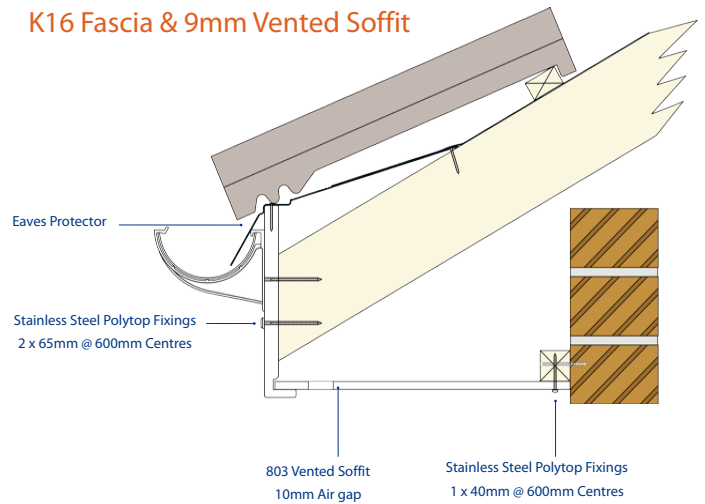


Roofline Installation Details

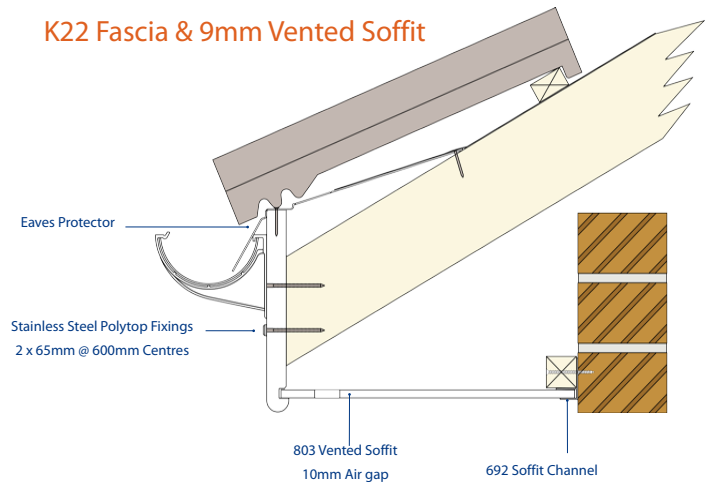


This technical bulletin is intended to provide you with a brief overview of the popular products in Kestrel's Roofline range, where they can be used and the main criteria for installation.

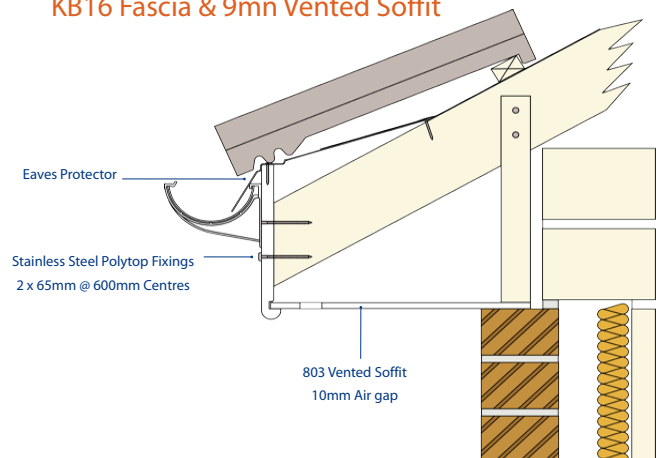
Typical Eaves Details K16 Fascia & 9mm Vented Soffit



K22 Fascia & 9mm Vented Soffit



KB16 Fascia & 9mm Vented Soffit



Fascia Installation Details

Pre-Installation Considerations

Preparation:

- All access and works to comply with current and relevant Health & Safety and Construction Design Management Regulation recommendations.
- Clear work area in-line with best practice before starting work, ensuring safe scaffolding access is available.
- Remove first row of roof tiles where necessary.
- Remove all existing fascia / soffit materials.
- Replace any un-sound / rotten timber or felt and treat rafter ends with preservative.
- Maintain air path for roof ventilation.

Installation considerations

Installation considerations are intended to provide you with need-to-know information for the core processes of product installation.

They are not intended as an exhaustive installation guide. The information presented will provide you with a valuable resource when assessing how best to use our products in your selected application.

Fascia

Fit directly to rafter ends using polytop nails, 2 per fixing centre max 600mm centres - 65mm nails. Austenitic stainless steel (Grade A4 BS6105). Fascia is capable of load bearing in relation to light weight gutters and the first row of roof tiles (Eaves Tiles).

Expansion gaps of 5mm per board end must be allowed for during installation.

Cover joints and Corners to be secured using low modulus neutral cure silicone. BS5889 Type A. Gutter brackets to be secured directly into the board using stainless steel screws - 10 gauge x 25mm long (parallel thread form).

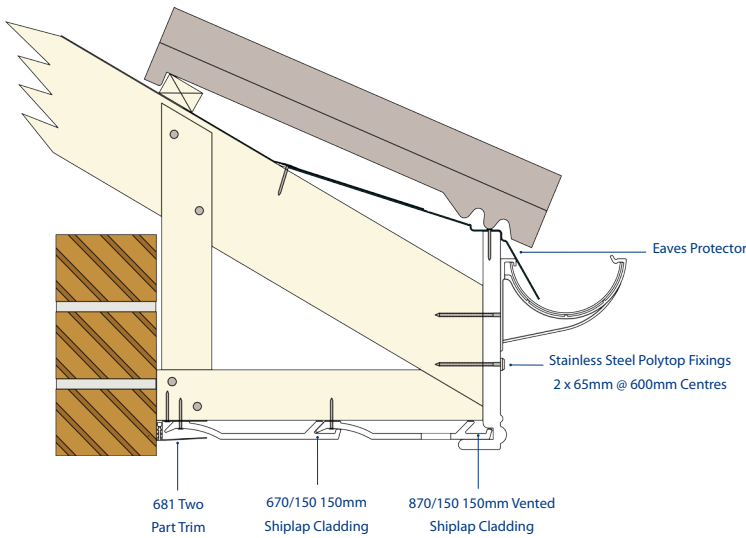
All Kestrel fascia boards 16mm and over are capable of load bearing and may be used in new-build or refurbishment.



KESTREL
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Fascia Installation Details

018 Fascia & 150mm Shiplap Cladding - Vented

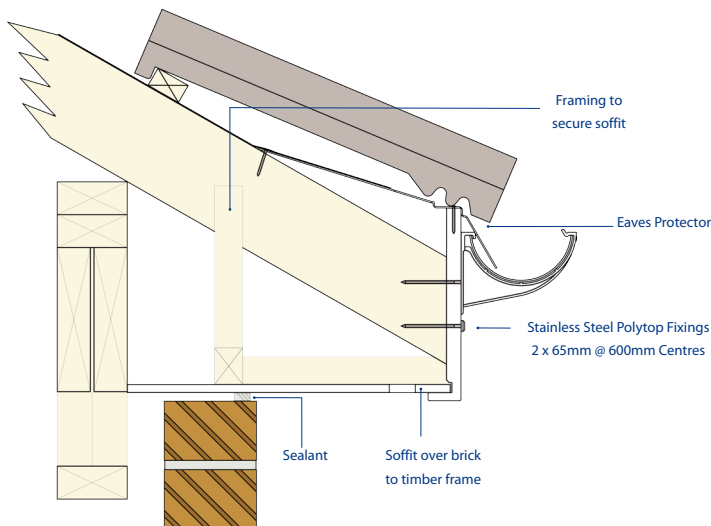


Tongue and Groove Cladding

Shiplap and Open-V cladding planks may also be used as soffit and are available in vented and nonvented versions. Vented cladding planks have a 12.5mm air gap which permit 25mm continuous ventilation to be achieved via the use of two rows of vented product. Cladding planks are secured using 30mm cladding pins.

NB: When using 018 as a bargeboard the box end piece will need to be packed out to prevent the Ogee form of the bargeboard standing proud of the box end piece.

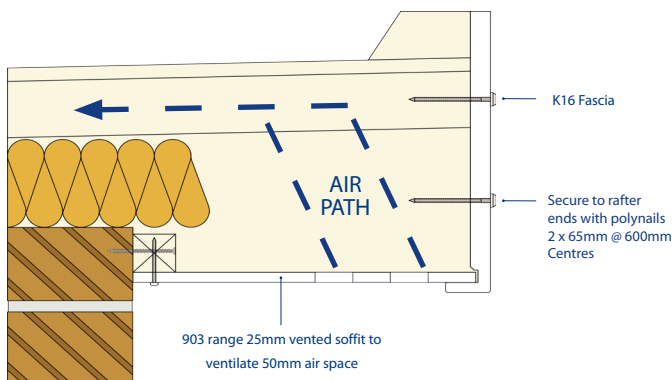
K16 & 803 Timber Frame Detail



Timber Frame

When fitting to timber frame project, be aware the soffit needs to be large enough to carry over the top of the brickwork liner, back to the timber frame. Soffit widths should not exceed 300mm without additional support.

Flat Roof Detail



Flat Roof Installation

When fitting to a flat roof area, consideration must be given to allow adequate ventilation above the insulation in order to comply with building regulations. See page 11 for a full explanation of ventilation requirements.

NB: Joints for K22, K16, KB16 & K605 are available in 600mm lengths in addition to shorter standard lengths.

Bargeboard Installation Details

Bargeboard

K16 16mm bargeboard should be installed using 65mm Polytop nails 2 per fixing centre at maximum 600mm centres. Austenitic stainless steel (grade A4 BS6105).

605 9mm bargeboard should be installed using 50mm Polytop nails 2 per fixing centre at maximum 600mm centres. Austenitic stainless steel (grade A4 BS6105).

Boards less than 16mm thick boards are required to be fully supported along their length.

K-Wave and K-Crest being 16mm thick should be installed using 65mm Polytop nails 2 per fixing centre at maximum 600mm centres.

The joint of bargeboards meeting at a ridge should be covered using a cover joint or feature finial and secured using Low Modulus Neutral Cure Silicone

Complementary Ranges

The K16 and 605 are complementary ranges being the same external shape. This allows the 9mm barge to be used in conjunction with the 16mm fascia for a more cost effective solution.

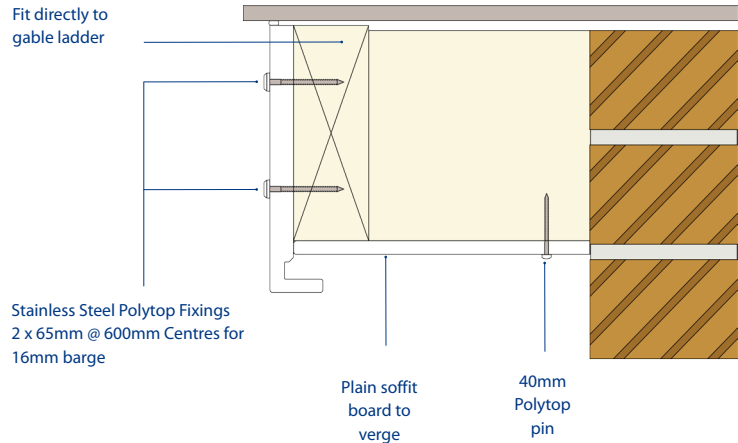
The K22 and KB16 are also complementary ranges being the same external shape.

This allows the 16mm a barge, to be used in conjunction with the 22mm fascia, to be a more cost effective solution.

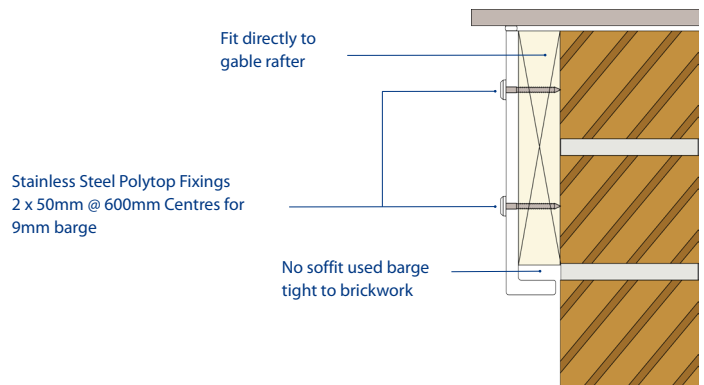
NB: KB16 barge can be run into a K22 box end piece to create a stepped box end feature.

Typical Verge Details

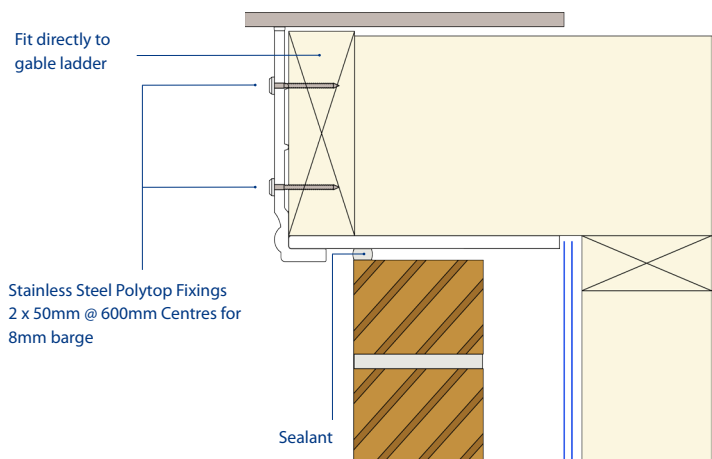
K16 - 16mm Bargeboard & Plain Soffit



605 - 9mm Bargeboard & No Soffit



008 - 8mm Bargeboard to Timber Frame



Box End Installations

Boxed Ends

To provide a neat and weathertight area at the point where Fascia and Bargeboard meet, it is necessary to construct a box end.

A box end piece is cut from wide Bargeboard material (nominally 405mm) to suit the roof pitch and overhang requirement. When using 605 bargeboard large box end details may be obtained by using the extra wide product of 600mm width.

The soffit forming the base of the box end must match the eaves soffit and is mitred at the joint, using 691 H-section as a jointing trim.

Box ends are supported using a preservative treated timber framework.

Boxed End Methods

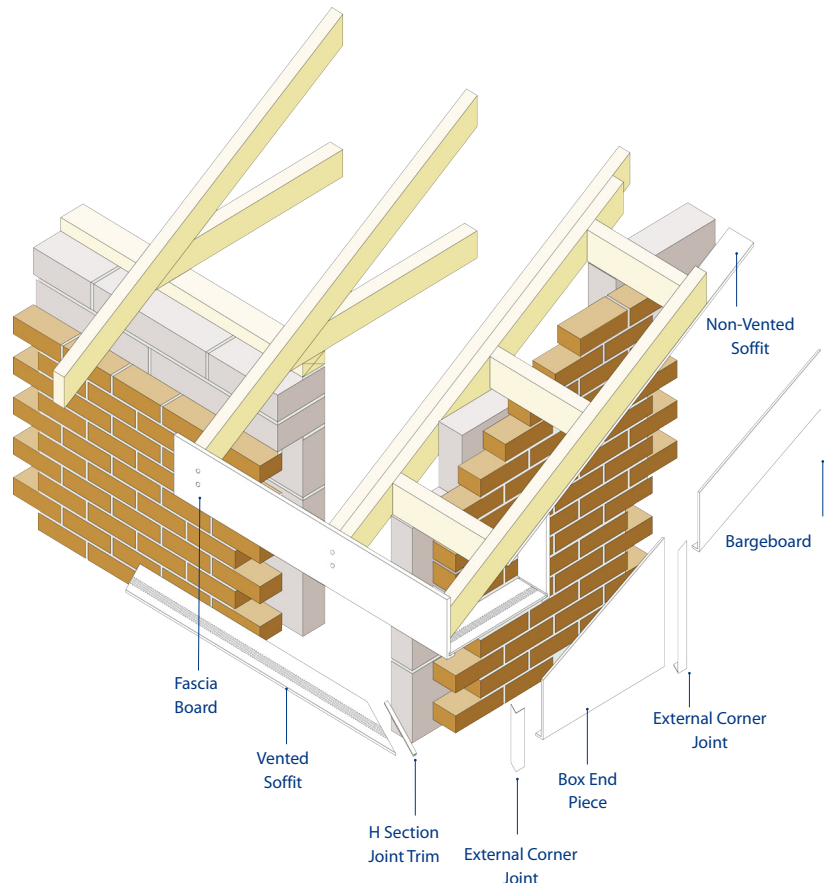
The jointing of the bargeboard into the box end piece can be achieved in two ways

Method 1

The bargeboard is cut plumb directly above the back edge of the box. A corner joint with a piece of one face removed is then used to cover the back corner and bargeboard/box end piece joint.

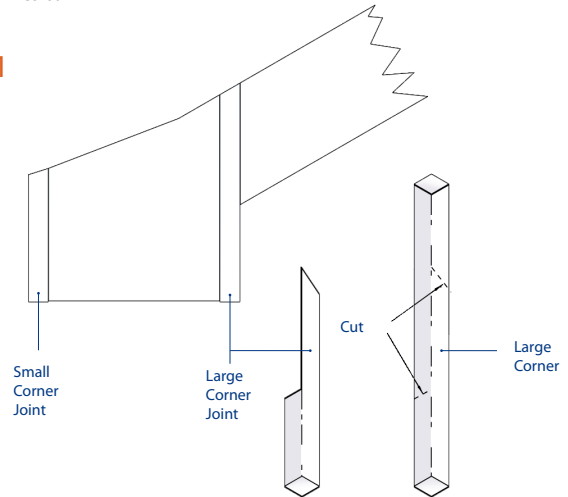
Method 2

The bargeboard is cut perpendicular to its length; the angled joint between the boards being covered by a cover joint with its return leg removed. The bottom edge of the cover joint is then cut to mate with the top edge of the corner joint used to cover the back corner of the box end.

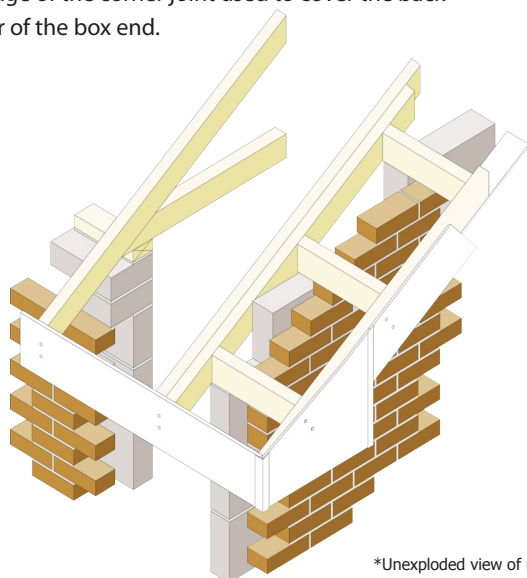
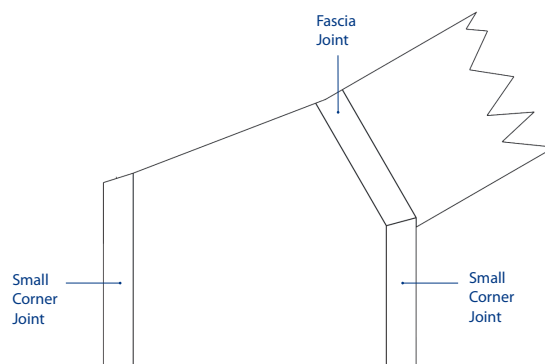


*Exploded view of method 1

Method 1



Method 2



*Unexploded view of method 1

Soffit Installation Details

Soffit

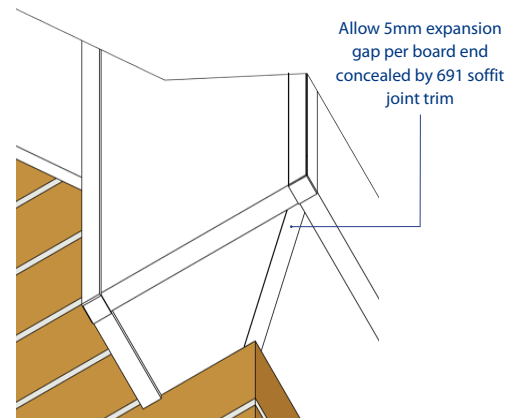
Kestrel 9mm soffit boards are available in non-vented versions for use as verge soffit or as eaves soffit when other forms of eaves ventilation are to be used. They are also available in ventilated form and can contribute towards providing the necessary roof space ventilation.

Soffit is secured at maximum 600mm centres to timber using 40mm Polytop pins, alternatively a wall side fix may be achieved using 692 Soffit Channel.

In properties where the outer skin of brickwork is level with the bottom of the fascia board soffit groove, the soffit may be extended over the brickwork and clamped using timber battens secured to the rafter sides.

Soffit widths should not exceed 300mm without additional support.

A H-section trim 691 is used to join soffit boards.



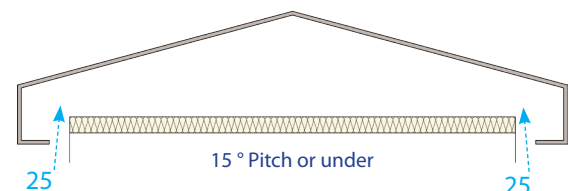
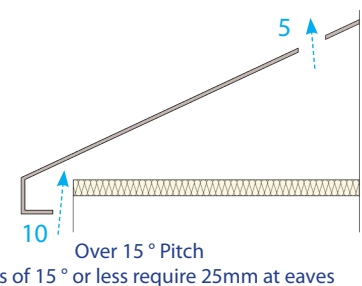
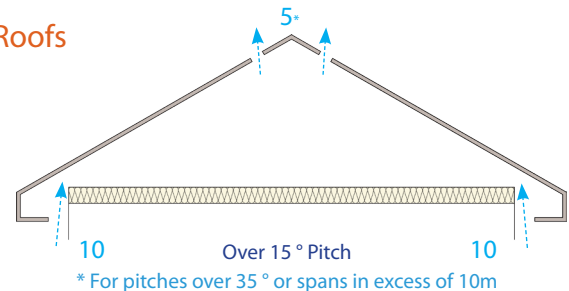
Stainless Steel Polytop Fixings
1 x 40mm @ 600mm Centres

Roofline Ventilation

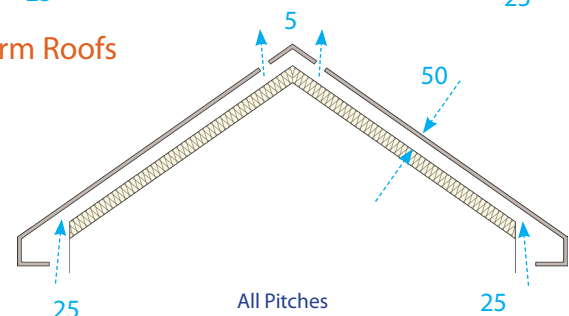
The requirement to ventilate the roof space of a building, to protect the building and people who use it, from the harmful effects caused by condensation is covered by 'The Building Regulations 2000'. Guidance on the provision of adequate ventilation is given in Approved Document C2 Resistance to Moisture (2004 edition) and detailed in BS5250: 2002 Code of practice for control of condensation in buildings. Kestrel provides a comprehensive range of products designed to comply with the requirements of these regulations. Kestrel 9mm soffit boards are available in non-vented versions for use as verge soffit or as eaves soffit when other forms of eaves ventilation are to be used. They are also available in ventilated form and will contribute towards providing the necessary roof space ventilation. These pre-vented soffits are available in 10mm air gap up to 600mm wide and 25mm air gap up to 450mm wide. All soffits are covered by Kestrel's British Board of Agreement Certificate No. 95/3117.

Provision of Ventilation

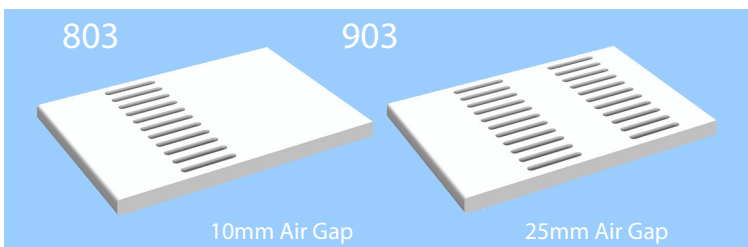
Cold Roofs



Warm Roofs



Dimensions in millimetres.



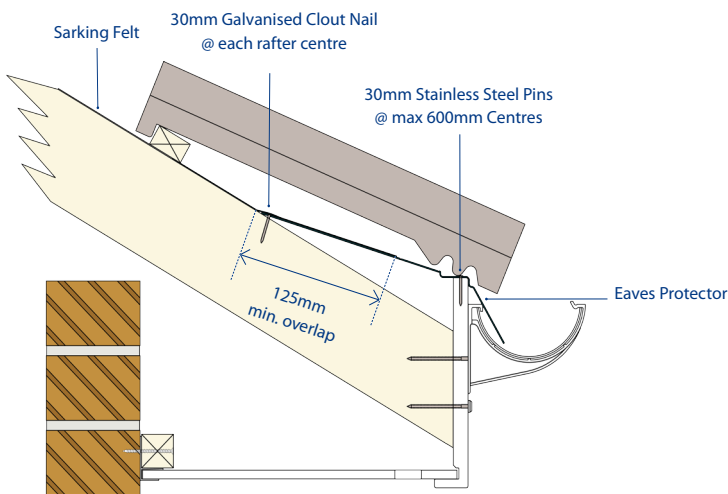
Provision of Ventilation

The illustrations reflect the basic ventilation requirements normally applicable. For additional information please refer to the current Building Regulations and appropriate British Standards.

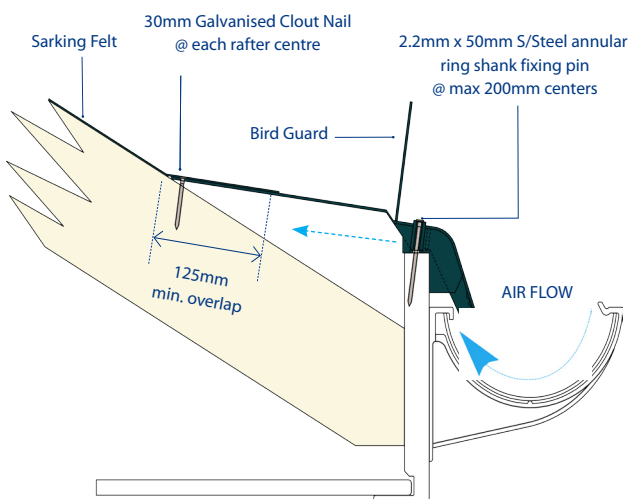
Roofline Ventilation

Ventilation and Eaves Protection

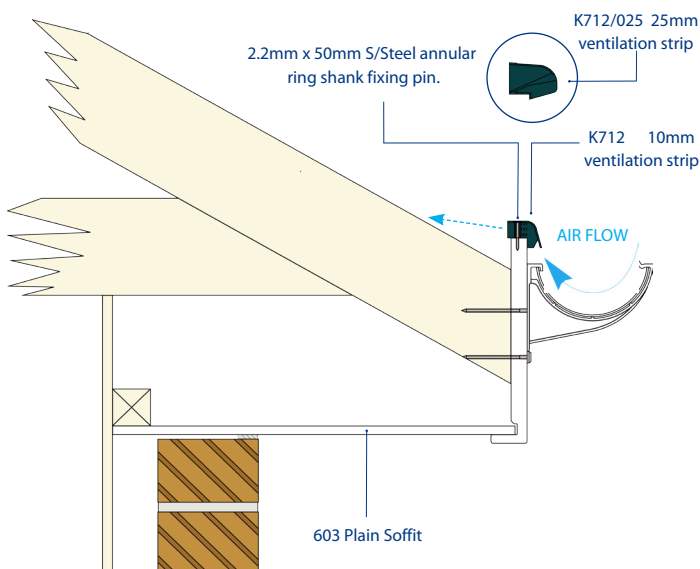
K708 Eaves Protector



K711 Over Fascia Ventilator & Eaves Protector



K712 Over Fascia Ventilation Strips



Eaves Protection

The Kestrel Eaves Protector K708 has been designed to provide a long-term solution to the problems associated with eaves decay under the roof, including the degradation of sarking felt and the secondary rotting of rafter timbers and other roof structures.

Available in 1.5m, 2.55m or 4.95m lengths the Kestrel eaves protection profile consists of a durable black pigmented PVC-U profile located between the roof tiles and the PVC-UE fascia system.

Whether used on refurbishment projects or in new-build installations, the traditional sarking felt finishes before the fascia and is lapped over the eaves protector. Therefore it is not exposed to the elements and is not subject to decay.

Ventilation and Eaves Protection

A further enhancement of the idea of the eaves protector comes in the form of K711 an eaves protector combined with over fascia ventilation and bird comb. The ventilation of the roof void at eaves level is provided by an upstand on the underside of the eaves protector which sits on the top edge of the fascia board.

The K711 product provides ventilation equivalent to a 10mm continuous slot.

This product is also available as K711/25 to provide ventilation equivalent to a 25mm continuous slot.

The provision of an integral bird comb provides an effective barrier against bird infiltration into the roof void when using profiled roof tiles. If flat slate tiles are to be used the comb is readily removed.

The durability and rigidity of the eaves protectors and the load bearing features of Kestrel fascia boards are such that no tilting fillet is needed.

Eaves Ventilation

A simple means of providing ventilation over the fascia is also available in the form of Kestrel K712 over fascia ventilation strips.

The K712 product provides ventilation equivalent to a 10mm continuous slot.

This product is also available as K712/025 to provide ventilation equivalent to a 25mm continuous slot.

As with the K711, this product is designed to sit directly on top of the fascia board. Fix with 2.2mm x 50mm stainless steel annular ring shank fixing pin at every fixing centre.

Typical Jointing Details

Jointing of Fascia & Bargeboard

All Kestrel fascia board ranges have a series of specifically designed accessories to complement the size and shape of the fascia board. These include some of the following:

- Extra Large Corner Joints (Typically 600mm for Box ends)
- Standard Corner Joints
- Fascia Joints
- Internal Corner Joints
- End Caps

All joints should be secured using Low Modulus Neutral Cure Silicone.

Apex Joint

Apex joints are made utilising a standard fascia joint from the main fascia range cut to suit. e.g. for the K16 range item 649/300.

Alternatively, a decorative finial (K714) can be used to give a more aesthetically pleasing finish.

Running Gables / In-Line Pikes

Where fascia meets barge along a running gable, it is important that the same range of fascia and bargeboard are used. This will prevent a step being created.

Four typical methods are detailed below. The method used will be determined by the roof pitch or configuration.

Construction of In-Line Pike Junctions

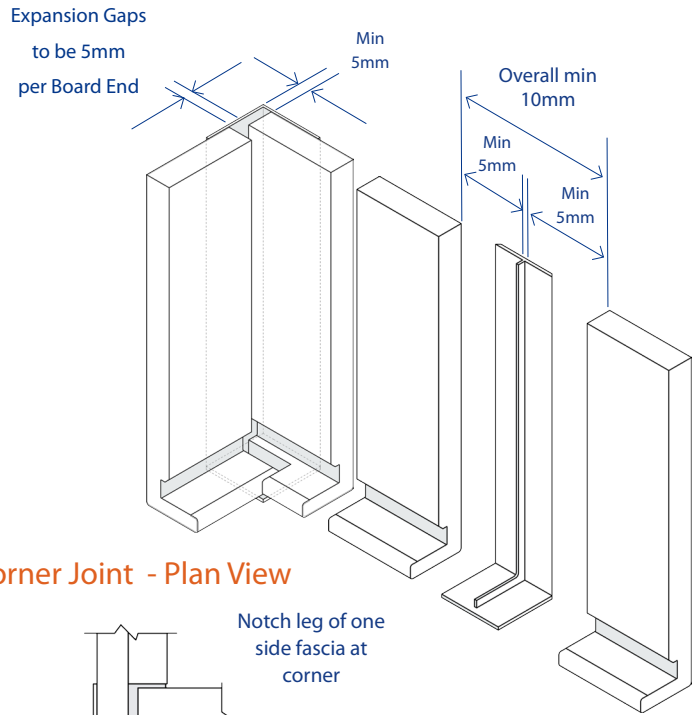
In-line pike junctions can be created using standard joints from the relevant ranges. In-line boxends can also be created using the same construction methods as shown previously on page 4.

Joints and bargeboards will need cutting to suit.

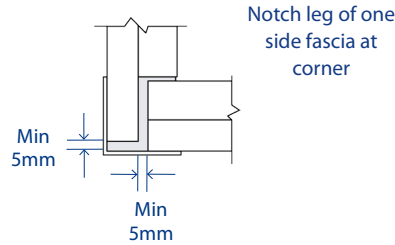
Fascia and bargeboard material will need to be the same type.

This type of detail is often used to a side gable where the gable meets a roof projection.

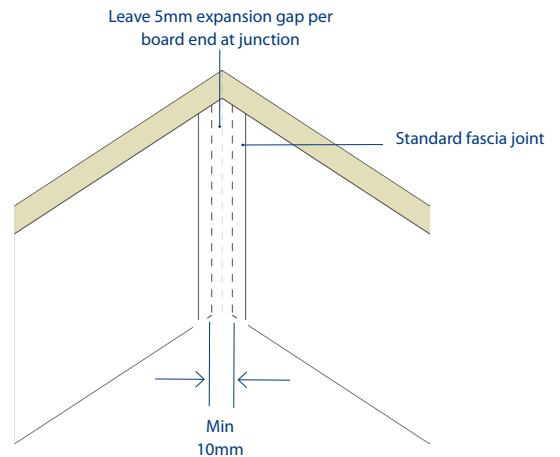
Corner & Fascia Jointing



Corner Joint - Plan View

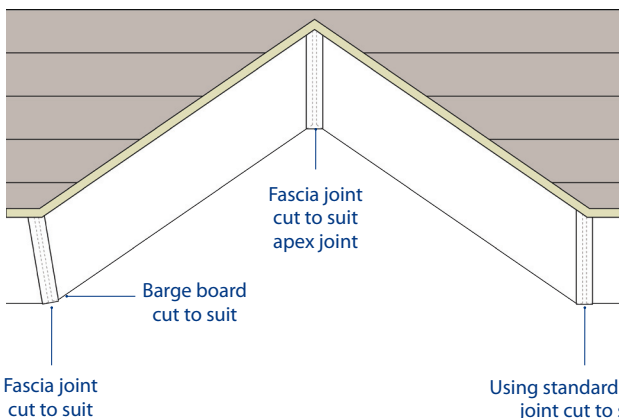


Apex Joint



In-Line Box End Options

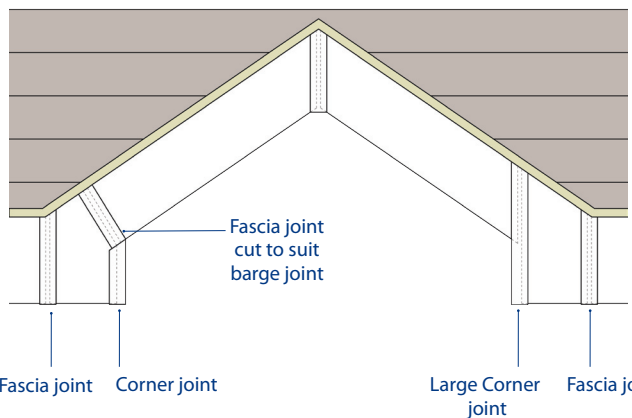
Method 1



Method 2

Using standard corner joint cut to suit

Method 3



Method 4

Roofline Installation Guide - Foiled



Working with Woodgrain products requires some slightly modified procedures and installation processes.

Overall, woodgrain products are as easy and convenient to fit and use as most other products in the Kestrel range.

However, with a little extra knowledge and care at the preparation stage, you can save yourself potential difficulties later on.

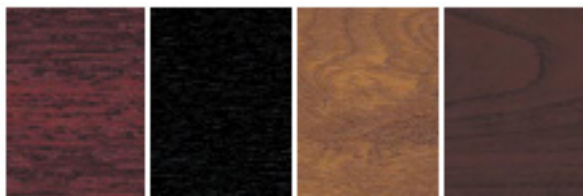
Kestrel's Woodgrain foiled profiles have been extensively tested to ensure long term weatherability and are guaranteed for use both internally and externally for a period of 10 years. However, non-white systems have a different potential for heat absorption, with resultant risk of excessive expansion and contraction.

In particular, with a Woodgrain foiled coating, this heat absorption can be significant, with potentially detrimental effects on long term installation. Special consideration needs to be given when installing Woodgrain products to minimise the amount of heat build up and provide for greater amounts of expansion.

The following additional fixing details must be followed when installing Woodgrain products:

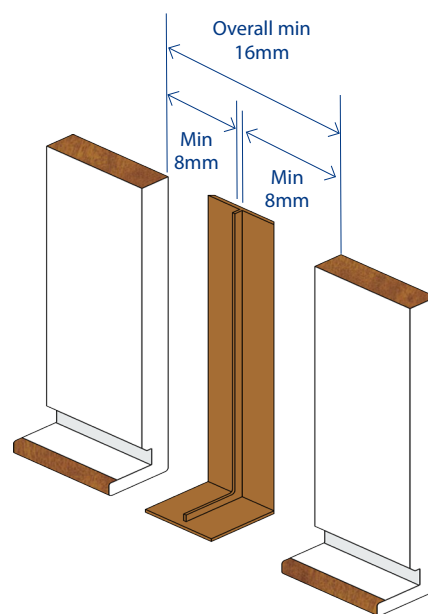
Fascias/Bargeboard

1. Increase expansion gap from 5mm for white to 8mm.
2. All installations to take place at ambient temperatures - between 5°C and 25°C.
3. All pre-installed products to be kept away from direct sunlight, preferably indoors, at all times.
4. All joints to be made with Woodgrain corners and butt joints.



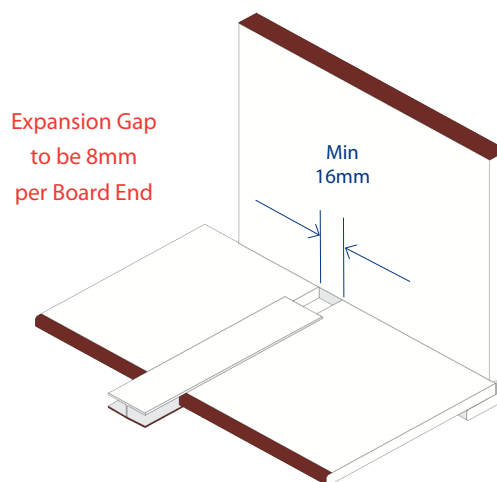
Mahogany Blackgrain Sherwood Rosewood

Foiled Fascia Joint Installation Details



Expansion Gap
to be 8mm
per Board End

Foiled Soffit Joint Installation Details



Expansion Gap
to be 8mm
per Board End



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