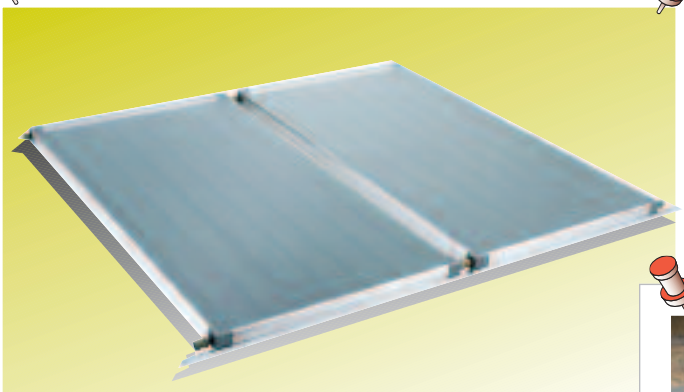
Solar Water Heater Training Course

Installer and User Manual



BCSE

Australian
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I. ABOUT THIS BOOK

This Installation manual has been compiled to replace the *Solar Water Heater Training Course, Installer and User Guide* published by the Solar Energy Industries Association of Australia (SEIAA) in 1996.

SEIAA was one of the industry associations that merged to become the Business Council for Sustainable Energy (BCSE), an industry association that covers the full range of sustainable energy, including the major suppliers of solar water heater systems in Australia. Solar water heaters not only include the flat plate and evacuated tube systems commonly seen in Australia, but also 'heat pumps' that utilise heat from the air.

The use of solar water heaters has been recognised as one of the main ways that households can save on fossil fuel energy and reduce the resultant greenhouse gas emissions that are recognised as the cause of global warming.

These benefits have been recognised by the Federal and State Governments, with a range of financial incentives being available. A number of different state planning schemes now encourage the installation of solar water heaters for use in new homes.

The book has been developed with the assistance of the New Zealand Solar Industries Association for use in both countries.

II. THE ROLE OF PLUMBING PROFESSIONALS

With solar water heaters being recognised as a key part of a sustainable home, there is a greater demand for plumbers with relevant installation skills. Solar water heaters utilise free energy from the sun, and even in southern Australia and southern New Zealand households and businesses can save at least 60% of the annual fossil fuel energy usually required by a water heater. Special installation skills and knowledge will ensure that systems are installed to efficiently capture this energy. In effect, the use of fossil fuel energy is replaced by solar collection components and the installer's skills.

This book has been produced as a reference book for plumbers and apprentices in learning more about solar water heaters, as well as a practical book for use in the field to cover real installation issues and troubleshooting. The BCSE hopes that the book will be a practical and valuable tool.

The term 'installer' has been used throughout the book. While most parts of a solar water heater installation must be done by a qualified plumber, including any water connections, some parts of the work may be done by someone with relevant training. These might include sizing a system, choosing the best system type, siting collectors to achieve maximum solar contribution and to avoid shading, and assisting with collector and system installation.

We hope that this training book, in conjunction with practical training if required, will provide plumbers with the specialist knowledge of solar water heaters that will complement their existing skills and enable them to be more involved in this growing part of the water heater market.

III. FURTHER ACKNOWLEDGEMENTS AND CONTRIBUTIONS

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IV. CONTENTS

V. LIST OF EXAMPLES

VI. LIST OF RULES OF THUMB

VII. LIST OF TABLES

VIII. LIST OF FIGURES