

FEATURES

Green Pioneers: Brainwave unwraps pool insulation secret

While on holiday in the freezing Rockies recovering from cancer, Nigel Rose found a way to retain the heat in swimming pools



Thermapool's Nigel Rose was determined to put his idea into practice (Christopher Cox)

When he was 24, Nigel Rose was diagnosed with testicular cancer. After his final course of chemotherapy the builder followed doctor's orders and booked a holiday, travelling to Whistler in the Canadian Rockies.

As he lay in his camper van with temperatures of -20C outside, Rose had a brainwave



Operations Director RSPCA - London - £Competitive - how to insulate a swimming pool.

"I don't know why I thought of swimming pools," he said. "But as I lay in a sleeping bag, trying to trap all the heat to keep myself warm, it dawned on me that so much energy could be saved if pools were insulated."

When he returned from his trip in 2000, he shared his idea with friends. "They thought I was bonkers, but they didn't know how determined I was to make this work."

The research and planning kept him busy. He even believes it helped him to recover faster from his illness than he might have otherwise. "Being so passionate about an idea at a time when I could have hit a real low kept me going," Rose said.

By coincidence, in 2003 he was asked to build a swimming pool for a neighbour and saw it as a perfect opportunity to give his idea a practical test. By lining the outside with a combination of adhesives and render, Rose was optimistic that the pool would use very little power to keep heated.

He was right. A report by the Building Research Establishment found that by using Rose's technique, up to 86% of pool heat is prevented from dispersing into the surrounding ground, while the remaining 14% unavoidably evaporates from the surface.

"It means people save an enormous amount of money, as they're not paying to heat their pool as much," he said. "Saving both money and energy makes sense."

Using research in the report, Rose calculated that if all swimming pools in Britain were insulated with his Thermapool invention, the energy saved would reduce CO2 emissions by 786,279 tonnes a year.

Rose refuses to reveal the secret formula behind his invention. The broad principle is that 75mm of cement, sand and a key ingredient is plastered on to the inside or outside of the pool before 4.5mm of render is laid on top, giving the insulation a solid finish.

Once the pool is filled, Rose's concoction isolates all the water from the structure and surrounding ground, trapping the heat and allowing it to circulate. Rose said that the traditional insulation materials used in building construction, such as polystyrene and glass fibre, are not suitable for swimming pools because they deteriorate when wet and lose their insulating properties.

In 2004, he wrote a letter to the prime minister, emphasising the importance of making pool insulation mandatory. "When I eventually received a response, they told me to take my interests elsewhere," he said. "Swimming pools are not a priority."

Endless letters and lobbying eventually paid off and last year it became illegal to build an indoor pool in Britain without insulating the walls, floor and basin to the same degree required for walls and lofts in buildings, a regulation that will also apply to outdoor pools by 2013. "I haven't done anything amazing," said Rose. "It just seemed sensible to apply an energy-saving technique that already exists to a structure that needs it."

Thermapool has worked with private, local authority and school swimming pools, insulating about 1,200 in Britain and across Europe. Rose, now 35, still hears stories about the amount of money that the product is saving his customers.

"A client called to tell me that he hadn't put on the heater for his pool in two weeks," he said. "And the temperature was still fluctuating between 27C and 29C. But it's not just about the money that's being saved, it's what we're saving the environment that really counts."

Thermapool is the only insulation system accredited by the Carbon Reduction Programme scheme, which means that those who choose to have their pool insulated by Rose's company are offered grants of up to £2,000 to help cover the cost of installation.





DOWNLOAD GREEN COMPANIES WEB APP



League tables of the country's most environmentally aware workforces, with extended profiles and tables including:

- Winners by company size and
- Ievel of environmental impact
 The greenest bosses in Britain
- The greenest bosses in b
- The best companies for environmental management
 The greenest workforce

Runs on Chrome and Safari browsers only Oownload Chrome | Download Safari

Download the Green Companies app



MULTIMEDIA GALLERIES

