

FLASH+

PLUS POINTS

Issue 3 - February 2012

In this issue of PLUSPOINTS we speak to people who are making green construction happen. Sharing case studies, achievements and tips are an important part of FLASH+ and the articles featured here are just a taster of what our SME members can expect from participating in the programme.



In this issue:

Education, education, education! Plus Points speaks to Justin Bere the architect who designed the retrofitted Mayville Community Centre in London about how he and his project team maximised its low carbon footprint and learnt a lot. Justin is one of FLASH+ experts and presents our Soft Landings workshops.

How green is MY home? Queenborough and Rushenden in Kent is the site of a major retrofit project to convert social housing. Now it's time to start measuring up.

INSITES: Briefs on making it happen: How the Green Building Company made conventional UK cavity walls satisfy Passivhaus; Arcola Community theatre company and environmental crusaders on how they are making the lowest carbon theatre in the land - on a shoestring; Architects Heath Avery haven't waited for the recession to end for green construction to catch on

Diary dates

The past couple of weeks have been extremely busy with workshops and site visits – all of which have been 'sold out'. And we are happy to report feedback of 97% excellent/good on the satisfaction scale from our members.

If you are an eligible SME and would like to find out more about growing your business through improving the performance of buildings then check out

– they've already devised assessment models to encourage clients to evaluate the advantages of sustainable buildings.

Big idea: Introducing CarbonBuzz, the new data bank which can tell you how you are doing.

Top tips: Six ways to effective energy management.

Education education education!



New single storey entrance with wildflower meadow roof.

Rapid progress toward green construction will depend on educating the sector as fast as possible suggests architect, Justin Bere, who has just completed a model retrofit at Mayville Community Centre in London

It was an interesting introduction to green thinking when Mayville's trustees were first planning an upgrade to their community centre. The original idea was to try to be green by installing a biomass boiler into their building originally built in the 1890s as a generating station. Justin pointed out that, in a building so energy inefficient, this would be unsustainable in every sense. [READ MORE...](#)

How green is MY home?

Making social housing energy efficient is vital to save tenants and owners money as well as achieve low carbon objectives. 270 homes in Swale, Kent, part of the Queenborough and Rushenden (Q&R) regeneration project, led by Swale Borough Council and housing association Amicus Horizon, are having a range of energy saving measures installed to reduce energy costs and cut carbon to both private owner occupier and social landlord homes. As part of the FLASH+ programme, a detailed analysis on the energy saving performance of the programme's retrofit measures will be carried out by the Institute for Sustainability. These measures include external wall insulation, heating upgrades and energy efficient glazing. [READ MORE...](#)

our website

www.secbe.org.uk/flashplus or call Tina McGeachan on 0118 9207 204

Upcoming events

7th February 2012
Introduction to Soft Landings & Building Performance Evaluation: Workshop
Basingstoke

28th February 2012
Less talk more BIM: Workshop
Crawley

6th March 2012
Less talk more BIM: Workshop
Oxford

18th April 2012
Retrofitting period properties
Hove

Major conference

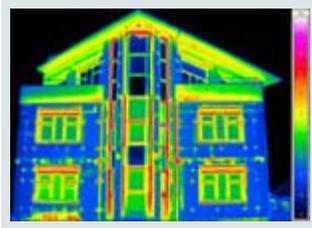
1st May 2012
How to understand and change the performance of buildings
Crawley

For more details on all these events, go to: www.secbe.org.uk/flashplus/flashplus_events or call Tina McGeachan on 0118 9207 204

INSITEs

INSITEs focuses on the practical; delivering green building design and construction. The three briefs below are examples of making it happen.

Thinking out of the green box?



Heath Avery Architects has created two sophisticated programs to help their clients go green. Their Sustainable Investment Model (SIM) looks at existing buildings

and assesses the potential for achieving sustainability through retrofit. But they've gone beyond low carbon buildings and have developed a 'People Payback Calculator', which forecasts the impact of environmental improvements on human performance and productivity. It's one way of marketing your way to green solutions. [READ MORE...](#)

The lowest carbon theatre in the world - on a shoestring.

Arcola Theatre in Dalston is one of the leading fringe theatres in London, founded as a community venture in 2000. To recognise their success and ambition, Hackney Council leased them a



near derelict former paint factory, The Colourworks, in which they are working to create the world's first carbon neutral theatre. The theatre presents high-quality drama, also reaching out to the local community not just giving them diverse programming but also targeted creative learning programmes. Even more radical for a theatre, its members crusade passionately on the environment. [READ MORE...](#)

Green cavity walls

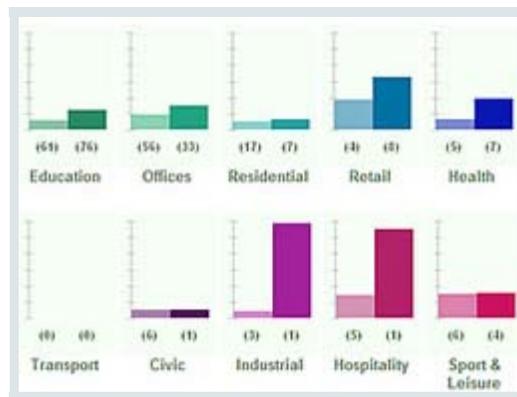
The Green Building Company does what it says on the tin. It has just



completed the construction of a family house in West Yorkshire approved by Passivhaus which uses 90% less energy and is 20 times more airtight than a standard build.

Passivhaus is based on 'Fabric First'; to get the building not to need energy in the first place. "It's also more comfortable with an even temperature because the whole fabric is warmer," explains Bill Butcher, Green Building Company Director. "Normal buildings are like 5th November bonfires, where your front is burning but your back is freezing!". [READ MORE...](#)

Big idea: CarbonBuzz tracks the difference



The graphs illustrate the difference between design predictions of energy consumption and the in-use measured values of energy use in new buildings. CarbonBuzz aggregates this information by building type so that individual buildings can anonymously contribute to a body of knowledge about building performance.

CarbonBuzz is an online tool, intended to increase the evidence base for low energy design solutions. By enabling building owners, surveyors, engineers, and architects to report on the actual versus predicted-at-design energy use of new buildings, it raises awareness of the gap between CO2 emissions forecast and the actual energy use of building once occupied. [READ MORE...](#)

6 Top tips: implementing a simple energy management strategy

Monitor and record - Start taking weekly measurements of gas and electricity readings to get a sense of how much is being used each week. Pay attention to changes in weather that will drive heat usage up or down, and changes in use (extra activities and hours) that will also have an effect on use

Check the energy use at "downtimes" - Check how much electricity is used at midnight/weekends and try to reduce this as close as possible to zero; turn on and off equipment whilst monitoring overall electricity. Using a clip on meter at the fuse box will tell you how much certain appliances and equipment use.

Delegate and manage - Assign someone to make sure everything is off on a Friday (could be cleaners or a late worker) & make sure that someone also checks that everything is off on a Monday morning

Prioritise - Use a plug meter with power readout (a cheap monitor you plug into the wall and plug in equipment through it) to help see where most energy is being used. Check different appliances in different modes (sleep, active, "energy saving", and standby). List the rooms and appliances that use the most electricity and concentrate efforts on improving these areas.

Think long term - Get purchasing managers and policy makers to talk to energy managers about purchases of any energy-using equipment. Ensure that purchasing policies reflect whole life costs rather than sale costs, and develop a process of vetting new equipment.

Motivate your staff - Print out weekly electricity/gas use graphs and pin on wall to raise staff awareness and set an annual target. Any underspend could be split between the company and staff as a Holiday bonus

Top Tips provided by The Pilio Group at <http://smeasure.com/>

The Institute for Sustainability's FLASH+ programme is part-funded by the European Regional Development Fund (ERDF). It has been designed to provide a range of free business support to help over 250 Small to Medium sized Enterprises (SMEs) in the South East of England exploit high growth, low carbon business opportunities. The project will focus on the results from measurement, monitoring and evaluation of building performance and give businesses access to learning and best practice from cutting edge new build and retrofit projects via established trade and professional networks. These will be managed and coordinated by SECBE. All FLASH+ delivery partners are committed towards equal opportunities and diversity, in accordance with the Equality Act 2010.



Institute for Sustainability

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