

Repair and Maintenance of Historic Buildings in New Zealand

Blue Forsyth
Kakariki Earth Limited

What are you addicted to?

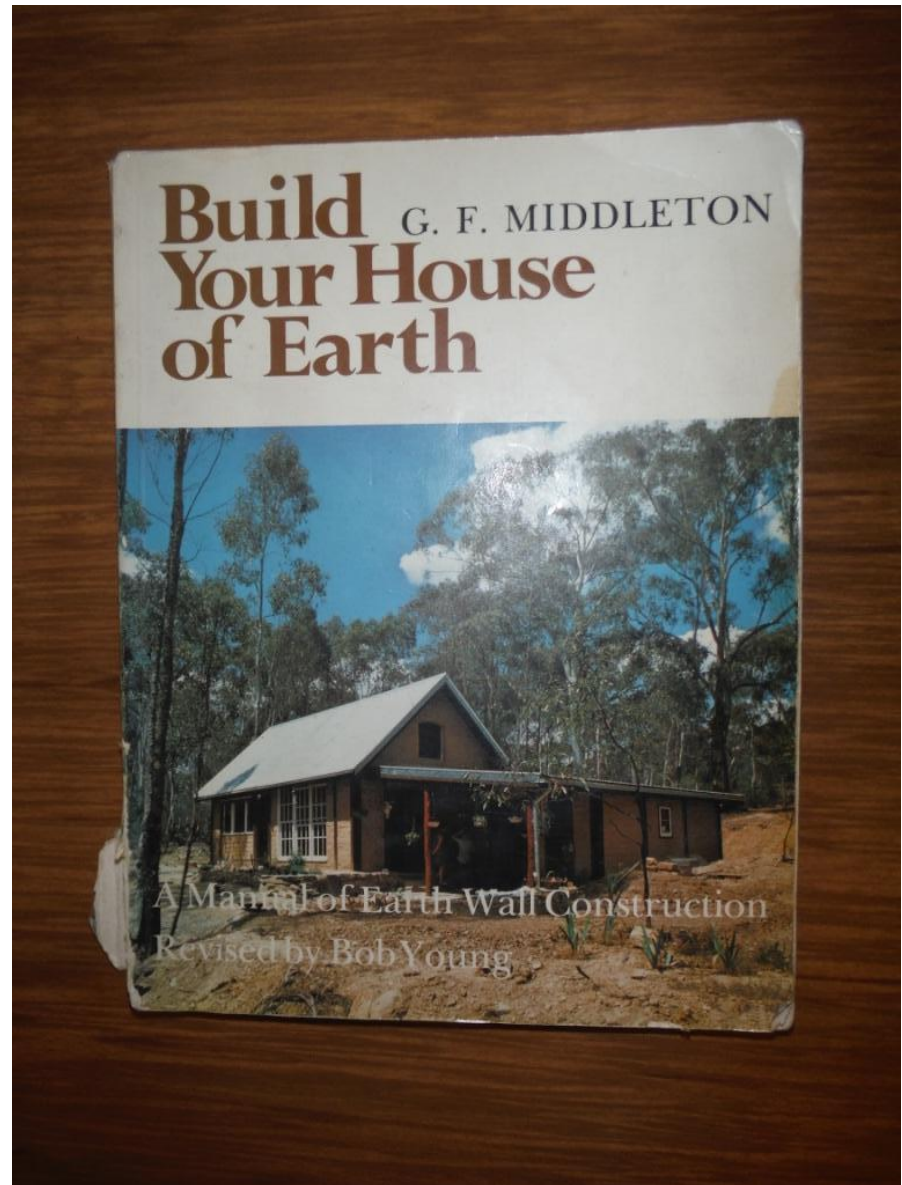
Humorsharing.com



ADDICTION

I'm not addicted to FACEbook

- First Published
1953
- Revised
1979
- Purchased
1982





We are all
students

We are all
teachers

Maintenance is essential

The 2nd law of
thermodynamics

Increasing
entropy



Left alone,
everything
falls apart!



Heritage Buildings

- Issues
 - Ownership
 - How much will it cost?
 - Who pays?
 - Access
 - Building use

Degrees of Intervention

(From ICOMOS NZ Charter)

1. Preservation (stabilisation, maintenance, or repair)
2. Restoration, (reassembly, reinstatement, or removal)
3. Reconstruction
4. Adaptation

Serious Maintenance Required

Water
Water
Water





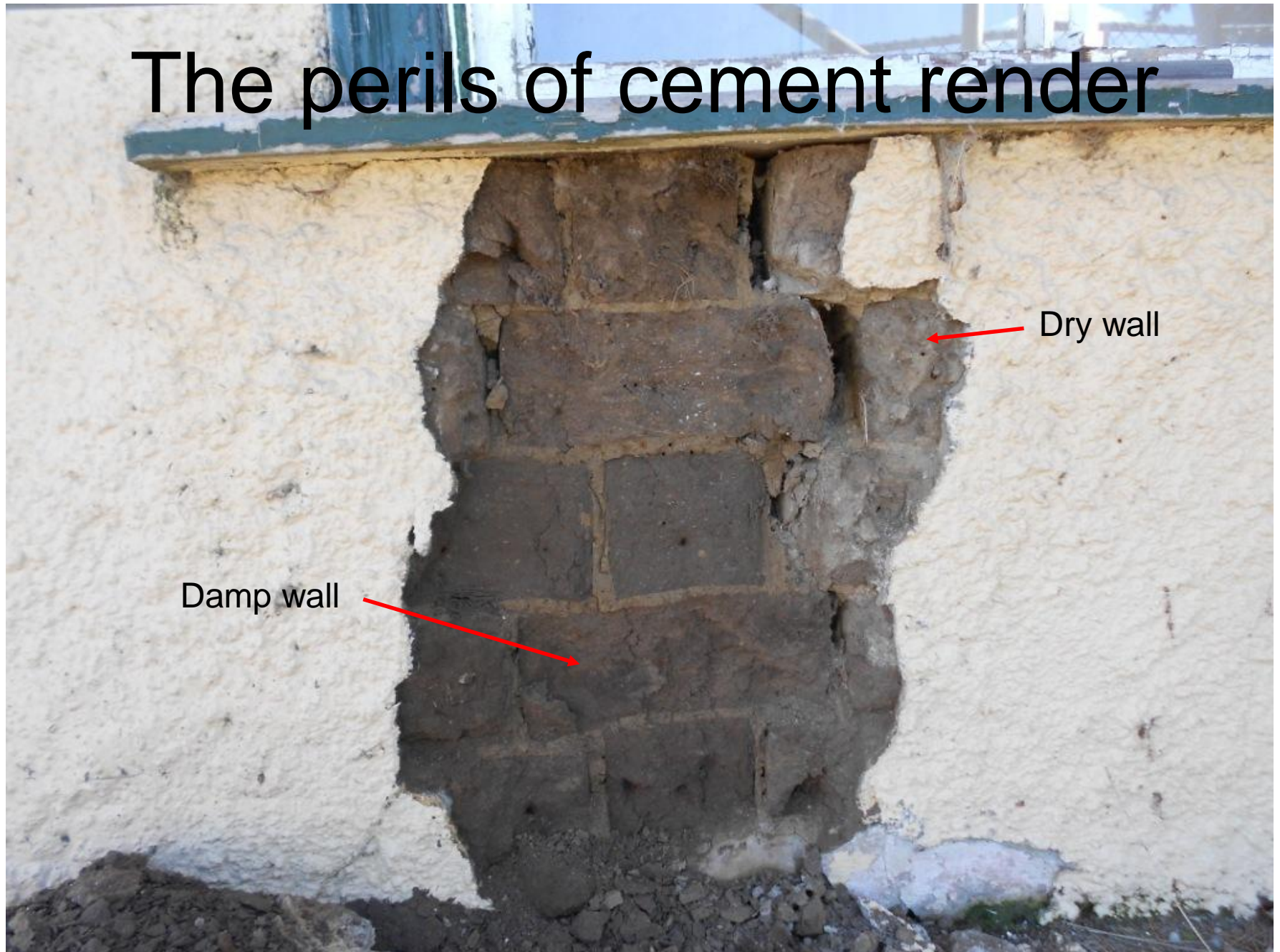
Too much moisture can
be very destructive....

and needs to be
controlled in and
around any
building!





The perils of cement render





Cracks can be a serious risk to the structure

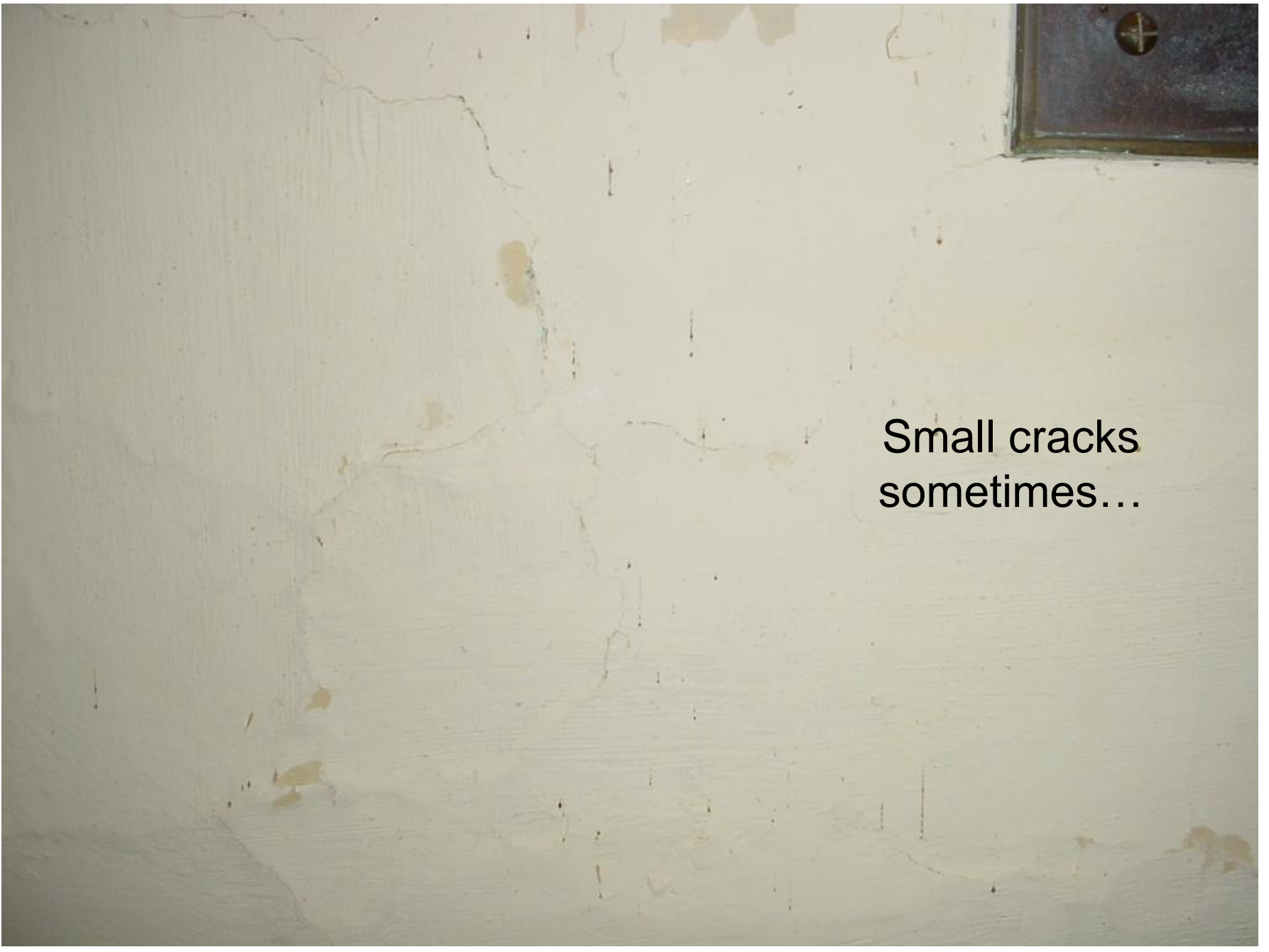


Vegetation can be a problem!



Don't ignore the small problems.
They will only get bigger!





Small cracks
sometimes...

Turn into BIG
jobs



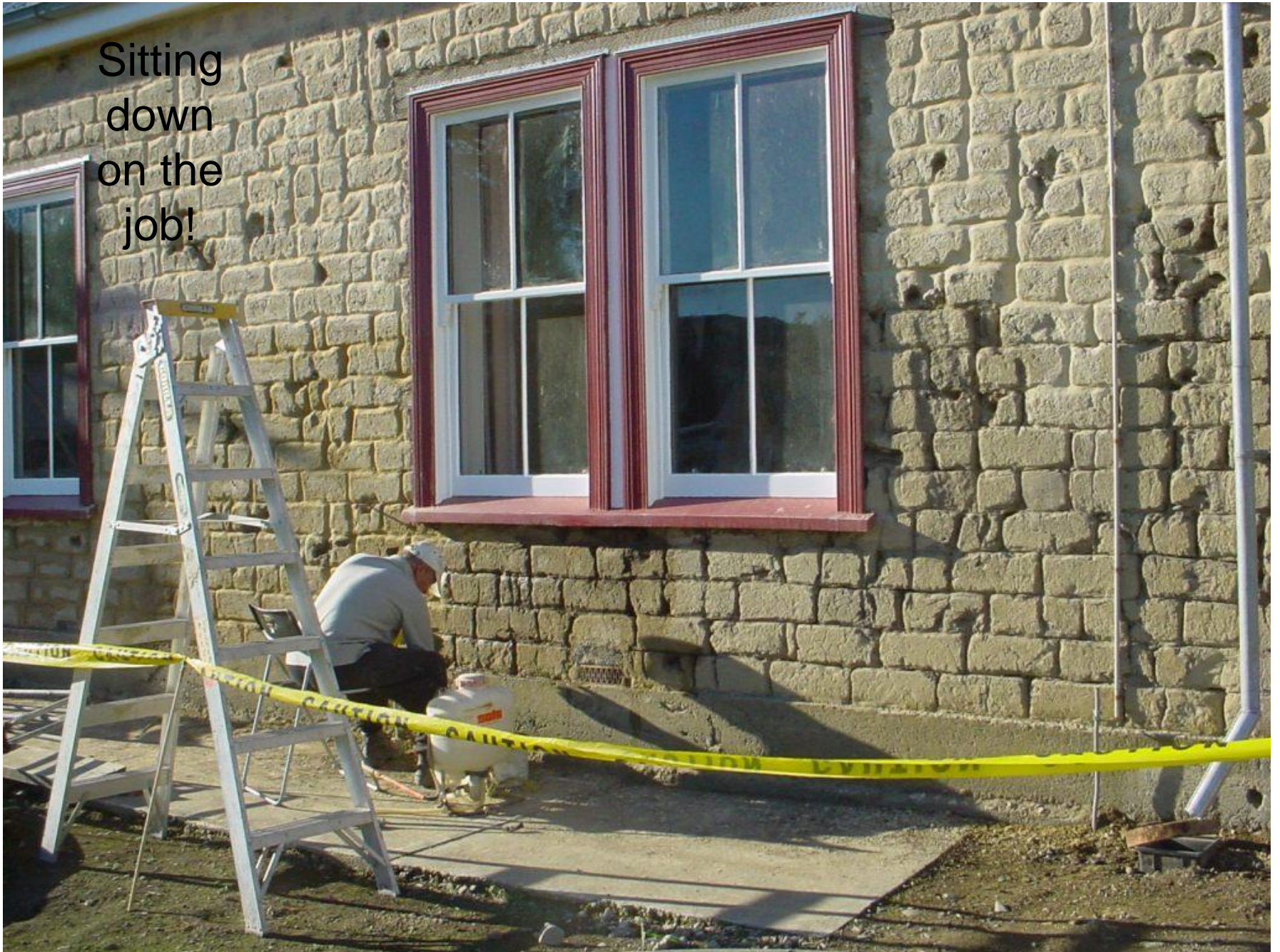


Surface
erosion





Sitting
down
on the
job!



More small
cracks



Some
large
cracks
hidden
beneath





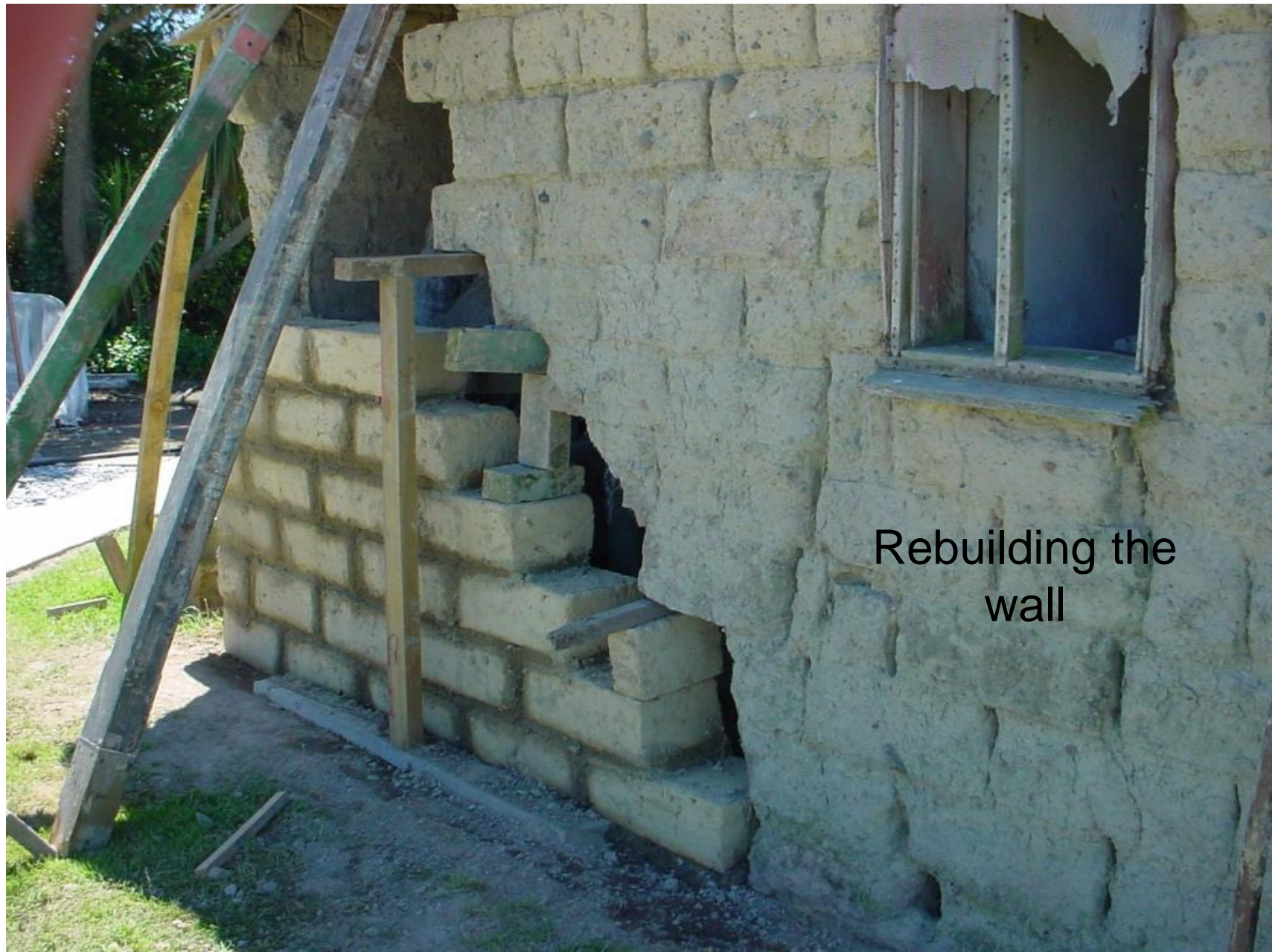
A building on
the move!

Smash up the
old.....



Reform the new





Rebuilding the
wall



Sometimes cracking can be serious!







Start at the top.....



and work down!



The old
foundation with
engineering
improvements



Re-mixing the old cob



Cob
stockpile

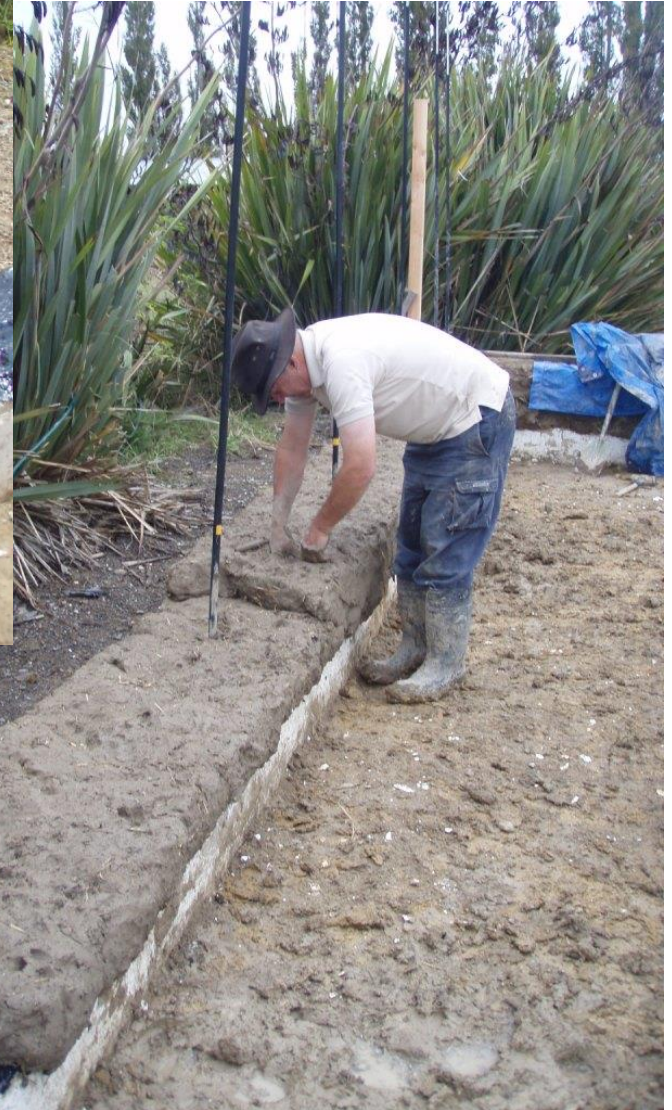




Quality
control



The first of
many!





Trimming and
thwacking!





More
engineering!

Windows in
position





Cobbing in all
weathers!



A few
curious
locals



Some even
wanted to
get their
hands dirty!





Getting to
the top



All new top plate

Gable ends up



Lime render on



Looking sharp








Ready for the next
150 years



What have I learnt in 25 years?

Building has gone from:

Simple		Complex
Un-regulated		Highly regulated
Generalist		Specialist
Natural materials		Engineered/processed
Low cost/debt-free		High cost/lifetime debt

Not all bad things per se but...

My hope for the next 25 years

Retain the values of the past by reversing some of those trends

Give a 21st century twist to 18th and 19th century technology

Have Natural Building principles core component in formal building and architectural courses

Find the political will to provide healthy (natural) affordable homes for all

Question the profit motive that dominates the housing landscape (the romantic socialist in me!)