

### FINDING SPACE FOR NATURE, WILLMOTT DIXON



Permanent bat boxes installed in external wall insulation to counter the detrimental effect construction could have on bat populations.

### BIODIVERISITY ENHANCEMENT OVERVIEW

Over the decades, the buildings in which we live, work and play in have become increasingly comfortable. The construction and maintenance industries' considerable investment in research, training and materials has resulted in a better quality of life for millions of people up and down the country. But what is better for us is not always better for the flora and fauna (biodiversity) with which we share our neighborhoods.

However, with a bit of thought and planning, it is possible to provide and create spaces for nature within our projects – and it doesn't have to cost the earth – as Aled Roberts, Site Manager for our Energy Services' Arbed 2 Team, explains:

"We are delivering our first scheme in North Wales to make houses more energy efficient. In Nantlle, a village in Gwynedd, our ecological survey identified that the external wall insulation we planned to fit could have a detrimental effect on bat populations. Bats are a particular issue for construction and property maintenance companies – they are protected by legislation for good reason – but their numbers are declining at a worrying rate. This is due mostly to loss of habitat."

### Fact box

### Company name:

Willmott Dixon

### **Project name:**

Energy Services
Arbed 2 Team Willmott Dixon

### **Biodiversity enhancement:**

Bat boxes

Permanent installation in external wall insulation

### Location:

Nantlle, Gwynedd, Wales

### Size:

30 x 30 cm boxes

### Cost:

Cost of installing two boxes was just over £160

### Tips:

You can find out more about Schwegler bat boxes here: http://www.nhbs.com.

### Year completed:

2013

### Categories

- Small scale permanent
- Most innovative

### **METHODOLOGY**

Aled Roberts, Site Manager for our Energy Services' Arbed 2 Team, explains:

"We are delivering our first scheme in North Wales to make houses more energy efficient. In Nantlle, a village in Gwynedd, our ecological survey identified that the external wall insulation we planned to fit could have a detrimental effect on bat populations. Bats are a particular issue for construction and property maintenance companies – they are protected by legislation for good reason – but their numbers are declining at a worrying rate. This is due mostly to loss of habitat."

"The houses in question undoubtedly needed insulating – there were gaps in the fascias, and under the eaves of the houses, through which the cold Snowdonia winds could penetrate. But it is precisely these sorts of nooks and crannies that bats need for roosting during the summer months.

"As Site manager, my job is to ensure that our project comes in on time and budget – so naturally I was concerned that any mitigation measures might slow us down and be costly. But after some research we found a really simple solution – bat boxes which are designed to be embedded into external wall insulation. And they weren't expensive – the cost of installing two boxes was just over £160."

"Installation of the Schwegler 30x30cm boxes was easy. First we screwed a back-plate to the hole within the void. Then we fitted an access panel."

### a void is left in the insulation. A backplate is attached, which includes a wooden pad for bats to hook onto. The backplate has a roughened surface which bats prefer.



## Step 2: The access panel is fitted over the top. The bat logo is there to help ecologists identify the boxes in years to come.



# The result: The box fits snugly and discreetly into the rendered wall.

### SUMMARY

It's almost impossible to predict how well-used these boxes will be. Bats are secretive creatures with complex habits – there's still a lot we don't know about them. Research is key, so installing the boxes is only half the battle. Equally important is the relationship we have built with local ecologists, which will ensure that the sites continue to be monitored long after our project has finished.

They have recorded these boxes on the local database and have arranged for university students to survey the area in summer 2014. Any bats that are seen using the boxes will be recorded in the main database of biological records for the region. Careful monitoring of the site will help us develop an understanding of what works and what doesn't for future projects.

