

Heated Raised Access Floor System

Concept to commercialisation in less than three years



SPECIFIC has developed the first electrically-heated raised access floor system.

As well as its own value proposition, this system really comes into its own when combined with renewable electricity generation and storage. It has significant advantages over current heated floor systems, primarily quicker installation and more dynamic, localised area control.

The system uses SPECIFIC's heated coating and the long-established principle of resistive electrical heating, in which electrical energy is converted into heat energy.

The coating is applied to a steel substrate and fitted to the surface of a standard raised access floor tile, used in office buildings up and down the country.

Benefits

- Rapid, accurate temperature control
- Zone-able
- Compatible with building management systems
- Rapid installation results in lower costs
- Energy saving
- Can be retrofitted
- Unobtrusive, without need for wet trades
- DC compatible – ready for renewables
- Easy to replace damaged tiles
- Space saving – no radiators

“ A building the size of the Shard has over 55,000 raised access floor tiles which could be used as a heating system using this technology. As such this is a major new business opportunity for us, considering the number of large buildings of this type which are equipped with inefficient and uncontrollable water based heating systems. We are so impressed we are fitting it to our own building. ”

Andrew Hubbard, MD Permaflor



Led by



Swansea University
Prifysgol Abertawe

Funders

EPSRC

Engineering and Physical Sciences
Research Council

We work with
Innovate UK



**Cronfa Datblygu
Rhanbarthol Ewrop
European Regional
Development Fund**

With partner engagement from the outset, license packages and technical transfer arrangements have enabled SPECIFIC's knowledge and know-how to be transferred to industry. The technology has gone from product concept to market in less than three years.

2013

First meetings with potential partners. UK patent application filed

First tile demonstrator constructed



Active Office constructed at SPECIFIC

First trial: 24 tiles printed at SPECIFIC and assembled at Permaflor



Second trial: 40 tiles

2014

International patent application filed

Single tile concept licensed



First meeting with control and electrical companies



First Building as Power Station 'pod' constructed at SPECIFIC

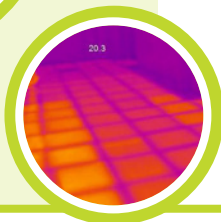
2015

System installed in Permaflor office

330 tiles printed at SPECIFIC



Commercial opportunities identified



With thanks to our partners and supporters

Permaflor
access flooring solutions



GWENT GROUP
ADVANCED MATERIAL SYSTEMS

CONSTRATA
Raised Access Floors

HAC GROUP



GREENBUILD CONSULT
A Complete Sustainable Consultancy

Strategic Partners



TATA STEEL

