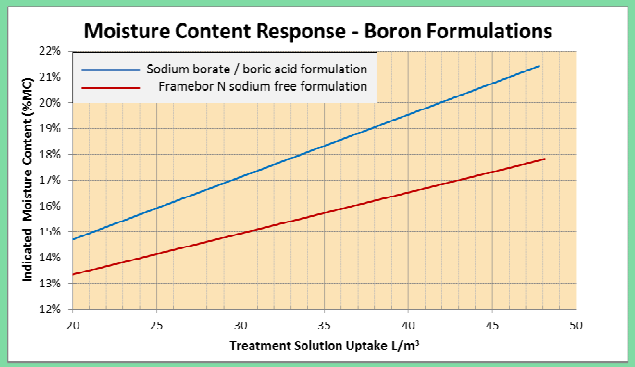
Note that this correction can only be applied to timber that has rested 7 days after treatment. Moisture content readings approaching and in excess of 30% may be unreliable. The reading of impedance type moisture meters should not be significantly affected by the treatment when the timber is equilibrated for at least 7 days after treatment. Where an exact moisture content of a timber sample is required the oven dry method as per AS/NZS1080.1 should be used.

Framebor® N preservative is less conductive in wood than formulations containing sodium borate (as sodium is a highly conductive electrolyte). This difference is demonstrated in the chart below.



This comparison uses matched sample sets of kiln dry (12% initial MC) 45mm x 90mm Radiata Pine timber treated with 10% w/v BAE (boric acid equivalent) strength solutions then left under cover for 7 days. Displayed are lines of best fit for indicated core moisture content using conductivity moisture meter (no correction applied) plotted against original solution uptake. Results under different conditions may vary.

Framebor® Preservative Treatment Levels

Treatment Level (as per NZS3640)	Required minimum treatment loading as % m/m boric acid equivalent (BAE) [1]
H1.2	0.4
H3.1	0.8

1 – See NZS3640 for penetration requirements and other treatment details.

Contact Lonza Wood Protection for details on process settings to achieve minimum treatment requirements and compliance testing. Quality control kits and support for compliance testing are provided by Lonza Wood Protection technical services.

Framebor® preservative treated timber products are produced by many independent producers throughout New Zealand. Contact your supplier or timber retailer for details of timber specification and availability.

Lonza | Wood Protection

Trading as Arch Wood Protection (NZ) Ltd
A Lonza company
265 James Fletcher Drive Otahuhu
Auckland New Zealand
Tel: 09 276 3646 Fax: 09 270 2020
Email: tanalised.nz@lonza.com
www. tanalised.co.nz

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New Zealand

Lonza

Wood Protection

Framebor® N

The new H1.2 boron framing solution

Tanalised®

What is Framebor® N?

Framebor® N wood preservative is a new H1.2 boron based framing treatment solution using a novel patented formulation which provides significant improvements compared to most other boron preservatives. Boron is trusted and proven in New Zealand and provides excellent protection to timber framing against fungal decay and insect attack (boron is preservative number 11 as per NZS3640).

Framebor® N is ideal for the treatment of kiln dried stress graded timber with low uptake Lowry or Reuping type processes. It can also be applied using a dipping process followed by a post-dip holding period. Framebor® N can also be used for treatment of H3.1 non-structural timber where fully painted (see NZS3640 for details).

The facts and benefits

- Low cost— with lower freight costs due to the high active concentration and by avoiding use of expensive glycol solvents, Framebor® N delivers a low cost H1.2 treatment.
- Framebor® N is highly concentrated yet is stable in storage, easy to use and dissolves easily in water to make the treatment solution.
- Mould protection – Framebor® comes with a highly effective mould control additive to prevent unsightly mould growing on timber during storage or during construction.
- Low uptake processing—treatment schedules developed by Lonza Wood Protection result in full through treatment with minimal moisture increase and dimensional change in the timber. Re-drying after treatment is generally not required.
- Reduced moisture content reading—the low conductivity of Framebor® N solution means that for an equivalent treatment solution uptake compared to some other boron treatments, Framebor® N will display up to 2% units lower moisture content (MC%) in the wood compared to other treatments as measured by a conductivity type moisture meter. See charts overleaf.

Framing timber treatment guide

Framebor® N is suitable for treatment of Radiata pine and Douglas fir timber to H1.2 level for use in interior framing and structure. H1.2 is for structural timber components protected from the weather, above ground but with possible exposure to moisture. See NZS3640 for specific details of treatment requirements.

Acceptable solutions as per Amendment 7, for clause B2, durability of the New Zealand Building Code.

Recommended treatment for timber framing (high risk) by the Department of Building and Housing

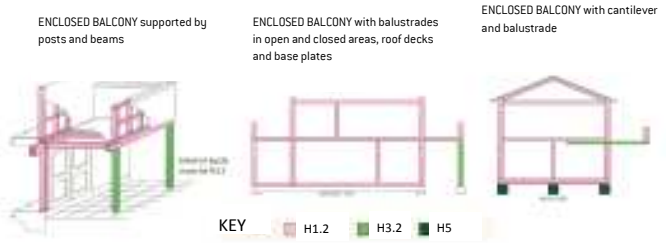

Diagram used courtesy of Department of Building & Housing—please see Building Code Compliance Doc B2—Durability for full details.

External Moisture Management

Due to the range of risk levels of moisture ingress for different building applications, consideration may be given to using H3.2 level treated timber for High or Very High risk situations as indicated below. Cantilevered joists and posts penetrating the building envelope should be H3.2 level treated. Timber piles in ground contact should be H5 treated.

Risk Level [1]	Some Typical Examples [2]
Low	Internal dry area walls, external walls with full clear cavity construction (see diagram), free standing roofs (no vertical intercept) and → 10° slope, sub-floor support in dry areas.
Medium	Window sills and jack studs on external walls, wall framing in wet areas, low pitch roof structures (← 10° slope), bottom plates in batten cavity walls with weatherboard or shiplap cladding.
High & Very High	Timbers used in parapets and enclosed balconies, support under enclosed decks and valley gutters, external walls with flat sheet cladding and stucco render (see diagram), sub-floor support and bottom plates in wet areas.

Notes:

1. To be read as per Table 1 of Building Code Compliance Document E2 External Moisture.
2. These are limited examples only. See Compliance Documents B2 Durability and E2 External Moisture for full details.

Using the treated timber

Notes: Boron is not a fixed preservative and is not intended for long term exposure to weather or direct ground contact. Unprotected weather exposure or ground contact during storage and construction should be minimised. Unprotected exposure time before and during construction must not be more than three (3) months.

Boron has low corrosion potentials to metals. Normal steel fixings and fasteners are suitable for contact with Framebor® N treated timber.

H3.2 treatment may be substituted for H1.2 as an alternative solution in some cases. Consult with your territorial authority or building consent authority for further details.

The treated structural timbers should be used in their final shape and form. Cutting, notching and drill holes required for fitting and installation do not require re-sealing. Any timber pieces that are rip sawn should be re-treated to the original specification.

Moisture meter correction

Like most water borne timber treatments, Framebor® N may slightly increase the apparent moisture content reading taken with a conductivity (pin type) moisture meter. An approximate correction can be made by taking the indicated meter reading off the corrected figure on the vertical axis.

Framebor® N Treated Radiata Pine
Conductivity Meter Moisture Content Correction