



Security Fencing for a Battery Storage Facility

**Jacksons
Fencing**

Products

- 443m EuroGuard® Flatform fencing
- 6m wide EuroGuard Flatform gate

Background

As the UK accelerates its transition to renewable energy, battery storage facilities and electrical energy storage systems (EESS) have become critical infrastructure. These battery power station facilities store excess energy generated from renewable sources like wind and solar, ensuring a stable supply even when production dips. The increasing number of battery energy storage systems (BESS) and such facilities underscores the need for robust security measures to protect valuable assets and maintain operational integrity.

This case study details the installation of 443 metres of EuroGuard® Flatform twin wire mesh fencing around a leading battery storage facility in the UK, including a 6-metre wide gate designed to accommodate the delivery and installation of large batteries and access for emergency and maintenance vehicles.

The battery storage facility in question required a perimeter security solution that could deliver high levels of protection while being cost-effective and scalable. The site, covering a large area, needed a fencing system that would prevent unauthorised access and deter vandalism, allow high visibility for security patrols and surveillance systems, accommodate future expansion without significant additional costs, and facilitate the installation and ongoing maintenance of large battery units with minimal disruption.



Solution

To meet these requirements, we installed 443 metres of EuroGuard® Flatform twin wire mesh fencing around the energy storage facility's perimeter. This fencing system was chosen for its unique combination of security features, visibility, and cost-efficiency.

EuroGuard® Flatform features a vandal-resistant design; twin wire mesh panels with fixings positioned on the secure side of the fence, which make it extremely difficult for vandals to tamper with or breach the fence. This level of security is crucial for a site that houses expensive and sensitive battery storage equipment. Inferior mesh fencing systems face the risk of front-facing mesh clips and subsequently the whole fence panel being removed to create large gaps in the perimeter. Jacksons' anti-theft fixings were key here, used in tandem with CCTV systems.

High visibility is also important. The mesh design allows for clear sightlines, enabling security personnel and surveillance systems to monitor the area effectively. This visibility is key for early detection of any potential security threats. High visibility fencing is not only secure, but situated in a rural location, this type of fencing also helps to keep countryside views in tact, which is vital for improving staff morale working on site each day. It also helps staff provide the earliest warning of nearby field fires, which are becoming more frequent in the UK during extended periods of hot weather.

For large perimeters like this facility, cost efficiency is a critical factor. EuroGuard Flatform mesh security fencing offers a budget-friendly solution without compromising on quality or security, making it ideal for extensive sites.

Scalability is also convenient with mesh security fencing. As the facility expands to accommodate more battery units, the fencing system can be easily extended thanks to our mesh security clip system. More twin wire mesh panels can be added, allowing for quick and straightforward scaling while ensuring that security remains uncompromised.

Gate installation

A 6-metre wide mesh gate was installed as part of the perimeter fencing solution, minimising the number of access points while providing sufficient space for the transportation and installation of large battery units. This design choice enhances security by reducing potential entry points while ensuring that operational efficiency is maintained.

Perimeter Intrusion Detection System

Due to the remote location of the site, the fence had a Microphonic Perimeter Intrusion Detection System (PIDS) added to the top of the fence that was installed to detect cutting and penetration of the perimeter.

The importance of battery storage and security

Battery energy storage systems and grid storage facilities are becoming increasingly vital as the UK shifts towards a more sustainable energy grid. By storing excess renewable energy, these facilities help balance supply and demand, reducing reliance on fossil fuels and enhancing energy security.

Given their importance, these sites are prime targets for theft, vandalism, and even potential sabotage. Installing high-quality security fencing is essential to protect these critical assets, prevent operational disruptions, and ensure the ongoing stability of the energy supply while providing a low lifetime cost.



EuroGuard® Flatform for perimeter.



EuroGuard® Flatform detail.

For further information on products featured visit: www.jacksons-security.co.uk