

# SECURITY FENCING

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The Essential Guide  
To Security Fencing

 **BARKERS**  
Fencing





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# Introduction

Security fencing is stronger and more robust than demarcation fencing as it has been designed to deter and deny unauthorised access, protecting valuable assets and premises from intruders, vandals, criminals, espionage, and terrorism.

The level of security required for a site often depends on the values of what is inside the premises or the harm that can be done if the wrong person was able to gain access.

Security fencing is often used on but not limited to, schools, commercial and industrial infrastructure, MOD, healthcare, research and bio facilities, data centres, utility sites, CNI, HM Government estate and nuclear and military installations.

If you are looking for a perimeter security solution which will keep intruders out, you may be interested in a third-party accredited system. Certification is given by an independent certification body, which ensures the products have been designed, installed, and perform as is claimed.

In this guide, we will look at the benefits of security fencing, the different levels and ratings of third-party accredited security fences and the key things to consider when selecting the right perimeter security solution.





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# The Benefits Of A Secure Perimeter

Security fencing and gates will look very different depending on what sector you are in and the operational requirements of the site.

When a site has valuable, harmful, or dangerous assets, it's imperative to ensure that they're properly secured so that they do not get into the wrong hands. The infrastructure could contain valuable assets, hazardous material, or confidential hardware/information.

## Ensures The Operation Isn't Interrupted

Whether it is a school, commercial premises, data centre or nuclear facility, allowing an unauthorised person gain access could be disastrous for several reasons.

A security breach could cause harm, theft of assets, damage reputation and disrupt operations.

Disrupting operations can lead to losses in revenue, output, or learning.



## Deters People From Breaking In

A visual deterrent can go a long way in stopping perpetrators from considering an attempt to gain access.

The longer it takes the intruder to break in, the more chances there is of getting caught.

Be sure there are no weak links in the perimeter.

If you are using a fence with a certain security rating, it makes sense to ensure the entrance security meets the same rating.







## Reassures And Protects

Seemingly obvious but having a fence which you know will keep unauthorised personnel out gives reassurance.

The main objective of the fencing is to protect the valuable assets, and stop wrong people gaining access to things could cause harm.

A secure perimeter also protects the people who are inside.

This point is even more relevant when you have a third-party accredited fence, which has been independently and rigorously tested to protect against intruders attempting to force entry.



## Long-Lasting

Galvanising is a protective coating applied to steel fencing which significantly enhances corrosion resistance.

Without protection, steel will rust over time due to atmospheric conditions, with some corrosion depending on the environment that the fencing is in.

Security fences are often stronger and sturdier than demarcation fences so they will stand the test of time.



# The 5D's Of Perimeter Security

Forming a strong perimeter requires a thorough strategy. The 5 D's of perimeter security showcases the multiple layers of security needed to protect a site's assets, they also allow for time and the intelligence needed to quickly respond to security threats.

## 1 Deter

Using visual deterrents, such as intimidating fencing, security toppings, lighting, and signs. These work to discourage intruders before any attempt to breach your site.

## 2 Detect

The capability to detect trespassers by human inspection and/or electronic surveillance provides the intelligence to support a proper security response.

## 3 Defend

The final security measure usually involves the security team of the site or the police arresting the intruder.

## 4 Delay

To offer valuable time with a security breach, there's a range of delaying methods to be considered to stop an intruder. These include the use of, road blockers, gates and turnstiles, fencing around assets and, interior doors with access control.

## 5 Deny

Manned security gates or a swipe card system works to control and manage who enters and leaves the premises of a site.





# Common Security Standards For Fencing And Gates

There is a whole array of third-party accreditations and security ratings which may cause some confusion if you're not an expert in security fencing.

There are three widely recognised testing houses for forced entry testing:

- **LPCB (Loss Prevention Certification Board)** has been working with industry and insurers for more than 100 years to set the standards needed to ensure that fire and security products and services perform effectively.

In recent years LPCB' has gained momentum for being all-encompassing and universal. It is being adopted by schools, healthcare facilities, water industry and data centres to name a few.

- **CPNI (Centre for the Protection of National Infrastructure)** is the government authority for protective security advice to the UK national infrastructure – Products with this accreditation have been tested and approved for use on government infrastructure.

- **ASTM (American Society for Testing and Materials)** is an international standards organization that develops and publishes voluntary consensus technical standards. This is widely used in the US and the Middle East.

If you need your perimeter to provide hostile vehicle mitigation, there are another three widely recognised standards:

- **PAS68** is the specification for Hostile Vehicle Mitigation (HVM) in the PAS (Publicly Available Specification) which is a British standard. It has stood the test of time; it's been around since 2005.

- **ASTM**, you may recognise this from the force entry accreditations, ASTM also certifies impact tested products.

- **IWA 14** was introduced in 2014. IWA stands for the International Workshop Agreement, this standard takes elements from both PAS68 and ASTM to create an all-encompassing standard.

It's worth noting that unlike forced entry accredited fence where a rating is the same across the board, impact testing has different classifications.

Barkers range of impact tested fences are also forced entry tested to provide the ultimate protection, achieving two security benefits in one system.

# Key Things To Consider

There are key things to consider that work to strengthen a site's perimeter security, the best solutions are designed to suit a site's unique needs and challenges, there is no one solution that fits all.

When specifying a security fencing there are 6 key things to consider subject to the site.

## The Threat

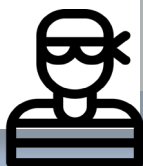
First and foremost, you need to understand what the threat is you're trying to protecting against.

For example, this could be forced entry. Depending on the site you might need to ensure the perimeter is impact tested.

For impact tests consider the speed at which the vehicle could be travelling.

For force entry systems, consider the experience of the attacker, what tools they may be carrying and how long you need to delay for until site security or the police can intervene.

With the right precautions taken, you can work to protect your site, those on-site and valuable assets.



## Security Breach Impact

By considering what impact a security breach would have will most likely tell you what kind of fencing you need and how crucial investing in a reliable security fence would be.

Third-party accredited fencing systems provide reassurance.

The impact could range from damage and theft of equipment from a commercial premise to poisoning a wide number of people or dangerous substances such as nuclear chemicals falling into the wrong hands.



## Aesthetics

How people want the site to look can sway your choice of fence.

Mesh is considered the more aesthetically pleasing solution, so is often favoured in places which don't want to be intimidating.

Palisade looks aggressive which lends itself well to secure perimeters which want to deter people from entering.

Fencing over 1.8 high requires planning permission so it's worth checking if there are any stipulations on what will and won't pass.





## The Operational Site Requirements

This is very site-specific; you must consider what time delay you need to create to enable security to react before the perpetrator reaches the asset.

Each perimeter is different, so the whole fence doesn't need to be the same.

For example, there may be sections of the perimeter which are close to a road, this section may require impact tested fencing but the rest of covered by forestation.

You will also need to consider entry and exit to the site.

If you have a high flow of people or vehicles, consider how quickly you need this solution to operate.

It would be a good idea for the fencing and gates to meet the same security accreditations to ensure the perimeter has no weak points.



## Ground Conditions

The ground conditions must be able to withstand the local wind loading conditions.

We strongly advise on security applications that there are wind load calculations and soil reports as this may affect install in particularly windy or open areas.

Palisade fencing follows the contours of the land better than with mesh, especially Barkers High-Security Palisade system.

StronGuard™ can cope with sloping ground up to 33 degrees without on-site modifications.

Mesh fencing has a fixed rectangle panel so the only way to cope with the uneven ground is to borrow or step the fence.

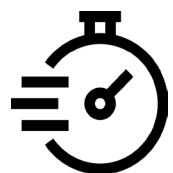


## Ease And Speed Of Installation

When selecting a fence, it's worth considering how easy it is installed, certain fences can be difficult, costly and take time to implement.

If it's large heavy pieces, it can be difficult and cumbersome to manoeuvre.

When selecting an impact tested fence, it's worth considering the foundations required for the system to operate effectively.





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