



NEW ZEALAND TIMBER PRESERVATION COUNCIL *Incorporated*

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NEWSLETTER *Issue 24 September 201*

CIRCULATE TO:

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NZS 3640 Amendment 3

Following protracted consideration, including an independent report and recommendation from an overseas expert, Standards New Zealand have approved Amendment 3 to the timber treatment standard, NZS 3640.

The amendment will permit:

- The use of boron at a retention of 0.8% BAE in H3.1 subject to the timber being primed at the treatment plant.
- The use of LOSP copper naphthenate at a retention of 0.05% in H3.1.

Timber treated to H3.1 is used as:

- Exterior products where there is no risk of water entrapment such as fascia, weatherboards and external joinery.
- Structural members in situations where there is a risk of periodic wetting such as in enclosed balcony framing and enclosed flat roof framing.

Note there is no pre-priming requirement for the LOSP copper naphthenate. However, NZS 3602, which is the standard covering the use of timber in building, requires H3.1 Radiata Pine weatherboard and exterior finishing timbers to be protected with a well maintained three-coat paint system (this includes priming of all faces including cut ends prior to fixing).

A copy of NZS 3640:2003 incorporating all three amendments is now available. TPC is able to obtain copies at a discounted rate. If you would like a copy of the consolidated document please let us know.

Compliance with the Building Code

You should note however that the Department of Building and Housing has not determined whether Boron H3.1 is compliant with the performance requirements of the Building Code.

The Department is concerned about Boron H3.1 in terms of

- Fitness for purpose in structural framing

- The effect of the paint protection on adhesives and synthetic underlays
- The possibility of the paint protection disguising grade marks

At this stage the Department regards Boron H3.1 as an **Alternative Solution** in terms of the Building Code. This means that it can be approved for use on a case by case basis by territorial authorities.

Structural Timber Verification

Further to my email to all licensees dated Friday, 15 September 2006 re the above, I remind you all that the verified grades are to be proof tested in their service condition.

This means that framing timber to be used within a house frame has to be verified through testing after it has been kiln dried (and treated where applicable). For outdoor structural timber such as to be used as decking sub floor framing, the timber may be verified in its green condition.

The applicable grade for green treated structural timber is G8.

This grade has mechanical properties of:

MoE	6.5 GPa
Bending	11.7 MPa

These properties are equivalent to VSG/MSG8 which is dry when tested.

If you are looking to produce G8 grade we recommend you look to Verified Timber Ltd to conduct your verification programme. Verified Timber are equipped and recognised to conduct all necessary quality assurance procedures for structural timber in compliance with NZS 3603 and NZS 3622.

Contact details are:

Verified Timber Ltd
Ph: 04 471 2424 Fax: 04 471 2450
Email: info@verifiedtimber.co.nz Website: www.verifiedtimber.co.nz

Building Code Cites New Grades

On 14 September 2006 the Department of Building & Housing cited the new verified structural timber grades that are specified in NZS 3603 and the amended tables of NZS 3604, incorporating these grades into the compliance documents of the Building Code.

These citations will become effective on 1 April 2007. In the meantime the new grades and tables will be accepted by territorial authorities as **Alternative Solutions**. In fact many specifiers are already incorporating the new grades in their designs and requiring their use.

To remind you, the verified structural grades are:

Visually graded	G8, VSG8, VSG10
Machine stress graded	MSG6, MSG8, MSG10, MSG12, MSG15

Unverified No.1 Framing may continue to be used, in fact it is the legal grade in terms of the Building Code until 31 March 2007. Even after that date it can continue to be used but it will have lower characteristic values.

NZS 3604, the timber framing standard contains design tables for the use of:

- Unverified No.1 Framing.
- Verified VSG/MSG8
- Verified VSG/MSG10

It is likely that some tables will be developed for MSG12 in the future as well.

Plant Audits

As a follow up to our publication of the Best Practice Guideline (BPG) we are undertaking a programme of plant audits.

To date Stefan has completed an audit of twenty sites against the provisions of the BPG. These audits have been well received and the companies operating the audited sites will all receive a comprehensive written audit report. The reports will cover areas where compliance with the BPG has been achieved and areas where it has not. This will be an excellent guide for licensees to be able to determine areas requiring attention.

Over the course of the next four quarters, Stefan expects to complete audits of all licensee sites.

We would really appreciate it if all of you could give Stefan all the co-operation needed for him to be able to complete his audit efficiently and effectively.

Successful completion of the audits will be a big plus not only for individual licensees but also for the WOODmark® programme and the timber preservation industry as a whole.

Many thanks for your help.

Tanks Certification

We recently had a successful meeting with ERMA and Department of Labour on this subject.

At the meeting we were able to clarify the requirements of these regulatory agencies with regard to certification and the exemption for pressure vessels. We were also able to get agreement on a course of action TPC proposes to undertake for all licensees to ensure that compliance is achieved in the most cost effective and consistent manner. Both ERMA and Department of Labour readily accept the TPC initiatives and the benefits and assistance to them that these initiatives will achieve.

The next step in this process is to develop a code of practice to be followed by our designated engineer in conducting an assessment and certification of all treatment plant sites.

In the meantime all licensees who have designated TPC as their tank certifier are up-to-date in terms of their legal obligations in this matter for the time being.

Treatment of LVL

AS/NZS 1604 Part 4 is the standard for the treatment of LVL. It sets out penetration and retention requirements which are not readily achievable using schedules that are commonly used for solid wood.

In the circumstances, TPC requires that only approved processes be permitted for the treatment of LVL. In fact different schedules are required for different thicknesses of LVL.

Treaters of LVL are also required to follow certain procedures in respect of sampling for internal and independent TPC monitoring.

Licensees who wish to treat LVL should conduct trials and submit data from those trials including the results of three separate trial charges to TPC for approval for the WOODmark® programme. It would be best for any licensees contemplating this move to contact us first.

Inter Laboratory Comparison

One of the requirements of TPC's laboratory service contract was that the contractor will conduct an inter laboratory comparison twice a year.

SGS, our current contracted laboratory, will shortly be undertaking an inter laboratory comparison on CCA, Boron and LOSP TBTN, Azole and IPBC treated timber.

We expect the comparison will throw up comparative data that confirms the accuracy and consistency of laboratory analyses we receive.

Technical Committee

The committee met in Rotorua on 12 September. Among the major points discussed were:

- A review of the Boron testing protocol which:
 - Reaffirmed the benefit of using salicylic acid.
 - Refined the methodology of measuring moisture content in sapwood only.
 - Confirmed the importance of particle size.
 - Reported trials in analysis of Douglas Fir.
- Discussed developments with a spot test for Azole.
- Agreed about inclusion of GC as an acceptable method for analysing Azole.
- Discussed acceptable methods for sampling LVL.

- Discussed ways forward for developing cost effective analyses of IPBC.
- Discussed resin bleed.
- Discussed HSNO storage requirements.

Promoting WOODmark®

In August we published our first issue of *WOODmark® Update*. This is a brief summary of recent developments in the world of treated timber. Our first issue covered:

- NZS 3640 Amendment 3.
- Boric treatment.
- Structural timber verification.
- Approved timber treatments.
- Disposing treated timber waste.
- Protecting cut ends.
- H5 treated house piles.

WOODmark® Update was circulated to every territorial authority in New Zealand, timber merchants and frame and truss manufacturers. We expect to produce *WOODmark® Update* four times a year. If you would like a copy of *WOODmark® Update* to pass on to your customers please contact us and we would be happy to supply copies.

We believe *WOODmark® Update* will become an important means for us to keep key partners in the timber and building game up to date with developments in our industry. It will also be helpful in clarifying any misunderstandings and confusion about treated timber and its correct use.

Being a WOODmark® licensee means we can, from time to time, do a little promotion directly for you. For instance, in August we wrote to all territorial authorities pointing out that the house piles and poles standard, NZS 3605, specifies the WOODmark® programme as a means of compliance for 125mm square piles. We pointed out that recognising the WOODmark® brand is a simple way for them to recognise compliance with the standard and we supplied them with a list of WOODmark® licensed house pile producers.

We are currently looking at improving our website by listing all licensees and the treated timber products they produce. We will shortly contact you with a request for data for the website.

Kevin Hing
