

BS 8530:2010



BSI Standards Publication

Traditional-style half round, beaded half round, Victorian ogee and moulded ogee aluminium rainwater systems – Specification

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Summary of pages

This document comprises a front cover, an inside front cover, pages i to iv, pages 1 to 22, an inside back cover and a back cover.

Foreword

Publishing information

This British Standard is published by BSI and came into effect on 31 July 2010. It was prepared by Subcommittee B/542/6, *Corrugated sheeting materials*, under the authority of Technical Committee B/542, *Roofing and cladding products for discontinuous laying*. A list of organizations represented on these committees can be obtained on request to its secretary.

Supersession

This British Standard supersedes BS 2997:1958, which is withdrawn.

Relationship with other publications

Harmonization of European standards led to the British Standard for aluminium rainwater goods, BS 2997:1958, being withdrawn in 2007 and left the United Kingdom with no standard for its traditional generic styles of aluminium gutter and rainwater pipe systems.

This British Standard covers UK styles of traditional cast and extruded aluminium gutters and fittings, together with extruded aluminium rainwater pipes with cast aluminium sockets and fittings, all of which are excluded from BS EN 612 and BS EN 1462.

Information about this document

It is an objective of this British Standard to maintain the historic appearance, dimensional integrity and interchange ability between system manufacturers.

As the majority of this product type is now supplied with a factory-painted finish, the coating specifications are included to ensure only external grade architectural quality paints are applied to this product range. Specifications for pipe and gutter assembly and fixing components are also included.

Presentational conventions

The provisions of this standard are presented in roman (i.e. upright) type. Its requirements are expressed in sentences in which the principal auxiliary verb is "shall".

Commentary, explanation and general informative material is presented in smaller italic type, and does not constitute a normative element.

Contractual and legal considerations

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

Compliance with a British Standard cannot confer immunity from legal obligations.

1 Scope

This British Standard specifies requirements for cast and extruded aluminium rainwater systems for use on buildings. It covers extruded aluminium rainwater pipes sized between DN 65 and DN 100.

It specifies the materials, dimensions, tolerances, mechanical properties, surface conditions, coatings, jointing methods, fixings and marking for the following components of the rainwater systems:

- a) gutters, including half round, beaded half round, beaded deep half round, Victorian ogee and moulded ogee gutters, fittings and accessories used for assembly or support;
- b) rainwater pipes, fittings and accessories used for assembly or support.

2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

BS 4842, *Specification for liquid organic coatings for application to aluminium alloy extrusions, sheet and preformed sections for external architectural purposes, and for the finish on aluminium alloy extrusions, sheet and preformed sections coated with liquid organic coatings*

BS 6496, *Specification for powder organic coatings for application and stoving to aluminium alloy extrusions, sheet and preformed sections for external architectural purposes, and for the finish on aluminium alloy extrusions, sheet and preformed sections coated with powder organic coatings*

BS EN 603-2, *Aluminium and aluminium alloys – Wrought forging stock – Part 2: Mechanical properties*

BS EN 755-2, *Aluminium and aluminium alloys – Extruded rod/bar, tube and profiles – Part 2: Mechanical properties*

BS EN 755-3, *Aluminium and aluminium alloys – Extruded rod/bar, tube and profiles – Part 3: Round bars, tolerances on dimensions and form*

BS EN 755-4, *Aluminium and aluminium alloys – Extruded rod/bar, tube and profiles – Part 4: Square bars, tolerances on dimensions and form*

BS EN 755-5, *Aluminium and aluminium alloys – Extruded rod/bar, tube and profiles – Part 5: Rectangular bars, tolerances on dimensions and form*

BS EN 755-7, *Aluminium and aluminium alloys – Extruded rod/bar, tube and profiles – Part 7: Seamless tubes, tolerances on dimensions and form*

BS EN 755-9, *Aluminium and aluminium alloys – Extruded rod/bar, tube and profiles – Part 9: Profiles, tolerances on dimensions and form*

BS EN 1462:2004, *Brackets for eaves gutters – Requirements and testing*

BS EN 1559-1, *Founding – Technical conditions of delivery – Part 1: General*

BS EN 1559-4, *Founding – Technical conditions of delivery – Part 4: Additional requirements for aluminium alloy castings*

BS EN 1706:2010, *Aluminium and aluminium alloys – Castings – Chemical composition and mechanical properties*

BS EN 1774, *Zinc and zinc alloys – Alloys for foundry purposes – Ingot and liquid*

BS EN 2070-1, *Specification for aluminium and aluminium alloy wrought products – Technical specification – Part 1: General requirements*

BS EN 10088-1, *Stainless steels – Part 1: List of stainless steels*

BS EN 10088-2, *Stainless steels – Part 2: Technical delivery conditions for sheet/plate and strip of corrosion resisting steels for general purposes*

BS EN 10088-3, *Stainless steels – Part 3: Technical delivery conditions for semi-finished products, bars, rods, wire, sections and bright products of corrosion resisting steels for general purposes*

BS EN 12020-1, *Aluminium and aluminium alloys – Extruded precision profiles in alloys EN AW-6060 and EN AW-6063 – Part 1: Technical conditions for inspection and delivery*

BS EN 12206-1, *Paints and varnishes – Coating of aluminium and aluminium alloys for architectural purposes – Part 1: Coatings prepared from coating powder*

BS EN ISO 3506-1, *Mechanical properties of corrosion-resistant stainless steel fasteners – Part 1: Bolts, screws and studs*

BS EN ISO 3506-4, *Mechanical properties of corrosion-resistant stainless steel fasteners – Part 4: Tapping screws*

BS EN ISO 9227, *Corrosion tests in artificial atmospheres – Salt spray tests*

3 Terms and definitions

For the purposes of this British Standard, the following terms and definitions apply.

3.1 accessories

bolts, nuts, washers and screws for fixing gutters and pipes to a building

3.2 aluminium

3.2.1 cast aluminium

type of aluminium formed by pouring molten aluminium into a mould form

3.2.2 extruded aluminium

type of aluminium whereby linear shapes are formed by forcing a preheated softened aluminium mass under extreme pressure through a die, the opening of which corresponds to the required cross-sectional profile

3.3 angle

corner fitting which changes the gutter's direction

3.4 direct fix spacer

spacer component allowing the direct fixing of specific gutter types to the fascia board or background without a fascia bracket

NOTE The rear up stand to Victorian ogee and moulded ogee gutters is not vertical. Therefore, when fixing gutters without fascia brackets, a wedge-shaped aluminium spacer is placed against the outside rear face of the gutter in alignment with fixing holes provided, through which a screw is inserted and fixed directly to the fascia board or background, thereby supporting the gutter without a visible fascia bracket.

- 3.5 ear**
projection on the pipe socket or fitting which allows attachment to the building
- 3.6 effective length**
<gutter> overall length of gutter, excluding the length of either the joint socket or spigot
- 3.7 effective length**
<pipe> overall length of a pipe, excluding the depth of the joint socket
- 3.8 fitting**
<gutter> angle, outlet, stop end or double socket/spigot joint union for use with gutters
- 3.9 fitting**
<pipe> shoe, offset (double bend), bend, branch, loose socket or hopper head for use with pipes
- 3.10 gutter**
open channel casting or extrusion of defined profile which evacuates rainwater from the roof area
NOTE One end of the gutter is socketed or spigoted depending on the gutter type.
- 3.11 gutter brackets**
- 3.11.1 gutter bracket**
item for retaining/supporting a gutter or pipe on a building
- 3.11.2 fascia bracket**
gutter bracket suitable for fixing to a vertical surface which runs parallel to the gutter
- 3.11.3 side rafter bracket**
gutter bracket suitable for fixing to the side of a roofing rafter
- 3.11.4 top rafter bracket**
gutter bracket suitable for fixing to the top of a roofing rafter
- 3.11.5 rise and fall bracket**
gutter bracket assembly for fixing into masonry below the gutter, which provides height adjustment via a vertical threaded bar connected to the gutter supporting cradle
- 3.12 joint**
connection between the ends of gutters, fittings or pipes
- 3.13 nominal size DN**
alphanumeric designation of size for components of a pipework system, which is used for reference purposes
NOTE The nominal size comprises the letters DN followed by a dimensionless whole number which is indirectly related to the physical size, in millimetres, of the bore or outside diameter of the end connections
- 3.14 pipe**
extrusion of uniform bore tube, straight in axis, having a cast socketed end
NOTE The cast socketed end allows pipes to be jointed together.