#### Why Do Our Buildings ... and What Can We Do About It?





#### Hank Dittmar

## **The Prince's Foundation**

The Prince's Foundation for the Built Environment is an educational charity founded by HRH The Prince of Wales to improve the quality of people's lives by teaching and practising timeless and ecological ways of planning, designing and building. We are one of 24 charities for which the Prince of Wales is President, together we comprise the largest multi-cause charitable enterprise in the United Kingdom.







#### Evolving Tradition: Learn, Practise, Teach





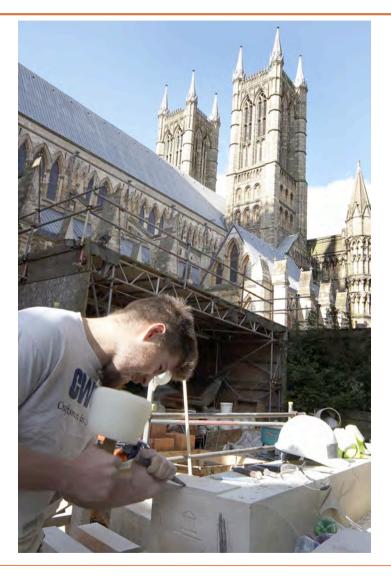


The Good Homes Alliance is a group of housing developers, building professionals and other industry supporters whose aim is to build and promote sustainable homes and communities and to transform the whole of UK house building into a sustainable endeavour.

The GHA was launched on 28<sup>th</sup> February 2007 as a memberbased Community Interest Company (CIC)



### **Experimenting with Simple, Natural Building Systems**





#### **Ecohome Award 2007: Which Upton building won?**





A: All of them; they all meet the same standard!



#### British Gas Study, November 2006

IRT Surveys conducted leak tests on representative buildings in mid 2006 for British Gas and The Prince's Foundation.

Best practice is 8 leakage (m<sup>3</sup>/hr/m<sup>2</sup>) Good practice is 15 leakage (m<sup>3</sup>/hr/m<sup>2</sup>)

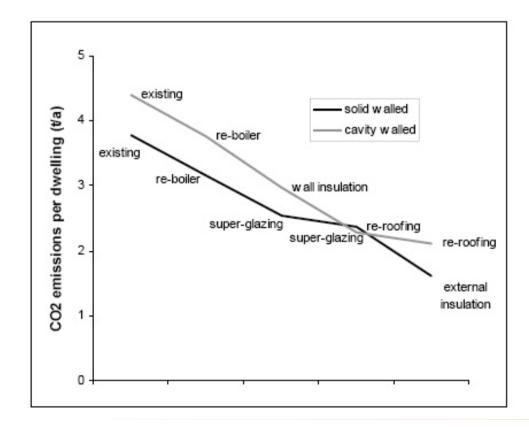
Building Type	Leakage (m <sup>3</sup> /hr/m <sup>2</sup> )
Tudor & Victorian	10.11
1960's	15.1
1970's	11.7
1980's	12.0 - 40.1
1990's	12.0 – 23.6

Conclusion: poor workmanship and construction methods offset impact of contemporary building regulations.

# Solid Walls vs. Cavity Walls

#### **≜UCL**

#### options for improving existing dwellings





**Robert Lowe, UCL, November 2006** 

#### **Prince's Foundation Summer School at Lincoln Cathedral**





## Prince of Wales Traditional Building Craft Apprentices



• A seven month intensive residential programme in traditional building skills, focused on greening traditional buildings, and on building a work force dedicated to the making and reuse of beautiful, long-lived, simple and natural buildings.

• Four New Orleans residents participated in the course, two teachers from Delgado College, and two carpenters from the union. Three graduated as Prince of Wales Master Craftsmen.

#### **Greening Tradition: Two Prototype Wall Systems**





#### **Aerated Clay Block Prototype**



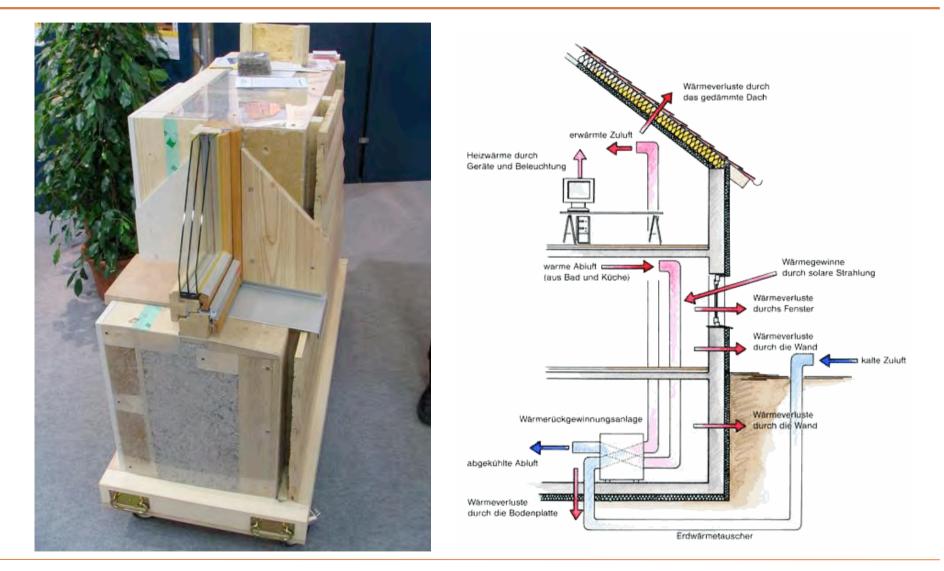


## **Hemcrete Wall**





#### The Alternative: Wall Section of "Passive House"





#### **Building Research Establishment "Innovation Park"**



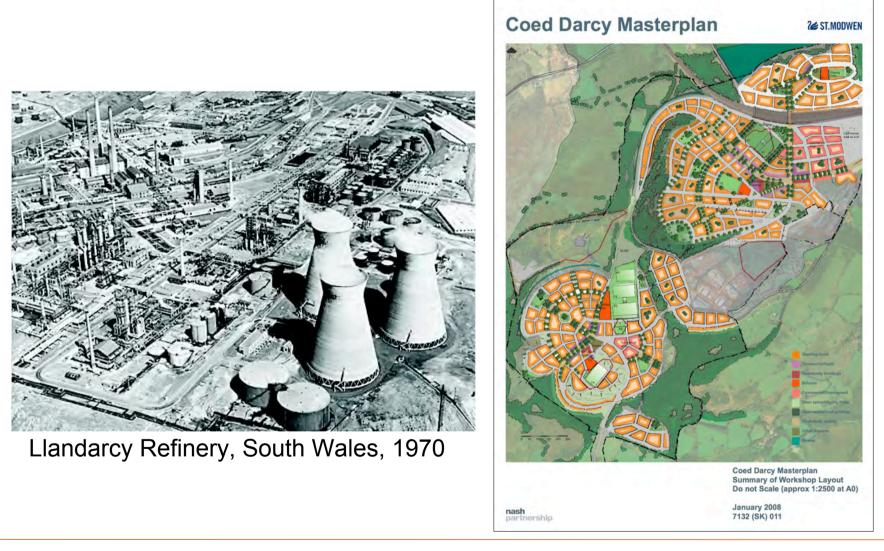
Prince's Foundation "Good Home" to be built here. Specification: aerated clay block and render, materials must come from the ground or be grown. Partner with BRE, Swan, NBM.

#### **BRE Innovation Park**





## **Application: Coed Darcy**





# **Application: Stamford**





# **Application: Ellon**

CRAFT 11 Jonato Bills

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#### SCOTEA GEORGIAN



#### Materials and Applications

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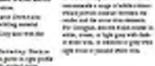
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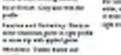
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#### Master Plan and Pattern Book for Ellon, UDA and PFBE, 2007-8









