

Product name	SG8 H5 CCA
Product line	New Zealand Radiata Pine Structural Timber
Product identifier	SG8 H5 CCA
Product Class	Class 1
Product Sizes	70x45, 90x45, 140x35, 140x45, 190x45, 240x45, 290x45, 200x75

Building Product Information Sheet (BPIR)

Description

Structural (SG8) H5 CCA Radiata timber is for structural wood products and is used where severe decay hazard risks such as ground contact where conditions of severe or continuous wetting may occur. The H5 CCA level of treatment allows for the wood to be used where it will be exposed to, and in continual contact with weather moisture or continuous wetting. In these situations, H5CCA is required to ensure a long life and trouble-free usage.

Manufactured from plantation grown New Zealand Radiata Pine. • Kiln dried Radiata Pine. • Machine stress graded for structural assurance. • Compliant with New Zealand Standards

This timber is Kiln dried, and can be used for a selection of the following applications where timber dimension, grade (SG8) and treatment (H5) are specified by an Engineer or Designer and where the application meets the New Zealand Building Code/ NZS3640

End uses for this product include:

- House piles and poles
- engineered retaining walls
- Crib walling
- Horticultural supports
- deck piers,
- timber piers in permanent fresh water contact.

Relevant Building Code Clauses

- **B1 Structure** — B1.1, B1.2, B1.3.1, B1.3.2, B1.3.3 and B1.3.4.
- **B2 Durability** — B2.3.1 (a,b,c)
- **F2 Hazardous building materials** — F2.3.1

Contributions to Compliance

SG8 H5 CCA KD SG8 Pine Structural Timber

Clause B1 (Structure)

- Strict internal standards are maintained for quality control of all Structural Timber. In addition to these standards Grade Right Ltd performs audits to ensure the verified framing programme is accurate. Lumber treated by North Sawn Lumber meets multiple quality assurance standards and is marked with the Assure Quality imprint for preservative purposes. These schemes ensure that our plant, systems, independent testing, and quality control all meet with rigorous New Zealand standards for wood treatment and processing. With North Sawn Lumber you can be sure of consistent high-quality treatment.
- When SG8 H5 CCA Timber is used correctly as it is engineered and designed to, it is designed to safeguard people from injury and loss of amenity and protection of other property.
- SG8 H5 CCA structural timber is required to fulfil the functional requirements of buildings and structures throughout their lives, through strength testing, correct installation, and design.
- There is an exceptionally low probability when used of a structure rupturing, becoming unstable, losing equilibrium, or collapsing during their intended duration when the correct product is used for its intended use. This is reinforced by our strict quality control of all Grade Standards.
- Timber strength, suitability, treatment, and design when used in accordance with NZS3604 standards, means that a Timber framed building or structure causing a loss of amenity through undue deformation, response to vibration, degradation or other physical characteristics throughout their lives when the building is in use is prevented to the best possible level.

Contributions to Compliance

SG8 H5 CCA KD Pine Structural Timber

Clause B2 (Durability)

SG8 H5 CCA treated timber is guaranteed for 50 years* (see Koppers warranty). The treated wood is guaranteed to withstand insect attack and fungal decay and remain structurally fit for purpose for these periods when installed correctly. This is conditional on the timber having been treated to reach or exceed the Hazard Level H5 requirements of NZS3640. For radiata pine structural timber products used in outdoor framing and Interior construction, the H5 CCA treatment is specified to ensure a long life and trouble-free service under the Building Code. Typical examples are above ground and inground use for decking, pergolas or fencing.

Contributions to Compliance

SG8 H5 CCA KD Pine Structural Timber

Clause F2.3.1 (Hazardous building materials)

Chromate Copper Arsenate (CCA) is a preservative that has been used extensively around the world for more than 80 years and has stood the test of time.

Radiata SG8 H5 CCA KD is NOT considered a hazardous material and is safe to use, especially when simple Health and Safety protocols are in place:

- Eyes: Wear non-fogging goggles, full face shield, or safety glasses with side shields when cutting this product.
- Hands and Skin: Wear protective clothing such as overalls and shirt with sleeves, also closed in footwear. Wear puncture-resistant gloves (e.g. Leather) when handling dry wood.
- Respiratory: Use in well-ventilated area or outside. Wear a class P1 or P2 replaceable filter or a disposable face piece respirator should be worn if wood dust is generated.
- General: Wash hands before eating, drinking, smoking, using the toilet and at the end of the shift.
- Ensure clothing exposed to CCA sawdust is washed separately.
- Do not dispose of offcuts by burning, use approved landfills only and do not use as 'mulch' for gardens.

Scope of Use

SG8 H5 CCA KD Pine Structural Timber

Radiata SG8 is Kiln Dried H5 CCA Treated. CCA is a non-hazardous product that has been used in New Zealand for over 50 years with a proven safety record when used as recommended. CCA is often referred to as 'Tanalised'. This treatment provides effective timber preservative and resistance to fungal decay and insect attack. The preservative formulation is applied to dry timber using a controlled vacuum pressure process in an industrial timber treatment plant that ensures deep penetration without compromising the integrity of the wood.

SG8 is a structural timber. H5 CCA is most commonly used in situations where severe decay hazard risks such as ground contact where conditions of severe or continuous wetting may occur.

The benefits of SG8 H5 CCA KD Pine Structural Timber are:

- It is long lasting and robust in New Zealand conditions which are recognised as being severe for wood rot and decay.
- Its natural appearance makes it ideal for outdoor structures.
- Painting or staining for enhanced appearance are easy to apply.
- Low maintenance and easy to work with.
- SG8 Pine Timber is made from a renewable resource.

All Structural timber complies with the design requirements of NZS3604:2011 Timber Framed Buildings. The engineering properties are contained in NZS3603:1993 A4 and are verified by the process specified in NZS3622:2004 A1.

SG8 (Stress Graded 8 with an average stiffness of 8.0GPa) is tested as a joist on edge by bending the piece to measure stiffness and then a bending strength load of about 345kg applied to measure bending strength. This testing gives consumers confidence that Grade Verified timber will perform in service.

Conditions of Use

SG8 H5 CCA KD MG Pine Structural Timber

- Must be installed by a licensed building practitioner (even where restricted building work does not apply) It must be installed in accordance with the specifications and installation details described in NZS 3604 or as detailed by the Chartered Professional Engineer, and good building practice.
- SG8 H5 CCA Timber must be used where the timber will be <200mm off the ground and there is a potential for the timber being continuously wet.
- All metal fasteners and fixings must be hot dipped galvanised steel as a minimum. Where items will be difficult to replace or maintain or where greater levels of corrosion are expected such as structures near to the sea, stainless steel fixings are a minimum. DO NOT USE ALUMINIUM in contact with CCA treated wood.
- Treated wood products should be used in its final shape and form as supplied. If subsequent cutting to length rebates or notch holes are formed for required for fitting and installation, exposed cuts should have an in can remedial preservative applied such as Enseal Clear or Green. IN NO CIRCUMSTANCES should H5 CCA treated timber be rip sawn or re-manufactured from the original dimensions.
- Structural timber should not be used where it will be subject to loadings that are above design limits as specified in NZS3604.2011 Timber Framed Buildings or NZ/AS1720 Part 1.2022 Timber Structures.
- Structural Timber must be installed in accordance with good building practice, sound design principles, and in accordance with the specifications and installation details provided by the engineer and/or other qualified design professional.
 - It is the responsibility of the builder to purchase the correct grades and treated levels from the supplier and install them according to the consented design/plan. In the case of prefabricated buildings, the responsibility rests with the frame and truss manufacturer. Where grades which are not available have been specified, builders should ask the designer to redesign in available grades and amend the consent.
- Design responsibility lies with the building owner and the professionals that they engage. The specifier for the project must ensure that the details in the specification for their individual projects are appropriate for the intended application. The specifier must also ensure that additional detailing is provided for specific design or any areas that fall outside the scope and specifications of normal SG8 H5 CCA Pine Structural Timber.
 - Designers should be aware there are now three sets of design tables within NZS3604 and they need to ensure plans and specifications are clear and include grade, size of timber, spacing etc. as this information is critical at consent and build stages.

Contact Details

Manufacture location	New Zealand / Aotearoa
Legal and trading name of manufacturer(s)	North Sawn Lumber Ltd
Manufacturer address for service	458 Marsden Point Road, PO Box 7, Ruakaka
Manufacturer website	www.nslumber.co.nz
Manufacturer email	info@nslumber.co.nz
Manufacturer phone number	027574 3394
Manufacturer NZBN	9429035559368

Documentation

- NZ Timber Preservation Council Inc
[NZ Timber Preservation Council \(nztpc.co.nz\)](http://nztpc.co.nz)
Timber Preservation Information
- Verified Timber
<https://www.verifiedtimber.co.nz/>
Structural Timber Information
- Building Performance
<https://www.building.govt.nz/building>
Certification Design Maintenance
- Koppers FramePro Brochure
<https://www.kopperspc.co.nz/pdfs/Fram...>
<https://www.kopperspc.co.nz/resources/sds.html>
https://www.kopperspc.co.nz/pdfs/Koppers_NZ_Warranty.pdf
Maintenance Test results/resources/warranty
- Grade Right NZ Ltd Grade Verified Information Sheet:
• <https://www.graderight.co.nz/home/>
Certification Installation Test results
- CodeMark Product Certificate North Sawn Timber
[codemark-certificate-1.png \(1200x848\) \(nslumber.co.nz\)](#)
CodeRight Dryframe Protim Micro Structural Timber
- Asure Quality
[Forestry & Timber Certification – AsureQuality](#)
Forestry Timber Certification