

Irish Standard I.S. 357:2007



Playing Field Equipment

Goals

Code of Practice on the Procurement, Installation, Maintenance, Inspection and Storage

DECLARATION

OF

SPECIFICATION

ENTITLED

PLAYING FIELD EQUIPMENT – GOALS – CODE OF PRACTICE
ON THE PROCUREMENT, INSTALLATION, MAINTENANCE,
INSPECTION AND STORAGE

AS

THE IRISH STANDARD SPECIFICATION FOR

PLAYING FIELD EQUIPMENT – GOALS – CODE OF PRACTICE

ON THE PROCUREMENT, INSTALLATION, MAINTENANCE,

INSPECTION AND STORAGE

NSAI, in exercise of the power conferred by section 16 (3) of the National Standards Authority of Ireland Act, 1996 (No. 28 of 1996) and with the consent of the Minister for Enterprise, Trade and Employment, hereby declares as follows:

- 1. This instrument may be cited as the Standard Specification (Playing field equipment Goals Code of practice on the procurement, installation, maintenance, inspection and storage) Declaration, 2007.
- 2. (1) The Specification set forth in the Schedule to this declaration is hereby declared to be the standard specification for Playing field equipment Goals Code of practice on the procurement, installation, maintenance, inspection and storage.
 - (2) The said standard specification may be cited as Irish Standard 357: 2007 or as I.S. 357: 2007.

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Foreword

This Irish Standard has been prepared by the NSAI Technical Committee on Goal Safety in response to fatal accidents involving defective, modified, unstable or incorrectly anchored goals.

It has been developed specifically for those that are involved in the procurement, installation, maintenance, inspection and storage of goals.

Attention is drawn to standards specified in section 2, Normative References, which may be used in conjunction with this standard.

SCHEDULE

PLAYING FIELD EQUIPMENT – GOALS – CODE OF PRACTICE ON THE PROCUREMENT, INSTALLATION, MAINTENANCE, INSPECTION AND STORAGE

1 Scope

This Irish Standard gives guidance for the procurement, installation, maintenance, storage and inspection of goals. It also gives guidance for their inspection and testing by the owner. For the purpose of this code of practice, goals should include, uprights, crossbar, together with any other parts such as the net, net support posts, sockets and anchoring systems

It is applicable to goals that are used for recreational play, training and competitions. It is not applicable to goals that are classed as toys.

Alterations or additions or appendages, to parts of a goalpost that could affect the essential safety of the equipment should not be carried out/used i.e. target practice sets.

2 Normative references

This Irish Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies (including amendments).

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I.S. 356	Playing field equipment- Goals – Functional and Safety Requirements – Test Methods			
	Portable and Fixed Goals			
I.S. EN ISO 1806	Fishing nets – Determination of mesh breaking force of netting			
I.S. EN ISO 2307	Fibre ropes – Determination of certain physical and mechanical properties			
I.S. EN ISO 2062	Textiles – Yarns from packages – Determination of single-end breaking force and elongation at break			
I.S. EN ISO 10002-1	Metallic Materials - Tensile Testing - Part 1: Method of Test at Ambient Temperature			
I.S. EN 748	Playing Field Equipment - Football Goals - Requirements and Test Methods including Safety			
I.S. EN 749	Playing Field Equipment - Handball Goals - Functional & Safety Requirements, Test Methods			
I.S. EN 750	Playing Field Equipment – Hockey Goals – Functional and Safety Requirements, Test Methods			
BS 8461	Football Goals - Code of practice for their procurement, installation, maintenance,			

storage and inspection

BS 8462

Goals for youth football, futsal, mini-soccer and small sided football - Specification

Laws of the Game

FIFA

Laws of the Game

Cumann Lúthcleas Gael and Cumann Camógaíochta na nGael

Laws of the Game

International Rugby Board

3 Terms and definitions

For the purposes of this standard, the following terms and definitions apply.

owner

club/organisation/institution /private individual that owns the goal and has responsibility for its integrity

3.2 competent person

one who possesses sufficient training, experience and knowledge appropriate to the nature of work to be undertaken

3.3 goal

uprights, crossbar, together with any other parts such as the net, net support posts, sockets and anchoring systems

3.4 portable goal

goal structure which may or may not be temporarily located by light ground sockets but which, when erected or assembled is stabilised by means of a specific ground anchorage system which enables the structure to withstand the required design and test loads

NOTE

portable goals can be referred to as free standing goals

3.5 fixed goal

goal structure which is set in a suitably -sized permanent foundation in such a way as to enable the combined structure to withstand the required design and test loads

3.6 goalframe

crossbar and uprights

3.7 brittle material

a material that when subjected to a progressively increasing load will fail in an abrupt manner. For the purpose of this standard, a brittle material is a material that will fail at less than 10% elongation, when subjected to a tensile test as per I.S. EN 10002-1

3.8 ductile material

a material that when subjected to a progressively increasing load will progressively deform, but will not fail abruptly. For the purpose of this standard, a ductile material is a material that can withstand an elongation at fracture of not less than 10%, when subjected to a tensile test as per I.S. EN 10002-1

3.9 in use

that period commencing with the erection of the goals on the field of play and their subsequent use for training or play, in accordance with the rules of the game for that particular code of sport

3.10 intended use

the purpose for which the goal has been designed

3.11 not in use

the commencement of the dismantling of goals and the subsequent period when they are not available for their intended use

3.12 net support

attachment which may be fixed to the goal frame for supporting the net, but which does not support the goal frame

3,13 support frame

framework comprising the side bars and back bars that may support the goal frame

3.14 diagonal support (Figure 1)

diagonal bar connected to goal frame and supporting bar

3.15 anchoring system

system for ensuring that a portable goal can not tip over, slide or displace

4 Goal sizes

The Laws of the Game define the sizes of goals to be used for the different versions of the game.

Annex A gives guidance on the sizes of goals. The user should refer to the particular Laws of the Game to ensure accuracy of the sizes listed.

5 General

If equipment is not safe, access and/or use should be prevented.

NOTE Examples of situations where the equipment is not safe are as follows:

- i) not anchored as per manufacturer's instructions;
- ii) safe installation of equipment is not complete;
- iii) safe removal has not been completed;
- iv) where goals have been damaged or have deteriorated so that they are unsafe;

6 Procurement

6.1 General

A goal, net and fittings where required for use should conform to appropriate standards (see Annex A). Goals designed only for home use (i.e. intended to be used as toys rather than sports equipment) should not be used.

A goal should be purchased as a complete unit (e.g. goal, net, anchors, stabilisers, etc.) together with any other accessories that may be required.

Replacement parts 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 the appropriate standard.

NOTE Purchasers are advised to purchase goals from manufacturers and suppliers that can show evidence that the goal conforms to the relevant standard as appropriate, and to obtain a copy of a Test Certificate showing conformity. It is advisable to check that the goal being bought is exactly the same type as the one to which the Certificate refers.

6.2 Information to be supplied by the Manufacturer to the User

The manufacturer should provide a "Warning Label" which is affixed to the goal and written instructions for assembly, installation, use, storage and maintenance. These instructions should be supplied with each goal for its intended use.

For a portable goal, the information supplied should include detailed instructions for use of the anchoring system supplied.

The instructions for a portable goal should clearly indicate that a goal should be anchored at all times by means of the system supplied by the manufacturer for the relevant surface. The instructions should describe the anchoring system supplied with the goals including a list of all components required.

For a fixed goal, detailed instructions for the installation of the ground sockets if applicable should be included.

For a fixed goal, detailed instructions for the installation of the ground sockets if applicable should be included.

Maintenance information should provide instruction on how a goal should be inspected in accordance with the appropriate standard, including the removal of the goal(s) from use until any damaged parts have been replaced.

7 Installation

7.1 General

On receipt of a goal and prior to installation, it should be checked to ensure that it has not been damaged in transit. If parts are missing, the goal should not be assembled or used in an incomplete state. The manufacturer or distributor should be contacted.

Consideration should be given to the location of underground and overhead services during the installation of a goal.

Goals should be installed in a safe manner, having regard to the health and safety of those erecting them. Goals should be installed by competent persons. A goal should be installed according to the manufacturer's instructions and in accordance with the relevant standards.

7.2 Portable goal

7.2.1 General

A portable goal is only safe for use if it is properly stabilised or anchored. A portable goal should be stabilised/ anchored in accordance with the manufacturer's instructions using the systems supplied by it.

Typical mechanisms for anchoring/stabilising a goal include ground pegs, counter balance weights and fixings.

Anchoring points should be specified in the manufacturer's instructions.

Consideration should always be given to the ground conditions where a goal is to be used to determine the most appropriate stabilising/ anchoring systems.

Permanent fixing points should be set in concrete.

7.2.2 Anchor points

The dimensions of the concrete block surrounding the anchor point should be in accordance with the Manufacturer's Instruction or relevant standard.

7.2.3 Weights

When weights are used for stabilising/anchoring a goal the correct weights and number should be used. Weights should be supplied by the manufacturer.

Weights should be positioned in accordance with the manufacturer's instructions or relevant standard.

7.3 Fixed goal

7.3.1 Sockets

Goal post sockets should always be set in concrete. The dimensions of the concrete foundations should be in accordance with the manufacturer's instructions, and in compliance with the relevant standards.

Consideration should be given to the ground conditions prior to installation of the ground sockets.

7.3.2 Socket caps

Sockets that are not in use should be capped when goals are removed with an appropriate tightly fitted metal, rubber or plastic cap or drop in lid.

7.3.3 Net support posts

Free standing net support posts should be set in concrete. The foundation dimensions should be in accordance with manufacturers' instructions and the relevant standard.

7.4 Net fixings

Net fixings shall be designed in such a way that a player cannot be injured. Net fixings which fix the net to the goal shall be designed so that any external openings (i.e. on the circumferences of the cross section of the uprights and the cross bar) are ≤8mm or ≥25mm.



Figure 1 — Typical Net Hook for Net Fixing

Neither spring hooks nor metal cup hooks shall be used as a means of fixing the net to the goal frame.

8 Inspection

It is not possible to specify exactly what inspections should be made or at what intervals, because the conditions under which a goal is kept and used vary so widely. It may be necessary to inspect a goal which is permanently installed in an open public space every day, while one which is in a locked, fenced enclosure and is only ever used by an organised club at a high level with supervision may need to be inspected relatively infrequently. The type and thoroughness of the inspections needed, also vary with the type of goal.

In order to prevent accidents, the owner should ensure that an appropriate inspection schedule is established and maintained for each goal, taking into account level of usage.

The schedule should list the components to be inspected and the methods of carrying out the inspections, in accordance with this clause.

A typical schedule is located in Annex B

8.1 Inspection type / frequency

Goals should be inspected regularly to ensure that they are still safe for use.

Outlined below is guidance on the inspections that should be carried out on a goal. Inspection frequency may be increased as a result of the identification of damaged parts, environmental conditions, or frequency of use of the goal.

8.1.1 Inspection level 1 - Routine visual inspection

Routine Inspection should be carried out at least every week and/or before any game, training activity or event such as summer camps or sports day.

The routine visual inspection enables the identification of obvious hazards that can result from vandalism, misuse or general deterioration.

Typical hazards to consider:

- Damage to the goalframe
- Lack of / insufficient anchorage or stability equipment
- Damaged or missing fixings
- Damaged nets / damaged or missing net fixings

NOTE Examples of visual inspection are stability, anchorage, excessive wear, structural integrity and alignment.

8.1.2 Inspection level 2 - Operational inspection

Operational inspection should be carried out particularly when a goal has been moved from one location to another. This level of inspection should be carried out by those who have responsibility for the movement of a goal.

The operational inspection is a more detailed inspection taking into account inspection level 1 and checks to verify the integrity of the components and assembly of the goal and in particular note any deterioration of same.

- Check that anchorage and stability equipment is properly attached to the goal
- Check that manufacturers instructions are followed in relation to location of anchorage equipment and correct weights

8.1.3 Inspection level 3 - Annual main inspection

The annual main inspection is carried out at intervals not exceeding 12 months, but ideally at the start of the season. Inspection level 3 is carried out to establish the overall level of safety of the goal.

- Inspection level 3 should include inspection level 1 & 2 checks.
- Foundations and surfaces, e.g. effects of weather, evidence of rotting or corrosion,

8.1.4 Mechanical testing (Strength and Stability)

If during any inspection (inspection level 1-3) the safety of the goal can not be determined visually, either a load bearing strength test or stability test may be required. (Annex C sets out the requirements and testing criteria).

This test should be carried out by a competent person using suitable mechanical testing equipment. Users/owners should consult with their governing bodies/ management if mechanical testing is required.

8.1.5 Replacement parts

If any of the structural components require replacement, the goal should be removed from its location and stored in a secure area. Ideally the goal should be labelled "Not Safe for Use" while it is awaiting repair. Replacement parts should be procured from the manufacturer of the original goal.

It is important to ensure that the combination of goal and new component will continue to conform to the appropriate standard.

A goal that is unsuitable for repair should be removed from use and replaced.

To ensure the strength and stability of the repaired / revised goal, testing should be carried out as outlined in the relevant standards.

9 Maintenance

9.1 General

Maintenance may occur as a result of an inspection check, moving of a goal, during usage or as part of a maintenance program. A goal that is properly installed should be safe but after a time this may no longer be the case. Rust may weaken the goal. Bolts and other fixings may become loose or break or be lost. Nets may lose strength when exposed to the elements over time. Sockets may become loose and the goal may become detached from its anchors and not be reattached.

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

Manufacturer's Instructions should include information in relation to maintenance requirements for the goal. A goal and its components should be maintained according to the Manufacturer's Instructions.

9.2 Routine maintenance

In order to minimise the possibility of accidents, the owner should ensure that an appropriate routine maintenance schedule is established, implemented and maintained.

This should take into account local conditions and the manufacturer's instructions which may affect the necessary maintenance frequency.

The routine maintenance of a goal should consist of preventative measures to maintain their level of safety and performance. Such measures should include:

replacement of damaged/worn/ missing components

repainting and re-treating of surfaces;

cleaning;

9.3 Corrective maintenance

Corrective maintenance should include measures to correct defects or replace defective components, to reestablish the necessary levels of safety of the goal.

These measures should only be carried out by the manufacturer or competent person.

9.3.1 Personal safety

Maintenance/repair works should only be carried out when the goal is not in use. Any works to be carried out should be done having regard to the local safety statement.

Where a goal is to be removed from the site, for example for maintenance, any anchorages or foundations should be made safe.

10 Records

Records of inspection and maintenance should be kept in standard hard copies and/or electronic format

Records should be maintained by the person/club/organisation/institution who owns the goal. If different to the landowner copies of such records should be made available.

Proper records in hard copy/electronic format should be kept in respect of each goal in a safe, secure location that permits easy retrieval.

The documents stored should include:

- a) Test Certificate of Conformity (from the Manufacture upon purchase)
- b) owner records, e.g. log book
- inspection and maintenance instructions
- d) records of all inspections carried out
- e) records of all maintenance works carried out
- f) records of mechanical testing carried out and certificates of testing, if applicable;

g) specific design and tender documents

These documents should be kept so as to be accessible when needed in connection with maintenance, inspection and repair. Records referenced in (d) and (e) may be maintained in the owner's log book (b). Annex B gives examples of Inspection Records

Records should be maintained for a minimum period of the lifetime of the goal.

11 Operation

11.1 General

If equipment is not safe, access to or use of the equipment should be prevented.

NOTE Examples of situations where the equipment is not safe are as follows:

- i) not anchored as per manufacturer's instructions
- ii) safe installation of equipment is not complete
- iii) safe removal has not been completed
- iv) where a goal have been damaged or have deteriorated so that they are unsafe

11.2 General Recommendations

The owner should take into account in all steps of installation, inspection, maintenance and operation, the manufacturer's information to ensure the safety of the goal.

11.3 Specific recommendations

11.3.1 Assessment of safety measures

The owner of goals should have appropriate procedures in place for the safe management of goals in relation to their procurement, installation, maintenance, inspection and storage.

11.3.2 Personnel

Personnel performing tasks as a part of safety management, such as inspection, repair and maintenance, should be competent to carry out such tasks.

The level of competence will vary with the task and training may be necessary. The personnel should have adequate information about their tasks and adequate information about their responsibilities and authority.

Any work involving the goal that is deemed to affect safety should only be carried out by suitable competent personnel.

A goal should only be installed when safe to do so and in a supervised manner.

11.3.3 Procedures

Defects that occur during use of a goal and which put safety at risk should be corrected without delay. If this is not possible, the goal should be secured against use e.g. by immobilisation or removal and suitably labelled indicating "Not Safe for Use".

Access/use by the public should be prevented until unsafe goals are repaired and declared fit for use.

11.3.4 Goals manufactured with brittle materials

A goal that is manufactured with brittle materials should be identified and a programme should be put in place to replace it.

12 Moving & Storage of goals

12.1 Moving of goals

Before a goal can be moved, it should be detached from anchors, fixing posts, weights or sockets. Manufacturer's instructions should be followed when moving goals. Consideration should be given to the safety of personnel carrying out this task a goal may be unstable following detachment from anchoring/socketed systems.

A goal may be moved by either personnel or mechanical means such as a tractor with front loader, mobile crane etc. Consideration should be given to the location of overhead electrical cables during movement of goals. A goal should not be dragged across the ground/ pitch as this may damage the goal.

12.2 Storage of goals

When not in use, a portable or fixed goal when dismantled should be stored in accordance with manufacturer instructions.

The period of time which should elapse before the goal is deemed to be "NOT IN USE" will vary and may be determined, inter alia, by

- damage;
- failing daylight;
- the closure of the grounds/park;
- the end of a programme of fixtures and/or training;
- the end of the playing season;

as determined by an official e.g. referee, club official, grounds man, authorised officer, owner.

All goals including fixed goals when dismantled should be securely stored whether they are stored internally or externally when not in use. Access to stored goals should be restricted to authorised persons.

Annex A (informative)

Goal Sizes

Type of Football	Size (width x height to crossbar) m	Applicable standard
Rugby Fixed Socket type	5,6 x 3,0	I.S. 356
Senior Gaelic – Stadium Fixed Socket type	6,5 x 2,5	I.S. 356
Gaelic - Fixed Socket type		
Club/Schools - Senior	6,5 x 2,5	I.S. 356
Gaelic - Fixed Socket type	· · · · · · · · · · · · · · · · · · ·	
Club/Schools – Junior	4,6 x 2,2	I.S. 356
Senior GaelicPortable	6,5 x 2,5	I.S. 356
Gaelic Juvenile	4,6 x 2,2	I.S. 356
Under 12 - Portable		
Gaelic Juvenile	3,0 x 1,83	I.S. 356
Under 10 - Portable		
Gaelic Juvenile Under 8 - Portable	2,5 x 1,50	I.S. 356
Eleven-a-side (full size)	7,32 x 2,44	I.S. EN 748
Youth Football	6,4 x 2,13	BS 8462
Mini-soccer	3,66 x 1,83	I.S. 356
Small Sided football	4,88 x 1,83	
	4,88 x 1,22	
	3,66 x 1,83	I.S. 356
	3,66 x 1,22	
	2,44 x 1,22	
Futsal	3,0 x 2,00	I.S. 356

Annex B (informative)

Typical Goal Record & Inspection Sheets

The Record sheets shown here are typical examples of Goal Record and Goal Inspection Records. They are for guidance only. It is recommended that the owner establishes a suitable Log book of Goal Record Sheets and Goal Inspection Sheets that meets their needs.

Goal Record Sheet

This Record may be used every time an inspection or maintenance check or repair is carried out

(It is recommended to have a goal identification number allocated to each goal and the corresponding goal marked with the number)

	Goal Identification Number:		Location of Goal:	
Date	Type of Check Indicate Level of Inspection /Maintenance or other	Findings	Action Taken	Inspected by

Goal Inspection Sheet

This sheet may be used to record the checks that are carried out on a goal following its installation.

Goal Identification Number	Pitch Address/ Number			
Goal Size	Goal Type			
Manufacture / Distributor	Date of Manufacture			
Date of Purchase	Supplier Information for Spare Parts			
Supplier Information for Spare Parts:				
Date of Inspection/Maintenance / Repair:				
Ground and Prevailing Weather Conditions:				
Result of Inspection (Pass/ Fail):				
Action Taken:				
Inspected by:				

Annex C (normative)

Mechanical Testing (Strength & Stability)

C.1 General

Testing to determine the strength or stability of the goals should be carried out in accordance with the appropriate standard and the specified test procedure.

NOTE The load values specified here are in some cases lower than those used for the manufacturer's certification. A distinction may be drawn between a field test, which may be carried out regularly during the service life of the goals for the purpose of ongoing inspection, and a manufacturer's test, whose purpose is to certify the structural integrity of the design and the suitability of the materials used in the goal's construction. It is envisaged that the higher loads used in the manufacturer's tests may result in a small, yet permanent, deformation of the crossbar. While this is completely acceptable for a certification test, the use of slightly lower load values as specified below will adequately test the strength of the goals but should not result in the occurrence of any permanent damage. However, manufacturers that state conformance to I.S. 356, I.S. EN 748, and other relevant standards shall test their products in accordance with those standards for strength, stability and other requirements.

C.2 Load bearing strength (Vertical loading)

C.2.1 General

The loads specified below relate to the dimensions of goals listed in the Annex A.

When tested in accordance with the test procedure as described below in C.3, the following shall apply;

Goal Size	Load Bearing Strength Vertical Loading (N)	Requirement
Gaelic	1800	the crossbar shall not fracture or collapse or show permanent deformation (full recovery)
Full Size Soccer Goals	1620	the crossbar shall not fracture or collapse or show permanent deformation (full recovery)
Soccer Goals under 5m width	720	the crossbar shall not fracture or collapse or show permanent deformation (full recovery)
Soccer Goals under 5m length (Futsal Goals)	1620	the crossbar shall not fracture or collapse or show permanent deformation (full recovery)
Rugby Goals (Pre–I.S. 356 Published standard)	1800	the crossbar shall not fracture or collapse or show permanent deformation greater than 5mm.
Rugby Goals	1800 N	the crossbar shall not fracture or collapse or show permanent deformation greater than 10mm.

Table C1 — Vertical Loads for Strength Testing

C.3 Strength test procedure

The test requirement as indicated below should account for the possibility that the loadings may cause localised settlement of the uprights. The following procedure should apply to take this into account:

1. Measure dimensions A, B, C (defined in Fig C 1.). These dimensions are called A_1 , B_1 and C_1 , respectively.

- 2. Apply the appropriate vertical load (F), as indicated in Table C 1 at the centre of the crossbar for the indicated time, and then remove the load.
- 3. After the appropriate time, as specified in clause C 3.1, again measure dimensions A, B, C. These dimensions are called A_2 , B_2 and C_2 , respectively.
- 4. Determine the deflection (or deformation) of the centre of the crossbar (d) as follows:

$$d = (C_1 - C_2) - \frac{(A_1 - A_2) + (B_1 - B_2)}{2}$$

In terms of the criteria indicated in Table C 1., the goals shall be deemed to have passed the test if

- a) There are no visible signs of fracture of the goal post; and
- b) The measured deflection (or deformation), that is, dimension "d", is not greater than those specified in Table C 1.

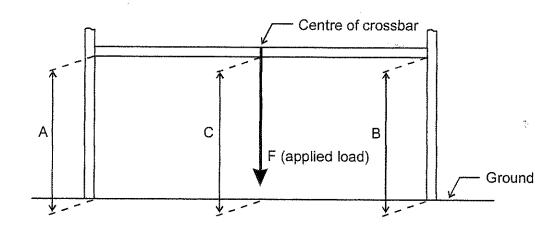


Figure C.1 — Strength Test

C.3.1 Test Requirements for portable and fixed Goals

Apply an appropriate vertical force (N), for the goal size being tested at the centre of the crossbar for

1 min +10 sec . - 0 sec

Note any fracture or other damage to the goal.

Remove the force and measure any permanent deformation 30 min + 1 min , - 0 sec after removal of force

C.4 Stability (Horizontal Testing)

When tested in accordance with the relevant standards the goal should meet the requirements specified in Table C.2.

Goal Size	Stability Testing Horizontal Loading (N)
Gaelic	1100
Full Size Soccer Goals	1100
Soccer Goals under 5m length	700
Soccer Goals under 5m length (Futsal Goals)	1100
Rugby Goals	1100

Table C.2 — Horizontal Loads - For Stability Testing

C.4.1 Determination of stability for portable and fixed goals

C.4.2 C.4.1.2 Stability testing of portable goals

Install the goal in its normal position of use including appropriate anchorage in accordance with the Manufacturer's Instructions.

Apply a forward horizontal force for the goal size being tested as listed in Table C.2, at the top of the center of the crossbar for 1 min., by means of a strap of not less than 5,0 m length. Note any falling or sliding of the goal frame.

After testing the vertical uprights should recover their verticality or plumb and should be visually vertical.

The test methodology should be designed in a way that takes into account the possibility of failure and the resultant danger to persons carrying out the test.

C.4.1.3 Stability testing for portable goals under 5m length

Install the goal in its normal position of use. Apply a forward horizontal force as listed in Table C.2 at the top of the center of the crossbar for 1 min., by means of a strap of not less than 5,0 m length. Note any falling or sliding of the goal frame.

Observe whether the goal tips over.

Repeat this test using in turn, each of the anchoring systems with which the goal can be supplied and in each case with the goal anchored on the corresponding playing surface.

For goals incorporating a weighted support frame designed to prevent the goal tipping forward, install the goal in its normal position of use and restrain the goal with blocks before performing the test

C.4.1.4 Stability testing of fixed goals

Install the goal in its normal position of use. Apply a forward horizontal force as listed in Table C.2 at the top of the center of the crossbar for 1 min., by means of a strap of not less than 5,0 m length. Note any falling or sliding of the goal frame.

After testing the vertical uprights should recover their verticality or plumb and should be visually vertical.

The test methodology should be designed in a way that takes into account the possibility of failure and the resultant danger to persons carrying out the test.

GIVEN under the seal of the National Standards Authority of Ireland

This 14th day of September, 2007



Enda McDonnell Director of Standards

> Maurice Buckley Chief Executive

The Minister for Enterprise, Trade and Employment hereby gives his consent under Section 16 of the National Standards Authority of Ireland Act, 1996 to the above declaration.

Paul Bennett

20-9-2007

An Officer of the Department of Enterprise, Trade and Employment duly authorised under Section 15 (4) of the Ministers and Secretaries Act, 1924, to authenticate instruments (under the National Standards Authority of Ireland Act, 1996) made by the Minister for Enterprise, Trade and Employment.

