SECURING WHAT MATTERS

Guide to specifying perimeter security
Guide to specifying perimeter security

This guide provides current background information on perimeter security and maps out the process to be implemented in moving from a general concern about security to the creation of a secure perimeter.

This publication sets out to:

- Illustrate the practical issues that need to be considered when determining the type and positioning of a security fence.
- Assess the level of crime risk and the security level of fence required.
- Discuss the criteria for selecting a type of perimeter fence.
- Illustrate points to consider when choosing security advice, type of contractor and management of your project.
## Contents

1. Guide to specifying perimeter security ........................................... 3
2. Security survey: Assessing your site ............................................. 4
3. Risk assessment ............................................................................. 7
4. Fence options and security categories .......................................... 9
   - Demarcation ............................................................................. 11
   - Deterrent .................................................................................. 13
   - Delay ....................................................................................... 15
   - Sports and recreational ............................................................. 17
   - Entry and access control ........................................................... 19
   - Hardening the perimeter ............................................................ 21
5. Procurement and advice ............................................................... 23
Poor security can have the following consequences:

- Cost due to vandalism and theft.
- Damage to the company or school’s reputation.
- Lowering of morale among staff and pupils in a school environment.
- Disruption and cost caused by the loss or theft of vital equipment.
- Diversion of resources to repairs and maintenance.

Implementation

Implementation involves a wide range of activities.

*The key ones are:*

- Liaising with the police to keep up to date on local crime patterns.
- Recording security incidents consistently.
- Carrying out periodic security surveys and security risk assessments.
- Developing a security strategy tailored to the site’s unique circumstances.
- Engage with security advisors to provide support with your planning and specification.
- Choosing perimeter security specific to your needs.

Achieving the objective

Fencing systems should address a variety of issues, potential concerns, security, safety requirements and a wide range of applications:

*Key areas are:*

- Project a positive image.
- Provide a safe and secure environment.
- Reflective social responsibility, through sensitive design and attractive appearance.
- Consider and provide a wide range of application requirements.
- Ensure the highest standards of specification, product quality and installation, giving guaranteed long term solutions.
The first stage in developing a security strategy is to carry out a security survey. This is best done with the support of a security adviser or local Crime Prevention Design Officer. The plan on these pages highlights the kind of issues that need to be considered. However, the design and surroundings of each site is unique and so will require its own specific considerations and solutions.
Detailed assessment of the site and its perimeter enables the specification of effective security for whole sites or individual elements of the site. A map of the perimeter and its position in relation to the surroundings should be available.

Site survey
Caution: note the following factors when conducting your survey.

**Climbing aids**
Note any climbing aids such as utility boxes, bins, trees etc. that are located on or in close proximity to the fence line.

**Entrance points**
Limit the number of entrance points to your perimeter and nominate a single entry exit point.

**Ground conditions**
Mark any undulating or steep sloping ground, as well as changes in ground type e.g. concrete, soft ground.

**Environment**
Ensure your chosen fence and position works with your local environment or surroundings.

**Attack risk**
Note sections of your fence line that may be obscured from vision or that are more vulnerable to attach.

**Service**
Note any major utilities.

**Public right of way**
Be aware of any rights of way across or close to property.

**Existing perimeter**
Mark the removal of existing perimeter fences and record any areas the fence will have to work in conjunction with existing perimeters e.g. brick/stone walls.

**Maintain height integrity**
Where ground levels change take care to note the requirement to maintain the height integrity of the fence.

**Adhere to standard product**
Standard product where possible will reduce the cost of your project.
Relative effectiveness of security measures

Although fencing has been shown to be the most effective measure, its value is further enhanced when it forms part of an integrated approach – e.g. a combination of fencing, access control and CCTV.

Clearly a group of measures should be selected to work well together. One consideration is the selection of a fencing type, such as welded mesh, which has a high transparency to CCTV. Palisade and railing fencing is particularly unsatisfactory in this respect and will create blind spots along the fence.
Although perimeter security is considered the most effective measure against ‘external’ threats, there are a number of issues to be confronted before it can be effectively planned and implemented. These issues can include funding and the potential phasing of the project, footpaths and impact on the community etc.

**Funding**

The lifetime cost of the installation, i.e. maintenance, repair and effectiveness over time, should be kept in mind when assessing the required funding. The lowest initial capital expenditure invariably will not result in the lowest costs over the lifetime of the installation.

An adjoining landowner may be prepared to contribute, if there is some shared advantage.

**Phasing**

If funding limitations dictate that an investment in perimeter security is carried out in phases over a number of years, the early phases will have to be carefully considered in order to provide clearly enhanced security, even though the perimeter is incomplete. Short lengths of extra fencing terminating against buildings may be required. Inventiveness may be called for when deciding on appropriate phasing.

**Shortening the perimeter**

A short perimeter can be easier to implement and maintain in a secure condition. It may therefore be necessary to withdraw from the existing perimeter and create a secure perimeter closer to buildings.

| Note: This solution will separate main buildings from the grounds and may reduce the amenity available. |

The shortest possible perimeter is achieved by fencing across recesses buildings. Means of escape may have to be considered if this option is chosen.

**Control of vehicle access**

In nearly all cases, provision will have to be made for vehicle movements through the perimeter.

Gates can be locked during the day. However, many management issues arise from such a decision. Security awareness and a co-operative attitude will be called for among staff.

A wide range of access control solutions are available, permitting gates and vehicle barriers to be operated remotely.

**Community use of schools**

Community use of school facilities, such as sports halls out of school hours, is a difficult issue to be addressed. Community use is often a precondition for sports hall funding and many schools have previously welcomed community access.

In such cases, a shortened perimeter or a remotely controlled vehicle barrier may be the only solution.

**Planning**

The local planning authority should be consulted on any perimeter security measure, such as gates, fences, walls or other means of enclosure. The planning situation may not be straightforward, and planning concerns should be known as early as possible.

| Note: Approval will be required for a new perimeter construction exceeding two metres in height in any location. |

**Footpaths**

Public footpaths or other rights of way cross many sites. Although footpaths can be fenced on both sides, this is rarely practical.

| Note: From early 2003, local highway authorities in England may close rights of way crossing school lands. |

The grounds for closure include:

- Protection for pupils and staff from violence or threat of violence.
- Protection from harassment.
- Protection from alarm and distress arising from unlawful activity.
- Protection from any other risk to health and safety arising from unlawful activity.

Where these powers are used, highway authorities are encouraged to seek diversion rather than closure. Alternative footpath routes should therefore be considered and proposed to the authority.

**Community views**

The local community may object to the proposed perimeter for a range of reasons. Straightforward aesthetic objections may arise. It may be necessary to consult the local community formally or informally to explain the reasoning behind the decision to create a secure perimeter.

**Displacement**

| Note: Enhanced perimeter security may ‘move’ problems to another business or school in the locality. |
A comprehensive security survey looks at five major areas:

- The incidence of crime, based on your own statistics or on discussion with local police.
- Environmental and building factors that contribute to security.
- An assessment of the degree and effectiveness of the security measures employed.
- Provision for internal demarcation or specific application, such as sports fencing or areas of increased security.
- Entry/Exit control from your site.

This guide incorporates an assessment to understand the level of risk. The check list assists you in determining which risk category you are in: low (up to 25 points), medium (25-60 points) or high-risk (60-80 points).

Sites in the low-risk category should consider a range of demarcation security fencing measures, whereas sites in the medium or high-risk category should consider more secure measures such as higher security fencing, detailed in deterrent and delay categories.
The security survey will have identified the most vulnerable parts of the site, the best position for a security fence and give a rounded picture of the risks that your site faces. Risk assessment is key, without this information it is difficult to assess:

- The type and scale of risk.
- Any trends or patterns in the incidents occurring at the premises.
- The selection of security measures and fencing type.
- The efficiency of the chosen security measures.

The next step determines the level of security the fence should provide. An assessment of the level of crime in the locality should play a large part in detailing the level of security that the fence and its access gates need to provide.

### Risk relative to security

<table>
<thead>
<tr>
<th>Standards</th>
<th>Risk</th>
<th>Typical Applications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Home Office Approved CAT 4 BS1722 Pt14</td>
<td>High Risk</td>
<td>DELAY Prisons, Secure Units, Utilities, Data Points</td>
</tr>
<tr>
<td>Secured by Design CAT 3 BS1722 Pt14</td>
<td>Medium Risk</td>
<td>DETERRENT Schools, Offices, Business Parks and Industrial Sites</td>
</tr>
<tr>
<td>Secured by Design CAT 2 BS1722 Pt14</td>
<td>Low Risk</td>
<td></td>
</tr>
<tr>
<td>Secured by Design CAT 1 BS1722 Pt14</td>
<td>Minimum Risk</td>
<td>DEMARCATION Retail, Parks, Playgrounds</td>
</tr>
</tbody>
</table>
Checklist

To help you conduct a survey and risk assessment the following checklist is provided. It is divided into three parts: circle the level appropriate to your site and at the end add up the total score.

**Part 1: Incidence of crime**

This section of the survey assesses the type, scale, patterns and trends of incidents which have actually happened in the last 12 months.

This part of the risk assessment can be based on an analysis of reported incidents. However, if your site does not yet have an incident reporting procedure a more subjective assessment will have to be made, possibly based on a discussion with the local police or residents.

**Part 2: Environment and buildings**

This section of the survey assesses the environmental and building factors which contribute to security.

**Part 3: Security measures**

This section of the survey assesses the degree and effectiveness of the security measures employed.

---

**Part 1: Crime incidents in last 12 months**

1. **Trespass**
   1. No cases of trespassers in grounds
   2. Trespassers commonly present in grounds

2. **Vandalism**
   1. No cases of vandalism reported
   2. Frequent vandalism of buildings

3. **Theft/burglary**
   1. No cases of theft or burglary in locality
   2. Frequent theft/burglary in locality

4. **Fire**
   1. No arson attacks in the locality
   2. Locality have suffered from arson attacks

5. **Safety**
   1. No attacks or threats reported
   2. Attacks inside or in vicinity of buildings

6. **Drugs/solvent abuse**
   1. No problems reported
   2. Locality problem with drugs or solvent abuse

---

**Part 2: Environment and buildings**

1. **Incidence of crime in surrounding area**
   1. Low crime rate
   2. Locality has a high crime rate

2. **Premises overlooked from roads and/or housing**
   1. Grounds clearly visible to public
   2. Unobserved grounds and buildings

3. **Boundaries, fences and gates**
   1. Boundaries well defined with secure fences and gates preventing unauthorised access
   2. No perimeter fences and gates or in poor condition

4. **Clearly defined entrances**
   1. Clear entrances with signs directing visitors
   2. No clear entrances or multiple entrance points

5. **Car parking**
   1. Car parks well lit and CCTV in place
   2. No safe enclosed place to park and no CCTV

6. **Valuable equipment that is easily stolen and disposed of**
   1. Few computers, TVs and electrical equipment
   2. Many computers, TVs and electrical equipment

---

**Part 3: Security measures**

1. **Waste bins**
   1. Waste and recycling bins locked up every night
   2. Unlocked mobile bins left around premises

2. **Security lighting**
   1. Permanent lighting of all entrances, footpaths and building facades
   2. No lighting

3. **Surveillance**
   1. Efficient surveillance e.g. CCTV covering perimeter/security patrols
   2. No system

4. **Intruder alarms**
   1. System using passive infra-red detectors in all ground floor perimeter and other vulnerable rooms
   2. No system

---

**Security risk assessment score summary**

Part 1 - Crime (30)
Part 2 - Environment and Buildings (30)
Part 3 - Security measures (20)
Total (80)

0-25 points: Low risk - Demarcation
25-60 points: Medium risk - Deterrent
60-80 points: High risk - Delay
Fence options and security categories

Perimeter fencing is separated into three main security categories. Fence systems must be considered for relevant attributes and should be relative to security level and category.
Demarcation

The fence should mark the boundary line, showing that the land is not public space and defining the area protected. This would be the first step to creating and differentiating ownership of land from one side of the fence to the other.

Deterrent

In most cases the fence should prevent casual trespass, deterring the opportunist by its increased security. The fence should make a clear statement that access is only intended at a proper entrance point, and then only by persons authorised to enter.

Delay

The fence should resist determined, unauthorised entry for as long as possible to allow intervention.

<table>
<thead>
<tr>
<th>Product Attributes relative to security</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Demarcation</strong></td>
</tr>
<tr>
<td>2.4m +</td>
</tr>
<tr>
<td>2.0 - 2.4m 2.4m +</td>
</tr>
<tr>
<td>2.0 - 2.4m 2.4m +</td>
</tr>
<tr>
<td>2.0 - 2.4m 2.4m +</td>
</tr>
<tr>
<td>0.9 - 1.8m 2.0 - 2.4m 3.0m +</td>
</tr>
<tr>
<td>0.9 - 2.0m 2.4m +</td>
</tr>
<tr>
<td>0.9 - 2.0m 2.4m +</td>
</tr>
<tr>
<td>0.9 - 2.0m 2.4m +</td>
</tr>
<tr>
<td>0.9 - 2.0m 2.4m +</td>
</tr>
<tr>
<td>0.9 - 2.0m 2.4m +</td>
</tr>
<tr>
<td>0.9 - 2.0m 2.4m +</td>
</tr>
<tr>
<td>0.9 - 2.0m 2.4m +</td>
</tr>
</tbody>
</table>

This table demonstrates fence systems relative to security level and category and scores relevant attributes that should be considered for each system.

1. Low suitability to attribute
2. High suitability to attribute
### Demarcation

**What are demarcation fences?**

Betafence demarcation products provide a clearly defined boundary line, demonstrating that the land beyond is not public space or marking a change of ownership. Demarcation fences are usually lower in height than barriers in other Betafence categories and can be used to stop people taking unrecognised routes (desire lines) by guiding foot and vehicular traffic in the right direction.

**Features**
- Choice of panels ranging from 0.9m to 2.0m high
- Open mesh for good visibility
- Safety
- Low visual impact

---

**Paladin® Classic**
- Height: 0.9 -> 3.0m
- Width: 3.0m
- *H/V Ø: 3mm/4mm
- Mesh: Varies to maximum 50 x 50mm
- Beam: Yes, with additional wires for strength
- Coating: Galvanised + Polyester

**Nylofor® 2D Super**
- Height: 1.03 -> 2.43m
- Width: 2.5m
- *H/V Ø: 2 x 8mm/6mm
- Mesh: 200 x 50mm
- Beam: Flat panel
- Coating: Galvanised + Polyester

**Nylofor® F**
- Height: 1.03 -> 2.43m
- Width: 2.5m
- *H/V Ø: 15 x 6mm/6mm
- Mesh: 200 x 50mm
- Beam: Flat panel
- Coating: Galvanised + Polyester

**Paladin® FX**
- Height: 0.9 -> 3.0m
- Width: 3.0m
- *H/V Ø: 4mm/5mm
- Mesh: Varies to maximum 150 x 50mm
- Beam: Yes, with additional wires for strength
- Coating: Galvanised + Polyester

**Nylofor® 2D**
- Height: 1.03 -> 2.43m
- Width: 2.5m
- *H/V Ø: 2 x 6mm/5mm
- Mesh: 200 x 50mm
- Beam: Flat panel
- Coating: Galvanised + Polyester

**Nylofor® 3D**
- Height: 1.03 -> 2.43m
- Width: 2.5m
- *H/V Ø: 5mm/5mm
- Mesh: 200 x 50mm
- Beam: Yes
- Coating: Galvanised + Polyester

**Roll Top®**
- Height: 0.9 -> 2.4m
- Width: 3.0m
- *H/V Ø: 5mm/5mm
- Mesh: 150 x 50mm
- Beam: Yes, rolled beam for safety
- Coating: Galvanised + Polyester

**Nylofor® 3-M**
- Height: 1.73 -> 2.43m
- Width: 3.0m
- *H/V Ø: 5mm/5mm
- Mesh: 200 x 50mm
- Beam: Yes, with additional wires for strength
- Coating: Galvanised + PVC

*Horizontal/Vertical wire diameter
As the product attributes table (see page 10) shows, demarcation fences are ideal for marking a perimeter in low risk environments, providing a discernible boundary and improving safety, containment or separation.

Excellent through visibility and low height makes demarcation products the perfect choice for schools, offices, retail parks and public facilities. They can be used around a perimeter or internally to keep pedestrians away from the danger presented by traffic and can improve safety in playgrounds, parks and other open spaces without impacting significantly on the surroundings.

Where the wellbeing of users is paramount, particularly children, the Roll Top system offers a stable fencing option, boasting a rolled top and bottom beam with no protruding edges for safety. Paladin Classic offers an aesthetic clean finish and Nylotraf 2D/2D Super or F panels provide a more rigid stable finish.
What are deterrent fences?

Betafence deterrent products help prevent casual trespass, theft, drug abuse and opportunists by offering a number of security capabilities. This broad reaching category of fence makes a strong visual statement that access is intended for authorised personnel only at designated entry/exit points. It provides increased security by marking the boundary with a clear physical barrier and can be upgraded to enhance safety if required.

Features

- Typical panel height of 2.0-2.4m
- Excellent stability/rigidity
- Good through visibility
- Low visual impact
- Anti-climb options available
Understanding and interpreting your needs is essential when choosing the right deterrent fence. As the product attributes table (see page 10) shows, a wide range of panels of varying heights and construction are available to suit environmental constraints and identified levels of risk.

Deterrent fences can be used by schools, offices, heavy industry and public facilities to stop people entering the premises and provide a visual statement of intent, particularly where instances of trespass and vandalism have occurred.

The extensive choice of panels in this category allows a system to be built relative to the level of security required. If good through visibility and aesthetics are essential, then a fence type such as Paladin Classic may be recommend, whilst Nylofor 2D Super will offer greater rigidity and Securifor will raise the level of security. Please note, the services of a professional adviser may be needed to help specify the most appropriate fencing type.
### Securifor® Super6
- **Height**: 1.2 -> 6.00m
- **Width**: 2.5m
- **H/V Ø**: 4mm/6mm
- **Mesh**: 12.7 x 76.2mm
- **Beam**: Flat Panel
- **Coating**: Zincalu or Galvanised + Polyester

### Securifor® 358
- **Height**: 1.2 -> 6.00m
- **Width**: 2.5m
- **H/V Ø**: 4mm/4mm
- **Mesh**: 12.7 x 76.2mm
- **Beam**: Flat Panel
- **Coating**: Zincalu or Galvanised + Polyester

### Securifor® 2D
- **Height**: 1.2 -> 3.00m
- **Width**: 2.5m
- **H/V Ø**: 2 x 4mm/6mm
- **Mesh**: 12.7 x 76.2mm
- **Beam**: Flat Panel
- **Coating**: Galvanised + Polyester

### Securifor® 3D
- **Height**: 2.00 -> 3.00m
- **Width**: 2.5m
- **H/V Ø**: 4mm/4mm
- **Mesh**: 12.7 x 76.2mm
- **Beam**: Yes
- **Coating**: Galvanised + Polyester

### Paladin® Classic
- **Height**: 0.9 -> 3.00m
- **Width**: 3.0m
- **H/V Ø**: 3mm/4mm
- **Mesh**: Varies to maximum 50 x 50mm
- **Beam**: Yes, additional wires for Strength
- **Coating**: Galvanised + Polyester

### Delay

**What are delay fences?**

Betafence delay products offer the highest levels of security, to stop unauthorised entry and prevent a potential attack. Fences in this category will create a significant amount of physical delay and resist determined intruders for as long as possible, allowing intervention to take place.

**Features**
- Panels ranging from 2.4m to 5.2m high (generally 3.0m plus)
- Excellent visibility and stability
- Anti-climb and anti-cut options
- Compatible with PIDs, CCTV, etc
Delay fences are an essential part of any high to maximum security environment, such as prisons, secure units, utility and industrial sites, data centres and in some cases, schools. When the safety of your assets, people or property is under severe threat, fences in the delay category can provide a significant physical barrier against demonstrators, activists, terrorists, drug use, extreme vandalism and arson. The skill level of this ‘perceived threat’ will influence the specification.

The Betafence delay range includes specific products designed to prevent intruders climbing over or cutting through the panels, without compromising visibility for CCTV and security surveillance. As the product attributes table (see page 10) demonstrates, they are stable enough to support perimeter intrusion detection systems (PIDs) and can form the basis of a hardened security boundary (see page 21).

We recommend anyone looking to specify a fence from the delay category engages the services of a professional security adviser.
Sports and recreation

What are sports and recreation fences?

Betafence sports and recreation products are designed specifically for ball courts, multi-use games areas and play areas, to provide a safe, contained arena for physical activity. Fences in this broad reaching category are suitable for all types of sports environments, offering a player-friendly, flat boundary that is stable enough to deflect a ball without deforming the mesh.

Features

- Wide range of heights from 1.2m to 6.0m
- Optional rebound section with varimesh panels
- Play area options
- Flush inner surface to protect players
- Robust, stable construction

**BekaSport Super**

This premier, three-stage varimesh panel is constructed from Securifor 2D in sizes ranging from 3.0m to 6.0m high. The mesh density is graduated from bottom to top to provide greater rigidity and improved deflection where it is needed most and eliminate finger traps.

**BekaSport Plus**

Suitable for heavy use the BekaSport Plus incorporates a rebound section up to 1.2m high. It is created using Nylofor 2D Super varimesh, ranging in mesh aperture 66mm x 50mm at the bottom to 200mm x 50mm at the top. A flat inner surface and high levels of rigidity and stability are provided by twin 8mm horizontal wires, giving heights ranging from 2.0m to 6.0m.

**BekaSport**

BekaSport fencing is constructed from Nylofor 2D Super. This panel perfect for general use in schools and where sport is played less intensively.

**BekaSport F**

This rigid panel uses a flat bar to give increased strength and create a smooth internal surface.

**Roll Top**

Ideal for children’s play areas, this low level panel is strong yet safe, providing a smooth internal surface. Roll Top is offered in a multi-lift configuration, enabling the height to be increased to 3.0m if required.

---

**BekaSport® Super**

<table>
<thead>
<tr>
<th>Height</th>
<th>Width</th>
<th>*H/V Ø</th>
<th>Mesh</th>
<th>Beam</th>
<th>Coating</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.0 -&gt; 6.0m</td>
<td>2.5m</td>
<td>2 x 4mm/8mm/6mm</td>
<td>Varimesh 12.7-25.4-50.8 x 76.7mm</td>
<td>Flat Panel</td>
<td>Galvanised + Polyester</td>
</tr>
</tbody>
</table>

**BekaSport® Plus**

<table>
<thead>
<tr>
<th>Height</th>
<th>Width</th>
<th>*H/V Ø</th>
<th>Mesh</th>
<th>Beam</th>
<th>Coating</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.0 -&gt; 6.0m</td>
<td>2.5m</td>
<td>2 x 8mm/6mm</td>
<td>Varimesh 66-200 x 50mm</td>
<td>Flat Panel</td>
<td>Galvanised + Polyester</td>
</tr>
</tbody>
</table>

**BekaSport®**

<table>
<thead>
<tr>
<th>Height</th>
<th>Width</th>
<th>*H/V Ø</th>
<th>Mesh</th>
<th>Beam</th>
<th>Coating</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.0 -&gt; 6.0m</td>
<td>2.5m</td>
<td>2 x 6mm/6mm</td>
<td>200 x 50mm</td>
<td>No, Flat Panel</td>
<td>Galvanised + Polyester</td>
</tr>
</tbody>
</table>

**BekaSport® F**

<table>
<thead>
<tr>
<th>Height</th>
<th>Width</th>
<th>*H/V Ø</th>
<th>Mesh</th>
<th>Beam</th>
<th>Coating</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.0 -&gt; 6.0m</td>
<td>2.5m</td>
<td>15 x 6mm/6mm</td>
<td>200 x 50mm</td>
<td>No, Flat Panel</td>
<td>Galvanised + Polyester</td>
</tr>
</tbody>
</table>

**Roll Top®**

<table>
<thead>
<tr>
<th>Height</th>
<th>Width</th>
<th>*H/V Ø</th>
<th>Mesh</th>
<th>Beam</th>
<th>Coating</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.9 -&gt; 3.0m</td>
<td>3.0m</td>
<td>5mm/5mm</td>
<td>150 x 50mm</td>
<td>Yes, rolled beam for safety</td>
<td>Galvanised + Polyester</td>
</tr>
</tbody>
</table>
The primary purpose of sports and recreation fences is to create a defined area in which children or adults can play safely, keeping balls in – not people out!

Each system is designed specifically to meet your security, budget and sporting requirements, as well as the age group of your users. The strong, rigid panels are available in a variety of heights suitable for parks, council facilities, sports centres and academies, schools, colleges and universities.

All Betafence sports and recreation panels have a smooth internal surface to minimise the risk of injury. They can be supplied with open mesh or a varimesh construction providing a rebound section to add strength and stability where contact and deflection is greatest. Goal mouths can be created and complementing gates added for ease of access, note for these applications gates should always open away from the playing area.

Sports and recreation applications
Entry and access control

What is entry control?

Entry points are the weakest part of a perimeter, but with the right method of control, vehicle and pedestrian passage can be managed effectively on any site. Betafence provides a wide range of barriers, swing or sliding gates and turnstiles to suit all entry/exit points and ensure your security system is not compromised.

Features

- Wide range of gates, barriers and turnstiles
- Various methods of access control
- Integrated safety measures

- **Swing or sliding gates**: Betafence offers a number of manual or automated gate options for the controlled passage of pedestrians and vehicles.

- **Turnstiles**: Fitted to control the access and flow of pedestrians, turnstiles are useful for monitoring visitor numbers in a public venue.

- **Lift arm barriers**: Lift arm barriers are usually installed to control traffic flow. Barriers can be set to open automatically from the inside, improving the passage of authorised vehicles, yet slowing traffic speeds.
No matter how secure your environment, visitors need to come and go on foot and in vehicles. The wide range of cost-effective entry systems offered by Betafence minimises weak spots in a perimeter, allowing you to control access safely and professionally.

When specifying keep entry/exit points to a minimum and when selecting a gate or barrier take into account the level of risk identified, the nature of your operation and the frequency of usage. For example, on a low risk site it may be appropriate to leave the main gate open during office hours and control vehicular access with a barrier.

Additional safety issues arise when moving parts are added to entry control and it is important to consider how gates will operate. All Betafence automated products conform to relevant industry standards and incorporate photocells, warning lights and pressure strips to prevent a person or vehicle becoming trapped. A wide choice of access control options are available including swipe cards, voice intercoms, keypads, push buttons and remotes. Note: automated gates should be fully compliant to BS EN 12453 and should be CE marked by the manufacturer.

Please note all automated access points will require regular maintenance. We recommend you seek professional advice when specifying entry control to ensure your system complies with current regulations.
Hardening the perimeter

### Product range

| Sterile zone | Fences can be erected in layers behind the perimeter to delay potential attackers in a sterile zone, often in conjunction with underground detection. |
| Toppings | Cranked or vertically extended posts and T-bar toppings can be combined with barbed or razor wire to reduce the risk of intruders climbing over the fence. It is important to note that adequate warning signage must be used for this option. |
| Electrified fencing | An electric fence can be added to the back face of the fence to deter anyone from making contact and detect a potential attack. |
| On-fence detection | Betafence offers a range of panels that are stable enough to support effective perimeter intrusion detection systems (PIDS). Examples of PIDS are: Point sensor, Fibre optic and Microphonic. |
| Off-fence detection | Passive infrared, volumetric sensors, radar, video monitoring (CCTV), video motion, thermal imaging and lighting can be added to enhance and complement your perimeter protection. |
| Hardening access control | Vehicle security at entry/exit points can be improved with the addition of sliding gates, speed gates, turnstiles, bollards, rising blockers and ramps. |
In high risk environments, a number of additional features can be installed to make your perimeter security even more resistant to attack.

When hardening your perimeter there are a number of factors to consider, including the risks faced, potential intruders, the type of property to be protected, its locality and environmental concerns. Installing the correct fence type and entry controls are essential, but any number of hardening measures can be used independently or combined to increase the layers of security applied and to raise the security level.

We recommend anyone looking to specify hardening measures engages the services of a professional security advisor. Only proper interaction will lead to valid analysis and effective perimeter protection.
Although perimeter protection is proven to be the most effective anti-crime measure, we understand that you need to be confident the installation is procured and erected prudently and professionally.

Procurement would traditionally take place through a competitive tendering process, in which the lowest quote would be selected. In recent years, however, commercial organisations and public bodies have been required to consider other factors, including lifetime cost.

When purchasing perimeter security, the following should be considered:

- Is a sufficient level of security provided – not excessive or deficient?
- Are other aspects, such as access control or hardening relevant?
- Is the product of sufficient quality? Manufacturing quality varies widely, particularly corrosion protection. Has the product undergone accelerated lifetime testing?
- Is the price right?
- Will the installation be achievable in the required time frame?
- Are the materials and installation guaranteed?
- Will the installation be independently checked to support the guarantee?

Betafence’s partnering approach to perimeter security procurement integrates the roles and responsibilities of the manufacturer, designer, consultant, contractor, any sub-contractors and the client to provide a complete supply chain.

The Betafence partnering approach comprises:

- The PRO-net network of licensed contractors, who are required to meet a range of quality and service criteria, remove and are committed to continuous professional development and measured against individually agreed indicators.
- The Access Control Partnership, who provide commissioning and maintenance contracts.
- BEKassure, a ten year independently audited guarantee, covering fencing materials and installation.
- Support of the ‘Secured by Design’ Police initiative, which aims to design out crime by achieving the ‘Police Preferred Specification.’
- A range of Home Office approved products and specifications.
Advisory service

Betafence is a market leader in the production and installation of perimeter protection, enjoying an international presence and managing large projects worldwide. We have vast experience in designing and manufacturing individual fencing systems and offer a full support service to guide you through the process.

The purpose of this document is to help you broadly determine which of our extensive range of fencing systems best suits your needs. Our team of security advisers and technicians will then work with you throughout the planning, specifying, design, manufacturing and installation stages to ensure you are completely happy with the final product.

We know that each installation is unique and requires an integrated approach. We manufacture the highest quality fencing to create a safe, secure environment that will fully protect your site for years to come.

Choosing an installer

Betafence can recommend a suitable fencing contractor for any project, nationwide.

Our PRO-net licensed installers undergo rigorous assessments of their technical competence and quality of service. They are independently audited to ensure their work meets the high standards required by our 10-year guarantee and have individual responsibility for their workmanship. Licences are only awarded once contractors have proved they comply with the PRO-net Chartered or Licensed Contractor schemes.

Betafence is committed to continuous professional development (CPD) and we offer RIBA accredited CPD courses to local authorities, architects and other interested parties to promote learning and development within the perimeter protection sector. These entertaining and informative presentations offer solutions and real life examples of best practice, to improve the way we work together to meet client requirements.

The Betafence advantage

Betafence upholds the principles of best practice in all installations, whether they are at a maximum security prison or a school. We pride ourselves on producing perimeter protection that meets the ever growing security needs of all sectors, including industry and commerce.

If you require budget costs, we can provide a cost per metre for the type of system you require. You can also take advantage of our comprehensive programme of support, which includes site survey, specification, pricing, installation, independent auditing and a 10-year guarantee.

We are on hand throughout the lifetime of your perimeter system to offer ongoing advice. Whatever you want to achieve from your perimeter protection, you can be confident that we will provide the best possible solution.

If you would like further information about Betafence’s products or services, please do not hesitate to contact us. One of our security advisers will be happy to visit your site and assess your needs in more detail.