

**AS 1720.5:2015**  
(Incorporating Amendment No. 1)

AS 1720.5:2015



## **Timber structures**

### **Part 5: Nailplated timber roof trusses**



This Australian Standard® was prepared by Committee TM-010, Timber Structures and Framing. It was approved on behalf of the Council of Standards Australia on 31 July 2015. This Standard was published on 18 August 2015.

---

The following are represented on Committee TM-010:

- Australian Building Codes Board
  - Australian Forest Products Association
  - Australian Institute of Building
  - Building Research Association of New Zealand
  - Engineered Wood Products Association of Australasia
  - Engineers Australia
  - Forest and Wood Products Australia
  - Frame and Truss Manufacturers Association Australia
  - Glued Laminated Timber Association of Australia
  - Housing Industry Association
  - Housing SA
  - James Cook University
  - Master Builders Australia
  - New Zealand Timber Industry Federation
  - Timber Development Association, NSW
  - Timber Queensland
  - University of Technology, Sydney
  - Wood Processors and Manufacturers Association of New Zealand
- 

This Standard was issued in draft form for comment as DR AS 1720.5:2015.

Standards Australia wishes to acknowledge the participation of the expert individuals that contributed to the development of this Standard through their representation on the Committee and through the public comment period.

---

### **Keeping Standards up-to-date**

Australian Standards® are living documents that 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Standards may also be withdrawn.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 that may have been published since the Standard was published.

Detailed information about Australian Standards, drafts, amendments and new projects can be found by visiting **[www.standards.org.au](http://www.standards.org.au)**

Standards Australia welcomes suggestions for improvements, and encourages readers to notify us immediately of any apparent inaccuracies or ambiguities. Contact us via email at **[mail@standards.org.au](mailto:mail@standards.org.au)**, or write to Standards Australia, GPO Box 476, Sydney, NSW 2001.

---

**AS 1720.5:2015**  
(Incorporating Amendment No. 1)

**Australian Standard<sup>®</sup>**

**Timber structures**

**Part 5: Nailplated timber roof trusses**

First published as AS 1720.5:2015.  
Reissued incorporating Amendment No. 1 (May 2019).

**COPYRIGHT**

© Standards Australia Limited

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, unless otherwise permitted under the Copyright Act 1968.

ISBN 978 1 76035 200 4

## PREFACE

This Standard was prepared by the Australian members of the Joint Standards Australia/Standards New Zealand Committee TM-010, Timber Structures and Framing.

*This Standard incorporates Amendment No. 1 (May 2019). 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.*

After consultation with stakeholders in both countries, Standards Australia and Standards New Zealand decided to develop this Standard as an Australian Standard rather than an Australian/New Zealand Standard.

The objective of this Standard is to provide a performance-based document for the design of nailplated timber roof trusses for residential and similar building applications in accordance with AS 1720.1, AS 4055 and the AS(/NZS) 1170 series. Guidance is provided as necessary for the interpretation of these Standards specifically for roof truss design within defined building parameters. Some prescriptive information is included for effective application of the Standard.

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 for information and guidance only.

## CONTENTS

	<i>Page</i>
FOREWORD.....	4
 SECTION 1 SCOPE AND GENERAL	
1.1 SCOPE.....	5
1.2 APPLICATION .....	5
1.3 NORMATIVE REFERENCES .....	5
1.4 NOTATION.....	6
1.5 DEFINITIONS.....	6
1.6 GENERAL REQUIREMENTS.....	9
1.7 BASIS FOR DESIGN .....	9
1.8 OTHER METHODS .....	9
 SECTION 2 DESIGN CONSIDERATIONS	
2.1 PERFORMANCE .....	10
2.2 DESIGN METHODS .....	10
2.3 DOCUMENTATION.....	10
2.4 MATERIALS.....	11
2.5 LOADS.....	12
 SECTION 3 DESIGN METHODS	
3.1 STRUCTURAL MODELS .....	14
3.2 CRITICAL DESIGN ACTION EFFECTS.....	14
3.3 CAPACITY FACTOR .....	14
3.4 STRENGTH LIMIT STATES .....	15
3.5 STABILITY LIMIT STATES.....	20
3.6 SERVICEABILITY LIMIT STATES .....	20
 SECTION 4 MEMBER DESIGN	
4.1 GENERAL.....	22
4.2 DESIGN FOR SAFETY .....	22
4.3 DESIGN FOR SERVICEABILITY .....	27
 SECTION 5 JOINT DESIGN	
5.1 GENERAL.....	29
5.2 STRENGTH LIMIT STATES .....	29
 APPENDICES	
A NOMENCLATURE.....	36
B OTHER DESIGN CONSIDERATIONS .....	44
C COMMONLY USED STRUCTURAL MODELS .....	51
D TRUSS OVERHANG DESIGN METHOD .....	53
 BIBLIOGRAPHY .....	 57

This is a free preview. Purchase the entire publication at the link below:

[Product Page](#)

- 
- Looking for additional Standards? Visit Intertek Inform Infostore
  - Learn about LexConnect, All Jurisdictions, Standards referenced in Australian legislation
-