

CI/SfB (52)

MILLAGE: HOTEL

ALUMINIUM RAINWATER SYSTEMS

GUTTERS & DOWNPIPES

ENGINEERING EXCELLENCE

Combined with Innovative Design



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Introduction

Frank Dales, Eurlng CEng, first started designing and manufacturing bespoke metal gutters in 1977. Initially supplying the industrial market with galvanised steel gutters, it wasn't long before Dales Fabrications was manufacturing standard aluminium gutters and rainwater pipes. Offering a full design service with qualified design professionals for those difficult to manufacture items, Dales Fabrications quickly developed a reputation for high quality goods combined with excellent customer service.

Although Frank retired many years ago, his principle of continuous investment in the latest manufacturing technology is maintained by the same family that still own and run the business today. It is investment that enables Dales to keep stocks high and turnaround fast, with some of the quickest lead times and lowest prices in the business.



Stock Systems with Bespoke Components

Stock gutters and pipes can normally be delivered to site within a week or two, dependent on the colour and finish. Dales has invested in the latest manufacturing technology so that bespoke components can be manufactured urgently provided that full manufacturing information is sent with the order. If an order is likely to need special components its well worth giving our Project Management team a ring on Tel: 0115 930 1521 to see exactly what manufacturing information will be required.

Roof Drainage & Gutter System Design

At Dales there is a team of Project Managers each of whom are suitably qualified in one of the professional disciplines of the building industry. If required, they can design a gutter system to suit your individual project requirements incorporating gutter and outlet sizing and positioning advice for a given rate of rainfall in accordance with BS EN 12056-3. To use this service, please don't hesitate to send a roof plan, elevations and eaves section to us via email: sales@dales-eaves.co.uk. One of our Design Team will then get in touch to discuss the project further.

Project Management Design & Specification Service

On receipt of project drawings we assign a Project Manager to each project. They provide a single point of contact throughout the life of the project, from initial design to completion. Relevant criteria, including support methods, material requirements and budget are established with the specifier. The Project Manager can prepare CAD drawings, calculations, NBS Specifications and quotations, providing a complete specification service.

To discuss the requirements for your project, our Project Management Team can be contacted on Tel: 0115 930 1521.

Accountable Solutions

Dales believe in total quality: quality of design, manufacture, advice and service. This commitment, combined with our ability to create total solutions uniquely suited to individual projects, puts the responsibility for system integrity and functionality on us rather than you, the specifier.

BS EN ISO 9001: Design & Manufacture



Dales Fabrications have been working within the constraints of BS EN ISO 9001 accreditation for over 20 years.

To view our Quality Policy Statement and ISO 9001: Design & Manufacture certificate please visit our website at www.dales-eaves.co.uk

Professional Indemnity Insurance

Dales Fabrications hold full Design/Professional Indemnity Insurance with a first class security in the London market. This allows architects and specifiers to use our products with confidence.

Specify via www.dales-eaves.co.uk

Our website has been designed so that you can specify any Dales system swiftly and quickly. CAD drawings and NBS specifications all our products, including our solar shades, wall copings and gutters or rainwater pipes, are available for download.

There is a substantial number of complete eaves system CAD drawings from typical installations available in both PDF or DWG format and these are linked to corresponding NBS Specification clauses. Both the section drawings and specification clauses are easily downloaded for simple integration into your project documentation.

For simplicity and ease of use the NBS clauses are designed to be cut and pasted into your specification document. If there is a drawing or NBS specification clause that you feel needs some modification to suit your project, please call us directly on Tel: 0115 930 1521 and we'll be happy to discuss the design further.

Aluminium: The sustainable choice

Aluminium is recognized as one of the most sustainable materials for use in the building industry. This is due to the vast natural deposits of bauxite (aluminium ore) and longevity of service, combined with low recycling costs. Around 96% of the aluminium used in construction projects around the world is recycled.

The Environment and Dales

Our current environmental policy is available to view at www.dales-eaves.co.uk

Preferred Installer Network

Our network of carefully selected preferred installers are on hand to provide a full supply and fix package. These companies specialise in the installation of our materials and fit them on a regular basis.

If you are a plumbing, roofing or specialist subcontractor interested in becoming a Preferred Fixer for Dales products, please contact us on Tel: 0115 930 1521 and ask to speak to one of our Project Managers to discuss matters further.

Project Sector: Commercial

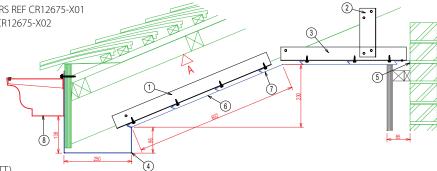
Dales Severn Gutter with 76.2mm dia Rainwater Pipe and Dales Aluminium Fascia & Kwik Fix Soffit NHS Offices, Mansfield Nottinghamshire



Architect: Henry Mein Partnership www.henrymein.co.uk Main contractor: Allenbuild Limited www.allenbuild.co.uk Preferred fixer: Cladceil Ltd www.cladceil.co.uk

LEGEND AND FIXING SEQUENCE

- 1. DALES SOFFIT TRIMMER, 16G GALV STEEL @ 600mm CTRS REF CR12675-X01
- 2. DALES HANGER, 16G GALV STEEL @ 600mm CTRS REF CR12675-X02
- 3. DALES SOFFIT TRIMMER, 16G GALV STEEL @ 600mm CTRS REF CR12675-X03
- 4. DALES FASCIA, 14G ALUMINIUM PPC (BS18B25 MATT) REF CR12675-X04
- 5. DALES CLOSURE ANGLE, 18G ALUMINIUM PPC (BS18B25 MATT) REF CR12675-X05
- 6. DALES KWIKFIX PLANKS, 175mm COVER WIDTH 18G ALUMINIUM PPC (BS18B25 MATT) REF CR12675-X06
- 7. DALES CRANKED KWIKFIX PLANK, 18G ALUMINIUM PPC (BS18B25 MATT) REF CR12675-X07
- 8. DALES SEVERN GUTTER, ALUMINIUM PPC (BS18B25 MATT)



Project Sector: Healthcare

Dales Delta 100 Box Gutter with 76.2mm dia Rainwater Pipe and Dales Aluminium Fascia & Kwik Fix Soffit Castle Hill Hospital, Hull, Humberside



Curved Gutters:

For this project, it was important that the aluminium fascia and gutter were curved. The curve was achieved by using the Dales Delta 100 box gutter against a curved aluminium fascia, also by Dales.

Secret fix Kwik Fix planks were installed to a facet, but by supplying a curved fascia, the eye does not notice the facetted soffit planks. This offers a more economical choice than curving the soffit panels as well.

Project Sector: Housing

Dales Torent 1 Gutter and Purpose Made Soffit Planks

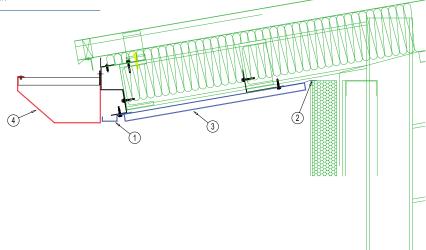
Building 9, Harbourside, Bristol, Avon



Architect: Cullinan Studio www.edwardcullinanarchitects.com **Roofing Contractor:** Prater Roofing Limited www.prater.co.uk

LEGEND AND FIXING SEQUENCE

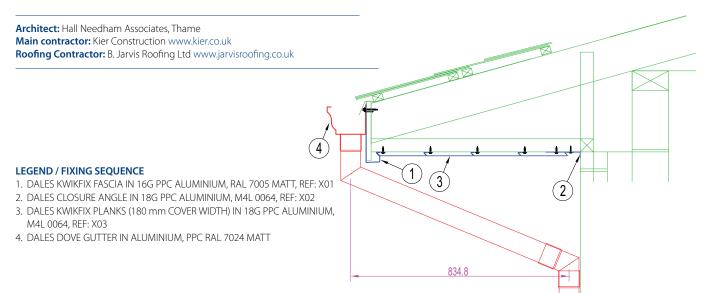
- 1. DALES SOFFIT CLOSURE 14G ALUMINIUM PPC
- 2. DALES CLOSURE ANGLE, 18G ALUMINIUM PPC
- 3. DALES PANEL PLANKS, COVER VARIES
- 4. DALES TORENT 1 GUTTER, ALUMINIUM PPC



Project Sector: Leisure

Dales Dove Gutter and 100x75 Rectangular Rainwater Pipes with Dales Kwik Fix Fascia Soffit Hotel, Nottingham, Nottinghamshire





Project Sector: Local Authority

Dales HR150 & Purpose Made Gutters with 101.6 dia Rainwater Pipes & Dales Sigma Fascia & Secret Fix Soffit Panels Community Centre, Thornbury, Gloucestershire







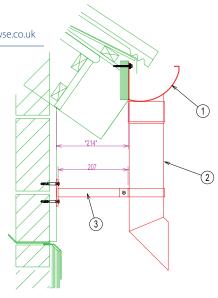


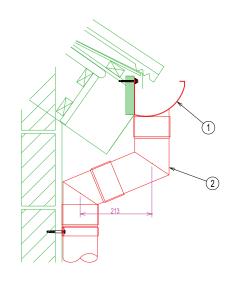


 $\textbf{Roofing Contractor:} \ \textbf{Sharpe + Howse Limited www.sharpandhowse.co.uk}$

LEGEND

- 1. DALES HR150 GUTTER, ALUMINIUM PPC (RAL 7004 MATT)
- 2. DALES 101.6dia RWP, ALUMINIUM PPC (RAL 7004 MATT)
- 3. DALES MULLION RWP BRKT, ALUMINIUM PPC (RAL 7004 MATT)





Project Sector: Education

Dales Classic & 101.6 dia Rainwater Pipes and Kwik Fix Fascia Soffit System School, St Saviour, Jersey





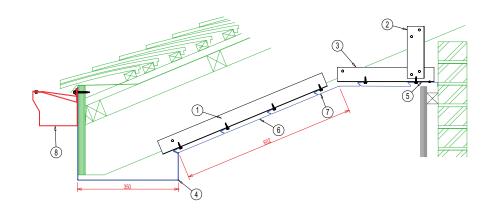




Architect: States Of Jersey Property Services **Main contractor:** Stansell QVC Ltd

LEGEND AND FIXING SEQUENCE

- 1. DALES SOFFIT TRIMMER, 16G GALV STEEL @ 600mm CTRS REF -X01
- 2. DALES HANGER, 16G GALV STEEL @ 600mm CTRS REF -X02
- 3. DALES SOFFIT TRIMMER, 16G GALV STEEL @ 600mm CTRS REF -X03
- 4. DALES FASCIA, 11G ALUMINIUM PPC REF -X04
- 5. DALES CLOSURE ANGLE, 18G ALUMINIUM PPC REF -X05
- 6. DALES KWIKFIX PLANKS, 175mm COVER WIDTH 18G ALUMINIUM PPC REF -X06
- 7. DALES CRANKED KWIKFIX PLANK, 18G ALUMINIUM PPC REF -X07
- 8. DALES CLASSIC GUTTER, ALUMINIUM PPC



HR Range



Description

Dales HR range offer the appearance of traditional half round gutters but give significant capacity advantages for the same diameter. They are jointed using Dales unique overstrap joint system which has proven to give effective joint life for over 35 years. As the manufacturer, Dales can provide all manner of purpose-made componentry to suit your individual project. Contact Dales Design Team on Tel: 0115 930 1521 to discuss your requirements further.

Finish

- Polyester Powder Coatings: Standard, Metallic & Anodic equivalents
- Anodised: Natural, Anolok & Anolok II
- Mill Finish

NSSPlus

NBS Plus subscribers go to www.nbsplus.co.uk and search for Dales Fabrications under The Content' in the @manufacturers' drop down menus. NB: The following draft specification includes information on the full HR range so should be amended to **delete information on the product that is not required**.

R10 RAINWATER DRAINAGE SYSTEMS 311 Aluminium Gutters

Manufacturer: Dales Fabrications Ltd, Crompton Road Industrial Estate, Ilkeston, Derbyshire. DE7 4BG. Tel: 0115 930 1521.

Email: techinfo@dales-eaves.co.uk Website: www.dales-eaves.co.uk.

The supplier shall design and manufacture the system in accordance with BS EN ISO 9001 and hold Professional Indemnity Insurance to cover their design activities. The Design of the system, including components, support structure, fixings and sealant, shall accommodate typical loadings/ stresses in accordance with relevant British Standards.

Product Reference: HR150 System/ Dales HR215 System

Material: Aluminium Sheet to BS EN 485/515/573: Grade 1050 AH14, supplied by BS EN ISO 9002 registered stockist to ensure traceability.

Size: 150x110mm (HR150)/ 215x120mm (HR215) Gauge: 16g (1.5mm) HR150/ 14g (2mm) HR215 Finish: Polyester Powder coated to BS 6496, coated only by Syntha Pulvin approved and BS EN IOS 9002 registered applicators/ Anodised to BS 3987 (Architectural Anodising)/ Mill Finish

Colour& Finish: RAL/ BS/ Anolok ref: (Specify colour reference and finish)

Colours from range available: See also http://www.dales-eaves.co.uk/finishes.html

Fixings: Fixings recommended for the purpose and supplied by Dales Fabrications Ltd. **Accessories:** Corners/Transitions/Junction/ Stopends/Outlets/Special items to be designed and factory manufactured specifically for the application.

Method of Jointing:

Gutter: Joint straps secured in accordance with manufacturer's instructions, joints assembled dry with 8mm expansion gap and sealed with low modulus silicone sealant after assembly. Sealant to be provided by Dales Fabrications Ltd.

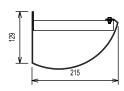
Method of Fixing: Fixings as recommended for the purpose and supplied by Dales Fabrications Ltd, through pre-punched holes in the back of the gutter and accessories. Internal gutter brackets fixed at pre-punched centres with fixings as recommended for the purpose and supplied by Dales Fabrications Ltd, through pre-punched holes in the back of the gutter and accessories.

PROFILES



Dales HR150 Gutter

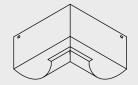
Gutter Capacity:	3.32 l/s
101.6mm Sq Outlet Capacity:	3.89 l/s
101.6mm dia Outlet Capacity:	3.11 l/s
76.2mm Sq Outlet Capacity:	2.75 l/s
76.2mm dia Outlet Capacity:	2.20 l/s



Dales HR215 Gutter

Gutter Capacity:	6.71 l/s
152.4mm dia Outlet capacity:	6.42 l/s
101.6mm Sq Outlet Capacity:	5.97 l/s
101.6mm dia Outlet Capacity:	4.78 l/s
76.2mm Sq Outlet Capacity:	3.29 l/s
76.2mm dia Outlet Capacity:	2.63 l/s

Internal corners



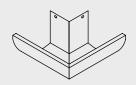
Joint strap



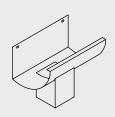
Stopend



External Corner



Outlet



Ogee Range



Description

Dales Ogee range offer the appearance of traditional ogee gutters and are ideal for refurbishment or other projects where a traditional appearance is wanted. Specified with stipple effect polyester powder coatings they reproduce a cast appearance. They are jointed using Dales unique overstrap joint system which has proven to give effective joint life of over 35 years. As the manufacturer, Dales can provide all manner of purpose-made componentry to suit your individual project. Contact Dales Design Team on Tel: 0115 930 1521 to discuss your requirements further.

Finish

- Polyester Powder Coatings: Standard, Metallic & Anodic equivalents
- Anodised: Natural, Anolok & Anolok II
- Mill Finish

NSSPlus

NBS Plus subscribers go to www.nbsplus.co.uk and search for Dales Fabrications under The Content' in the @manufacturers' drop down menus. NB: The following draft specification includes information on the full Ogee range so should be amended to **delete information on the product that is not required**.

R10 RAINWATER DRAINAGE SYSTEMS 311 Aluminium Gutters

Manufacturer: Dales Fabrications Ltd, Crompton Road Industrial Estate, Ilkeston, Derbyshire. DE7 4BG. Tel: 0115 930 1521.

Email: techinfo@dales-eaves.co.uk Website: www.dales-eaves.co.uk.

The supplier shall design and manufacture the system in accordance with BS EN ISO 9001 and hold Professional Indemnity Insurance to cover their design activities. The Design of the system, including components, support structure, fixings and sealant, shall accommodate typical loadings/stresses in accordance with relevant British Standards.

Product Reference: Dales Dove System/ Dales Severn System

Material: Aluminium Sheet to BS EN 485/515/573: Grade 1050 AH14, supplied by BS EN ISO 9002 registered stockist to ensure traceability.

Size: 148x110mm: Dove/212x156mm: Severn

Gauge: 16 gauge (1.5mm)

Finish: Polyester Powder coated to BS 6496, coated only by Syntha Pulvin approved and BS EN IOS 9002 registered applicators/ Anodised to BS 3987 (Architectural Anodising)/ Mill Finish

Colour& Finish: RAL/ BS/ Anolok ref: (Specify colour reference and finish)

Colours from range available: See also http://www.dales-eaves.co.uk/finishes.html

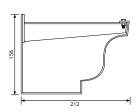
Fixings: Fixings recommended for the purpose and supplied by Dales Fabrications Ltd. **Accessories:** Corners/Transitions/Junction/ Stopends/Outlets/Special items to be designed and factory manufactured specifically for the application.

Method of Jointing:

Gutter: Joint straps secured in accordance with manufacturer's instructions, joints assembled dry with 8mm expansion gap and sealed with low modulus silicone sealant after assembly. Sealant to be provided by Dales Fabrications Ltd.

Method of Fixing: Fixings as recommended for the purpose and supplied by Dales Fabrications Ltd, through pre-punched holes in the back of the gutter and accessories/ Severn: Internal gutter brackets fixed at 750mm centres with fixings as recommended for the purpose and supplied by Dales Fabrications Ltd, through pre-punched holes in the back of the gutter and accessories.

PROFILES



Dales Severn Gutter

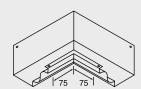
Gutter Capacity:	7.35 l/s
101.6mm Sq Outlet Capacity:	6.54 l/s
101.6mm dia Outlet Capacity:	5.32 l/s
76.2mm Sq Outlet Capacity:	3.66 l/s
76.2mm dia Outlet Capacity:	2.93 l/s



Dales Dove Gutter

4.21 l/s
5.75 l/s
4.60 l/s
3.16 l/s
2.53 l/s





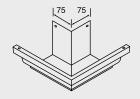
Joint Strap



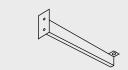
Stop Ends



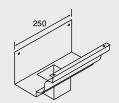
External Corner



Internal Gutter Bracket



Outlets



River Range



Description

Dales River range offer a contemporary take on the traditional 'Ogee' profile. The systems are direct fixed eliminating the need for brackets and reducing installation time as a result. They are jointed using Dales unique overstrap joint system which has proven to give effective joint life of over 35 years. As the manufacturer, Dales can provide all manner of purpose-made componentry to suit your individual project. Contact Dales Design Team on Tel: 0115 930 1521 to discuss your requirements further.

Finish

- · Polyester Powder Coatings: Standard, Metallic & Anodic equivalents
- · Anodised: Natural, Anolok & Anolok II
- Mill Finish

NSSPlus

NBS Plus subscribers go to www.nbsplus.co.uk and search for Dales Fabrications under 'The Content' in the @manufacturers' drop down menus. NB: The following draft specification includes information on the full River range so should be amended to **delete information on the products that are not required**.

R10 RAINWATER DRAINAGE SYSTEMS 311 Aluminium Gutters

Manufacturer: Dales Fabrications Ltd, Crompton Road Industrial Estate, Ilkeston, Derbyshire. DE7 4BG. Tel: 0115 930 1521.

Email: techinfo@dales-eaves.co.uk Website: www.dales-eaves.co.uk.

The supplier shall design and manufacture the system in accordance with BS EN ISO 9001 and hold Professional Indemnity Insurance to cover their design activities. The Design of the system, including components, support structure, fixings and sealant, shall accommodate typical loadings/stresses in accordance with relevant British Standards.

Product Reference: Dales Derwent/ Avon/ Welland/ Trent System

Material: Aluminium Sheet to BS EN 485/515/573: Grade 1050 AH14, supplied by BS EN ISO 9002 registered stockist to ensure traceability.

Size: 130x75mm: Derwent/148x98mm: Avon/182x140mm: Welland/ 200x150mm: Trent Gauge: 14 gauge (2.0mm) Derwent, Avon & Welland/ 3.0mm Trent

Finish: Polyester Powder coated to BS 6496, coated only by Syntha Pulvin approved and BS EN IOS 9002 registered applicators/ Anodised to BS 3987 (Architectural Anodising)/ Mill Finish

Colour& Finish: RAL/ BS/ Anolok ref: (Specify colour reference and finish)

Colours from range available: See also http://www.dales-eaves.co.uk/finishes.html

Fixings: Fixings recommended for the purpose and supplied by Dales Fabrications Ltd.

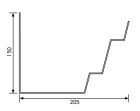
Accessories: Corners/Transitions/Junction/ Stopends/Outlets/Special items to be designed and factory manufactured specifically for the application.

Method of Jointing:

Gutter: Joint straps secured in accordance with manufacturer's instructions, joints assembled dry with 8mm expansion gap and sealed with low modulus silicone sealant after assembly. Sealant to be provided by Dales Fabrications Ltd.

Method of Fixing: Fixings as recommended for the purpose and supplied by Dales Fabrications Ltd, through pre-punched holes in the back of the gutter and accessories.

PROFILES



Trent

Gutter Capacity:	6.83 l/s
101.6mm Sq Outlet Capacity:	6.43 l/s
101.6mm dia Outlet Capacity:	5.23 l/s
101 x 76mm Outlet Capacity:	4.76 l/s
76.2mm Sq Outlet Capacity:	3.60 l/s
76.2mm dia Outlet Capacity:	2.88 l/s



Welland

Gutter Capacity:	5.27 l/s
101.6mm Sq Outlet Capacity:	6.13 l/s
101.6mm dia Outlet Capacity:	4.99 l/s
101 x 76mm Outlet Capacity:	4.54 l/s
76.2mm Sq Outlet Capacity:	3.43 l/s
76.2mm dia Outlet Capacity:	2.74 l/s



Avon

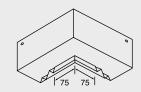
Gutter Capacity:	2.53 l/s
101 x 76mm Outlet Capacity:	3.70 l/s
76.2mm Sq Outlet Capacity:	2.85 l/s
76.2mm dia Outlet Capacity:	2.28 l/s



Derwent

Gutter Capacity:	1.36 l/s
76.2mm Sq Outlet Capacity:	2.02 l/s
76.2mm dia Outlet Capacity:	1.61 l/s





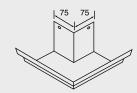
Joint Strap



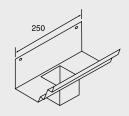
Stop Ends



External Corner



Outlets



Nene Range



Description

Dales Nene range are attractive heavy duty aluminium systems of elegant simplicity combining functional requirements with practical and design benefits. The systems are direct fixed eliminating the need for brackets and reducing installation time as a result. They are jointed using Dales unique overstrap joint system which has proven to give effective joint life of over 35 years. As the manufacturer, Dales can provide all manner of purpose-made componentry to suit your individual project. Contact Dales Design Team on Tel: 0115 930 1521 to discuss your requirements further.

Finish

- Polyester Powder Coatings: Standard, Metallic & Anodic equivalents
- · Anodised: Natural, Anolok & AnolokII
- Mill Finish

NSSPlus

NBS Plus subscribers go to www.nbsplus.co.uk and search for Dales Fabrications under 'The Content' in the @manufacturers' drop down menus. NB: The following draft specification includes information on the full Nene range so should be amended to **delete information on the product that is not required**.

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Manufacturer: Dales Fabrications Ltd, Crompton Road Industrial Estate, Ilkeston, Derbyshire. DE7 4BG. Tel: 0115 930 1521.

Email: techinfo@dales-eaves.co.uk Website: www.dales-eaves.co.uk

The supplier shall design and manufacture the system in accordance with BS EN ISO 9001 and hold Professional Indemnity Insurance to cover their design activities. The Design of the system, including components, support structure, fixings and sealant, shall accommodate typical loadings/stresses in accordance with relevant British Standards.

Product Reference: Dales Nene 1/ Nene 2 System

Material: Aluminium Sheet to BS EN 485/515/573: Grade 1050 AH14, supplied by BS EN ISO 9002 registered stockist to ensure traceability.

Size: 150x100mm: Nene 1/233x143mm: Nene 2 **Gauge:** 14 gauge (2.0mm) Nene 1/3.0mm Nene 2

Finish: Polyester Powder coated to BS 6496, coated only by Syntha Pulvin approved and BS EN IOS 9002 registered applicators/ Anodised to BS 3987 (Architectural Anodising)/ Mill Finish

Colour& Finish: RAL/ BS/ Anolok ref: (Specify colour reference and finish)

Colours from range available: See also http://www.dales-eaves.co.uk/finishes.html

Fixings: Fixings recommended for the purpose and supplied by Dales Fabrications Ltd. **Accessories:** Corners/Transitions/Junction/

Stopends/Outlets/Special items to be designed and factory manufactured specifically for the application.

Method of Jointing:

Gutter: Joint straps secured in accordance with manufacturer's instructions, joints assembled dry with 8mm expansion gap and sealed with low modulus silicone sealant after assembly. Sealant to be provided by Dales Fabrications Ltd.

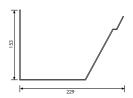
Method of Fixing: Fixings as recommended for the purpose and supplied by Dales Fabrications Ltd, through pre-punched holes in the back of the gutter and accessories.

PROFILES



Dales Nene 1

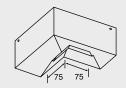
Gutter Capacity: 3.29 l/s 76.2mm Sq Outlet Capacity: 3.06 l/s 76.2mm dia Outlet Capacity: 2.45 l/s



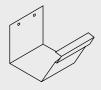
Dales Nene 2

Gutter Capacity:	8.08 l/s
101.6mm Sq Outlet Capacity:	6.51 l/s
101.6mm dia Outlet Capacity:	5.29 l/s
76.2mm Sq Outlet Capacity:	3.64 l/s
76.2mm dia Outlet Capacity:	2.91 l/s

Internal Corner



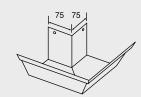
Joint Strap



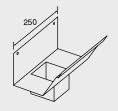
Stop Ends



External Corner



Outlets



Delta Range



Description

The Dales Delta range are efficient box gutters designed to give low maintenance longevity with high capacities at comparatively low cost. They are jointed using Dales unique overstrap joint system which has proven to give effective joint life of over 35 years. As the manufacturer, Dales can provide all manner of purpose-made componentry to suit your individual project. Contact Dales Design Team on Tel: 0115 930 1521 to discuss your requirements further.

Finish

- Polyester Powder Coatings: Standard, Metallic & Anodic equivalents
- Anodised: Natural, Anolok & Anolok II
- Mill Finish

NSSPlus

NBS Plus subscribers go to www.nbsplus.co.uk and search for Dales Fabrications under 'The Content' in the @manufacturers' drop down menus. NB: The following draft specification includes information on the full Delta range so should be amended to **delete information on the products that are not required**.

R10 RAINWATER DRAINAGE SYSTEMS 311 Aluminium Gutters

Manufacturer: Dales Fabrications Ltd, Crompton Road Industrial Estate, Ilkeston, Derbyshire. DE7 4BG. Tel: 0115 930 1521.

Email: techinfo@dales-eaves.co.uk Website: www.dales-eaves.co.uk.

The supplier shall design and manufacture the system in accordance with BS EN ISO 9001 and hold Professional Indemnity Insurance to cover their design activities. The Design of the system, including components, support structure, fixings and sealant, shall accommodate typical loadings/stresses in accordance with relevant British Standards.

Product Reference: Dales Delta 100/125/150/200 System

Material: Aluminium Sheet to BS EN 485/515/573: Grade 1050 AH14, supplied by BS EN ISO 9002 registered stockist to ensure traceability.

Size: 150x110mm: Delta 100/150x125mm: Delta 125/190x150mm: Delta 150/220x200mm: Delta 200 **Gauge:** 16 gauge (1.5mm): Delta 100/

14g (2.0mm) Delta 125/ 150/ 200

Finish: Polyester Powder coated to BS 6496, coated only by Syntha Pulvin approved and BS EN IOS 9002 registered applicators/ Anodised to BS 3987 (Architectural Anodising)/ Mill Finish

Colour& Finish: RAL/ BS/ Anolok ref: (Specify colour reference and finish)

Colours from range available: See also http://www.dales-eaves.co.uk/finishes.html

Fixings: Fixings recommended for the purpose and supplied by Dales Fabrications Ltd.

Accessories: Corners/Transitions/Junction/ Stopends/Outlets/Special items to be designed and factory manufactured specifically for the application.

Method of Jointing:

Gutter: Joint straps secured in accordance with manufacturer's instructions, joints assembled dry with 8mm expansion gap and sealed with low modulus silicone sealant after assembly. Sealant to be provided by Dales Fabrications Ltd.

Method of Fixing: Internal gutter brackets fixed at pre-punched centres with fixings as recommended for the purpose and supplied by Dales Fabrications Ltd, through pre-punched holes in the back of the gutter and accessories.

PROFILES



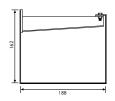
Dales Delta 100

Gutter Capacity:	4.83 l/s
101.6mm Sq Outlet Capacity:	5.40 l/s
101.6mm dia Outlet Capacity:	4.35 l/s
76.2mm Sq Outlet Capacity:	3.07 l/s
76.2mm dia Outlet Capacity:	2.46 l/s



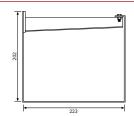
Dales Delta 125

2 l/s
3 l/s
9 l/s
3 l/s
4 l/s
(



Dales Delta 150

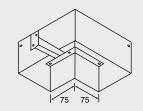
10.36 l/s
14.34 l/s
6.62 l/s
5.38 l/s



Dales Delta 200

Gutter Capacity:	17.66 l/s
152.4mm dia Outlet Capacity:	17.25 l/s
101.6mm Sq Outlet Capacity:	7.46 l/s
101.6mm dia Outlet Capacity:	6.07 l/s





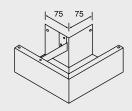
Joint Strap



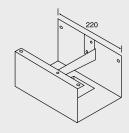
Stop Ends



External Corner



Outlets



DF Box Range



Description

The System 75 and System 120 Direct Fix Box gutters are manufactured from 2mm aluminium for heavy duty use with high levels of rigidity and front and bottom faces free of visible fixings. They are jointed using Dales unique overstrap joint system which has proven to give effective joint life of over 35 years. As the manufacturer, Dales can provide all manner of purpose-made componentry to suit your individual project. Contact Dales Design Team on Tel: 0115 930 1521 to discuss your requirements further.

Finish

- Polyester Powder Coatings: Standard, Metallic & Anodic equivalents
- · Anodised: Natural, Anolok & AnolokII
- Mill Finish

NSSPlus

NBS Plus subscribers go to www.nbsplus.co.uk and search for Dales Fabrications under 'The Content' in the @manufacturers' drop down menus. NB: The following draft specification includes information on the full DF Box range so should be amended to **delete information on the product that is not required**.

R10 RAINWATER DRAINAGE SYSTEMS 311 Aluminium Gutters

Manufacturer: Dales Fabrications Ltd, Crompton Road Industrial Estate, Ilkeston, Derbyshire. DE7 4BG. Tel: 0115 930 1521

Email: techinfo@dales-eaves.co.uk Website: www.dales-eaves.co.uk.

The supplier shall design and manufacture the system in accordance with BS EN ISO 9001 and hold Professional Indemnity Insurance to cover their design activities. The Design of the system, including components, support structure, fixings and sealant, shall accommodate typical loadings/ stresses in accordance with relevant British Standards.

Product Reference: Dales System 75/120

Material: Aluminium Sheet to BS EN 485/515/573: Grade 1050 AH14, supplied by BS EN ISO 9002 registered stockist to ensure traceability.

Size: 134x94mm: System 75/ 139x132mm: System 120

Gauge: 14 gauge (2.0mm)

Finish: Polyester Powder coated to BS 6496, coated only by Syntha Pulvin approved and BS EN IOS 9002 registered applicators/ Anodised to BS 3987 (Architectural Anodising)/ Mill Finish

Colour& Finish: RAL/ BS/ Anolok ref: (Specify colour reference and finish)

Colours from range available: See also http://www.dales-eaves.co.uk/finishes.html

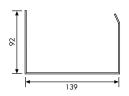
Fixings: Fixings recommended for the purpose and supplied by Dales Fabrications Ltd. **Accessories:** Corners/Transitions/Junction/ Stopends/Outlets/Special items to be designed and factory manufactured specifically for the application.

Method of Jointing:

Gutter: Joint straps secured in accordance with manufacturer's instructions, joints assembled dry with 8mm expansion gap and sealed with low modulus silicone sealant after assembly. Sealant to be provided by Dales Fabrications Ltd.

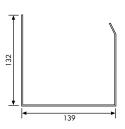
Method of Fixing: Fixings as recommended for the purpose and supplied by Dales Fabrications Ltd, through pre-punched holes in the back of the gutter and accessories.

PROFILES



Dales System 75

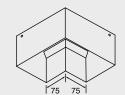
Gutter Capacity:	3.31 l/s
101.6mm Sq Outlet Capacity:	4.10 l/s
101.6mm dia Outlet Capacity:	3.31 l/s
76.2mm Sq Outlet Capacity:	2.81 l/s
76.2mm dia Outlet Capacity:	2.25 l/s



Dales System 120

Gutter Capacity:	5.48 l/s
101.6mm Sq Outlet Capacity:	5.94 l/s
101.6mm dia Outlet Capacity:	4.83 l/s
76.2mm Sq Outlet Capacity:	3.32 l/s
76.2mm dia Outlet Capacity:	2.66 l/s

Internal Corner



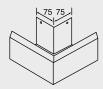
Joint Strap



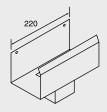
Stop Ends



External Corner



Outlets



Torent Range



Description

The Dales Torent range was produced for customers that wanted an elegant contemporary alternative to box and ogee style gutters. They are jointed using Dales unique overstrap joint system which has proven to give effective joint life of over 35 years. As the manufacturer, Dales can provide all manner of purpose-made componentry to suit your individual project. Contact Dales Design Team on Tel: 0115 930 1521 to discuss your requirements further.

Finish

- · Polyester Powder Coatings: Standard, Metallic & Anodic equivalents
- · Anodised: Natural, Anolok & AnolokII
- Mill Finish

NSSPlus

NBS Plus subscribers go to www.nbsplus.co.uk and search for Dales Fabrications under 'The Content' in the @manufacturers' drop down menus. NB: The following draft specification includes information on the full Torent range so should be amended to **delete information on the products that are not required**.

R10 RAINWATER DRAINAGE SYSTEMS 311 Aluminium Gutters

Manufacturer: Dales Fabrications Ltd, Crompton Road Industrial Estate, Ilkeston, Derbyshire.
DF74RG, Tel: 0115, 930, 1521

Email: techinfo@dales-eaves.co.uk Website: www.dales-eaves.co.uk

The supplier shall design and manufacture the system in accordance with BS EN ISO 9001 and hold Professional Indemnity Insurance to cover their design activities. The Design of the system, including components, support structure, fixings and sealant, shall accommodate typical loadings/stresses in accordance with relevant British Standards.

Product Reference: Dales Torent 1/2/3 System

Material: Aluminium Sheet to BS EN 485/515/573: Grade 1050 AH14, supplied by BS EN ISO 9002 registered stockist to ensure traceability.

Size: 100x100mm: Torent 1/

200x150mm: Torent 2/ 270x150mm: Torent 3

Gauge: 14g (2.0mm)

Finish: Polyester Powder coated to BS 6496, coated only by Syntha Pulvin approved and BS EN IOS 9002 registered applicators/ Anodised to BS 3987 (Architectural Anodising)/ Mill Finish

Colour& Finish: RAL/ BS/ Anolok ref: (Specify colour reference and finish)

Colours from range available: See also http://www.dales-eaves.co.uk/finishes.html

Fixings: Fixings recommended for the purpose and supplied by Dales Fabrications Ltd. **Accessories:** Corners/Transitions/Junction/

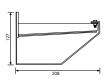
Stopends/Outlets/Special items to be designed and factory manufactured specifically for the application.

Method of Jointing:

Gutter: Joint straps secured in accordance with manufacturer's instructions, joints assembled dry with 8mm expansion gap and sealed with low modulus silicone sealant after assembly. Sealant to be provided by Dales Fabrications Ltd.

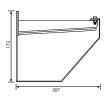
Method of Fixing: Internal gutter brackets fixed at pre-punched centres with fixings as recommended for the purpose and supplied by Dales Fabrications Ltd, through pre-punched holes in the back of the gutter and accessories.

PROFILES



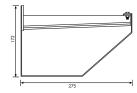
Dales Torent 1 Gutter

Gutter Capacity:	4.93 l/s
101.6mm Sq Outlet Capacity:	5.71 l/s
101.6mm dia Outlet Capacity:	4.65 l/s
76.2mm Sq Outlet Capacity:	3.20 l/s
76.2mm dia Outlet Capacity:	2.56 l/s



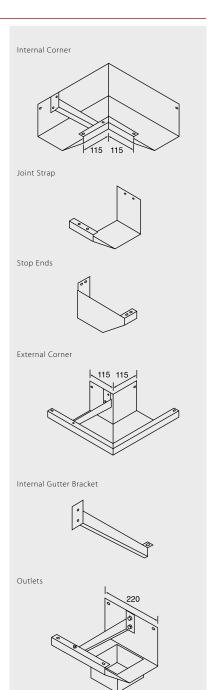
Dales Torent 2 Gutter

Gutter Capacity:	9.17 l/s
101.6mm Sq Outlet Capacity:	6.97 l/s
101.6mm dia Outlet Capacity:	5.67 l/s
76.2mm Sq Outlet Capacity:	3.90 l/s
76.2mm dia Outlet Capacity:	3.12 l/s



Dales Torent 3 Gutter

Gutter Capacity:	12.33 l/s
152.4mm dia Outlet Capacity:	12.88 l/s
101.6mm Sq Outlet Capacity:	6.96 l/s
101.6mm dia Outlet Capacity:	5.66 l/s
76.2mm Sq Outlet Capacity:	3.90 l/s
76.2mm dia Outlet Capacity:	3.12 l/s



Classic Gutter



Description

The Dales Classic gutter has been imitated but never matched offering subtle, pleasing lines combined with a substantial capacity, it is suitable for the widest range of projects. It is jointed using Dales unique overstrap joint system which has proven to give effective joint life of over 35 years. As the manufacturer, Dales can provide all manner of purpose-made componentry to suit your individual project. Contact Dales Design Team on Tel: 0115 930 1521 to discuss your requirements further.

Finish

- Polyester Powder Coatings: Standard, Metallic & Anodic equivalents
- · Anodised: Natural, Anolok & AnolokII
- Mill Finish

NSSPlus

NBS Plus subscribers go to www.nbsplus.co.uk and search for Dales Fabrications under 'The Content' in the @manufacturers' drop down menus.

R10 RAINWATER DRAINAGE SYSTEMS 311 Aluminium Gutters

Manufacturer: Dales Fabrications Ltd, Crompton Road Industrial Estate, Ilkeston, Derbyshire. DE7 4BG, Tel: 0115 930 1521.

Email: techinfo@dales-eaves.co.uk Website: www.dales-eaves.co.uk.

The supplier shall design and manufacture the system in accordance with BS EN ISO 9001 and hold Professional Indemnity Insurance to cover their design activities. The Design of the system, including components, support structure, fixings and sealant, shall accommodate typical loadings/ stresses in accordance with relevant British Standards.

Product Reference: Dales Classic System

Material: Aluminium Sheet to BS EN 485/515/573: Grade 1050 AH14, supplied by BS EN ISO 9002 registered stockist to ensure traceability.

Size: 152x130mm Gauge: 16 gauge (1.5mm)

Finish: Polyester Powder coated to BS 6496, coated only by Syntha Pulvin approved and BS EN IOS 9002 registered applicators/ Anodised to BS 3987 (Architectural Anodising)/ Mill Finish

Colour& Finish: RAL/ BS/ Anolok ref: (Specify colour reference and finish) Colours from range available: See also http://

www.dales-eaves.co.uk/finishes.html Fixings: Fixings recommended for the purpose and supplied by Dales Fabrications Ltd. Accessories: Corners/Transitions/Junction/

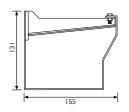
Stopends/Outlets/Special items to be designed and factory manufactured specifically for the application.

Method of Jointing:

Gutter: Joint straps secured in accordance with manufacturer's instructions, joints assembled dry with 8mm expansion gap and sealed with low modulus silicone sealant after assembly. Sealant to be provided by Dales Fabrications Ltd.

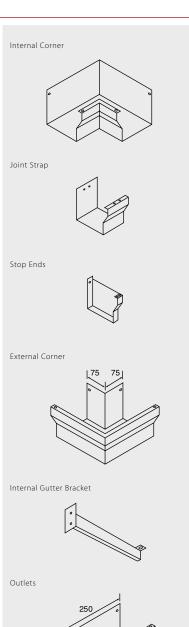
Method of Fixing: Internal gutter brackets fixed at pre-punched centres with fixings as recommended for the purpose and supplied by Dales Fabrications Ltd, through pre-punched holes in the back of the gutter and accessories.

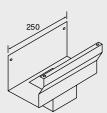
PROFILES



Dales Classic Gutter

Gutter Capacity:	5.36 l/s
101mm Sq Outlet Capacity:	5.98 l/s
101mm dia Outlet Capacity:	4.86 l/s
76.2mm Sq Outlet Capacity:	3.35 l/s
76.2mm dia Outlet Capacity:	2.68 l/s





product codes, please contact our ect Managers on **Tel: 0115 930 1521**

Dales Domestic & Strongline Gutters



Description

Dales Domestic and Strongline direct fix gutters continue to prove popular due to their attractive appearance, longevity and economy. They are jointed using Dales unique overstrap joint system which has proven to give effective joint life of over 35 years. As the manufacturer, Dales can provide all manner of purpose-made componentry to suit your individual project. Contact Dales Design Team on Tel: 0115 930 1521 to discuss your requirements further.

Finish

- · Polyester Powder Coatings: Standard, Metallic & Anodic equivalents
- · Anodised: Natural, Anolok & AnolokII
- Mill Finish

NSSPlus

NBS Plus subscribers go to www.nbsplus.co.uk and search for Dales Fabrications under 'The Content' in the @manufacturers' drop down menus. NB: The following draft specification includes information on both the Domestic and Strongline gutters so should be amended to **delete information on the product that is not required**.

R10 RAINWATER DRAINAGE SYSTEMS 311 Aluminium Gutters

Manufacturer: Dales Fabrications Ltd, Crompton Road Industrial Estate, Ilkeston, Derbyshire. DE7 4BG. Tel: 0115 930 1521

Email: techinfo@dales-eaves.co.uk Website: www.dales-eaves.co.uk

The supplier shall design and manufacture the system in accordance with BS EN ISO 9001 and hold Professional Indemnity Insurance to cover their design activities. The Design of the system, including components, support structure, fixings and sealant, shall accommodate typical loadings/stresses in accordance with relevant British Standards.

Product Reference: Dales Domestic/ Strongline System

Material: Aluminium Sheet to BS EN 485/515/573: Grade 1050 AH14, supplied by BS EN ISO 9002 registered stockist to ensure traceability.

Size: 120x75mm: Domestic/ 135x102mm: Strongline Gauge: 16 gauge (1.5mm)

Finish: Polyester Powder coated to BS 6496, coated only by Syntha Pulvin approved and BS EN IOS 9002 registered applicators/ Anodised to BS 3987 (Architectural Anodising)/ Mill Finish

Colour& Finish: RAL/ BS/ Anolok ref: (Specify colour reference and finish)

Colours from range available: See also http://www.dales-eaves.co.uk/finishes.html

Fixings: Fixings recommended for the purpose and supplied by Dales Fabrications Ltd. **Accessories:** Corners/Transitions/Junction/Stopends/Outlets/Special items to be designed and factory manufactured specifically for the

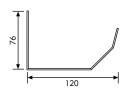
application.

Method of Jointing:

Gutter: Joint straps secured in accordance with manufacturer's instructions, joints assembled dry with 8mm expansion gap and sealed with low modulus silicone sealant after assembly. Sealant to be provided by Dales Fabrications Ltd.

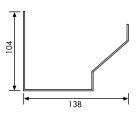
Method of Fixing: Fixings as recommended for the purpose and supplied by Dales Fabrications Ltd, through pre-punched holes in the back of the gutter and accessories.

PROFILES



Dales Domestic

Gutter Capacity: 1.21 l/s 76.2mm Sq Outlet Capacity: 1.55 l/s 76.2mm dia Outlet Capacity: 1.24 l/s



Dales Strongline

Gutter Capacity: 2.47 l/s 76.2mm Sq Outlet Capacity: 2.82 l/s 76.2mm dia Outlet Capacity: 2.26 l/s Internal Corner



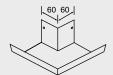
Joint Strap



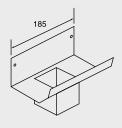
Stop Ends



External Corner



Outlets



Dales Contemporary Square Aluminium Pipe



Description

Dales Contemporary Square Aluminium Rainwater Pipes are available as standard in either 76.2 or 101.6mm sizes. Each pipe is extruded with a close-fit socket to one end, giving clean, contemporary lines when installed. Dales standard pipe brackets fix the pipe very close to the wall, firmly clamping the pipe in position and making it very difficult to climb. As the manufacturer, Dales can provide all manner of purpose-made componentry to suit your individual project. Contact Dales Design Team on Tel: 0115 930 1521 to discuss your requirements further.

Finish

- · Polyester Powder Coatings: Standard, Metallic & Anodic equivalents
- · Anodised: Natural, Anolok & AnolokII
- · Mill Finish

NSSPlus

NBS Plus subscribers go to www.nbsplus.co.uk and search for Dales Fabrications under 'The Content' in the @manufacturers' drop down menus. NB: The following draft specification includes information on both sizes of pipe so should be amended to **delete information on the product that is not required**.

R10 RAINWATER DRAINAGE SYSTEMS 370 Aluminium Pipework For External Use

Manufacturer: Dales Fabrications Ltd, Crompton Road Industrial Estate, Ilkeston, Derbyshire. DE7 4BG. Tel: 0115 930 1521.

Email: techinfo@dales-eaves.co.uk Website: www.dales-eaves.co.uk.

The supplier shall design and manufacture the system in accordance with BS EN ISO 9001 and hold Professional Indemnity Insurance to cover their design activities. The Design of the system, including components, support structure, fixings and sealant, shall accommodate typical loadings/stresses in accordance with relevant British Standards.

Product Reference: Dales Aluminium Rainwater Pipes.

Material: Extruded Aluminium to BS EN 755 Part 1, 2 & 9 2001 6063 T4: supplied by BS EN ISO 9002 registered stockist to ensure traceability.

Shape: Square **Size:** 76.2mm/101.6mm

Gauge: 16 gauge (1.5mm)/14 gauge (2mm) **Finish:** Polyester Powder coated to BS 6496, coated only by Syntha Pulvin approved and BS EN IOS 9002 registered applicators/ Anodised to BS 3987 (Architectural Anodising)/ Mill Finish

Colour& Finish: RAL/ BS/ Anolok ref: (Specify colour reference and finish)

Colours from range available: See also http://www.dales-eaves.co.uk/finishes.html

Fixings: Fixings recommended for the purpose and supplied by Dales Fabrications Ltd. **Other requirements:** Standard Swaged Pipe Joints

Accessories: Pipe connectors/square to round adapters/pipe elbows/rodding access pieces/ hopper heads/pipe brackets/offset pipe brackets/pipe branches/pipe offsets/two piece adjustable offsets/special items to be designed and factory manufactured specifically for the application.

Method of Jointing:

Dry socket joint

Method of Fixing: Bracketed in accordance with manufacturer's instructions, generally two brackets per pipe length. All brackets to be supplied by Dales Fabrications Ltd

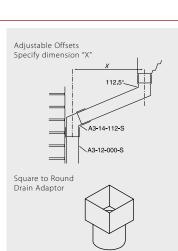
PROFILES

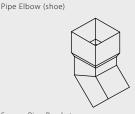


101.6 and 76.2mm Square Rainwater Pipe

All pipes are nominal 3000mm long with socket at one end.

PIPE SIZE	Wall Thickness	PART REF
101.6 Sq	2.0	A2-12-000-S
76.2 Sq	1.6	A3-12-000-S

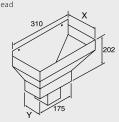


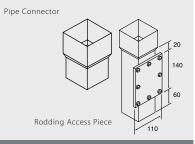


Square Pipe Bracket



Hopper Head





Dales Rectangular Aluminium Pipe



Description

Dales Rectangular Aluminium Rainwater Pipes have square edged corners and are available as standard in size: 101.6 x 76.2mm. Dales standard pipe brackets fix the pipe very close to the wall, firmly clamping the pipe in position and making it very difficult to climb. As the manufacturer, Dales can provide all manner of purpose-made componentry to suit your individual project. Contact Dales Design Team on Tel: 0115 930 1521 to discuss your requirements further.

Finish

- Polyester Powder Coatings: Standard, Metallic & Anodic equivalents
- · Anodised: Natural, Anolok & AnolokII
- Mill Finish

NSSPlus

NBS Plus subscribers go to www.nbsplus.co.uk and search for Dales Fabrications under 'The Content' in the @manufacturers' drop down menus.

R10 RAINWATER DRAINAGE SYSTEMS 370 Aluminium Pipework For **External Use**

Manufacturer: Dales Fabrications Ltd, Crompton Road Industrial Estate, Ilkeston, Derbyshire. DE7 4RG Tel: 0115 930 1521

Email: techinfo@dales-eaves.co.uk Website: www.dales-eaves.co.uk.

The supplier shall design and manufacture the system in accordance with BS EN ISO 9001 and hold Professional Indemnity Insurance to cover their design activities. The Design of the system, including components, support structure, fixings and sealant, shall accommodate typical loadings/ stresses in accordance with relevant British Standards.

Product Reference: Dales Rectangular Aluminium Rainwater Pipes.

Material: Extruded Aluminium to BS EN 755 Part 1, 2 & 9 2001 6063 T6: supplied by BS EN ISO 9002 registered stockist to ensure traceability.

Shape: Rectangular **Size:** 76.2x101.6mm Gauge: 14 gauge (2mm)

Finish: Polyester Powder coated to BS 6496, coated only by Syntha Pulvin approved and BS EN IOS 9002 registered applicators/ Anodised to BS 3987 (Architectural Anodising)/ Mill Finish

Colour& Finish: RAL/ BS/ Anolok ref: (Specify colour reference and finish)

Colours from range available: See also http:// www.dales-eaves.co.uk/finishes.html

Fixings: Fixings recommended for the purpose and supplied by Dales Fabrications Ltd. Other requirements: Standard Pipe Socket Joints

Accessories: Pipe connectors/square to round adapters/pipe elbows/rodding access pieces/ hopper heads/pipe brackets/offset pipe brackets/ pipe branches/pipe offsets/two piece adjustable

offsets/special items to be designed and factory manufactured specifically for the application.

Method of Jointing:

Dry socket joint

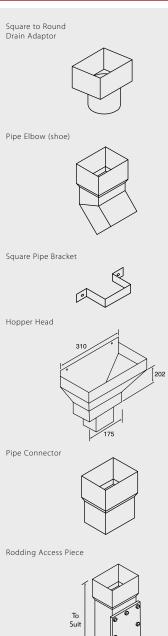
Method of Fixing: Bracketed in accordance with manufacturer's instructions, generally two brackets per pipe length. All brackets to be supplied by Dales Fabrications Ltd

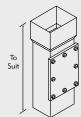
PROFILES



101.6 x 76.2mm Rectangular Rainwater Pipe

All pipes are nominal 3000mm long with socket at one end. The pipe wall thickness is 2mm.





product codes, please contact our ect Managers on **Tel: 0115 930 1521**

Dales Square & Rectangular Aluminium Pipe with Cast Collars



Description

Dales Traditional Square and Rectangular Aluminium Rainwater Pipes with integral cast collars offer the appearance of traditional cast-iron but offer comparative savings in both weight and cost. In contrast to cast iron products, bespoke items in aluminium can be fabricated with relative ease.* The NBS clause reproduced below is for traditional collars with ears (bracket). For NBS specifications for pipes with other types of cast collar or to discuss purpose-made componentry to suit your project, please contact our Project Managers on Tel: 0115 930 1521 to discuss your requirements further. *Please note that 152.4mm square pipe is subject to both minimum order charges and extended delivery periods.

Finish

- · Polyester Powder Coatings: Standard, Metallic & Anodic equivalents
- · Anodised: Natural, Anolok & Anolok II
- · Mill Finish

NSSPlus

NBS Plus subscribers go to www.nbsplus.co.uk and search for Dales Fabrications under 'The Content' in the @manufacturers' drop down menus. NB: The following draft specification includes information on all sizes of pipe so should be amended to **delete information on the products that are not required**.

R10 RAINWATER DRAINAGE SYSTEMS 370 Aluminium Pipework For External Use

Manufacturer: Dales Fabrications Ltd, Crompton Road Industrial Estate, Ilkeston, Derbyshire. DE7 4BG. Tel: 0115 930 1521.

Email: techinfo@dales-eaves.co.uk Website: www.dales-eaves.co.uk.

The supplier shall design and manufacture the system in accordance with BS EN ISO 9001 and hold Professional Indemnity Insurance to cover their design activities. The Design of the system, including components, support structure, fixings and sealant, shall accommodate typical loadings/stresses in accordance with relevant British Standards.

Product Reference: Dales Traditional Aluminium Rainwater Pipes: Cast Eared Sockets

Material: Extruded Aluminium to BS EN 755 Part 1, 2 & 9 2001 6063 T4: supplied by BS EN ISO 9002 registered stockist to ensure traceability.

Shape: Square/Rectangular

Size: 76.2mm/101.6mm/76.2x101.6mm/152.4mm

Gauge: 16 gauge (1.5mm)/14 gauge (2mm)/ 12 gauge (2.5mm)

Finish: Polyester Powder coated to BS 6496, coated only by Syntha Pulvin approved and BS EN IOS 9002 registered applicators/ Anodised to BS 3987 (Architectural Anodising)/ Mill Finish Colour& Finish: Colour from Dales' standard

Colour& Finish: Colour from Dales' standard range (available from www.dales-eaves.co.uk/finishes)

Fixings: Fixings recommended for the purpose and supplied by Dales Fabrications Ltd. **Other requirements:** Cast Eared Collar Pipe Connections

Accessories: Pipe connectors/square to round adapters/pipe elbows/rodding access pieces/ hopper heads/pipe brackets/offset pipe brackets/ pipe branches/pipe offsets/two piece adjustable offsets/special items to be designed and factory manufactured specifically for the application.

Method of Jointing:

Dry socket joint

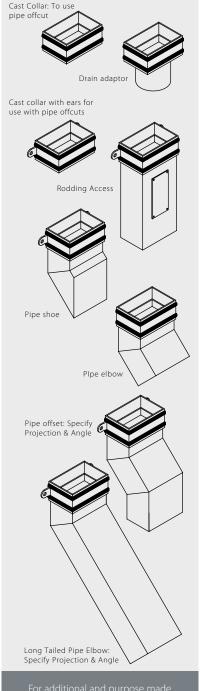
Method of Fixing: Cast Eared Collars in accordance with manufacturers instructions, one per pipe joint. All collars to be supplied by Dales Fabrications I td.

PROFILES



76.2mm/101.6mm/76.2x101.6mm/ 152.4mm Square and Rectangular Rainwater Pipe

All pipes are nominal 3000mm long with socket at one end.



Dales Contemporary Round Aluminium Pipe



Description

Dales Contemporary Round Aluminium Rainwater Pipes are available as standard in either 76.2, 101.6 & 152.4mm sizes. Each pipe is extruded with a close-fit socket to one end, giving clean, contemporary lines when installed. Dales standard pipe brackets fix the pipe very close to the wall, firmly clamping the pipe in position and making it difficult to climb. As the manufacturer, Dales can provide all manner of purpose-made componentry to suit your individual project. Contact Dales Design Team on Tel: 0115 930 1521 to discuss your requirements further.

Finish

- · Polyester Powder Coatings: Standard, Metallic & Anodic equivalents
- · Anodised: Natural, Anolok & AnolokII
- Mill Finish

NSSPlus

NBS Plus subscribers go to www.nbsplus.co.uk and search for Dales Fabrications under 'The Content' in the @manufacturers' drop down menus. NB: The following draft specification includes information on all sizes of pipe so should be amended to **delete information on the products that are not required**.

R10 RAINWATER DRAINAGE SYSTEMS 370 Aluminium Pipework For External Use

Manufacturer: Dales Fabrications Ltd, Crompton Road Industrial Estate, Ilkeston, Derbyshire. DE7 4BG. Tel: 0115 930 1521.

Email: techinfo@dales-eaves.co.uk Website: www.dales-eaves.co.uk.

The supplier shall design and manufacture the system in accordance with BS EN ISO 9001 and hold Professional Indemnity Insurance to cover their design activities. The Design of the system, including components, support structure, fixings and sealant, shall accommodate typical loadings/stresses in accordance with relevant British Standards.

Product Reference: Dales Aluminium Rainwater Pipes.

Material: Extruded Aluminium to BS EN 755 Part 1, 2 & 9 2001 6063 T4: supplied by BS EN ISO 9002 registered stockist to ensure traceability.

Shape: Square/Round/Rectangular Size: 76.2mm/101.6mm/152.4mm/ Gauge: 16 gauge (1.5mm)/

14 gauge (2mm)/12 gauge (2.5mm)

Finish: Polyester Powder coated to BS 6496, coated only by Syntha Pulvin approved and BS EN IOS 9002 registered applicators/ Anodised to BS 3987 (Architectural Anodising)/ Mill Finish

Colour& Finish: RAL/ BS/ Anolok ref: (Specify colour reference and finish)

Colours from range available: See also http://www.dales-eaves.co.uk/finishes.html

Fixings: Fixings recommended for the purpose and supplied by Dales Fabrications Ltd. **Other requirements:** Standard Swaged Pipe

Joints

Accessories: Pipe connectors/square to round adapters/pipe elbows/rodding access pieces/ hopper heads/pipe brackets/offset pipe brackets/ pipe branches/pipe offsets/two piece adjustable offsets/special items to be designed and factory manufactured specifically for the application.

Method of Jointing:

Dry socket joint

Method of Fixing: Bracketed in accordance with manufacturer's instructions, generally two brackets per pipe length. All brackets to be supplied by Dales Fabrications Ltd

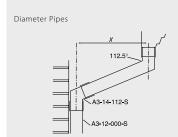
PROFILES



76.2/101.6/152.4mm dia Rainwater Pipe

All pipes are nominal 3000mm long with socket at one end.

PIPE SIZE	Wall Thickness	PART REF
152.4 dia	2.5	A1-12-000-D
101.6 dia	1.6	A2-12-000-D
76.2 dia	1.6	A3-12-000-D



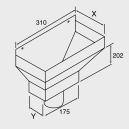
Round Pipe Bracket



Pipe Elbow (shoe)



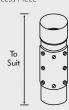
Hopper Head



Pipe Connector



Rodding Access Piece



Dales Traditional Round Aluminium Pipe with Cast Collars



Description

Dales Traditional Round Aluminium Rainwater Pipes with integral cast collars offer the appearance of traditional cast-iron but offer savings in cost, time and delivery. Cast collars can be with or without ears and can be contemporary or traditional in appearance. The NBS clause reproduced below is for traditional collars with ears. As the manufacturer, Dales can provide all manner of purpose-made componentry to suit your individual project. Contact Dales Design Team on Tel: 0115 930 1521 to discuss your requirements further.

Finish

- · Polyester Powder Coatings: Standard, Metallic & Anodic equivalents
- · Anodised: Natural, Anolok & AnolokII
- Mill Finish

NSSPlus

NBS Plus subscribers go to www.nbsplus.co.uk and search for Dales Fabrications under 'The Content' in the @manufacturers' drop down menus. NB: The following draft specification includes information on all pipe sizes so should be amended to delete information on the products that are not required.

R10 RAINWATER DRAINAGE SYSTEMS 370 Aluminium Pipework For **External Use**

Manufacturer: Dales Fabrications Ltd, Crompton Road Industrial Estate, Ilkeston, Derbyshire. DE7 4RG Tel: 0115 930 1521

Email: techinfo@dales-eaves.co.uk Website: www.dales-eaves.co.uk.

The supplier shall design and manufacture the system in accordance with BS EN ISO 9001 and hold Professional Indemnity Insurance to cover their design activities. The Design of the system, including components, support structure, fixings and sealant, shall accommodate typical loadings/ stresses in accordance with relevant British Standards.

Product Reference: Dales Traditional Aluminium Rainwater Pipes: Cast Eared

Material: Extruded Aluminium to BS EN 755 Part 1, 2 & 9 2001 6063 T4: supplied by BS EN ISO 9002 registered stockist to ensure traceability.

Shape: Round

Size: 76.2mm/101.6mm/152.4mm

Gauge: 16 gauge (1.5mm)/14 gauge (2mm)/

12 gauge (2.5mm)

Finish: Polyester Powder coated to BS 6496, coated only by Syntha Pulvin approved and BS EN IOS 9002 registered applicators/ Anodised to BS 3987 (Architectural Anodising)/ Mill Finish

Colour & Finish: RAL/ BS/ Anolok ref: (Specify colour reference and finish)

Colours from range available: See also http:// www.dales-eaves.co.uk/finishes.html

Fixings: Fixings recommended for the purpose and supplied by Dales Fabrications Ltd. Other requirements: Cast Eared Collar Pipe

Connections

Accessories: Pipe connectors/square to round adapters/pipe elbows/rodding access pieces/ hopper heads/pipe brackets/offset pipe brackets/ pipe branches/pipe offsets/two piece adjustable offsets/special items to be designed and factory manufactured specifically for the application.

Method of Jointing:

Dry socket joint

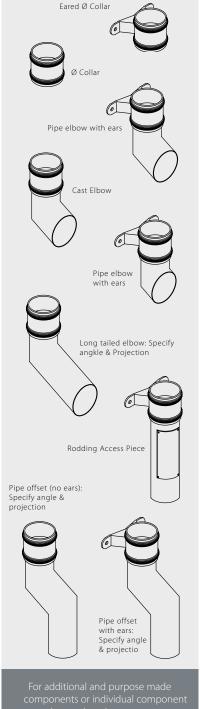
Method of Fixing: Cast Eared Collars in accordance with manufacturers instructions, one per pipe joint. All collars to be supplied by Dales Fabrications Ltd.

PROFILES



76.2mm/101.6mm/152.4mm Round Rainwater Pipe

All pipes are nominal 3000mm long with socket at one end.



product codes, please contact our ect Managers on **Tel: 0115 930 1521**

Technical Information

Lightning Conductivity

Dales aluminium gutters and down-pipes can usually be rendered electrically continuous using the Dales lightning conductivity clip, as part of a lightning protection system. This can be discussed with a Dales project manager and a detail can be provided.

Aluminium gutters and pipes are not suitable as the sole lightning protection system for any building and should only be utilised as part of an overall lightning protection design. Specifiers should refer to the latest EN BS standard concerning the protection of structures against lightning for further information.

Roof Drainage and Gutter System Design

Dales operate a project management system with suitably qualified and experienced technicians. These project managers will provide a gutter system designed to suit your individual project requirements incorporating gutter and outlet and positioning advice in accordance with BS EN 12056-3 for a given design rate of rainfall. To use this service please contact a member of our project management team. For additional information on the project managers role, please refer to page 7.

All published flow capacities contained in this literature are calculated in accordance with the recommendations contained in BS EN 12056-3: 2000. Dales policy is not to issue high, although genuine, experimental results which include no margin of safety.

Loadings

Dales gutter systems are designed to accommodate loadings in excess of those induced when the system is operating at full capacity. Snow guards are recommended where sliding snow may cause impact loading in excess of normal design criteria. (see BS EN 12056-3: 2000 National Annex NB clause NB.4)

Thermal Movement

Dales design all systems to accommodate the extremes of temperature typical of the UK. For overseas projects, the extremes of temperature specific to each country are used as the design criteria.

System Fixings

The fixings that secure any system are potentially its weakest link. Dales have researched their chosen fixings carefully with salt spray tests where appropriate to investigate any possible corrosion issues. The fixings are supplied as part of the system and their performance is appropriate to the life of the system. All seen fixings are pre-coated to colour match the coated products.

Curved Gutters

Dales are able to design and manufacture gutter systems that are a pure curve in plan. These systems create interesting design issues and should be discussed thoroughly with the technical services department before detail drawings or specifications are finalised.

Faceted Gutters

Where a curve in plan involves a non-rectangular or square section, i.e. raking or moulded front face, a specially designed facet may provide a most satisfactory solution

Secret Fix Pipework

All sizes and types of aluminium pipes can be manufactured with secret fixing and or internal pipe jointing. This type of pipework offers improved security and very clean lines. It is generally more expensive and since it is made to order usually on longer lead times. For a suitable NBS specification clause or for further information, please email your enquiry to sales@dales-eaves.co.uk or give our Design Team a ring on Tel: 0115 930 1521.

Lead times

All the standard gutter profiles shown in this literature are available in standard polyester powder paint finishes in less than two weeks. Non-stock items are some of the larger standard gutters, 152.4mm pipes (either dia or sq) and contemporary cast-collared pipework. If lead times are of particular importance please give one of our Directors a ring on Tel: 0115 930 1521 to discuss your requirements.

Purpose-made Gutters and other Specials

Dales are a specialist manufacture of both standard and bespoke items and although most of our bespoke gutters tend to arise through integration with our complete eaves systems, we are always happy to help specifiers achieve their design ideas.

If you have a suitable project and would like one of our Technical Managers to visit you please email your request to sales@dales-eaves.co.uk.

Finishes



Finishes

There are three main architectural finishes that can be applied to aluminium. These are polyester powder coating, PVF2 and anodising. Details of the colours available for each finish can be found at www.dales-eaves.co.uk

Polyester powder coating (Dales Standard Finish)

Easily the most popular choice for aluminium coating. It offers significant low maintenance life and a wide colour range, including attractive metallic finishes. All polyester power coating meets or exceeds BS EN12206:2004. For a small size sample of a particular colour for your finishes board, please contact Dales Project Management team on Tel: 0115 930 1521.

Anodised

Anodising is a controlled method of forming a protective layer of oxide to the aluminium products. It requires higher priced grades of aluminium than those used for paint finishes such as polyester powder. Anodising creates a particularly high quality metallic finish with a range of colours available. Anodised finish is particularly suited to coastal installations.

PVF2

Less widely used in the UK than polyester powder coating but is still the preference of some clients and specifiers. PVF2 is a two or three part wet spray coating which is applied after components are manufactured. It does give significant low maintenance life but is generally more expensive than polyester powder coating and can increase lead times.



Mill Finish

Whilst hidden items are generally supplied in mill finished aluminium, Dales do not recommend it as a suitable finish for visible surfaces.

	PPC	PVF2	Anodising
Impact Resistance	Excellent	Good	Excellent
Scratch Resistance	Good	Poor	Excellent
Repair Characteristics	Excellent	Good	None
Available Colour Range	Excellent	Good	Poor
Metallic Finishes	Good	Very Good	Excellent
Guarantee	25 Years	25 Years	25 Years
Cost	Effective	High	High

Durability

Dales systems are designed to give a low maintenance life of 40 years in rural and suburban conditions, 25 years in industrial conditions. For marine environments, the project location and specific requirements should be discussed to assess the best material alloy and surface finish protection.

Loadings

Both gutter and fascia soffit systems are designed to accommodate loadings in excess of those induced when the gutters are operating at full capacity. Snow guards are recommended where sliding snow may cause impact loading in excess of normal design criteria (see BS EN 12056-3 2000). For wind and other specific loadings please contact our Project management team on Tel: 0115 930 1521.

Thermal movement

Dales design all systems to accommodate the extremes of temperature typical in the UK. For projects overseas, please contact our Project Management Team on Tel: 0115 930 1521.

NBS Guidance

The NBS specification clauses within Dales product literature have been compiled in collaboration with NBS Services Ltd using NBS Plus project specifications based on the National Building Specification. The clauses are intended to enable the contractor to clearly identify the product required and the work involved in installation. (The contractor is required to comply with Dales' sitework instructions by NBS Preliminaries clause A33 / 130).

Individual Project Specifications

Any member of Dales Project Management team will be pleased to review any completed NBS clause to ensure compliance with this guidance. Alternatively, we are happy to provide complete NBS specification clauses tailored to suit your individual project requirements. For more information please contact Dales Project Management team on Tel: 0115 930 1521.

NBS Specification Services



NBS Plus subscribers go to www.nbsplus.co.uk and search for Dales Fabrications under 'The Content' in the 'Manufacturers' drop down menus.

Relevant Sections Within NBS

Dales Eaves Systems should be specified within one of the following two clauses:

For eaves systems combining one of Dales' range of gutters.

R10: 321 Combined fascia, soffit and gutter

For eaves systems excluding a gutter system.

G20: 950 Proprietary fascias/barges/soffits

The following draft specification can be inserted under either heading and includes specification information for both planked systems and panel soffit systems which should be deleted as appropriate.

Clauses specifically relating to Planks are shown in blue whilst clauses relating to panels are shown in red.

Manufacturer:

Dales Fabrications Ltd, Crompton Road Industrial Estate, Ilkeston, Derbyshire DE7 4BG Tel: 0115 930 1521.

email: sales@dales-eaves.co.uk website: www.dales-eaves.co.uk

Product reference

Kwikfix Fascia & Soffit System Panel Fascia & Soffit System

· Material/Grade:

Fascia & soffit, Aluminium Sheet to EN 485/515/573 : Designation NS3, Condition H14, supplied by BS EN ISO 9002 registered stockist to ensure traceability.

Monocoque Bracket to EN10143/Z2: 1993

Profile:

Please specify fascia profile (See page 15 for guidance)

Size:

Fascia depth, mm Soffit width, mm

Gauge:

Fascia 2mm (14 gauge) Soffit 1.2 mm (18 gauge) Fascia 2mm (14 gauge) Soffit 2mm (14 gauge)

· Finish:

Fascia Soffit: Architectural Polyester Powder Coating by BS EN ISO 9002 registered applicator. Dales monocoque bracket system: Self Finish.

Colour:

Fascia: RAL
Soffit: RAL

Fixings:

All fixings to be completely concealed wherever possible, any exposed fixings to be colour matched. All fixings to be provided by Dales Fabrications Limited.

Supports:

Dales Monocoque Bracket System in pre-galvanised steel at centres recommended by Dales Fabrications Limited.

Ventilation: (Delete as appropriate)

Preformed ventilation slots equal to a continuous strip mm wide, slots sized to stop the ingress of nesting, winged insects without the need for backing mesh.

· Accessories:

Factory fabricated stopends, internal & external corners, gable box ends, apex pieces, soffit end closures, mitre cover strips etc. as required.

· Installation:

To be fixed in strict accordance with Dales Fabrications fixing instructions. List of recommended installers available on request.

Method of Jointing:

Fascia: Butt jointed with 3mm expansion gap, secured with 3mm pop rivet through pre-punched slot into profiled butt strap.

(Standard Fascia Joint - delete as appropriate)

Fascia: Butt jointed with 3mm expansion gap, secured with Dales secret fix profiled buttstrap and clips. (Secret Fascia Joint - delete as appropriate)

Soffit: Planks to be butt jointed with 1mm gap. Joints must occur on supports. All joints to be staggered.

Soffit: Panels to be butt jointed with 3mm expansion gap, secured with Dales secret fix profiled buttstrap and clips.



Dales Customer Support Ethic



'One to One'Technical Support & CPD

Dales have an experienced team of technical advisors who can visit site or your premises to discuss individual project requirements.

As part of their ongoing commitment to CPD provision, each technical advisor can organise and present a CPD seminar on various subjects relating to the products that Dales manufacture. For more details or to arrange a seminar contact us on Tel: 0115 930 1521 or email us on sales@dales-eaves.co.uk



Specification Service & Project Managers

We assign an individual Project Manager to each project. The Project Manager will remain the single point of contact throughout the various stages of the project, from initial design to completion.

Relevant criteria, including support methods, material requirements and budget, are established with the specifier.

The Project Manager can prepare CAD drawings, calculations, NBS specifications and quotations, thereby providing a complete specification service.

All our design activities are underwritten by Professional Indemnity Insurance.



In-house Design & Fabrication

Dales' manufacture under the control of ISO 9001: 2015 Design & Manufacture Quality Assurance.

ISO 9001: 2015 Design & Manufacture Certificate: 041494



Continuous investment in the latest CAD/CAM technology, manufacturing equipment and training for personnel enables us to maintain the highest standards in customer service and product quality.



Preferred Installer Network

Our network of carefully selected preferred installers are on hand to provide a full supply and fix package. These companies specialise in the installation of our materials and are fixing them on a regular basis.







Complete eaves solutions

Dales design and manufacture a wide range of fascia soffit systems that suit both traditional and contemporary building designs. These designs often include the integration of rainwater goods and secondary support to provide complete, low maintenance eaves systems.



Solar shading

Dales design and manufacture aluminium solar shading systems using standard products to create bespoke solutions on an individual project basis.



Coping systems

Dales design and manufacture a range of wall capping systems in aluminium which provide an attractive and low maintenance alternative to more traditional stone copings.



Rainscreen cladding

Dales design and manufacture elegant and performance-driven rainscreen solutions.



