

GREEN ARCHITECTURE DAY 2006

Creating Sustainable Architecture Principles and Case Studies

Presented by Duncan Baker-Brown RIBA
of BBM sustainable design ltd

www.bbm-architects.co.uk



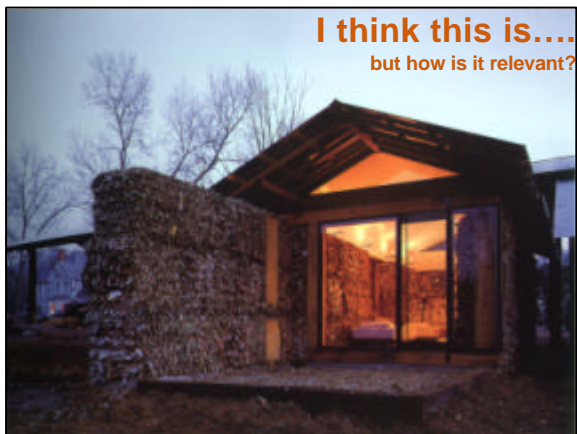
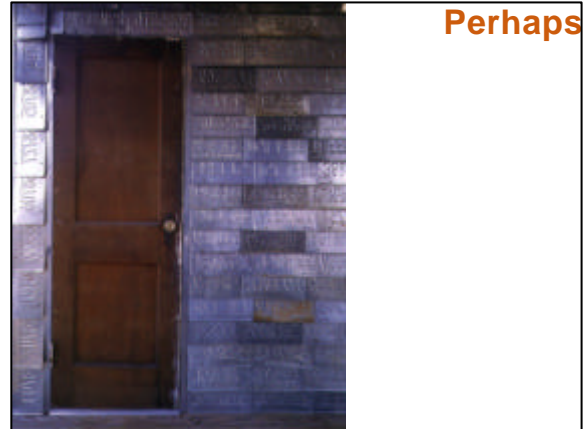
Unfortunately
this is
Sustainable
Design



This is not...
but it is beautiful!



Is this?



What are we doing?

- Creating well insulated + sometimes well sealed buildings
- That sometimes reduce energy consumption in use
- That often cause 'sick building syndrome'
- That do not consider the energy used + pollution created in construction
- Who is guilty?
- WE ALL ARE

What can we do?

- **Consider 'Designing for Demolition'**
 - Your building is a future material resource for others
- **Consider levels of energy + pollution used when selecting materials**
 - Reducing the extent a material is processed reduces its embodied energy + pollution levels as well as the likelihood of in-built toxins
- **Consider non-toxic materials**
 - To reduce the likelihood of 'sick building syndrome'
 - To make construction and disposal safer + easier

What else can we do?

- **SPECIFY LOCAL MATERIALS BECAUSE**
 - It reduces the amount of pollution created in transport
 - They can 'weather' better in native environment
 - They can create a sense of place: a local identity
 - They can help generate local commerce
 - In particular cases they can help support bio-diverse environments

Sweet Chestnut: The Process



Sweet Chestnut: The Process



Sweet Chestnut: The Process



Sweet Chestnut: The Process



Case Study No.1 Sparrowhouse Lewes



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Case Study No.1
Sparrowhouse Lewes



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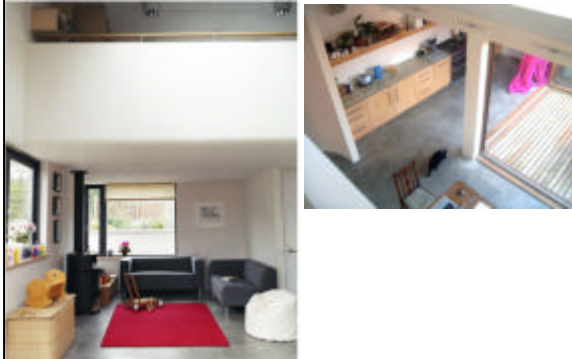
Case Study No.1
Sparrowhouse Lewes



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Sparrowhouse Lewes



Case Study No.1
Sparrowhouse Lewes



Case Study No.1
Sparrowhouse Lewes



Case Study No.2
New House + Studio Hove



Case Study No.2
New House + Studio Hove



Case Study No.2
New House + Studio Hove

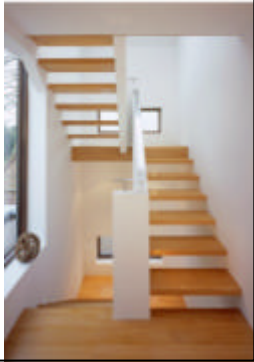


Case Study No.2
New House + Studio Hove



Case Study No.2

New House + Studio Hove



Case Study No.3

Extension to St.Pancras School



Case Study No.3

Extension to St.Pancras School



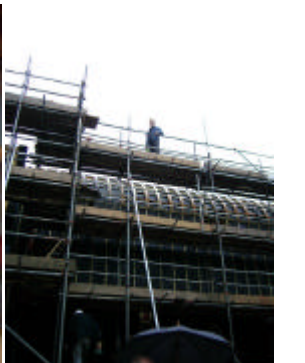
Case Study No.3

Extension to St.Pancras School



Case Study No.3

Extension to St.Pancras School



Case Study No.3

Extension to St.Pancras School



Case Study No.3

Extension to St.Pancras School



Case Study No.3

Extension to St.Pancras School



Case Study No.4

The Bridge



Case Study No.4

The Bridge



Case Study No.4

The Bridge



Case Study No.4

The Bridge



Case Study No.4
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Case Study No.4
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Case Study No.4
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Contact sheet

Low Impact Materials

Coppiced Sweet Chestnut Cladding/Glue Lam structures/ joinery supplied by Inwood Developments tel: 01825 872150

Wood Fibre ground floor insulation, Clay Plaster, Recycled Building Papers by Construction Resource tel: 0207 4502211

Thermafleece Sheep's Wool Insulation- Second Nature UK Limited tel: 01768 486285

Lime Render + Wood fibre Insulation System, Flax Quilt Insulation by Natural Building Technologies tel: 01844 338338

Sedum Roof + Rubber Single Ply Membrane by Prelasti (AAC Waterproofing) on 01248 421955

Double Glazed Windows (Sparrowhouse/ St Pancras / The Bridge)- Rational Windows (UK) Ltd tel: 01869 248181

Treble Glazed Windows Creative Media Centre 2- Swedish Window Company

Folding/ Sliding Doors- Solarlux Systems Ltd tel: 01924 204444

External Solar Blinds to Creative Media Centre 2 by Luxaflex tel: 01293 851010

Paints - Ecos Organic Paints (Sparrowhouse) tel: 01524 858978 + Biofa by Villa Natura (St Pancras School)
tel: 01273 685800

Natural Ventilation + Light Source at The Bridge- Suncatcher by Monodraught tel: 01494 897700