This is a free page sample. Access the full version online.

AS 3634—1989

Australian Standard®

Solar heating systems for swimming pools

STANDARDS AUSTRALIA

This is a free page sample. Access the full version online.

This Australian Standard was prepared by Committee CS/28, Solar Water Heaters. It was approved on behalf of the Council of Standards Australia on 14 June 1989 and published on 18 August 1989.

The following interests are represented on Committee CS/28:

Australian and New Zealand Solar Energy Society
Australian Gas Association
CSIRO, Division of Energy Technology
Department of Administrative Services, Australian Construction Services
Department of Business and Consumer Affairs, N.S.W.
Department of Minerals and Energy, N.S.W.
Department of Mines and Energy, N.T.
Department of Primary Industries and Energy
Electricity Supply Association of Australia
Engineering and Water Supply Department, S.A.
Gas and Fuel Corporation of Victoria
Master Plumbers and Mechanical Services Association of Victoria
Metal Trades Industry Association of Australia
Solar Energy Industries Association of Australia
Trade Practices Commission
University of New South Wales
Victorian Solar Energy Council

Additional interests participating in preparation of Standard:

Swimming Pool and Spa Association of Australia

Review of Australian Standards. *To keep abreast of progress in industry, Australian Standards are subject to periodic review and are kept up to date by the issue of amendments or new editions as necessary. It is important therefore that Standards users ensure that they are in possession of the latest edition, and any amendments thereto.*

Full details of all Australian Standards and related publications will be found in the Standards Australia Catalogue of Publications; this information is supplemented each month by the magazine 'The Australian Standard', which subscribing members receive, and which gives details of new publications, new editions and amendments, and of withdrawn Standards.

Suggestions for improvements to Australian Standards, addressed to the head office of Standards Australia, are welcomed. Notification of any inaccuracy or ambiguity found in an Australian Standard should be made without delay in order that the matter may be investigated and appropriate action taken.

This Standard was issued in draft form for comment as DR 87144.

This is a free page sample. Access the full version online.

AS 3634—1989

Australian Standard®

Solar heating systems for swimming pools

First published as AS 3634—1989.

PUBLISHED BY STANDARDS AUSTRALIA
(STANDARDS ASSOCIATION OF AUSTRALIA)
1 THE CRESCENT, HOMEBUSH, NSW 2140
ISBN 0 7262 5804 0

This is a free page sample. Access the full version online.

PREFACE

This Standard was prepared by Standards Australia's Committee on Solar Water Heaters, in response to a request from the Victorian Solar Energy Council (VSEC). Studies commissioned by VSEC in 1984, including performance testing of swimming pool heaters, indicated that solar heating of swimming pools was very cost effective compared to gas or oil-fuelled heating. One outcome of these studies was the proposal by VSEC that standards should be established for pool heating covering the materials and performance of solar collectors used for pool heating, and the design, construction and installation of these systems.

The 1986 edition of AS 2535, *Solar collectors with liquid as the heat-transfer fluid — Methods of testing thermal performance*, incorporated revisions to make that Standard suitable for testing the performance of collectors of the types used for pool heating. A Standard for the materials used in unglazed collectors for pool heating is in course of preparation.

This Standard deals with design, construction and installation aspects collectively, and is based largely on the work of VSEC, and the assistance received from this source is gratefully acknowledged. Account has also been taken of BS 6785, *British Standard Code of Practice for solar heating systems for swimming pools*, and also the specifications for solar pool heating prepared by the Gas and Fuel Corporation of Victoria.

© Copyright — STANDARDS AUSTRALIA

Users of Standards are reminded that copyright subsists in all Standards Australia publications and software. Except where the Copyright Act allows and except where provided for below no publications or software produced by Standards Australia may be reproduced, stored in a retrieval system in any form or transmitted by any means without prior permission in writing from Standards Australia. Permission may be conditional on an appropriate royalty payment. Requests for permission and information on commercial software royalties should be directed to the head office of Standards Australia.

Standards Australia will permit up to 10 percent of the technical content pages of a Standard to be copied for use exclusively in-house by purchasers of the Standard without payment of a royalty or advice to Standards Australia.

Standards Australia will also permit the inclusion of its copyright material in computer software programs for no royalty payment provided such programs are used exclusively in-house by the creators of the programs.

Care should be taken to ensure that material used is from the current edition of the Standard and that it is updated whenever the Standard is amended or revised. The number and date of the Standard should therefore be clearly identified.

The use of material in print form or in computer software programs to be used commercially, with or without payment, or in commercial contracts is subject to the payment of a royalty. This policy may be varied by Standards Australia at any time.

This is a free page sample. Access the full version online.

CONTENTS

Page

1 SCOPE 4
2 REFERENCED AND RELATED DOCUMENTS 4
3 DEFINITIONS 4
4 COLLECTORS 5
5 CONTROL SYSTEM (WHERE FITTED) 7
6 HYDRAULIC CONSIDERATIONS 8
7 PIPEWORK 10
8 PUMPS 11
9 COMMISSIONING AND HANDOVER 11

APPENDICES

A NOTES ON THE DESIGN OF SOLAR POOL HEATING SYSTEMS 13
B CALCULATION OF POOL HEATING LOAD 17
C SOLAR POOL COVERS 21
D EFFECT OF ORIENTATION AND INCLINATION ON COLLECTOR PERFORMANCE 22
E TABLE OF CLIMATIC DATA 26

SAI GLOBAL

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