



MESH VS. PALISADE

Security Fencing:
The Essential Guide



Introduction

There are a variety of options available when it comes to specifying security fencing for your project. After you have selected the level of security your perimeter needs to provide, it's likely that your next debate will be whether to choose mesh or palisade security fencing.

Both fences have various benefits in their own right, and in theory, they are both designed to safeguard high-value items and sensitive areas.

As a market-leading company that produces both palisade and mesh systems, Barkers Fencing is well positioned to discuss the merits of both systems, and contrary to what some may tell you, it is not simply a case of either system is good and the other is bad.

Standard palisade and mesh, as opposed to high-security their variants, can be breached fairly quickly depending on the intruder's experience and access to various tools, hence why it's frequently employed as a demarcation option. Both systems have high-security derivatives available.

In this guide, we'll be comparing high-security mesh and palisade fencing. By reading this complete guide, we hope it will aid in your decision-making when choosing between either palisade or mesh fencing.



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Summary

Before we learn about the pros and cons of Palisade and Mesh fencing, we need to know how they differ from each other and why people employ each type of fencing on their site(s).

Here is a brief overview of the two and how their popularity has changed over the years:



Mesh Fencing

Mesh fencing first appeared on the market in the early 1990s, and it quickly gained popularity as a more aesthetically acceptable alternative to palisade fencing. Due to the reduced steel content and less aggressive top line, it's typically deployed around schools or business establishments.

Mesh fencing, like palisade fencing, can provide varying levels of security.

Summary

Palisade Fencing

The palisade design itself has stood the test of time, having been in use for nearly a century.

Though, it's taken a hit in recent years as a result of a number of videos showing people levering the bolt that secures the pale to the angle and removing the pale.

It's important to note that palisade fencing, like other items, are not all the same.

There are numerous options available, each with a different level of security.

To fight physical attack and intrusion, high-security derivatives of both mesh and palisade fencing systems have been developed, providing a formidable long-lasting barrier against would-be intruders.





Possibly the biggest difference between mesh and palisade is the installation. Typically mesh systems have 10% shorter post centres, which in turn means more holes to be dug and more concrete to be poured into the foundations.

Meanwhile, palisade typically requires fewer holes to be dug and comes in smaller sections, easing installation. It does, however, require extra assembly, as the rails need to be inserted into the posts and the pales must then be fixed to the rails.

Ground Conditions

Mesh panels are large and rigid. If the ground is uneven or there is any kind of sloping ground, the fence will have to be buried or stepped, requiring additional labour and posts to stop gaps appearing under the fence.

With security variants of mesh, they usually have to be buried in the ground to stop the bottom of the panel being prised up. A select few mesh systems such as SecureGuard SL2X don't have to be buried, as part of their accreditation, as long as they are completely flush to the floor with no gaps beneath to create a solid stance.

Barker's' StronGuard palisade can cope with slopes of up to 33 degrees without the contractor needing to cut anything down or buy and install extra posts. This creates a more convenient solution and easier installation when dealing with uneven ground.

Handling

Whereas mesh is delivered as large panels, palisade fencing is delivered in smaller sections, making it easier to handle around site and take to areas with poor access.

Security variants of mesh often have additional strengthening features such as double skins or anti-cut bars which all add weight to the panel. SecureGuard SL2X is one of the lightest panels to have achieved LPS 1175 B3 accreditation, but a single 2.4m high panel still weighs 92kg whilst a 3.0m high panel weighs 118kg. The weight and size may make manoeuvring difficult.

Are You Looking For An Inviting Or An Intimidating Security Fence?

Inviting

Fencing that provides a more inviting aesthetic is often preferred for residential or built-up areas.

Mesh fencing can provide different levels of security, in order to meet your site requirements, whilst maintaining the beautification level of an area.



Intimidating

A visual deterrent like an intimidating fence can make a big difference to breaking and entering attempts.

Palisade's intimidating appearance mixed with sturdy materials and pointed pales provides added security.



← Platform 1
Platform 2 →

The Intimidating Appearance Of Palisade

Palisade is intimidating in its appearance because it typically has **spiked pale tops**, deterring anyone from climbing over. It can be a lot quieter to attack a mesh fence than a palisade, and noise attracts attention, which the intruder does not want.

The palisade fence can range anywhere up to **3.6 meters** high in a single pale. A triple or single-pointed pale design makes people think again about climbing the fence because it would be easy to get caught or impaled on.

Palisade security fencing is constructed of sturdy steel pales that have often been reinforced, which, combined with pointed tops, deters break-in attempts because attackers can see how tough it is to get access.



Some clients choose to have the pale curled outwards to make the palisade even more difficult to climb, as you can see here. This heightens the fence's threatening nature and gives the impression that it is even more difficult to scale.



Are There Downfalls To Palisade Fencing?

Although the menacing appearance of palisade fencing is a great deterrent benefit, it may also be its biggest drawback.

If a location is near a residential area, residents may object to a barrier that they believe will be intrusive.

Palisade fencing, however, doesn't look out of place on this new housing development in Wythenshawe, Manchester. A uniform and minimalist design makes the fencing easier on the eye, and the green powder coating blends well with the surrounding environment. This specific model provides a high level of security and prevents vehicles accruing onto the train lines, as shown in the image below:



The Cost Of Security Fencing

Standard palisade is more expensive than ordinary **VGuard** or mesh systems used for boundary delineation in its most basic version because the palings contain more solid steel.

Standard conventional /demarcation mesh fencing contains less steel and therefore is usually roughly 40% less expensive than standard palisade fencing.

When comparing mesh and palisade security derivatives, however, they are often interchangeable and either one can be the more expensive option, depending on your unique requirements.

Standard Mesh

- Slightly cheaper than palisade due to less solid steel
- Around 40% less expensive than standard palisade
- Typically has 10% smaller post centres, meaning more holes need to be dug and more concrete used

Standard Palisade

- More expensive than ordinary VGuard Mesh
- Around 40% more expensive than standard demarcation mesh
- Palisade is notable for being easier to handle, as palisade comes in smaller pieces. Making installation easier

High-Security Mesh & High-Security Palisade

- The cost of these high-security variations of mesh and palisade will be mostly interchangeable and will often be dependent on the steel content used.
- For more clarification on the costs of each high-security fence, we would recommend contacting us directly. By working with your bespoke needs, we can provide a clearer picture of what each system will cost.

Lifespan Of Fencing Products

Unless specified otherwise, mesh panels are more often than not made from pre-galvanized wires which must then be **powder coated** to add **corrosion resistance**, whereas palisade is **hot dipped galvanized** and then powder coated when required.

As the wires are pre-galvanized before manufacture, the wires are cut leaving an unprotected edge. Hot dip galvanizing is difficult on mesh because of the small apertures present in the fence. However, they can be made from galfan wire or a higher quality PPC, enhancing its lifespan. This will, of course increase cost and must be stipulated on order.

The difference?

There is a much thicker coating of zinc on a galvanized surface, compared to pre-galvanized surfaces. This can cause issues, as it's the zinc coating which prevents the steel from rusting.

Typically, pre-galvanization creates a 12 micron layer of zinc where as galvanizing creates a 70 micron layer of zinc. In the UK, zinc erodes at a rate of 1 to 1 ½ microns per year. You can see a map of erosion rates on the [galvanizing association website](#).

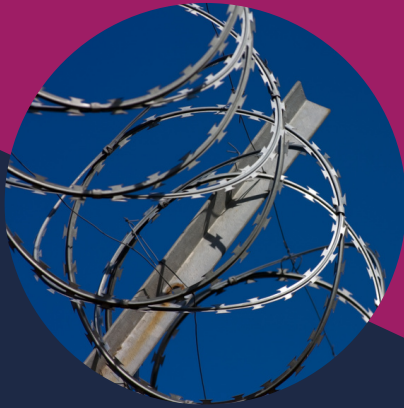
Galfan is coated with a layer of 95% zinc and 5% aluminium and will protect the surface from rusting for a similar period of time as hot dip galvanizing. Here is an image showing how pre-galvanized mesh fencing can rust in a much shorter time frame than a galvanized product:



So ask yourself: **How long do you need your perimeter security to last? Does your solution provide value for money?**

Additional Security Features For Your Security Fencing

Depending upon your requirements from your high-security fencing, both types of fencing can have security toppings added such as:



Razor Wire



Barbed Wire

Mesh Summary:

Barkers has high-security mesh systems that are approved by:

- **CPNI** (Generic Home Office Design)
- **LPS1175 A1**(SR1), **B3**(SR2) and **C1**

Optional Mesh Features: Barkers have the option of adding panels which curve outwards, which further deters intruders from climbing.

Palisade Summary:

Barkers has high-security palisade systems that are approved by:

- **CPNI** (Contact CPNI for more details)
- **LPS1175 B3** (SR2), **C5** (SR3) approved
- **PAS68** (Hostile Vehicle Mitigation) as seen in the StronGuard RCS and as such, is the only standalone palisade fence to do so.

Optional Palisade Features: : Barkers offer pales that curve outwards on their palisade fencing as an extra deterrent against climbing.

Concluding Thoughts

Palisade and mesh systems both have an abundance of pros and cons, however, these are often relative to your specific needs.

As you've seen, the right solution depends on the operational requirements of the site, the budget, aesthetics and the security level.

Palisade security fencing works well in high threat areas due to its intimidating appearance. Not only that, but it's the ideal solution if the site you are trying to secure has an uneven ground or is on a gradient.

Mesh fencing is the more "inviting" looking of the two, as it doesn't have the same intimidating appearance as a palisade. However, in terms of security if it has the same security accreditation it provides a similar level of security.

It is critical that an accredited fencing system be installed correctly. To meet certification, it must be installed according to the manufacturer's drawings as this was how the system was originally tested.

We have an approved installers scheme at Barkers, in which we can recommend installers who have received training or even supply training to your own installers. As part of this training we also supply a manual and video on how to install the fencing appropriately.

A key thing to remember here is that not every system is the same. With an wide range of bespoke options available to you, both systems can be enhanced further with additional security toppings and features to make your security fencing even harder to climb or bypass.

