



# Capturing AECB's Golden Nuggets & Guru Know-How

Promoted by Brian Murphy  
Green Building Encyclopaedia (GBE) proposal to  
Association for Environment Conscious Building (AECB)  
Championed by Julia Bennett and Paul Bourgeois



## This presentation:

- Is available on <http://GreenBuildingEncyclopaedia.uk/>
- Page: ...?P=12210 for PDF added today
- I will build hyperlinks from text content into the relevant pages of the website to expand on the content if you wish to explore further

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## Sheffield 2015 AECB Conference

- Made very welcome after a long absence
- Presented this idea in the exhibition space display
- Generated some interest
- Julia and Paul said we should try to make it happen

16/07/16 Mentioned in Social Media



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## Other reason for this proposal:

- AECB is a fountain of knowledge and expertise
- We know it, but very few other people do
- The AECB Forum helped to spread the word wider than membership (check-out the stats!)
- CarbonLite training is converting others slowly (CLR too)
- Passivhaus Plus is a new outlet to a wider audience
  - Fran pleaded for more engagement
- But there are millions that need to have AECB know-how
- If we are to have any significant effect, we cannot do it alone
- We need to share, more, faster, to those who can act on it
- We must not hold back
  - (no more not wanting to share what is our know-how)

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## Current Doctrine:

### Profits before People before Planet Fiduciary Rules okay

(Legal obligation to make profits for shareholders)

- Trying to change the majority in the industry is impossible
- "I have always done it like this, why change now?"
- Even if they want to change its too big a task
- Youth of the world want future stability
- With guidance can start afresh in their own enterprises
- Youth can carry the torch without the burden
- AECB can show the way



## There are two parts to this proposal:

- Extract the golden nuggets out of the AECB forum
- Capture the know-how of the AECB guru before its lost forever

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## There are two complimentary parts being offered to build on:

- Green Building Encyclopaedia (GBE)
- GBE 2D/3D View: an interface to GBE


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## underlying ambitions

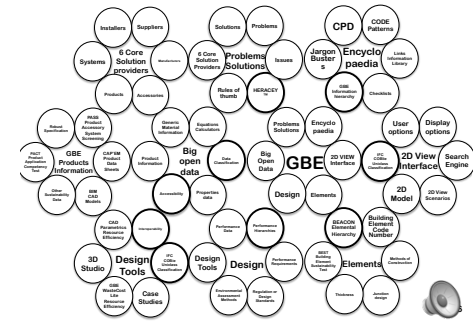
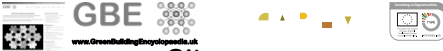
- Paul tells me that the committee
  - and members?
- Want to develop a level of professionalism?
  - Or be more professional?
- To enable fit with and assimilation into mainstream?
- Conventional materials and construction performance is understood and taken for granted and is the default
- Green is unknown and nothing is taken for granted and has to be proved each time
- More research needs to be done or knowledge disseminated in the best way possible to be accessible all when making everyday choices (ASBP similar aim)





# Green Building Encyclopaedia


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## Site map


- 60 items in this mind map
- 275 Page groups in the site map so far
- 1925 pages so far, 30,000 anticipated
- This takes a lot of navigating
- So a novel navigation method has been developed

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## Neural Network Navigation

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## Tapestry

- 1971
- Carole King
- 45 years since you first played it
- You remember every word
- You know the next track before it plays
- That's the way the human brain works
- Nuggets of information stitched together

20


## Neural Network

- Human brains are clever
- So the magic to be found here
- is in the connections (Neurons) and connectivity
- between the nodes (Neurons)
- and the information (Neurons)
- that they store
- and how they connect

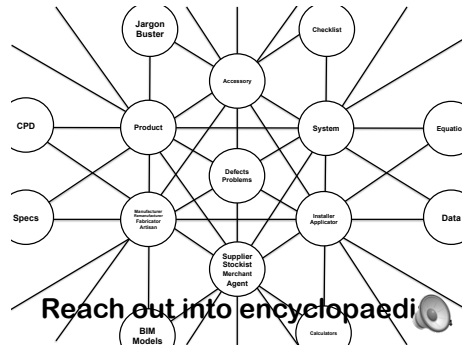
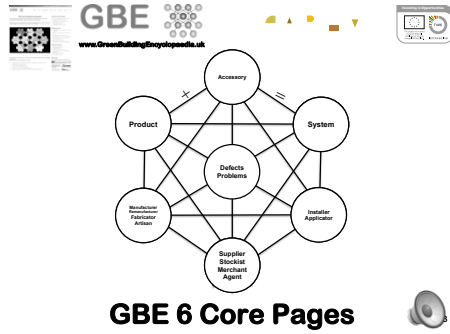


Product Page + Accessory Page = System Page

Product Pages + Accessory Pages = System Pages



## GBE 6 Core Pages



# GBE 2D View into GBE Encyclopaedia

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**Facility/Building Use**

**Facility/Building Use**

- Navigation menu: Go back, Go forward, Drill Down, New Window, Interrogate, Manufacturer, Supplier, Installer, Product, Accessory, System, Materials, Collaboration, Building Use
- Interrogation menu: Jargon Buster, Checklist, CPD Seminars, Specification, Equations, Datasets, Calculators, Code, Patterns, Design, RulesOfThumb, Performance, Case Studies

**Facility/Building Type: Format Variations**

- Navigation menu: Go back, Go forward, Drill Down, New Window, Interrogate, +Basement, +Attic, +Roof, Integral Garage, +Extension, +Conservatory, Sun Space Porch, +Landscape, Collaboration

**Drill Down Sequence Elements**

- Navigation menu: Go back, Go forward, Drill Down, New Window, Interrogate, Elements: Foundations, Basement, Floor, Frame, Walls, Roofs, Landscape, Collaboration

**Elements: Foundation**

- Interrogation menu: Go back, Go forward, Drill Down, New Window, Interrogate, Foundation: Core, Top, Underside/side, Interfaces, Basement, Walls, Floors, Collaboration

**Elements: Floors**

- Navigation menu: Go back, Go forward, Drill Down, New Window, Interrogate, Floors: Core, Top, Underside, Interfaces: Roof eaves, External Wall, Partitions, Collaboration
- Interrogation menu: Jargon Buster, Checklist, CPD Seminars, Specification, Calculators, Library, Links, Code, Patterns, Design, RulesOfThumb, Performance, Problem, Solution

**Elements: Frame**

- Navigation menu
  - Go back
  - Go forward
  - Drill Down
  - New Window
  - Interrogate
  - Frame: **Selected**
  - Core
  - Lining
  - Cladding
  - Interface with:
  - Roof
  - Floors
  - Foundation
  - Collaboration
- Interrogation menu
  - Jargon Buster
  - Checklist
  - CPD Seminars
  - Specification
  - Calculators
  - Library
  - Links
  - Code
  - Patterns
  - Design
  - RulesOfThumb
  - Performance
  - Problem
  - Solutions

**Elements: Stair/Ramp**

- Navigation menu
  - Go back
  - Go forward
  - Drill Down
  - New Window
  - Interrogate
  - Stairs: **Selected**
  - Ramps
  - Walkways
  - Balustrades
  - Interfaces
  - Wall
  - Floors
  - Pavement
  - Collaboration
- Interrogation menu
  - Jargon Buster
  - Checklist
  - CPD Seminars
  - Specification
  - Calculators
  - Library
  - Links
  - Code
  - Patterns
  - Design
  - RulesOfThumb
  - Performance
  - Problem
  - Solutions

**Elements: Ext. Wall**

- Navigation menu
  - Go back
  - Go forward
  - Drill Down
  - New Window
  - Interrogate
  - External Wall: **Selected**
  - Core
  - Inner
  - Outer
  - Interfaces
  - Roof
  - Floors
  - Foundation
  - Collaboration
- Interrogation menu
  - Jargon Buster
  - Checklist
  - CPD Seminars
  - Specification
  - Calculators
  - Library
  - Links
  - Code
  - Patterns
  - Design
  - RulesOfThumb
  - Performance
  - Problem
  - Solutions

**Windows Doors Rooflights**

- Navigation menu
  - Go back
  - Go forward
  - Drill Down
  - New Window
  - Interrogate
  - Window
  - Door
  - Rooflight
  - Roof Window
  - Interfaces
  - Wall
  - Roofs
  - Collaboration
- Interrogation menu
  - Jargon Buster
  - Checklist
  - CPD Seminars
  - Specification
  - Calculators
  - Library
  - Links
  - Code
  - Patterns
  - Design
  - RulesOfThumb
  - Performance
  - Problem
  - Solutions

**Systems: Proofing**

- Navigation menu
  - Go back
  - Go forward
  - Drill Down
  - New Window
  - Interrogate
  - Systems: **Selected**
  - Air/Wind Tight
  - Acoustic Ins.
  - Damp/Gas PM
  - Thermal Insu.
  - Vapour Bar
  - Fire Resistant
  - Interfaces
  - Collaboration
- Interrogation menu
  - Jargon Buster
  - Checklist
  - CPD Seminars
  - Specification
  - Calculators
  - Library
  - Links
  - Code
  - Patterns
  - Design
  - RulesOfThumb
  - Performance
  - Problem
  - Solutions

**Components in Assembly**

- Navigation menu
  - Go back
  - Go forward
  - Drill Down
  - New Window
  - Interrogate
  - Manufacturer
  - Supplier
  - Installer
  - Product
  - Accessory
  - System
  - Materials
  - Collaboration
- Interrogation menu
  - Jargon Buster
  - Checklist
  - CPD Seminars
  - Specification
  - Calculators
  - Library
  - Links
  - Code
  - Patterns
  - Design
  - RulesOfThumb
  - Performance
  - Problem
  - Solutions

**Local**

- Navigation menu
  - Go back
  - Go forward
  - Drill Down
  - New Window
  - Interrogate
  - Site
  - City
  - County
  - Region
  - Country
  - Continent
  - Collaboration
- Interrogation menu
  - Jargon Buster
  - Checklist
  - CPD Seminars
  - Specification
  - Calculators
  - Library
  - Links
  - Code
  - Patterns
  - Design
  - RulesOfThumb
  - Performance
  - Problem
  - Solutions

**Extracting Golden Nuggets**

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**AECB AECB Forum**

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- is very informative,
- has been very popular
  - 71,962 views, 46 replies in 1 topic
    - Congratulations Mark Siddall: Psi values
- was a great way to share know-how;
  - And its static not a drip feed like SM
- was an invaluable part of the AECB offering
  - to its members and way beyond

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### Overtaken by Social Media

- AECB Forum's role has been overshadowed
  - in the last 5-7 years
  - by the enormous success of social media platforms,
  - which can play a similar role
  - but with continually added sophistication
- offer much more to users

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### Whist AECB Forum platform has become moribund

- its content remains as valid as ever.
- By virtue of its format:
  - it is full of golden nuggets
  - buried in long strings of chatter
  - sometimes cyclical and often repetitive.
  - its many strands of discussion were not joined up or cross linked,
  - to the detriment of its users learning opportunities.

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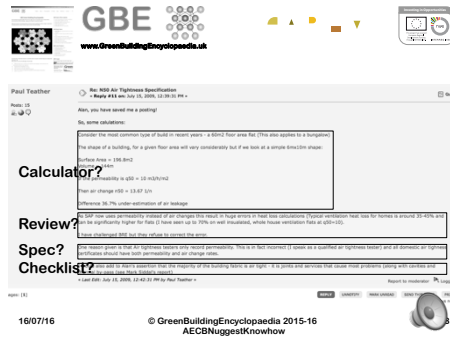
### This GBE proposal is to:

- Determine the ambitions for 'the essence or nuggets',
  - AECB Gurus essential to decide what is valid
- Prepare briefing document and provide training:
  - to project team (AECB members?)
  - to know what to look for to save
  - how each will be used in the end
  - what to discard
- Copy the content out (into Word for example, if it possible?)
- Highlight the essence
- Strike out the chatter (track changes on)
- AECB Gurus & GBE check, confirm approach and catch loose ends
- team members filter files and accept or reject changes
  - Reformat for end uses



- Its 'golden nuggets'
- Convert them into the most appropriate formats:
  - Reference Documents/Bibliographies/Software tools
    - Reviews/critiques of parts
  - Checklist
    - By trade: avoid this, consider these, reclaim and reuse, etc.
  - Datasets, Equations, Calculators, Tools
  - Specifications:
    - Recipes, Materials, Products, Accessories, Systems
    - Elemental assemblies, junctions and details
  - Drawings,
    - Elemental assemblies, junctions and details
  - Outlines: Essence of a thing in Hierarchy
  - Etc. see more below

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Encyclopaedia Know-how Information	Design Principles Code & Patterns Rules of Thumb	Products Materials Accessories	Solution Providers:	Services to manufacturers Suppliers & Installers	News, Blogs Events & Diary
CPD Seminars	Jargon Buster	Methods of Construction Systems	Manufacturers & Suppliers	Consultancy	Links
Specification	Sustainability Checklists	Systems, Elements & Whole buildings	Applicators & Installers	Disciplines	Video & Images
Calculators	Defects & Solutions	Websites & Databases	About GBE	Project Case Studies	Feedback

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Deliver them using website technology

- Join-up all the related information from all relevant Forum discussions
- Links in both directions
- to be as accessible and useful as possible
- (GBE Neural network)

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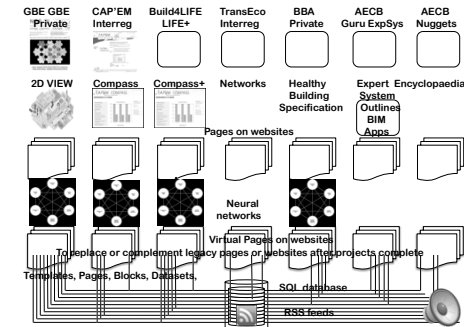


Make available to AECB

- To members and the public at large.
- Via GBE, AECB website(s)
- or both linked up using RSS technology

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Who does what?

- The process of assimilating this information
- Could and should be a joint effort between
- AECB members and GBE in close liaison throughout.
- Shared: spread nuggets between many, if little funding
- Carried out by AECB members
- Checked by GBE if fully funded
- Building Website/parts/linking GBE happy take on when funded

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Capture the know-how of AECB Gurus before it is lost forever.

Who are the Gurus?

- People like:
- David and his numbers and number crunching
- Mark e.g. Psi and Thermal Bypass
- Paul e.g. Airtightness
- Recent Graduates with Dissertations, Masters or PhDs on focused subjects

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Priorities:

- Oldest first
- Younger will do this with their own know-how during their career, I hope

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Process

- Work with the Gurus to determine what could be useful to others in their absence
- With AECB agreement.
- Record their knowledge and know-how turn it into:

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Know where

- Sources of data or knowledge
- Bibliography with links to PDFs or online shops

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- How to use and apply the data in detail
- Method statements detailed enough to follow
- Procedures to get best results

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- Pages of illustrated text
- By the GURUs or assisted by writers/editors
- Builds to Encyclopaedia
- Extracts from magazine back copies (Proposal 3?)

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- Take one Issue
- Download brain(s)
- Organise into subtopics to become pages
- Make into web pages and hyperlink like a daisy chain
- Cross link with other Issue daisy chains

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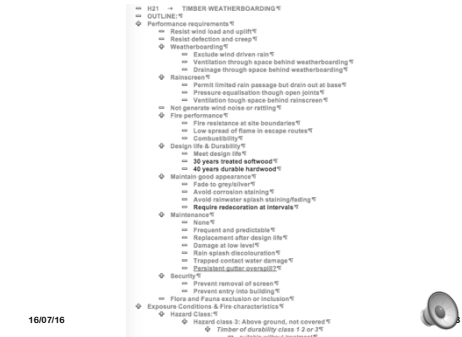
- Data sets of materials, properties
- Equations to interrogate data sets to make calculators
- Calculators to become Apps (for BIM for example)
- Multiples to create modelling tools

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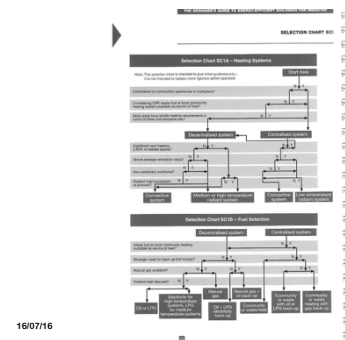


- Capture their analytical thought processes
- Materials and methods Hierarchical Outlines of their essence (Weatherboarding example)
- Develop expert-system to allow others to experience them and learn from them
- Convert as much as possible into design and decisions tools

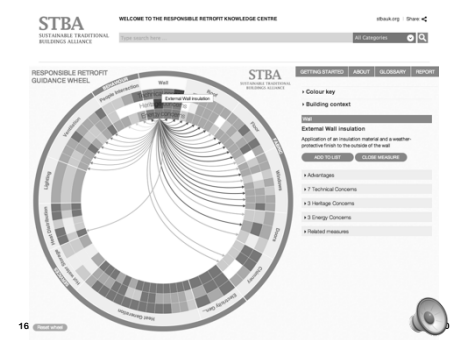
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16



- GBE would welcome the opportunity to work with AECB to:
- extract the essence of the Forum,
  - capture its Guru knowledge and what it's individual members do and
  - make it readily available to all of it's members and to a wider audience.

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The process of assimilating this information

- would be a joint effort
- between AECB members
- Expert system authors
- (up skill AECB members?)
- GBE in close liaison throughout.

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Why would anybody want to do this?

- A chance to work with Gurus
- A learning opportunity
- Potential for specialisation
- Specialist careers awaiting
- A Guru's Mini me

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Who would want to do this?  
Somebody:

- With an inquisitive mind
- that wants to develop Apps
- who needs to know a Guru's know-how
- who want to be the Guru's mini-me

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All contributors

- Of know-how, time or funding
- Acknowledged on each page or text block footer
- Along with © Establishment
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Funding: Indigogo Crowdfund 50% AECB 50%
- Linked to individual or company pages;
- In turn linked to all contributed pages

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Costs

- relate to time to carryout tasks
- all need to be paid to do this  
–or no incentive

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Income apportioned as appropriate:

- overhead costs to hosting website
- income for time or know-how contributors
- repay AECB to cover development costs
- if not funded by other means

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- Brian Murphy BSc Dip Arch (Hons+Dist)
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  - Environmentalist by Actions
- Greening up my act since 1999
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