

# Soccer Goal Safety

SECOND EDITION



In an effort to provide continuing goal safety education to the soccer community at large, Kwik Goal has produced the following Soccer Goal Safety Reminder. This guide is based, in large part, on the CPSC document “Guidelines For Movable Soccer Goal Safety.”

We encourage the many volunteer coaches, administrators, and parents to use this pamphlet as a reminder to practice pre-match safety inspections. We also encourage all organizations that own or use soccer goals to implement a post-match safety plan to ensure that goals are secure after organized play has concluded.

Most importantly, take a few minutes to discuss this issue with your players. All age groups need to understand the dangers of climbing on any soccer goal.

Please visit:

[www.kwikgoal.com/safetyfirst](http://www.kwikgoal.com/safetyfirst) for more information on soccer goal safety and for soccer goal safety stickers.

**Duplication of this document is encouraged.**



This document is intended to provide basic soccer goal safety information and soccer goal purchasing guidance and is not all-inclusive. While following the concepts in this booklet will ensure that your soccer goal is safer, it may not prevent all accidents.

## MYTH vs. FACT

**MYTH:** The majority of soccer goal related injuries occur during matches or training.

**FACT:** Most soccer goal related injuries occur when organized soccer play is over. Injuries occur either during the transport of goals, when goals are being used for unapproved purposes, or during pick-up soccer.

**MYTH:** Heavier soccer goals need not be anchored because of the inherent difficulty in moving them.

**FACT:** Any unanchored goal can be tipped with catastrophic results.

**MYTH:** Homemade goals that match manufacturer's designs or styles will act as a suitable replacement for professionally manufactured goals.

**FACT:** The CPSC reports a large majority of goals involved in fatal or serious tip-over accidents involve "homemade" goals that have been made by shop classes, custodial staff, or local welders who are not fully aware of proper anchoring techniques and safe counterbalancing goal designs.

**MYTH:** Soccer goals will not tip unless moved or climbed upon.

**FACT:** Unanchored, portable, lightweight goals are capable of tipping during high wind conditions, especially with nets affixed to the frame. All goals should be anchored when they are in an upright position.

**MYTH:** Once a goal is anchored, it is considered secure.

**FACT:** Unless a goal is anchored in a permanent/semi-permanent manner (ground sleeves or anchors in cement), it should be secured after soccer play is finished by locking goals face to face, locking goals to a permanent structure, or in some cases placing goals "face-down" on to the ground.

**MYTH:** Padded goals will reduce injury when a goal tips over.

**FACT:** Padding will not protect a person from injury when a goal tips over.

## PRE-MATCH SOCCER GOAL CHECKLIST

- | YES                      | NO                       |  |
|--------------------------|--------------------------|--|
| <input type="checkbox"/> | <input type="checkbox"/> | Are anchors in place and secured properly to the goal and ground surface?    |
| <input type="checkbox"/> | <input type="checkbox"/> | If anchor bags are being used, are they in good condition?                   |
| <input type="checkbox"/> | <input type="checkbox"/> | Are anchor bags adequately filled with aggregate?                            |
| <input type="checkbox"/> | <input type="checkbox"/> | Are anchor bags placed over the base of the goal frames at the back corners? |
| <input type="checkbox"/> | <input type="checkbox"/> | Is all connecting hardware, such as nuts and bolts, in place and secure?     |
| <input type="checkbox"/> | <input type="checkbox"/> | Has the structural integrity of the goal been compromised?                   |
| <input type="checkbox"/> | <input type="checkbox"/> | Are welds cracked?   |
| <input type="checkbox"/> | <input type="checkbox"/> | Are corner joints secure?  |
| <input type="checkbox"/> | <input type="checkbox"/> | Is the goal on a level surface?  |
| <input type="checkbox"/> | <input type="checkbox"/> | Are the goal nets attached properly to the goal frame?                       |
| <input type="checkbox"/> | <input type="checkbox"/> | Do sharp edges exist in any part of the goal and net attachment system?      |
| <input type="checkbox"/> | <input type="checkbox"/> | Do the nets have large holes or tears?                                       |

## POST-MATCH SOCCER GOAL SUGGESTIONS

If goals are to remain in the upright position, make sure they are secured with cement based ground anchors or ground sleeves.

If goals are anchored with portable style anchors, goals should be stored by being chained together face-to-face, chained to a permanent structure, or in some cases placed in a face down position.

- **Remove the net when the goal is not in use.**
- **Make sure that all connecting hardware is in place and secure.**
- **Check the structural integrity of the goal.**
- **Never allow anyone to climb on the goals.**
- **If goals are to be moved, exercise extreme caution and provide adequate manpower to move the goals.**
- **Check condition of warning labels.**

## POST-SEASON SUGGESTIONS

When the soccer season is complete, consider fully disassembling goals and storing them in the proper facilities.

# ANCHORING SYSTEMS

Anchors that are installed into concrete (semi-permanent anchors) are the safest overall anchoring option because they will function properly in all soil conditions.

If the use of a semi-permanent anchor is not feasible, it's critical that soil conditions are identified when choosing portable type anchors.

## Semi-Permanent Ground Anchors

Soccer goal anchors are considered semi-permanent when the base of the anchor is cemented into the ground. The goal is then placed in position according to the system, and then either a bolt or a leash system is used to secure the goal to the anchor.

Another type of semi-permanent anchor is a ground sleeve that is cemented into the ground. An extended goal post will then slide into the sleeve, anchoring the goal itself into the ground.

## Portable Ground Anchors (Below Ground)

When deciding on a portable ground anchor, it is important to know the characteristics of the soil where the soccer goals are located. The quality of support offered by an anchor peg or auger anchor will be determined by the one to two foot layer of soil under the top soil called the sub-soil.

### Clay soil

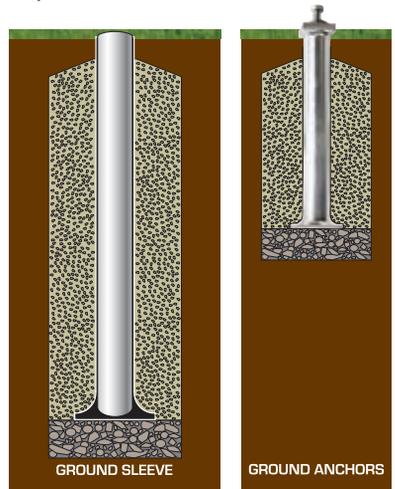
Ground anchor pegs are the best portable anchoring option for goals being anchored into soil that is considered hard or clay based. A 12" anchor peg would be suitable because of the compaction and heavy qualities of this type of soil.

### Loam soil

Loam soils have a more even dispersion of clay, sand and silt and therefore require a more aggressive portable type of anchor. A 16" anchor peg would be best in this soil condition.

### Sandy soil

The cork-screw design of an auger anchor will be able to grip the sandy soils effectively.



AVAILABLE IN  
2 SIZES  
12" and 16"

PORTABLE ANCHOR  
PEGS FOR CLAY SOIL

PORTABLE AUGER  
ANCHORS FOR  
SANDY SOIL



## **Portable Ground Anchors (Above Ground/ Artificial Surfaces)**

The two main options for anchoring soccer goals on top of the playing surface are anchor bags or anchor weights.

The minimum weight for anchoring specific models and sizes of soccer goals will vary. Always check with the goal manufacturer for the proper above ground anchor weight recommendations for your specific goal.

When using anchor bags or anchor weights, please note that the anchors should be placed at the back corners of the goal at the frame base and back bar.

Also, a periodic quality check of the above ground anchors is advised. Torn or ripped bags will lose aggregate over time. Anchors in disrepair may also damage artificial surfaces.

## **Replacement Anchors**

A soccer goal frame and its anchors function as one system. Goal design, material and weight are all factors that manufacturers will take into account when designing anchors. Anchors made for a specific manufacturer's goal model may not be suitable for other goal types and goal makes. If replacement anchors are needed for an existing goal, contact the original manufacturer of the goal frame.

## **Installing Anchors Before The Turf**

We recommend that you discuss anchor installation with the turf installer during the planning stages of the project. It may be possible to have semi-permanent style anchors installed prior to the installation of the playing surface.

**All soccer goal anchors should be inspected for damage and installation integrity on a regular basis. Any damaged anchor should be replaced immediately.**

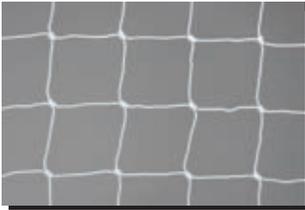
# SOCCER GOAL NET SAFETY

There is always a potential danger for unattended children and players to see a soccer goal as something to climb. Beyond safe goal anchoring practices, it is also recommended that soccer nets manufactured to minimize unsafe climbing situations be installed. Smaller mesh netting helps prevent entrapment and discourages climbing and other misuse that can lead to serious injury.

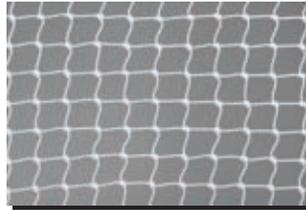
Most U.S. manufacturers provide netting with 140mm mesh sizes. Installing nets with 120mm mesh is highly recommended in order to reduce potential entrapment situations.

A second net style that would provide an even better safeguard for misuse is a net made with 2" size mesh. Toeholds and footholds that would exist in larger mesh netting are essentially eliminated with two inch mesh nets.

Both the ASTM in the U.S. and the English FA provide guidelines that highly recommend soccer goal net mesh measurements not exceed 4.72 inches (120mm) in width.



120 mm Mesh



2" Mesh

## REFERENCES

For further information on soccer goal safety and soccer goal performance standards, please reference the following resources:

**U.S. CONSUMER PRODUCT SAFETY COMMISSION:** [www.cpsc.gov](http://www.cpsc.gov)

Document numbers:

326 Guidelines for Moveable Soccer Goal Safety

5118 Movable Soccer Goals Can Fall Over On Children

**ASTM:** [www.astm.org](http://www.astm.org)

F1938-98 Guide for Safe Use of Movable Soccer Goals

F2056-00 Safety and Performance Specification for Soccer

**THE FA:** [www.thefa.com](http://www.thefa.com)

Goals for Football Technical Details

Goals for Football Guidance Notes

# SOCCER GOAL PURCHASING GUIDELINE

More and more clubs and schools are becoming aware of the dangers of owning and using homemade or dilapidated soccer goals. Purchasing safe and reliable replacement goals can be daunting, especially when most goal models look alike in print or on the internet.

The following Soccer Goal Buying Guide Checklist focuses on the three key areas soccer goal purchasers should investigate when researching and comparing the qualities and specifications of soccer goals: design and construction; ease of assembly; and, of course, anchoring systems.

## Design and Construction

Poorly designed goals provide hidden dangers to the teams using them. Goal frame design redundancies provide built in safeguards should pre-match and post-match inspections be overlooked.

The questions posed below may reveal shortcuts taken in the product design and manufacturing processes.

- | YES                      | NO                       |  |
|--------------------------|--------------------------|--|
| <input type="checkbox"/> | <input type="checkbox"/> | 1. Does the goal frame or net attachment systems have sharp edges, particularly near the playing field?  |
| <input type="checkbox"/> | <input type="checkbox"/> | 2. Does the goal frame or net attachment system pose child entrapment, protrusion or pinch point dangers?  |
| <input type="checkbox"/> | <input type="checkbox"/> | 3. Does the goal post design allow for easy pre-match inspection by officials or coaches?  |
| <input type="checkbox"/> | <input type="checkbox"/> | 4. Does each goal frame attachment point have multiple bolts for safety redundancy?  |
| <input type="checkbox"/> | <input type="checkbox"/> | 5. Is there at least three inches of frame material overlap with all telescoping parts for safety redundancy?  |
| <input type="checkbox"/> | <input type="checkbox"/> | 6. Are all goal parts through bolted to ensure goal frame parts stay connected even if fasteners become loose?   |
| <input type="checkbox"/> | <input type="checkbox"/> | 7. Is a quality, durable finish like powder coating used?  |
| <input type="checkbox"/> | <input type="checkbox"/> | 8. If an artificial surface is utilized, is the goal frame's base smooth and free of edges that might damage the playing field?                        |
| <input type="checkbox"/> | <input type="checkbox"/> | 9. Are wheel options available for easy goal frame movement and can they be engaged simply without the continual removal or replacement of components? |
| <input type="checkbox"/> | <input type="checkbox"/> | 10. Are goal frame ends open or uncovered?   |

## Ease Of Assembly

Shortcuts are taken when the goal assembly process is difficult and lengthy. For complexes with many fields, additional on-field construction steps (like drilling) limits the likelihood that mixed goal parts will easily fit together when goals are reassembled the following season.

- |                          |                          |   |
|--------------------------|--------------------------|---|
| YES                      | NO                       |   |
| <input type="checkbox"/> | <input type="checkbox"/> | 1. Are comprehensive, professionally rendered instructions provided with the goal?  |
| <input type="checkbox"/> | <input type="checkbox"/> | 2. Can the goal be assembled with simple hand tools as opposed to power tools or tools requiring special knowledge?   |
| <input type="checkbox"/> | <input type="checkbox"/> | 3. Are goal safety warning labels included and affixed to the goal by the manufacturer ( instead of the customer) prior to shipping?                              |
| <input type="checkbox"/> | <input type="checkbox"/> | 4. Does the manufacturer ask the customer to perform multiple construction steps like drilling holes or connecting many small components at the time of assembly? |

## Anchoring

An “all-soil” condition anchor should be included with your goal at the time of purchase. Portable or above-ground anchors should be purchased additionally according to the soil conditions of the playing field and the overall usage logistics of the facility (i.e. multiple sports).

- |                          |                          |   |
|--------------------------|--------------------------|---|
| YES                      | NO                       |   |
| <input type="checkbox"/> | <input type="checkbox"/> | 1. Will the anchoring system included with the goal function in all soil conditions per ASTM standards?               |
| <input type="checkbox"/> | <input type="checkbox"/> | 2. Do assembly instructions include directions on how to test the goal after installation to ensure proper anchoring? |
| <input type="checkbox"/> | <input type="checkbox"/> | 3. Can additional types of anchors be used within the goal’s design?  |
| <input type="checkbox"/> | <input type="checkbox"/> | 4. Has the manufacturer tested the goal’s design against ASTM and FA Standards?                                       |



