

CONSULTANTS FILE: AWARDS 2012

OUTSTANDING ACHIEVEMENT AWARD

This year's Outstanding Achievement Award goes to an engineer who has spent his working life promoting sustainable design, and is a passionate advocate for integrated engineering design and building physics.

Winner Doug King

Doug King graduated from university as a physicist, and says he entered the construction industry "out of curiosity", seeing buildings as "large interdependent systems that were a challenge to understand". He is now a chartered engineer and a chartered environmentalist, as well as a chartered physicist, a combination that, he says, "brings a scientific approach and environmental sensitivity to the engineering of buildings".

Ten years ago King was named ACE Young Consulting Engineer of the Year (the forerunner to the NCE/ACE Young Consultant of the Year Award). At the time, he was an associate at Buro Happold, where he worked on the Genzyme Center in Cambridge, Massachusetts – the largest building in the world ever to attain the LEED Platinum standard – and two award-winning UK buildings, the Weald and Downland Gridshell in Sussex and Sainsbury's supermarket in Greenwich, London.

Soon after winning the Young Consulting Engineer award, King set up his own consultancy, King Shaw Associates, with structural engineer Mike Shaw, and the firm quickly gained a worldwide reputation for innovative low carbon buildings and a client list that includes the Royal Shakespeare Company, British Library, British Museum, Oxford University, Historic Royal Palaces and the United Nations Development Programme.

During that period King has also become a leading researcher in sustainable design, and a public advocate for improving skills at university level to ensure the next generation of engineers are able to tackle the challenges

King: Lifelong commitment to sustainable building design



of low carbon design.

Since 2002 King has been teaching interdisciplinary design at Bath University, and lecturing and tutoring on environmental and sustainable building design to both engineering and architectural students at all levels, including a master's course in environmental design.

He was appointed honorary visiting professor at Bath University in 2007, and the following year was announced as one of four Royal Academy of Engineering-funded visiting professors in building engineering physics. In this capacity he has taught at a diverse range of academic institu-

"The engineering profession must adapt to the new low carbon paradigm"

tion, including Robert Gordon University in Aberdeen, Kuban State University in Russia and the Arab University in Beirut.

Two years ago King authored the Royal Academy of Engineering report *Engineering a Low Carbon Built Environment*, which argued that building designers need to have a far deeper grasp of engineering physics if society is to

meet the challenges of creating a sustainable future.

It argued for changes in teaching at universities to help remove the boundaries between different branches of engineering, and, ideally, to start eliminating the barriers with other disciplines, such as architecture and planning, as well.

"The engineering profession must adapt to the new low carbon paradigm well ahead of society as a whole in order to provide the necessary leadership in design and the direction of policy," claimed the report. "The professional engineering institutions and trade associations must all recognise a multi- »