



INSTALLATION REQUIREMENTS

Hyne Timber T3 Green.
Treated timber framing.





This manual details the installation requirements for Hyne Timber T3 Green.

It is intended for use by building designers, builders, carpenters, other trades persons and building certifiers responsible for ensuring that buildings manufactured from T3 Green can resist the action of termites and decay, in accordance with the relevant performance requirements of the National Construction Code (NCC).

Guidelines

Safety

T3 Green is safe to use. A Safety Data Sheet (SDS) is available at www.hyne.com.au. Take standard precautions against wood dust e.g. wear dustproof goggles, leather or cotton gloves, and a class P1 respirator if generating dust from cutting or sanding.

Waste disposal

You should be able to dispose of offcuts through normal trade waste collection services. For large volumes you should check with your local waste service authority for disposal requirements.

Storage and on-site protection

T3 Green is both termite and decay resistant and can resist weather exposure for short periods without aesthetic deterioration. The product is not designed to resist in-ground decay-causing fungi and therefore it should be stored in dry conditions above the ground, after delivery and prior to use. Exposure to ground based decay may cause deterioration and negate the termite resistance of the product.

Product performance and requirements

Building performance requirements

When designed, installed, used and maintained in accordance with the requirements herein; T3 Green will provide sufficient termite protection and decay resistance for the building to meet the NCC performance requirements. i.e.

Building design requirements

NCC Volume 1	
B1P1 & B1P2 B1P1 2) a) - n)	Structural Reliability & Resistance: Permanent loads, live loads, environmental actions, differential movement, time dependent effects, construction actions
B1P1 2) o)	Structural Reliability & Resistance: Termite actions
NCC Volume 2	
H1P1 2) a) - n)	Structural Reliability & Resistance: Permanent loads, live loads, environmental actions, differential movement, time dependent effects, construction actions
H1P1 o)	Structural Reliability & Resistance: Termite actions

Building practice requirements

Site treatment

T3 Green shall be installed, stored and maintained in accordance with the building practice requirements of AS 1684 "Residential Timber-Framed Construction." The resistance of T3 Green to termites and decay may be affected by: end trimming, notching, trenching or drilling of holes. Suitable brush-on or spray-on preservative treatments for T3 Green are recommended below.

- Protim® Solignum® XJ Clear
- Tanalised® Enseal Clear or Ecoséal

These products contain insecticides and fungicides, which with the correct application will protect any: end trims, notching, trenching or drill holes.

Site conditioning

The moisture content and dimensional tolerance requirements of AS/NZS1748.1 may be exceeded immediately following preservative treatment and/or wet weather conditions, and can be expected to return to equilibrium within a few weeks of dry conditions. Due allowance shall be made for an elevated moisture content and some minor swelling. The guidance in Appendix E "Moisture Content and Shrinkage" of AS 1684.2 "Residential Timber-Framed Construction" is applicable. Swelling of up to 4% over the nominal product width may occur, and due allowance, particularly in very wide sections, should be made.

Allowing for shrinkage is particularly critical where T3 Green is used in conjunction with seasoned timber members (see Figure 2).

Figure 1: T3 Green joist protection system

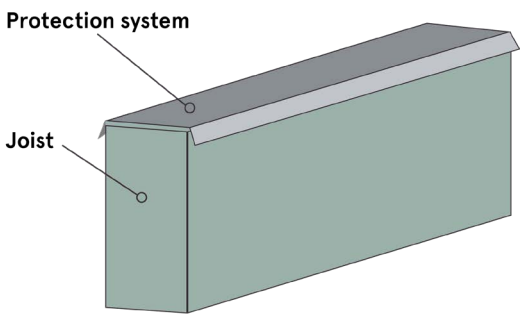
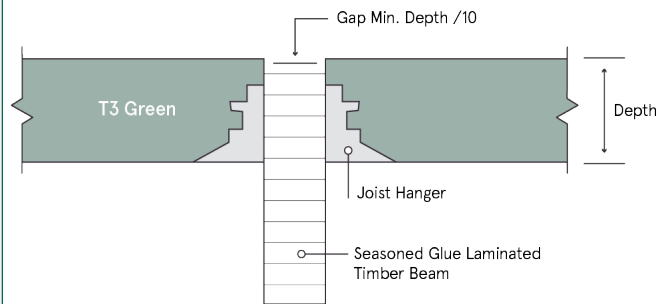


Figure 2: Allowance for shrinkage in T3 Green



The structural and durability design of buildings using T3 Green shall comply with the principles and requirements defined in AS 1720.1, AS 1684 and AS 3660.

Two options for resisting termite action are:

1. The use of termite resistant materials as primary building elements, and/or
2. The use of termite barrier systems.

T3 Green is a termite resistant material and may be used solely, or in conjunction with, other termite resistant materials to resist termite actions and satisfy the NCC performance requirements. Where all primary building elements are not designed, specified and installed as termite resistant; then a termite barrier system shall be used. Where primary building elements, other than T3 Green, are also used in a building then the NCC structural provisions relating to termite action shall be met. e.g. AS 3660.1 "Termite Management – New Building Work"

Durability & exposure

Understanding periodic wetting and hazard classes

T3 Green is treated to H3 Hazard Level, which is suitable for above-ground applications exposed to periodic wetting and leaching as defined in AS/NZS 1604.1.

- Periodic Wetting refers to regular exposure to moisture (e.g. rain, condensation or splash), followed by opportunities for the timber to dry out.
- Leaching is the gradual removal of preservative chemicals by water over time.
- Biological risks addressed at this level include moderate decay (fungi), termites, and borers.

Do not use T3 Green in applications where timber is:

- Continuously damp
- Exposed to in-ground hazard conditions (use H4 or H5 instead)

Installation best practices

To maximise durability and performance, especially in deck construction, exposed framing, or low-clearance applications (<400mm from ground), observe the following recommendations:

Moisture management

- Ensure adequate ventilation beneath and around timber elements.
 - A minimum clearance of 400mm from the underside of framing to ground is recommended.
 - Avoid blocking airflow with solid skirting – use ventilated cladding or screen systems.
- Where clearance is below 400mm, use H4-treated timber for bearers and joists.
- Ensure ground beneath the deck is:
 - Graded for drainage.

- Covered with a plastic membrane and gravel to suppress moisture and weeds.

Waterproofing & detailing

- Use a DPC or waterproof membrane over the top of joists to reduce moisture ingress from above, e.g. Trex Protect, Malthoid or similar (see Figure 1).
- Avoid creating moisture traps, such as enclosed joints or unventilated cavities.
- Slope exposed horizontal surfaces to allow water runoff, and cap/seal end grains or slop them to discourage pooling or moisture uptake.
- Provide drainage holes in enclosed members or boxed sections if required.

Fastening & fixings

- Only use hot-dip galvanised or stainless steel fasteners, brackets, and connectors.
- Stagger screws in decking boards to reduce splitting risk
- Maintain a minimum 6mm gap between decking boards to allow for expansion and drainage.

Product finishing

Where used in outdoor environments and/or exposed to ultraviolet light, T3 Green must be sealed with a suitable timber paint or stain coating to maintain optimum serviceability, appearance and dimensional stability. All surfaces must be adequately coated to ensure the timber is protected from the elements. Ensure T3 Green is clean and dry before applying any coating products, and that the coating manufacturers' instructions are followed carefully. Coatings must be maintained as per the instructions of the coating manufacturer – particularly when subject to harsh environmental conditions. This information should be passed on to the homeowner to ensure ongoing maintenance is carried out as required, to preserve the integrity of the product over time.

Product description

Intended use

Hyne Timber T3 Green products are suitable for use in buildings in external and internal, above ground applications in Australia. Typically, this may include: deck joists, pergola rafters and wet-area wall framing.

Certification

T3 Green is a CodeMark® Australia certified product, meaning that it has been independently audited for compliance against the performance requirements of NCC, relating to structural reliability, stability and resistance to actions. CodeMark® Australia certification ensures product acceptance by building certifiers.

Appearance

The surface of T3 Green is lightly coloured to give an even green colour, which differentiates this product from non-treated timber products, and from other treated timbers, like Hyne Timber T2 Blue and T2 Red (both of which are intended for use in dry, above ground applications only).

Timber species

T3 Green is manufactured from Responsible Wood and PEFC Chain of Custody Certified Australian plantation grown softwood: including Radiata Pine, Slash Pine, Caribbean Pine & hybrids of Slash/Caribbean Pine.

Sizes

Widths: 70mm to 240mm

Thicknesses: 35mm and 45mm

Lengths: Up to 6m

Grades

T3 Green is available in F5, MGP10, MGP12 and MGP15 structural grades. These grades are manufactured to meet the product requirements defined in AS/NZS 1748.1 “Timber – Solid – Stress-Graded for Structural Purposes General Requirements”.

Strength & stiffness

T3 Green has the structural properties defined in AS 1720.1 “Timber structures Design methods” for the nominated grade. Please note that immediately following preservation or on-site wetting, the strength and stiffness of this product may reduce slightly. Avoid full loading during the construction period and until in-service stabilisation has occurred.

Durability

T3 Green has been designed to resist all termite species in Australia, and to resist above ground fungal organisms which can cause decay. The preservatives used have satisfied test protocols, defined by the Australian Wood Preservation Committee. This product also meets the preservation requirements of AS 1604.1:2021 “Preservative-treated wood-based products – products and treatments”.

Product identification

T3 Green products are individually marked to include the product name, AS 1604.1 compliant brand and the Codemark® Australia certification number. Product packaging is marked with a pack card that describes the product and its certification.

Packaging

T3 Green is packaged to a common parcel size, nominally 700mm wide x ~360mm high. The piece numbers in each pack are shown below:

Thickness (mm)	Width (mm)	35	45
	Nº. Wide high	10	8
70	10	100	80
90	8	80	64
140	5	50	40
190	4	40	32
240	3	N/A	24

Packages of T3 Green may be supplied either wrapped with plastic film, or not wrapped.

Performance statement

Hyne Timber T3 Green has been designed and manufactured to resist termite action and above ground decay in Australian buildings. It has also been designed to eliminate VOC's and have a very low odour.

When installed in accordance with the requirements herein, T3 Green can be used in conjunction with other building materials/systems to resist termite action and decay, and meet the performance requirements of the National Construction Code (NCC).

T3 Green properties

	Termite resistant product		Product of Australia
	Fungal resistant		No VOC emissions



Independently certified

Give your customers the trusted brand in timber.

Contact details

Ground Floor, 385 MacArthur Ave, Hamilton.
QLD 4007 Australia
info@hyne.com.au | hyne.com.au
