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Australian Standard®

Water supply—Copper and copper alloy compression and capillary fittings and threaded end connectors

AS 3688—1994
Water supply—Copper and copper alloy body compression and capillary fittings and threaded-end connectors
(In Professional Packages 50E, 61A, 61B)
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Specifies requirements for copper and copper alloy body pipe fittings and threaded-end connectors for use in water supply systems where the normal working temperature does not exceed 95°C, with maximum peaks of 110°C for short periods of time, and where the continuous working pressure ranges up to a maximum of 1.4 MPa for all fittings other than capillary fittings manufactured from copper tube.

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Board of Works, Melbourne
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Department of Local Government, Qld
Department of Public Works, N.S.W.
Engineering and Water Supply Department, S.A.
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Hunter Water Board
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PREFACE

This Standard was prepared by the Standards Australia Committee on Brass Water Fittings, to supersede AS 1585—1982, *Capillary and brazing fittings of copper and copper alloy*, AS 1590—1982, *Copper alloy threaded pipe fittings for use with tubes threaded with pipe threads of Whitworth form*, and AS 1645—1974, *Copper and copper alloy compression fittings for use in water supply and hot water services.*

The history of the Standards which have been revised and amalgamated to form this Standard is as follows:

(a) AS 1585 originally published as AS B181 in 1969, revised and redesignated as AS 1585 in 1973, and further revised in 1976 and 1982.

(b) AS 1590 originally published as AS B37 in 1931, revised in 1969, revised and redesignated as AS 1590 in 1974, and further revised in 1977 and 1982.

(c) AS 1645 originally published as AS B36 in 1931, revised in 1969, and revised and redesignated as AS 1645 in 1974.

Provision has been made to rationalize dimensions, thread lengths vary from ISO 1179 in that they have been slightly reduced, but minimum external thread lengths have been maintained. Emphasis has been placed on dezincification requirements and the concept of performance format and testing has been introduced.

CONTENTS

Page

SECTION 1. SCOPE AND GENERAL

1.1 SCOPE 5
1.2 APPLICATION 5
1.3 REFERENCED DOCUMENTS 5
1.4 DEFINITIONS 5
1.5 DESIGNATION OF SIZE 5

SECTION 2. MATERIALS

2.1 SCOPE OF SECTION 6
2.2 COPPER 6
2.3 COPPER ALLOY 6
2.4 DEZINCIFICATION-RESISTANT COPPER ALLOY 6
2.5 STAINLESS STEEL 6
2.6 OTHER MATERIALS 6
2.7 CORROSION-RESISTANT MATERIALS 6
2.8 USE OF MATERIALS 6
2.9 EFFECT ON WATER 6

SECTION 3. DESIGN AND DIMENSIONS

3.1 SCOPE OF SECTION 8
3.2 TUBE STOP 8
3.3 SLIP FITTING 8
3.4 FIXING DEVICE 8
3.5 DIMENSIONS 8
3.6 WATERWAY 8
3.7 THICKNESS OF COMPONENT 8
3.8 SCREW THREADS 8
3.9 FABRICATED COMPONENTS 9
3.10 FITTINGS REQUIREMENTS 9
3.11 PLATING AND OTHER SURFACE FINISHES 9
3.12 WORKMANSHIP AND FINISH 9

SECTION 4. PERFORMANCE REQUIREMENTS

4.1 WATERTIGHTNESS 10
4.2 STRENGTH OF FITTING 10
4.3 STRENGTH OF FABRICATED JOINT 10
4.4 HYDROSTATIC PRESSURE 10
4.5 PRESSURE CYCLE 10
4.6 RESISTANCE TO PULL-OUT 10
4.7 STRENGTH OF NUT 10
4.8 RESISTANCE TO LEAKAGE SUBJECT TO BENDING 10

SECTION 5. CAPILLARY FITTINGS

5.1 GENERAL 11
5.2 DIMENSIONS 11
5.3 ENGAGEMENT SOCKETS 11
5.4 PERFORMANCE REQUIREMENTS 11

SECTION 6. END CONNECTORS

6.1 GENERAL 14
6.2 DIMENSIONS 14
6.3 THREADED END CONNECTORS 14
6.4 PERFORMANCE REQUIREMENTS 14

Page

SECTION 7. PIPE UNION END CONNECTORS AND COUPLINGS
7.1 GENERAL 16
7.2 THREADS 16
7.3 PERFORMANCE REQUIREMENTS 16

SECTION 8. COMPRESSION FITTINGS
8.1 GENERAL 17
8.2 DIMENSIONS 17
8.3 OLIVES 17
8.4 ALTERNATIVE DESIGNS 17
8.5 PERFORMANCE REQUIREMENTS 17

SECTION 9. OTHER FITTINGS
9.1 GENERAL 19
9.2 THREADED SOCKETS 19
9.3 REDUCING BUSHES WITH OVERLAPPING INTERNAL AND EXTERNAL THREADS 19
9.4 CONTINUOUSLY THREADED FITTINGS 19
9.5 PERFORMANCE REQUIREMENTS 19

SECTION 10. MARKING
10.1 SPACE FOR MARK OF CERTIFYING BODY 20
10.2 MARKING REQUIREMENTS 20

APPENDICES
A METHODS OF SPECIFYING SIZES AND TYPES OF FITTINGS 21
B METHODS FOR DETERMINING DIMENSIONS 22
C METHODS FOR DETERMINATION OF WATERTIGHTNESS 24
D METHOD FOR STRENGTH TEST 26
E METHOD FOR TORQUE TEST ON FABRICATED FITTINGS 27
F METHOD FOR JOINT TEST 28
G METHOD FOR DETERMINATION OF RESISTANCE TO PULL-OUT OF ASSEMBLED JOINTS 30
H METHOD FOR TORQUE TEST ON CONNECTOR NUTS 32
I METHOD FOR DETERMINATION OF RESISTANCE TO LEAKAGE WHEN SUBJECTED TO BENDING 33
J LIST OF REFERENCED DOCUMENTS 35

STANDARDS AUSTRALIA

Australian Standard

Water supply—Copper and copper alloy compression and capillary fittings and threaded end connectors

SECTION 1. SCOPE AND GENERAL

1.1 SCOPE. This Standard specifies requirements for copper and copper alloy pipe fittings and connectors for use in water supply systems where the normal working temperature does not exceed 95°C, with maximum peaks of 110°C for short periods of time, and the continuous working pressure ranges up to a maximum of 1.4 MPa as defined by the fittings size.

1.2 APPLICATION. Fittings, end connectors, and couplings shall comply with Sections 1 to 4 and with Sections 5 to 10 as follows:

SECTION 5 Capillary fittings.
SECTION 6 End connectors.
SECTION 7 Pipe union end connectors and couplings.
SECTION 8 Compression fittings.
SECTION 9 Other fittings.
SECTION 10 Marking.

1.3 REFERENCED DOCUMENTS. The documents referred to in this Standard are listed in Appendix J.

1.4 DEFINITIONS. For the purpose of this Standard, the definitions given in AS 1355 and those below apply.

1.4.1 Threaded end connector—a connecting end on a pipe or fitting that is threaded either on an internal surface or external surface so that it can be used to make a threaded joint.

1.4.2 Union end connector—a connecting end on a pipe or fitting that allows a union joint to be made.

1.5 DESIGNATION OF SIZE. The size by which a fitting is designated shall be the nominal size of the pipe(s) or tube(s) with which it is to be jointed. The method of specifying the sizes of fittings shall be in accordance with Appendix A and the method of determining the dimensions of the fittings shall be in accordance with Appendix B.

NOTE: Designated sizes do not necessarily indicate exact dimensions as these details are given in the relevant tables herein.