



# Aluminium Coping Systems

- Standard, Sloping or Ridged Copings
- Sustainable
- Low Maintenance
- Aluminium: 100% Recyclable
- Full Design Service
- Quality Assured Manufacturer



ISO 9001: 2008  
Design & Manufacture  
Certificate: 025



# Combined with Innovative Design

## Meridian Copings: Standard or Bespoke

Dales have been producing aluminium wall copings to suit a wide variety of wall types to suit different building applications for many years. Whilst standard systems are most often required, Dales can design copings on an individual project basis and are not restricted in size by particular extruded parts. Whilst secret fix systems are preferred by most specifiers, it is often the case that walls with increasingly substantial insulation require larger width copings and Dales can offer advice as to when a mechanically fixed coping will offer a more secure solution.

For more information and to discuss your project requirements, please contact our Project Management Team on Tel: 0115 930 1521.

## Coping Support Bracket: Strength Through Design

With their unique folded bracket design, Dales offer methods of support to suit walls that involve concrete, masonry or structural steel construction with claddings from curtain walling to traditional masonry.

For advice on how our coping support brackets can integrate into your wall designs, please call us on Tel: 0115 930 1521 or email drawings to [sales@dales-eaves.co.uk](mailto:sales@dales-eaves.co.uk)

## 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.

## Introduction

Through a combination of experience and specialist technical expertise, Dales Fabrications Ltd have been manufacturing a comprehensive range of low maintenance eaves products for over 35 years. Extensive engineering experience combined with a passion for quality and a desire for technical innovation has meant that Dales remain a high quality and reliable source of low maintenance eaves products. This literature has been designed with the intention of helping you to specify Dales' products without complication.

For assistance with your project, including technical or pricing advice, call our Project Management Team on Tel: 0115 930 1521 or email your project drawings to us at [sales@dales-eaves.co.uk](mailto:sales@dales-eaves.co.uk) and we'll be happy to help.

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# Accountable Solutions



## 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.



ISO 9001: 2008  
Design & Manufacture  
Certificate: 025

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

## Using BIM models of Dales Products

As part of its policy to meet the targets set out in the Government Construction Strategy 2025, Dales has an ongoing commitment to provide BIM models for all its products by 1st April 2016.

To download the latest BIM models of Dales products currently available, please visit either [www.dales-eaves.co.uk](http://www.dales-eaves.co.uk) or [www.BIMstore.co.uk](http://www.BIMstore.co.uk)

## Specify via [www.dales-eaves.co.uk](http://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](http://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.

## Reasons to Use Dales

- NBS Specifications on demand
- CAD detail drawings on demand
- Efficient website to aid easy specification: [www.dales-eaves.co.uk](http://www.dales-eaves.co.uk)
- Engineering-led company ethos
- Project Management System for every project
- Full Design Service: Backed by Professional Indemnity Insurance
- Over 35 years of manufacturing and design experience
- Over 20 years of ISO 9001: Design & Manufacture Quality Assurance
- Preferred Installer Network
- Excellent Lead Times

# Project Sector: Education

Meridian Wall Coping, 260 Shadex Solar Shades & Curved Fascia Soffit

Beths Grammar School, Bexley, Kent



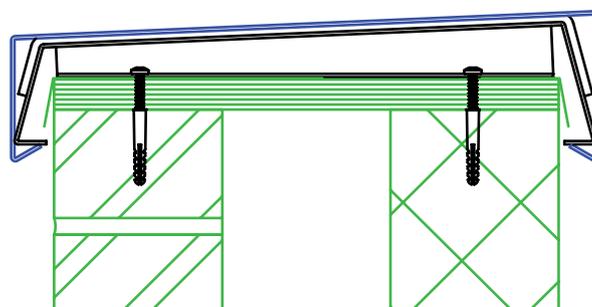
**Architect:** Ingleton Wood LLP architects, [www.ingletonwood.co.uk](http://www.ingletonwood.co.uk)

**Main contractor:** Horizon Construction, [www.horizonconstruction.co.uk](http://www.horizonconstruction.co.uk)

**Preferred fixer:** Specialised Fixings of Ipswich, [www.specialisedfixings.co.uk](http://www.specialisedfixings.co.uk)

*"We have worked successfully with Dales Fabrications and Ingleton Wood LLP on this project and we're very pleased with the result. Not only have we helped to create additional space at Beths Grammar School to accommodate more pupils, but through creative design we've constructed a centralised hub for the administrative support and senior management team. In addition, the new main entrance and reception correct the safeguarding issues that surrounded the location and accessibility of the existing school reception."*

*Steve Hart, Senior Contracts Manager, Horizon Construction*



# Project Sector: Local Authority

PM Gutter, Pipes, Fascia Soffit, Solar Shading & Curved Meridian Coping System

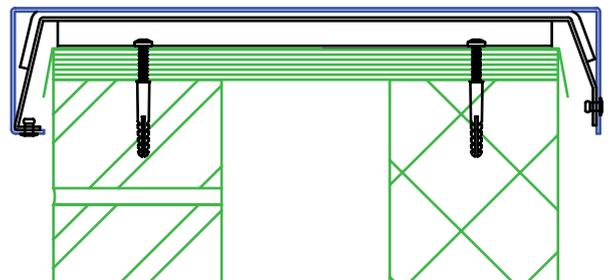
Wymondham Library, Wymondham, Norfolk



**Architect:** NPS Property Consultants [www.nps.co.uk](http://www.nps.co.uk)

**Main contractor:** Morgan Ashurst [www.morgansindall.com](http://www.morgansindall.com)

**Preferred fixer:** Roweaver Developments Ltd [www.roweaver.co.uk](http://www.roweaver.co.uk)



# DESIGN CONSIDERATIONS

## Coping Selection

### Meridian Coping System

Dales Meridian Coping Systems provide practical and sustainable low maintenance solutions for parapet and perimeter walls. The standard range includes the Standard (flat), Weather-struck (sloping) and Ridgeway (apex) profiles, but alternative bespoke profiles can be provided when required.

For smaller width copings, typically those for wall widths up to 500mm, installed below 10m, the Meridian coping can be designed to 'snap' onto pre-fixed brackets, providing a secure method of fixing whilst eliminating visible fixings. For wider copings, i.e. those over 501mm, thicker material will normally be selected combined with visible fixings to secure the coping to the bracket. Careful and thoughtful design can be applied to reduce the visibility of the fixings.

### Loadings

Copings installed in excess of 10m above ground level will require mechanical fixing due to increased wind loads and the thickness may also need to be increased. Dependant on the design, the fixings may be visible or recessed.

Any coping will transfer loads to the structure so it is vital that the top courses of masonry are tied in adequately. In addition, where uneven surfaces are to be capped, or where perforated bricks are utilised, it is recommended that 18mm minimum of exterior grade ply is installed. Best practice requires a suitable DPM be installed under any metal coping system.

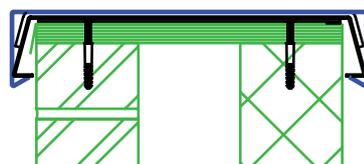
### Size

All profiles are available in widths up to 500mm without the need for visible fixings. Copings in excess of 500mm are designed on an individual project basis. For assistance with a purpose-made wall coping, please contact our Project Management Team on Tel: 0115 930 1521 or email your request to [sales@dales-eaves.co.uk](mailto:sales@dales-eaves.co.uk)

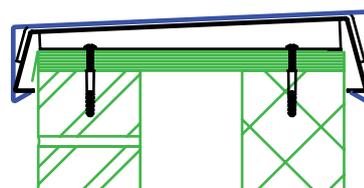
The minimum size that Dales currently manufacture a wall coping for is a single skin brick wall. For anything smaller in width, please send your enquiry and drawings of the particular application to [sales@dales-eaves.co.uk](mailto:sales@dales-eaves.co.uk)

The thickness of aluminium that the coping is manufactured from is dependent on the particular wall thickness, which will include all materials that make up the total wall width:

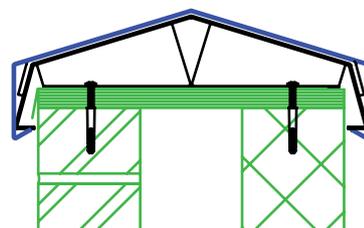
| Total wall thickness | Aluminium thickness              |
|----------------------|----------------------------------|
| 112mm to 300mm       | 1.5mm                            |
| 301mm to 410mm       | 2.0mm                            |
| 410mm to 500mm       | 2.5mm                            |
| Above 501mm          | Call Dales on Tel: 0115 930 1521 |



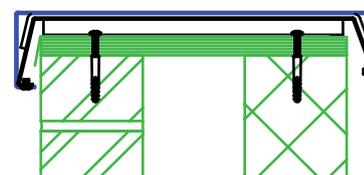
Standard



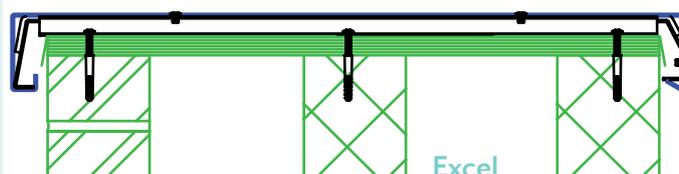
Weather-struck



Ridgeway



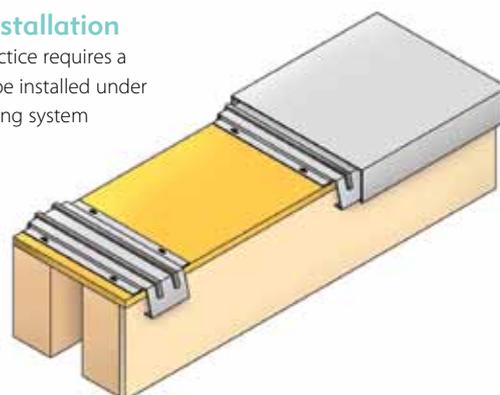
Stormforce



Excel

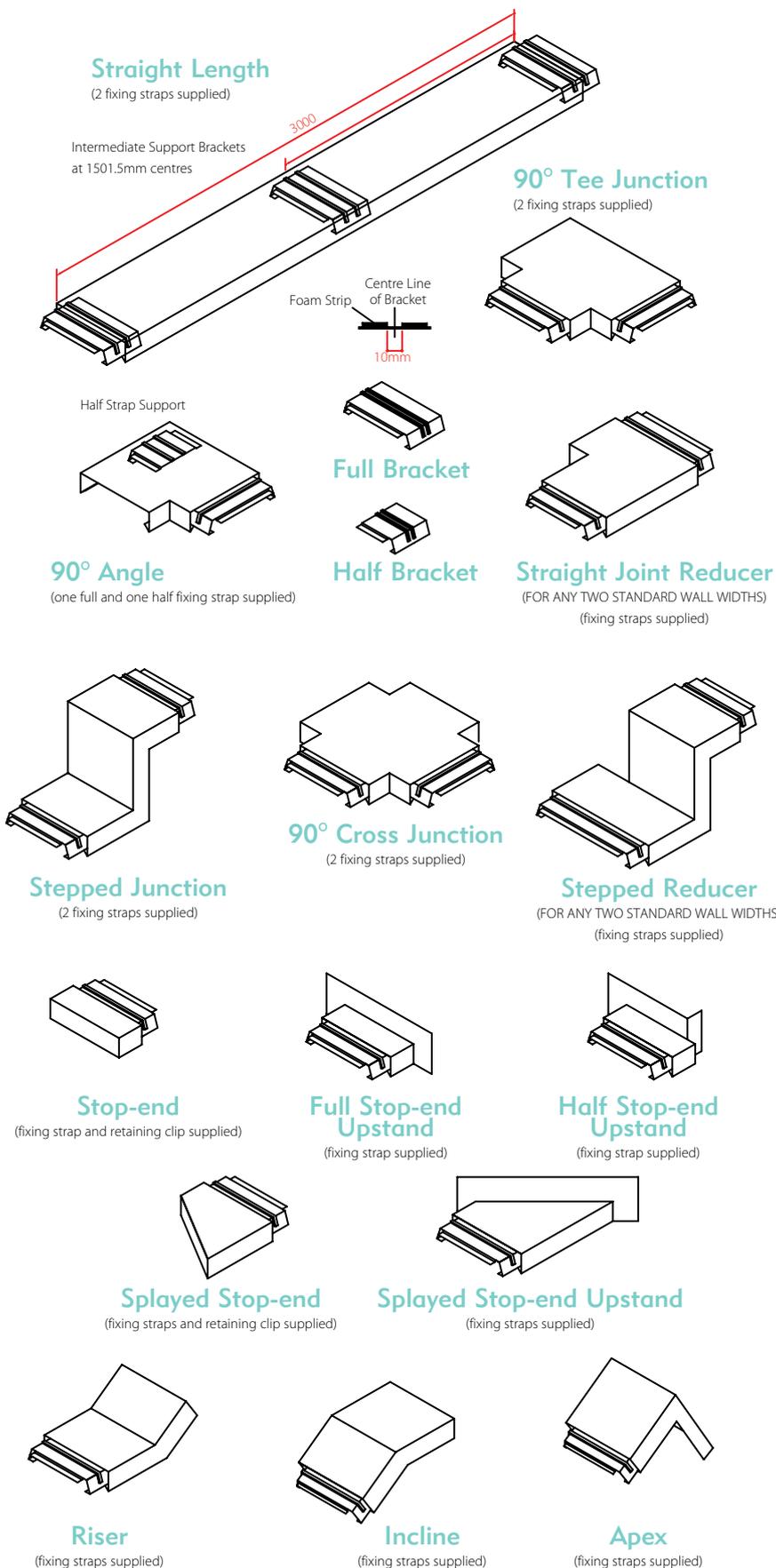
### Typical Installation

**Note:** Best practice requires a suitable DPM be installed under any metal coping system



## DESIGN CONSIDERATIONS

# Coping Components



## Accessories

Dales can design and manufacture a substantial range of specialist components to suit individual project requirements. Where curved products are deemed too expensive or simply unnecessary, then faceted lengths of coping can be produced. Special T-junctions incorporating stop ends or junctions for steps in height or raking stop ends do not present any difficulty to Dales.

A few of the more typical components are illustrated here, but if you have any concerns as to whether a particular component can be manufactured, please either email drawings or call our Project managers. Alternatively, one of our experienced Technical Managers can visit site to review your requirements and discuss possible solutions.

## Finish

All Dales aluminium products are available in architectural polyester powder coating, anodised, PVF2, mill finish or timber effect polyester powder coatings. Further details can be found on p10 or at [www.dales-eaves.co.uk](http://www.dales-eaves.co.uk)



# Curves & Other Requirements



## Curves

Dales have been designing and manufacturing curved products since the business was first established back in 1977. Although accuracy and manufacturing equipment has improved dramatically since then, it is an attention to detail that remains crucial to ensure success.

Dependant on the radius, it is possible to curve all of the Dales standard coping profiles. Curving coping systems can involve a longer design and manufacturing process that produces more scrap with corresponding increases in costs and lead times. Resting against those drawbacks is the fact that the visual impact of a curved coping system is often substantially more attractive than a faceted alternative.



# Other Requirements

## Insulated copings and Thermal Breaks

Thermal breaks are important where cold bridges might arise to ensure that anticipated u-values are achieved. Although not regularly requested given that most designs incorporate insulation to the perimeter wall construction additional insulation can be incorporated as part of the coping design if required. Dales are also content to provide simple EPDM or nylon breaks.

## Durability

When maintained in accordance with the recommended care regimes, Dales Meridian Coping systems are designed to give a low maintenance life of 40 years in rural and suburban conditions and 25 years in industrial environments.

For marine environments the exact requirements should be discussed with our Project Managers on Tel: 0115 930 1521

## Thermal Movement

Dales design all systems to accommodate the extremes of temperature typical in the UK. For overseas projects, please contact Dales to discuss the particular requirements of your project.



## Fixings

Fixings always present a potential weak link in any system, as such Dales take the process of fixing selection as seriously as the design of the system itself.

All fixings have been selected after careful consultation with manufacturers and rigorous testing for both ultimate strengths and potential incompatibility issues.

All necessary fixings are supplied as part of the complete package from Dales.



# DESIGN CONSIDERATIONS

## 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](http://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      |

### Timber Effect Polyester Powder Coating

With several different wood grain effects now available in polyester powder coatings on Dales aluminium products, there is no longer any need for clients to suffer the maintenance problems associated with wood. For a sample of timber effect coating please don't hesitate to call or email our Project Managers.



# 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](http://www.nbsplus.co.uk) and search for Dales Fabrications under 'The Content' in the 'Manufacturers' drop down menus.

## Relevant Sections Within NBS

Dales Meridian Coping Systems should be specified within F30 Accessories/ Sundry/ Items for Brick/ Block/ Stone Walling

### Guidance for Quantity Surveyors

As all corners, transitions and junctions etc are factory manufactured, these components must be measured as "extra over" items within the Bills of Quantities. Please contact Dales on Tel: 0115 930 1521 or email [sales@dales-eaves.co.uk](mailto:sales@dales-eaves.co.uk) for further clarification.

### F30 ACCESSORIES/ SUNDRY/ ITEMS FOR BRICK/ BLOCK/ STONE WALLING

#### 780 COPING SYSTEM

**Manufacturer:** Dales Fabrications Limited, Crompton Rd Industrial Estate, Ilkeston, Derbyshire, DE7 4BG. Tel: 0115 930 1521  
Email: [sales@dales-eaves.co.uk](mailto:sales@dales-eaves.co.uk) Website: [www.dales-eaves.co.uk](http://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/ EN harmonised standards (where applicable).

**Material/ Grade:** Aluminium sheet to EN 485/515/573: Designation N3, Condition H14, supplied by ISO 9002 stockist to ensure traceability.

#### Gauge/ Size:

150 - 300mm 1.5mm  
301 - 410mm 2.0mm  
410 - 500mm 2.5mm  
501mm plus 2.5mm & visible fixings

**Profile:** Standard, Weather-struck, Ridgeway, Stormforce & Excel

**Finish:** Architectural Polyester Powder coated to BS6496, coated only by BS EN 9002 registered applicators

**Colour:** Colour from Dales' standard range.  
(available at [www.dales-eaves.co.uk/finishes.html](http://www.dales-eaves.co.uk/finishes.html))

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

**Accessories:** Aluminium bracket-joint straps, stopends, corners and special items to be designed and factory manufactured specifically for the application.

**Method of jointing:** Joints assembled centrally over brackets and secured by "snapping" into place or secured with mechanical fixings, dependant on project specific drawings and installation instructions provided by Dales Fabrications Limited.

**Method of Fixing:** Brackets fixed with project specific fixings at centres as required by project specific drawings and installation instructions issued by Dales Fabrications Limited.



## Other products available from Dales

### Aluminium Fascia Soffit Systems

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.

Details of Dales fascia soffit systems can be found in our 'Aluminium Fascias and Soffits' literature.

### Aluminium Solar Shading/ Brise Soleil Systems

Dales design and manufacture solar shading systems on an individual project basis. Further information is contained in our 'Aluminium Solar Shading/ Brise Soleil Systems' literature.

### Aluminium Rainwater Systems

Dales design and manufacture a wide range of rainwater goods that include both standard and bespoke systems. These systems can be utilised on their own or integrated into our fascia soffit systems to provide a complete low maintenance eaves system.

Further information is available in our Aluminium Rainwater Systems literature.



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## Dales Fabrications Ltd

Crompton Road, Industrial Estate, Ilkeston, Derbyshire, DE7 4BG

Contact us on: [www.dales-eaves.co.uk](http://www.dales-eaves.co.uk) [sales@dales-eaves.co.uk](mailto:sales@dales-eaves.co.uk)

Tel: **0115 930 1521**