

Australian/New Zealand Standard™

Structural laminated veneer lumber

**Part 4: Determination of formaldehyde
emissions**



AS/NZS 4357.4:2005

This Joint Australian/New Zealand Standard was prepared by Joint Technical Committee TM-008, Plywood Timber Products. It was approved on behalf of the Council of Standards Australia on 26 April 2005 and on behalf of the Council of Standards New Zealand on 6 May 2005. This Standard was published on 8 August 2005.

The following are represented on Committee TM-008:

Australian Building Codes Board
CSIRO Forestry and Forest Products
Engineers Australia
Forests NSW
Housing Industry Association
New Zealand Forest Research Institute
New Zealand Plywood Manufacturers Association
Plywood Association of Australasia
Timber Development Association (NSW)

Additional Interests:

Mr Kevin Lyngcoln

Keeping Standards up-to-date

Standards are living documents which reflect progress in science, technology and systems. To maintain their currency, all Standards are periodically reviewed, and new editions are published. Between editions, amendments may be issued. Standards may also be withdrawn. It is important that readers assure themselves they are using a current Standard, which should include any amendments which may have been published since the Standard was purchased.

Detailed information about joint Australian/New Zealand Standards can be found by visiting the Standards Web Shop at www.standards.com.au or Standards New Zealand web site at www.standards.co.nz and looking up the relevant Standard in the on-line catalogue.

Alternatively, both organizations publish an annual printed Catalogue with full details of all current Standards. For more frequent listings or notification of revisions, amendments and withdrawals, Standards Australia and Standards New Zealand offer a number of update options. For information about these services, users should contact their respective national Standards organization.

We also welcome suggestions for improvement in our Standards, and especially encourage readers to notify us immediately of any apparent inaccuracies or ambiguities. Please address your comments to the Chief Executive of either Standards Australia or Standards New Zealand at the address shown on the back cover.

This Standard was issued in draft form for comment as DR 04563.

STANDARDS AUSTRALIA/STANDARDS NEW ZEALAND

RECONFIRMATION

OF

AS/NZS 4357.4:2005

Structural laminated veneer lumber

Part 4: Determination of formaldehyde emissions

RECONFIRMATION NOTICE

Technical Committee TM-011 has reviewed the content of this publication and in accordance with Standards Australia procedures for reconfirmation, it has been determined that the publication is still valid and does not require change.

Certain documents referenced in the publication may have been amended since the original date of publication. Users are advised to ensure that they are using the latest versions of such documents as appropriate, unless advised otherwise in this Reconfirmation Notice.

Approved for reconfirmation in accordance with Standards Australia procedures for reconfirmation on 27 April 2016.

Approved for reconfirmation in New Zealand on behalf of the Standards Council of New Zealand on 18 May 2016.

The following are represented on Technical Committee TM-011:

Australian Building Codes Board
Australian Forest Products Association
Australian Timber Importers Federation
Australian Wood Panels Association
Building Research Association of New Zealand
Engineered Wood Products Association of Australasia
Forest and Wood Products Australia
Furntech-AFRDI
Glued Laminated Timber Association of Australia
Master Builders Australia
Monash University
New Zealand Plywood Manufacturers Association
New Zealand Timber Industry Federation
Timber Design Society
Wood Processors & Manufacturers Association of New Zealand

NOTES

Australian/New Zealand Standard™

Structural laminated veneer lumber

Part 4: Determination of formaldehyde emissions

First published as AS/NZS 4357.4:2005.

COPYRIGHT

© Standards Australia/Standards New Zealand

All rights are reserved. No part of this work may be reproduced or copied in any form or by any means, electronic or mechanical, including photocopying, without the written permission of the publisher.

Jointly published by Standards Australia, GPO Box 476, Sydney, NSW 2001 and Standards New Zealand, Private Bag 2439, Wellington 6020

ISBN 0 7337 6814 8

PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee TM-008, Plywood Timber Products.

The objective of this Standard is to provide a test method for determination of formaldehyde emissions for structural laminated veneer lumber (LVL).

This Standard is based upon the Japanese Agricultural Standard (JAS) method specified in MAFF Notification No. 237 but has been adapted to suit LVL products commonly manufactured and sold in Australia and New Zealand. Specifically, it allows product to be tested in the same condition that it is supplied to the market, for example with edge and/or surface finish. This Standard requires test pieces to be conditioned for 7 days prior to testing to reflect the typical minimum time period that would elapse from manufacture to the sale and use of the product.

This Standard is part 4 of the [AS/NZS 4357](#) series, *Structural Laminated Veneer Lumber*, which comprises the following parts:

[AS/NZS](#)

[4357](#) Structural Laminated Veneer Lumber

[4357.0](#) Part 0: Specifications (revision of [AS/NZS 4357:1995](#), *Structural Laminated Lumber*)

[4357.1](#) Part 1: Method of test for measurement of dimensions and shape

[4357.4](#) Part 4: Determination of formaldehyde emissions (this Standard)

Other companion Standards in preparation are as follows:

Part 2: Determination of structural properties—Test methods

Part 3: Determination of Structural Properties—Evaluation methods

CONTENTS

	<i>Page</i>
1 SCOPE.....	4
2 REFERENCED DOCUMENTS.....	4
3 DEFINITIONS.....	4
4 PRINCIPLE	4
5 APPARATUS	4
6 REAGENTS.....	5
7 TEST PIECES.....	5
8 PROCEDURE.....	6
9 DETERMINATION OF FORMALDEHYDE.....	6
10 REPORT	7
APPENDICES	
A ESTABLISHING THE FORMALDEHYDE CALIBRATION CURVE.....	8
B FORMALDEHYDE AIR CONCENTRATION IN THE DESICCATOR.....	11