

Mark Hodson outlines the challenges faced by Hodson Architects in designing an overtly 'green' project – the headquarters for the Ecology Building Society.

Edinburgh – 23 May PROCESS BASED REMEDIATION

Attention CIBIC RIA Seminar at the Scottish Executive examining the benefits of process based techniques in the remediation of contaminated land. Speakers include: Joanne Swain (CIBIC), Mark Hodson (EBS), Craig and Paul Fisher (CIBIC Enterprise). Tel: 020 7222 8691

Amsterdam – 14 June PLANTS FOR PEOPLE

Day Symposium held by Plants for People at Foville, the world horticulture exhibition. The international speakers demonstrate how to improve crop quality, reduce ailments, increase productivity and recovery. The event is chaired by Roger S. Ulrich, director of the Centre for Health Systems and Design at Texas A&M University. Tel: 00 31 70 365 5807

LONDON – 18 June TECHNICAL CONFERENCE

One day conference

held by CIBIC at the Royal Exchange. Theme: 'Sustainable & Sustainable'. The morning session examines the environmental benefits of process based remediation. The afternoon session focuses on the challenge of high rise and sustainability. Speakers include Jeremy Egge, Deputy Divisional manager for sustainable energy, David Butler (BIC) and Roger Park, chairman of the CIBIC panel on sustainable construction. Tel: 020 8675 5211

Nuremberg – 18-21 September GALABAU SHOW

Described as Europe's biggest trade fair for the planning, construction and maintenance of urban green and open spaces. Green roofs are a part of the improvement of ecological quality of life, are key themes. A wide range of products and services covering urban greening, green roofs, transport, recycling, urban design, plants

and seeds. Tel: 00 49 911 86 06 0

Amsterdam – 26-28 October GREEN CITY

Part of the European exhibition, the Green City includes the 'Landed City' which demonstrates how green spaces can be integrated into an urban environment. There is also a mud house, solar walls and a greenhouse, plus a green information centre. Tel: 00 31 15 212 0110

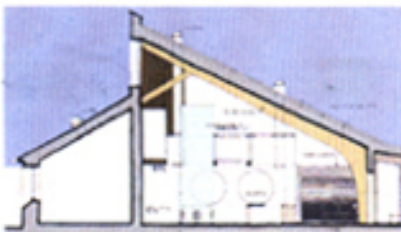
LONDON – 22-24 October SUSTAINABLE ENERGY EXPO

Exhibition at Olympia highlighting the opportunities and viability of sustainable energy, with accompanying case study seminars and workshops. The Renewable Power Association is holding a two day conference entitled Renewable Power Design, which will take place at the NEC on 23-24 October. Tel: 020 7915 5000

The American Hardwood Export Council (AHEC) has launched a new edition of its illustrated Guide to American Hardwood Lumber Grades. The guide includes four additional species – white oak, gum, soft maple and cottonwood – completing the range that AHEC promotes in Europe. Guidance on specification is also included. The guide can be ordered on line (details: www.ahcec.europa.org)

We were appointed to design the Ecology Building Society headquarters in Sildon, west Yorkshire, late in 2000. Like most young practices, we were very aware of sustainability issues but had not had the opportunity to design a truly 'green' building – so this was an exciting and daunting prospect.

Our main responsibility is always to endeavour to provide good quality environments which respond to the specialness of the site,



context and brief. Our approach to sustainability is not one of eco-gizmos or kitschy handicrafts but rather a contemporary architecture with ecological propriety and a clearly understandable strategy and dynamic. But the setting of 'green' targets for the building (U-values, daylighting, air leakage) is essential, and the need for good information and advice is paramount.

The current options are generally OK. Seminars run by the RIBA and BRE give detail and sound background information, although we have found that repetition is possible even when the programmes sound different. The BRE Design Advice scheme is excellent and should be taken up on all qualifying schemes (ie more than 500 square metres). Our 'energy advisor' for the EBS HQ, David Olivier, has proved to be knowledgeable and understanding of our design aspirations across the full range of decision making.

The BREEM assessment system is a useful checklist and works well. The costs can be justified to your client in terms of cheap marketing in response to enhanced 'green'

credentials as well as improved performance. Other lesser known but vital sources of assistance are the AECB (page 38) and also Construction Resources, who can supply materials and offer guidance on solar energy, heating and water management.

The work of the services engineer is obviously important at the design stage but should continue to include post-completion pressure-testing, where appropriate, and the tweaking of control systems. Energy consumption of the Elizabeth Fry Building at UEA by John Miller & Partners was reduced greatly as a result of careful monitoring over a two-year period.

A clear justification for decisions made is the only way of overcoming seemingly paradoxical situations. With the EBS HQ we are pursuing the strategy of 'build tight, ventilate right'. Thermal mass within the building is maximised and exposed. The use of concrete in the floor slabs and walls needs to be qualified in terms of reduced energy consumption over a reasonable time period in order to overturn the inbuilt high embodied energy.

Some of the best performing components (eg windows) are made in north America but does one ship them halfway round the globe or source locally and accept a lower performance standard? Likewise, should timber be supplied from local well-managed forests or is it appropriate to import from fully accredited and licensed forests? Is it not right to support a sustainable source in the Amazon basin?

Aluminium, although a non-starter in terms of embodied energy, is 100 per cent recyclable and is therefore a good long-term bet. Of course recycled aluminium would be better.

Many timber board products are cheap, fit for the purpose and look good. A favourite of ours is Trus Joist's Parallam structural timber, made from waste produced in the processing of timber. Unfortunately many timber products are bonded with phenolic glues and, while some manufacturers are developing water-borne adhesives, can't pressure be applied to make them try harder?

Mark Hodson

Mark Hodson, Hodson Architects



Roderick James Architects have specified an Envirosum-green roof system from the RAM-Roof Garden Consultancy, for this 200m² project in Sidmouth, Devon. A green roof was chosen in order to soften the environmental impact of the scheme, which is located within a wooded area on a hill top. RAM-RGC can provide a 'one stop' solution including design, supply and installation (details: www.ram-rgc.co.uk)