

# CASSETTE FASCIA SOFFIT ASSEMBLIES

## FLAT, FLUSH SECRET FIX ALUMINIUM FASCIA SOFFIT SYSTEMS WITH COMPLETE DESIGN FLEXIBILITY

Bailey Cassette Eaves System has been rigorously designed and developed to be particularly neat and smooth in finished appearance whilst featuring ease of installation. The system provides a long life, low maintenance solution for this critical building element.

Bailey has the experience to translate aesthetic requirements into practical and workable solutions, without reducing the impact and integrity of the original concept.

The system is particularly suited to applications where architects and

specifiers require an eaves that is sleek and smooth, for example in modern commercial buildings. Bailey's Cassette system fulfils this need because its composition ensures each cassette panel remains truly flat, without the ripples and fixing dimples that arise with standard sheet metal soffits.

Bailey Cassette eaves have been used to create a range of interesting and innovative features and effectively achieve straight, faceted, and curved installations. Cassette systems can also be produced curved in section and plan simultaneously.

Architects and designers can combine standard components to create unique and building-specific eaves that will add impact to any project.



**BAILEY**



HEADQUARTERS BUILDING, EGHAM

## CONSTRUCTING THE EAVES

Bailey Cassette Eaves System has been developed so that architects can easily design signature eaves that are both cost effective and easy to install.

The system comprises five elements: fascias, soffits, rear edge trims, carcassing and rainwater disposal. Each element is selected from a range of standard components which are combined to create the shape the designer requires. Once the shape and design have been finalised the key to speedy and cost effective installation is the use of Laser-Line carcassing. This allows the eaves to be simply bolted to a building elevation with consequent savings in time and cost of providing access.

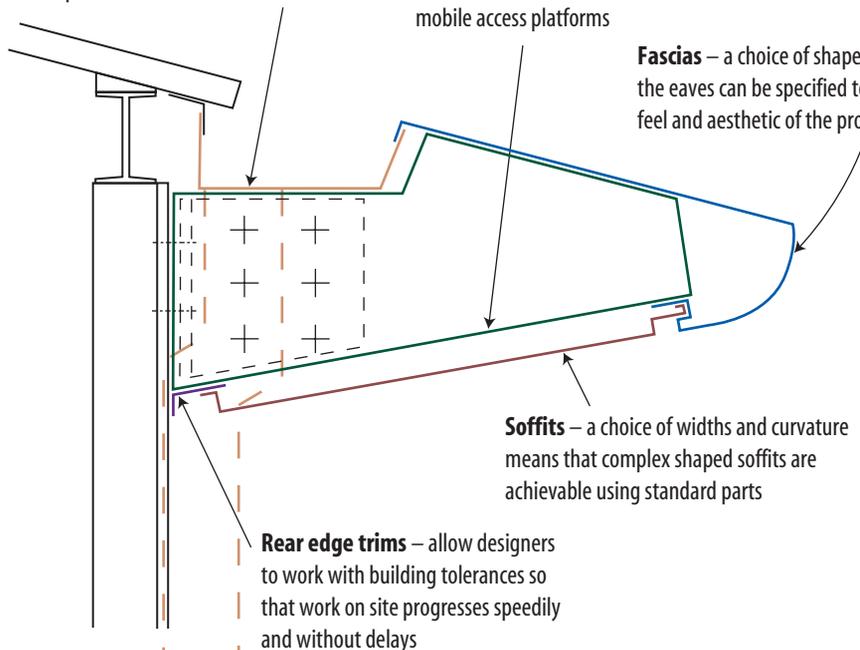
**Rainwater disposal** – Bailey's extensive range of gutters and downpipes are easily incorporated into the eaves

**Carcassing** – Laser-Line provides a unique one-piece support that enables eaves to be simply installed without the need for expensive steel outriggers and often from mobile access platforms

**Fascias** – a choice of shapes means that the eaves can be specified to match the feel and aesthetic of the project

**Soffits** – a choice of widths and curvature means that complex shaped soffits are achievable using standard parts

**Rear edge trims** – allow designers to work with building tolerances so that work on site progresses speedily and without delays



# BAILEY CASSETTE FASCIA SOFFITS

It is often the eaves that defines the shape and character of a building. As well as providing shade and protection, the eaves is an integral part of the building skyline.

The Bailey Cassette Eaves system provides a range of tried and proven components which specifiers and designers can combine to create exciting and visually attractive eaves which are easily applied to the building. Bailey Cassette Eaves are manufactured in aluminium and so have the benefits

of longevity, strength and light weight. Components are available in a wide range of finishes including architectural polyester coating and anodising. Specifiers have a choice of 220 RAL, BS and Bailey house colours with matt, satin, gloss and metallic finishes available.

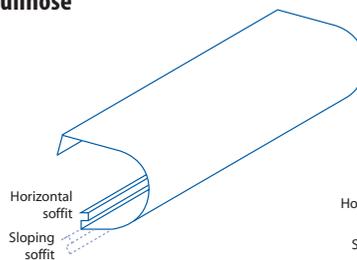
Using the core components shown here designers and architects have the freedom to mix components to create original combinations that can result in unique eaves that will enhance any project.

## FASCIAS

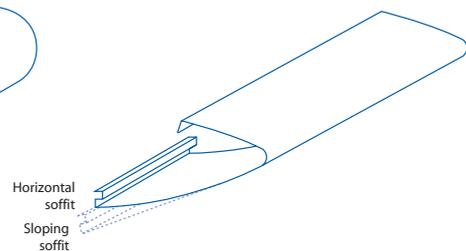
Fascias can be designed to many different shapes and are the flexible part of the eaves. This enables coordination between roof, soffit and wall to achieve aesthetic requirements appropriate to each individual project. Some popular designs are

illustrated. Dimensions are flexible to allow specific eaves projections to be achieved in conjunction with standard soffit panels. For example, 600mm soffit panel with 150mm projection to fascia provides 750mm overall eaves projection.

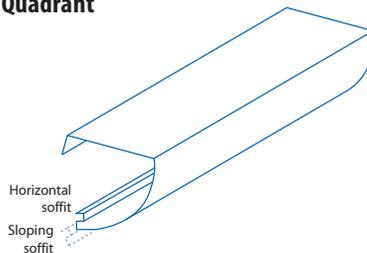
**Bullnose**



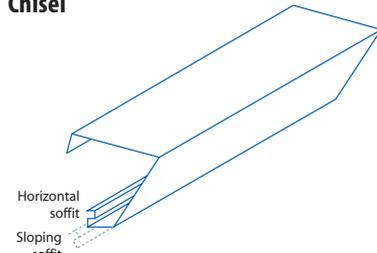
**Aerofoil**



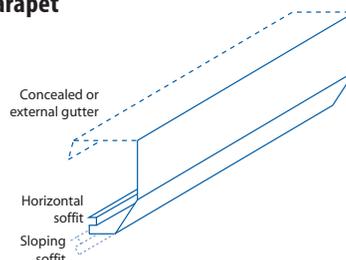
**Quadrant**



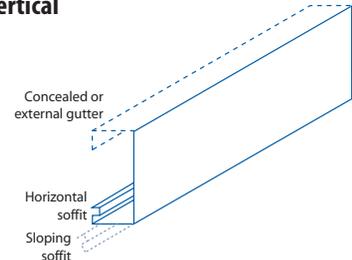
**Chisel**



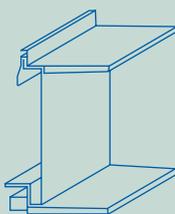
**Parapet**



**Vertical**

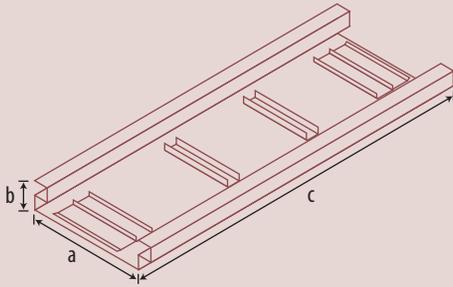


### I-LINE

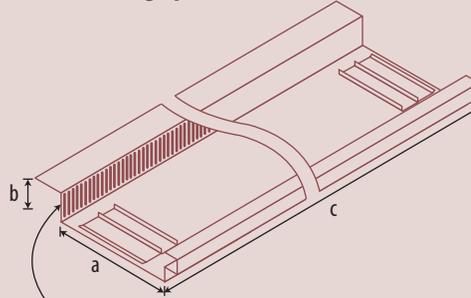


Bailey I-Line (see separate data sheet) can be fully integrated with the cassette soffit system and can be used at the eaves and throughout external elevations to evoke structural beams.

**Standard panel**

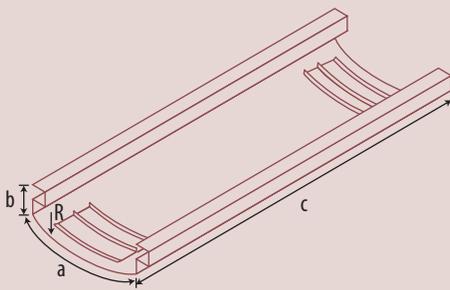


**Rear edge panel**

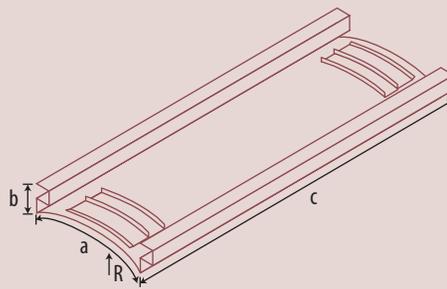


Ventilation panels ventilation equivalent to a continuous 10mm gap can be provided in the rear edge panel where required

**Convex panel**



**Concave panel**

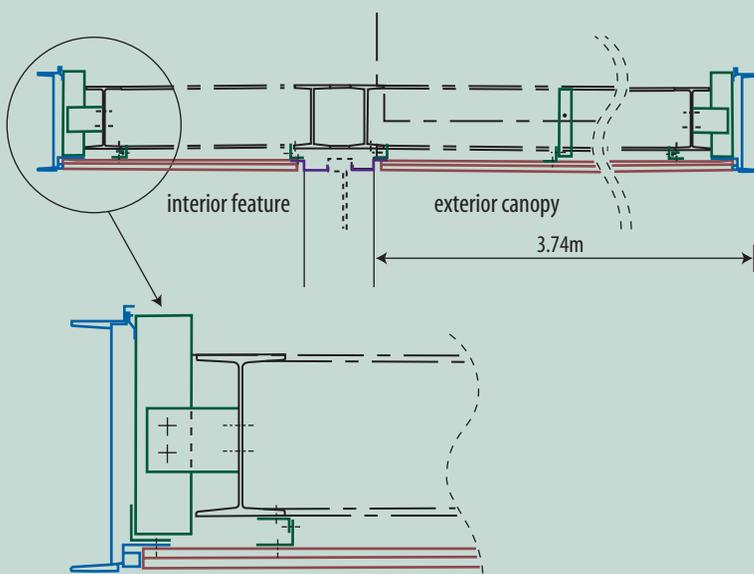


Available soffit panel sizes:			
a	b	c	R
275mm	35mm	All panels available	Radius from 400mm to 20m
350mm	35mm		
450mm	35mm		
600mm	35mm		
800mm	40mm		
1000mm	40mm	1500mm	
		2000mm	
		2500mm	
		3000mm	

## BUS STATION, CHORLEY

This project uses deep, flat, horizontal soffits combined with Bailey I-Line channel feature. Both soffits and I-Line were installed internally as a feature of the main concourse as well as being used to create an external feature canopy.

With such an extensive area of soffit specifying Bailey Cassette system was key to ensuring flat soffits without visible fixings or quilting.



# SOFFITS

Soffit panels are available in standard widths from 275mm to 1000mm with wider soffits being achieved by using multiple panels as desired.

The most economical is the 3000mm long panel, however alternative lengths are available so that grid lines in curtain walling or cladding modules can be recognised and maintained throughout the building's façade.

## Jointing

Where panels interlock with each other or the fascia, a flush joint is achieved using completely secret fixings. This edge detail also works to stiffen the panel so that it remains truly flat. Metal thickness is varied according to the panel width and wider panels also feature intermediate stiffening ribs secretly fixed to the reverse side. Thus the ripples, quilting and fixing dimples commonly associated with lesser systems are avoided.

Transverse joints feature an interlocking joggle method, which avoids any danger of panel joints sagging or the need to rivet joints together. The joggle feature further stiffens the panel.

Thermal movement is accommodated in the longitudinal and transverse joint systems.

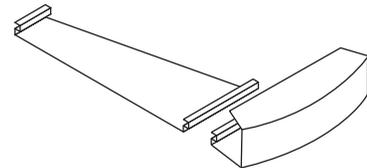
Building tolerance is accommodated within the design cross section and by use of adjustable tolerance panels longitudinally.

## Ventilation

Bailey Cassette Systems can neatly and easily incorporate ventilation to meet the requirements of the Building Regulations and relevant standards. Ventilation is usually discreet being carefully located so as to prevent unsightly dust build up. Needle punching of the metal eliminates the requirement for a separate insect mesh.

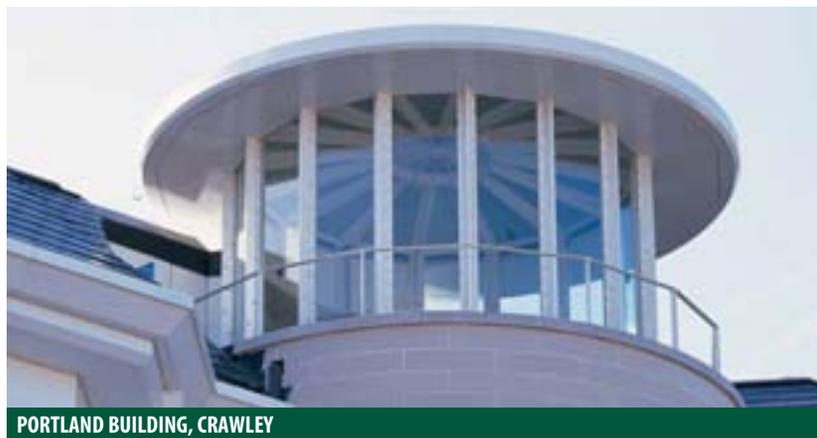
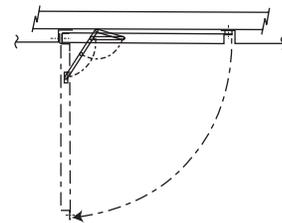
## Curved or faceted eaves

Tapered panels are used to create curved or faceted eaves. Front or rear edges of the panels are curved or faceted as required.



## Access panels

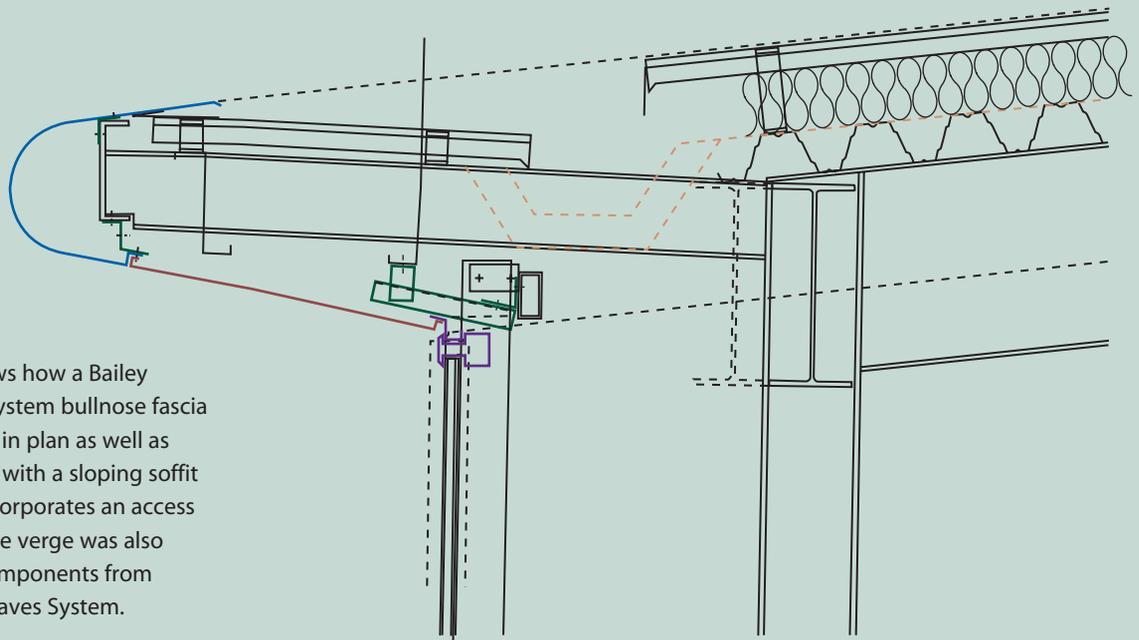
Access to services, for maintenance can be facilitated via access hatches, which are either complete panels or inserted within panels.



PORTLAND BUILDING, CRAWLEY



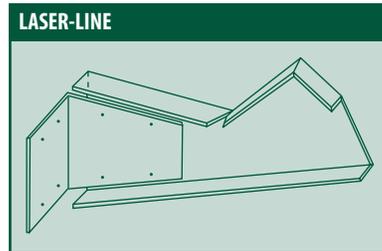
## RESTAURANT, CASTLEPOINT, BOURNEMOUTH



This project shows how a Bailey Cassette Eaves System bullnose fascia has been curved in plan as well as being combined with a sloping soffit which in turn incorporates an access panel. The feature verge was also created using components from Bailey Cassette Eaves System.

## CARCASSING

Bailey Eaves Systems are best supported by Laser-Line accurately fabricated one piece components. Laser-Line provides the entire support for the eaves and can be aligned using laser beams or traditional methods.



As a single component, Laser-Line eliminates the need for separate rails, angles and channels. This reduces the

time taken to install carcassing with a more accurate finished result.

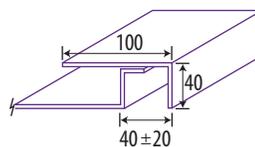
Laser-Line is normally attached to one or two points of the main building structure. From a single attachment point at the building face (via an angle bracket) Laser-Line can support a cantilevered eaves up to 900mm projection. Larger projections require at least two fixing points on the primary structure. Details are contained in the Laser-Line datasheet.

Alternatively, rails, angles, channels and cleats are available to construct carcassing on site attaching to the main building structure as required.

## REAR EDGE TRIMS

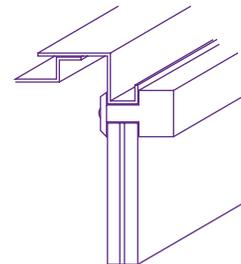
The rear edge of the soffit usually incorporates a shadow gap to accommodate building tolerance which is masked by a closure trim. This helps speed installation and so reduces time on site.

Standard closure trims are shown here and all can incorporate



ventilation where required. Feature details can also be achieved at this point of the eaves.

Where soffits are attached to curtain walling, rear edge details can be supplied as 'glaze in' where required.



## RAINWATER DISPOSAL

Where rainwater disposal is accommodated at the eaves, gutters can either be concealed within the fascia or employed as an external aesthetic feature.

Bailey Monsoon membrane lined system provides a competitive and effective solution for concealed gutters. Details are contained in a separate data sheet.

### External gutters

Bailey offers a full range of cast, extruded and pressed aluminium gutters and rainwater pipes in various capacities.

Traditional, modern and security downpipe designs are available. For a selection of standard bracket or direct fixed gutters and rainwater pipes please refer to the Bailey datasheets.

**H31 FOR EAVES CLADDING ONLY**  
**R10 WHEN COMBINED WITH GUTTER AS RAINWATER DISPOSAL**

Combined fascia/soffit and gutter\* system to .....

<b>Manufacturer and reference</b>	Bailey, Blatchford Close, Horsham, West Sussex, RH13 5RF. Telephone 01403 261844.
<b>Profile Reference</b>	Bailey Cassette System. For gutter and rainwater specifications refer to relevant datasheets.
<b>Drawing Reference</b>	As applicable
<b>Panel thickness</b>	Minimum 2mm increased in accordance with the recommendations of Bailey Eaves systems.
<b>Finish/Colour</b>	Visible faces to be polyester powder coated to colour and gloss level selected from the manufacturer's standard range. Polyester powder coating is to be electrostatically applied at the manufacturer's in-house plant. Pretreatment of the aluminium is to produce no environmentally harmful effluent and conform with Qualicoat standards. Test samples are to be retained and results submitted to the architect if requested. Tests to be applied as a minimum are: 1 1000 hour salt spray test 2 Impact test (0.908kg from 0.25m high) 3 Permeability test (2 hour pressure cooker) 4 Adhesion test (2mm cross hatch) 5 Flexibility test (20mm mandrell) 6 MIBK cure test <i>(As standard only visible faces are polyester powder coated. Some severe industrial or marine locations may require coating to reverse sides of some components. Consult Bailey technical department in these situations.)</i>
<b>Accessories</b>	Factory fabricated fascia corners, stopend, transitional flashings, rear edge trims, etc as required.
<b>Supports</b>	To be fitted to Bailey Laser-Line carcassing system at centres recommended by Bailey.
<b>Fixing</b>	All fixings to be completely concealed. System to be fixed using aluminium and stainless steel fixings as recommended and supplied by Bailey Eaves Systems.
<b>Special Features</b>	The system is to fully allow for building tolerances to be overcome on site without the necessity to purpose manufacture components to site dimensions. All factory fabricated components to be fully finished and dressed prior to polyester powder coating. Panels to be stiffened to provide flat and acceptable flat surface.
<b>Method of Jointing</b>	Fascias to be jointed using internal profiled butt strap with 2mm to 3mm expansion gap. Soffit panels to be jointed with Bailey Interlocking End Joint detail with concealed fixing. Joints to be secured to the rear face of panels without any exposed or visible fixings on the surface of the panels.
<b>Modulation</b>	Specific requirements for modulation in conjunction with building grid layout to be entered here.
<b>Ventilation</b>	<i>(Only include this section if ventilation is required via the eaves system).</i> Ventilation to be provided as an integral part of the eaves system. Vents to be in a concealed location and to require no separate mesh. Ventilation to give the equivalent to a 10mm* or 25mm* continuous gap.
<b>Design</b>	Installation subcontractor to provide a full design service. As a minimum, full working drawings are to be provided for architect approval prior to manufacturer. These shall include: a) Reflected soffit layouts showing all joints, junctions, mitres etc suitable cross referenced to the relevant section. b) Section of each different detail including method of support from structural elements and fixings to be used. Each component to be numbered. c) Large scale details and where required isometric details or particularly awkward or complex junctions, corners, barge boxes etc.
<b>Packaging</b>	All components are to be fully wrapped and protected. Bundles should be no larger than can be handled by one person to ensure transfer to point of installation in original packaging. Heavy items to be marked with appropriate warnings and approximate weight. Fascia and soffit components to be labelled in accordance with part numbers given on working drawings.
<b>Installation</b>	Entire fascia, soffit and rainwater system together with all sub-carcassing work is to be supplied and installed by one subcontractor selected from the Bailey list of recommended subcontractors.

\* Delete as appropriate

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