

Australian Standard[®]

Skylights



This Australian Standard® was prepared by Committee BD-075, Skylights. It was approved on behalf of the Council of Standards Australia on 6 July 2007.
This Standard was published on 12 September 2007.

The following are represented on Committee BD-075:

- Australian Industry Group
 - Australian Window Association
 - CSIRO Manufacturing and Materials Technology
 - Master Builders Australia
 - National Association of Testing Authorities Australia (NATA)
 - Plastics and Chemicals Industry Association
 - Skylight Industry Association of Australia
 - University of Technology, Sydney
-

This Standard was issued in draft form for comment as DH 07105.

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Standards may also be withdrawn.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 the 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

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, or write to Standards Australia, GPO Box 476, Sydney, NSW 2001.

Australian Standard[®]

Skylights

Originally as AS 4285—1995.
Second edition 2007.

COPYRIGHT

© Standards Australia

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.

Published by Standards Australia GPO Box 476, Sydney, NSW 2001, Australia

ISBN 0 7337 8386 4

PREFACE

This Standard was prepared by the Standards Australia Committee BD-075, Skylights, to supersede AS 4285—1995.

The Standard was proposed by the Skylight Industry Association to cover areas of product performance, safety, design, construction and maintenance. Installation requirements, test conditions and procedures have also been addressed. The Standard is aimed at factory-manufactured skylight assemblies and their components.

The objective of this Standard is to provide the manufacturers and users of skylights with specifications covering the construction and performance of such skylights for use in building applications.

The changes to previous edition of this Standard comprise the following:

- (a) Modification of ‘Scope and General’—
 - (i) clarifying scope, application and limitations;
 - (ii) requirements for new designs and innovation; and
 - (iii) new definitions.
- (b) Addressing new materials used in manufacturing skylights.
- (c) Addressing issues related to the construction of skylight assemblies—
 - (i) fabricated metal bases;
 - (ii) glazing;
 - (iii) ventilation; and
 - (iv) bushfire-prone area.
- (d) New section for ‘Cleaning and Maintenance’—
 - (i) cleaning and maintenance of base components;
 - (ii) cleaning and maintenance of mechanical components, timber and glass; and
 - (iii) cleaning and maintenance of polymer surface.
- (e) Inclusion of commentary to some clauses.
- (f) New ‘Informative’ appendix for—
 - (i) size of skylights; and
 - (ii) skylights shaft or lightwell.

This Standard incorporates commentary on some of the clauses. The commentary directly following the relevant clause, is designated by ‘C’ preceding the clause number and is printed in *italics* in a box. The commentary is for information only and does not need to be followed for compliance with the Standard.

Notes to the text contain information and guidance. They are not an integral part of the Standard.

Illustrations in this Standard are purely diagrammatic and are intended to show functional requirements only, not methods of construction.

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.

CONTENTS

	<i>Page</i>
SECTION 1 SCOPE AND GENERAL	
1.1 SCOPE	4
1.2 NEW DESIGNS AND INNOVATIONS	4
1.3 NORMATIVE REFERENCES	4
1.4 DEFINITIONS	4
SECTION 2 MATERIALS AND HARDWARE	
2.1 MATERIALS	5
2.2 FASTENINGS AND HARDWARE	7
2.3 PROTECTION AGAINST CORROSION	8
2.4 SEALANTS, WEATHERSTRIPPING AND GASKETS	9
2.5 FINISHES	9
SECTION 3 CONSTRUCTION, PERFORMANCE REQUIREMENTS AND INSTALLATION	
3.1 CONSTRUCTION OF SKYLIGHT ASSEMBLIES	10
3.2 PERFORMANCE REQUIREMENTS	12
3.3 INSTALLATION	13
3.4 SAFETY LABEL REQUIREMENTS	14
3.5 MARKING	14
3.6 MAINTENANCE	14
APPENDICES	
A NORMATIVE REFERENCES	15
B MEANS FOR DEMONSTRATING COMPLIANCE WITH THIS STANDARD	17
C SKYLIGHT SHAFT OR LIGHT WELL	19
D SIZE OF SKYLIGHTS	20
E SAFETY LABEL	21
F MARKING	22
G ENERGY EFFICIENCY	23
H MAINTENANCE OF SKYLIGHTS	24
I BIBLIOGRAPHY	25

STANDARDS AUSTRALIA

**Australian Standard
Skylights**

SECTION 1 SCOPE AND GENERAL

1.1 SCOPE

This Standard specifies requirements for the manufacture and testing of skylights comprising a factory-manufactured assembly to permit natural light transmission. The Standard includes requirements for materials, fastenings and hardware, weatherproofing, ventilation, safety labels, marking and maintenance for skylights complete and ready for installation in a roof opening. It is designed for use by manufacturers, suppliers, designers and consumers alike.

This Standard applies to factory-manufactured natural lighting systems installed into roofs including skylights (roof lights), roof windows and tubular skylight (tubular roof lights).

This Standard does not apply to complex overhead roof glazing systems, including barrel vault, atriums, conservatories and roof systems constructed from light-transmitting materials.

NOTES:

- 1 Alternative methods for determining compliance with this Standard are given in Appendix B.
- 2 While information on the choice of a skylight for a particular application is outside the scope of this Standard, information is provided in the Commentary C3.2.2 that provides some guidance in this respect.

1.2 NEW DESIGNS AND INNOVATIONS

Any alternative materials, designs, methods of assembly, procedures, etc., that do not comply with specific requirements of this Standard, but that give equivalent results to those specified are not necessarily precluded, however, equivalent performance may need to be demonstrated. Where materials are substituted they shall not only satisfy the specified component and assembly performance requirements of this Standard but, where not specifically identified in Section 2 'Materials and Hardware', shall demonstrate equivalent or better performance in these areas.

1.3 NORMATIVE REFERENCES

The normative documents referenced in this Standard are listed in Appendix A.

NOTE: Documents referenced for informative purposes are listed in Appendix I.

1.4 DEFINITIONS

For the purpose of this Standard, the definitions below apply.

1.4.1 Base assembly

A skylight base assembly is a fabricated or moulded frame and is the means of securing a dome or glazed panel to a roof in a weathertight manner. It is normally made up of the soaker tray, side and bottom flashings, ventilation areas, dome trims and condensation lip or gutter.