



Timber Acoustic Barriers Reduce Stadium Noise

**Jacksons
Fencing**

Products

- Over 275m of 3.5m high Jakoustic Commercial and Highway acoustic barriers
- Double leaf acoustic gate

Background

With space at a premium for housebuilders across the UK, sites for development are being mapped out closer to commercial, retail, and leisure properties, all of which have the potential to create noise. With excessive noise being a threat to animal and human health and quality of life, many efforts are made during the specification and construction stages to reduce its impact on new developments and those who will live there.

In this case, a housing development was being built near to a multipurpose stadium. With the potential to hold a range of sporting events, it was imperative that noise mitigation measures were installed prior to the completion of the housing development to reduce as much noise as possible and create a peaceful living environment for residents.

Living next to a stadium has its pros and cons – often it means free or reduced tickets for life, more amenities and facilities nearby, and better transport links, but it also comes with the downside of noise. Some homebuyers may be put off, but knowing that noise mitigation solutions are in place to help combat the problem is an attractive feature, especially when it's done right.



Solution

One way to combat external noise is through the installation of an acoustic barrier.

Installing an acoustic barrier is not simply putting up a fence and hoping for the best, it involves careful planning and research, and we highly recommend the use of experienced acoustic consultants. There are multiple factors to consider: height of the barrier; distance from noise source; type of acoustic barrier (reflective or absorptive), and there are strict principles to follow for a fence to be an effective acoustic barrier. Mass density, sound impenetrability, height, thickness, material, and installation are all key factors that must be correctly executed for best performance.

At Jacksons, we specialise in timber acoustic barriers and have been manufacturing them since 2004. Aside from their excellent noise reduction capabilities (up to 32dB reduction), they offer an attractive appearance which looks great in most environments. This is especially important in leisure and residential applications to prevent creating prison-like conditions.

Over 275m of our 3.5m high Jakoustic® Commercial and Highway reflective acoustic barriers were installed around the perimeter of the stadium. Due to the shape of the stadium, the installation followed a gradient. To provide strength and correct wind loading, our acoustic barriers over 3m tall are installed with steel I beams. These are galvanised as standard, but in this case the customer wanted green powder coating which further increases aesthetic appeal. A matching 4m wide double leaf acoustic gate was also installed for access.

All our acoustic barriers are provided with a 25 year guarantee against rot, insect attack, rust and corrosion, providing a low lifetime cost.



3.5m high acoustic barriers supported by steel I beams



Double leaf acoustic gate

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