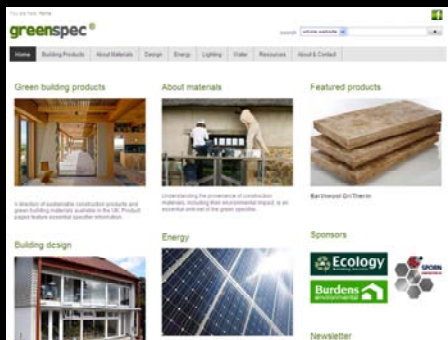


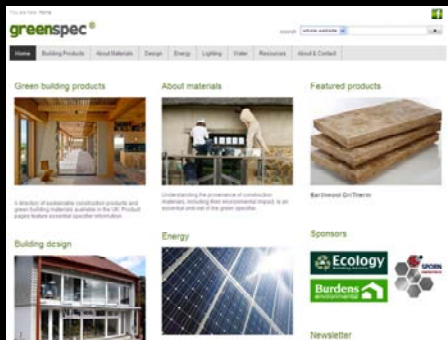
Defects, Liability, Claims & Sustainable Building

This & contained presentations

- **Scribd:** www.scribd.com/brianspecman
- **> Collection > Green Is The Colour =**
http://www.scribd.com/document_collections/2581793
- **> collection > UWE RIBA Part 3 Specification & Liability**
http://www.scribd.com/document_collections/2369157
- **> collection > About Specification =**
http://www.scribd.com/document_collections/2375402
- **> collection > GreenSpec & MyGreenSpec =**
http://www.scribd.com/document_collections/2323768
- **> Collection > CAP'EM**
http://www.scribd.com/document_collections/2442078



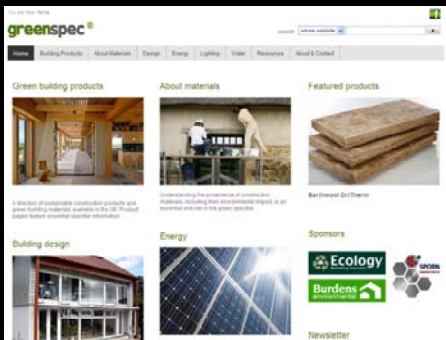
- **Brian Murphy**
 - Architect and Specifier (£2405m so far)
 - Director of GreenSpec
- **Sub-Partner of CAP'EM**
 - Cycle Assessment Procedure for Eco-Materials
 - Potential alternative to BRE Green Guide to Specification
 - Interreg Funded: €8m 50%
 - UK Partner: BSK-CIC
 - 4 year 10 partners 5 countries NWE



- Past present and future legislation
- Cost & Value Engineering
- How GreenSpec can help you
- MyGreenSpec

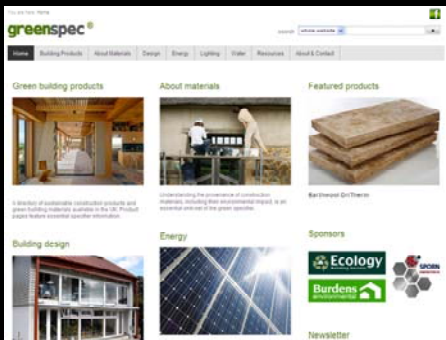
Past, present and future legislation

- the implications of EU directives and how the construction industry must adapt and adopt higher standards



Green Legislation

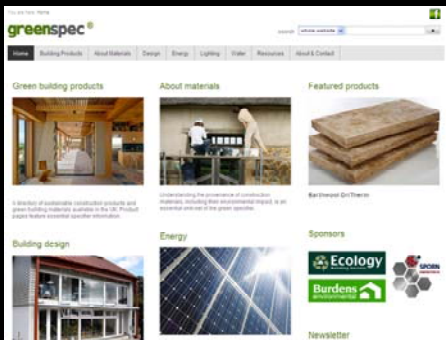
- 1999 BD Conference
 - ‘Green is the Colour’
 - Legislation driving Green Building
 - Half an hour to fill and nothing to report
 - In research I prepared a Chronology of the green movement up to 1999:
 - International, Legislation, Fiscal Drivers, EU, Government, Acts, Regulation, Players, Publications, Actions, Ethical activity



Pre 1999



- Significant Directives/legislation Standards/ Specifications
- H&S at Work Act
- Environmental Protection Act 1984
 - Duty of Care
- Building Regulations Part C



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Procurement

- Treaty of Rome 1957
- Construction Products Directive 1992
- EU Procurement Rules
 - Case Law EU PR (Bus services)
 - EU Procurement Rules 2
 - Or Equivalent (not similar, not & approved)
- OGC Office of Government Commerce

OGC Office of Government Commerce

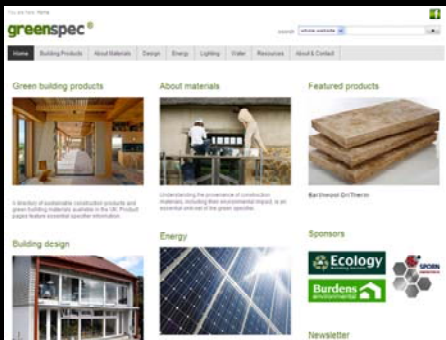
- Quick Wins Best Practice Voluntary Specifications
- Buy Sustainable - Quick Wins
 - need upgrading
- E.g. UK Government Timber Procurement policy:
 - CPET
 - FSC = PEFC
 - PEFC was set up to provide alternative lower standards
 - FLEGT Forest Law Enforcement Governance and Trade

GPP Green Public Procurement

- EU Green Public Procurement rules
 - to replace current UK system
 - EU Procurement Rules + Revisions apply
- UK interpretation:
 - Central Government setting higher standards than GPP
 - OGC will adopt GPP for Local Government
- E.g. Nordic Swan
- E.g. EU Ecolabel
- Indoor air quality: addressed, could do better

EUPR Environmental & Social criteria permitted

- Four rules apply:
- 1. Award criteria must have a link to the subject matter of the contract
- 2. Award criteria must be specific and objectively quantifiable
- 3. Award criteria must have been advertised previously
- 4. Award criteria must respect Community law



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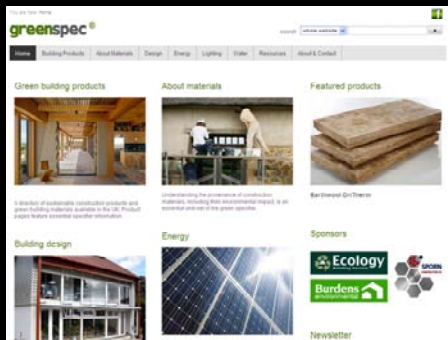
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Waste

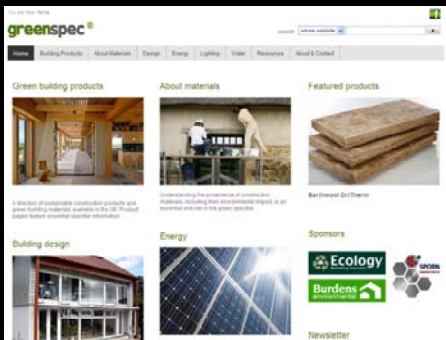
- Landfill and Hazardous Waste Regs.
 - European Waste Catalogue
 - ODC Ozone Depleting Chemicals
- Site Waste Management Plans 2004-2008
- Duty of Care
- Fly tipping > Site Closure
- £50,000 fines and/or 5 years
- ASBOs for bad behaviour
- Confiscation & crushing of vehicles

23/11/2010 Brighton&HDC dishing out spot fines for no SWMP 18



Biodiversity

- Wildlife Protection Act
- Habitat Regulations
 - £5000 fine per Bat/Roost disturbance/prevention
 - In direct conflict with Building Regulations
 - Approved Document L
- Tertiary Documents
 - BCT & GreenSpec Bats & Birds in Zero Carbon Buildings Book



Energy

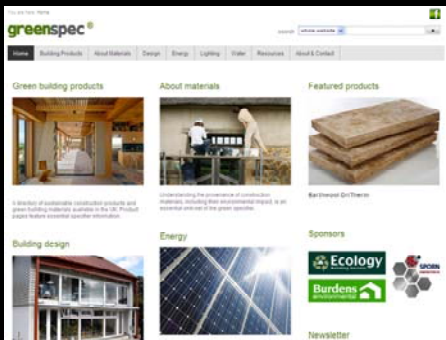
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- EPC & DEC
- Government Property: much is G rated
 - London Average: G Rated
- Setting out objective to demonstrate by example
 - Improve property
- Even New Build Needs work
 - E.g. British Library
 - E.g. Suffolk CC
- Will we ever get sued for incompetent buildings?
- Fuel poverty for 100% glazed facades Air-con



Materials & H&S

- CHIP
- COSHH
- CDM
- WEEE
- RoHS
- REACH (article on GreenSpec Peter Ruifrok and Alan Best)

CRC Carbon Reduction Commitment

- Major obligations,
- targets must be met
- Operational costs addressed for the first time?
- Many new buildings under PFI will fail to deliver:
 - Contractual requirements
 - who wrote the contracts ? Why so badly?
 - and who is checking compliance? & How?
 - CRC requirements
- Refurbishment/refit of PFI buildings inevitable

CRC Carbon Reduction Commitment

- Who: Big power & heat consumers
 - Electricity: >6,000 megawatts/hour (MWh)
 - 4000-5,000 UK organisations affected
 - Non-participation will be a criminal offence.
- Pay upfront for amount of CO₂ they will generate, based on last years bills
- If they improve their estate:
 - reclaim money for CO₂ reductions
- Failure to improve:
 - do not get money back

Costs and value engineering

- Don't cost cut and call it VE
 - VE stuff into projects not out of them
 - maximising the benefits of sustainable choice

Landfill Tax & Escalator

- An expensive tax
- Added to the cost of buying the materials and the cost of its removal as waste
- Just seen as an overhead on construction
- Which the Employer pays, not the builder
- Not yet seen as a fine for bad behaviour
- 34-40% of materials delivered or arising end up in skips (BRE)
- Resource Efficient Design must be part of our offering

VE High performance windows

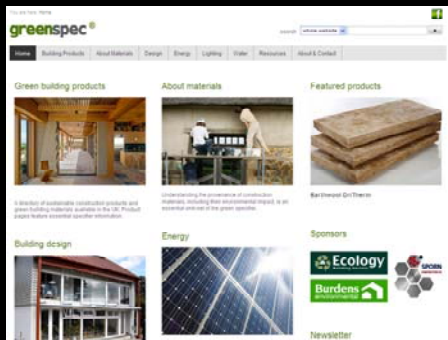
- Viewers, insulators, heaters, ventilators, noise deadeners, air filter/trickle vents
- with integral adjustable blinds:
 - coolers, privacy screens,
- Or ventilation with heat recovery

VE Permeable Pavement:

- Recycled aggregate from demolition arisings,
- Drive, Parking, footpath, solar collector,
- Avoiding falls, gullies, channels, drains, kerbs, petrol interceptors
- rainwater harvester, groundwater top up, SUDS drainage, G/WSHP, landscape irrigation supply,
- Water cleaning system: with live bacteria eating the hydrocarbons

How GreenSpec can help you:

- Growing the team with experts: Lighting, Water, Carbon
- Products: & Latest additions
- Design guidance:
 - New Build and Refurbishment
- Material characteristic comparisons
- Durability & Whole Life Cost data
- Jargon Buster: demystifying new terms
- Waste
- Legislation, Policy & Guidance
- Opinion
- Research & Reports
- Suppliers
- Image Bank
- and much more



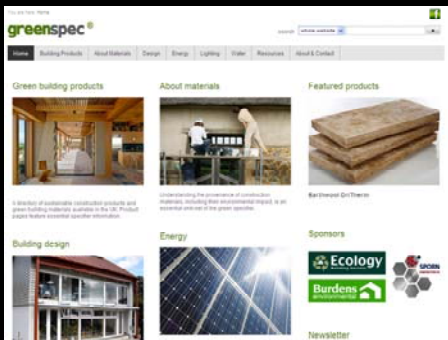
Product Pages

- Introduce new products or remind us of those with green credentials
- Justify our choice
- Link to literature, Certificates, etc.
- Link to manufacturer:
 - Website, contacts, PDF information
- Link to supplier:
 - Stock levels, availability, costs, order time,

The Context:

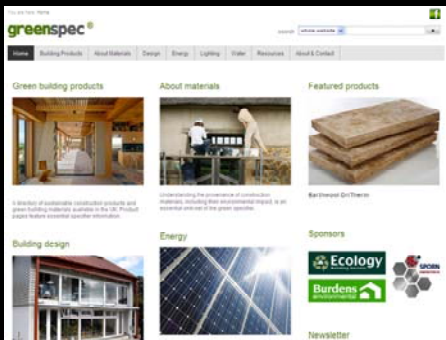
Design & Specifications

- Design is getting more complicated
- Green requirements coming at you from every direction
- We relegate Green Issues to an Assessor
- Rules books do not engage with all the issues: healthy materials and indoor air quality, competent building
- Assessors say Material Credits are not worth the effort except at Code 5 or 6
- Schools: no credit for Timber: Use Concrete
- BRE Green Guide says PVC is good
- We are not thinking green
 - Or we are thinking BRE Green
 - Not GreenSpec Green



Materials

- GreenSpec select products using 57 published criteria/filters and many more
- Competence, Proper materials, Compatibility, Specifiers/Employer's Choice, etc.
- CAP'EM will provide a simplified LCA
- Aligning with natureplus (D) & IBO (Au)
- Aligning with TC350 in due course (EU)



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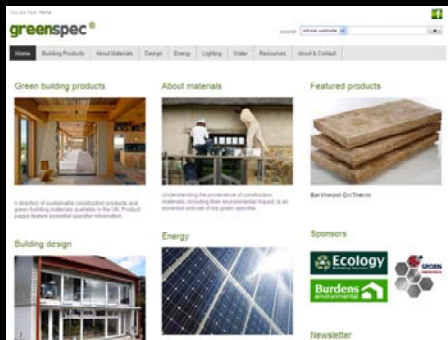
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Design

- BIM will be expected in future Government Procurement
 - Elemental approach
- Resource efficiency should be on our agenda
- High performance will be taken as read
 - Code 5 and above, Passivhaus, Minergie,
- New methods of construction may be unfamiliar to us

23/11/2010 – Some of us are still unsure about VB and BMs 36



Specification

- The nightmare task that lands on our desk every year of so
- That we programme to take a week but takes a month
- That we leave until Sunday before Tender on Monday
- That includes repetitive tasks every time we do one
- Working with new materials and methods needs a lot of research
- The information is never at hand
- We must scrutinise the details and specify at length
- We don't have time for the inevitable meetings with the Reps.

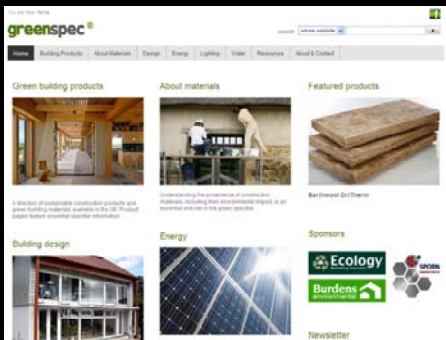
The nightmare has ended

MyGreenSpec

- Assemble a virtual building in a day
- Choose how to make its many parts from ready made competent assemblies, add claddings, linings, finishes
- Be given performance advice about the methods you chose and reconsider if you wish
- Having chosen the methods for the elements, select products to replace the materials in each component
- The elemental specification assembles itself
- You just hit 'Specify', Word opens the file.
- Links back to GreenSpec Product Pages

Product Availability

- The Specification is sent to a builders merchant
- They email back a schedule of products with:
 - Availability, stock levels, order time, price
- Offer to police the specification when the contractor starts to purchase



MyGreenSpec

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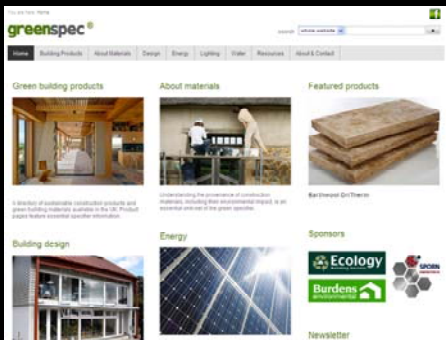
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- Things can only get better
- Ready made with choice
- Competent construction with guidance
- Specification all on its own
- Better control of the end result
- Carbon reductions achieved

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- Brian Murphy BSc Dip Arch (Hons+Dist)
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- Specification Writer by Choice
- Greening up my act since 1999
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- Scribd: www.scribd.com/brianspecman
- Facebook: <http://www.facebook.com/pages/GreenSpec/77375462337>