Wood Preservation 2009

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Topics:

Leaching trial - boron treated framing.

The regulatory framework.
Drivers for leaching trial:

- Amendment to NZS 3640 – Aug 2006
- Concern with solvents in framing
- Simplification of treatment choice

Conditions for leaching trial:

- A real time trial
- Statistically based
- Relevant to NZ framing use
Statistical basis in practice:

Leaching trial

250 sample lengths supplied
broadly selected clear wood
90 x 45 x 2380

114 lengths treated 0.4% BAE w/w
118 samples treated 0.8% BAE w/w

10 samples (each) tested
to AS/NZS 1605:2000
cross-section analysis (5 per stick)

Statistical basis in practice:

Leaching trial

20 samples (each) sent to BRANZ
ends retained for baseline testing

10 samples (each) BRANZ tested
Leaching trial

Test rig:

Syringe

Dosing rate – 100cc/m every four days

10 lengths 0.4% BAE.

10 lengths 0.8% BAE.

Leaching trial

Test programme:

Leaching assessment periods
Early feasibility indication
Industry update reports
Industry preparation
NZS 3640 review and DBH approval process
Run-on "check" programme

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Test expectations:

- Percent boron w/w: 0.4, 0.8
- Time: 0.15
- Threshold level

Test evaluations:

1. Results of leaching trial
2. Analysis of WHRS cases
   - Consent date – case registration date
3. ‘Common wisdom’ – 2 years
4. Changes in building quality
5. New knowledge on rot types
The Regulatory Framework

Building Code

The Code is ‘performance based’

For example
Code says a building…“must be durable enough for its function”
This is the Law

…but the Code doesn’t tell you how to do this...

Compliance Documents
…Acceptable Solutions
…Verification methods

These show you how to comply with the Building Code…“they are not the Law”
They are one way.
You could use other ways
NZS 3640 and 3602 is an Acceptable Solution…Because the Department says it is!

Regulatory framework

If the leaching trial is successful…the Department will make it an Acceptable Solution

This will give…a single boron treatment option for all framing

…but they are the easiest way for compliance with the Code

Compliance Documents

Acceptable Solutions

Verification methods

NZS 3640 and 3602 is an Acceptable Solution…Because the Department says it is!
The End