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COPPER AND COPPER ALLOY WASTE FITTINGS

AS 1589—1994
Copper and copper alloy waste fittings
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Specifies requirements for copper and copper alloy waste fittings for use in plumbing installations and includes traps, gullies, waste outlets, gratings and connectors.
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Public Works Department, New South Wales

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COPPER AND COPPER ALLOY WASTE FITTINGS

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PREFACE

This Standard was prepared by the Association's Committee on Sanitary Plumbing Fittings, to supersede AS 1589—1979, Copper and Copper Based Alloy Fittings for Use in Sanitary Plumbing Installations.

This Standard differs from AS 1589—1979 in that additional information is included on the functional aspects and basic designs of waste traps and gullies, waste outlets and gratings, and waste connectors. Emphasis has been placed on dezincification, and the concept of performance testing has been introduced which will enable fittings to be evaluated as being fit for purpose. All references to non-pressure capillary fittings have been transferred to a new Standard which is in the course of preparation. Special fitting designs such as 'pop up' wastes, telescopic and swivel connectors, etc are not included.

Criteria for impregnation methods on fittings affected by porosity or pitting will be included at a later date.

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STANDARDS ASSOCIATION OF AUSTRALIA

Australian Standard
COPPER AND COPPER ALLOY WASTE FITTINGS

SECTION 1. SCOPE AND GENERAL

1.1 SCOPE. This Standard specifies requirements for copper and copper alloy waste fittings (hereinafter referred to as fittings) for use in plumbing installations and includes traps, gullies, waste outlets, gratings, and connectors.

1.2 APPLICATION. Copper and copper alloy waste fittings shall comply with the requirements of Section 1 and with the following sections, as appropriate:

Section 2—Copper and Copper Alloy Waste Traps and Gullies.
Section 3—Copper and Copper Alloy Waste Outlets and Gratings.
Section 4—Copper and Copper Alloy Waste Connectors.

1.3 REFERENCED DOCUMENTS. Referenced documents are listed in Appendix K.

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

NOTE: Where definitions in this Standard also appear in AS 1355 (with different wording), the definitions in this Standard take precedence over those in AS 1355. In the next edition of AS 1355, the definitions as given in this Standard will be incorporated.

1.4.1 Bottle trap—a trap in which the seal is maintained by a concealed membrane.

1.4.2 Capillary fitting—a fitting in which the joint is made by the flow of filler metal by capillarity along the annular space between the outside of the tube and the inside of the socket.

1.4.3 Combination trap—a trap with a swivel joint to facilitate use as an 'S' trap or 'P' trap.

1.4.4 Compression joint (non-manipulative type)—a joint which is made by means of a loose compression ring(s) which grips the outside wall of a pipe when the coupling nut is tightened.

1.4.5 Connector—a fitting used to convey liquids from a fixture to discharge pipework.

1.4.6 Depth of water seal—the vertical distance measured between the dip and the weir of a trap. (See Figure 1.1.)

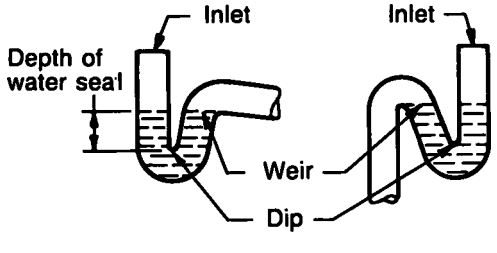

FIGURE 1.1. TYPICAL TRAPS

1.4.7 Dip—the lowest point of the internal surface of a trap at which the water seal is commenced. (See Figure 1.1.)

1.4.8 Fabricated fitting—a fitting built up by joining together a number of components.

1.4.9 Fitting—a device for use in pipework for connecting the pipes either into each other or to a component part of the system.

1.4.10 Grating—framework of parallel or crossed bars or a plate having holes or slots to prevent ingress of large solids.

1.4.11 Gully—a tube trap for use in providing a separation between waste discharges and the remainder of a drainage system.

1.4.12 Disconnector gully—a gully comprising a riser pipe and inlet fitting to provide disconnection between waste discharges and the remainder of the sewerage installation.

1.4.13 Floor-waste gully—a disconnector gully located inside the building provided with a floor grate or waste outlet fitting and with provision where required for connection of waste pipes from fixtures.

1.4.14 Inspection opening (IO)—an opening with removable cover in the body of a fitting for the purpose of providing access into pipework for inspection.

1.4.15 Loose coupling nut—a nut retained to the fitting by means of a shoulder and capable of turning relative to the fitting.

1.4.16 'P' trap—a trap in which, when the inlet leg is vertical, the outlet leg is inclined below the horizontal within the limits specified herein.

1.4.17 Quality control test—a test performed during or after manufacture to prove the quality of a production run of fittings.

1.4.18 'S' trap—a trap in which the outlet leg is parallel to the inlet leg within the limits specified herein.

1.4.19 Soil connector—a fitting which conveys soil liquid from a fixture to discharge pipework.

1.4.20 Trap—a fitting designed to retain a water seal for the purpose of preventing the passage of gases. (See Figure 1.1.)

1.4.21 Tube trap—a trap in which the seal is maintained without the use of an internal membrane.

1.4.22 Type test—a test intended to prove the suitability and performance of a new material, a new manufacturing or processing technique, or a new design or size of joint or fitting. Type tests are generally performed when a change is made in material composition or method of manufacture.