



Sustainable security and noise management for new Cambridge Central Mosque

**Jacksons
Fencing**

Products

- 160 metres 2.5m high Jakoustic® Reflective fencing
- 57 metres of 2.5m Jakoustic® Reflective fencing on special cranked steel posts
- 22 metres 1.2m high Sentry® fencing on wall
- 31 metres 2m high Sentry® fencing
- 22 metres of barbican 2.5m high
- 19 metres 2.4m high EuroGuard® flatform heavy
- 2 double leaf self-closing Sentry® gates

Background

Taking 10 years to build, and costing £23 million, Cambridge Central Mosque is the first purpose-built mosque in the city, being described as 'the greenest mosque in Europe'; 'a unique prayer space that fuses traditional and modern architecture'. The mosque has space for 1000 worshippers, who previously prayed on a rota basis at overcrowded Islamic centres, enabling the majority of the city's Muslim community the chance to attend daily services.

The building was designed by the renowned Marks Barfield Architects to be truly inclusive, sustainable, safe, secure and respectful of its neighbourhood, with construction carried out by Gilbert Ash. The complex includes a cafe, teaching space, accommodation and a garden, offering a peaceful retreat away from the city centre which is open to the public as well as the Muslim community.

With a key focus on sustainability, the mosque boasts zero carbon on-site emissions, rain water harvesting and rain source heat pumps. Solar panels supply energy, while large skylights provide natural lighting all year round, supplemented by low energy LED bulbs.

The entrance hall and prayer hall comprise of a series of tree-like structures, made from sustainable timber that not only create a visually stimulating environment, but echo the core ecological values of the mosque.

To stay true to the key values throughout the site, the required fencing also needed to have sustainable qualities such as a long life-time guarantee and responsible sourcing of materials.

Solution

To reduce the noise impact for both local residents and worshippers, our Jakoustic® Reflective acoustic fencing was installed, resulting in a safe, secure, anti-climb perimeter with an aesthetically pleasing noise barrier that blends in with the surrounding area. This is achieved using a flat timber profile along with interlocking 'V' boards which reduces the rate at which sound waves can pass through the barrier.

The natural timber facade matches the timber structure inside the mosque and satisfies the environmental requirements of the development; providing a long term solution with a 25 year guarantee against rot and insect attack.

In the government advice document for planning security around places of worship, it is recommended that places of worship should be made as accessible as possible and ensure that there is a welcoming atmosphere within. It also highlights the need for balance to be achieved between creating an accessible, welcoming atmosphere while ensuring that there are robust protective security measures in place.

We supplied Sentry® metal railings, which were specially crowd loaded. The guide emphasises that security measures must not compromise public safety, which is why it was essential that our Sentry® railings were designed to ensure safety for large groups of people congregating in areas. Sections of the fencing were cranked to fit onto walls, providing additional height and deterring people from climbing.

To match the fencing, we also provided two self-closing gates fitted with magnetic locks to provide secure access control and ensure gates are not accidentally left open. The self-closing timers can be adjusted to ensure there is appropriate access for everyone, and reduce the risk of closure during busy times.

We also supplied Barbican® vertical bar fencing, our alternative to steel palisade fencing, which provides much higher security as there are no bolts or palings to be forced or removed. The design is less intimidating, while still providing an anti-climb solution. Additionally our EuroGuard® Flatform mesh fencing was installed to provide clear access for CCTV cameras. With its horizontal twin wire construction and flat profile, it provides a strong and durable anti-climb solution. . All our steel fencing and gates are also guaranteed for 25 years, keeping long-term maintenance costs low and connecting the product back to the core sustainability objective of the project.



Crowd-Loaded Sentry® Fencing



Jakoustic® Reflective Fencing

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