

Australian/New Zealand Standard™

**Specification for preservative treatment**

**Part 5: Glued laminated timber products**



## **AS/NZS 1604.5:2012**

This Joint Australian/New Zealand Standard was prepared by Joint Technical Committee TM-006, Timber Preservation and Durability. It was approved on behalf of the Council of Standards Australia on 18 September 2012 and by the New Zealand Standards Approval Board on 6 September 2012. This Standard was published on 26 November 2012.

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The following are represented on Committee TM-006:

Australian Forest Products Association  
Australian Pesticides and Veterinary Medicines Authority  
Australian Timber Importers Federation  
Department of Building and Housing (New Zealand)  
Department of Employment, Economic Development and Innovation  
Engineered Wood Products Association of Australasia  
Engineers Australia  
Forest and Wood Products Australia  
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New Zealand Timber Preservation Council  
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*This Standard was issued in draft form for comment as DR (2012) AS/NZS 1604.5.*

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# Australian/New Zealand Standard™

## Specification for preservative treatment

### Part 5: Glued laminated timber products

Originated as AS/NZS 1604.5:2002.  
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## PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee TM-006, Timber Preservation and Durability, to supersede AS/NZS 1604.5:2005.

*This Standard incorporates Amendment No. 1 (March 2017). The changes required by the Amendment are indicated in the text by a marginal bar and amendment number against the clause, note, table, figure or part thereof affected.*

The objective of this Standard is to specify requirements for preservative treatment of glued laminated timber products for protection against decay or insect attack.

The objectives of this revision are to add—

- (a) copper azole to Table H2; and
- (b) waterborne azole formulation to Table H3.1; and

This Standard is part of a series that covers specifications for preservative treatment of timber products, as follows:

AS 1604	Specification for preservative treatment
AS 1604.1	Part 1: Sawn and round timber
AS/NZS 1604	Specification for preservative treatment
AS/NZS 1604.2	Part 2: Reconstituted wood-based products
AS/NZS 1604.3	Part 3: Plywood
AS/NZS 1604.4	Part 4: Laminated veneer lumber (LVL)
AS/NZS 1604.5	Part 5: Glued laminated timber products (this Standard)

A1 | The objectives of this amendment to this Standard are to—

- (i) delete all references to Forests New South Wales;
- (ii) amend and simplify the preservative and preservative treatment requirements of Clauses 1.5, 1.7 and 1.8;
- (iii) amend the marking information in Clause 6.2.1;
- (iv) insert a new Appendix C, Timber preservatives; and
- (v) insert a new Appendix D, Abbreviated marking.

A1 | This Standard does not specify the preservative treatment methods to be adopted to achieve the specified penetrations and retentions. Where the user is uncertain of the appropriate preservative treatment, additional information may be obtained from relevant organizations.

Preservatives not covered in this edition, and which may have general application, should be brought to the attention of Standards Australia for consideration for inclusion in future editions.

### **WARNING:**

#### **Important Safety Notice**

**Improper use of the preservative chemicals and treated products may be hazardous. All individuals involved in the production or testing of treated products should be familiar with the relevant Material Safety Data Sheets.**

**Consumer information sheets dealing with the appropriate use and handling of treated products should be provided as the point of sale literature.**

**Treated timber should not be used for food preparation surfaces nor should it be used in storage units or containers where the foodstuffs will be in direct contact with the treated timber surface.**

Statements expressed in mandatory terms in notes to tables are deemed to be requirements of this Standard.

The terms 'normative' and 'informative' have been used in this Standard to define the application of the appendix to which they apply. A 'normative' appendix is an integral part of a Standard, whereas an 'informative' appendix is only for information and guidance.

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## FOREWORD

The purpose of preservation is to extend the life of the glued laminated timber product by protecting it from decay or insect attack. This increases the range of the end application of the glued laminated timber product and renders it a more useful and reliable material for construction, building and engineering purposes.

The service life of the glued laminated timber product depends on a variety of factors. These include the natural durability of the timber species, the degree of preservative treatment, and the range of hazards and type of environment anticipated during the service life of the product. In addition, the severity of exposure may be reduced by alternative design. Regular inspection and maintenance procedures will assist in minimizing the effects of exposure.

In all conditions of use, the non-durable timber component of glued laminated timber products may be made durable by correct preservative treatment. Service life may depend on the glued laminated timber products having been ripped, crosscut, shaped, bored, machined or having had any such operations or processes carried out after preservative treatment. Where subsequent machining is unavoidable, supplementary protection should be applied to the cut surface; however, this protection cannot be expected to be as effective as the original recommended treatment.

## STANDARDS AUSTRALIA/STANDARDS NEW ZEALAND

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## SECTION 1 SCOPE AND GENERAL

**1.1 SCOPE**

This Standard specifies requirements for preservative treatment of glued laminated timber products. It specifies the preservative penetration pattern and the preservative retention requirements suitable for each hazard class (see Table 1.1).

This Standard does not cover grade or seasoning condition.

**1.2 APPLICATION**

The preservatives referred to in this Standard are intended for application only in approved industrial treatment plants as defined in AS/NZS 2843 series.

This Standard, in conjunction with AS 1604.1 and the AS/NZS 1605 series, is intended for application throughout Australia and New Zealand.

## NOTES:

- 1 This Standard does not apply to finger-jointed material. For finger-jointed material, the requirements of AS 1604.1 apply.
- A1 | 2 **‘Text deleted’**
- 3 Where glued laminated timber products are to be treated to comply with the requirements of this Standard, timber treaters should select suitable timber material to ensure that the finished product can be penetrated to the depth required for each hazard class.
- 4 Where a timber species’ treatment properties are not known, trial samples placed into a normal charge/process should give indications of the timber’s treatability. These indications should serve as a guide for the treater.
- 5 The following references set down the treatment properties of some well-known commercial timbers of the world:
  - (a) EN 350-2 (see Bibliography).
  - (b) Keating WG, Bolza E, *Characteristics, properties and uses of timber*, Vol. 1, *South East Asia, Northern Australia and the Pacific*, INKATA PRESS, Melbourne, 1982.
- 6 Additional guidance on the use/application of preservative-treated glued laminated timber products is provided in Bolden S and Greaves H, *Guide to the specification, installation and use of preservative treated engineered wood products*, FWPA Project No. PR08.1062.

**1.3 NORMATIVE REFERENCES**

The following are the normative documents referenced in this Standard:

NOTE: Documents referenced for informative purposes are listed in the Bibliography.

AS	
1604	Specification for preservative treatment
1604.1	Part 1: Sawn and round timber
5604	Timber—Natural durability ratings