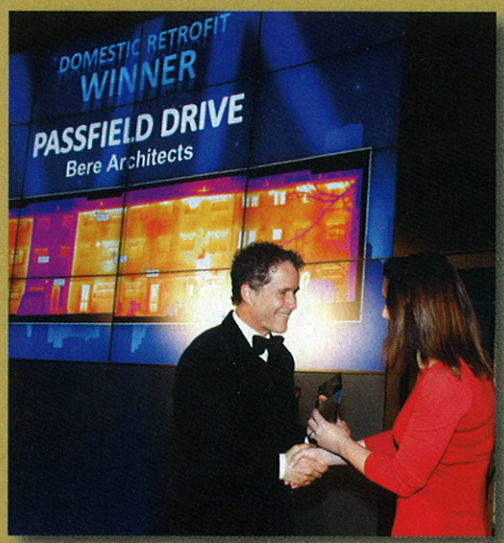
Performance management



Sarah Lewis and Nick Newman discuss Bere Architects' decision to monitor building performance closely and give their opinion on why the industry has not fully embraced this method.

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TSB funding allowed Bere:Architects to monitor Mayville Community Centre performance figures closely

Why did Bere start to pay so much attention to the figures?

We started monitoring the performance of our director Justin's home in 2008 using simple i-buttons which provided temperature readings at 10-minute intervals. We also monitored some traditional turn-of-the-century buildings to provide a benchmark against which we could assess Justin's house.

Although this is possibly quite unusual for an architecture practice, we found it extremely useful because we were able to compare both energy consumption and comfort conditions side by side. The findings were stark. People in traditional homes were living in relatively cold and damp conditions and using more energy than people living in low energy homes. This demonstrated the benefits of a fabric-first approach.

In 2010 we learnt that the Technology Strategy Board (TSB) was about to launch a competition for exactly the sort of funding we had been looking for. We were thrilled and were one of the first firms to put in proposals and win funding. We now have a number of on-going research projects partnering with universities, BSRIA (Building Services Research and Information Association) and Cambridge Architectural Research.

We feel that it has been important to closely monitor our completed buildings to be sure that we are providing good pilot demonstrator projects and, if not, to find out what changes are necessary.

The results have been hugely reassuring and have brought about humbling respect from experts, some of whom have been working in the field of research on low energy buildings for much longer than us, and all of whom have felt a great deal of frustration about the performance gap discovered in most projects.

Why doesn't the rest of industry do this?

We suspect this is not an industry-wide practice because many in the industry favour short term profit over long term sustainable growth and treat houses as commodities to be traded instead of places to live. Much of the industry is geared towards building fast, selling quick and moving on; there is no time or cost margin for breaking out of this cycle. Fear of failure, or of being 'named and shamed' also hangs over many heads. We feel it is part of the duty of every construction professional to make sure that their buildings are performing broadly as designed. A client should not pay for energy reductions that they cannot actually get.

What needs to be done to bring it to the forefront of industry practice?

This is more complex. For the situation to change, market demand must be created. This will only be created if public awareness increases. A carrot and stick example of how this might happen is if property websites allow buyers to sort results in terms of EPC ratings. The stick would be if clients sued over a building which fails to meet its predictions. Further ideas might be awards and accredited practices based on performance. Could designing for environmental performance become a requirement for a RIBA chartered practice?

Sarah Lewis and Nick Newman are director and associate director at Bere Architects

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