STRUCTURAL

LASERframe®

The natural solution for you.

CarterHoltHarvey
Woodproducts Australia

Strong, straight and environmentally sound, **LASERframe®** is the natural choice for framing.

LASERframe is Australia's most widely used structural framing timber. Pine framing has been used by generations of Australian builders. Timber is chosen for the roof and wall frame construction in tens of thousands of Australia's new homes every year because of its durability, high strength to weight ratio, ease of use and competitive pricing.

LASERframe is made from certified plantation pine and combines strength and cost effectiveness with total design flexibility.

Quality Assured

LASERframe undergoes stringent quality assurance processes during manufacture to produce strong and true framing timber. Our production processes are audited for compliance by an independent third party.

All LASERframe is planed to accurate and consistent dimensions.

Each stick is branded confirming its grade and the mill where it was manufactured.

Random samples are regularly tested to ensure both strength and stiffness properties are in accordance with the requirements of relevant Australian Standards.

Suitable for Bushfire Zones

LASERframe can be used for internal walls. As system requirements differ for each Bushfire Attack Level Zone refer to 'A guide to Bushfire Compliant Construction using Carter Holt Harvey Woodproducts' for further information. This can be downloaded for free from: www.chhwoodproducts.com.au/bushfire-protection

The True Environmental Choice

Australian plantation pine is natural, biodegradable and reusable. Compared to other commonly used building products timber requires less energy to produce, transport and use and, whilst growing, is a source of carbon capture.

In 2004 Australia's production forests and tree plantations are estimated to have absorbed around 44 million tonnes of CO2 from the atmosphere.[1] Choosing to build with timber helps to minimise your building's carbon footprint.

[1] "Forest Industries & Climate Change" National Association of Forest Industries 2007.

As can be seen in the table below, studies have shown that plantation pine requires less energy and releases less carbon in production and stores more carbon than other building materials such as concrete or aluminium. Buildings that are principally constructed from timber will have a lower embodied energy than buildings constructed of brick, concrete or steel. (Embodied energy is a measure commonly used when assessing the total energy input associated with a given material across manufacture, transportation and installation).

Material	Energy used in Production (MJ/m3)	Carbon Released (kg/m3)	Carbon Stored (kg/m3)
Timber	750	15	250
Steel	266 000	5320	0
Concrete	4800	120	0
Aluminium	1 100 000	22 000	0

Source: Environmental Properties of Timber Summary Report, Forest and Wood Products Research and Development Corporation 2004.

Sustainable Timber Certification

The LASERframe range is made from sustainably managed and certified plantation timber grown in accordance with recognised international environmental standards such as FSC (Forest Stewardship Council) or PEFC (Program for Endorsement of Forest Certification). Where required, LASERframe can be supplied with either FSC or PEFC chain of custody certification.

FSC® www.fsc.org FSC® C020156

The mark of responsible forestry

PEFC™ PEFC/21-31-91

TERMINATOR®
Termites. No worries.

Cost-effective Termite Protection for Your Home

A new home is a large investment and it's natural to want to protect it from termite and borer damage. LASERframe TERMINATOR is a termite treated framing solution providing long term protection against structural termite damage. The upfront cost of using LASERframe TERMINATOR is only a fraction of the price you'll pay if termites make themselves at home at your place. Insurance often won't protect you, but TERMINATOR can.

Simple to Use

Unlike other termite management systems, LASERframe TERMINATOR doesn't require ongoing application of top up chemicals or completion of an annual inspection to maintain your warranty. The TERMINATOR guarantee applies for up to 15 years longer than some other termite management system guarantees.

LASERframe TERMINATOR conforms to the Building Code of Australia and Australian Standard 1604.1. The TERMINATOR treatments do not affect material properties of the timber so you can upgrade to TERMINATOR without the cost and hassle of re-submitting plans.

LASERframe TERMINATOR is suitable for internal wall frames, roof trusses and any other internal load bearing application where termite protection is required. LASERframe TERMINATOR should not be used outdoors or in contact with the ground.

Peace of Mind

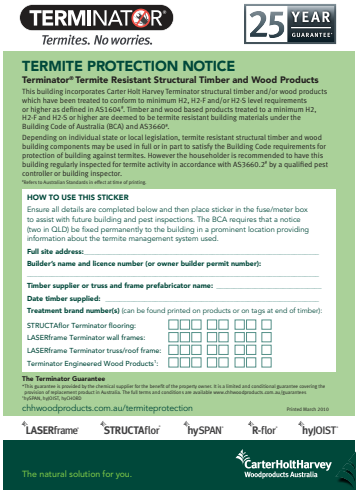
LASERframe TERMINATOR is backed by a transferable 25 year chemical supplier guarantee* so you can be confident that your house frame is protected. TERMINATOR has been rigorously tested by independent research bodies to ensure that it is suitable for use in Australian conditions.

25 YEAR CHEMICAL SUPPLIER GUARANTEE*

*The guarantee is provided by the chemical supplier for the benefit of the property owner. It is a limited and conditional guarantee covering the provision of replacement product used in Australia. The full terms and conditions are available at www.chhwoodproducts.com.au/guarantees.

Termite Protection Notice

Our meter box sticker provides a permanent record of TERMINATOR termite protection in your home.

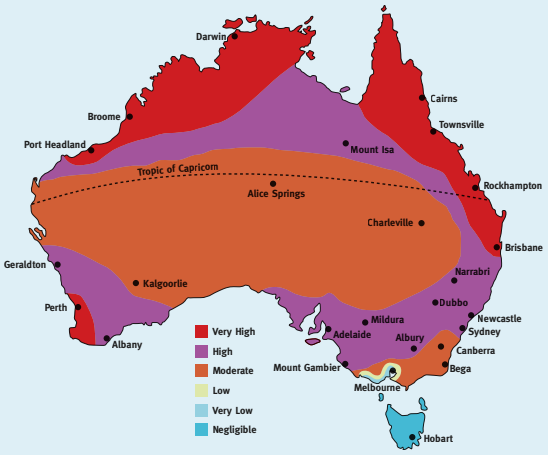

TERMINATOR®
Termites. No worries.
25 YEAR GUARANTEE*
TERMITE PROTECTION NOTICE
Terminator® Termite Resistant Structural Timber and Wood Products
This building incorporates Carter Holt Harvey Terminator structural timber and/or wood products which have been treated to conform to minimum H2, H2-F and/or H2-S level requirements or higher as defined in AS1604². Timber and wood based products treated to a minimum H2, H2-F and H2-S or higher are deemed to be termite resistant building materials under the Building Code of Australia (BCA) and AS3660².
Depending on individual state or local legislation, termite resistant structural timber and wood building components may be used in full or in part to satisfy the Building Code requirements for protection of building against termites. However the householder is recommended to have this building regularly inspected for termite activity in accordance with AS3660.2² by a qualified pest controller or building inspector.
HOW TO USE THIS STICKER
Ensure all details are completed below and then place sticker in the fuse/meter box to assist with future building and pest inspections. The BCA requires that a notice (two in QLD) be fixed permanently to the building in a prominent location providing information about the termite management system used.
Full site address:
Builder's name and licence number (or owner builder permit number):
Timber supplier or truss and frame prefabricator name:
Date timber supplied:
Treatment brand number(s) (can be found printed on products or on tags at end of timber):
STRUCTAflor Terminator flooring:
LASERframe Terminator wall frames:
LASERframe Terminator truss/roof frame:
Terminator Engineered Wood Products¹:
The Terminator Guarantee
chhwoodproducts.com.au/termiteprotection
LASERframe STRUCTAflor hySPAN R-flor hyJOIST
The natural solution for you.
CarterHoltHarvey Woodproducts Australia

What are the risks of termite attack?

- 9% of homes in Melbourne and Sydney have suffered termite damage (An analysis of termite damage in Sydney and Melbourne, Archicentre 2006).
- The biggest cost associated with termite attack is usually from repairing structural damage. Damage from termites is not usually covered by home insurance.[2]
- Check the termite hazard map to see if you are building in an at risk area. You should also check with your local council to see if higher risks apply to your specific area.

[2] "What you need to know about Termite Management"- Building Commission Victoria

Termite Hazard Map



TERMINATOR Blue or TERMINATOR Red?

LASERframe TERMINATOR is available in two different types of treatment depending on what area of Australia you are building in. For the majority of the population TERMINATOR Blue is the ideal choice, but in Australia's far north (above the Tropic of Capricorn) stronger protection is required against the Mastotermes darwiniensis termite species. TERMINATOR Red provides this higher level of protection.

Structural Component	Hazard Class	Situation	Location	Common Uses	Guarantee*
LASERframe TERMINATOR Blue	H2-F	• Inside, above ground, dry • Insect borer and termite hazard	South of the Tropic of Capricorn	• Framing, flooring, trusses	25 years
LASERframe TERMINATOR Red	H2	• Inside, above ground, dry • Insect borer and termite hazard	Australia-wide	• Framing, flooring, trusses	25 years

LASERframe® TERMINATOR®
Termites. No worries.

LASERframe TERMINATOR Blue is pine framing that has been protected with an organic insecticide treatment (to an H2-F level) and is the recommended solution for structures built south of the Tropic of Capricorn.

Easily Identifiable

LASERframe TERMINATOR Blue (as its name implies) is coloured blue timber framing. However, to ensure genuine LASERframe TERMINATOR Blue is being used, check for the TERMINATOR branding stamps or end tags on all sticks of timber.

Repels Termites

The insecticide used in TERMINATOR Blue repels termites, which means they are unlikely to use the frame and truss as a "highway" to reach other edible parts of the building. TERMINATOR Blue is also resistant to European House Borer.

Safe To Use[3]

When used in framing TERMINATOR Blue is safe for humans and mammals, but repels termites. It is effectively odourless and does not emit volatile fumes.

Range

TERMINATOR Blue is available in a range of sectional sizes and grades (MGP10, MGP12 and selected MGP15). Refer to the table on page 6 for more information.

LASERframe® TERMINATOR®
Termites. No worries.

Termites north of the Tropic of Capricorn are more prevalent and destructive than those to the south. **LASERframe TERMINATOR Red** is specifically designed to protect homes built in these high risk termite areas. LASERframe TERMINATOR Red has been treated to an H2 level using Light Organic Solvent Preservative (LOSP). It is a full sapwood treatment to ensure total protection.

Identification of TERMINATOR Red

TERMINATOR Red is identifiable by its red to light orange colour. However, to ensure genuine LASERframe TERMINATOR Red is being used, check for the TERMINATOR branding stamps or end tags on all sticks of timber.

Ideal for High Termite Risk Areas

LASERframe TERMINATOR Red is specifically designed to provide protection against the termite species known as Mastotermes darwiniensis, a larger and more destructive termite found north of the Tropic of Capricorn.

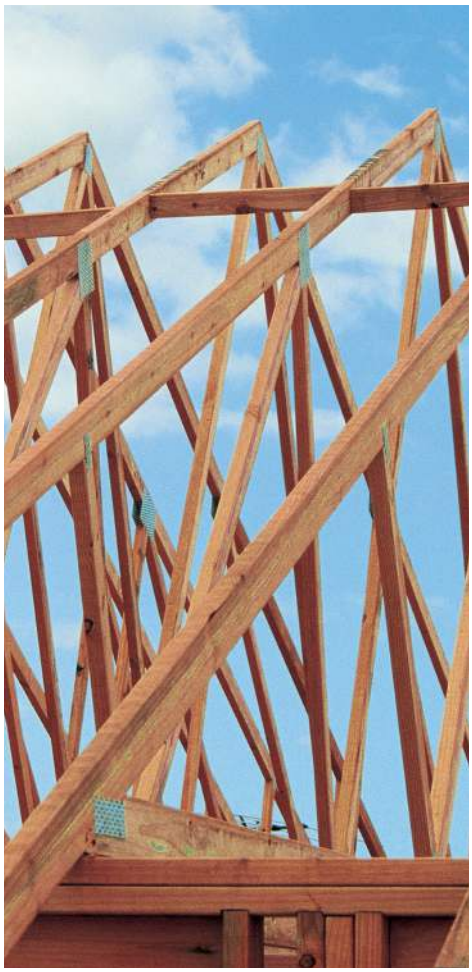
Safe To Use[3]

LASERframe TERMINATOR Red is treated with LOSP and can be used broadly across Australia without limitations. The active ingredient has low toxicity for humans and most non-target animal life. LOSP treated timber may have an initial solvent odour which fades as the solvent evaporates. The odour has usually dissipated by the commencement stage of building.

Range

TERMINATOR Red is available in a range of sectional sizes and grades (MGP10, MGP12 and selected MGP15). Refer to the table on page 6 for more information.

[3] All TERMINATOR timber preservatives are approved by the Australian Pesticide and Veterinary Medicines Authority and a range of state based regulators.



TERMINATOR®
Termites. No worries.

Other TERMINATOR Products

Termite protection for all structural elements

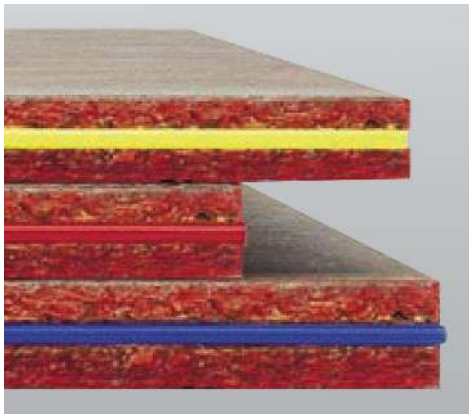
Carter Holt Harvey manufactures a range of termite resistant structural building products to complement LASERframe TERMINATOR and provide protection against termite attack for all the structural timber elements in your home.

Structural Flooring

- STRUCTAflor TERMINATOR particleboard flooring provides cost-effective, long-term defence against termite damage and is available in a range of sizes. STRUCTAflor TERMINATOR can be easily identified by its red wax edge seal and stamp on the underside of the board.

Structural Beams & Joists

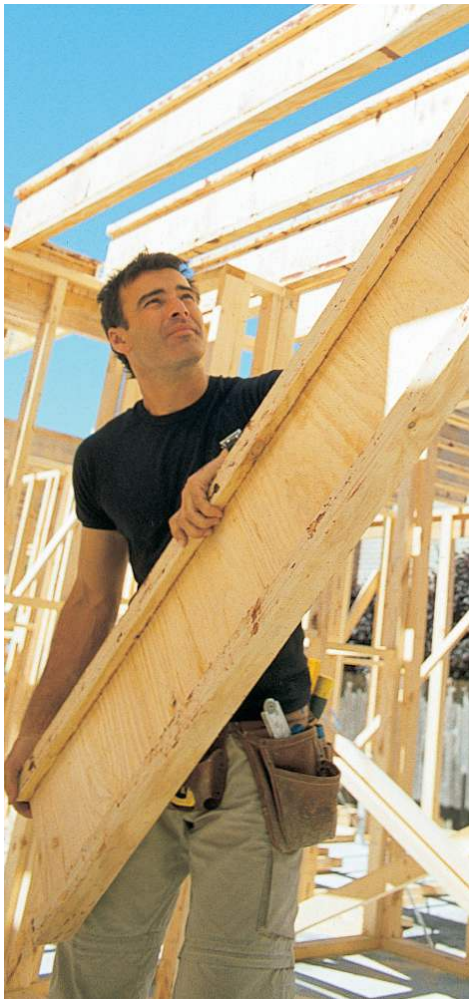
- hySPAN H2-S TERMINATOR delivers the benefits of Structural Laminated Veneer Lumber (LVL) plus "surface to core" termite protection meaning it can be cut or notched without resealing. Its popular uses include rafters, floor joists, beams and lintels
- hyJOIST H2-S TERMINATOR is a cost effective, lightweight and easy to install I-joist with added termite protection. Available in a range of sizes and lengths they are ideal for designing cost effective floors. Other uses include commercial floors, roof rafters and purlins for low pitched applications.



STRUCTAflor TERMINATOR flooring

Structural Component	Hazard Class	Situation	Location	Common Uses	Guarantee*
STRUCTAflor TERMINATOR	H2	• Inside, above ground, dry • Insect borer and termite hazard	Australia wide	• Flooring	25 years
hyJOIST TERMINATOR	H2-S	• Inside, above ground, dry • Insect borer and termite hazard	South of the Tropic of Capricorn	• Floor joists for houses; commercial floors • Roof rafters and purlins for houses and commercial systems	25 years
hySPAN TERMINATOR	H2-S	• Inside, above ground, dry • Insect borer and termite hazard	South of the Tropic of Capricorn	• Floor joists for houses, commercial floors, bearers, beams & lintel • Roof rafters and purlins for houses and commercial systems	25 years

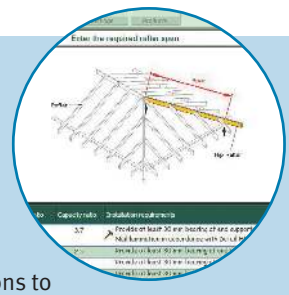
*Refer to www.chhwoodproducts.com.au/guarantees for details of chemical supplier guarantee



hyJOIST

FREE timber design software

designIT for houses



Simple to use – yet deceptively powerful, designIT is a powerful tool to help building practitioners to design more economical floor, wall and roof member layouts.

Features include:

- Engineering judgement not required to select beam sizes
- Beam sizing grouped into floor, wall & roof applications
- Floor joist and bearer calculations to accurately design complex loads
- Tie-down connections
- Provision of Design Certificates for members sized through the programme

Download at www.chhsoftware.com/designIT

Installation and Handling Information

Fixings & Adhesives

TERMINATOR treated timber is non-corrosive and normal bright steel nails and fixing plates are suitable. The treatment does not affect nail or plate holding.

The termite treatment should not affect adhesives, including plasterboard adhesives. However, we do recommend checking with plasterboard and adhesive suppliers regarding their specific recommendations.

Service Conditions

The LASERframe range, including LASERframe TERMINATOR is suitable for interior applications only. For outdoor load bearing applications use our ALLseasons range of products.

Storage

As with all interior timber products, keep LASERframe products protected from weather before use. Keep product clear of ground contact. Product exposure to rain and sunlight on the building site should be minimised.

LASERframe TERMINATOR Resealing Requirements

The recommendation of AS 1604.1 for all treated products in the hazard classes including H2 and H2-F is that good building practice is to reseal with a suitable timber preservative, such as Protim® XJ or Tanalised® Enseal Clear.

Examples of where resealing is required to meet the conditions of the TERMINATOR guarantee are:

- When TERMINATOR Red is used above the Tropic of Capricorn
- When LASERframe TERMINATOR is rip sawn or re-dressed
- Notching of bottom plate for fixing of bath tub or shower recess

When Laserframe is used south of the Tropic of Capricorn resealing is recommended but not required under the terms of the Terminator guarantee in the following situations:

- Where a piece of timber is cut to length and the cut face will be left exposed
- Where holes are drilled in the erected frames for installation of services
- Turbo-webs
- Trenches and notches do not require resealing if they are tightly joined to TERMINATOR or higher level treated timber and if there is no exposed untreated timber.

TERMINATOR guarantee visit : www.chhwoodproducts.com.au/guarantees

Health and Safety

LASERframe TERMINATOR is manufactured to applicable Australian Standards and is safe when handled correctly. However like all chemicals used in the home there are common sense procedures which should be followed.

To download Material Safety Data Sheets (MSDSs) that provide information about substances and their associated hazards, visit our website: chhwoodproducts.com.au

When working with treated timber the following is recommended:

Do not burn treated pine

Always wear dust mask and goggles

Always wear gloves when working with timber

Dispose of waste in an approved landfill

The LASERframe Structural Framing Range (including TERMINATOR)

Depth (mm)	Thickness (mm)	Available Lengths (m)	Framing Available – MGP 10 & MGP 12				Pieces per pack (ex Morwell)
			NSW	QLD	SA	Vic	
70	35	1.2 – 6.0	✓✓✓	✓✓✓	✓✓✓	✓✓✓	180 (150)
90	35	1.2 – 6.0	✓✓✓	✓✓✓	✓✓✓	✓✓✓	144 (120)
120	35	2.4 – 6.0	✓✓	✓✓✓	✓✓✓	✓✓✓	108
140	35	3.0 – 6.0	✓✓	✓✓✓	✓✓✓	✓✓✓	90
190	35	3.6 – 6.0	✓✓	✓✓✓	✓✓✓	✓✓✓	72
70	45	1.2 – 6.0	✓✓✓	✓✓✓	✓✓✓	✓✓✓	140 (120)
90	45	1.2 – 6.0	✓✓✓	✓✓✓	✓✓✓	✓✓✓	112 (96)
140	45	3.6 – 6.0	✓✓	✓✓✓	✓	✓✓✓	70
190	45	2.4 – 6.0	✓✓	✓✓	✓	✓✓✓	56
240	45	3.6 – 6.0	✓		✓	✓	42
290	45	3.6 – 6.0	✓		✓	✓	28

✓ LASERframe Untreated ✓ LASERframe Blue ✓ LASERframe Red

LASERframe Structural Framing is available in MGP10 and MGP12 grades with some limited MGP15 available.

Non-Structural Battens

End Section		Length	Battens			
Depth (mm)	Thickness (mm)		NSW	QLD	SA	VIC
42	35	Random	✓	✓	✓	✓
42	42	Random			✓	

Valley Boards

Depth (mm)	Thickness (mm)	Length (m)	Valley Boards			
			NSW	QLD	SA	VIC
100	25	4.8 - 6.0	✓			
190	19	4.8 - 6.0			✓	

Please use this as a guide only. Range and lengths available may change.