Football Goal Post Report

CLAMPDOWN TO BAN THE KILLER GOALPOSTS

VICTIM: Craig died on his holidays

TRAGIC: Jonathan Smith with the goal that killed him in the background

VICTIM: Posts toppled on Sophia

VICTIM: Mobile goal trapped Paul

VICTIM: Jack's death sparked action

Safety watchdogs finally act after nine youngsters die

EXCLUSIVE

By ANDREW PENMAN

SAFETY watchdogs are to act after nine children were killed by goalposts.

The move follows the death of seven-year-old Jack Sheerin who was hit by a falling crossbar.

Incredibly, current safety standards only cover full-size goalposts. There are no guidelines for smaller versions used by children.

But that is set to change after police inquiries showed that Jack was just the latest goalpost victim.

Detective Chief Superintendent Stuart Hyde, who led the investigation before Jack's inquest last month, was shocked to find similar tragedies going back 13 years.

He said: "Nine children had been killed by goalposts since 1986.

"I had no idea of the number until I looked into this. Me and the coroner were determined something must be done. We wanted some good to come out of this."

Jack was killed at a football coaching day this summer in Dewsbury, West Yorks. As the three coaches set up temporary goalposts at one end of the field, some of the 10 children taking part swung from the crossbar of the 6ft metal post erected at the other end.

The 154lb goalposts fell over, hitting Jack on the head and shattering his skull.

Mum Susan said: "He lived for football. I saw him off with his packed lunch. I can't believe he won't be coming back."

Tragedy

Jack's tragedy has terrible similarities to the death of Craig Taylor. His mother, Dorothy, saw Craig, seven, crushed to death by goalposts on a family caravan holiday in Morecambe, Lancs, in 1986.

She said: "You don't ever imagine you'll lose a child playing football. We still can't believe it.

"After all this time I thought something would have been done — but children are still dying."

Michael Westby saw his son Paul, eight, killed on the Isle of Wight nine years ago. Paul jumped up to grab the crossbar of a portable goal which tipped up, trapping him.

Mr Westby said: "Six-a-side football is now being encouraged for youngsters. It is six-a-side where the mobile goalposts are used, so unless something is done to make them safer then deaths will increase."

Sophia Burke, from Manchester, died just days before her 11th birthday in 1996. A metal crossbar fell on her as she played football.

Wayne Turner, 13, of Blackburn was killed in 1995. He was swinging on posts during a kickabout when they collapsed on him.

Soccer-mad Emma Butler, 12, died as she kept goal during a warm-up at a school near Oxford. A ball hit the unstable 132lb frame which collapsed on her, rupturing her heart.

Jonathan Smith, 11, of Witham, Essex, also suffered a ruptured heart when home-made 200lb posts collapsed on him in January 1991. Mother Brenda said: "Had Gary Lineker's son been involved in a goalpost accident then no time would have been wasted by the FA.

"Something should be done so there are no more lives wasted. I don't want other parents to go through what we've been through."

Husband Peter, 55, added: "Mobile goalposts could be replaced with the lightweight aluminium versions which, even if they did topple, would not kill or maim anybody."

David O'Neill, six, of Croydon died after a crossbar made from a scaffolding pole fell on him in 1994.

And two-year-old Emma Barter of Ipswich, Suffolk, was killed in 1996 when a set of five-a-side goalposts fell on her as she swung on them.

At Jack Sheerin's inquest coroner Roger Whittaker called for action from the British Standards Institution, the Football Association and the Department for Education.

Mum Susan said: "I hope this will go some way towards preventing deaths like this happening again."

The BSI, backed by the FA, is drawing up rules to govern five-a-side, seven-a-side and portable goalposts, which are not covered by current safety standards. The new guidelines will cover issues including stability, anchorage and construction materials. A spokesman said: "It may be that the heavier the goalposts, the more stringent the measures."

Sports Minister Kate Hoey backed the initiative, saying: "We must do everything we can to ensure this type of accident does not happen."

The rules are expected to be in place by the next football season. Hopefully that will be soon enough to prevent another tragedy.

Goalposts

John Wilson - Founding Member of European Goalpost safety committee and creator of mini-soccer

Goal post design & the birth of mini soccer

In bygone days at the drop of a hat, a jumper or school blazer, impromptu games of football were started anywhere, any time. All who played in those games will remember the many squabbles that took place with every shot that was within inches of the blazer cum goalpost. To put a stop to those incessant arguments a soccer crazy kid some fifty three years ago produced a makeshift 12'x6' goal from off-cuts of wood and some pea netting from the old Woolworths store to create the very first mini soccer goal.

When this young lad became a dad himself he made another wood and pea netting goal for his son but realised that something better was needed. Attempts to make a goal from round plastic drainpipe followed however it was quickly realised that these were not strong enough and further research was needed to resolve the problem.

A specially strengthened uPVC section was created, and with special corner fittings and ground anchors a goal was manufactured that was easy to assemble, lightweight yet strong, virtually impossible to knock over, light enough to carry in a small bag and with a new unique system of net fitting the goal could be erected quickly and with ease.

New uPVC goals in bags were welcomed by the English Football Association and in 1990 they were put through thorough testing before being approved to launch the very first small sided football games for children. An invitation to FIFA soon followed and the goals were subsequently approved by the worlds governing body of soccer The Federation de International de Football Association.

Mini-Soccer became mandatory in 1999 for all children under the age of ten playing football in England. From that very first wooden goal post a whole new introduction to football evolved. Thousands of mini-soccer goals are now in use all over the world. The lightweight safe goal posts enable children to emulate their heroes and dream of the day when they might themselves be the one to save or score a winning goal at Wembley.

From this humble beginning the young designer of the original mini soccer goal went on to become recognised as the leading goalpost innovator in the UK with more patents and registered designs that any other goalpost engineer.

They say Imitation is the best form of flattery and many copies have emerged but none have bettered the original goalpost engineered and developed By ITSA GOAL in the home of football Sheffield.

This report is to highlight the types of Goalposts available and offer un biased advice and guidance as to which may be the best option for each particular football pitch location. Football goalposts can be in permanent positions, moveable freestanding, freestanding to dismantle after use, stadium goalposts, flat pack goals and goalposts to pack away in carry bags for transportation.

The UK has four main manufacturers of goalposts as well as numerous on line sport catalogues that import and supply goalposts.

Introduction

ITSA Football goalposts are better by design, Goalposts that are safer, easy to use, last longer, outperform others and do not cost the earth.

All ITSA GOAL football goalposts have substantial public and product liability cover. The company has never had a claim in three decades of manufacturing goal posts. All our goalposts can be used in official matches.

Goal post Safety Standards

The Goal post Safety Standard BS 8462 was introduced in October 2005 to ensure that all goal posts used in official matches and training designated sports equipment and not toys.

Toy Mini Soccer goals and other Far East imports may not meet these new standards. Goals with rusting corners, creased net stanchions and missing parts should not be used. Toys are manufactured to BSEN 741 and BSEN 5665 which excludes all types of sports equipment including goal posts.

To conform to law one of the game goalposts should have no advertising on the front of the posts or the goal net, they should have a method of supporting the net away from the crossbar, the material of manufacture and shape must confirm and the size should be correct to the inside of the posts.

The goal post safety standards prohibit the use of welded and screw in metal net hook fixings(even if coated in plastic) and all goalpost crossbars should not permanently deform more than10mm when strength tested to standard.

Figure 1 The 70mm dia. lightweight goal post was dropped on the melon three times and showed only very slight bruising.

ITSA Goal can provide individual test certificates for goals however all test data is shown on the Testing Spread sheet (on page 15) which gives test certificate number and test results.

Goalpost safety standards and testing has no bearing on whether a goal post can be used for a football match. Law one of the game is the reference for Goalposts in all affiliated football. These identify the materials goalposts can be made from and the dimensions. Numerous sizes are set by national associations and leagues as an example in Germany and Holland 5mx2m is the norm in Spain 6mx2m is the size used for youth football and in the UK 16'X7' & 21'X7' is the excepted size alongside the popular 12'x6' mini soccer goal for younger children.

The goalpost size used for adult football is 24'x8' (dimensions are always to the inside of the posts) The maximum width is 120mm however 100mm is the most popular post dimension .The lines should be the same width as the post.

Freestanding goals

It is essential that heavier free standing goals are anchored at all times. With children and youths the lighter a free standing goal frame is the safer it is. We recommend that when freestanding goals are not in use they are secured face to face, uprights onto ground, with lockable security cables fitted around posts to hold them together..

Check It

Make sure goalposts are in good condition and properly constructed. Homemade goalposts should never be used - they do not have built-in safety features and may be particularly hazardous for younger players. Goalposts should always be properly maintained at all times especially un-welded corner frames that expand apart. If any part of a goal frame becomes loose or detached the goal should not be used in any circumstance.

Secure It

Goalposts of any size must be securely anchored to the ground at all times. Freestanding goalposts must be anchored or weighted down to prevent them toppling forward, and should be removed from the pitch when not in use and stored securely. If goals can be dismantled and locked away it is advisable to do this to prevent unauthorized usage. If goal posts are to be left outside un-attended then they should have the nets removed and be stored face down with the longest leg to the ground, and securely chained together face to face.

Test It

Adults should test the goalposts to make sure they are stable by safely exerting a downward force on the crossbar, backward force on both upright posts and forward force on both upright posts.

Do not do any testing whilst children are around the goal posts. **Never** leave goalposts in position un-anchored always complete the installation before moving to the other side of the pitch. Always inform children of the dangers of swinging and climbing on crossbars especially if you witness it actually happening. Always follow the goalpost manufacturer's instructions.

Respect It

Goalposts should only be used for their intended purpose; in particular, children and adults should not swing or climb on them. Repair any damaged paintwork or breach of the protective coating and inspect welds and all fixings on a regular basis. When fitting ground sockets take time and ensure the posts are fitted square and that no undue pressure is exerted to the corner joints. Look after your goalposts and they will give many years of quality performance. Only sports equipment not toys should be used in affiliated organized football.

The safe use and storage of goal posts in football at all levels is important and everyone involved with playing and organizing football must play their part to ensure that the tragic accidents that have so disfigured the game in the past can never happen again.

Guidelines for the safe use of goalposts can also be accessed in the Football Development section of the Football Association website.

We recommend that a laminated set of fitting instructions be kept with all goal posts at the storage site and that any new users be fully trained in installation, use, maintenance and storage.

Why we advise you not to use these Inflatable football goals

They are very expensive in relation to good quality long lasting sports equipment. Uprights can be pulled inwards making the goal smaller. (If you have a goal mouth scramble then by just falling back on these goals it will collapse and the game will need to be stopped. The goal frame can be pulled in to let balls go wide or over the crossbar.) Inflatable Goals can become punctured (the best way to have a game called off. (see customer comments about the embarrassing incidents they have experienced with inflatable football goals)

Footballs drop straight down dead without any rebound , as with conventional goal posts, uprights collapse inwards when struck by a hard shot from a football thus changing the whole concept of the game. They are unstable in windy conditions ,and often deflate during the course of a game. As this type of goal needs to be laid out on the ground in the winter they collect all the mud which then is carted around everywhere on the goal and in the bag.

We believe these goals should only ever be used as a toy or for an informal kick about. We except that these goals are safe, if not over inflated, but as a reputable goal post manufacturer we advise teams not to purchase such goals and to refuse to play against teams that provide them for any organized affiliated match. We can not understand why the Football Association does are not advise clubs in the same way we do.

We respect that the final decision is down to you the customer ...it is your money but highlighting pitfalls not evident in persuasive marketing we hope to help customers make a more informed decision before parting with hard earned money. We advise to check with a user of the product before you buy or take up our offer to compare with our itsa goal before you part with your money!

These goals are still being sold to unsuspecting football teams This is a recent comment we have had from someone having to pump up the goals every week..... during matches !

"Would it be possible to send your latest brochure for me to pass onto my sons junior football team. Moorside Rangers, as I am fed up off standing behind the goals on match days pump in hand waiting to pump the nets back up".

Joe Shryane

"I would recommend consumers and Amazon avoid this product. I have ordered 2 and both have malfunctioned after the first inflation due to the substandard quality of the product. I also recommended the product to the local school I voluntarily coach soccer at, where at a home game both goals deflated due to several holes in the product. Imagine the children's disappointment when the match had to be abandoned"

Woodie

"We purchased the inflatable goals as they were suggested by the F.A. An absolute waste of money "

Stuart /A.F.C. Urmston - Manchester

"Incidentally, I have just looked on the internet to see if Peter Shilton was still promoting/endorsing Igoals (which was one of the things that gave us initial confidence in buying the product which endured about four matches before the first of a great many embarrassing failures with both the goals themselves and the pumps"

Andy Smith Henfield under eights

Any Goalpost supplier worth his salt and who has knowledge of the game would never offer such products to their customers.

Inflatable & tape goalposts

As a respected goal post supplier we consider inflatable and goal posts made out of tape to be toys and we do not offer these to our customers. we recommend customers not to buy Such products at any price.

Its questionable how they can freely support the weights on strength tests required on BS 8462 safety standards when goalkeepers can pull the crossbar down with one hand to let footballs fly over the top.

Frankly we think these products are unsuitable for football matches at any level. We advise to not waste money on such products. We also debate that any of these goals can be installed quicker than our own timed installation video. The ITSA GOAL uPVC goal can be installed in less than sixty seconds.

The speed of installation, the main reason customers are persuaded to buy them, is in our opinion, over stated. Our own experience has shown that by the time the pump is out of the bag, the inflatable or tape goal is unfolded (usually covered in mud) and the pump is connected our freestanding goals are up and in use. (see our timed video). Our uPVC mini soccer goal goes up six times faster and comes down ten times faster.

Inflatable and tape goals are all made in the Far East and therefore they are less environmentally friendly. When the net tears or a major puncture occurs on these products the whole goal is unuseable and this may well result in them ending up in land fill. The plastic pump used to blow up the goal has a limited life and the current replacement cost is more than the cost of one of our uPVC goals.

Again as a reputable goalpost supplier we would never offer products that are not suitable. This type of football goal is not really a goal at all as it offers no rebound. Our advice is the same as inflatable goals do not waste money on these toys when you can have stronger sports equipment and for less money.

Figure 2 Tangled inflatable Igoal - difficult to store and easily punctured.

Figure 3 Superglue & industrial tape repairs on joints after four matches.

Figure 4 Broken pump needed repair not long after purchase

Compare uPVC Samba Goals & ITSA Goals

Figure 9 Itsa Goal locking stanchion easily removed with the click of a button. Goals that have innovation, goals that work and goals that last longer.

Figure 10 Itsa Goal net support stanchion locked in place on the rear ground frame. With locking buttons.

Figure 11 16x7 ITSA GOAL 9v9 football goals . As seen on the The One Show on BBC TV.

Figure 12 Itsa Goal with locking secure net support stanchions.

Figure 13 Itsa Goal unbreakable corner bracket with locking stanchion and easy to use net fixings to rear of posts.(no clipping to do)

We do not like to use what we consider to be negative advertising however we feel users of goal posts are entitled to be made aware of products that may not include important and relevant information before they buy. These low engineered goal products have flooded the market and many buyers at club level are now reluctant to continue using uPVC goal posts and are moving towards metal goal posts because of the experiences of buying such products. We can assure you that uPVC ITSA GOAL products are strong,sturdy, safe and easy to use. Our uPVC one section crossbar versions are comparable to most metal goalposts. Football Goals.

Compare uPVC Samba Goals & ITSA Goals

Figure 14 A Typical 16 x 7 Samba Goal in use.

Figure 15 Samba Goal again note and compare crossbar to sales photographs.

Figure 16 Samba type goals Note :-Dip in crossbar & no roof to net preventing goals from being scored directly under the crossbar.

Figure 17 A brand new SAMBA Match Goal notice crossbar dip .

Figure 18 Samba Goal with push in net supports that may easily go missing or spring out when footballs hit them.

Figure 19 Samba goals in a typical garden setting - Note the signature crossbar dip on these goals.

Compare uPVC Samba Goals & ITSA Goals

Figure 20 Samba goal net support tube showing why many end up with out net supports.

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Figure 21 Samba match goal stanchions that need replacement - why invest in more parts when you can buy a goal where a tube cannot crease - ITSA goal.

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Figure 22 The twisting nature of far-east goalposts.

Figure 23 Samba Goal showing how quickly the net frays due to being wrapped around base of posts.

Figure 24 An ITSA goal 16' x 7' Aluminium Flat-Pack demountable goal.

Figure 25 An ITSA goal mini-soccer - six months old at sports centre.

Compare uPVC Samba Goals & ITSA Goals

These Photographs show examples of other manufacturers uPVC goals that have net support stanchions just pushed into holes and not secured. Do not be fooled by big name endorsments,that may have been paid for,or goals that have touched up staged photographs to make them look better than they actually are.

All uPVC goals supplied by ITSA GOAL are to match standard. Net supports are securely locked to the frame and unlike others they do not become detached when they are moved or a football hits them. Beware head on shots of goalposts that hide net supports and look out for goals with different coloured corners as these may indicate the trade mark signature of a low quality Far East goal post.

The Photographs were taken of other uPVC goal posts with net supports that are merely pushed into holes in the frame. The photographs show the comparison in the designs of uPVC goals and the engineering quality of ITSA GOAL products. Goalposts that are built to last longer and outperform the rest . For football goals you can trust look for the - Made in Sheffield- recommendation!

Figure 26 Samba goal with net supports spragged in holes with no proper roof to net.

Figure 26 Samba Match goal post with net support stanchion just pushed into a hole and not secured.

Figure 27 Samba Match goal with net supports just pushed into a hole on the ground frame and not secured.

Figure 28 When net support stanchions are not secured on goal posts this is the result . (note difference with the ITSA GOAL grass goals in the background)

Raising the Industry Standard

Some Goalpost manufacturers, but not all, are beginning to follow our lead and are incorporating, at long last, welded corners on some of their football goals. The problem of un-welded mitred corners on football goal posts was highlighted in 2005 at Old Trafford when the goal posts expanded apart during a live broadcast game between Manchester Utd and Liverpool on Match of the day. After this incident some manufacturers followed our lead and started to offer welded corners on goal posts.

The photographs show goalposts all around the U.K. demonstrate the maintenance problems and dangers of un-welded corners and joints on aluminium football posts. Crossbars can expand up to eight millimeters whilst uprights expand just one millimeter which means that any un-welded corners and joints can never stay together without constant re-alignment and re-tightening of bolts. Be sure to check before you buy that ALL corners are fully welded on your goal posts unless you want to buy yourself a lot of maintenance work. Is the small saving in money worth all the hard work every week.

Free standing football goalposts from our company have always had fully welded corners and side frames that do not rust. We believe where possible not to mix steel (ferrous metal) and aluminum (non ferrous) and that is why we prefer not to make goal posts with heavy steel net supports that are bolted onto the rear of aluminium goalpost frames. Numerous freestanding goalposts used in sports centres have wheels and in the main many have collapsed or are entangled with net cord. The wheels used with internal bearings are not ideal when left out in the open all the time and that is why they do not last very long. We do not recommend flip over wheels as they can may become dagerous. We can attache flip over wheels to our goalposts however we feel our own wheel systems offer longevity, practicality and real value for money.

Other makes of Goalposts with un-welded corners coming apart !

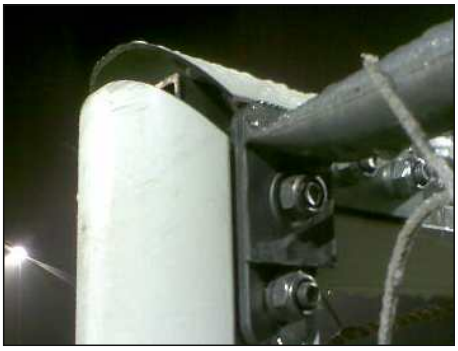


Figure 29 Others Football goal with mitred corner at Winterhill School on mini soccer goals (not an ITSA goal product)

Figure 30 Others mitred corner Goal post on free standing oval goal with rear rollers (not an ITSA goal product).

Figure 31 Others Goal posts with mitred corners when regular maintenance has not taken place (not an ITSA goal produc

Figure 32 Adult Five-A-Side goal with rollers - continually being loosened when moved (not an ITSA goal product).

Figure 35 Badly designed goals have been damage by the aid of poor maintenance (not an ITSA goal product).

Figure 33 Wheels that can be dangerous and have finger entrapment areas safer ITSA goal wheel systems are available (not an ITSA goal product).

Figure 36 Badly designed mitered corner Aluminum goal (not an ITSA goal product).

Figure 34 Bag weights with ripped openings are unsuitable counter balance systems (not an ITSA goal product).

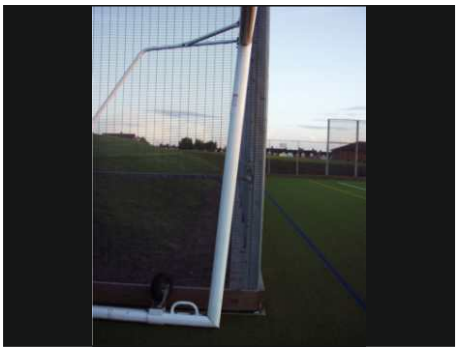


Figure 37 Unstable full size Aluminum Freestanding goal with rollers. Continual movement loosens bolt fixing requiring continued maintenance (not an ITSA goal product).

The examples shown are not ITSA GOAL products.

Images have been photographed from around the UK for safety reference.

Steel Goal posts

Anti-vandal football goal posts from ITSA Goal are the only fully locking goal posts available in the UK. These goal posts have numerous safety features and the unique patented system makes it impossible to remove and store the goalposts against a wall with crossbars attached to uprights. One of the main causes of children's fatalities with goalposts.

Other goal post manufacturers claim that they have lockable goalposts however only the goalpost uprights lock into ground sockets and anyone with a basic spanner can undo the nuts and bolts (if not rusted up) on the crossbar and remove the crossbar and uprights. **DO NOT BE MISLED BY OTHER CLAIMS OF LOCKING FOOTBALL GOALPOSTS.**

Another feature only found on ITSA GOAL steel goalposts are the Industrial nylon push in arrowhead goal net fixings which are supplied to the rear of the uprights and the crossbar which helps protect paintwork. Goal post nets just lift on and off with ease. No tying or clipping is required which saves hours on match days. Goal post net fixings on the uprights have the added advantage of preventing children shimming up the posts and extending the lifetime of the paintwork.

Welds are electro plated on the goalpost corners to give added protection especially to unseen internal welds. Net supports on the goalposts are electro plated to prevent corrosion and quickly attach to the crossbar. With no bracket attached to the upright on the anti vandal version children find climbing onto the crossbar more difficult.

Goal Net supports can be easily removed after each game and stored with nets. A safer option for all permanently sited goal posts especially lower six foot mini soccer goalposts and areas prone to vandalism.

Our anti vandal goals are not just mass produced bits of steel bolted together but a patented engineered product that offers total security, accountability and added safety.

This attention to detail and quality control is what makes our football goalposts stand out from the rest.

The photographs taken around the U.K. of other manufactures goalpost highlight what the glossy catalogues do not show and indicate the problems found in heavy steel socketed and free standing movable football goal posts .

We have never made dangerous heavy free standing steel goalposts and do not recommend that they be used at all when lighter safer aluminum versions are available. We advise customers to avoid these at all costs.

Figure 38 The type of protruding corner found on basic steel nut & bolt football goal posts (not an ITSA goal product).

Figure 39 Steel ground back bars on freestanding movable football goals rust & that is why ITSA Goal supply aluminum ground frames

Steel Goal Posts

Figure 40 Photograph shows the problems and damage to paintwork that have nets pulled and clipped around the front of the goal post uprights (not an ITSA goal product).

Figure 41 Photograph shows heavy steel goals that may cause serious injury if they topple onto children (not an ITSA goal product)

Figure 42 Low net supports aid climbing and may detach from upright as this photograph shows. From other UK manufacturer (not an ITSA goal product).

Figure 43 Low net supports that children may run into and cause injury. ITSA GOAL only supply quick release removable net supports on Mini Soccer Goals that attach to crossbars not uprights.

As a company we do not follow what has gone before but improve existing goalpost design with new innovation and quality engineering. Making products cheaper inevitably means corners need to be cut which results in poor performance and may also compromise safety. This policy of continued development is why we have so much more positive customer feed back than any other company in the Industry. We make Goals that work and not goals that make work

By pointing out problems future development , design and improvement in safety of all goal posts is ensured. We highlighted the problem of crossbar expansion and informed customers about nets becoming entangled in heavy steel rear rollers on free standing goal posts supplied buy other manufacturers and this has forced other manufacturers to make changes.Our innovation of locking steel uprights has also now been introduced by other manufacturers which is good to see.

ITSA Goal lead others follow...

Steel Goals

Figure 44 A typical local authority football goal with bolts missing - can not line up & can not be secure (not an ITSA goal product).

Figure 45 Old fashioned nut & bolt goals soon end up like this - not itsa goal anti vandal goal posts (not an ITSA goal product).

Figure 46 Dangerous 60mm steel goalpost proves the lengths that some teams will do to allow the match to go ahead (not an ITSA goal product).

Figure 48 Typical hinged mechanics that incorporate finger entrapment (not an ITSA goal product).

Figure 49 Typical folding goal design with dangerous swinging sides that can cause injury (not an ITSA goal product).

The examples shown are not ITSA GOAL products.

Images have been photographed from around the UK for safety reference.

Mini Soccer Football

Mini Soccer was created in Sheffield the home of football in the late eighties when the very first uPVC 12'x6' goalpost in a bag was created by ITSA GOAL.

Many copies of the concept have emerged including the Samba Goal but none have surpassed the engineering quality of the original plastic goal in a bag.

Mini Soccer is the Football Association preferred route for children to be introduced to the game. The game is played on smaller pitches, smaller teams sizes for more touches of the ball and with proportional 12'x6' goalposts. Smaller size three and size four footballs are used.

Many Junior football clubs struggle week in week out with badly designed Goalposts and tape barriers unaware that stronger, longer lasting and easier to use products are readily available.

Mini Soccer goalpost should have straight crossbars that do not dip more than 10mm to conform to strength tests on BS8462 safety standards. ITSA GOAL supply the only uPVC football goals with straight crossbars and net supports secured to the frame.(not just pushed into a hole) ITSA GOAL offer a large range of Mini Soccer goals including moveable freestanding versions, permanently sited goalposts and goals that pack away in carry bags. They include low cost value for money aluminum flat pack demountable goalposts and uPVC goals with aluminum crossbars. Patented flat folding lockable aluminum goalposts half the weight of other hinged sided goalposts, they offer speedy installation, sides that cannot swing about and total accountability

Lightweight aluminum socketed goals that can be installed easily and taken down quickly after each game are available and for permanently sited goals left in position all season ITSA GOAL have laser engineered anti-vandal lockable steel football goals.

Mini Soccer goals from ITSA GOAL are competitively priced, combine quality engineering, longevity, safety and ease of use. Goalposts made in Sheffield, the home of football that out last and outperform the rest.

Figure 50 MINI SOCCER uPVC GOAL
one section crossbar (perfectly straight).

Figure 51 **MINI SOCCER** PORTABLE GOAL
(Fits in a 2 metre bag)

Goals that work not goals that make work!.

Mini Soccer Football

Figure 52 **MINI SOCCER** DEMOUNTABLE GOAL
Store flat goal post that slots together with ease!

Figure 53 **MINI SOCCER** FOLDING LOCKABLE GOAL
Light weight, fully welded, Aluminum non rusting goals.

Figure 54 **MINI SOCCER** FREESTANDING GOAL
Top of the range socketed and Freestanding goals with various wheel options available.

Figure 55 **21 x 7** ANTI-VANDAL STEEL SOCKETED GOAL Anti-vandal, Anti-theft all sizes available.

Figure 56 Quick release aluminum socketed goals for use with box nets and shaped nets.

Figure 57 **MINI SOCCER** ELLIPTICAL FREESTANDING GOAL Top of the range Oval socketed and Freestanding goals with various wheel options available.

Nine v Nine Football for children

Nine a side football is the Football Association preferred route for children to progress from Mini Soccer to the eleven a side game. The game requires a slightly larger playing area with size five footballs and larger goals. All football goals used on nine a side games should have straight crossbars that do not dip more than 10mm to conform to strength tests on BS8462 safety standards.

ITSA GOAL supply uPVC football goals with straight crossbars and net supports secured to the frame.(not just pushed into a hole). A large range of 9v9 goalposts including moveable freestanding goals, permanently sited goalposts and goals that pack away in carry bags, low cost value for money aluminum flat pack demountable goalposts and uPVC goals with aluminum crossbars.

ITSA GOAL patented folding lockable aluminum goalposts are half the weight of other hinged sided goalposts offer speedy installation, sides that fold flat, supports that cannot swing about and total accountability.

Lightweight aluminum socketed goals that can be installed easily and taken down quickly after each game are available and for permanently sited goals left in position all season ITSA GOAL have laser engineered anti-vandal lockable steel football goals.

All ITSA GOAL 9v9 football goals are competitively priced, combine quality engineering, longevity, safety and ease of use.

Goalposts made in Sheffield, the home of football, that out last and outperform the rest.

Some goalposts make work ... ITSA Goal posts just work !

Figure 58 **9 V 9** uPVC GOAL with two section aluminium crossbar (perfectly straight)

Figure 59 **9 V 9** PORTABLE GOAL (Fits in a 2.8 metre bag)

Figure 60 **9' V 9'** DEMOUNTABLE GOAL (extension to 21' x 7' available) Store flat goal post that slots together with ease!

Bs8462 SAFETY INFORMATION - In 2009 the Safety standards were changed when a competitor recommended to the Football Association and the BSI that all children's goal posts above 18Kg in weight (uPVC goals) have crossbar testing increased by 1000 Newtons (crossbars to take approximately three thirty stone men) which meant all the lightweight safe freestanding goalposts that previously conformed to BS8462:2005 were now outside the safety standard. You may be able to attain a grant on heavier free standing steel goals to BS8462: 2012 that will be difficult to move, heavy to lift, difficult to store .But not from us!, see our 'Blunt Thoracic Trauma impact data below. Due to this dangerous amendment to the safety standard you now cannot attain a grant on safer lightweight aluminium goalposts just over 18Kg. This ridiculous increase in testing to 1800 Newtons, introduced into BS8462:2012, increases the crossbar weight substantially. As the standard cannot be corrected for some time due to the strict time scales set by BSI we can only supply these safer products to BS8462:2005 - certificate available. For many years our company has been campaigning to **remove all** heavy freestanding goalposts used by children. We have never supplied heavy freestanding steel goals and always put safety before the bottom line. It is a ridiculous state of affairs that safe, more affordable, freestanding goals may not be eligible for a grant when dangerous heavy steel free standing goals, that if they topple onto a child can cause serious of fatal injury, are eligible. If freestanding goal are used on artificial surfaces they need counter balance weights. We do not recommend or use sand bags on our alloy freestanding goals as these do not give a reliable calibrated weight. Using our unique counter balance weight ensures the correct amount of weight is used at all times. Details as to counter balance weights required to conform to BSI & EN748 safety standards is shown on our testing result document

ITSA GOAL & FOOTIE GOAL - TESTING REFERENCE & RESULTS showing deflection on 9v9 & Youth football goals

Mar-13

Certificate Number	Size	Description - 9v9 football goal posts	Material	date of test	Test House	crossbar deflection	Test standard	Newtons crossbar strength	Newtons crossbar Stability	18 Kilos weight
12080219	16'x7'	ITSA GOAL Upvc FREESTANDING GOAL WITH TWO SECTION CROSSBAR - with net fixings and locking frames	uPVC	26/07/12	Element	6.5mm	BS8462-12	300	300	UNDER
12080223	16'x7'	ITSA GOAL Upvc FREESTANDING GOAL with four section crossbar - goal nets tied to frame with upright supports	uPVC	26/07/12	Element	6.7mm	BS8462-12	300	300	UNDER
12080220	16'x7'	**FOOTIEGOAL** Upvc FREESTANDING - PUSHED FIT GOAL -net support locked to crossbar, two section crossbar - Goalnets tied to frame & up right suppots	uPVC	26/07/12	Element	6.5mm	BS8462-12	300	300	UNDER
12080222	16'x7'	ITSA GOALL Upvc anchored grass goal with two section with aluminum crossbar & net fixings	Upvc/Alloy	26/07/12	Element	4.5mm	BS8462-12	300	300	UNDER
12080221	16'x7'	**FOOTIE GOAL** UPVC anchored goals grass with net support stanchions secured to crossbar, tied on nets & upright supports	uPVC	09/08/12	Element	6.5mm	BS8462-12	300	300	UNDER
8070137-A	16'x7'	Oval Aluminium 100mm x 115mm socketed goal	Aluminium elliptical	02/07/08	STL	2mm	BS8462-12	1800	1100	OVER
9040207-A	16'x7'	Anti Vandal lockable 76.1mm diametre steel Socketed Goal (one section crossbar)	Steel	09/04/09	STL	2mm	BS8462-12	1800	1100	OVER
6110083	16'x7'	70mm dia Aluminium freestanding goals (two or four section crossbar)	Aluminium	14/10/07	STL	9.7mm	BS8462-2005	800	1100	OVER
6110083	16'x7'	70mm dia Aluminium goal foldaway (Two section Aluminium crossbar)	Aluminium	14/10/07	STL	6.7mm	BS8462-2005	800	1100	OVER
6110083	16'x7'	70mm dia aluminium goal (one section Aluminium crossbar)	Aluminium	14/10/07	STL	3.1mm	BS8462-2005	800	1100	OVER
7040410	16'x7'	uPVC goal (Four section Aluminium crossbar) - Grass small bag portable goal with mass less than 18kg	uPVC/Alu	05/04/07	STL	9.9mm	BS8462:2012	300	300	UNDER
7040411	16'x7'	uPVC goal (Two section Aluminium crossbar) - Grass portable large bag goal with mass less than 18kg	uPVC/Alu	05/04/07	STL	2.1mm	BS8462:2012	300	300	UNDER
7060133	16'x7'	Oval Aluminium fully welded side frames *(tested with muti surface anchors & integral counterbalance weights)*	Aluminium	08/05/07	STL	4.8mm	BS8462:2012	1800	1100	OVER
7040411	16x7	70mm grass portable uPVC & aluminium goal three section crossbar (Fits in 2.07M long bag)	Aluminium	02/07/08	STL	8.8mm	BS8462;2012	300	300	UNDER
9040841	16'x7'	Oval Aluminium 100mmx 115mm freestanding goal *(tested multi surface anchors)*	Aluminium elliptical	29/04/09	STL	5.6mm	BS8462:2012	1800	1100	OVER
8070135	16x7	70mm grass portable aluminium & uPVC goal four section crossbar (fits in 1.54M bag)	uPVC/Alu	02/07/08	STL	12.2mm	BS8462:2012	300	300	UNDER
13030186	16x7	grass demountable Aluminium 70mm freestanding goal	Aluminium	05/03/13	Element	2.8mm	BS8462;2012	300	300	UNDER
13030187	16'x7'	70mm Aluminium portable goalpost with front ground spike anchors	Aluminium	05/03/13	Element	0.1mm	BS8462:2012	300	300	UNDER
13030181	16x7	Folding lockable Oval Aluminium 100mmx 115mm freestanding goal *(tested multi surface anchors)*	Aluminium elliptical	05/03/13	Element	0.8mm	BS8462	1800	1100	OVER

CHECK THE WEIGHTS OF FREESTANDING GOALPOSTS AT YOUR CLUB !

The empirical research of ITSAGOAL indicates :

If you have uPVC goals below 18 kilos: **VERY LOW RISK** these are the safest goalposts for children to use especially very young footballers

If they are less that 37 Kilos : **LOW RISK**

If they are less than 42 kilos: **SLIGHT RISK** they are safe – as a coach you can rest easy that if a goalpost did topple forward on a child it is unlikely they would be seriously injured. We have living proof of this.

42 to 54 kilos: **HIGH RISK** - these goals, a child should survive depending on age and where the impact was however it is likely that fractures may be sustained.

54 to 70 kilos: **VERY HIGH RISK** this mass/weight would we feel cause serious and severe injuries if toppling onto a child's head or upper body and a lower body impact would most certainly break limbs.

Above 70 kilos: on our empirical research goals of this weight are potentially **UN-SURVIVABLE,** particularly if they topple onto children

We strongly recommend any freestanding goals to the weight mass above are destroyed at the earliest opportunity or permanently anchored and not moved around.

For a report on goal post safety and Blunt Thoracic Trauma impact information email john@itsagoal.net or visit www.itsagoal.net goalpost safety section.

If you want to see the impact of the largest children's goal, 21'x7' lightweight version falling on a melon compared to the 21'x7' freestanding goal to 1800Newtons that is to the latest BS8462:2012 standard amendment visit www.itsagoal.net - goal post safety .
WHAT PRICE IS THE LIFE OF ONE YOUNG FOOTBALLER ?

Certificate Number	Size	Description - Youth Football Goalposts	Material	date of test	Test House	crossbar deflection	Test standard	Newtons crossbar strength	Newtons crossbar Stability	18 Kilos weight
7080246	21'x7'	Anti Vandal lockable 76.1mm diametre steel Socketed Goal (Two section crossbar)	Steel	09/04/07	STL	5mm	BS8462:2012	1800	1100	OVER
9040207	21'x7'	Anti Vandal lockable 76.1mm diametre steel Socketed Goal (one section crossbar)	Steel	09/04/09	STL	2.8mm	BS8462:2012	1800	1100	OVER
7080245	21'x7'	80mmx80mm Aluminium with integral counterbalance back bar (one section crossbar)	Aluminium	08/05/07	STL	1mm	BS8462:2012	1800	1100	OVER
7090599	21'x7'	Oval Aluminium 100x115mm Socketed Goal (two section crossbar)	Aluminium elliptical	11/09/07	STL	0.4mm	BS8462:2012	1800	1100	OVER
8070137	21'x7'	Oval Aluminium 100x115mm Freestanding (one section crossbar) *anchors & weights*	Aluminium elliptical	02/07/08	STL	2.9mm	BS8462:2012	1800	1100	OVER
13030184	21'x7'	Oval Aluminium 100x115mm folding goalpost for *anchors & weights*	Aluminium elliptical	05/03/13	Element	1.6mm	BS8462:2012	1800	1100	OVER
8070138	21'x7'	Oval Aluminium 100x115mm Freestanding(two sectioncrossbar) *anchors & weights*	Aluminium elliptical	02/07/08	STL	4.2mm	BS8462:2012	1800	1100	OVER

TESTING HOUSE REFERENCE (STL) Sheffiled Testing Laboratories (Element) Element Materials Technology
The total counterblance weight on each of the stability tests is required for each goal in the test range - Information is given with each freestanding goalpost
The testing shows that all crossbars on similar goals shorter in length than twenty four foot will deflect less and will pass the strength test.
All freestanding goals have been tested on grass with multi surface anchors however each pitch can vary - check ground conditions before use
Freestanding goalpost frames above 45 kilos in weight can cause serious injury if they topple on children - extra care must be taken when using these heavier goals
All metal goals both steel & aluminium experience metal fatigue with constant use and movement - check welds and joints at regular intervals - look for hairline cracks in the weld
check playing surface- Additional anchors can be applied to any freestanding goal - longer safety pegs are also available to give extra support on soft or sandy surfaces.

PLEASE NOTE When buying freestanding goals for children please check the weight/mass of the goals - These are from our own resarch into Blunt Trauma Thoracic Impact on children
up to 18 Kg no risk 18-42Kg slight risk 42-55Kg High Risk 54-70Kg very high risk 70-98Kg potentially un survivable
If you buy freestanding goals at the heavier end of the scale extra care is needed at all times-Goals MUST allways be anchored and secured and adult supervision is needed

*Football goal posts tested earlier however the amendments in 2009 & 20012 did not change or effect the goalpost testing required UPDATED CERTFICATE TO BS8462 : 20012
PLEASE NOTE smaller goals with the same crossbar 12'x4' and 8'x4' are also covered by the above testing as the topple is less and crossbar is identical

"Jumpers for goalposts" the start of ITSA GOAL

SAFETY STANDARDS V SAFER STANDARDS

ITSA GOAL is the oldest uPVC football goal manufacturer in the world and a leading innovator in football goal post design.

The company was the first goalpost manufacturer to represent the U.K. on the European Normalization (CEN) Safety Standards. Prior to this committee being put together by the **B**ritish **S**tandards **I**nstitute no one in the industry had looked into the issues surrounding goalpost safety. The introduction of uPVC football goals for children by ITSA GOAL made a huge difference and ensured young children at long last could play football in proportional safe football goals.

The committee was set up soon after the death of Jonathan Smith in 1991 when the BBC program "That's Life" highlighted the serious injuries caused by poorly designed goal posts. At that time the company had just introduced the very first safe lightweight uPVC Mini Soccer Goal and this was seen as a huge step forward in safety of goalposts for children. They say "imitation is the best form of flattery" and many copies of this portable plastic goal have emerged over the years but none have come near to engineering quality of the original goal posts supplied by ITSA GOAL.

Until the death of Jonathan and the work of his mum Brenda Smith who highlighted the dangers of badly designed goalposts, nothing had been regulated as to what could and could not be used. The growing fatalities from goalposts forced the industry and the Football Association into doing something and the drive towards safer goal posts began.

We are proud that uPVC football Goals have gone a long way towards reducing serious injuries to young children around the world however, sadly, fatalities continue with heavier goalpost frames still in use, and that is why we are still fighting all these years on to remove all heavy freestanding goalposts used by children.

Our company has been involved more than most to try and introduce safer football goals. The distraught mum of Jack Sheering said to our Chairman after her son was killed by goalposts "*if only my son had been playing with your goals John he would still be alive"* did focus the mind somewhat. To us it is common sense, make lighter goals that children can survive if they ever topple onto them, the lighter the goal frame the safer it is.

The lessons have still not been learned and other young footballers are still being fatally injured by heavy freestanding goalposts. This is why we as a company have never supplied heavy steel freestanding children's goalposts or square steel socket goalposts as we feel they are dangerous. Even though we have been trying for years to make changes The British Standards Institute still sets standards that allows the manufacture of such goalposts. The company that manufacture these type of goalposts actually advises the BSI and others like myself are excluded by the members of these BSI committees. This is disgraceful situation that allows manufacturers on such committees to legitimize there own product designs within a safety standard however dangerous they may actually be.

Our company commissioned a detailed report by Sheffield & Hallam University in 2002 looking at the dangers of toppling freestanding goal posts and the overwhelming conclusion was that the mass of the goal and the speed generated by that mass from the fulcrum point was the main reason why goalposts cause fatalities. Our mission has

been to reduce this total mass on all goal posts and in particular free standing moveable goalposts to a safe limit.
Please visit www.itsagoal.net goalpost safety and see the impact tests we undertake to show explicitly everything that we feel is wrong with the current BSI standard.
This is why we are campaigning to improve and make a radical change to the current BSI Standards and persuade the Governing bodies of the sport to step in and make it happen.

We are asking safety to be put before profit. An example is the recent dilution of the 100mm x100mm mesh opening size on the 2009 amendment to the BS 8462 standard to allow larger mesh nets. A young three year old girl in York died from head entrapment in a net in 2012. Is a thirty seven pence saving on a larger 120mm x120mm mini soccer net really worth it?

Those who use football goals every week should have some input and say into the safety of Football Goals. Below are the problems we have experienced over the last twenty four years on our travels around the UK.

The main dangers with football Goalposts as we see it are:-

1 – Storage of Socketed Goalposts

Socketed heavy steel goalposts being removed from the ground intact (usually as bolts get rusted up and cannot be easily removed) with crossbar still attached to uprights and then stored up against a wall, fence or shed has been the cause of numerous deaths of children. This is extremely dangerous when crossbars are stored to the top and leant upwards. Even intact goalposts when stored with crossbar to the floor can still be dangerous especially when multiple sets are leant and stored together as heavy steel falling uprights can be just as dangerous. Socketed goalposts **must** be designed to be separated (uprights from crossbars) dismantled, made safe and stored away securely preferably at ground level or as low as possible. They must be designed to ensure they cannot be removed intact. (ITSA GOAL lockable anti vandal goals do just that)

Socketed goalposts that are bolted ideally if not locked need to have the crossbars secured from the sides to the uprights and not dropped onto the top of the uprights and bolted. Goalpost crossbars secured in this way to the side are safer as nuts and bolts cannot be removed without the whole frame being lifted out of the ground sockets which is something a child cannot do. If the crossbars are used with missing bolts the crossbar can still not be removed without removing the hole of the goal frame. These types of goalposts should also incorporate a locking system to prevent the posts from being lifted out of the ground by vandals.

On goals where crossbars are lifted onto uprights unless they are locked in place they can be used without bolts and can be lifted off the uprights by vandals or children and if this happens they may drop onto any one below. This type of design is also more likely to see the nuts & bolts not line up when re assembling the frame. We have seen this on a number of occasions.
Socketed goalposts that have crossbars that just drop into uprights and only rely on nuts & bolts to keep crossbars attached and not locks can be easily undone by vandals allowing the crossbar to be lifted off and dropped and the weight of a steel crossbar is heavy enough to cause serious injury or a fatality. The other common problem with this design is that the ground movement and upright position changes making hole alignment difficult. If numerous socketed goalposts are used then it is imperative that every

goalpost upright goes in the right hole at the right end of the pitch at the right side of the goal and on the right pitch every time they are re installed. This is why all over the country goalpost crossbars are not correctly bolted and in some case we have seen dropped on without any nuts & bolts at all. Unlike the anti-vandal goal which allows any upright or crossbar to be used anywhere It only takes one mix up with one upright to ensure all nuts & bolts may be unable to be fitted on the remaining goalposts.

Ground sockets for socketed goalposts need to be secure and lockable in open areas especially council pitches not just left open for rubble or animals or children to step into. Every goal should provide a secure lockable socket cap system that ensures nothing can be put inside and nothing can fall or become trapped inside.

Square steel football goalposts

These goalposts have been sold to local Authorities as being superior anti- vandal goalposts however they are extremely heavy and need extra care in installation and removal. The anti-vandal claim seems to be based on the fact that they are very heavy to remove as they are in deeper sockets but in actual fact they can be easily unbolted and removed by anyone.
The extra deep sockets offered with these type of goalposts are only 100mm deeper than ground sockets supplied as standard by ITSA Goal and 200mm deeper that the normal ones used by other goalpost manufacturers.

Square steel posts are sold on the basis they are superior to other goalposts when in actual fact, in our opinion, the shape makes them more dangerous as contact during a game directly with a pointed corner may increase any impact injury. We only make round goalpost uprights as we feel impacts would be deflected much better and as a company we have never made square upright steel goal posts. We recommend that all such goalposts be banned. We have recently been informed of a serious injury caused by a square steel upright on a goalpost that resulted in a young teenager having to undergo two hours of surgery after he collided into the square upright on such a goalposts.

2 –Heavy Free standing steel goals

Heavy steel or Alloy freestanding goalposts toppling forward onto the stomach, head or chest is one of the major problems for children. (See blunt trauma research) The accidents often show this happening whilst goalposts are being set up or moved around and at times when they may not be anchored. Accidents have happened when coaches have turned their back for just one moment but that is all it takes. We make light weight free standing goals to our own safe mass and we have living proof that lighter goals are safer….when one of our goals fell onto a child nothing more than a slight bump resulted. (See comments from Denis Hickford)

ITSA GOAL are the only manufacturer pioneering lighter freestanding goal posts and pressing for change in the industry. They may also be the only company doing impact testing on every freestanding goalpost. We believe it is the damage the goalpost can do to a child that needs testing not the damage to the frame.

This type of lightweight freestanding goalpost should be the first choice for Junior Football clubs. It seems a ridiculous state of affairs that these are outside the current safety standards yet heavier less practical freestanding goal posts that may kill a child are included.

Strong, sturdy long lasting alloy freestanding goals to a weight/mass that cannot fatally injure a child can be made it just needs the mindset of the rest of the industry to change. We as a company have never had one of our lightweight crossbars bend or break in twenty four years and we argue it is not necessary to use heavy steel post sections for children's freestanding goalposts.

3 – Hand, Finger, Head, Torso & foot entrapment

Entrapment, especially on swinging hinged sided goal frames is a problem. A business colleague lost three finger ends with such goals when heavy steel sides swung in wards and the goal collapsed on top of him during a game. According to the Football Association's own report it states hundreds of accidents a year are reported in Accident & Emergency departments that are caused by football goalposts. These accidents must be serious enough to need medical attention so whatever is currently causing these incidents shows why radical improvements are needed to the current BSI 8462 and EN 748 standards.

Folding goals that have sides that dislodge and swing about are unstable and may be unsafe. Buttons, pins and spring sided frames are just not good enough. All side frames need to be securely locked especially around children during play, whilst being moved and when stored. Only last year we were informed by a club chairman in Norwich that a youngster had his arm broken clean in two by a folding goal with steel swinging unsecured side frames.(see ITSA GOAL lockable folding goals)

4 – Mitered corner freestanding goalposts-un welded

A number of freestanding goal frames expand apart and leave dangerous sharp corners that need constant tightening and alignment of nuts & bolts. Our influence has meant that many have changed and now weld corners yet the mitered versions are still being sold as they are less expensive to make. Heavy freestanding goals with integral weights or rollers on the rear of the goal frame are designed in such a way that every time they are moved the nets may become entangled, the structure is weakened as nuts & bolts become loose. These goals in our opinion need to be tested over a much longer period than the one minute required in the standards. Integral weighted goals may need better designed frames that do not work apart as the stresses on these freestanding goals when moved is much more than other types of goals. In our opinion a radical re think about this type of goal needs to take place. We do not make or supply such goals and would never have one on our football pitch as it would compact the surface and may well rut and damage the playing surface.

5- Football Goalposts with wheels

Wheels on freestanding goals appear to be inadequate for the job as many just buckle over, puncture or lose wheels at which time they can leave knife like edges.(see photo on aluminum goalpost section on www.itsagoal,net) We believe that wheels should be always be removed from goalposts prior to play as they are often located in dangerous positions, have numerous finger and foot entrapment areas and players can collide into them and sustain serious injury. Goalpost wheels buckle and bend outwards and collapse due to the fact that freestanding goals are pulled from side to side more than they are pushed backwards and forwards. This is why the current wheel systems do not work. As barriers and all other obstructions for players are recommended to be at least 1.82 meters back from the touchline then we feel if wheels are to be left attached they must follow this guidance unless they can be shown not to be dangerous to players. A problem we have come across recently is flip over wheels being used on freestanding goals without counterbalance weights with the back wheels left in move position (up) and the front wheels in the none move position (down) which tilts the goal forward into a topple position and vastly increases the danger of overturning if any one swings on the

crossbar. With such goalposts leave the front wheels raised and lower the back wheels and that helps make it more difficult to topple the goal frame ITSA GOAL offer innovative lightweight strong freestanding goal frames that can be safely and easily moved by one person. Quick release wheels allow them to be removed during play and these goals also have the added advantage that when wheels are in place it is difficult for them to topple forward.
Removable dollies are suitable for moving larger goalposts on muddy playing surfaces as these spread the load and do not damage quality turf.

6 - Free standing Goalposts - Counter balance Weights

The main problem as we see it are sandbags as these can split and the weight can become less than is required to hold a goalpost securely. The actual weight can vary from bag to bag as they are often left to users to fill and secure. Any form of counter balance weight that can change should be discouraged so the use of water and sand bags should be avoided unless they are only used to help prevent the goal moving its position during a game. These types of weights may leave users with a false sense of security that they are using the correct weight when they may not be and should never be used as a counter balance to toppling of a goalposts. Only weights that cannot be adjusted should be used so that users know the weight is correct at all times. (the calculations for counter balance weight needed is shown on the toppling report)

In our opinion the topple test is far too high for children's goals which leads to more weights being used than are actually needed and this results from our own experience that users only using two weights on each corner as it is too much trouble to use more. Two weights will do the job if they are sufficiently heavy and are correctly positioned. This used with a goalposts frame of a weight that cannot kill would solve the problems and weights would be used to keep the goalpost in its position during a game more than as a need for toppling and that would result in both being accomplished.

If the maximum weight of the goals is reduced, should be much less on children's goals and should equate to the same force that say four young lads could exert by swinging on the crossbar. This would probably equate that the two counterbalance weights on the rear corners are actually sufficient to do the job but only on the lighter safer freestanding goalposts

Freestanding goalposts with integral weights are acceptable but only when the frame is designed in such a way as to easily transport the weight around without coming apart. These frames need to be designed to allow sideways movement as well as back and forward as they are moved sideways more than back and forward.

With lighter safer goalposts that cannot kill the weights would be used on hard surfaces more to stop the goal from moving around rather than to be the main force to prevent toppling.
Counter balance weights can be heavy and they should be designed in such a way as to allow them to break down to the maximum health & safety lifting limits which is around 25Kilos. (We make 22kilo weights) .They should always be stored at ground level if possible.

WHY ARE LIGHTER SAFER GOALPOSTS NOT MADE WITHIN - BS 8462?

You may wonder how on earth this has come about that safe goalposts that are just over 18kilos in weight cannot be included within the BS 8462 safety standard.

The reason is due to a leading UK goalpost manufacturer suggesting to the Football Association that all 9v9 and youth goalposts above 18 kilos be tested to 1800N the same as stadium goalposts that have sockets placed into concreted foundations. We could not believe anyone in the industry would suggest that children's goalposts be tested to such a high level increasing the mass/weight to what we considered to be a dangerous level and we made our views known to The Football Association.
The argument put forward by others is that if the back ground bar is much heavier than the rest of the goal it would prevent it from toppling forward. On larger adult goalposts this has some merit but it does make it more difficult to move around which defeats the whole point of a moveable goalpost. This however is not even required on children's goalposts if they are lighter in weight.

WHY NOT MAKE GOALS LIGHT ENOUGH NOT TO KILL IF THEY TOPPLE ?

Common sense really and that is the basis of all ITSA GOAL freestanding goalpost design yet clubs cannot receive grants towards these safer products only the heavier ones.

Junior clubs do not need such heavy integral weighted expensive freestanding goals they need more practical solutions. The option of using lighter less expensive goals may be taken away in the long run if we cannot change the current BSI standard. If common sense does prevail, the European standards being looked at now with reference from the BSI standard may eventually stop the use of safer lighter goal frames in the UK so it is imperative that this current standard is changed.

We are footballers ourselves designing goalposts for footballers and unlike others that design and make goalposts we have our own sports ground and use goalposts. We need the support of Junior Football Clubs if we are to change the standard before it becomes European Law.

With lighter goal frames coaches, teachers and club volunteers can rest assured that if they did turn their back for a moment and a goalpost fell onto a child it would not cause a fatality with children in their care. If you want this you need to speak out now or it may be too late!

The alternative is constant maintenance of heavy goalposts the additional work and dangers of moving heavy frames about, constant wheel problems, levers that are tensioned so much it can strain the wrists to release them, constant punctures, ruts in pitches from moving these heavy freestanding goals around and the worry if one ever did come apart and fall on a child what damage it may inflict.

Although we feel we have resolved many problems set out earlier we cannot make other manufactures change unless the standard is improved and a safe weight limit is introduced and strength testing is reduced to around 400N/600N on freestanding goals between 18kilos and 45kilos in weight.
At the moment it is 300N up to 18 kilos and 1800N for any goal above 18 kilos even if it is just slightly heavier than one kilo over…this is preventing the lighter weight

freestanding goalposts from attracting Football Foundation grants even though clubs want to use them.

This 50% grant may encourage clubs to buy the most dangerous heavy steel goals as the price with grant will be less than any other free standing goals. We would strongly recommend clubs however to avoid these goals and the hard work they will inevitably bring on match days. If you do decide to buy these goals you need to take extra care at all times and make sure everyone at the club is aware of the potential dangers if they fall onto a child!

Help influence the design of safer goalposts in the future contact the BSI working party direct reference SW/136/22 EN 16579.

If you need help with any football goalposts or would like to discuss this matter in more depth just give us a call at any time …07974745768 we need to spread the word to every Junior club in the UK and persuade the governing bodies of the game to ensure children are safe when they play football.

Recommended improvements to BS8462 – maximum weight for children's goals

Topple Dangers Posed By Free-standing Soccer Goalposts Report (Pedgley, Haake. 2002)

- In 2002 ITS A GOAL Ltd. commissioned this report by University of Sheffield
- Publicly available information
- Available for goalpost manufacturers for over ten years
- Presented to the British Standards Institute

Conclusion of Report

- Mass of goalpost is a major issue
- Basis for Its A Goal goalpost innovation
- Maximum safe weight is recommended

The Aim

To find a maximum safe weight for children and youth freestanding football goalposts, up to and including 21'x7" (6.4x2.1m)

Empirical Research

"A goal may collapse as the result of someone hanging on the crossbar, during recreational play, when the goal is moved, or from a gust of wind, and only rarely in relation to a match" (Blønd, Hansen,. 1999)

Empirical Research

- Accidents happen when goals are being put up, taken down or in storage
- Back bar weight increases manoeuvrability problems
- Heavy individual sections will be dangerous and should be less than 25kg for lifting safety
- Maximum safe weight for children and youth's freestanding football goalposts needs to be determined

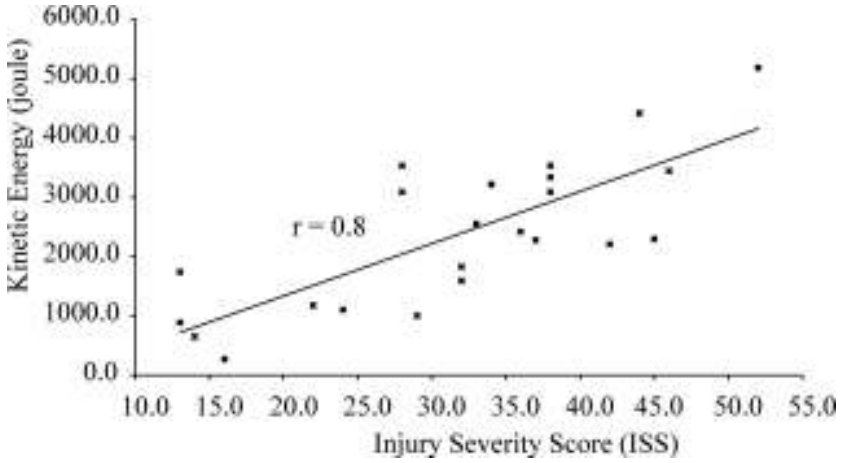
Blunt Thoracic Trauma In Children: Review of 137 Cases, (Balci et al. 2004)

- Blunt injuries sustained to the chest cavity
- Generally from a fall or road accident
- Injuries to other parts of the body can also occur from such an incident
- Often results in hospitalisation

Blunt Thoracic Trauma Data

- "The mean age of children was 6.9 +/- 7.3 (1-16) years. Of the patients, 19.7% (n:27) were under 5 and 52% (n:70) were between 9 and 12 years " (Balci, et al.)
- This is the data the following calculations are based on.
- Please note, a child under the age of 9 wouldn't be able to withstand the same force as a child over the age of 12. The different age group tolerances need to be considered.

Kinetic energy and ISS relationship in children with thoracic and associated injuries. (Balci, et al. 2004)



Injury Severity Score & Abbreviated Injury Scale

- An ISS score of 12 is equivocal to 3 injuries at AIS score 2 (moderate)
- The victim would be expected to survive and not be severely injured.
- Using ISS score 12 as a maximum, from the graph this gives a kinetic energy value of around 600 Joules

$$E_K = 600J$$

Kinetic Energy

Kinetic energy is the energy of an object in motion

$$E_K = 0.5\ mv^2$$

E_K Kinetic energy
m Mass of an object
v Velocity at which the object is moving

Velocity

- Velocity is the rate of change of displacement in unit time.
- Distance covered by the crossbar, the height from a 16x7ft (2.13m) goalpost
- Average time taken to fall 0.4 seconds
  (Pedgley, Haake. 2002)

v = d / t
v = 2.13 / 0.4

$$v = 5.325ms^{-1}$$

Calculation

- Kinetic energy equation: $E_K = 0.5\ mv^2$
- Rearranging gives: $m = E_K / 0.5\ v^2$

- Known values: $v = 5.325ms\text{-}1$
  $E_K = 600J$

- Inputting the values gives: $m = 600 / 0.5 \times 5.325^2$
  mass = 42.32 kg (2 d.p.)

Heavier Goalposts

- The weight or potential injury of any goal can be calculated in this way
- Following the previous method a goalpost of 70kg would result in several serious injuries. The victim would be hospitalised but it is unlikely they would die from the injuries, unless they were very young or it was a head or chest impact.
- However an even heavier goalpost would result in severe and critical injuries, and it may be un-survivable.

Results

- 1-18kg no risk
- 18-42kg slight risk
- 42-54kg high risk
- 54-70kg very high risk
- 70-98kg potentially un survivable

Conclusion

From the data used in this investigation, 42kg has been found as the guideline value for a maximum safe weight for children and youth freestanding football goalposts, up to and including 21'x7" (6.4x2.1m)

Additional Recommendations

- Definition of goalpost and difference between adult and children's goalposts
- Information from standard available to clubs
- Dangerous goalposts could be condemned by an approved inspectorate
- Grant scheme available to replace freestanding goalposts used by children that are above the maximum safe weight limit
- Warning labels to be applied to full sized adult goalposts above the maximum safe weight limit
- A maximum weight per meter of post sections be agreed as a total weight in a reduced mass area may still create impact injury.

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Appendix

42kg is a good place to begin when calculating a maximum safe weight for goalposts being used by children especially aged 9-12. The impact testing on melons used by ITSA Goal clearly indicated that lighter goalposts are safer. As a further extension of this calculation the density of the material will also be a variable factor that could be used to give a more specific value. This would allow each goalpost of a certain size and material to have a maximum safe mass, depending on the age range of the children intending to use it. The problem with this would be that you could never guarantee that all the variables will be correctly fulfilled when toppling does occur. There would be external factors that would be difficult to account for, such as extreme weather conditions. A limit would have to be introduced otherwise the data would become so specific that it become redundant.

This is why we work as hard as we do to change the standards to make sure heavy steel goalposts are removed from the UK. visit:

http://www.itsagoal.net/itsa-goal-posts/goal-post-safety/ and see the accidents worldwide ….find out why we need change.