Pamela Dziwulska
(Architect, SPAB Scholar, ICOMOS NZ Chairperson)

The Contribution of Maintenance to Heritage Buildings and Sustainability

ICOMOS NEW ZEALAND

S·P·A·B

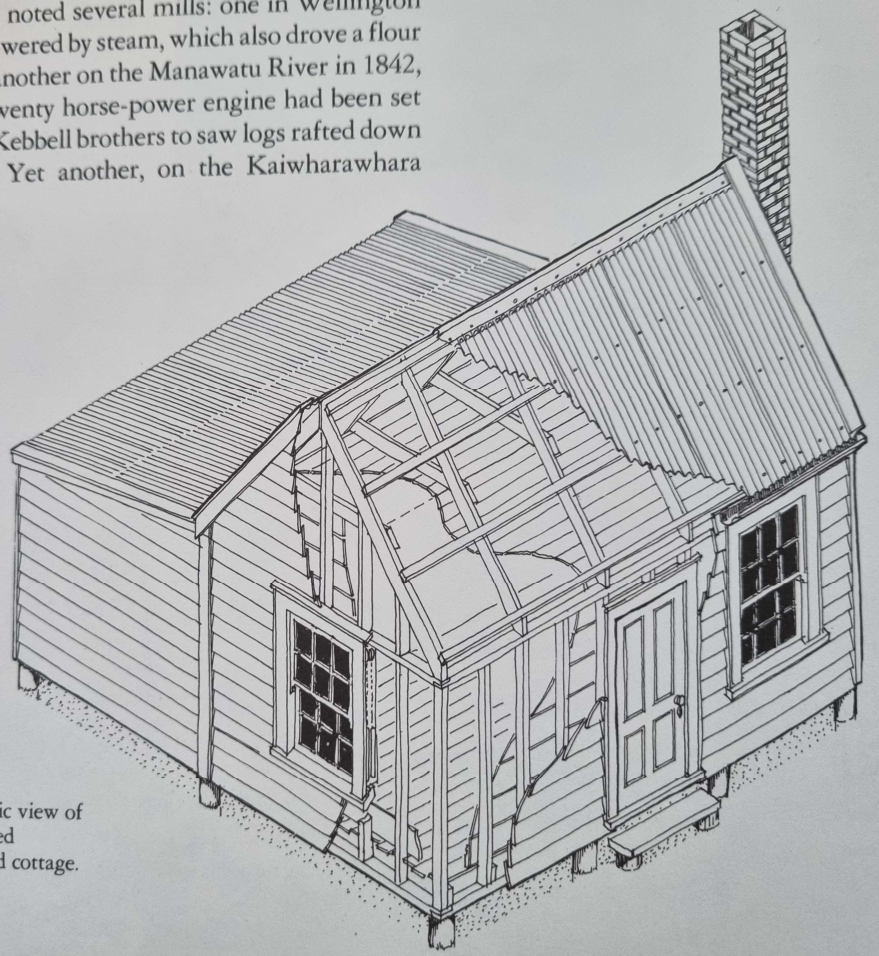
77. Northland houses:
(a) Cottage in the Kaipara district; *Matakohe Museum*
(b) Bedggood Cottage, Waimate North. *HPT.*

distinctive local style. No

45. Sawmiller's house with bark roof, Southland. *Wallace Museum.*

BAREFOOT IN WINTER? DOES FASHION INFLUENCE HOW WE BEHAVE WITH BUILDINGS?

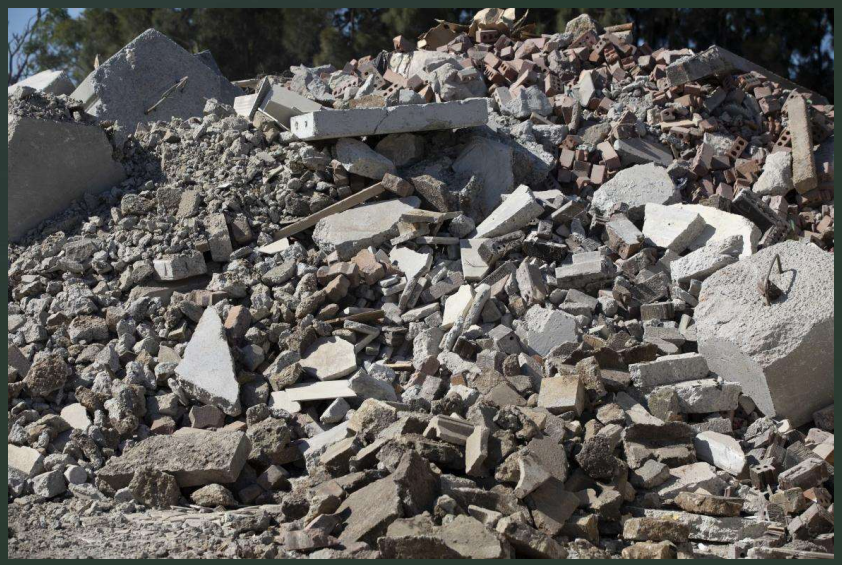
Wakefield noted several mills: one in Wellington in 1840 powered by steam, which also drove a flour mill; and another on the Manawatu River in 1842, where a twenty horse-power engine had been set up by the Kebbell brothers to saw logs rafted down the river. Yet another, on the Kaiwharawhara

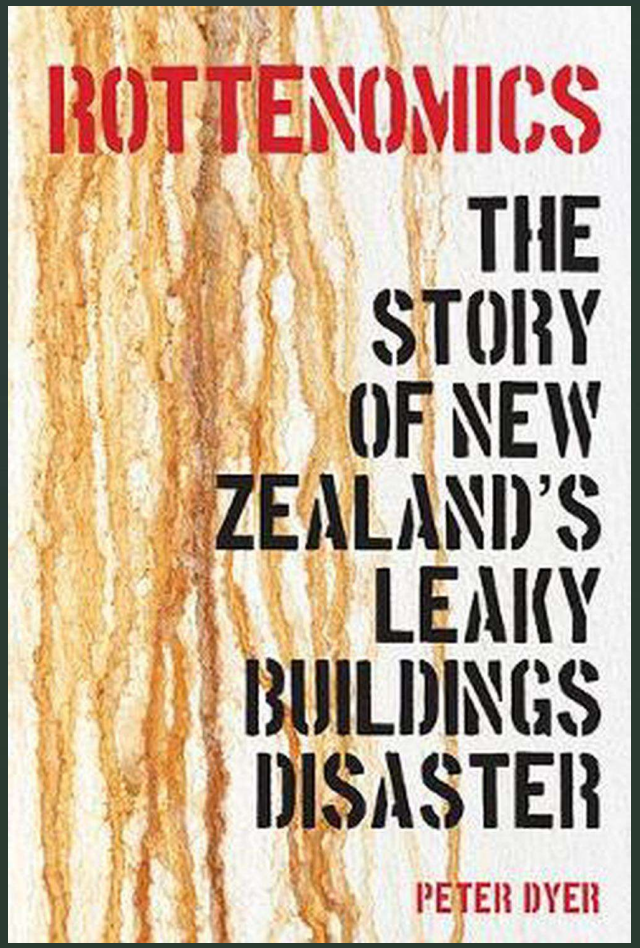


49. Schematic view of timber-framed weatherboard cottage.

WHERE DOES IT COME FROM?

WHERE DOES IT GO?

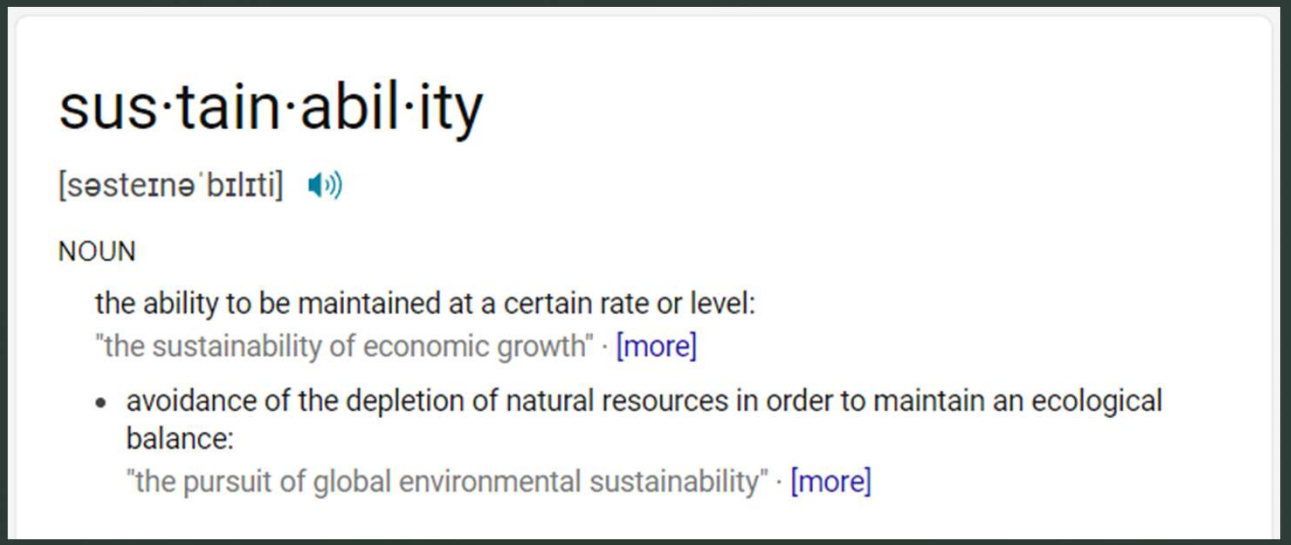




"174,000 THE NUMBER OF NEW ZEALAND HOMES BUILT BETWEEN 1985 TO 2014 THAT WERE/ARE DOOMED TO ROT"

"A CONSERVATIVE GUESS OF THE EVENTUAL TOTAL COSTS OF LEAKY HOMES:

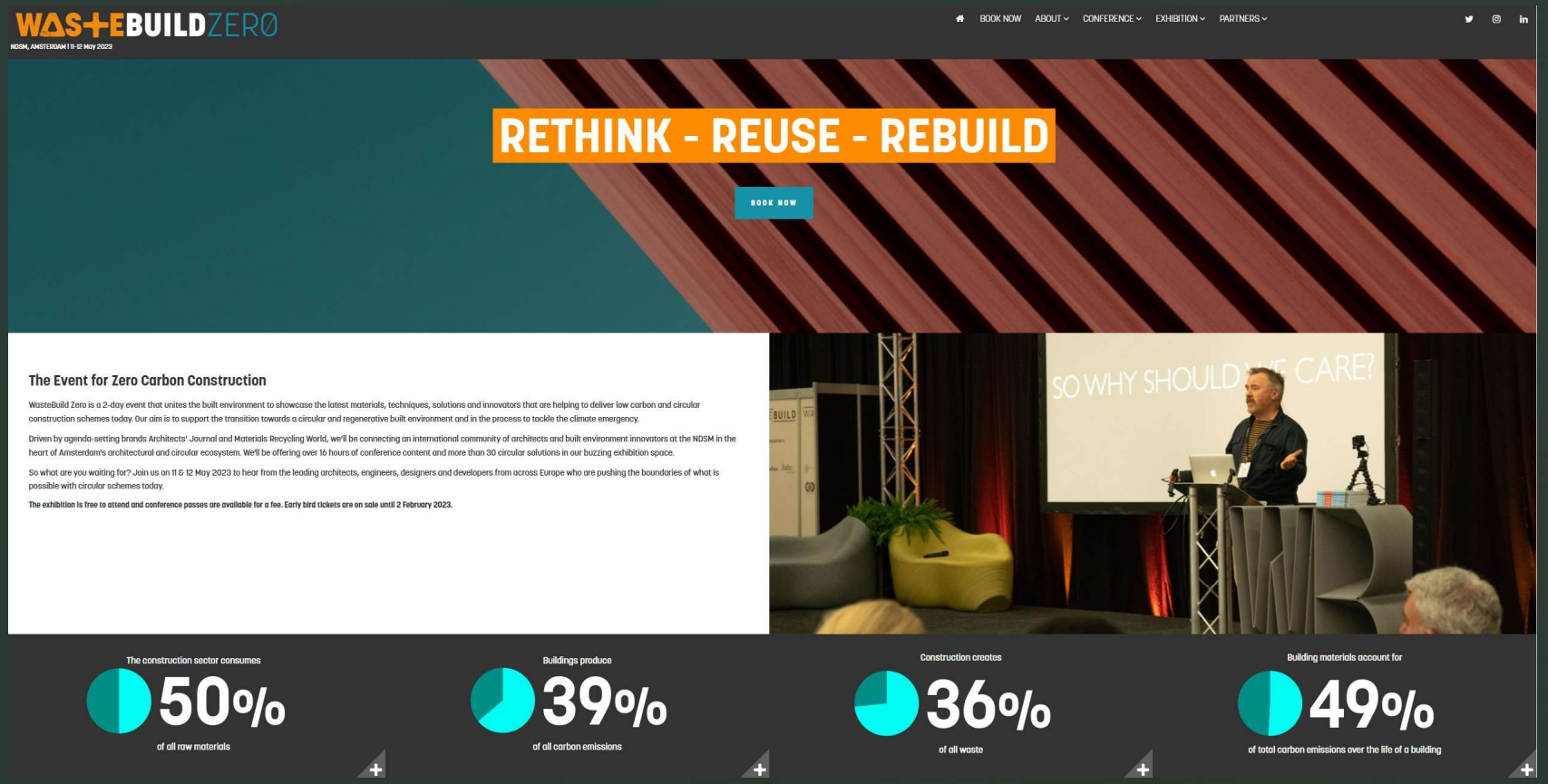
$47 BILLION"



HOW DOES THIS APPLY TO BUILDINGS? NEW OR OLD, IT MEANS:

- ALL MATERIALS THAT CONTRIBUTE TO THE CONSTRUCTION OF A BUILDING COME FROM NATURAL RESOURCES – CLAY, STONE, TIMBER, METALS ETC;
- BUILDINGS NEED TO BE MAINTAINED TO MAKE THE MOST OF THE RESOURCE FOR AS LONG A PERIOD OF TIME AS POSSIBLE TO AVOID DEPLETION OF RESOURCES
- “STAVE OFF DECAY WITH DAILY CARE” – WILLIAM MORRIS, 1877 SPAB MANIFESTO

How is the world responding?



RESOURCE MANAGEMENT IN THE BUILT ENVIRONMENT

STATS NZ:

GHG emissions from manufacturing industries and construction were up 40.4 percent from 1990, up 31.4 percent from 2005, and down 11.3 percent from 2019.

BRANZ:

The construction and demolition industry is one of the largest waste-producing industries in New Zealand. Construction and demolition waste may represent up to 50% of all waste generated in New Zealand, with 20% of the waste going to landfill and 80% going to cleanfill sites.

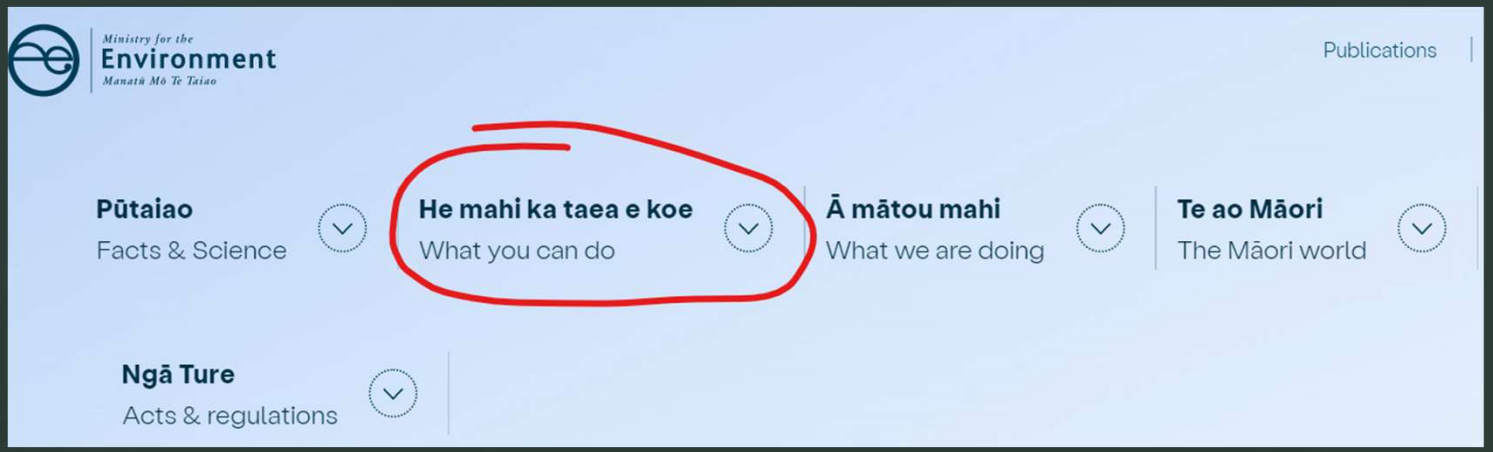
Disposing of these materials to landfill means that, as well as not being recovered for further use, they are contributing to adverse environmental effects. These include harmful chemicals leaching into soil and waterways, plus methane emissions into the air, as the waste breaks down and rots.

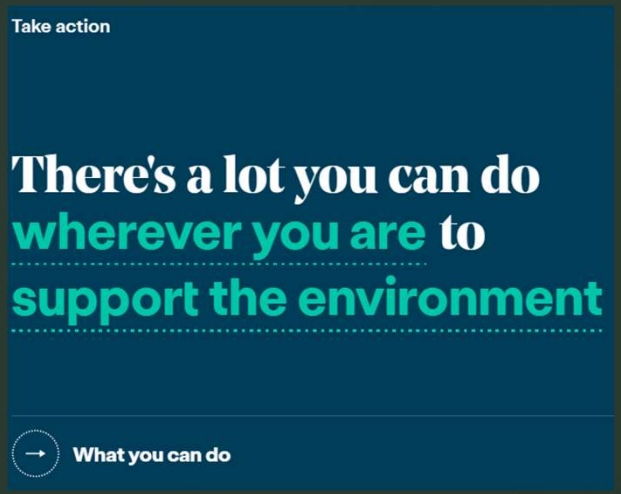
MfE:

Types of waste going to Class 1 landfills

Surveys show that construction and demolition waste is the largest source of waste to Class 1 landfills at 33 per cent followed by potentially hazardous waste at 24 per cent and then organic waste at 15 per cent.

RESOURCE MANAGEMENT IN THE BUILT ENVIRONMENT

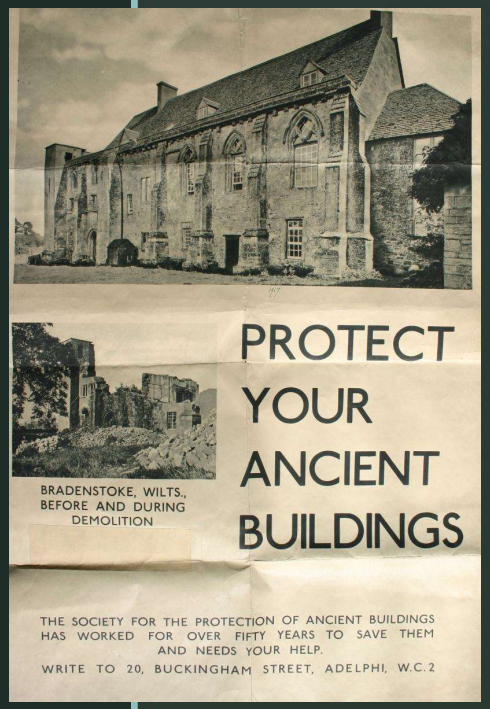




21 ACTIONS – ONLY FIVE THAT RELATE DIRECTLY TO BUILDINGS:

- REDUCE YOUR ELECTRICITY USE
- PLANT TREES
- REDUCE TRANSPORT EMISSIONS
- REDUCE, REUSE, RECYCLE
- PREVENT WASTE AT HOME

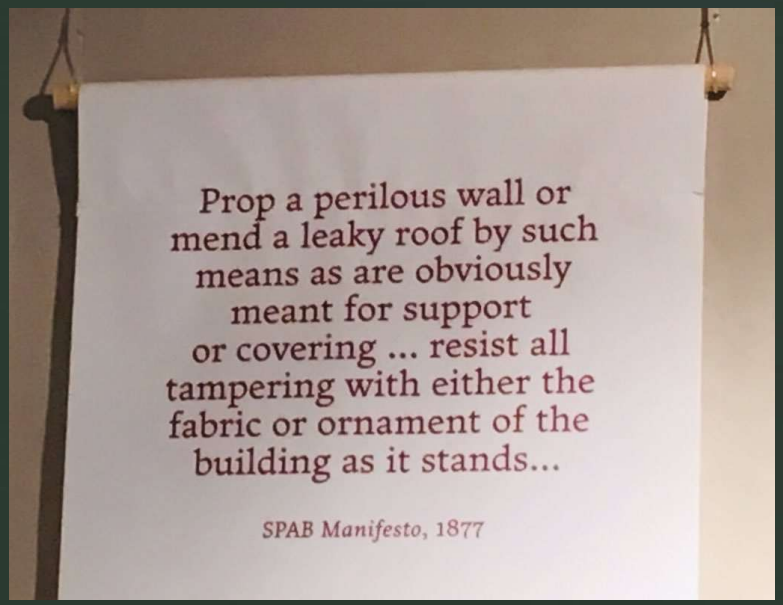
THE SPAB APPROACH
THE PHILOSOPHY



"We are only trustees for those that come after us."

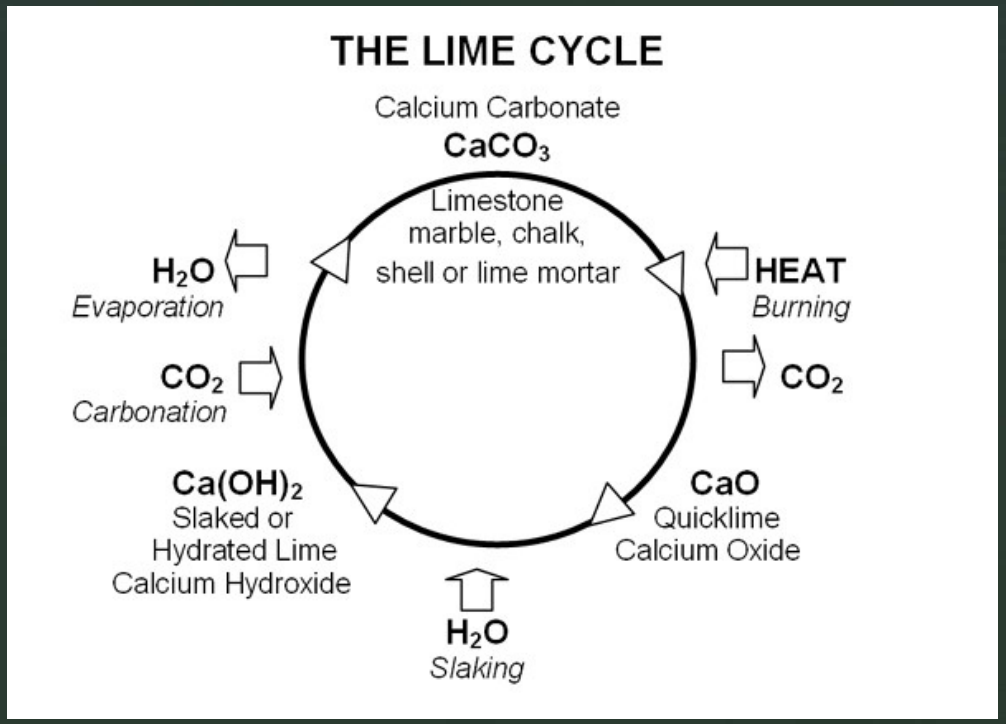
"The past is not dead. It is living in us, and will be alive in the future, which we are now helping to make."

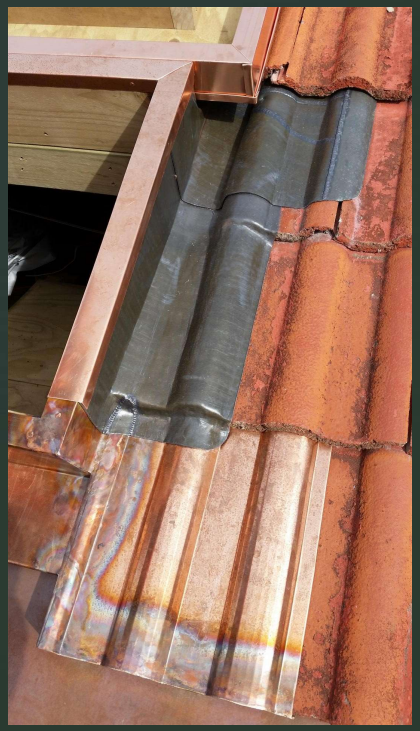
- William Morris




GOLD
MEDAL
ALE
SPEIGHT'S BREWERY

REPAIRS AND MAINTENANCE
MATERIAL LIFE-CYCLES AND CARBON





THE SPAB APPROACH
MAINTENANCE FIRST PRINCIPLES

- WATER MANAGEMENT
- MATERIAL CHOICES – INITIAL DESIGN
- MATERIAL CHOICES – COMPATIBILITY ISSUES / BUILDING PATHOLOGY (PERMEABILITY VS. SEALED SYSTEMS)

THE SPAB APPROACH MAINTENANCE CAMPAIGNS

"STAVE OFF DECAY WITH DAILY CARE"

FAITH IN MAINTENANCE CAMPAIGN

2007-2015

ANNUAL MAINTENANCE WEEK

A well-maintained building is not only likely to last longer, it is also most likely to be energy efficient. Damp is the most common cause of damage affecting buildings of all ages. Dry walls are better insulators than ones that are wet, and regular maintenance can help you spot a small problem before it becomes a larger, more costly one. Luckily small steps to keep a building dry can make a big difference. Clearing gutters and checking your roof's condition once a year are simple ways to help prevent rainwater damage.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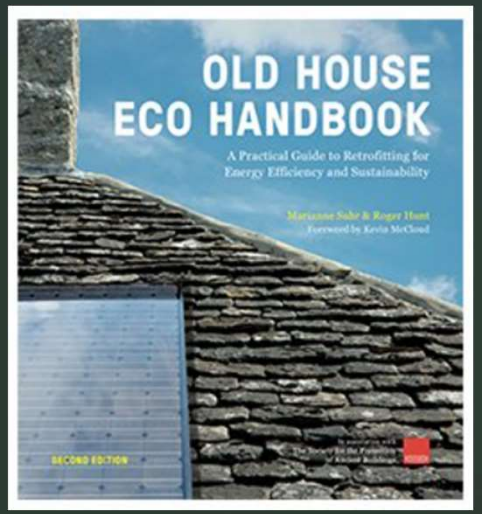
THE SPAB APPROACH
MAINTENANCE TOOLKITS

NEW OR OLD, BUILDINGS NEED MAINTENANCE!



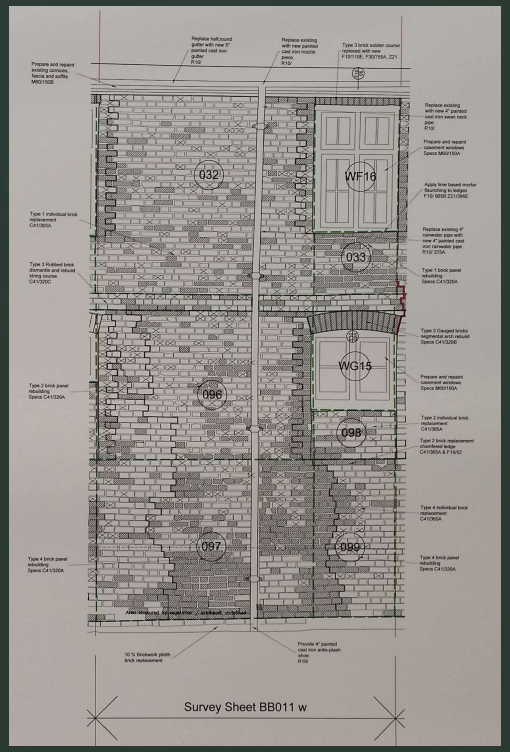
Video guides

One of the most important element of a bui...

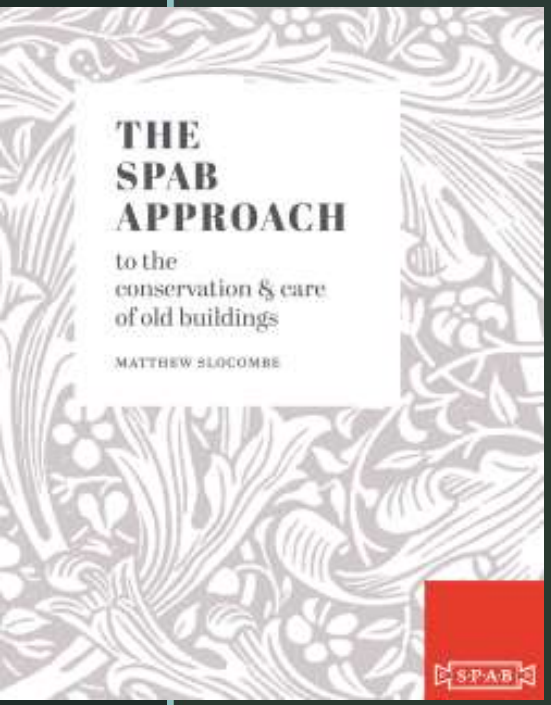
Ensure church rainwater goods are in good...

Ensuring the walls are in good order is ess...

SPECIALIST WORK: FORMALISING DOCUMENTS FROM SURVEYING TO REPAIRS



THE SPAB APPROACH - SUMMARY



- Regular Maintenance
- Understanding
- Context and Continuity
- Respect for Age
- Essential work only
- Repair not restoration
- Conservative Repair

- Materials
- Proven Methods
- Craftsmanship and Practical Knowledge
- New Design to compliment Old
- Emergency work and a long-term view
- Sustainability and the SPAB Approach
- Passing on knowledge

QUESTIONS??

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