many goals is not designed to be a load bearer) and makes the anchor as effective as possible. The use of a single anchoring point near the centre of the back bar should be avoided, even if it is attached by chains or cords to the outer corners of the support frame

5. Moving goals

In order to move a goal it is necessary to remove any anchors, weights, fixing points and/or sockets which make it unstable. Past experience has shown that a goal may be at its most dangerous when it is being moved. Consequently, there are a series of measures required to help make movement safer. The manufacturer's instructions on moving goals should always be followed.

Goals should never be moved without an adequate number of physically fit and capable people who have been fully trained to use proper lifting techniques. A full-sized goal should never be moved using fewer than four adults.

Goals should never be dragged across the ground as this may damage the goal and/or the playing surface. If wheels are fitted to the goal, they should be used correctly, in accordance with the manufacturer's instructions. Wheels should be of a type suitable for the surface across which the goal is to be moved.

Goals fitted with wheels can easily topple if they are pushed incorrectly or in the wrong direction. In general goals with four wheels should only be pushed by the uprights in a backwards direction (see Figure 3). Goals with two wheels should be moved by lifting the back bar and pulling in the direction shown in Figure 3. If the ground condition is unsuitable and the wheels rut into the playing surface the goal should be lifted.

Figure 3 – Moving goals

6. Storing Goals

Goals not in use should be properly stored. Stored goals should never be left accessible, upright or unstable. Socketed and folded free-standing goals should not

be left leaning unsecured; they should be locked securely and safely. If this is not possible they should be left lying flat on the ground so they cannot fall over.

Moveable goals may be left safely secured in pairs or in secured enclosures.

Goals should be left in place, properly stabilised, if no method of safe storage is available.

7. Goal inspections

7.1 General

Goals should be inspected regularly to ensure that they are still safe to be used. Three levels of inspection are recommended as shown in Table 3 which also details the checks and tests that should be made for each.

7.2 Frequency of inspections

The conditions under which goals are used and stored varies for different sites; this means it is impossible to specify exactly what check should be made and also at what frequency. For example, it may be necessary to check a goal which is permanently installed in an open public space on a daily basis, whereas one which is located in an enclosed stadium and is only used by an organised club with frequent supervision may not need the same frequency of checks. The type and thoroughness of the checks needed may also vary with the type of goal.

Table 3 - Inspection Guide

	Inspection Type 1	Inspection Type 2	Inspection Type 3
Check for loose and missing nuts, bolts, pins and other fixings	X	X	X
Check for firm attachment to anchoring points or signs of movement in sockets	X	X	X
Check for broken or missing net fixings	X	X	X
Check for any broken cord in the nets	X	X	X
Check for bent sections or other damage to any part of the goal	X	X	X
Check that all identification and instruction labels are firmly attached and fully legible	X	X	X
Check that the goal has been firmly reattached to all of its anchors		X	X
Check that the anchors are secure		X	X
Ensure all weights are present, the manufacturer's label on the goal should say what weight is needed (if applicable)		X	X
Check that the goal has not been bent or otherwise damaged while being moved		X	X
Check the strength and stability, in accordance with BS EN 748 or BS 8462, as appropriate			X

Inspections should be made as follows to establish the minimum frequency and level of checks required for any one set of goals.

- Inspection Type 1 should be undertaken at least every week and before any game or training activity.

- Inspection Type 2 should be undertaken each time a goal is moved or repositioned.

- Inspection Type 3 should be undertaken once every twelve months ideally prior to the start of every season

The frequency of inspections should be reviewed in the light of actual events and if records show that faults are found at each inspection the frequency of inspections should be increased.

Note: A goal's strength or stability should never be tested by hanging or swinging from the crossbar.

8. Repairs

If a goal is found to be damaged, or if faults are found during an inspection, the goal should be withdrawn from service until the defect is made good.

Goals should not be modified or repaired by welding or by substituting incorrect parts. No repair should be made that changes the structural integrity, design or shape of the goal.

Goals should be repaired using only the correct parts supplied by the original manufacturer / supplier. Repairs to any goal frame or ground socket should be undertaken only by the goalpost manufacturer or their authorised agent.

9. Records

Every goal should identified by a permanent label.

When a new goal is obtained a log book should be set-up. This should include details of the manufacturer, purchase date, erection date, together with details on how it was installed and the required on-going maintenance and inspection regime.

Examples of a log book are shown at the rear of this guide.

Log 1 – illustrates a goal inspection sheet. This is a page that is used to record the checks carried out on a new goal when it is first installed or on an existing goal when the inspection system commences. All known, relevant facts about the goal should be recorded.

Log 2a – illustrates a goal record sheet. This is a page that is filled in every time a goal is inspected, whether as a matter of routine or for some other reason, for instance after repairs have been undertaken.

Log 2b – shows examples of possible entries under each heading. This is not a full list.

To help avoid the risk of future legal proceedings the log book should be kept for a minimum of 21 years to provide evidence of good practice.

10. Signage

The dangers of not installing, securing or using goals correctly should be summarised in warning signs which should be displayed on or near every pitch or sports-hall where goals are used.

Log 1 – Specimen goal inspection sheet			
Goal reference			
Type of goal		**Size of goal**	
Supplier or manufacturer			
Contact details for spares and repairs			
Date of manufacture			
Date of inspection			
Findings			
Action taken			
Inspected by			

Log 2a – Specimen goal record sheet					Goal reference ……..
Date	**Type of check**	**Reason for check**	**Findings**	**Action taken**	**Checked by**

Log 2b – Illustrations of typical entries in a goal record sheet					Goal reference ……..
Date	**Type of check**	**Reason for check**	**Findings**	**Action taken**	**Checked by**
	1, 2 or 3	Routine	All OK	None needed	Printed name and signature of person carrying out the check
		Goal installed for first time (this season)	Description of any faults found	Repairs carried out (with description)	
		Goal moved (from …? to ….?)		Goal taken out of use (include method used)	
		Problems reported		Goal taken out of use and parts ordered	
		Repairs completed		Goal taken out of use and repairs ordered	
				Goal taken out of use and being scrapped	

References

BS 8461: Football goals – code of practice for their procurement, installation, maintenance, storage and inspection, 2005.

BS 8462: Goals for youth football, futsal, mini-soccer and small-sided football – Specification, 2005.

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