

Pinex® Verified MSG8 CCA Wet Product Information



SEPTEMBER 2009

Pinex® Verified is a structurally reliable outdoor timber manufactured by Carter Holt Harvey Woodproducts for use in deck joists, bearers, balustrades, handrails, exposed framing, ramps, stairs and steps.

Pinex Verified is kiln dried and then machine stress graded at CHH Woodproducts sawmills by experienced staff using proven technology. The structural reliability of Pinex Verified can be assured by the verification of this product in accordance with NZS 3622.

All Pinex Verified is plantation grown radiata pine.

PINEX VERIFIED FEATURES

- Structurally reliable outdoor timber
- Treated for outdoor use to Hazard Class H3.2
- Manufactured utilising machine stress graded technology
- Each piece tested for stiffness
- Service and support from CHH Woodproducts

TABLE 1:
PINEX VERIFIED SIZE AND LENGTH AVAILABILITY

Sizes (mm)	Lengths (m)
90 x 45	4.8, 5.4
140 x 45	4.8, 5.4, 6.0
190 x 45	4.8, 5.4, 6.0
240 x 45	4.8, 5.4, 6.0
290 x 45	4.8, 5.4, 6.0

Pinex Verified is specified and sold by the dry size. It is machined in the dry state to the section sizes given in Table 1. When treated with CCA, a water borne treatment, the size will increase, and will have a moisture content greater than 25%.

USES

- Pinex Verified is manufactured for use in buildings within the scope of NZS 3604 Amendment 4 with grade properties as assigned in NZS 3603 as shown in Table 2 and is suitable in fully exposed situations.
- Pinex Verified has the same structural properties as VSG8, G8 wet and will perform in a similar manner.

STRESS GRADING

All Pinex Verified is machine stress graded after kiln drying and planing in accordance with AS/NZS 1748. All pieces are tested for stiffness. Regular random samples are tested "off line" on purpose built test equipment to verify both strength and stiffness in accordance with NZS 3622.

The stiffness and strength of a piece of timber varies along its length. The grade of a piece is determined by the minimum values found along the piece.

Pinex Verified will not have paint markings on the face as typically seen on other machine stress graded products e.g. Laserframe.

The grade can be seen as wet MSG8 marked as the running brand.

GRADES

Pinex Verified MSG8.

All Pinex Verified pieces will carry an inkjet marking on each stick with a "V" groove on the opposite edge. Below is an example of the inkjet brand. Note that the number preceding AS/NZS 1748 identifies the site where the machine stress grading was done. The BV represents the name of the third party auditor - Bureau Veritas New Zealand.

Pinex Verified WET MSG8 190x45 101 AS/NZS1748 DATE BV NZS3622

DETERMINATION OF STRUCTURAL PROPERTIES

- The structural properties of Pinex Verified are verified according to the requirements of NZS 3622 Verification of Timber Properties.
- Table 2 gives the characteristic strength and stiffness values for limit states design.

For dry in-service use (i.e. < 16% moisture content) designers may apply the dry characteristics for MSG8 from Table 2.3 NZS 3603 Amendment 4, for Pinex Verified.

Designers must ensure that for dry in-service use that the appropriate creep factors are used in accordance with NZS 3603, or alternatively members are propped during the drying process until the moisture content has dropped below 18%.

TABLE 2: CHARACTERISTIC STRESSES FOR PINEX® VERIFIED MACHINE STRESS GRADED TIMBER (MPa)

Moisture condition - greater than 16%						
Species	Grade*	Bending Strength (MPa)	Compression Strength	Tension Strength	Modulus of Elasticity (GPa)	Lower Bound Modulus of Elasticity (GPa)
Radiata Pine	Pinex® Verified MSG8	11.7	12.0	4.0	6.5	4.4

* Pinex Verified has the same structural properties as VSG8, G8 wet and will perform in a similar manner.

ENGINEERING DISCLAIMER

The characteristic properties and stress grade classification are attributes of a timber population. All Pinex Verified timber comes from a population that meets the characteristic properties of the designated MSG grade. CHH Woodproducts is unable to warrant that any single piece or pack of timber has the characteristic properties of the designated MSG grade.

NEW ZEALAND BUILDING CODE – DURABILITY

Pinex Verified is manufactured to meet the requirements of NZS 3602 Timber and Wood based Products for use in Buildings. As such, if the product is used in accordance with CHH Woodproducts product literature, it will meet the durability clauses of the New Zealand Building Code.

QUALITY ASSURANCE

CHH Woodproducts has strict quality assurance processes in place to monitor that Pinex Verified adequately satisfies structural and visual requirements. Bureau Veritas, a JAS-ANZ accredited global conformity inspection company, has been contracted to undertake independent, third party auditing of the Machine Stress Grading processes at our structural mill sites. Independent audit inspections are carried out biannually and include:

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

TREATMENT

Pinex Verified is available treated to Hazard Class level H3.2 CCA as specified in NZS 3602 in accordance with NZS 3640.

STANDARDS

Pinex Verified may be used in conjunction with the following:

- NZS 3602:2003 - Timber and Wood-based Products for use in Building
- NZS 3603:1993 - Timber Structures Standard
- NZS 3604:1999 - Timber Framed Buildings
- NZS 3622:2004 - Verification of Timber Properties
- NZS 3640:2003 - Chemical Preservation of Round and Sawn Timber
- AS/NZS 1170 series - Structural Design Actions
- AS/NZS 1748:2006 - Timber Stress-graded Product requirements for mechanically stress-graded timber

STORAGE HANDLING AND INSTALLATION

Store Pinex Verified clear off the ground on bearers suited to keeping the timber straight. Lift packets off transport, do not tip.

Pinex Verified is sent from the sawmill in partially wrapped packets and it is important to ensure that the integrity of the wrap is maintained during storage. The benefits of Pinex Verified are optimised by looking after it as dry timber. Note the following:

- Minimise exposure to weather and rain
- Avoid ponding of water on the ground
- Dry out after exposure to wetting
- Cut ends of Pinex Verified treated in CCA should be retreated with an appropriate preservative of a copper naphthanate derivative, such as Holdfast Metalex®.

MAINTENANCE

Used as recommended, Pinex Verified requires no maintenance in fully exposed environments, but is not suitable for in-ground use.

DISPOSAL

Treated Pinex Verified residues should be sent for disposal at an approved landfill site.



The Pinex Verified machine stress grading process and procedures are audited by Bureau Veritas



The Pinex Verified timber treatment process and procedures are audited by AssureQuality

Disclaimer: The information contained in this product information sheet is current as at September 2009 and is based on data available to Carter Holt Harvey as at the time of going to print. Carter Holt Harvey reserves the right to change the information contained in this document without prior notice. It is important that you call 0800 746 399 to confirm that you have the most up to date information available. Carter Holt Harvey has used its reasonable endeavours to ensure the accuracy and reliability of the information contained in this document and, to the extent permitted by law, will not be liable for any inaccuracies, omissions or errors in this information nor for any actions taken in reliance on this information.