



Housing Development Reduces Motorway Noise Using Acoustic Barrier

**Jacksons
Fencing**

Products

- Jakoustic® Commercial and Highway Reflective

Background

In 2004, we started manufacturing and installing our timber acoustic barrier system, Jakoustic®. Since then, we have developed the system to include an absorptive variant, a lightweight option for more general use, and a commercial and highway system specifically designed for the reduction of road noise, which has been CE/UKCA marked as a whole system in compliance with BS EN 14388:2005. In addition, it complies with Highways Sector Scheme 2C for the supply, installation, and repair of environmental barriers for infrastructure works, and Scheme 4 for the preservative treatment of timber.

Timber acoustic barriers are ideal for many applications as their natural appearance blends well into most environments, their solid construction provides security and privacy, and they reduce noise by up to 32dB.

Due to the increasing demand for housing in the UK, residential developments are being brought closer to industrial sites, commercial properties, and transport infrastructure, including major motorways and highways.

Planning and specification of fencing solutions for housing developments is an important process that should not be overlooked, but unfortunately, we often see contractors breaking specification at the construction phase, and this is usually down to cost. When it comes to reducing noise or installing a large barrier near infrastructure, cutting corners will rarely lead to an appropriate solution and the wrong solution could also be a risk to life.

Timber noise barriers have similar visual characteristics to garden fencing, but there are a few key features that must not be compromised, and acoustic barriers are manufactured in very specific ways to fulfil their intended purpose. Mass, height, construction, distance from noise source, and distance from receiver are all factors which need to be determined to achieve the best outcome.

If noise reduction is a requirement of a new housing development – which usually it is today, an acoustic consultant should be involved at the specification stage to ensure the most appropriate solution is specified. Architects and specifiers should specify acoustic barriers, stipulating the features mentioned above, to increase the likelihood of successful planning applications.

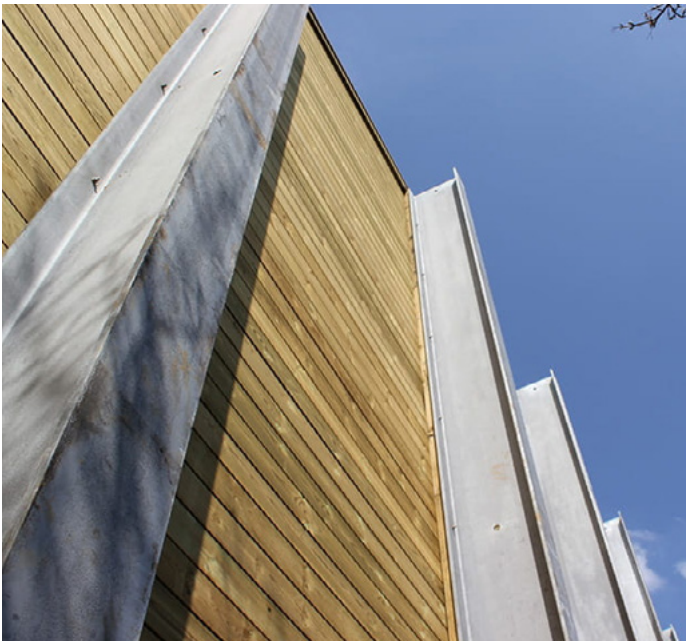
Solution

Due to our previous experience providing acoustic solutions in the UK, our capability to construct an exceptionally tall acoustic barrier for one of the UK's largest housebuilders at a new housing development near a major A road, was sought after.

The specification of the acoustic barrier involved the design and construction of giant bespoke steel I beams to be installed in the ground with unique foundations, guaranteeing correct and safe wind loading of the barrier. As part of the post installation, we developed a unique foundation design to secure the posts in position. The posts were then craned into position and scaffolding was used to support the posts during fixing.

Due to the large surface area of the fence and the location, anti-graffiti coating was added to the lower boards to lower the chance of the barrier being defaced.

Garden spaces have become more important than ever since the pandemic, and people have also noticed the effects of noise in their home and work lives, particularly with more people working from home. The reduction of road noise that an acoustic barrier can provide becomes a real selling point for the brand new homes. Furthermore, the benefit of the 25 year guarantee provides reassurance to homebuyers that the fence will not fall into disrepair and create a hazard or eyesore, protecting them from noise and providing safety and privacy around the development for years to come. Choosing a solution with a long guarantee is highly beneficial for developers as it reduces the risk of future problems. Additionally, Jacksons is a one-stop solutions provider; all our services are provided in house in the UK, from design, manufacture, transport and logistics, installation, and aftercare. With a UK based sales team, it makes it very easy to resolve any issues that may arise.



Giant bespoke steel I beams



Jakoustic® Commercial and Highway Reflective

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