

Specification for

Prefabricated drainage stack units in galvanized steel

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Committees responsible for this British Standard

The preparation of this British Standard was entrusted to Technical Committee B/505, Wastewater engineering, upon which the following bodies were represented:

- Association of Consulting Engineers
- British Plastics Federation
- Clay Pipe Development Association Limited
- Concrete Pipe Association
- Department of the Environment
- Department of the Environment (Property and Building Directorate)
- Fibre Cement Manufacturers Association Limited
- Institute of British Foundrymen
- Institution of Civil Engineers
- Institution of Water and Environmental Management
- Local Authority Organizations
- METCOM
- Water Services Association of England and Wales

The following bodies were also represented in the drafting of the standard, through subcommittees and panels:

- Association of Building Component Manufacturers
- Brewers Society
- British Bathroom Council
- British Plumbing Fittings Manufacturers' Association
- British Pump Manufacturers' Association
- Consumer Policy Committee of BSI
- Department of the Environment (Building Research Establishment)
- Institute of Building Control
- Institute of Clerks of Works of Great Britain Inc.
- Institute of Plumbing
- National Association of Plumbing, Heating and Mechanical Services Contractors
- Scottish Office (Building Directorate)

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Foreword

This British Standard has been prepared under the direction of Technical Committee B/505, Wastewater engineering. It is a revision, taking into account current practice for sanitary pipework. On publication of this standard, BS 3868:1973 will be withdrawn.

A British Standard does not purport to include all the necessary provisions of a contract. Users of British Standards are responsible for their correct application.

Compliance with a British Standard does not of itself confer immunity from legal obligations.

Summary of pages

This document comprises a front cover, an inside front cover, pages i to iv, pages 1 to 14, an inside back cover and a back cover.

This standard has been updated (see copyright date) and may have had amendments incorporated. This will be indicated in the amendment table on the inside front cover.

1 Scope

This British Standard specifies requirements for prefabricated drainage stack units, manufactured from steel and galvanized after fabrication.

These units are for use above ground, in plumbing systems for wastewater and rainwater; to include pipework within or external to a building, including basements, but excluding pipework which enters the ground.

2 References

2.1 Normative references

This British Standard incorporates, by reference, provisions from specific editions of other publications. These normative references are cited at the appropriate points in the text and the publications are listed on the inside back cover. Subsequent amendments to, or revisions of, any of these publications apply to this British Standard only when incorporated in it by updating or revision.

2.2 Informative references

This British Standard refers to other publications that provide information or guidance. Editions of these publications current at the time of issue of this standard are listed on the inside back cover, but reference should be made to the latest editions.

3 Definitions

For the purposes of this British Standard, the definitions given in BS 6100-1.3.2, BS 6100-1.3.6, BS 6100-1.5.1, and BS 6100-2.7 and BS 6100-3.3 apply.

4 Materials

Pipes and components used in prefabricated systems shall be manufactured from light or medium black steel tubes conforming to BS 1387.

Fittings intended for use with prefabricated systems shall be manufactured from mild steel of an equal quality and thickness as the steel pipes to which they are connected.

All fabricated components shall be finished free from burrs and sharp edges.

5 Dimensions and weights

Steel tubes and other components of the system shall conform to the dimensions and weights given in Table 1 to Table 18.

NOTE Dimensions are illustrated in Figure 1 to Figure 20.

6 Fabrication

All branch junctions shall have a weld free crotch radius (see Table 9 to Table 12).

Welding shall be carried out in accordance with BS 2971. The completed assembly shall be cleaned of all weld slag. The unit shall be airtight and capable of passing an air test at a pressure equivalent to 1.5 kN/m, over a period of 3 min.

Bends shall be supplied and fabricated to angle *A* of Figure 5 within $\pm 1^\circ$.

Access doors shall comprise a galvanized steel cover plate and sealing gasket fixed to a welded backplate using non-ferrous setpins.

Cleaning eyes shall be formed by welding on a parallel threaded British Standard Pipe thread (BSP) female iron boss to either an extruded hole or pipe end.

Munsen brackets shall be fabricated from mild steel and galvanized or red oxide painted after manufacture.

Saddle connections shall be fabricated from mild steel and galvanized after manufacture.

7 Jointing

Units shall be joined together to form a complete stack, using one or more of the following connections.

a) *Push fit joint*. Push fit synthetic rubber gasket used with spigot and socket pipes, for galvanized to galvanized, or galvanized to PVC-u.

b) *Mechanical joint*. Bolted joint compressing a synthetic rubber gasket using spigot pipes, for use with galvanized to galvanized; galvanized to cast iron or PVC-u.

NOTE 1 The galvanized to galvanized joint contains a bond that, when fitted correctly, ensures electrical continuity.

c) *Push fit waste boss*. Push fit insert waste boss with synthetic rubber gasket for use with copper or PVC-u pipes.

d) *Screwed waste boss*. Screwed BSP waste boss for use with galvanized, copper, or PVC-u pipes.

NOTE 2 An insulating connector is required with copper pipes.

e) *Saddle connection*. Bolt on saddle connections, for upgrading existing systems.

f) *Flanged joints*. Flanged joints shall be in accordance with BS 4504.

g) *Caulked joints*. Socket and spigot pipes which may be caulked with yarn and blue lead.

h) *Weathering apron*. An inverted collar is welded on to pipe allowing approximately 20 mm gap for flashing in a lead, slate or asphalt roof finish.