

About Timber Treatment Testing

This is written to provide owners, and potential buyers of plaster clad houses with information on our timber treatment testing, and the sample collection process.

Samples for treatment testing are taken invisibly from behind wall sockets.

Unless confirmed otherwise, buyers must assume that a house built between 1992 and 2005, contains untreated or undertreated timber, and allow for the increased risk and cost of decay.

Why Have Timber Treatment Testing?

Prior to 1992, NZ houses were usually built with timber treated with boron at a level that provided durability against virtually all timber destroying pests – decay, borer, and termites.

From 1992 to 1998, timber specifications changed so that the treatment only needed to protect against borer attack. This used much lower levels of boron or even just insecticides.

From 1998 until around 2005, completely untreated timber was permitted and widely used. Whilst this wouldn't rot or decay if it stayed bone dry, the reality is that all houses leak at some stage and many houses in this era were not weatherproof and leaks were considerable.

Plaster clad houses of this era had cladding direct fixed against the framing which locks in the moisture, keeping the framing wet for longer, making them more vulnerable to damage.

Without adequate treatment, wet timber decays and is attacked by insects. Timber with low levels of boron decay slower. Decay in untreated timber can progress very rapidly.

The single biggest risk factor for owners or potential buyers of plaster clad buildings, is the timber treatment level.

No-one should buy a plaster clad house without knowing if the timber is durable against decay and insects, and no seller should deny a buyer the opportunity to carry out this **essential due diligence**.

Whilst the above dates give general time frames for the new timber treatment standards, the reality was that many mills were slow to adopt the reduced treatment levels. This means that testing often shows well treated timber used in houses built much later than 1992.

From around 2002, many cladding manufacturers promoted using H1 Plus timber, which was either well treated boron, or well treated LOSP tin.

House plans and specifications sometimes list the timber to be used, however, in our experience what was actually used is often different.

The bottom line is that unless you have your timber treatment tested, you cannot tell whether the house is built from treated timber, and you cannot know the risk of damage if the house leaks.

Moisture Detection

How Do You Gather Samples of Testing?

Gathering samples typically causes no visible damage to the house. We remove some faceplates on powerpoints/light switches/ TV aerial boxes on external walls and take the sample from the stud that the internal boxes are screwed to.

We typically take samples from a range of locations around the house because different deliveries of timber may have come from different sawmills with using different timber treatments.

What do you test for?

We test for the most common timber treatments used from the 1990's through to now. These are boron, LOSP tin, and CCA. CCA testing is only done on samples suspected of containing CCA.

What don't you test for?

We don't test for the insecticide treatments that provides no durability against decay. We don't test for some of the lesser used fungicides such as IPBC which require a much larger sample and in- depth laboratory analysis.

Are the results reliable?

We use quality laboratory grade reagents and processes which produce a colour change in the samples depending on the timber treatment present. These are compared against control samples of known treated and untreated timber.

High levels of treatment produce a strong and obvious colour change. Low levels of treatment, or samples that have been degraded due to leaks, produce a weaker and less distinct colour change which is harder to interpret.

Whilst samples are gathered from four or five locations around the house, these are representative only and other parts of the house, or even the same wall may be built with different timber. There may have been historic repairs where timber has been replaced.

Timber treatment testing is one part of an overall weathertightness assessment and should be carried out in conjunction with moisture probe monitoring, which tests the actual timber condition and moisture levels.

What results do you provide?

We provide a timber treatment test certificate for the house, which shows photos of the reacted timber samples against known treated and untreated sample and our conclusion about the treatment levels.

How long does it take?

Normally the results are available about two to three days after gathering the samples.

Can I take samples myself?

Yes, however in this case, we cannot certify that they came from a particular house. We can provide more information on how to take samples, and where to send them on request.

For more information call us on 09-271 0522 or visit our website www.moisturedetection.co.nz.