

LASERFRAME® PRODUCT GUIDE

CarterHoltHarvey Woodproducts Australia

AUSTRALIA'S FAVOURITE STRUCTURAL FRAMING

Laserframe[®] is Australia's most widely used structural framing timber, chosen by Australian builders as the preferred roof and wall framing material in tens of thousands of Australian homes every year, because of its favourable strength to weight ratio, ease of use and competitive pricing.

Features and Benefits

- Kiln dried for improved stability
- Protective treatments are available a range of treatments is available to provide the required level of protection for your structural project
- Quality Assured lengths individually graded for structural assurance
- Compliant compliant with Australian Standards
- Renewable produced in Australia from sustainably grown Australian plantation pine. Available as PEFC[®] certified upon request





I.0 LASERFRAME INTRODUCTION

Laserframe is structural pine suitable for use in residential and light commercial framing. Manufactured by Carter Holt Harvey Woodproducts, Laserframe is produced to Australian Standard AS/NZS1748:Timber – Solid – stress-graded for structural purposes. It is also independently audited against the requirements of the Engineered Wood Products Association of Australasia (EWPAA) Plantation Timber Certification Scheme (PTCS) to provide additional quality assurance. All Laserframe structurally graded timber is compliant with the following Australian Standards:

- AS 1684: Residential Timber Framed Construction
- AS 1720.1:Timber Structures, Part 1: Design Methods

Laserframe is available untreated and in a range of treatment options as detailed below. The treatment option required is dependent on the in-service application and can be derived from AS1604.1: Specification for Preservative Treatment – Part 1.





2.0 LASERFRAME PRODUCT RANGE

Laserframe is available in a wide selection of sizes, grades and lengths to provide flexible design options. Machined in the dry state to section size, product is specified and sold by the actual dry size (Table 2)

Laserframe Untreated – natural pine timber appearance with no added treatment to improve resistance to termite attack or fungal decay. Suitable for indoor above-ground use.

Laserframe Terminator Blue^{*} – light blue appearance with an H2-F treatment for protection against borers and termite attack in areas south of the Tropic of Capricorn in Australia. Suitable for indoor above-ground use.

Laserframe Terminator Red^{*} – light red in appearance with an H2 treatment level for protection against borers and termite attack in all parts of Australia. Suitable for indoor above-ground use.

Laserframe Allseasons Green^{*} – light green in appearance with an H3 treatment for protection against borers, termite attack and moderate fungal decay in all parts of Australia. Suitable for outdoor above-ground applications subject to periodic moderate wetting and leaching.

Brand	Hazard Class	Preservative	Biological Hazard	Location		
Laserframe Untreated	-	Nil	Nil	Australia-wide		
Laserframe [®] Terminator [®] Blue*	H2-F	Bifenthrin	Termites & Borers	South of the Tropic of Capricorn		
Laserframe® Terminator® Red*	H2	LOSP	Termites & Borers	Australia-wide		
Laserframe [®] Allseasons [®] Green	H3	LOSP	Decay, Fungi & Termites	Australia-wide		

Table 1: Laserframe Range Treatment Levels

*These products come with a guarantee from Koppers. Conditions apply. See www.kopperspc.com.au for details.

Table 2: Laserframe Size and Length Range

			Laserframe Untreated	Laserframe Terminator Blue	Laserframe Terminator Red	Laserframe Allseasons Greer
Size (mm)	Grades	Lengths (m)	Standard Pack Quantity (Morwell Mill Pack Quantity)			
70×35	MGP10	0.9 to 6.0	180 (150)	180 (150)	180 (150)	90
	MGP12	2.4 to 6.0	180 (150)	180 (150)	180 (150)	
	MGP15 ‡	4.8 to 6.0	180 (150)	180 (150)	180 (150)	
	F4	2.4 to 6.0	180 (150)			
70×45	MGP10	0.9 to 6.0	I40 (120)	I40 (120)	I40 (120)	70
	MGP12	2.4 to 6.0	I40 (120)	I40 (120)	I40 (120)	
90×35	MGP10	0.9 to 6.0	I44 (I20)	144 (120)	144 (120)	72
	MGP12	2.4 to 6.0	I44 (I20)	I44 (120)	144 (120)	
	MGP15 ‡	4.8 to 6.0	I44 (I20)	I44 (120)	144 (120)	
	F5MSG	2.4 to 6.0	144 (120)			
90×45	MGP10	0.9 to 6.0	I I 2 (96)	II2 (96)	II2 (96)	56
	MGP12	2.4 to 6.0	I I 2 (96)	II2 (96)	II2 (96)	
	MGP15 ‡	4.8 to 6.0	I I 2 (96)	I I 2 (96)	II2 (96)	
	F5MSG	2.4 to 6.0	I I 2 (96)			
120×35	MGP10	2.4 to 6.0	108	108		
	MGP12	2.4 to 6.0	108	108		
140x35	MGP10	2.4 to 6.0	90	90	90	45
	MGP12	2.4 to 6.0	90	90	90	
140x45	MGP10	2.4 to 6.0	70	70		35
	MGP12	3.6 to 6.0	70	70		
190×45	MGP10	2.4 to 6.0	56	56		28
	MGP12	3.6 to 6.0	56	56		
240x45	F5	3.6 to 6.0				21
290x45	F5	3.6 to 6.0				14

Length range increments of 0.3m. Pack sizes may vary.

Refer to laserframe.com.au for State range details. Size, grade, length and treatment availability varies by State. ‡ MGP15 availability is limited.

3.0 LASERFRAME TERMINATOR STRUCTURAL TIMBER

Laserframe Terminator structural timber is a termite treated framing solution. Providing long term protection against structural termite damage it is deemed termite resistant under the:

- Building Code of Australia (BCA)
- AS3660.1:Termite Management New Building Work

Laserframe treatments do not affect material properties of the timber, allowing upgrade to Laserframe Terminator without the cost and hassle of re-submitting plans. Unlike some termite management systems, Laserframe Terminator doesn't require ongoing application of top up chemicals or completion of an annual inspection to maintain warranty. Additionally, the upfront cost of Laserframe Terminator is only a fraction of the price home owners are likely to pay for rectification work if termite attack occurs.

Laserframe Terminator structural timber is suitable for internal wall frames, roof trusses and any other internal load bearing application. It cannot be used outdoors or in contact with the ground.

Laserframe Terminator is available in two different types of treatment depending on what area of Australia you are building in.



3.1 LASERFRAME TERMINATOR BLUE

Laserframe Terminator Blue is structural pine framing treated to hazard level H2-F for protection against termite attack and damage when used in applications south of the Tropic of Capricorn. Repelling termites so that they are unlikely to use the frame and truss as a 'highway' to reach other parts of the building, Laserframe Terminator Blue is also resistant to European House Borer.

Coloured using a blue dye for ease of identification, lengths are also branded by way of an end tag or an inkjet stamp along the face or edge of the board.

Laserframe Terminator Blue is treated with bifenthrin (synthetic pyrethroids), an organic insecticide used in common household applications such as head lice shampoos, citronella garden torches and fly spray. When used in framing Terminator Blue is effectively odourless without volatile fumes and is safe for humans and mammals.



3.2 LASERFRAME TERMINATOR RED

Laserframe Terminator Red is structural pine framing treated to hazard level H2 for protection against termite attack and damage in all areas of Australia, including high risk termite areas such as north of the Tropic of Capricorn where the larger, more destructive mastotermes darwiniensis termite species is active.

Repelling termites so that they are unlikely to use the frame and truss as a 'highway' to reach other parts of the building, Laserframe Terminator Red is also resistant to European House Borer.

Coloured using a red dye for ease of identification, lengths are also branded by way of an end tag or an inkjet stamp along the face or edge of the board.

Laserframe Terminator Red is a full sapwood treatment to ensure total protection. It is treated with Light Organic Solvent Preservative (LOSP) containing Permethrin, which is safe for humans and mammals. LOSP treated timber may have an initial solvent odour which fades as the solvent evaporates, usually dissipating by the commencement stage of building.

3.3 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 Solignum XJ Clear Timber Protective or Tanalised Enseal Clear. To meet the conditions of the chemical guarantee, minimum reseal requirements apply (refer Table 3).

3.4 FIXINGS & ADHESIVES

Laserframe Terminator treatments are non-corrosive and do not affect nail or plate holding, making normal bright steel nails and fixing plates suitable in application. While the termite treatment should not affect adhesives, including plasterboard adhesives, we recommend checking with plasterboard and adhesive suppliers regarding their specific recommendations.

3.5 SERVICE CONDITIONS

The Laserframe Terminator Range is suitable for interior applications only. For outdoor load bearing applications use the Laserframe Allseasons Green range (overleaf).



Table 3: Resealing Laserframe Terminator

Resealing Required	Laserframe Terminator Blue	Laserframe Terminator Red	
Planed Studs	Yes	Yes	
Notches or rebates	Yes	Yes	
Damaged timber members	Yes	Yes	
Rip sawn or re-dressed	Yes	Yes	
Cuts for speed bracing	No	No	
Trenches	No§	No§	
Enclosed cut end	No	No§	
Exposed cut end	No	Yes	
Bore holes	No	No	
Service holes	No	No	

§ Resealing is not required if tightly joined to treated timber which has been treated to the same or a higher Hazard Class and if there is no exposed untreated timber. For full details on re-seal requirements please visit www.kopperspc.com.au

4.0 LASERFRAME ALLSEASONS GREEN



Laserframe Allseasons Green is structural and appearance grade pine timber treated for protection against borers, termite attack and moderate fungal decay in external applications in all parts of Australia.

Laserframe Allseasons Green is structurally graded to ensure it performs in load bearing applications, and is subject to strict appearance selection criteria. Laserframe Allseasons Green products are most often used as structural members such as joists, bearers, beams, rafters and battens in outdoor applications such as decks, pergolas and verandas where both strength and appearance are important.

Laserframe Allseasons Green H3 is treated with a Light Organic Solvent Preservative (LOSP) containing Propiconazole and Tebuconazole organic fungicides and Permethrin insecticide. LOSP is an effective preservative formulation designed to provide lasting protection for wood products used in external above ground applications. The treatment is a non-water based formulation that is designed to reduce the uptake of water by the timber during construction. This improves stability by reducing the dimensional changes that would otherwise occur as water is absorbed and lost.

Laserframe Allseasons Green is deemed termite resistant under the Building Code of Australia (BCA) and AS3660.1:Termite Management – New Building Work. Coloured using green dye for ease of identification, lengths are also branded by way of an end tag or an inkjet stamp along the face or edge of the board.

4.1 RESEALING REQUIREMENTS

In any application where Laserframe Allseasons Green has been cut, notched, rebated or drilled the exposed area should be resealed with a suitable timber preservative such as Protim Solignum XJ Clear Timber Protective to ensure the treatment envelope remains intact to provide the best long term protection.

4.2 FIXINGS & ADHESIVES

For normal applications all bolts, screws, nails, brackets, framing anchors and other fixings that will be in contact with preservative treated pine should be hot dipped galvanised. In harsh environments, such as those close to the sea, stainless steel or similar fixings should be used. While the treatment should not affect adhesives, we recommend checking with adhesive suppliers regarding their specific recommendations.

4.3 SERVICE CONDITIONS

The Laserframe Allseasons Green range is treated to Hazard Level H3, making it suitable for outdoor above-ground applications. Laserframe Allseasons Green is approved for use in all areas of Australia.

5.0 SPECIFICATION

5.1 DETERMINATION OF STRUCTURAL PROPERTIES

Laserframe is produced to Australian Standard AS/NZS1748:Timber – Solid – stress-graded for structural purposes. Carter Holt Harvey has stringent quality control processes within all manufacturing facilities for Laserframe structural products.

5.2 STRESS GRADING

The stiffness and strength of a piece of timber varies along its length. All Laserframe is stress graded in accordance with AS/NZS1748 to test for stiffness with random samples regularly tested 'off line' on purpose-built test equipment to verify both stiffness and strength.

5.3 IDENTIFICATION

All Laserframe products have identification marks by way of an end tag or inkjet stamp along the face or edge of the board.

These marking include:

- Structural grade
- Time and date of production
- Sawmill identification number
- Australian Standard

For treated timber products these markings also include:

- Registered treatment plant number
- Preservative number
- Hazard Class number

5.4 AUSTRALIAN BUILDING CODE – DURABILITY

Laserframe is manufactured to meet the requirements of AS 1684: Residential Timber Framed Construction and AS 1720.1:Timber Structures Part 1: Design Methods. As such, if the product is used in accordance with Carter Holt Harvey product literature, it will meet the durability clauses of the Building Code Of Australia (BCA). After installation, the timber requires no special attention other than maintenance of the building envelope and prompt remedy of any failures (roof, walls, floor, plumbing).

5.5 QUALITY ASSURANCE

Carter Holt Harvey has strict quality assurance processes in place to monitor that Laserframe adequately satisfies structural and visual requirements. The Engineered Wood Products Association of Australia (EWPAA) has been contracted to undertake independent, third party auditing of the stress grading processes at our structural mill sites. The following EWPAA inspections are carried out bi-annually:

- Audit of the stress grading process and procedures
- Assessment of personnel competence in relation to skills and knowledge requirements
- Verification of the calibration of testing equipment

5.6 CHEMICAL GUARANTEE

Laserframe Terminator products come with a guarantee from Koppers. Conditions apply. See www.kopperspc.com.au for details.

5.7 AUSTRALIAN PLANTATION PINE

The Laserframe range is produced in Australia from sustainably grown Australian plantation pine and is available as PEFC[®] chain of custody certified upon request.

5.8 STORAGE

The benefits of Laserframe are optimised by looking after it as dry timber. Lift pack off transport, rather than tip. For storage, ensure that the integrity of the plastic film wrap in which the product arrives from the sawmill is maintained and that the timber is stored at least 100mm clear of the ground on bearers suited to keeping it straight. Note the following:

- Minimise exposure to weather and rain
- Protect pre-cut and pre-nailed frames
- Enclose frames as soon as possible
- Avoid ponding of water on floor and around plates
 - Dry out after exposure to moisture
 - Minimise product exposure to rain and sunlight on building site

5.9 HANDLING & DISPOSAL

To download Safety Data Sheets visit: chhwoodproducts.com.au





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IMPORTANT NOTICE AND WARNING

While the products in this document possess the characteristics described, no representation is made that the products will be effective in all locations and circumstances. Much depends upon building design, construction practices and the environment in which the products are used. Statements about the attributes and performance characteristics of the products are made on the assumption that the products are properly stored, handled, installed, used and maintained in their relevant application.

You should not rely solely on this document when using the products Carter Holt Harvey recommends obtaining professional building advice which takes into account your particular circumstances and site conditions. Carter Holt Harvey is not involved in, and does not assume responsibility for, the selection, installation or maintenance of our products in situ.

Failure to install Carter Holt Harvey products in accordance with applicable building regulation requirements and instructions may lead to personal injury, loss or damage, and may adversely affect the performance of the products.