

# CAP'EM

Cycle Assessment Procedure for Eco-Materials



# Project



- EU Interreg funded 4 year project
- NW Europe (NWE) inter-region, 5 countries
  - Belgium, Holland, UK, part Germany and part France
- Euro 8 million
- 12 organisations
- Started June 2009
- Launches:
  - September 09 at PassiveHouse09 Belgium
  - March 10 at EcoBuild 10 UK London

A project working in partnership with leading organisations and businesses based in North West Europe:

**FR** | CD2E • [www.cd2e.com](http://www.cd2e.com)  
 Globe 21 • [www.globe21.fr](http://www.globe21.fr)  
 Fédération Nord des SCOP BTP • [www.scopbtp.org](http://www.scopbtp.org)

**UK** | Association of Community Rail Partnerships • [www.acorp.uk.com](http://www.acorp.uk.com)  
 Business Support Kent • [www.businesssupportkent.co.uk](http://www.businesssupportkent.co.uk)  
 GreenSpec • [www.greenspec.co.uk](http://www.greenspec.co.uk)

**BE** | Green Building Cluster Namur • [www.clusters.wallonie.be](http://www.clusters.wallonie.be)  
 VIBE • [www.vibe.be](http://www.vibe.be)

**DE** | Handwerkskammer Münster (HWK) • [www.demozentrum-bau.de](http://www.demozentrum-bau.de)

**NL** | De Groene Stee • [www.degroenestee.nl](http://www.degroenestee.nl)  
 Stichting Viba Expo • [www.svweb.nl](http://www.svweb.nl)

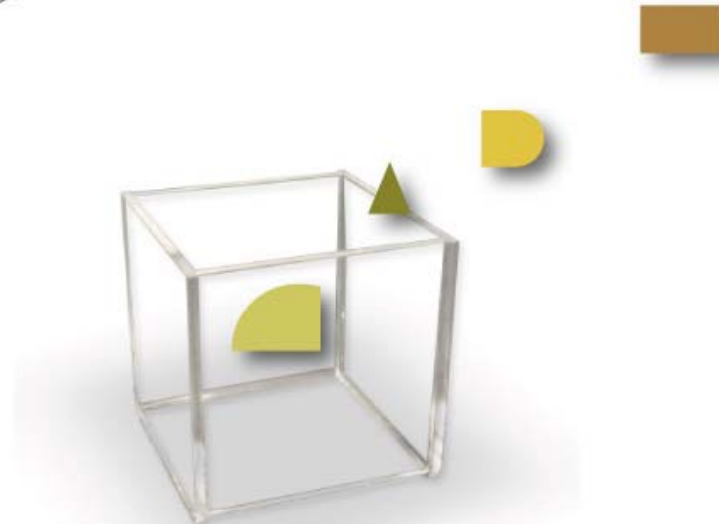


[www.capem.eu](http://www.capem.eu)

**CAP'EM**

Cycle Assessment Procedure for Eco-Materials

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Cycle Assessment Procedure for Eco-Materials

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## Develop and promote Eco Construction Materials

Eco construction materials provide an effective and lasting solution to the environmental issues facing the construction sector. However, it can be difficult to define exactly what constitutes an eco-material as they seldom have recognised industry certification. This makes it hard to compare their performance with traditional building materials.

For the eco-materials market to flourish, it requires a robust evaluation process that:

- defines and identifies eco-materials using common terms of reference and criteria
- develops a solid knowledge-base for manufacturers
- supports the lasting integration of eco-materials into mainstream construction products

The CAP'EM (Cycle Assessment Procedure for Eco-Materials) Project is a North-West European programme drawing together the expertise of 11 partner organisations to improve the production, distribution and use of eco-materials.

The **objectives** of this project are to:

1. Develop a shared methodology for the life cycle analysis of the environmental and health impacts of construction materials.
2. Evaluate and classify a series of materials according to this new methodology.
3. Compare the strengths and weaknesses of these materials, and develop technical and commercial information to communicate this to the market place.
4. Disseminate the evaluation results for the selected eco-materials.

### Simple and practical tools for the Construction Industry

The goal of the CAP'EM project is to promote eco-materials and to provide the construction industry with simple and practical tools to support their adoption:

#### Shared methodology

Define eco-materials.  
Evaluate their ecological credentials.

#### Resource centres and demonstration sites

See eco-materials in use.  
Gather performance data.

#### Web site

Information hub for eco-materials:  
*case studies, industry news,  
training, events...*



**CAP'EM**  
Cycle Assessment Procedure for Eco-Materials

Methodology

Evaluation

Classification

Dissemination

Demonstration



# Scope



- Definition: Eco Material
- Methodology: Simplified LCA Life Cycle Analysis
- Evaluation: Software to process product data
- Communication: 100 Results & web based Tool, promote products, develop supply chains
- Demonstration: build, extend, refurbish buildings using them and build mock-ups within them
- Dissemination: information, learning, training

# Objectives



- Develop the market for and use of Eco-materials and products
- Develop supply chains throughout NWE
- Develop awareness of and skills with eco-materials and methods within the construction community

# WP1



- Define an eco material
- Jointly develop a Simplified Life Cycle Assessment SLCA
- Aimed at SME companies producing Eco-materials
- that are available within the NW Europe region
  - manufactured by SMEs within NWE
- but could be manufactured further afield
  - manufactured outside region but available and used inside the inter-region

# Objective



- Seek out materials that:
  - Are made of rapidly renewable materials
    - E.g. plant, tree or animal based
  - Are made from naturally abundant & accessible resources
    - E.g. Mineral
  - Are used in as close to natural a state as possible
    - Use low carbon, energy & chemicals in manufacture
  - Use materials that sequester carbon in growth
    - That are from low carbon to carbon negative
    - And some assist in reducing production of carbon during use
  - Are healthy in manufacture, application, use and disposal

# Objectives



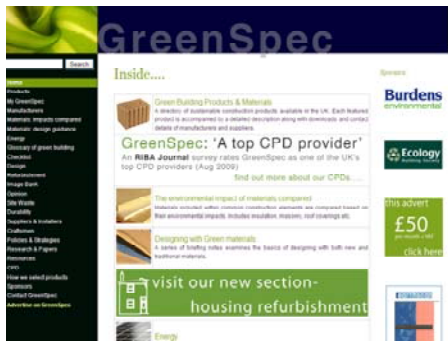
- Develop a method that could become European wide
  - Fits CEN TC 350 standard framework
  - Embraces EU Consumer Council critique of CEN TC 350
- Simplified
  - to keep costs down
  - Allow simple whole building analysis by designers
- Open book,
  - Can be scrutinised by others
  - Robust under scrutiny
- Support SMEs in a top-heavy market



# UK LCA specialist

- Dr Andrew Norton of renewables
- Agricultural LCA expertise
- Non-Food Crop products
- Renewable Building group (Bio-Renewable Building Products)
- Critical of LCA methodologies and LCA catalogue
- Wishes for an open book method
- Usable by design professions

- Evaluation
- Identify 300 eco-materials/products evenly across 5 countries
  - Consider how products work as elemental assemblies
  - shortlist 100 to process
- Gather information on 100 products and feed into the SLCA to obtain results
- test the methodology with data from 30 of the 100 short listed
- Publish the results on [www.capem.eu](http://www.capem.eu)
- [www.greenspec.co.uk](http://www.greenspec.co.uk) & others



# GreenSpec: WP2



- GreenSpec is the lead partner of WP2
- involved throughout 4 years,
- GreenSpec will aim to develop 100-300 more on-line product pages with SLCA data
- Links to manufacturer, supplier and their information
- product specifications for each of them
- [www.greenspec.co.uk](http://www.greenspec.co.uk)

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Building Society

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## Inside GreenSpec....



### Green Building Products & Materials

A directory of sustainable construction products available in the UK. Each featured product is accompanied by a detailed description along with downloads and contact details of manufacturers and suppliers.



### The environmental impact of materials compared

Materials included within common construction elements are compared based on their environmental impacts. Includes insulation, masonry, roof coverings etc.



### Designing with Green materials

A series of briefing notes examines the basics of designing with both new and traditional materials.

[Online Surveys & Market Research](#)

**Is Passivhaus relevant to you?**

**Yes**

80.0%

**No**

8.3%

**Not sure**

3.3%

**Unfamiliar with the term**

8.3%

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**the commercial carpet tile guide**

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# visit our new section- housing refurbishment



## Energy

Guides to designing with zero and low carbon energy technologies.



## Glossary of Green building

New subject = new expressions & acronyms



## Checklist

This CAWS menu-based checklist takes the specifier through the construction process - highlighting areas where sustainable construction best practice can be achieved.



## Design

This section examines the techniques of sustainable construction through the combination of materials and renewable technologies.



## Refurbishment

If Carbon Reduction targets are to be met, much progress has to be made in bringing the UK's existing building stock up to a greater standard of energy efficiency. This section addresses the key design strategies.



## Image Bank

A collection of images of inspirational 'green' buildings - ranging from the large commercial to the small domestic.



## Opinion

We invite leading industry commentators to express their views about matters concerning sustainable construction

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## Handbook of Sustainable Building

buy now at: £49.95

earthscan



## Passive Solar Architecture Pocket Reference

buy now at: £12.99

earthscan



## Thermal Analysis and Design of Passive Solar Buildings



### Image Bank

A collection of images of inspirational 'green' buildings - ranging from the large commercial to the small domestic.



### Opinion

We invite leading industry commentators to express their views about matters concerning sustainable construction



### Site Waste

Around 20% of the UK's waste originates from construction sites. This section provides a short introduction to the key concepts involved in reducing waste.



### Durability

The longer the whole life performance and lower the whole life cost, the better a component performs from a sustainability perspective. This section looks at a wide range of common construction components and assesses their whole life value.



### Policies & Strategies

A collection of publications from the EU, UK government, local government and NGOs outlining climate change and sustainable construction policies and strategies.



### Research & Papers

A collection of papers and publications which explore current thinking and policy.



### CPD

GreenSpec offers a wide range of in-house CPD seminars.



### How we select products

This section explains how GreenSpec examines and evaluates products that are submitted to be registered on the GreenSpec database.



**Thermal Analysis and Design of Passive Solar Buildings**  
buy now at: £80.00

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## L681 Thermal insulation

- external walls
- pitched roofs
- SIPs
- flat roofs
- intermediate and separating floors
- ground floors
- internal walls / partitions
- services
- general applications

### external walls

Manufacturer	Product	Type	
Termex	Termex	loose cellulose for timber frame construction	✓
Excel	Warmcell 500	loose cellulose for timber frame construction	✓
Plant Fibre Technology	Isonat	hemp and cotton slab for timber frame construction	
Isovlas	Isovlas	flax slab for timber frame construction	
Black Mountain	Sheep's wool	wool rolls for timber frame construction	
Second Nature	Thermafleece	wool rolls for timber frame construction	
YBS	Non-itch	polyester slab for timber frame	✓

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## Termex

### Cellulose thermal insulation for wood-frame construction

Termex cellulose blown fibre insulation is suitable for timber frame, warm roof and cold roof insulation. It is manufactured from sustainable material (timber) and is recyclable. Termex breathes; the fibres react to moisture in the same way as the other timber parts of a building.

#### SUSTAINABILITY

Termex insulation materials are manufactured from clean newsprint. Termex is made in Finland from traceable sustainable timbers. Non-volatile boric minerals are used to protect the insulation against fire, rot and rodents. The manufacturing process is energy efficient using just one tenth of the energy used to make mineral wool fibres. When the building lifecycle expires, Termex can be reused as insulation or as a soil conditioner.

#### THE ADVANTAGES OF CELLULOSE FIBRE INSULATION

Cellulose fibre is a natural alternative based on renewable resources and sustainable development. Termex cellulose fibre insulation has been type approved by the Finnish Ministry of the Environment for wall and roof insulation. Blown and sprayed cellulose insulation has become increasingly popular in Europe and North America for the following reasons:

- Seamless and precise insulation
- The breathing capacity of the material and excellent user experience
- Natural and safe raw materials. The non-volatile boric minerals used to prevent fire and rot secure the excellent properties of cellulose fibre.
- Compared with mineral wool fibres for insulation value but at one tenth the energy



- MyGreenSpec is an on-line specification assembly tool
- Create a virtual text-based building in a day
- Diagrams in hierarchy help choose methods of construction for all elements
- Components of elements are replaced with products
- An elemental specification falls out the end of the process

# MyGreenSpec 09

# Assembling

The self assembling specification

[Jump to WP3](#)



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## My GreenSpec



LORourke  
New build construction  
Last Updated: 15-05-2009



[Download your Outline Specification as text](#)

### Construction elements

#### Foundations

[add an element](#)



[design your own element](#)



#### Basements

[add an element](#)



[design your own element](#)



#### Ground floors

[add an element](#)



[design your own element](#)



#### External walls

[add an element](#)



[design your own element](#)



#### External wall / roof

[add an element](#)




[design your own element](#)




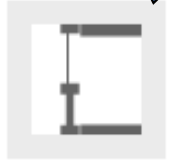




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### External walls

-  Cavity double-leaf, masonry
-  Cavity double-leaf, framed inner
-  Single solid
-  Framed & glazed

- External walls
  - add an element +
  - design your own element +
- External wall / roof
  - add an element +
  - design your own element +



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Single solid



Solid block requires further insulation



Cellular insulating blocks

External walls

External wall / roof



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Solid block requires further insulation



Solid in-situ concrete wall E10



Solid fired clay block F15



Solid concrete block F10



Solid unfired clay block F13

External walls

add an element +

design your own element +

External wall / roof

add an element +

design your own element +

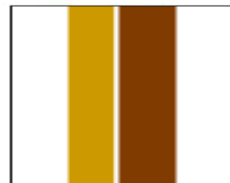


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Solid fired clay block F15



Insulated render M21

Insulated render M21

External walls

add an element +

design your own element +

External wall / roof

add an element +

design your own element +

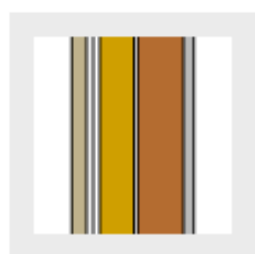


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Insulated render M21 - There is 1 element in this group.



*-high embodied energy, +high thermal mass and +high decrement insulation, +air-tight inner*

- Mineral render on/with reinforcing mesh
- High decrement, thermal insulation, \_ x rigid board, \_\_ mm.
- Fired clay cellular block wall
- Mortar
- Lime or clay plaster
- Paint: internal emulsion



[- select -](#)

ref: 21.m21.f10.m20.02

External walls

[add an element +](#)

[design your own element +](#)

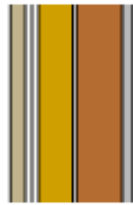
External wall / roof

[add an element +](#)

[design your own element +](#)

## External walls

location?



change element ↶

remove element ✕

↑  
↓

save

*-high embodied energy, +high thermal mass and +high decrement insulation, +air-tight inner*

Mineral render on/with reinforcing mesh

add product +

High decrement, thermal insulation, \_ x rigid board, \_\_ mm.

add product +

Fired clay concrete block wall

add product +

Mortar

add product +

Lime or clay plaster

add product +

Paint: internal emulsion

add product +

add an element +

design your own element +

## External wall / roof

add an element +

design your own element +

## Separating walls (party walls)

add an element +

design your own element +

## Internal walls & partitions

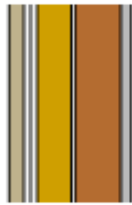
add an element +

design your own element +

## Upper floors

## External walls

location?



change element ↶

remove element ✕

*-high embodied energy, +high thermal mass and +high decrement insulation, +air-tight inner*

### Mineral render on/with reinforcing mesh

Add a product from the database - [select this link](#) -, or:-

save

cancel

High decrement, thermal insulation, \_ x rigid board, \_\_ mm.

add product +

Fired clay cellular block wall

add product +

Mortar

add product +

Lime or clay plaster

add product +

Paint: internal emulsion

add product +

add an element +

design your own element +

## External wall / roof

add an element +

design your own element +

## Separating walls (party walls)

add an element +

design your own element +

## Internal walls & partitions

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## L681 Thermal insulation

- external walls
- pitched roofs
- SIPs
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- intermediate and separating floors
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- services
- general applications

### external walls

Manufacturer	Product	Type	
Termex	Termex	loose cellulose for timber frame construction	✓
Excel	Warmcell 500	loose cellulose for timber frame construction	✓
Plant Fibre Technology	Isonat	hemp and cotton slab for timber frame construction	
Isovlas	Isovlas	flax slab for timber frame construction	
Black Mountain	Sheep's wool	wool rolls for timber frame construction	
Second Nature	Thermafleece	wool rolls for timber frame construction	
YBS	Non-itch	polyester slab for timber frame	✓

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L2 Complete construction entities  
 L3 Structural and space division  
 L4 Access, barrier and circulation  
 L5 Coverings, claddings, linings  
 L6 General purpose fabric  
 L7 Services  
 L8 Fixtures and furnishing

YBS	Non-itch	polyester slab for timber frame construction	✓
Pavatex NBT	Timber Frame Pavaclad System	external wood fibreboard insulation system for timber frame construction with cladding	✓
	Timber Frame Diffutherm System	external wood fibreboard insulation system for timber frame construction with render	✓
	Steel Frame Pavaclad System	external wood fibreboard insulation system for steel frame construction with cladding	✓
Pavatex NBT	Pavatherm	wood fibreboard for timber frame construction	✓
	Isolair	wood fibreboard, water resistant, for ventilated facades	✓
	Pavatherm Plus	wood fibreboard, interlocking, waterproof, for ventilated facades	✓
Saint-Gobain Isover	Isowool - CWS	glass fibre for full or partial-fill cavity walls	✓
	Isowool - Hi-Cav 32	glass fibre for full-full cavity walls	✓
	Isowool - Hi Therm	glass fibre for partial-fill cavity or party walls	✓
	Isowool - Walltherm	blown glass fibre for cavity walls	✓
	Timber Frame Roll and Batt	glass fibre roll and batt for timber frame construction	✓
InstaFibre	Yellow Wool	blown glass fibre for cavity walls	✓
	White Wool	blown glass fibre for cavity walls	
Rockwool	Cavity	mineral wool slab for full-fill cavity walls	✓
	High Performance Partial Fill	mineral wool slab for partial -fill cavity walls	✓
	Energysaver	blown mineral wool for cavity walls	✓
	Flexi	mineral wool slab for timber frame construction	✓



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L2 Complete construction entities

## Pavatex-NBT Pavatherm

### Wood fibre insulation board

'Application: roofing and weathering wall construction.

Pavatherm is a woodfibre board to EN 13171: Fibreboards for building constructions; Insulation material for thermal protection. The board does not contain any glue nor wood preservers.

Pavatherm is quality monitored by the FMPA Stuttgart.

Pavatherm is applied in roof constructions (inter beam and over beam constructions) and in wall constructions.

Boards are supplied in standard size of 1020 mm x 600 mm (thicknesses of 20, 30, 40, 60, 80, 90, 100mm), 1020 x 2050 mm (thickness of 40 and 60 mm).

The edges of Pavatherm insulation boards are straight.

Pavatherm is effective in reducing the U value (thermal transmittance), in improving acoustic sound protection and summer heat protection (decrement delay). Pavatherm guarantees an active breathing housing. Pavatherm can be used in new and renovation buildings.

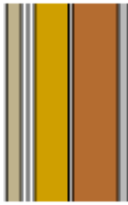
Pavatherm is applied in over rafter and inter rafter insulations as well as in timber construction walls. Pavatherm is not waterresistant. Therefore it must be protected with a water-resistant layer as Isolair "L" or a breather, waterproof membrane.'

Thermal Conductivity (K) = 0.038 W/m K (when measured to EN12687)



### External walls

location?



change element ↻

remove element ✕

save

*-high embodied energy, +high thermal mass and +high decrement insulation, +air-tight inner*

**Mineral render on/with reinforcing mesh**  
add product +

**High decrement, thermal insulation, \_ x rigid board, \_\_ mm.**  
add product +

[Pavatex-NBT Pavatherm](#)

**Fired clay cellular block wall**  
add product +

**Mortar**  
add product +

**Lime or clay plaster**  
add product +

**Paint: internal emulsion**  
add product +

---

add an element +    design your own element +

### External wall / roof

add an element +    design your own element +

### Separating walls (party walls)

add an element +    design your own element +

### Internal walls & partitions

add an element +    design your own element +



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- CPD
- How we select products
- Sponsors
- Contact GreenSpec
- Advertise on GreenSpec**

LORourke  
New build construction  
Last Updated: 22-09-2009



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## Construction elements

### Foundations

add an element +

design your own element +

### Basements

add an element +

design your own element +

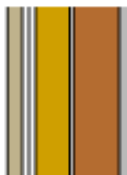
### Ground floors

add an element +

design your own element +

### External walls

location?



change element ↻

remove element ✕

*-high embodied energy, +high thermal mass and +high decrement insulation, +air-tight inner*

Mineral render on/with reinforcing mesh

add product +

- Home
- Products
- My GreenSpec
- Manufacturers
- Materials: impacts compared
- Materials: design guidance
- Energy
- Glossary of green building
- Checklist
- Design
- Refurbishment
- Image Bank
- Opinion
- Site Waste
- Durability
- Suppliers & Installers
- Craftsmen
- Policies & Strategies
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# My GreenSpec

Signed in as: **BrianSpecMan** (Sign Out) | My GreenSpec Home

My GreenSpec



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## Construct

### File Download

Do you want to open or save this file?



Name: MyGreenSpec\_31292276.doc  
Type: Microsoft Office Word 97 - 2003 Document  
From: [www.greenspec.co.uk](http://www.greenspec.co.uk)

Open Save Cancel



While files from the Internet can be useful, some files can potentially harm your computer. If you do not trust the source, do not open or save this file. [What's the risk?](#)

#### Foundations

add an element

#### Basement

add an element

#### Ground floor

add an element

#### External walls

location?



change element ↻

remove element ✓

-high embodied energy, +high thermal mass and +high decrement insulation, +air-tight inner

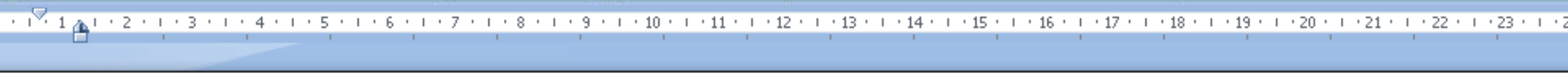
Mineral render on/with reinforcing mesh

add product +

Font: Arial, 12, Bold, Italic, Underline, Text Color, Background Color, Font Color, Font Style (ABC, abc, Aa, ab), Font Effects (ABC, abc, Aa, ab)

Paragraph: Bullets, Numbering, Decrease Indent, Increase Indent, Line and Paragraph Spacing, Paragraph Spacing, Paragraph Style, Paragraph Orientation, Paragraph Shading, Paragraph Borders, Paragraph Background

Styles: Normal, No Spacing, Heading 1, Heading 2, Title, Subtitle



Created on: 07-05-2  
Last Updated: 22-09-2

GreenSpec

Specifier: Brian Murphy

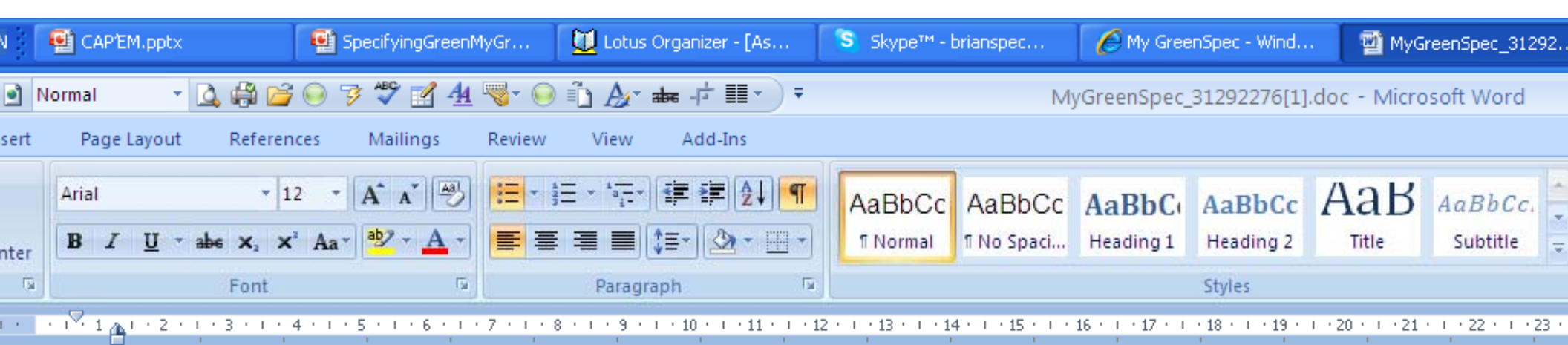
Project name: LORourke

Project environment: New-build construction

## OUTLINE SPECIFICATION

Foundations

Basements



• → **Mineral-render-on-with-reinforcing-mesh** ←

∞ Reference (colour, size, code etc.): \_\_\_\_\_ ¶

• → **High-decrement, thermal-insulation, x-rigid-board, mm.** ←

Pavatex-NBT-Pavatherm ←

Manufacturer: Pavatex ←

Address: c/o Natural Building Technologies, The Hangar, Worminghall Road, Oakley, Bucks, HP18 9UL ←

Tel: 01844 338 338 ←

Email: info@natural-building.co.uk ←

BRE Ecopoints: 4.7 (cradle-to-grave), -0.33 (cradle-to-gate) ←

BRE Environmental profile: unrated ←

Other environmental standards: ISO 14001; Natureplus; ←

3rd-party accreditation: none ←

Reusability / Recyclability: recyclable & reusable ←

% of post-consumer waste: 99.5% waste wood from local forest / timber yards ←

Life expectancy: life of building ←

Country of manufacture: Switzerland ←

∞ Reference (colour, size, code etc.): \_\_\_\_\_ ¶

• → **Fired-clay-cellular-block-wall** ←

∞ Reference (colour, size, code etc.): \_\_\_\_\_ ¶

• → **Mortar** ←

∞ Reference (colour, size, code etc.): \_\_\_\_\_ ¶



# GreenSpec

- Home
- Green building products**
- My GreenSpec
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Search

## Pavatex-NBT Pavatherm

### Wood fibre insulation board

'Application: roofing and breathing wall construction.

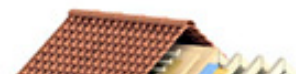
Pavatherm is a woodfibre board to EN 13171: Fibreboards for building constructions; Insulation material for thermal protection. The board does not contain any glue nor wood preservers.

Pavatherm is quality monitored by the FMPA Stuttgart.

Pavatherm is applied in roof constructions (inter beam and over beam constructions) and in wall constructions.

Boards are supplied in standard size of 1020 mm x 600 mm (thicknesses of 20, 30, 40, 60, 80, 90, 100mm), 1020 x 2050 mm (thickness of 40 and 60 mm).

The edges of Pavatherm insulation boards are straight.



- Methodology and assessment tool developed into Web-based free-access tool
  - free to use by SMEs
  - Assistance available from partners: paid for by SME
  - % of income pays for long term maintenance of tool and output data
- [www.capem.eu](http://www.capem.eu)

## WP3



- Communications
- CAP'EM website/intranet will be used to promote project, its partners & outputs, their showrooms and link them all up
- Own Launches & Conferences
- Show at Industry Exhibitions
- Presentations at other project events

# WP3

- Support the development of supply chains for the manufacturers
- From each country into each country
- GreenSpec already work with Builders Merchants
  - Some Green others Greening up
  - Burdens Environmental & EH Smith
  - list many UK importer/agent/stockists/distributors/merchants/showrooms
- Burdens recently bought into Kent's eco merchant and taken the brand nationwide

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## Specialist suppliers and installers

Manufacturer	Service
<b>FSC timber and products suppliers</b>	
<a href="#">List of FSC timber merchants</a>	UK, European, North American, Tropical hardwoods and softwoods.
<a href="#">List of FSC component suppliers</a>	Frame and truss fabricators, claddings and shingles, windows, doors and flooring.
<a href="#">List of FSC board suppliers</a>	Chipboard, hardboard, MDF, particleboard, pineboard and plywood.
<b>Windows and Doors</b>	
<a href="#">Green Building Store</a>	The Green Building Store (Holmfirth, West Yorks) supply their own ecoplus range as well as the Megrame range of windows and doors.
<a href="#">Ecomerchant</a>	Ecomerchant (Faversham, Kent) supply the Vrogrum range of timber windows and doors.
<b>Plaster and Render</b>	
<a href="#">Natural Building Technologies</a>	Natural Building Technologies (Oakley, Bucks) supply the BaumitBayosan range of renders, plasters and mortars along with the Claytec range of clay plasters.
<a href="#">Michael Wye &amp; Associates</a>	Michael Wye & Associates (Devon) supplies lime render and plaster.
<a href="#">Natural Deco</a>	Natural Deco (Stratford upon Avon) supply the Aglaia and Beeck ranges of mineral plaster.
<b>Lime products</b>	
<a href="#">Ty-Mawr Lime</a>	Ty-Mawr Lime (Brecon, Powys) supplies lime putty, pre-mixed lime mortar and plaster, limewash and hydraulic lime.
<a href="#">Limetec</a>	Limetec (Henley-on-Thames) supply their own range of varying strength hydraulic mortars.

- Investments
- Build, extend or refurbish showrooms
- Create full scale construction mock-ups in showrooms
- Build industry wide communities around the venues
- Develop and run trainings: designers to tradesmen
- Run topical exhibitions/conferences

# Actions

- UK Partners planning 2 venues
- Build/extend/refurbish eco-build showrooms
  - BSK Business Support Kent
    - Showroom and Training centre
  - ACORP Huddersfield
    - Eco-Build centre Railway watertower refurbishment
- Exhibit throughout NWE and eco-build showrooms
- Promote materials and methods to construction community
- Run education and training events
  - Kent CC & Business Link
  - GreenSpec & TGR use venue



- UK LCA Expert opinion
- [GreenSpec opinion](#)
- [End](#)



# UK LCA expert

- I feel the potential for the resultant SLCA is huge.
- Especially in the light of the industry wide suspicion and distrust of 'BRE Green Guide to Specification'
- I have long thought that the only requirement for a rival to Green Guide is a usable open database.
- In essence what Green Guide is, but without the controversial black box.



- The more I talk to people in construction and local government the more I realise that people want to know the raw data,
- so they can add up the impacts for themselves.
- There would be no specific limit on each material used, just comparable figures for a whole project which can then be compared with other designs.



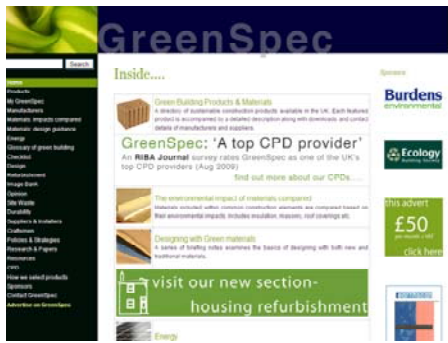
- If a client's main environmental policy requirement is reducing CO2 then they could pick out only the CO2 figures
- without it being buried under what someone else has deemed important
- (i.e. the suspect “weighting” exercise).
- Then choose a design that suits.



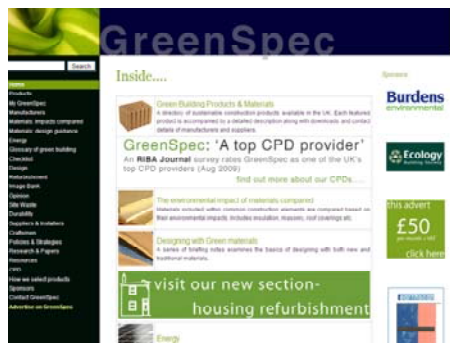
- How happy would people in your profession be to add up the figures?
- Would they rather pay for a dumb-down EH/CfSH/BREEAM GreenGuide approach?

# GreenSpec's position

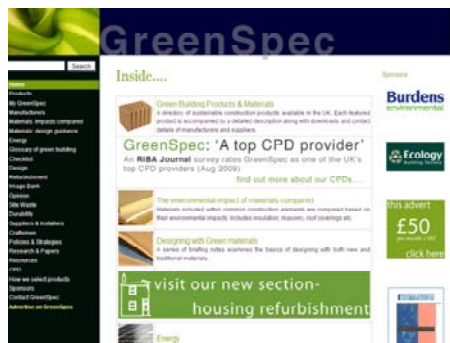
- Since my GreenSpec launch in 2001 I have been arguing that BRE's EcoPoints are good and ABC rating is bad.
- 'A' being the top of the pile is also a fundamental flaw because you cannot get any higher, without A+ A++ A+++ etc.
- I have also been arguing that an Asthmatic family need their designer to be able to concentrate on one issue (IAQ indoor air quality) and an energy consuming business to concentrate on another (Energy and/or CO2)



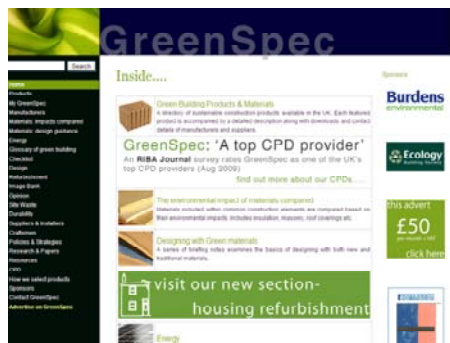
- I have always wanted to provide information so designers can choose individual ingredients and assemble them how they like (it's what architects do after all)
- If there is a simple system to total up a score then that would be great, BRE Envest 3 could have done it but its embroiled in BRE Green Guide
- CAP'EM could provide an alternative to BRE Green Guide for Government DCLG to consider



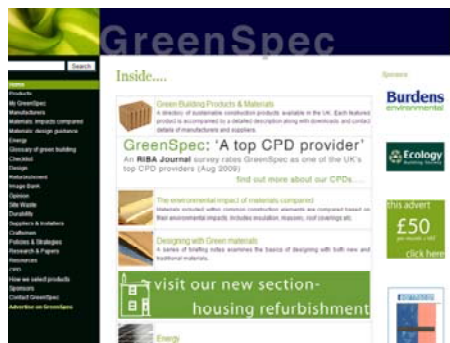
- MyGreenSpec is now launched, it assembles clauses for any materials in logical and appropriate combinations with a green flavour
- It has potential to add up the scores too.
- All that is needed is a Simple spreadsheet to total up the figures then anybody can concentrate on the issues that are relevant to the project and client.
- Anything simpler like BRE GGtS but believable as well will be a winner I am sure.



- We also have a rough idea of an even simpler scoring system that just scores a point for addressing an issue, from a list of about 150 (currently) I have started compiling it and it has been presented in the CAP'EM WP1 debate.



- CAP'EM will give us an opportunity to do develop MyGreenSpec directly
- The calculator development may come as a spin off.
- I have every confidence that BRE cannot get there starting from where they did and heading in the direction they are.
- We can because we are architects and specification writers.



- Inevitably there will be some who do not care and will be happy for the BREEAM assessor to sit in the corner and call out 66% at the end of the design review meeting.
- Architects are usually a bit sharper than that
- I would want to know what for.

- Brian Murphy
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- Scribd: W [www.scribd.com/brianspecman](http://www.scribd.com/brianspecman)
- LinkedIn, Facebook, AEC, Plaxo, etc.
- GreenSpec [www.greenspec.co.uk](http://www.greenspec.co.uk)
- MyGreenSpec
- <http://www.greenspec.co.uk/html/mygreenspec>