

Spectators

Introduction

The provision of improved or new spectator facilities at your club for supporters and visitors will be an important investment that should, if carried out successfully, bring long term benefits and increased attendances.

This Data Sheet provides a guide to the range and complexity of issues and design criteria connected with the provision of accommodation for spectators in small stadia. FSIF funding is available to help clubs in the Football League and from the Conference down to level 4 and below to increase the standard of their facilities.

The contents of this data sheet should not be seen as a substitute for the Guide To Safety at Sports Grounds (the 'Green Guide'), which provides details and information on all aspects of stadia design and the need to obtain any statutory approvals that may be required.

Data Sheet 1 'Planning an Improvement Project' lays out in diagrammatic form the recommended project stages. Data Sheet 3 'Access and Provision for Spectators with Disabilities' gives guidance on this topic and should be referred to as part of your overall approach and provision of spectator facilities.

Improvement projects should demonstrate an appreciation of the whole experience and process of spectating at football matches. This should include: arrival at the ground, circulation into and around the stands, access to the seats and support facilities, viewing sightlines during the match and safe egress or evacuation in the event of an emergency.

STAGE 1

Project brief

Before your project steering group selects and appoints your specialist consultants, it will be helpful to assemble the following basic site, usage and initial briefing information:

- a site plan showing the extent and scope of your land ownership, legal agreements, covenants, way-leaves and rights of way etc
- existing stands and buildings, mains services and other facilities, local knowledge of ground conditions and site factors
- grounds and stands maintenance arrangements
- existing spectator numbers and stand arrangements (if applicable)
- existing car parking arrangements and transport links
- existing access for pedestrians, cars and coaches

- details of any consultations with the Local Planning Authority or other agencies and organisations
- funding sources and initial capital cost budget
- outline brief for spectating provision
- league requirements and standards.

STAGE 2

Appointing consultants

Selecting and appointing your professional team is an important process and *Data Sheet 1 'Planning an Improvement Project'* covers this in some detail.

STAGE 3

Scheme Development

A feasibility study is a crucial and necessary process that will help your project steering group and professional team make informed decisions and submit a considered and well designed project to the FSIF.

The study should include:

Site information

- assembly and analysis of the initial briefing information assembled in Stage 1 and identification of the key issues
- initial schedules of accommodation and projected capacities (i.e. promotion to higher league)
- consideration of possible undercroft facilities including toilets, catering outlets, press/media areas, directors' rooms, and changing facilities
- orientation and pitch layout
- safety and security.



Development of project brief

Your appointed consultants should be competent persons with a working knowledge of the key references and sources of information and able to develop the initial project brief into an architectural brief including:

- schedules of accommodation
- footprinting options
- assessment of stand design options including profiles, roof structures, seating configurations and circulation strategies
- new services
- capital cost estimates.

Issues, standards and technical requirements

Seated spectator accommodation

Viewing standards

Spectators should always have a clear, unrestricted view of the whole of the football playing area. Seated spectators will be discouraged from standing if they can see the action and this will improve the safety and quality of the accommodation. Viewing standards are affected by three factors:

- the quality of sightlines (*see 'C' value below*)
- restrictions to viewing i.e. roof supports, flank walls, barriers, floodlights, scoreboards and hoardings
- the viewing distance from the playing area.

Sightlines and angle of rake and restrictions

The quality of sightlines is determined by the ability to see over the head of spectators in front. This is often expressed as a 'C' value, which is the distance between the centre of the eye and the top of the head in front. A 'C' value of 120mm gives a good sightline and 150mm an excellent one. New football stands should achieve a minimum 'C' value of 90mm for all seats. Diagram 1 shows how 'C' values

can be calculated. Sightlines for spectators in standing accommodation will require careful consideration due to the increase in vertical height. Note that when spectators stand up in seated areas their sightlines have a significantly reduced 'C' value.

The 'Green Guide' gives further guidance on this topic.

Football spectators, whether seated or standing, should be able to see the nearest touchline and this should be used as the focal point in the calculations.

Once you have determined the 'C' values, this will have a direct influence on the angle of rake of the stand. The steeper the rake, the better the sightlines (*see diagram 2. 'Steeper rake'*), but optimising sightlines can often produce a rake that is too steep for comfort or safety.

The Green Guide states that gradients for seated rows should not exceed 34 degrees and that a gradient above 25 degrees would be potentially hazardous on a standing terrace and should be avoided.

Calculating sightlines for each row or seat is a complex process and it is recommended that professional advice is sought from those with the appropriate experience in designing spectator accommodation.

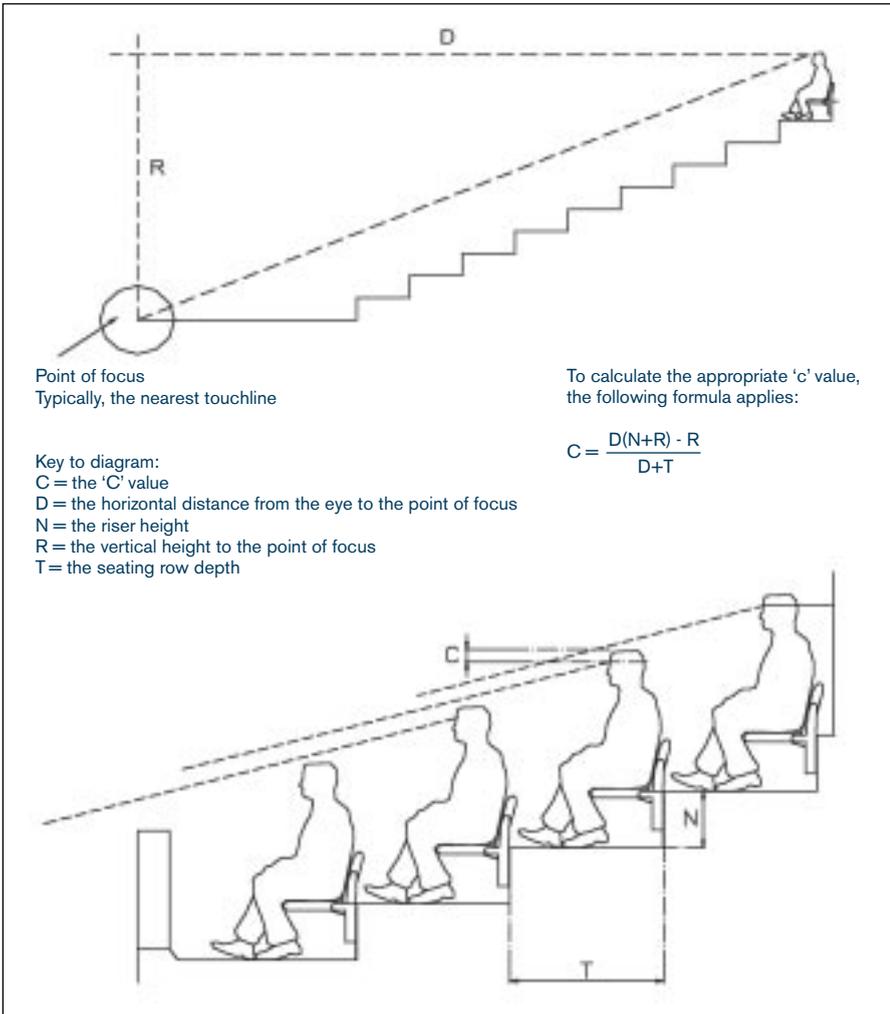


Diagram 1: 'C' Values.

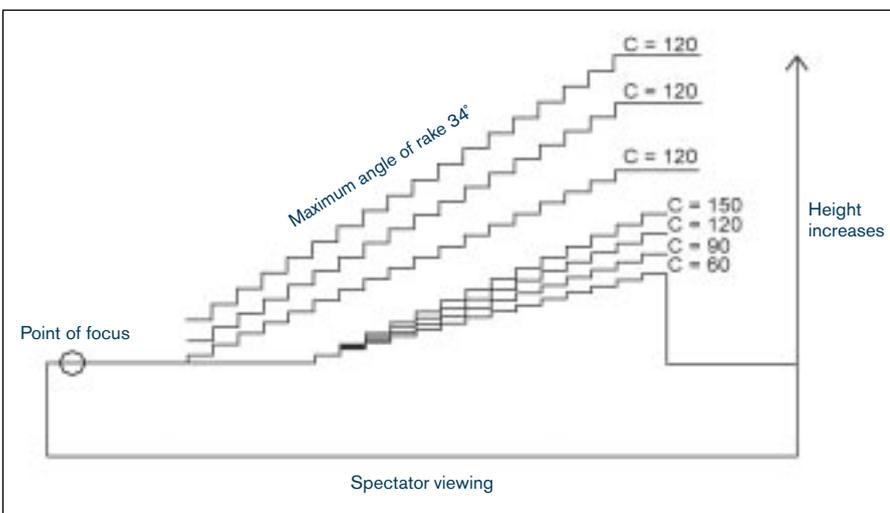


Diagram 2: Steeper Rakes.

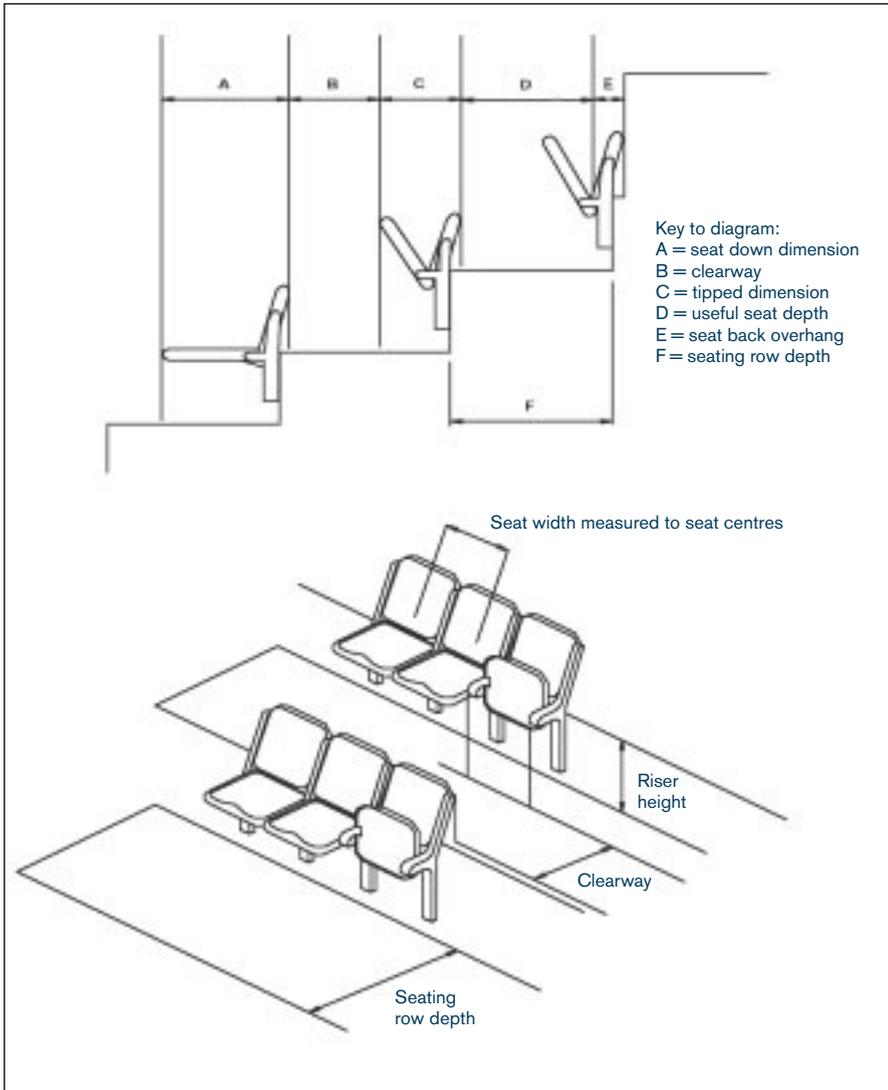


Diagram 3: Seating.

Gangways generally

You will need to give careful consideration to the design and provision of ingress and egress routes including both radial and lateral gangways. (Radial = front to back, lateral = across the front of seats) (see *diagram 4 'Gangways'*)

'The Green Guide' states that gangways should meet the following requirements:

- no spectator should have to travel more than 30m from their seat in order to enter an exit system
- gangways in seated accommodation should be a minimum of 1.2m wide in new construction
- adequate barriers or handrails should be provided.

Lateral gangways

Spectators sitting in the front rows which have lateral gangways at the same level may have their viewing restricted by the passage of people. The management should ensure that the movement of people is controlled to discourage people from standing. This can affect the 'S' factor (see *section on 'safety' on page 10*). Mid level lateral gangways can adversely affect the sightlines of the rows behind.

Radial gangways

The dimensions of the goings and risers of radial gangways will be determined by the gradient of the seating rows, i.e. up to 34 degrees. The following requirements should apply:

- The goings in radial gangways should not be less than 280mm and should be uniform
- The risers of steps in radial gangways should not be more than 190mm and should be uniform

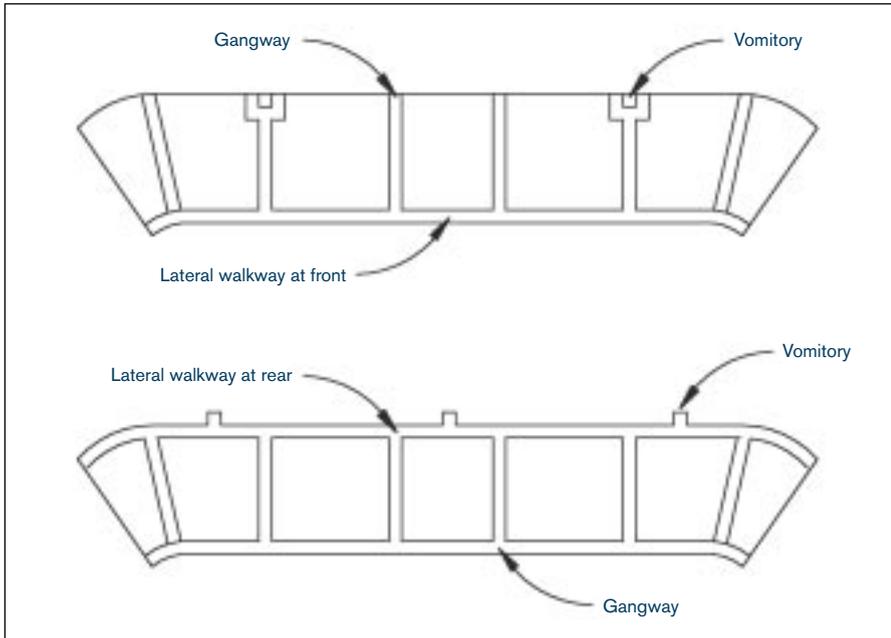


Diagram 4: Gangways.

- Nosings should be clearly identified (i.e. yellow marking)
- Gangways should not incorporate winders or tapered treads
- Barriers at the foot of gangways should be 1.1m high with a minimum design load of 3kN/m length.

In larger tiers, you may have to construct riser heights which increase from the front to the rear of the stand to achieve adequate sightlines. In steep stands you should consider compensatory safety measures including handholds down the gangways or in front of each seat or putting intermittent centre rails in the gangways.

Seat dimensions

Football spectators' safety and comfort will be determined by the amount of space provided for each seat. 'The Green Guide' states that for new construction the minimum space allocated to each person should be as follows:

- Seat width
460mm min. 500mm recommended
- Seating row depth:
700mm min. 760mm recommended.

Remember that designing to the minimum standards may preclude future upgrades to more advanced or comfortable seating types available in the future (see *diagram 3 'Seating'*).

The above recommended dimensions will apply particularly where:

- a Easy movement to and from seats is desirable i.e. to purchase refreshments at halftime
- b at grounds where other events requiring a higher level of comfort may regularly take place i.e. shows/concerts/displays.

Seating row depth

The 'seating row depth' is the horizontal distance between the rear of each row of seats. This is effectively the space allowed for a seated person from their back to the front of their knees. A minimum dimension of 760mm is recommended by the 'Green Guide' (see *diagram 3 'Seating'*).

Clearways

The clearway is the distance between the foremost projection of one tipped up seat and the back of the seat in front of it. This is also known as the 'seatway' (see *diagram 3 'Seating'*). The size of the clearway determines how safely and freely spectators and staff can move along the rows of seats. The 'Green Guide' defines the minimum clearway as 400mm. This can be reduced to 305mm where there are not more than 7 seats in a row served by a gangway on one side or 14 seats where there are gangways on both sides.

No. of seats in a row

The 'Green Guide' states that the number of seats in row should not exceed:

- 14 where there is a gangway at one end only
- 28 where there are gangways at both ends.

Deviations from this will normally only be permitted if a risk assessment shows that other factors can be taken into account i.e. where travel distances and egress times are relatively small.

Types of seating

It is recommended that clubs should always opt for the best quality seat they can afford. Comfort costs money, but it helps to attract spectators. Only tip up seats with backs will be eligible for funding.

Tip up seats must be counterweighted (most common) or spring loaded to rise automatically. This ensures that the minimum clearway is maintained in an emergency.

Seats without backs are not considered appropriate in new stand construction or where seats are being replaced.

Seats should be expected to have a useful life of at least 20 years. To achieve this you should consider the durability of materials. The most popular and practical material for the seat is plastic – polypropylene, polyethylene, PVC or GRP etc. Your advisers should ensure that minimum standards of flame retardancy to BS 5852 Part 1 are achieved. The support frame is usually metal – mild steel or cast aluminium. The latter is more expensive but will resist corrosion better. Where seats are exposed to the elements, the steel should be grit blasted, hot dip galvanised and finished with an electrostatic nylon coating.

Conversion from terraces to seating

Conversion of standing to seated accommodation is not confined simply to putting seats onto existing terraces. The new seating will have to conform to all of the necessary criteria (such as correct sightlines, rakes, gangways etc) covered in this data sheet.

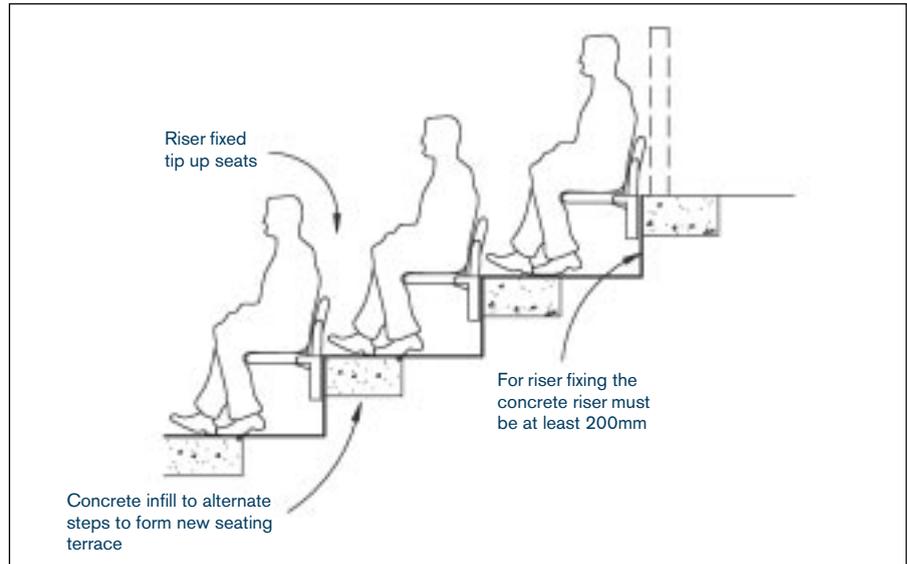


Diagram 5: Conversion to seating: Infill alternate rows.

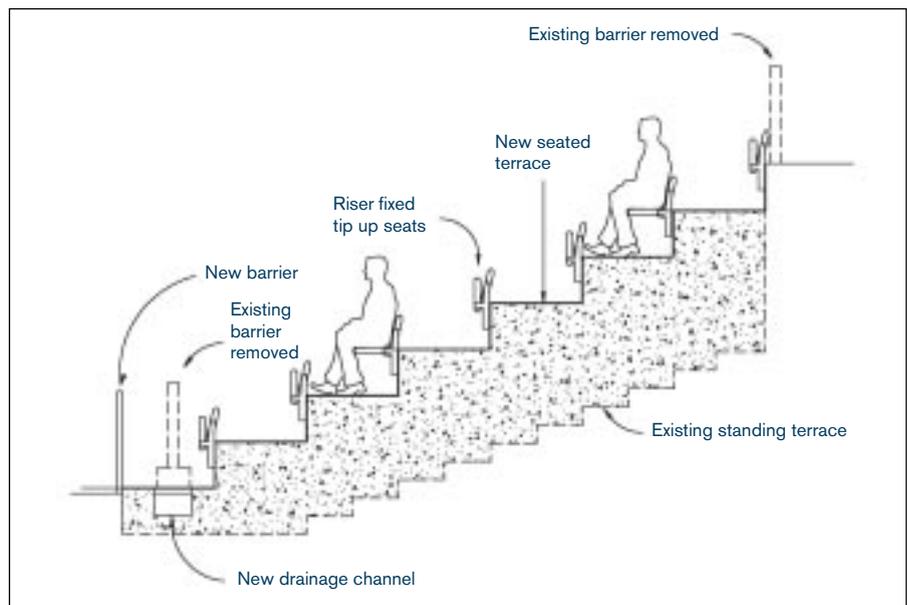


Diagram 6: Conversion to seating: Reprofiting stand.

The 'Green Guide' identifies four key considerations:

- The future conversion to seating can often be achieved by a typical solution of creating one seating row from every two standing terrace treads (see *diagram 5 'Conversion to seating: Infilling alternate rows'*) if the sightlines for standing spectators

already meet the minimum standards (see *'Sightlines and angle of rake and restrictions'* above).

- Designing standing terraces to the minimum dimensional standards identified in the following section 'Standing spectator accommodation' should make conversion to seating in the future more simple

- If you site radial gangways in standing areas to conform to seating accommodation standards i.e. 13 – 14m apart as opposed to approximately 24m apart for standing areas (*see below*) this will avoid future costs
- You will need to check that the conversion to seats will not require the replacement of any existing roofs or overhanging structures.

If the sightlines of an existing terrace are not adequate then you will need to re-profile the terraces. There are some basic ways to achieve this:

1. If subsoil conditions allow, the terraces can be simply re-profiled with mass concrete (*see diagram 6 'Conversion to seating'*).
2. Pre-cast concrete units can be used in the same way.
3. If the existing terrace is not suitable to take the additional loading as noted in 1 and 2 various lightweight solutions would need to be investigated including the use of lightweight (more expensive) concrete or applying a steel or aluminium structure bolted on top of the existing stands. This may take the form of a complete pre-fabricated unit comprising seats, gangways and barriers, and can also include roofs as a total package. Pre-fabricated units would need to meet all of the criteria and standards referred to on this data sheet and the 'Green Guide'.

Professional advice should be sought from a qualified structural engineer at an early stage to determine the feasibility of any of the above options.

Standing spectator accommodation

General note

Standing spectator accommodation at football stadia can often cause problems connected with crowd control. However, there is no reason why existing or new terraces which comply with the standards laid down by the 'Green Guide' and with adequate management procedures in place, should not be considered acceptable. Standing terraces at Clubs within the Football League are required to comply with certain standards in relation to crush barriers and gangways.

When you are planning standing areas the 'Green Guide' recommends that you consider future conversion to seated accommodation. Remember that the comfort and amenity of standing spectators should be given the same consideration as for seated spectators.

The 'Green Guide' defines the conditions for safe standing and state that spectators should not be subjected to:

- obstructed viewing, necessitating frequent changes of position or movement which affects other spectators
- excessive pressures from crowd surges
- excessive pressure from high densities of spectators
- forces that cause a spectator to lose control of their own movement, so that they step forward in an uncontrolled manner
- undue physical stresses caused by poorly constructed terracing, such as excessively sloping surfaces, uneven surfaces or broken or damaged terracing.

The criteria for acceptable standing accommodation are described in the following sections.

Viewing standards

Many existing terraces were built at a time when little consideration was given to the quality of view for standing spectators. Both new and existing terraces must now comply with the highest standards laid down by the 'Green Guide' and statutory bodies.

The viewing criteria for standing spectators are essentially the same as for seated areas. Standing spectators should have a clear, unrestricted view of the whole of the football playing area.

Viewing can be restricted by barriers, roof supports, hoardings, overhangs, lighting columns, camera points etc. In some cases, restricted viewing can affect the 'S' factor of a stand (*see section 'Calculating the safe capacity of football grounds'*) and can effectively reduce the safe capacity of a stand.

Sightlines

The 'C' value to be achieved is the same as for seated accommodation (*see section 'Seated spectator accommodation'*). With standing accommodation the calculation is made for every second tread. By doing this the sightlines are likely to be adequate for future conversion to seated accommodation (*see diagrams 5 and 6 'Conversion to seating'*).

Angle of terrace and riser heights

If every riser height on a terrace is the same, as is common on existing stands, the 'C' value will diminish towards the rear. This can cause surging as spectators push forward for a better view.

The best way to maintain adequate sightlines is to increase the riser heights progressively towards the rear. The Building Regulations allow for gangways to be at different pitches for the purposes of improving sightlines for spectators. The 'Green Guide' states that angles of slope in excess of 25 degrees would be potentially hazardous. New standing terracing should never be built at a rake greater than 25°.

For newly constructed standing areas the 'Green Guide' gives the recommended dimensions:

- Tread depth:
350mm minimum – 400mm maximum
- Riser height:
75mm minimum – 180mm maximum.

Designing to these dimensions should enable the terrace to be converted to seating in the future. For instance, a tread depth of 380mm would allow conversion of two rows to one seated row of 760mm.

Note that where the existing tread depth is below 350mm, conversion to a minimum seating row depth of 700mm for seated accommodation will be more difficult.

Viewing slopes

This is a non-stepped sloping area providing standing spectator accommodation. These should be avoided and will not attract grant aid under any circumstance. Where they

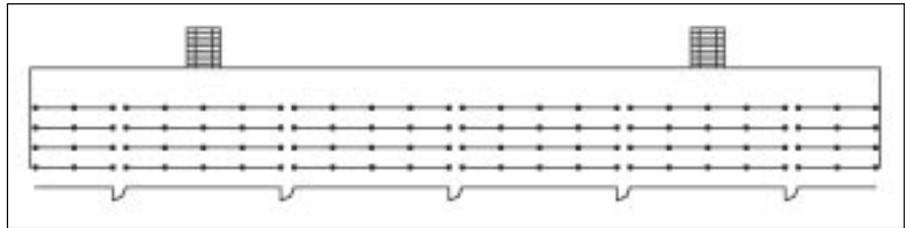


Diagram 7: Crush Barriers

exist they should comply with these simple requirements:

- The surface should be properly drained
- The angle of slope should not exceed approximately 10 degrees
- If the angle exceeds 10 degrees then crush barriers will be required between radial gangways
- Crush barriers should be spaced the same as for stepped areas.

Crush barriers

Although you can achieve a certain level of control by good stewarding, it is only made effective by designing sufficient physical restraints in the form of 'crush barriers'. The layout of crush barriers on a standing terrace is one of the most important factors in the effective management of football crowds.

The 'Green Guide' strongly recommends that you install continuous 'crush barriers' running uninterrupted between radial gangways. (See *diagram 7 'Crush Barriers'*).

This divides the terrace into controllable units. In existing stands where barriers are often staggered the 'Green Guide' gives advice on how the safe capacity calculation has to be reduced. This will mean counting only the spaces behind individual barriers. All other areas must be discounted.

Standing areas without crush barriers cannot be counted as safe unless the capacity is set at such a level that the risks are minimised.

The angle of terrace or viewing slope will affect the required maximum horizontal distance between crush barriers. The steeper the terrace, the greater the imposed load and so, the closer the spacing of the barriers needs to be. The 'Green Guide' gives guidance on crush barrier design:

- spacing, strength and construction. (*paragraph 10.2 and table 2*)
- height and positioning (*paragraph 10.10 and diagram 9*).

The maximum possible safe capacity of the terrace will not be achievable unless these standards are adhered to.

Pitch perimeter barriers

The Green Guide strength requirements for pitch perimeter barriers might appear excessive particularly for small clubs with modest attendances, and the cost of meeting those standards would likely be beyond their resources. Clubs should seek advice from their particular League and their Building Control Officer for guidance on what barrier construction might be considered appropriate. It is recommended that these be constructed in concrete and steel ensuring that there are no protrusions or sharp edges.

Whatever the outcome, they should make the specification absolutely clear to contractors when seeking competitive tenders.

In summary, the factors which affect the safe capacity of the stand can be summarised as:

- An angle of slope greater than 25 degrees (which may reduce 'S' or 'P' factors – see below). New standing terracing should never be built at a rate greater than 25 degrees
- Crush barrier horizontal spacing too great
- Inappropriate positioning or height of barriers
- Non continuous barriers between gangways
- The condition or strength of existing or new barriers which fail to meet the imposed loading criteria.

Gangways

As in seated areas, radial and lateral gangways should provide a means for orderly and safe exit from the terraces. As spectators have more freedom of movement on terraces the provision of suitably designed and clearly marked gangways is essential. You will need to ensure the following requirements are met:

- All standing spectators must be within 12m of a gangway or exit and be capable of exiting the terrace within 8 minutes
- All gangways should be clearly delineated with non-slip paint in a conspicuous colour. This makes them easier to identify by both spectators and staff in congested situations.

- New gangways should be a minimum of 1.2m wide (1.1m for existing terraces)
- Gangways along the side of the stand should have barriers or rails which meet the requirements of Table 1 in the 'Green Guide'.

It is recommended that radial gangways are the principal means of circulation and exit from terraces. In cases where the normal entry and exit is from the top or rear of the terrace emergency evacuation must be in a downward direction. This may be onto the pitch to zone 2 (*see diagram 8 'Zones' and section 'Safety' below*) or out via lateral gangways or vomitories to zone three and four.

Lateral gangways

You should not allow spectators to stand in lateral gangways because this restricts views of others who may then move or push forward for a better view. The 'Green Guide' recommends the following measures to ensure safe design:

- You can sink gangways below the row in front and this will prevent restriction of the view from the row behind. The row behind could also be raised to improve this further
- Always position a crush barrier behind the gangway
- To help with circulation, it is good practice to position a lateral gangway at the foot of the terrace between the front row and the pitch perimeter.

Radial gangways

Standing spectators tend to stand in radial gangways to improve their viewing and this creates the potential for crowd surges. The 'Green Guide' recommends

considering sinking radial gangways below the level of the terraces (as with lateral gangways) to discourage spectators from standing in them.

Other criteria to consider include:

- Ensuring that maximum distances for any spectator from any gangway or exit are not exceeded.
- Ensuring that maximum distances for any spectator to a place of safety are not exceeded. The maximum normally applied to seated areas will need to be applied to standing areas if they are to be converted to seating in the future.

Divisions and segregation

Football supporters tend to migrate from their standing areas, which can lead to overcrowding and safety problems. Standing areas should be sub-divided so that effective control of numbers entering and exiting can take place. The 'Green Guide' makes the recommendations below:

- Each division should be self contained in terms of means of escape, gangways, toilet provision and refreshments
- Radial divisions should have gangways either side of the barrier
- Divisions could have access from one division to another in an emergency
- Division may need to be designed as crush barriers depending on the expected loading
- Divisions should not restrict the viewing of spectators or this will reduce the safe capacity.

The preferred method of segregation is to use different stands or terraces. Where terraces need to be segregated, the following recommendations are made:

- Ensure that separate and adequate entry and exit points are provided
- Radial separation is preferred (i.e. front to back) with gangways either side of the barrier
- As with divisions above, separate toilet and refreshment provision should be made.

Although the use of pitch perimeter fencing is not recommended, an infilled perimeter rail will be required. Where such barriers are provided these must open in an emergency away from spectators allowing access onto the pitch. Where terraces are divided there should be adequate openings for each division.

Viewing galleries

Spectators are sometimes provided with viewing galleries accessed from hospitality areas. The limitations to the numbers that can be safely accommodated will relate directly to the capacity limits of the hospitality areas. The galleries will also require 'S' and 'P' factor assessments for safe capacity calculation.

Safety

Circulation routes in and around a football ground should be planned and managed safely. You can achieve safe circulation by physical means through good design and by human resources through good management.

Try to plan new construction so that there are continuous circulation routes around the spectator accommodation linking ingress and egress routes. Sports grounds are often planned in terms of four zones: (see *diagram 8 'Zones'*).

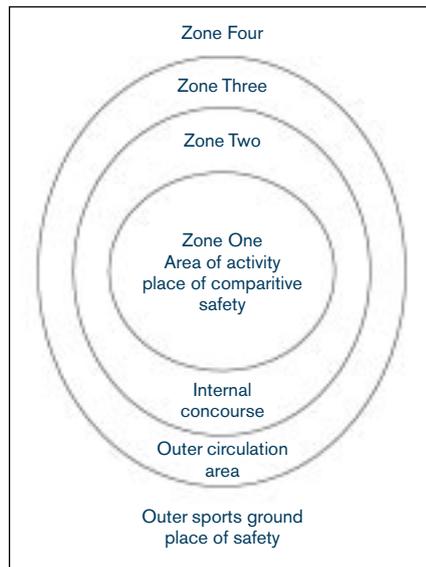


Diagram 8: Zones.

Zone One:

- the football pitch. A place of comparative safety. Although protected from the stands, the pitch should be accessible to spectators via gates or openings in barriers.

Zone Two:

- the spectator accommodation, including concourses and undercroft areas.

Zone Three:

- the area surrounding the spectator accommodation and usually contained by a perimeter fence. This may be considered, in certain circumstances, a place of comparative safety for evacuation from zone two. Zones two and three are often considered as a single area for evacuation to zone four.

Zone Four:

- the space beyond the perimeter fence. This is normally the designated place of safety in an emergency.

The safe capacity of football grounds

When you are developing the design it is essential to calculate the 'safe capacity' of the ground in order to obtain a safety certificate. The safe capacity of a ground is not determined merely by the size of any terraces and stands. Account must also be taken of:

- the entry and exit capacities
- the emergency evacuation capacity
- the quality of the club's safety management – The 'S' factor
- the physical condition of the spectator accommodation – The 'P' factor

Detailed advice on how to calculate the safe capacities is given in Chapter 1 of the 'Green Guide'.

Other related facilities

Turnstiles

You will need to count each spectator accurately as they enter the stadium. This information feeds to a central point and ensures that the safe capacities of each area are not exceeded. In the absence of a computerised system the management will need to demonstrate that an effective alternative system is in place. This information is important for two reasons:

- The management will need to know how long it will take spectators outside to enter the ground before kick-off
- If entry is not by reserved seats the management will need to know when a section is near capacity so that turnstiles can be shutdown
- Spectators queuing can be directed to other sections.

The number of turnstiles you will need is determined by the entry capacity of the ground. For instance, the 'Green Guide' sets an upper figure of 660 persons per turnstile per hour. When calculating the entry capacity to determine the number of turnstiles required it should be recognised that many spectators arrive early and, more importantly, even more arrive just before kick-off. In practice, a larger number of entry points may be required than the number based purely on the above calculation.

Pre-fabricated and temporary stands

A range of pre-fabricated stands is available, but their use will only be suitable for the lower League levels. Typically, these can comprise up to seven rows of seated accommodation including seats, roof, barriers and gangways. These are modular units which can be added to in the future and each unit can have a capacity of several hundred permanent or temporary seats. Standing accommodation is also available.

Pre-fabricated stands may, however, provide a solution to existing structures, which cannot be easily adapted to meet all of the requirements of the 'Green Guide'.

Note that all temporary stands must comply with all the same functional requirements and standards as permanent ones.

Access and provision for spectators with disabilities

Refer to FSIF Data Sheet 3 'Access and Provision for Disabled Spectators for information on this issue and Accessible Stadia published by the FSIF and FLA.

Provision of spectator toilets and catering facilities under the stand

The undercroft areas of spectator accommodation provide ideal space for the provision of toilet facilities, refreshment and catering facilities. Refer to FSIF Data Sheet 5 'Services and Support Facilities' for further information.

First aid, signage, control rooms, press and media, players and coaches, director's room and boxes

Refer to FSIF Data Sheet 5 'Services and Support Facilities' for further information.

Floodlighting

Refer to FSIF Data Sheet 6 'Football Pitches (Part 1) Floodlighting (Part 2)'

Changing accommodation

Refer to FSIF Data Sheet 7 'Facilities for Players and Officials' for information on this issue.

Management and operation issues

The responsibility for the safety of the spectators lies with the management of the ground. Good management will be essential in the calculation of the safe capacity of the spectator accommodation. The quality and effectiveness the ground management will directly affect the 'S' factor (*see section 'The Safe capacity of football grounds'*).

Chapters 2, 3 and 4 of the 'Green Guide' provide a comprehensive guide to the responsibilities of management and the methods of implementation. Chapter 4 is particularly important with respect to 'P' factor (*see section 'The Safe capacity of football grounds'*).

Application checklist

In addition to the completed forms your application should include

- Client brief and feasibility study
- Ground capacity existing and proposed
- Sight line standards
- Construction details and outline specifications
- Town planning consultation or permissions
- Scheme drawings – plans, sections and elevations
- Site plan and layout showing stadium and whole site details
- Professional estimates or competitively tendered costs with all other related costs and information identified under Capital Costs
- Programme and cash flow.

Further information

Publications

Guide to Safety at Sports Grounds. Fourth Edition 1997. ('The Green Guide') The Stationery Office

Building Regulations Approved Document M (2004 Edition) The Stationery Office

BS 8300:2001. Design of buildings and their approaches to meet the needs of disabled people – Code of practice. The Stationery Office.

Accessible Stadia FSIF/FLA

FSIF Data Sheets in this Series

1 Planning an Improvement Project

Project brief
Appointing professionals
Scheme development
Application details

2 Spectators

Circulation and movement
Standing and seating provision
Sightlines
Safety and evacuation

3 Access and Provision for Disabled Spectators

Parking and access to stadium
Circulation and movement
Disabled viewing/sightlines
Support facilities
Safety and evacuation

4 Access Audit

Methodology and approach
Key references

5 Services and Support Facilities

Public address/voice alarm
Toilets
Catering
First aid
Signage
Control rooms, and press/media

6 Football Pitches/Floodlighting

Safety margins
Pitch drainage
Lighting levels
Maintenance

7 Facilities for Players and Officials

Dressing rooms
Provision for officials
Medical room

8 Upgrading and Refurbishing

Condition surveys/site information
Key issues

Disclaimer

This Data Sheet is part of a series produced by the Stadia Improvement Fund. Whilst every effort is made to ensure that the contents are accurate the FSIF, its servants or agents shall not at any time be held responsible or liable for any loss, damage or expenditure arising from reliance placed upon the information in this Data Sheet. The information is intended as a guide, and should be supplemented where necessary by professional advice.

The FSIF reserves the right to amend, add to or discontinue the advice contained in this Data Sheet.

Should you have any queries on this Data Sheet, or anything on the wider work of the FSIF, please do not hesitate to contact us.

Football Stadia Improvement Fund

25 Soho Square, London W1D 4FF

Tel: 020 7534 4210

Fax: 020 7287 0459

E-mail: enquiries@footballfoundation.org.uk

Web address: www.footballfoundation.org.uk

Ref: FSIF Data Sheet 2. Publication Date: Jan 2004.