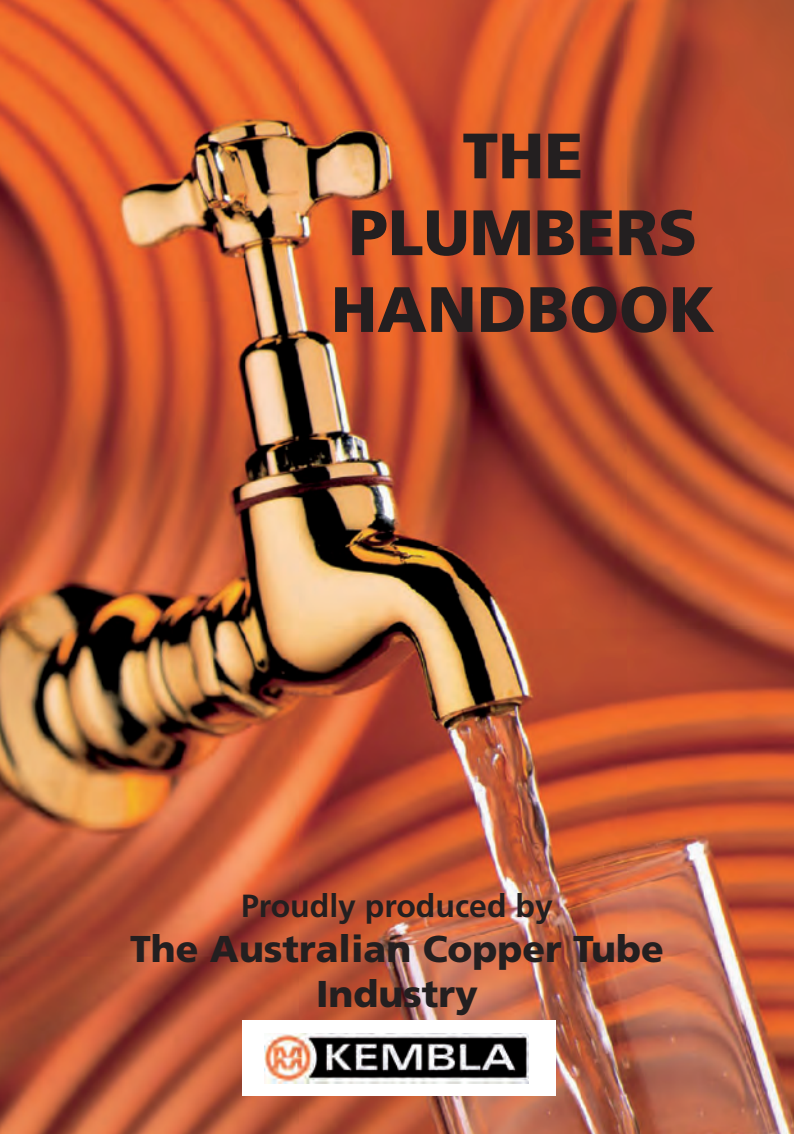
THE
PLUMBERS
HANDBOOK
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The Australian Copper Tube
Industry
KEMBLA

THE PLUMBERS HANDBOOK

EIGHTH EDITION

Proudly produced by

The Australian Copper Tube Industry

COPPER

Copper Development Centre, Australia Ltd

FOREWORD

The Copper Development Centre Australia, in conjunction with its tube manufacturing members MM Kembla and Crane Copper Tube, is proud to issue the eighth edition of the Plumbers Handbook which is published as an industry aid at a time when marked changes are taking place with respect to installation practice and material specification. This revision reflects some of those changes.

By 2007, the combined Australian copper tube manufacturing plants reached 145 years of operation. Over this remarkable period, the 2 tube companies have developed flexible copper systems for domestic, residential, commercial and industrial piping applications. A national network of distributors, on a day to day basis, offers a total system of reliable quality tubes, fittings, components and accessories which are manufactured and marked in accordance with WaterMark Licences, as required by the Plumbing Code of Australia.

The inherent flexibility and reliability of copper offers specifiers, designers, building owners, installers and occupiers significant benefits for an array of piping services which include plumbing, drainage, gas, refrigeration, air conditioning, fire services, air, steam and medical installations. Copper piping products are readily available with no embargo on intermixing of pipe and fitting brands. Small outside diameters offer space savings whilst copper's light weight and ductility assists installers. The impermeability of copper prevents the ingress of external substances. This characteristic, combined with copper's health benefits and compliance with AS/NZS 4020, ensure drinking water is suitable for human consumption. Copper's potential for 100% recycling contributes to a clean environment. Importantly, in addition to these attributes, copper systems are cost effective.

This edition of the Plumbers Handbook is issued with the expectation that recipients will use the information to complement design and installation skills for copper piping systems that have been developed over many years and played an essential role in Australia's development, and maintaining the health of its people.

The Copper Development Centre Australia recognizes the contribution of its members in the revision of this book and thanks its originator MM Kembla for the privilege of adopting it as a Copper Industry publication.

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TUBE SPECIFICATION AND SIZE RANGES

MATERIAL		
Copper	Phosphorus Deoxidised Copper, High Residual Phosphorus, Alloy C 12200 Copper tubes and fittings are suitable for the conveyance of a drinking water as they comply with Australian Standard AS/NZS 4020.	
Size Range	**Outside Diameter (mm)** 3.18mm up to and incl. 254.0mm **Thickness (mm)** 0.31 mm up to and incl. 3.25mm	
STANDARD LENGTHS		
Straight	Diameters up to and incl. 152.40mm: Diameters above 152.40 up to and incl. 203.20mm: Diameters above 203.20mm:	6 metres 4-6 metres 3-6 metres
Coils	Diameters up to and incl. 7.94mm: Diameters over 7.94mm and up to 31.75mm:	30 metres 18 metres

STANDARDS APPLICABLE TO COPPER AND ALLOY TUBES

STANDARDS AND DESCRIPTION	
AS 1432	Copper Tubes for Plumbing, Gasfitting and Drainage Applications
AS 1572	Copper and Copper Alloys - Seamless Tubes for Engineering Purposes
AS/NZS 1571	Copper - Seamless Tubes for Air Conditioning and Refrigeration
AS 1569	Copper and Copper Alloys - Seamless Tubes for Heat Exchangers
AS 3795	Copper Alloy Tubes for Plumbing and Drainage Applications
AS 4809	Copper pipe and fittings- Installation and commissioning