



Britain's most wildlife-friendly housing development chooses Jacksons' Acoustic Fencing

**Jacksons
Fencing**

Products

- 335 metres of 4m high Jakoustic® Commercial and Highway acoustic fencing

Background

Three villages and 2,450 new homes have been built in Aylesbury, Buckinghamshire, 2.5km east of the town centre, in a scheme described as Britain's most wildlife-friendly housing development.

Barratt Developments, David Wilson Homes and Aylesbury Vale District Council worked in close partnership with the RSPB to 'show that new homes need not be at the expense of the natural world'. The new villages include: bat and swift boxes, hedgehog highways, wildlife corridors, planting for wildlife, and sustainable urban drainage. The site is made up of 50% wildlife friendly green space, with plenty of ponds, parks, meadows, orchards and a nature reserve aimed at retaining as much green space as possible from the Greenfield site it was built on.

During phase 1 of the development, noise mitigation was required to satisfy the planning permission process, to protect residents from noise from link roads and a large electrical substation. Following noise assessment undertaken by Mewies Engineering Consultants Ltd and Commissioned by BDW North Thames Ltd, it recommended, among other solutions, "the installation of acoustically sound fencing at certain locations". The noise assessment determined that daytime and night-time noise levels exceeded the levels outlined in WHO guidelines and BS8233:2014.

For amenity spaces such as gardens, WHO guidance advised that external noise levels should not exceed 50dB. Additionally, the National Planning Policy Framework (2012) advises that planning policies with respect to noise emissions should aim to: avoid, or mitigate and reduce to a minimum, noise and other significant adverse impacts on health and quality of life as results of new development.

To provide a quieter environment for the residents and wildlife living in the community, and to protect them from noise disruption, the noise assessment recommended that fencing should meet the minimum spec as stated below:

- Made from good quality timber with minimal knots
- At least 2.5m high
- At least 25mm thick
- Closeboarded to minimise gaps
- No gaps between gravel board and ground
- A minimum mass of 10-15km/m3

Our acoustic fencing systems exceed the minimum requirements for garden fencing around the new development, with a thickness of 34mm, and mass of 25kg/m³.

Solution

As part of a £20 million contract, MV Kelly was employed to complete infrastructure works and groundworks, including the construction of a 7m high, 450 metre long acoustic barrier around the electrical substation. The acoustic barrier consisted of a gabion wall with an acoustic fence on the top. We provided 335 metres of 4m high Jakoustic® Commercial and Highway acoustic fencing which was installed on top of the earth bund. Jakoustic® Commercial and Highway fencing is installed on galvanised steel I-beams which provide strength and durability. It is also the only complete timber acoustic barrier system to hold a CE mark. For this project, reflective acoustic fencing was used, which works by reflecting noise away from its flat profile, which is very effective in large open spaces.

The timber facade of the acoustic barrier can reduce noise by up to 28dB*, and fits well with the 'natural' theme of the development. The fence provides a pleasant disguise for the substation, providing the residents with a more aesthetically pleasing view.

Our acoustic barriers have designed to be anti-climb, so security around the development is also increased, as well as intruders being deterred from accessing the electrical substation that the barrier surrounds. With a 25 year guarantee, the acoustic fence will provide noise reduction and protection for the residents and wildlife for many years to come.

*Jakoustic® barrier certified laboratory results: Rating according to BS EN 1793-2:1998 Category = B3 Laboratory sound reduction 28 dB Superficial mass 25kg/m²



Barbican® Vertical Bar Fencing

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

