

The Ins and Outs of Security Fences

Installing a fence around your property provides a good layer of security and the peace of mind that your yard is safe from unwanted visitors. To maximize your fencing's effectiveness, be sure to incorporate design elements like the ones below, that keep unwanted visitors out and your valuables in.



Tim ShaferSales Consultant, Security Expert
Detex Corporation

Get An Anti-Climb Fence

An anti-climb security fence is specifically designed to prevent individuals from easily climbing over it. To determine the right one for you, start by looking at your unique needs, the size of your perimeter, and what kind of security issues you have had in the past or anticipate in the future.

To make your fence difficult to climb over, get one that:

- **Is at least 8 feet tall.** Really, the taller the better. While higher fences are effective at keeping intruders out, also make sure you're aware of local regulations regarding maximum height.
- **Doesn't Have Horizontal Rails.** Horizontal rails can serve as footholds for potential climbers, giving burglars a leg up when trying to scale your fence.
- Has Pointed or Spiked Tops. Consider choosing fences with spear tops, or add razor wire or anti-climb spikes to the tops of flat-topped fences.

Now, Let's Look at Fences That Aren't Effective at Preventing Climbing

Not all fence types offer the same no-climb security, but still provide some protection.



Chain Link Fences

While chain link fencing is not classified as anti-climb fencing, it's a popular choice for perimeter security. Constructed from heavy-duty steel wires that are interlocked, chain link fences are known for their strength, durability, and ease of repair. They're also cost-effective and relatively simple to install. A significant drawback of this fencing type is that it can be easily climbed. The mesh openings can vary in size, which can be adjusted based on the level of security required. Chain link fences are available in heights ranging from 3 to 12 feet, making them adaptable to a variety of security needs. To further discourage climbing attempts, consider adding coiled barbed wire or razor wire along the top edge of the fence.

Wooden Fences

Wooden fencing should only be used as a temporary option. Wood is more easily penetrated and can be climbed with minimal effort. While wooden fences can be effective for providing privacy, they are not reliable for preventing climbing and should primarily be used for concealment rather than security.

Heras Fences

Constructed from galvanized steel, Heras fencing is usually sold in panels and is primarily designed for temporary use, such as in crowd control or at construction sites. Since this type of fencing is so portable, it is more often used as a safety measure to keep people from an area, rather than being used around a permanent building or perimeter.

Metal Hoarding Fences

Metal or steel hoarding is a flexible security enclosure that provides better security than standard metal panels. It's easy to install and durable, making it reusable for different projects. However, it can be expensive to install and is mainly used at temporary sites.

Recommended No-Climb Fencing Solutions

Metalco provides a variety of robust, high-performance no-climb fencing options that can adapt to your aesthetics and your safety requirements.

Mesh Panels

Palisade fencing comprises strong vertical pales that are secured to horizontal pales to form strong fencing that is nearly impossible to climb. Dating back to ancient times, this style has withstood countless attacks and kept many perimeters secure. They are often constructed higher than traditional fencing and can be designed in different finishes and colors.

You've stopped them from getting over your fence. But can they go around it, under it, or through it?



What's the point of a security fence if a burglar can bypass it by going around, digging under, or cutting through it. To make sure that doesn't happen, get a fence that:

- **Is secured into the ground with concrete.** Using concrete footings along the entire length of the fence. However, this can be costly. As a more budget-friendly alternative, anchor the fence posts in concrete.
- **Can't be cut through.** Some common fence types, like chainlink, are relatively easy to cut through with bolt cutters.
- **Includes secure gates.** A fence is only as secure as its weakest point. So, make sure your new security fence also has heavy-duty gates that match the security of the fence panel. You'll also want to padlock or exit devices on the gates.

The following two types of security fences meet the three security requirements outlined above and come highly recommended:

1. Metal security fences

A. These fences consist of tall, thin metal rods spaced evenly. They are stylish and low-maintenance.

2. Wire mesh fencing

A. Wire mesh fencing consists of a tightly woven grid of wire and is typically sold in panels that are suspended between metal posts. It offers some advantages like chain link fences but avoids the downsides of being easily cut or climbed.

Enhance Security with Smart Electric Features

On their own, high-security fences aren't "smart." They're a good barrier, but they can't tell you if someone is trying to access your property, which means you might not be able to act before the fence is breached.

Adding electronic security features to your fence is a great way to make your fence smart. Integrated perimeter security systems like monitored electric fences, taut wire fence systems, and fence detection systems can be connected to security equipment in a guardhouse or similar, so your security team will always know what's happening. If you don't have on-site security, many will plug into an alarm system, to alert you and the authorities when things go wrong.

Most electronic fence security systems also sound an alarm if the wires themselves are cut or the fence is tampered with, so you will also know if someone tries to disable the system.

While electronic additions to a high-security fence system aren't always the cheapest option, they can dramatically enhance site security, which means there's less to worry about.



Elevate High Security Fencing Even Higher

It's not just the type of fencing you choose that ensures high security, there are other things you need to consider too, such as:

High-Security Fence Hardware

A fence is only as good as the fittings that holds it together. If your fence is built using ordinary hex nuts and bolts, it will be easy for anyone with a wrench to remove sections of it. So, pay attention to the fittings and hardware used on your fence.

One option is to choose a shear nut or breakaway nut, where the hex head of the nut snaps or shears off when it's torqued.

Another option is to use a countersunk hex head bolt on the front face of the fence, so a tool can't be used to "grab" the bolt. A shear nut or even stripping the thread of the bolt will make sure it can't be easily removed.

Sometimes, an adhesive like Loctite or a two-part epoxy is applied to the thread of bolts and nuts before they are tightened.

All of these things are designed to make it as hard as possible to remove your fence hardware.

Underground Security

The dirt directly under your fence is another vulnerable point, which is why many clients install underground security. This might be something like a cast-in-place concrete beam or slab, or you might choose to bury the bottom of the fence.

If the area where you plan to install the fence has a large, expansive ground and is prone to significant frost heave, it may be more effective to bury a second custom panel or mesh strip beneath the fence rather than installing it directly into the ground. This approach is especially beneficial if you are using panel fencing.

Lexan

Another common security addition to many types of fencing is to add a sheet of Lexan on the attack side of the fence. Lexan is a specialized commercial plastic that can be retrofitted onto a security fence, providing an additional layer of protection. This material is strong enough to withstand most blows. Some sheets, if thick enough, are even bulletproof!



Fencing FAQs: Expert Answers to Your Top Questions

1. What are the most common types of security fences?

- Chain Link Fences: Durable and cost-effective, suitable for a variety of applications.
- Electric Fences: Ideal for high-security needs, deterring intruders with electrical currents.
- Steel Security Fences: Robust, providing high levels of protection.
- Vinyl Privacy Fences: Offer privacy and security with low maintenance.
- Wrought Iron Fences: Elegant and robust, combining aesthetic appeal with security.

2. How do I determine the best type of security fence for my property?

To determine the best type of security fence, consider:

- Level of Security Needed: High-security areas may require electric or steel fences, while residential properties might benefit from vinyl or wrought iron fences.
- **Environment and Climate:** Choose materials that are resistant to local weather conditions (e.g., rust-resistant coatings for steel).
- **Aesthetic Preferences:** Select a wall that complements the property's design, such as wrought iron for a classic look or vinyl for a modern appearance.
- **Budget:** Balance your security needs with your budget. Chain link fences are typically more affordable, while wrought iron and steel may be more expensive.

3. How do I maintain different types of security fences?

- Chain Link Fences: Minimal maintenance is required. Regularly inspect for rust or damage and clean as needed.
- **Electric Fences:** Regularly check the power source and wiring for functionality. Ensure that warning signs are visible and up-to-date.
- **Steel Security Fences:** Inspect for rust or damage. Repaint or recoat as necessary to maintain durability.
- Vinyl Privacy Fences: Clean with soap and water. Inspect for cracks or damage and repair as needed.
- **Wrought Iron Fences:** Regularly inspect for rust or paint damage. Repaint and treat with rust inhibitors as required.

4. Can I combine different types of fences for enhanced security?

Yes, combining different types of fences can enhance security. For example, a chain link fence
topped with barbed wire, or an electric fence can provide additional protection. Always ensure
that the combination complies with local regulations and is installed professionally for maximum
effectiveness.



5. What are the installation requirements for each type of security fence?

- **Chain Link Fences:** Typically require a level ground and proper post installation. Easy to install with basic tools.
- **Electric Fences:** Require a power source and adequate insulation. Installation may involve more technical aspects.
- **Steel Security Fences:** Require solid post and panel installation. They may need professional installation due to their weight and complexity.
- **Vinyl Privacy Fences:** Installation involves securing posts and aligning panels. It is generally straightforward but may require precise measurements.
- **Wrought Iron Fences:** Often require custom fabrication and professional installation due to their design and weight.

6. How long do security fences typically last?

- Chain Link Fences: Typically, 10-20 years, depending on maintenance and environmental factors.
- **Electric Fences:** Can last indefinitely with proper maintenance and care.
- **Steel Security Fences:** Usually 20-30 years, especially with regular maintenance.
- Vinyl Privacy Fences: Often 20-30 years, as they are resistant to weathering and damage.
- Wrought Iron Fences: 30-50 years or more with proper maintenance and care.

7. How do I determine the best type of security fence for my property?

Yes, additional security features can enhance the effectiveness of your fence:

- Cameras and Motion Sensors: Integrate with electric or chain link fences for surveillance and alerts.
- Alarm Systems: Can be added to electric fences for immediate response to breaches.
- Barbed Wire or Razor Wire is effective when added to the top of chain link or steel fences for increased deterrence.
- **Lighting:** Motion-activated lights can increase visibility and deter intruders.

Be Safe by Being In-the-Know

Understanding fence security is essential for protecting your property and enhancing safety. By considering factors like height, material, and design, you can choose the right fence to meet your security needs. Whether you're looking to prevent unauthorized access, ensure privacy, or enhance the overall safety of your space, investing in a quality security fence can provide peace of mind and a secure environment.





Tim Shafer

With decades of experience in access control and perimeter security, Tim Shafer is a trusted expert in the field. As a proven sales leader and dedicated community advocate, he blends deep industry knowledge with a passion for building safer environments. His work bridges innovative security solutions and meaningful client partnerships across diverse markets.

To connect with Tim for questions, consultations, or partnership opportunities, please contact him at tbs@detex.com or (800) 729-3839 ext 4335.