

MARK HARROD

GOAL POST SAFETY GUIDANCE



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INTRODUCTION

Mark Harrod Ltd has a wealth of experience as a manufacturer and supplier to the sports industry. They are leading specialists in the field of goal post safety and were involved with the revision of the Small Sided Goal Post Standard 2009 + 2012 with a number of football's governing bodies, including the FA and the Football Foundation.

As one of the UK's leading goal post manufacturers we are totally committed to the issue of goal post safety. This guide has been designed to provide important facts and guidelines to ensure that all goals and equipment are safe whilst in use and being stored.

The FA has published a document which gives guidance on the purchase and use of goal posts. This document was produced to help prevent fatal accidents which have occurred with the misuse of goal posts. The document was used to produce two new British Standards: BS 8462:2005 + A1:2012 and BS 8461:2005. These standards now cover all goals apart from full sized goals, which are covered by BSEN748:2004

The main points from the standards are listed below:

- Only purchase goals from a manufacturer that has products which conform to the latest British and European standards (BSEN748:2004 or BS 8462:2005 + A1:2012).
- Manufacturers should be able to supply test certificates if required.
- No home-made or modified goals should be used; most deaths from accidents have involved home-made or modified goals.
- Wooden goals should not be used, and do not meet the European Standard.
- Regular maintenance and inspection should be carried out and records kept enabling the correction of faults found during inspection.
- Socketed goal posts should always be concreted in.
- Freestanding goals should be anchored at all times, either by attaching the back bar to permanent fixing points, for instance: eyebolts, stainless steel loops set in concrete blocks, suitable attachments on a permanent fence, or by using the correct number of weights attached to the back bar or as part of the goal frame.

Note: All Mark Harrod Ltd goals are independently tested to conform to all the standards required and test certificates are available on request, as per the FA/Football Foundation criteria.

WHY IS THIS GUIDE IMPORTANT?

Several children in England have been tragically killed as a result of falling goal posts. Entrapment accidents have also occurred with welded metal cup hooks. All the fatal accidents occurred with goals which had been modified or were home-made goals. Pressure from concerned parents and industry leaders highlighted the issue of the need for safer goal posts.

During the 2001/02 season the FA carried out a programme of site inspections and testing of goal posts across the country. The results of these inspections highlighted some alarming deficiencies: of the goals tested, 41% mini soccer, 50% 5-a-side goals and 22% junior portable goals failed stability tests. Anchor weights were rarely used properly or to the correct loading, and all wooden goals failed the test.

The purpose in publishing this guide is to help prevent accidents by describing what needs to be done to make sure that goals are safe. When installed and used in the right way, a goal that was built according to the correct safety instructions and maintained should not cause any injury. Mark Harrod Ltd want to promote good practice.

There are three important aspects of a goal's design and construction which are potential dangers and where accidents have happened.

- **How the net is fixed to the frame of the goal. Metal hook fixings have caused serious injuries, including amputations, deep penetrative wounds and injuries involving trapping parts of the body (fingers, head, and so on). These hooks were illegal from 2007.**
- **The net itself. A net can cause cuts and trap parts of the body if the mesh size is too large, or the cord is too thin.**
- **The goal frame. Serious impact and crushing injuries have been caused by goals which have fallen over or collapsed, either as a result of poor design or maintenance, modification of the goal or through poor installation.**

The vast majority of goal posts are manufactured by bona fide companies like Mark Harrod Ltd and many will comply with the current European Standards (BSEN 748 & BS 8462:2005 + A1:2012). If anchored according to our recommendations, they will be perfectly safe in use.

The industry has been doing all it can to eliminate these tragic accidents. British Standards now exist covering all goal types; the following pages are to help you understand the rudiments of goal safety.

GOAL POST STANDARDS

**BSEN
748:2004**

Applicable for socketed and freestanding full size 7.32m x 2.44m (24ft x 8ft) and 5m x 2m goals only.

- All freestanding goals must be anchored in use and during storage.
- All socket type goals should be concreted into the ground.
- Steel Cup Net Hooks must not be used, and were illegal from 2007.

TESTING

Crossbars must be tested for strength. To pass this test they must be able to withstand a vertical force of 180kg applied to the middle of the crossbar for 1 minute.

When tested the crossbar should not fracture or collapse or show permanent deformation greater than 10mm within 30mins of testing. A stability test is also carried out, where a horizontal force of 110kgs is applied to the top of the centre of the crossbar. The goal must remain stable and not fall over.

The net must be tested for breaking strength, and be a maximum of 120mm square mesh.

INSTRUCTIONS

All manufacturers must provide written instructions for assembly, installation, maintenance and anchorage. When stored but not in use, goals should be secured against overturning.

For socketed goals, detailed instructions for the installation of the ground sockets should be included.

WARNING LABEL

A prominent warning label must be fixed to the goal frame, displaying information to the following effect:

- This goal is intended to be used only for football.
- Before using this product, check that all fastenings are secure and fully tightened.
- Ensure that the goal is secured at all times by means of the appropriate supplied anchoring system.
- Do not climb on the net or goal framework.
- The number and date of this British European Standard, i.e. BS EN 748:2004.
- The name or trademark of the manufacturer, retailer or importer.
- The year of manufacture of the frame.

GOAL POST STANDARDS

**BS
8462:2005
+
A1:2012**

Applicable for all goals except full size goals
(which must conform to the BSEN 748:2004).

- All freestanding goals must be anchored in use and storage.
- All freestanding goals must have a weighted bottom back bar.
- All socket type goals should be concreted into the ground.
- Steel Cup Net Hooks must not be used, and were illegal from 2007.

TESTING YOUTH AND FUTSAL GOALS

Crossbars must be tested for strength. To pass this test they must be able to withstand a vertical force of 180kg applied to the middle of the crossbar for 1 minute. When tested the crossbar should not fracture or collapse or show permanent deformation greater than 10mm within 30mins of testing. A stability test is also carried out, where a horizontal force of 110kgs is applied to the top of the centre of the crossbar. The goal must remain stable and not fall over.

The net must be tested for breaking strength and be a maximum of 120mm square mesh.

TESTING MINI SOCCER (NOT UPVC) AND SMALL SIDED FOOTBALL

Crossbars must be tested for strength. To pass this test they must be able to withstand a vertical force of 80kg applied to the middle of the crossbar for 1 minute.

When tested the crossbar should not fracture or collapse or show permanent deformation greater than 10mm within 30mins of testing. A stability test is also carried out, where a horizontal force of 70kgs is applied to the top of the centre of the crossbar. The goal must remain stable and not fall over.

TESTING UPVC GOALS (LESS THAN 18.0KG)

Crossbars must be tested for strength. To pass this test they must be able to withstand a vertical force of 30kg applied to the middle of the crossbar without fracture or other damage.

A stability test is also carried out, where a horizontal force of 30kgs is applied to the top of the centre of the crossbar. The goal must remain stable and not fall over.

OFFICIAL GOAL SIZES

Type of Football	Age	Sizes (mm)	Appropriate Spec
Eleven a side (full size)	U17 to Senior	7320 x 2440	BSEN 748:2004
Youth Football	U11 to U16	6400 x 2130	BS 8462:2005+A1:2012
Intermediate 9v9		4880 x 2130	BS 8462:2005+A1:2012
Mini Soccer	U7 to U10	3660 x 1830	BS 8462:2005+A1:2012
Small Sided Football		4880 x 1830 4880 x 1220 3660 x 1220 2440 x 1220	BS 8462:2005+A1:2012 BS 8462:2005+A1:2012 BS 8462:2005+A1:2012 BS 8462:2005+A1:2012
Futsal		3000 x 2000	BSEN 748:2004

INSTRUCTIONS

The manufacturer must provide written instructions for assembly, installation, use, storage and maintenance. These instructions must be supplied with the goal. For socketed goals, detailed instructions for the installation of the ground sockets should be included.

For freestanding goals, the information supplied must include detailed instructions for use of the anchoring system. The instructions for free-standing goals must include a reminder that the goals should at all times be anchored by means of the system supplied for the relevant surface. The instructions must also fully describe the anchoring system supplied with the goals including a list of all components required to allow the goals to conform to this British Standard.

WARNING LABEL

A prominent warning label must be fixed to the goal frame, displaying information to the following effect:

- This goal is intended to be used only for football.
- Before using this product, check that all fastenings are secure and fully tightened.
- Ensure that the goal is secured at all times by means of the appropriate supplied anchoring system.
- Do not climb on the net or goal framework.
- Spare parts and guidance on goal post safety may be obtained from the goal's manufacturer.
- Do not climb on the net or goal framework.
- The number and date of this British Standard, i.e. BS 8462:2005 + A1:2012.
- The nominal size of the goal frame and its intended use;
- The name or trademark of the manufacturer, retailer or importer;
- The year of manufacture of the frame.

WARNING: SWINGING OR CLIMBING ON THIS GOAL CAN CAUSE SERIOUS INJURY



LAB010

This 6.5m x 2.10m goal conforms to BS 8462-2005:2012 when it is anchored/installed to manufacturers instructions. This goal is designed to be used only for football. Before using this product check all fastenings are secure and fully tightened.

Spare parts and safety advice are available from Mark Harrod
Tel: 01502 710039 Unit 1 Tilia Court Beccles Business Park Suffolk NR34 7BF

MANUFACTURED IN 2013
MADE IN THE U.K.



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MAKE SURE THIS GOAL IS PROPERLY ANCHORED/INSTALLED AT ALL TIMES

CODE OF PRACTICE

**BS
8461:2005**

BS8461:2005 Football Goals - Code of Practice for their procurement, installation, maintenance, storage and inspection.

Procurement

Goals, nets and fittings for use should conform to BS EN 748:2004 or BS 8462:2005 + A1:2012 as appropriate (see table 1 on page 5). Goals should be purchased as a complete unit (e.g. goal, net, anchors, chains, etc. together with any other accessories that may be needed).

Replacement items for a goal should always be purchased from the original manufacturer or supplier and it is important to ensure that the combination of goal and new component will continue to conform to BS EN 748:2004 or BS 8462:2005 + A1:2012, as appropriate.

INSTALLING GOALS

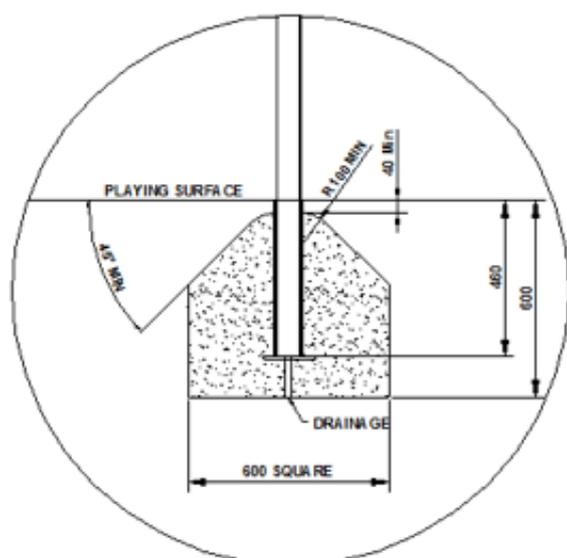
On receipt, a new goal should be checked carefully to ensure it has not been damaged in transit and that all parts are present. In the event of any parts being missing, the goal should not be assembled, nor used in an incomplete state.

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 the goal being erected.

SOCKETED GOALS

Goal post sockets should always be set into concrete. Always install as per manufacturer's instructions to determine dimensions of concrete and ensure a minimum cube of 600mm x 600mm.



ALUMINIUM

FREESTANDING GOALS

Freestanding goals should be properly stabilised in accordance with the manufacturer's instructions. They must be anchored at all times whether in use or storage. Freestanding goals are only safe if they are properly stabilised. Most of the commonly used methods of stabilisation can be affected by poor installation techniques as well as by poor ground conditions. For this reason, the most reliable methods of stabilising freestanding goals are:

- attaching the back bar of the support frame to permanent fixing points, for instance, eyebolts, stainless-steel loops set in concrete blocks in the correct position, or suitable attachment points on a permanent fence or wall;
- using adequate weights attached to the back bar of the support frame in the correct positions specified by the manufacturer.

The use of pins, u-pegs or screw-in anchors on natural turf pitches should only be used if you have evidence that they are effective under the worst ground conditions as these types of fixings may provide inadequate stability.

MOVING GOALS

A goal may be at its most dangerous when it is being moved. Under these circumstances, most types of goal are detached from any anchors, weights, fixing points or sockets and are therefore unstable.

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.

NOTE: Guidance notes from the Health and Safety Executive (such as 'Getting to grips with manual handling [2]'), give advice on lifting and moving heavy objects safely.

Manufacturer's instructions on moving goals should always be followed. 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 four wheels can easily topple if they are pushed in the wrong direction and should only be moved by pushing the uprights in a backwards direction. Goals with two wheels should be moved by lifting the back bar and pulling in a backwards direction. If the ground is soft, wheeled goals should be lifted.

RECOMMENDED SAFE PRACTICE FOR INSPECTION

INSPECTION TYPE 1

Undertaken at least every week, and before any game or training activity. Undertake a thorough visual check of the whole goal and check for the following:

- Loose and missing nuts, bolts, pins and other fixings;
- firm attachment to anchoring points or signs of movement in the sockets;
- broken or missing net fixings;
- any broken cord in the nets;
- bent sections or other damage to any part of the goal;
- all identification and instruction labels are firmly attached and fully legible.

INSPECTION TYPE 2

Undertaken each time a goal is repositioned. Undertake all the checks listed under inspection type 1 and:

- Check that the goal has been firmly reattached to all of its anchors;
- check that the anchors are secure;
- if weights are used, ensure that they are all present. The manufacturer's label on the goal should say what weight is needed to stabilise it;
- check that the goal has not been bent or otherwise damaged whilst being moved.

INSPECTION TYPE 3

Undertaken once every twelve months, ideally prior to the start of every season. Undertake all the checks listed under inspection types 1 and 2 and the following:

- Check (every goal) for strength and stability, in accordance with BS EN 748:2004 or BS 8462:2005 + A1:2012, as appropriate.
- A goal's strength or stability should never be tested by hanging or swinging from the crossbar.

REPAIRS TO DAMAGED OR FAULTY GOALS

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 be repaired using only the correct parts supplied by the original manufacturer/supplier. Goals should not be modified or repaired by welding or by substituting incorrect parts.

RECORDS

A permanent identification label should be attached to every goal. On receipt/installation of a new goal, a log book should be established to record when the goal was purchased and first erected, together with how it was installed and how it is maintained. The log book should be kept for a minimum of 21 years to ensure that evidence of good practice is available in the event of any subsequent legal proceedings (see enclosed record sheet).

SIGNAGE

A warning sign that summarises the dangers of not installing, securing or using goals correctly should be displayed on or near every pitch or sports hall where goals are used.

RECORD SHEETS

Inspections should take place annually in order to keep your goals covered by the required standards, and as evidence of good practice. We have Goal Inspection Sheets (example below) for each of your goals if you require them, please email us at info@markharrod.com.

MARK HARROD

GOAL POST INSPECTION SHEET



Use this inspection sheet to monitor the condition of your goals. Goal inspections should be carried out yearly from the date of installation. These checks are critical for the safety of those using them and can be carried out by yourself or by Mark Harrod.

Goal Reference:

Type of goal:

Date of installation:

Date of inspection:

Checked	Reason for check	Findings	Actions Taken	Checked by
Missing nuts/bolts				
Broken mesh/netting				
Missing/broken net hooks				
Broken or damaged parts				
Scratched/damaged paintwork				
Other				

Findings:

Actions taken:

FOR MAINTENANCE CHECKS, SPARES AND REPAIRS PLEASE CONTACT OUR TEAM

SUPPORT@MARKHARROD.COM • 01502 710039 • WWW.MARKHARROD.COM

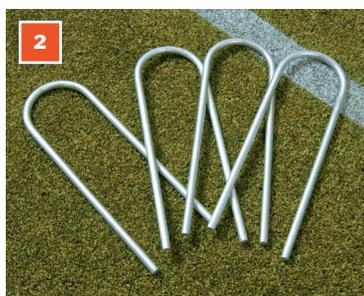
GOAL POST ANCHORS

For your goals to conform to the latest safety standards they must be correctly anchored. Mark Harrod Ltd offers a range of weighting and anchoring options suitable for all types of playing surface.



1. INTERNAL WEIGHT ANCHORS

Weights made to go inside Aluminium Portable football goals 100 x 110 section. Each weight is fully galvanised and weighs approx 11.5 kilos. A full size portable goal 7.3m x 2.4m will require 6 internal weights to conform to BS EN 748:2004. Mini soccer and 5-a-side goals require 4 weights per goal to conform to BS8462:2005+A1:2012.



2. U PEG ANCHOR

12mm steel, 460mm long zinc plated, sold in sets of 4. Requires 2 per goal, all goals to conform to BS EN 748:2004 and BS8462:2005+A1:2012. U-pegs should only be used if you have evidence that they are effective under the worst ground conditions.



3. COUNTERWEIGHTS

17 kilo hand bag type weight complete with chain and carabine clip, to conform to BSEN748:2004. 6 weights required to anchor a full sized goal, 4 weights required to anchor mini soccer goal and 5-a-side to conform to BS8462:2005+A1:2012.

Full Size = 6

Youth Size Goals = 6

9v9 Goals = 6

Futsal Goals = 6

Mini Soccer Goals = 4

Five A Side Goals = 4



4. SPORTS HALL ANCHOR

Wall fixed 100mm rawlbolt complete with chain and 2 carabine clips. Requires 2 per goal, all goals to conform to BS EN 748:2004 BS8462:2005+A1:2012.



5. ANCHOR CHAIN

3m of heavy duty chain complete with 2 carabine clips and 2 rawlbolts. Requires 2 per goal, all goals to conform to BS EN 748:2004 and BS8462:2005+A1:2012.