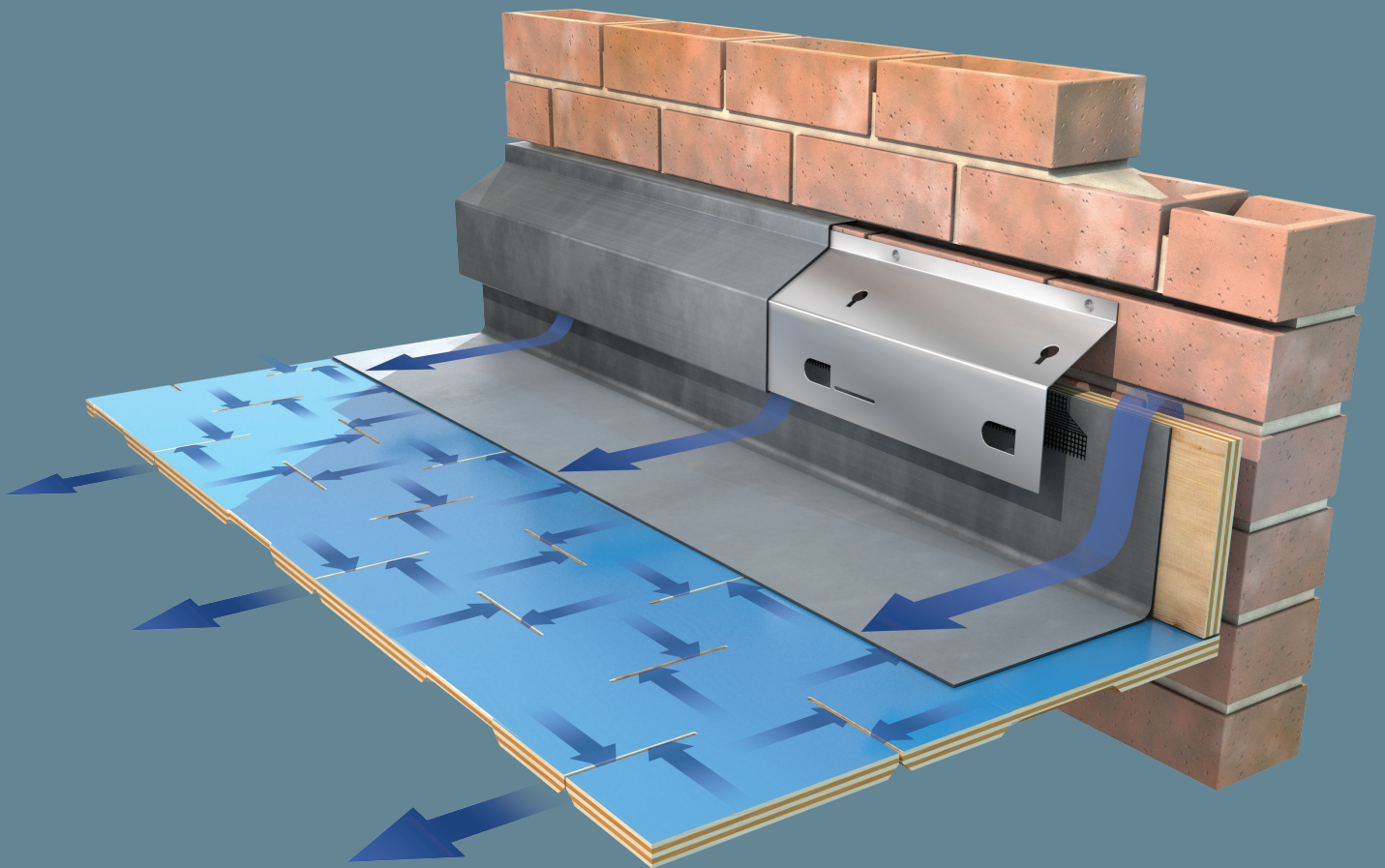


AIRTRAK™

roof void ventilation system



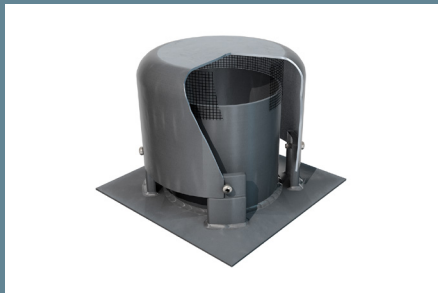
The AIRTRAK™ system

A range of proprietary roof void ventilators designed specifically for the ventilation of roof voids.

The Airtrak system assists specifiers, builders and specialist contractors alike in helping them meet the requirements of the Building Regulations in relation to the important issue of roof void ventilation.

The simple answer to details that often prove difficult and challenging in their execution.

Airtrak is roof void ventilation... made simple!



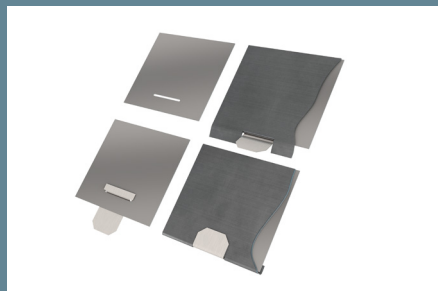
Point ventilators



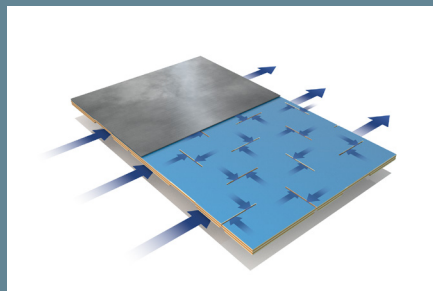
Linear ventilators for flat roofing



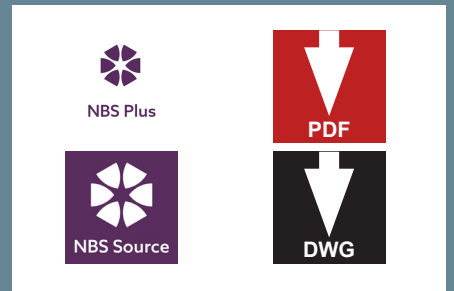
Linear ventilators for slate and tile roofing



Ventilation accessories



Ventilated roof deck for metal roofing



Easy specification and 'on page' downloads



E For increased resistance to both wind uplift in exposed locations and corrosion in coastal locations, the Airtrak ventilators can be supplied in 1.0 mm-thick, 316 grade stainless steel. Where extreme weather conditions are likely, consideration should be given to providing more weathering cover to upstands and slating or tiling to improve the integrity of the detail.



FR The Airtrak-FR ventilators incorporate an intumescent seal which activates in the instance of fire or at temperatures of 180-200°C. These ventilators will effectively close off ventilation apertures up to 25mm and help to control the spread of fire.

The AIRTRAK™ system – key features



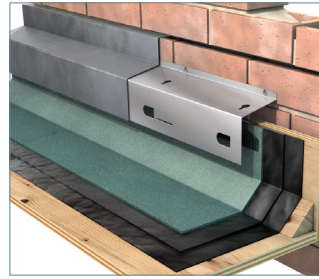
A proprietary product

The well established Airtrak brand provides peace of mind and is trusted in the roofing industry by specifiers, trade associations and contractors alike for delivering regulation compliant ventilation.



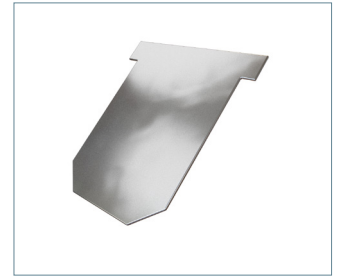
Economic to use

The Airtrak ventilators represent an economic solution to difficult details saving time both with design input and onsite labour.



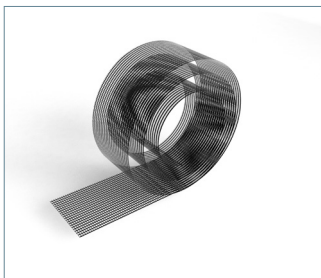
Strong and robust

Strong 304 grade 0.7mm stainless steel profile providing a neat and unobtrusive detail avoiding bulky plywood constructions. 316 grade stainless steel is available for coastal locations. The ventilators are compatible for use with all metal flashings, e.g. copper, lead, zinc, aluminium etc.



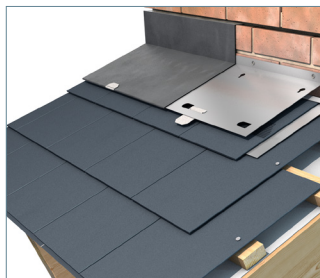
Unique Clipfast™ system

The unique Clipfast system of pre-spaced stainless steel restraining clips can be used with all Airtrak linear ventilators providing a means to secure the lead flashings to the ventilator profiles and prevent them sliding off over the course of time.



Insect mesh pre-attached

Airtrak ventilators have insect mesh pre-attached. This high open area mesh with 2.5mm hole size is designed to provide maximum airflow whilst keeping out nuisance insects.



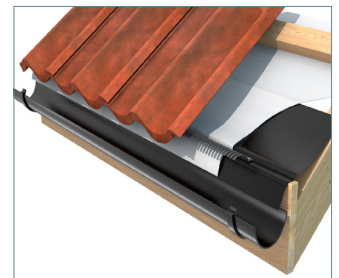
Pre-drilled and easy to install

All ventilators are pre-holed for secure fixing in position. Secondary fixing points are also provided to ensure resistance to wind uplift.



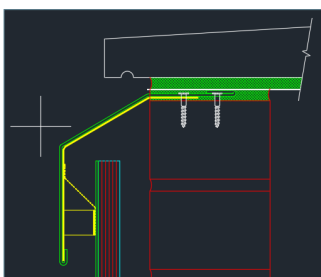
Specified air flow to regulation standards

All ventilators have sturdy spacer feet at 230mm centres which push out from the main body of the ventilators. These provide a continuous airgap helping to meet current regulations.



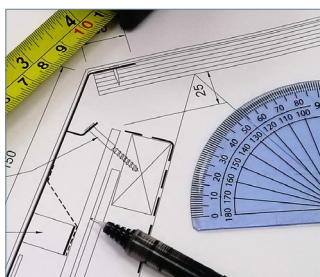
Easy to order

With a greatly expanded range of standard ventilators now available, the Airtrak ventilators cover most of the commonly encountered ventilation details. All ventilators are supplied in convenient 1m lengths which can be trimmed to length and mitred at corners on site.



CAD files

PDF sections, DWG files and data sheets are available for all of the Airtrak ventilators. If you have an electronic version of this brochure they can be downloaded directly from the page. Otherwise, all are available on the Nicholson website.



Bespoke ventilators

Bespoke ventilator profiles are easily obtained and usually available at short notice. Profiles can be produced to specific dimensions and angles to deal with non-standard situations.



NBS Plus

Airtrak ventilators are available on NBS for easy specification.



RIBA approved CPD's

Nicholson also provides 2 RIBA approved CPD's on roof void ventilation.

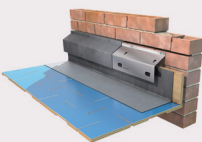
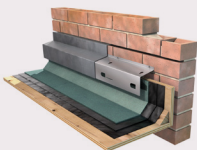
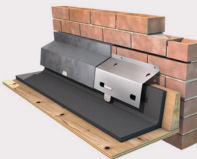
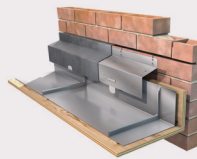
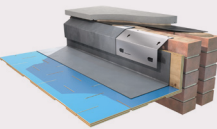
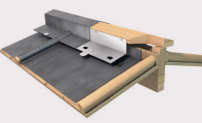
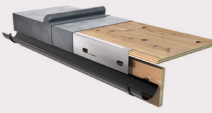
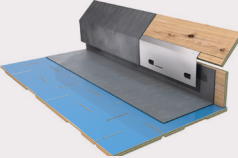
For further information please call us or visit our website.

Airtrak Product Selector

Point ventilators for lead roofing

<p>Airtrak CV</p>  <p>Cheek Ventilator</p> <p>page 9</p>	<p>Airtrak PRV</p>  <p>Pitched Roof Ventilator</p> <p>page 10</p>	<p>Airtrak LV9</p>  <p>Lead Roof Ventilator</p> <p>page 11</p>	<p>Airtrak LV15</p>  <p>Lead Roof Ventilator</p> <p>page 12</p>
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Linear ventilators for fully supported metal, liquid applied and membrane roofing

<p>Airtrak AB1</p>  <p>Abutment Ventilator for supported metal, membrane and liquid</p> <p>page 14</p>	<p>Airtrak AB2</p>  <p>Abutment Ventilator for built up roofing</p> <p>page 15</p>	<p>Airtrak AB3</p>  <p>Abutment Ventilator for mastic asphalt - vertical kerb</p> <p>page 16</p>	<p>Airtrak AB4</p>  <p>Abutment Ventilator for mastic asphalt - splayed kerb</p> <p>page 17</p>	<p>Airtrak AB5</p>  <p>Abutment ventilator for hard metal roofing</p> <p>page 18</p>	<p>Airtrak AB6</p>  <p>Parapet Abutment Ventilator</p> <p>page 19</p>
<p>Airtrak BRV1</p>  <p>Between Roll Ventilator Type 1</p> <p>page 20</p>	<p>Airtrak BRV2</p>  <p>Between Roll Ventilator Type 2</p> <p>page 21</p>	<p>Airtrak CL</p>  <p>Cladding Ventilator</p> <p>page 22</p>	<p>Airtrak VT</p>  <p>Ventilated Trim</p> <p>page 23</p>	<p>Airtrak EA Range</p>  <p>Eaves Ventilators</p> <p>page 24-25</p>	<p>Airtrak IL Range</p>  <p>Inline Ventilators</p> <p>page 26-27</p>
<p>Airtrak MV Slated Roofing</p>  <p>Mansard Ventilator for slated roofing</p> <p>page 28-29</p>	<p>Airtrak MV Tiled Roofing</p>  <p>Mansard Ventilator for tiled roofing</p> <p>page 30-31</p>	<p>Airtrak PE Range</p>  <p>Pitched Eaves Ventilator</p> <p>page 32-33</p>	<p>Bespoke</p>  <p>Custom-made ventilators</p> <p>page 34</p>		

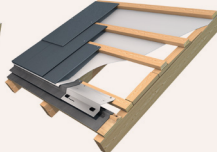
Linear ventilators for tiled and slated roofing

Airtrak LB20



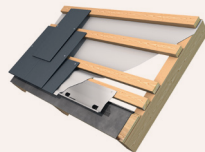
Layboard Ventilator for roof pitches >20° slate only
page 36

Airtrak LB30



Layboard Ventilator for roof pitches >30°
page 37

Airtrak LB45



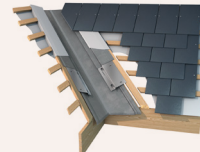
Layboard Ventilator for roof pitches >45°
page 38

Airtrak RTV



Ridge Tile Ventilator Slate/Tile
page 39

Airtrak PV



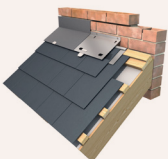
Pitched Valley Ventilator
page 40

Airtrak PV-M



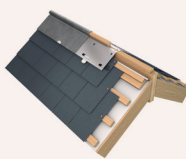
Pitched Valley Ventilator- mortar bed
page 41

Airtrak VA



Ventilated Apron for Slated/Tiled Roofing
page 42-43

Airtrak VR



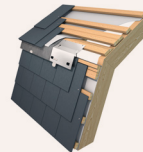
Ventilated Ridge for Slated/Tiled Roofing
page 44-45

Airtrak F10 and F25



Over Fascia Ventilator
page 46

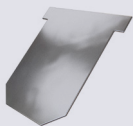
Airtrak CP



Change of Pitch Ventilator
page 47

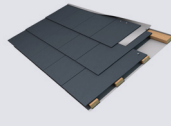
Airtrak ventilation accessories

Airtrak CF



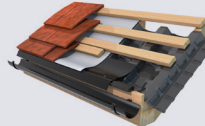
Clipfast Clips
page 49

Airtrak LPS



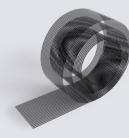
Low Pitch Soaker
page 50

Airtrak RV



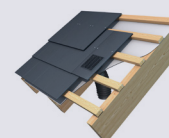
Roll Vent
page 51

Airtrak IM



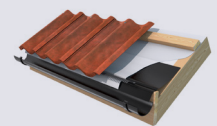
Insect Mesh
page 52

Airtrak SLV/A



Slate Vent
page 53

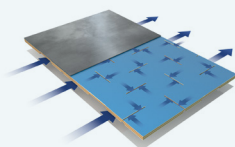
Airtrak CS/EC



Comb Strip and Eaves Carrier
page 54

Airboard roof deck

Airtrak Airboard



Decking for Fully Supported Metal Roofing
page 56-57

FAQs

Why should I use Airtrak?
Airtrak is an established and well known system that is designed and manufactured for the purpose of ventilating roof voids. It provides a solution that is pre-fitted with insect mesh and is durable whilst ensuring minimal impact on the character of the building.

How much ventilation do I need?
As a broad rule of thumb, flat roof area requires 25,000mm² of continuous ventilation (25,000mm² on two opposing sides of a roof so the total area is 50,000mm²). Ideally these are the two longest sides of the roof. Pitched roofs require a similar amount of ventilation efficiency. Pitched roofs require a similar amount of ventilation efficiency.

Frequently asked questions
page 58

Glossary



Download PDF section and TDS



Download DWG section and TDS



Ventilator available in 1.0mm 316 grade stainless steel for coastal and increased exposure applications



Ventilator available with intumescent seal to help prevent spread of fire

Helping you to use this brochure

Ventilation – key considerations for designers

The Airtrak range of proprietary ventilators provide a specified amount of ventilation and may be used to assist in achieving ventilation in line with the guidelines set out in BS 5250: 2011, Code of practice for control of condensation in buildings. Airtrak ventilators are suitable for use on building types that fall into internal humidity classes 1, 2 and 3 as defined in BS 5250.

Sources of moisture in roof constructions

The main sources of moisture in roof constructions are:

- a) water incorporated during the construction process (including precipitation),
- b) precipitation after construction, c) water vapour arising from the occupants and their activities d) atmospheric moisture, drawn into the roof during warm humid weather conditions

Ceiling finishes beneath a roof void

BS5250: 2011 recognises that measures taken to make internal ceilings beneath roof voids less permeable to moisture can result in less ventilation of the roof void being required.

Detailed recommendations on achieving a “well-sealed ceiling” may be found in BS 9250: 2007, Code of Practice for design of the airtightness of ceilings in pitched roofs.

Roof pitches

Flat roofs are defined by BS 6229 as having a pitch of 10° or less. Pitched roofs are defined by BS 5534 as having a pitch of greater than 10° and less than 75°.

Roofing underlays

BS 5250 recognises the following categories of roofing underlay as follows:

- HR underlay – a roofing membrane used under tiling and slating that provides high vapour resistance (i.e. greater than 0.25 MNs/g)
- LR underlay – a roofing membrane used under tiling and slating that provides low vapour resistance (i.e. not exceeding 0.25 MNs/g)
- APLR underlay - a roofing underlay membrane used under tiling and slating that is both air and vapour permeable providing the ability to transfer moisture vapour from the roof space and provide ventilation. Typically, these underlays do not offer the same amount of protection against water ingress as LR or HR membranes.

Designers please note:

- LR & APLR underlay membranes can help to allow moisture vapour to move more easily from the roof construction to the batten void zone. Unless a permeable external roof covering is used (see Roof coverings) this can increase the probability of interstitial condensation in the batten void.
- In situations where LR and APLR membranes are laid over an impermeable board such as sarking, close boarding or OSB / plywood, the underlay should be treated as HR for ventilation purposes.

Roof coverings

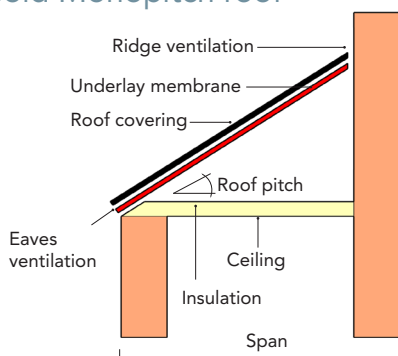
Permeable roof covering - An external roof covering that allows sufficient air movement through the covering to enable ventilation of the batten void thus removing any moisture collecting there.

Impermeable roof covering - An external roof covering that does not allow sufficient air movement through the roof covering to enable ventilation of the batten void.

Designers please note:

- Consider the location of roofs relying on the permeability of the external roof covering for ventilation of the batten void or roof space for the following reasons: 1) Roofs prone to moss and lichen growth may not remain permeable. 2) Roofs in areas where long periods of snow may stay on the roof may affect the permeability of the roof covering.
- Low pitch roof are more susceptible to extensive moss and lichen growth, and may affect long term permeability.
- Third party products designed to enable slates and tiles to be laid to pitches less than the manufacturers guidelines may result in a loss of permeability of the roof covering

Cold Monopitch roof



Roof types

BS 5250 addresses various types of roof structure which require ventilation. These are: cold pitched roof, warm pitched roof, monopitch roof, hybrid pitched roof, cold flat roof.

Cold pitched and Monopitched roofs

It is considered that there is significant risk of interstitial condensation in these types of roof construction. Where an HR underlay or impermeable roof covering is used ventilation is essential in accordance with BS5250. Where an LR / APLR underlay membrane is used along with a permeable roof covering, ventilation may be reduced or omitted subject to BS5250

Warm pitched/Monopitch/Hybrid roofs

With LR/APLR underlay

A Vapour Control Layer (VCL) should be provided at the ceiling line internally. If the external covering is sufficiently permeable to it will enable vapour to be released to the atmosphere (see Roof coverings above) and specific eaves and ridge ventilation may not be required. If there is no internal VCL, ventilation may be required.

Where an external covering is not classed as permeable (see Roof coverings above) there is a risk of interstitial condensation forming on the underside of the external covering. The batten void should be ventilated. Where sarking or close boarding is in place a ventilated void below the boarding should be included unless it is sufficiently open jointed to allow sufficient ventilation. Also see (Roofing underlays) above.

With HR underlay

In roofs with an HR underlay there is a risk of interstitial condensation forming on the underside of the underlay. To avoid that risk, a VCL should be provided on the warm side of the insulation, and ventilated voids should be formed between the underside of the underlay and the insulation. Each void should be at least 25 mm deep and be vented at both high and low level. Openings at low level should have free area equivalent to 25 mm × the width of the void and those at high level 5 mm × the width of the void. Vents should be provided on both sides of any obstruction, e.g. a horizontal ridge, fire break wall, roof window or dormer windows.

Cold flat roofs

Designers should be careful to avoid interstitial condensation in cold flat roofs. To avoid the risk of interstitial condensation, a VCL should be provided on the warm side of the insulation and there should be a cross-ventilated void, not less than 50 mm deep, between the slab or roof deck and the insulation. Ventilation openings should be provided to every roof void along two opposite sides of the roof and should be equivalent in area to a continuous opening of not less than 25 mm at each side. For large roofs, the dimensions of the cross-ventilated void and the ventilation may need to be increased.

Fully supported metal roofing

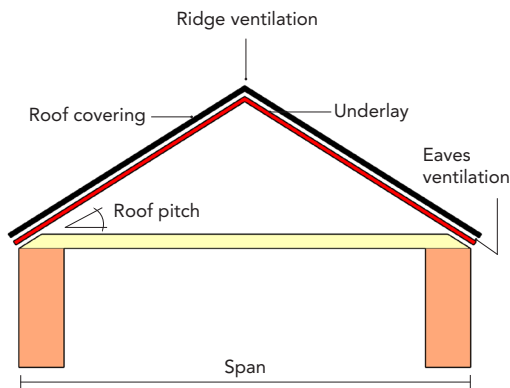
The risk of interstitial condensation on the underside of fully supported metal roofing depends on the performance of the VCL below, the insulation and the risk of moisture vapour ingress through unsealed joints in the roof covering. Fully supported metal roofs should be laid on a ventilated substrate which will ideally have some permeability to the ventilation zone. Fully supported metal roofing should be ventilated in accordance with BS5250 and information provided in FTMRC, LCA, LSTA publications.

Cold monopitch roof						
Roof Pitch	Span	Roof covering	Underlay membrane	Ceiling type	Eaves ventilation	Ridge ventilation
11° - 15°	Any	Any slate or tile	HR	Any	25mm	5mm
16° - 35°	Any	Any slate or tile	HR **	Any	10mm	5mm
11° - 75°	Any	Permeable	LR */**	Any	7mm	5mm
11° - 75°	Any	Permeable	LR *	Well sealed	3mm	5mm
11° - 75°	Any	Permeable	APLR *	Any	0mm	0mm
11° - 75°	Any	Permeable	APLR *	Aell sealed	0mm	0mm

* Where LR underlay but impermeable roof covering treat as HR underlay
 ** Where partial ceiling incline increase eaves ventilation to 25mm

Ventilation – key considerations for designers

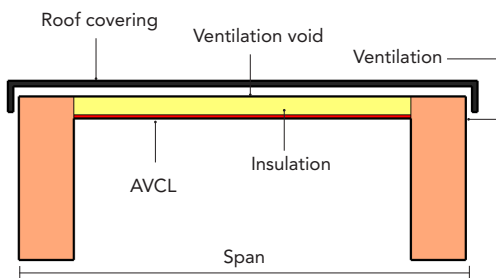
Cold pitched roof



Cold pitched roof						
Roof Pitch	Span	Roof covering	Underlay membrane	Ceiling type	Eaves ventilation	Ridge ventilation
11° - 15°	Any	Any slate or tile	HR	Any	25mm	0mm
16° - 35°	<10m	Any slate or tile	HR	Any	10mm	0mm
16° - 35°	>10m	Any slate or tile	HR	Any	10mm	5mm
36° - 75°	Any	Any slate or tile	HR	Any	10mm	5mm
11° - 75°	Any	Permeable	LR *	Any	7mm	0mm
11° - 75°	Any	Permeable	LR */**	Well sealed	3mm	0mm
11° - 75°	Any	Permeable	APLR *	Any	0mm	0mm
11° - 75°	Any	Permeable	APLR *	Well sealed	10mm	0mm

* Where LR underlay but impermeable roof covering treat as HR underlay
 ** Alternatively 5mm at ridge

Cold flat/Fully supported metal roofs

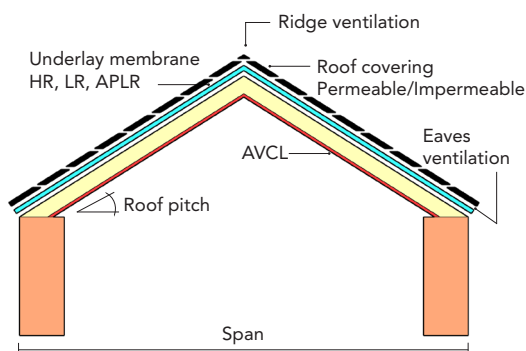


Cold flat roof					
Roof Pitch	Span	Roof covering	Ceiling type	Ventilation	Ventilation void
upto 10°	5m	Any membrane	AVCL	25mm on two opposite of the roof	50mm
upto 10°	>5m	Any membrane	AVCL	25mm on two opposite of the roof +5mm at midpoint	50mm

Fully supported metal roofs (FSMR)					
Roof Pitch	Span	Roof covering	Ceiling type	Ventilation	Ventilation void
Upto 10°	5m	FSMR */**	AVCL	25mm on two opposite of the roof	50mm
Upto 10°	>5m	FSMR */**	AVCL	25mm on two opposite of the roof + 25mm at mid point	50mm
11° - 75°	Any	FSMR */**	AVCL	25mm at eaves / 25mm at ridge	50mm
76°-90°	Any	FSMR */**	AVCL	25mm at eaves / 25mm at ridge	25mm

* Permeable substrate board recommended
 ** Subject to manufacturers recommendations

Warm pitched/Monopitch/Hybrid roofs



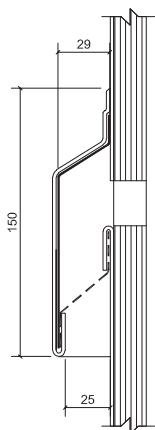
Warm pitched / Monopitch / Hybrid roofs							
Roof pitch	Span	Roof covering	Underlay membrane	Ceiling type	Eaves Ventilation	Ridge Ventilation	Ventilation void (min)
11° - 75°	Any	Any slate or tile	HR **	AVCL	25mm	5mm	25mm
11° - 75°	Any	Permeable	LR *	AVCL	0mm	0mm	n/a
11° - 75°	Any	Permeable	LR **	No AVCL	25mm	5mm	25mm
11° - 75°	Any	Impermeable	LR **	AVCL	25mm	5mm	25mm
11° - 75°	Any	Permeable	APLR *	AVCL	0mm	0mm	n/a
11° - 75°	Any	Permeable	APLR *	No AVCL	0mm	0mm	n/a
11° - 75°	Any	Impermeable	APLR **	AVCL	25mm	5mm	5mm

* If underlay membrane is over close /sarking boards treat as HR underlay
 ** If no common void at ridge provide 5mm to each side of ridge

Chatsworth House, Bakewell, Derbyshire
Products used: Airtrak-LV15, Airtrak-LV9,
Airtrak-AB1 (bespoke to specification)



Point ventilators for lead roofing

Airtrak CV
Cheek ventilatorDownload product
files here**Description**

A point ventilator fabricated from stainless steel and code 5 lead sheet which can be used to introduce ventilation into vertical lead cladding.

Material

0.7mm stainless steel, vinyl coated GRP insect mesh, code 5 lead sheet to BS EN 12588.

Ventilation

2200 mm²

Dimensions

OA width 150mm, OA height 125mm

Compatibility

For use with lead cladding.

Installation

The CV Ventilator is fitted over an aperture in the vertical cladding 25mm high x 90mm wide. The lead cladding should be folded back into a welt on the lower edge to receive the free edge of the insect mesh. The free edge of the mesh is secured by dressing it into the welt and the CV is then welded to the vertical cladding on the top and sides.

Please note

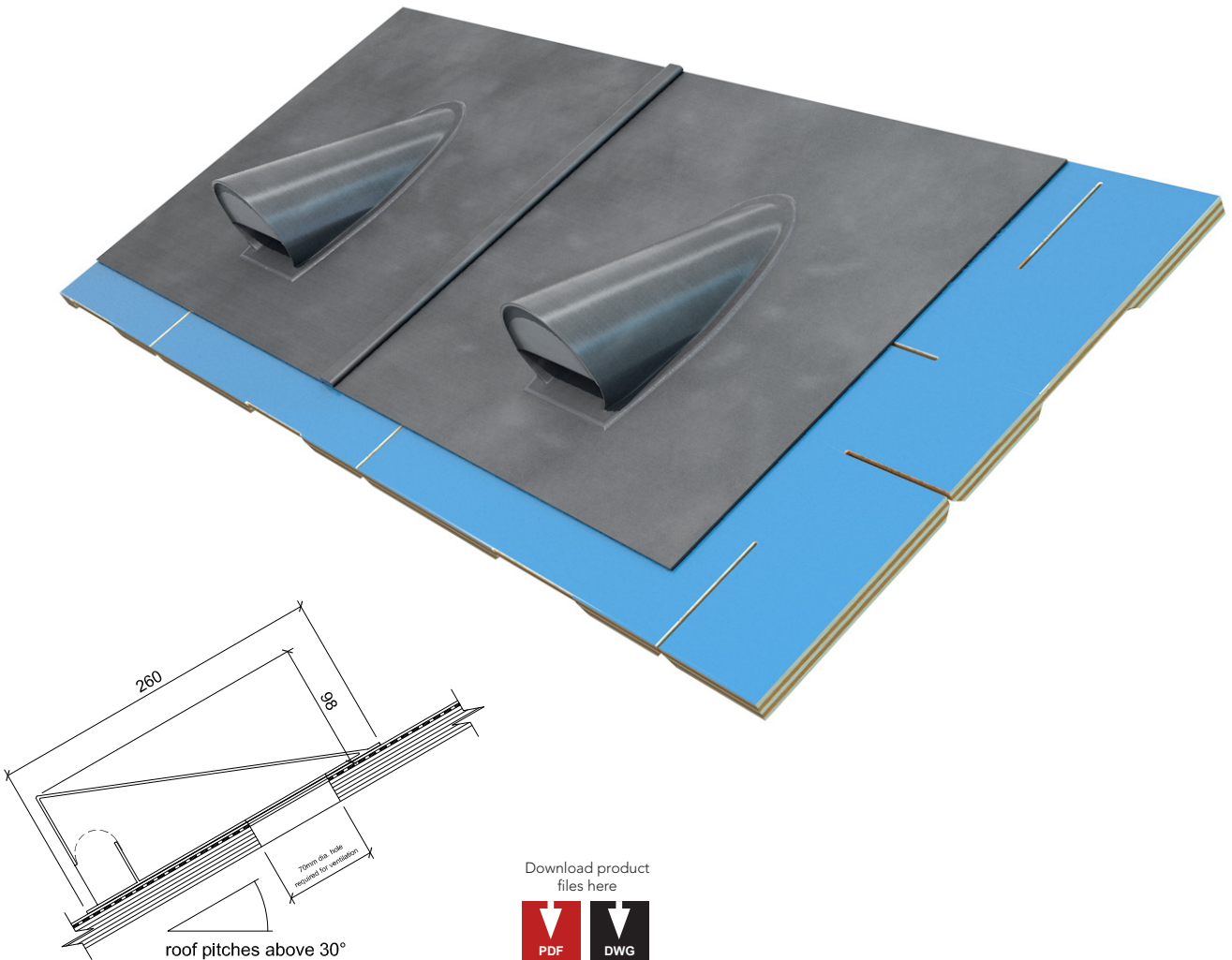
Standard Airtrak details as shown assume moderate weather conditions. Small amounts of moisture may be admitted under heavy storm conditions. Where more severe weather conditions are likely, consideration should be given to increasing the vertical overlap dimension to upstands and to slating or tiling to improve the integrity of the weathering detail. For slate and tile details we also recommend the use of the Airtrak LPS where appropriate. Contact Nicholson for further technical help.

To specify

Airtrak CV Cheek Ventilator

Available from: Nicholson Roof Products, www.nicholsonsts.com
info@nicholsonsts.com, 01763 295828.

Airtrak PRV
Pitched roof ventilator



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Description

The Pitched Roof Ventilator is designed for providing point ventilation to lead roofs and vertical cladding where appropriate. The traditional shape adopted is suitable for pitches of 30° and over. It has an integral insect mesh of stainless steel woven mesh. The ventilator is positioned over a hole in the decking and lead covering and welded into position. A storm check is incorporated into the design to guard against water ingress in extreme conditions.

These ventilators may also be used in slated and tiled roofs where a more traditional look is required. The ventilator should be welded to a larger base sheet prior to being included in the slating or tiling.

Material

Code 5 lead, stainless steel woven insect mesh.

Ventilation

3000mm²

Dimensions

OA length 260mm, OA height 98mm

Compatibility

A point ventilator for lead roofing and slated and tiled roofing on pitches over 30°.

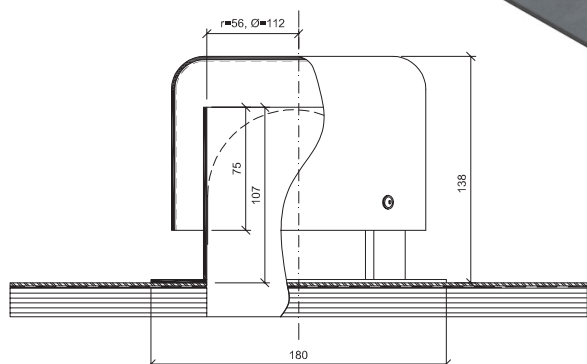
Installation

The PRV is welded to the completed lead bay over an aperture in the lead covering and roof deck of 70mm diameter. If desired, the PRV should be treated with patination oil in the normal manner. To use the PRV in a slated or tiled roof, it must first be welded to an appropriate sized lead sheet. It is then tiled or slated into the roof as tiling proceeds.

To specify

Airtrak PRV Pitched Roof Ventilator

Available from: Nicholson Roof Products, www.nicholsonsts.com
info@nicholsonsts.com, 01763 295828.

Airtrak LV9
Lead roof ventilator

Download product files here



Description

The LV9 Lead Roof Ventilator is a compact point ventilator for flat or pitched lead covered roofs up to 30°. It is useful for introducing ventilation into roof voids which cannot easily utilise the Airtrak linear ventilators.

The LV9 can also be supplied with a stainless steel insert inside the weathering hood. This provides extra strength and is recommended when the LV9 is sited where it might be vulnerable to mechanical damage. These areas would include roof walkways, escape routes and areas accessed by maintenance contractors. The LV9 can also be used as a termination for extract ducts. It can also be used for situations where additional ventilation is required or retrofitted to roofs where no ventilation was initially installed.

Material

Code 5 lead to BS EN 12588, 0.7mm stainless steel, stainless steel insect mesh.

Ventilation

9000mm².

Used at 900mm centres - 10mm continuous air gap equivalent

Used at 1800mm centres - 5mm continuous air gap equivalent

Dimensions

OA height 138mm, OA width 180mm

Compatibility

Point ventilator or extract terminal for lead roofing up to a pitch of 30°.

Installation

The LV9 is fitted to a completed lead roof. A 110mm diameter aperture is made in the lead roof covering and the roof decking below. The LV9 is placed centrally over the hole and welded to the lead bay. Avoid siting the LV9 where it could obstruct the flow e.g. gutters.

To specify

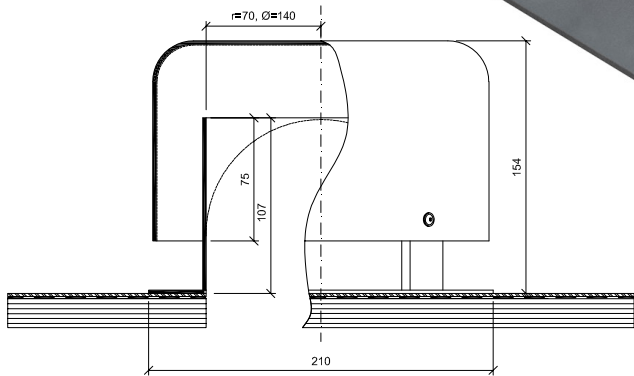
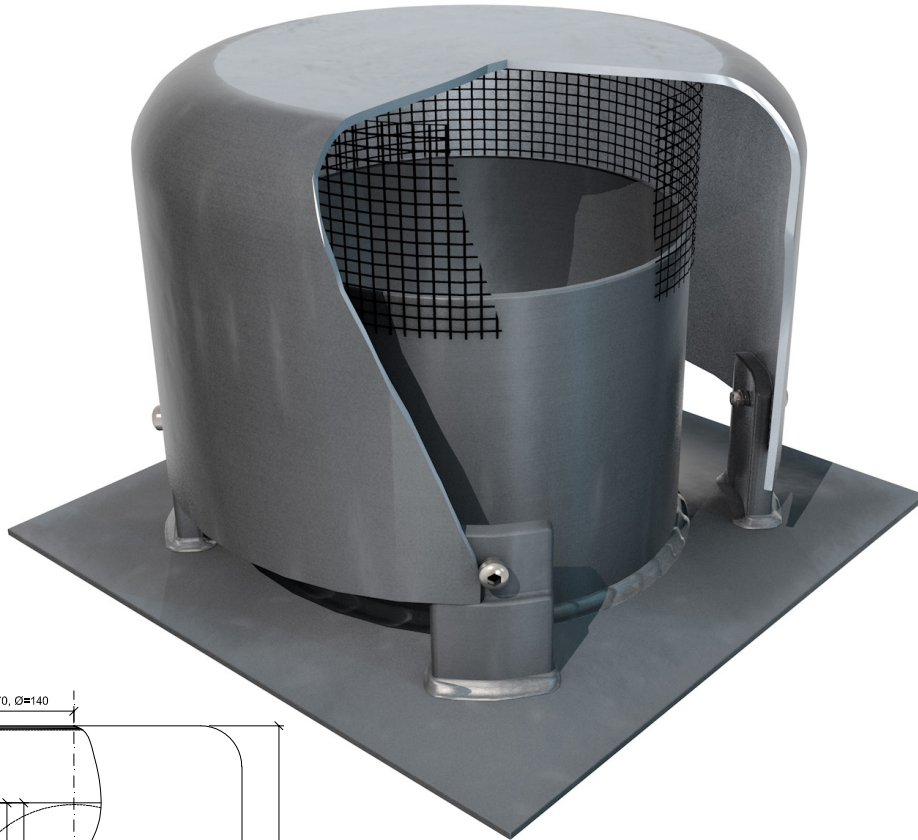
Airtrak LV9 Lead Roof Ventilator

Airtrak LV9-S Lead Roof Ventilator with stainless steel insert

Airtrak LV9-X Lead Roof SVP or Extract Terminal - no insect mesh

Available from: Nicholson Roof Products, www.nicholsonsts.com
info@nicholsonsts.com, 01763 295828.

Airtrak LV15
Lead roof ventilator



Download product files here



Description

The LV15 Lead Roof Ventilator is a compact point ventilator for flat or pitched lead covered roofs up to 30°. It is useful for introducing ventilation into roof voids which cannot easily utilise the Airtrak linear ventilators.

The LV15 can also be supplied with a stainless steel insert inside the weathering hood. This provides extra strength and is recommended when the LV15 is sited where it might be vulnerable to mechanical damage. These areas would include roof walkways, escape routes and areas accessed by maintenance contractors. The LV15 can also be used as a termination for extract ducts. It can also be used for situations where additional ventilation is required or retrofitted to roofs where no ventilation was initially installed.

Material

Code 5 lead, 0.7mm stainless steel, vinyl coated GRP insect mesh.

Ventilation

15,000mm²

Used at 600mm centres = 25mm continuous air gap equivalent

Used at 1500mm centres = 10mm continuous air gap equivalent

Dimensions

OA height 154mm, OA width 220mm

Compatibility

Point ventilator or extract terminal for lead roofing up to a pitch of 30°.

Installation

The LV15 is fitted to a completed lead roof. A 140mm diameter aperture is made in the lead roof covering and the roof decking below. The LV15 is placed centrally over the hole and welded to the lead bay. Avoid siting the LV15 where it could obstruct the flow e.g. gutters.

To specify

Airtrak LV15 Lead Roof Ventilator

Airtrak LV15-S Lead Roof Ventilator with stainless steel insert

Airtrak LV15-X Lead Roof SVP or Extract Terminal - no insect mesh

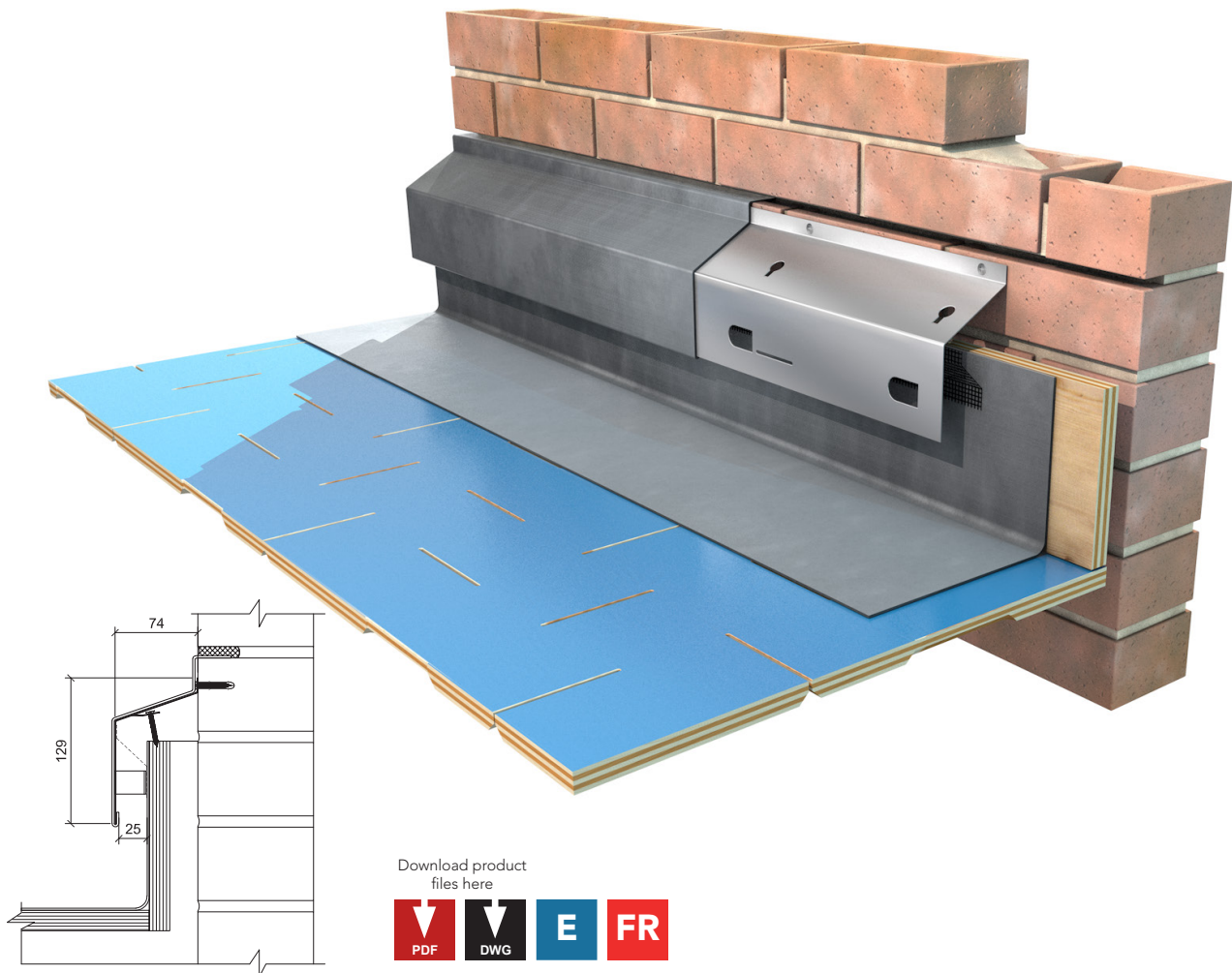
Available from: Nicholson Roof Products, www.nicholsonsts.com
info@nicholsonsts.com, 01763 295828.

Sandhurst Royal Military Academy, Sandhurst, Surrey
Products used: Airtrak-AB1, Airtrak-MV200, Airtrak-LB30
(bespoke to specification)



Linear ventilators for metal, liquid applied
and membrane roofing

Airtrak AB1
 Abutment Ventilator for fully supported metal,
 membrane and liquid applied roofing



Description

The AB1 is a stainless steel profile which provides ventilation at the interface of a fully supported metal, membrane or liquid applied flat roof with an abutment such as a parapet or building wall. It has an integral insect mesh and spacer feet to provide a continuous strip of ventilation to the roof void as required by current Building Regulations. It requires a cover flashing in a suitable material.

Material

Stainless steel, vinyl coated GRP insect mesh, intumescent material (FR version only)

Ventilation

25mm continuous air gap equivalent.

Dimensions

OA girth 180mm, length 1000mm

Compatibility

All roof coverings up to 4mm in thickness including liquid applied, single ply membranes and fully supported metal roof coverings.

Installation

The AB1 is fitted over the ventilated upstand and screwed to the abutment wall using suitable non ferrous fixings. Secondary non-ferrous fixings should be installed to prevent wind uplift.

Lengths should be butted together and can be mitred at corners or trimmed to length with a large pair of tin snips.

A flashing is required to the ventilator profile which should be installed in accordance with current industry best practice guidelines. The lower edge of the flashing should be welted around the bottom edge of the ventilator. The use of the CF Clipfast Clips should be considered where it is possible that the flashing might slip off the ventilator over time and the welt disengage from the lower edge (see page 49).

Please note

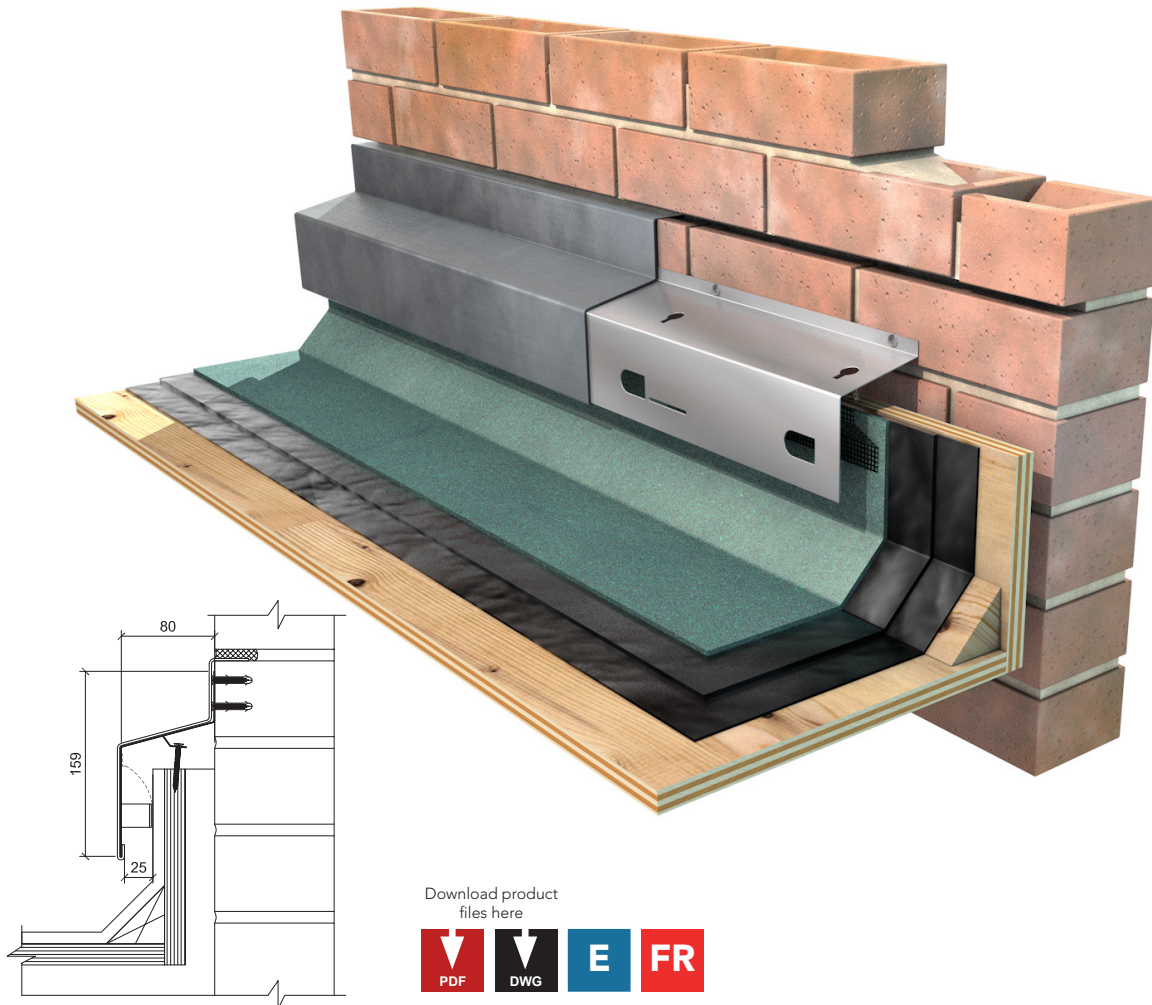
Standard Airtrak details as shown assume moderate weather conditions. Small amounts of moisture may be admitted under heavy storm conditions. Where more severe weather conditions are likely, consideration should be given to increasing the vertical overlap dimension to upstands and to slating or tiling to improve the integrity of the weathering detail. For slate and tile details we also recommend the use of the Airtrak LPS where appropriate. Contact Nicholson for further technical help.

To specify

Airtrak AB1 Abutment Ventilator
 Airtrak AB1-E Increased Exposure Abutment Ventilator
 Airtrak AB1-FR Fire Resisting Abutment Ventilator

Available from: Nicholson Roof Products, www.nicholsonsts.com
info@nicholsonsts.com, 01763 295828.

Airtrak AB2
Abutment Ventilator for
built up roofing



Description

The AB2 is a stainless steel profile which provides ventilation at the interface of a built up felt flat roof with an abutment such as a parapet or building wall. It has an integral insect mesh and spacer feet to provide a continuous strip of ventilation to the roof void as required by current Building Regulations. It requires a cover flashing in a suitable material.

Material

Stainless steel, vinyl coated GRP insect mesh, intumescent material (FR version only)

Ventilation

25mm continuous air gap equivalent.

Dimensions

OA girth 220mm, length 1000mm

Compatibility

Bitumen built up roofing membranes up to 10mm in thickness.

Installation

The AB2 is fitted over the ventilated upstand and screwed to the abutment wall using suitable non ferrous fixings. Secondary non-ferrous fixings should be installed to prevent wind uplift. Lengths should be butted together and can be mitred at corners or trimmed to length with a large pair of tin snips.

A flashing is required to the ventilator profile which should be installed in accordance with current industry best practice guidelines. The lower edge of the flashing should be welted around the bottom edge of the ventilator. The use of the CF Clipfast Clips should be considered where it is possible that the flashing might slip off the ventilator over time and the welt disengage from the lower edge (see page 49).

Please note

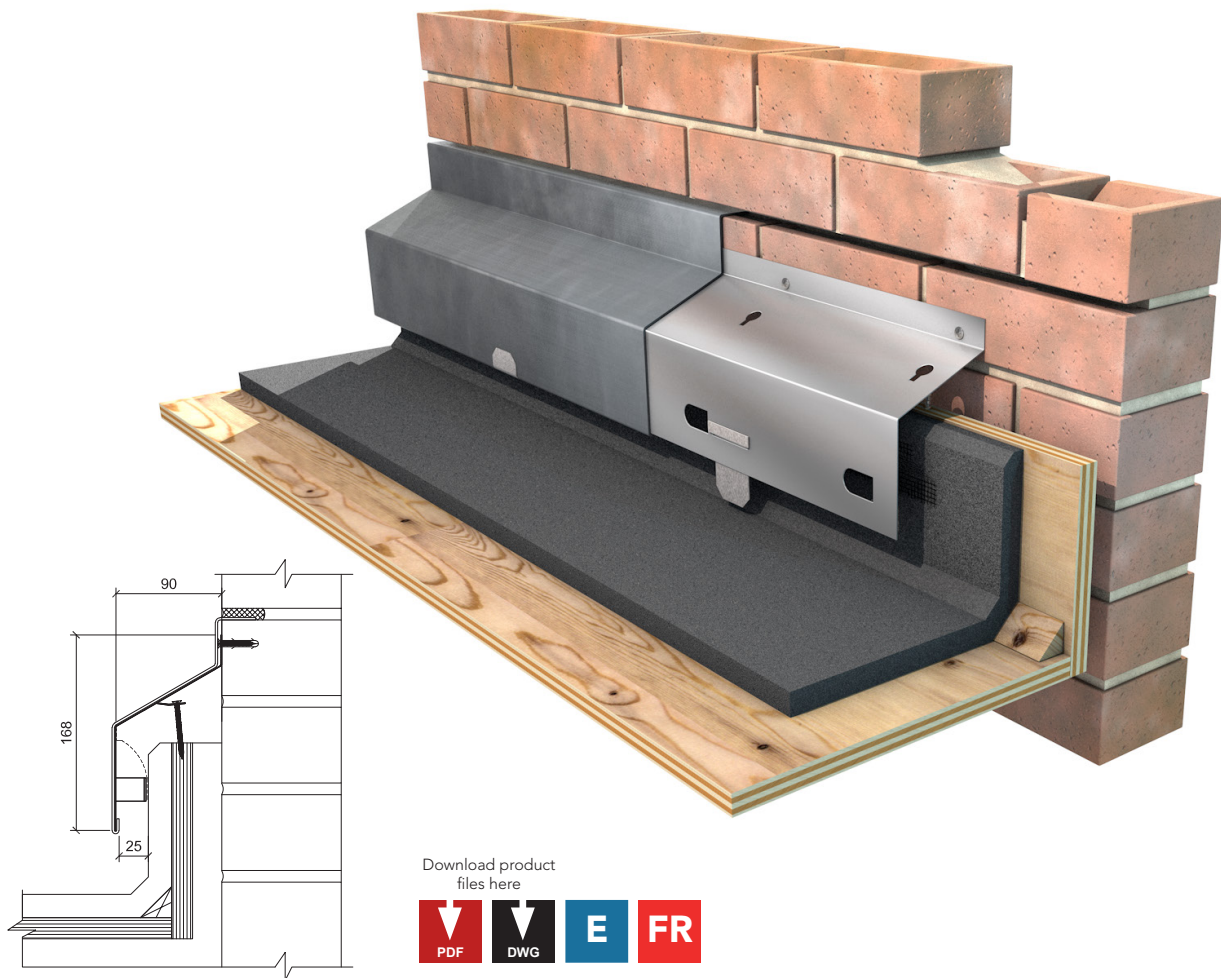
Standard Airtrak details as shown assume moderate weather conditions. Small amounts of moisture may be admitted under heavy storm conditions. Where more severe weather conditions are likely, consideration should be given to increasing the vertical overlap dimension to upstands and to slating or tiling to improve the integrity of the weathering detail. For slate and tile details we also recommend the use of the Airtrak LPS where appropriate. Contact Nicholson for further technical help.

To specify

Airtrak AB2 Abutment Ventilator
Airtrak AB2-E Increased Exposure Abutment Ventilator
Airtrak AB2-FR Fire Resisting Abutment Ventilator

Available from: Nicholson Roof Products, www.nicholsonsts.com
info@nicholsonsts.com, 01763 295828.

Airtrak AB3 Abutment Ventilator for mastic asphalt – vertical kerb



Description

The AB3 is a stainless steel profile which provides ventilation at the interface of a mastic asphalt roof with an abutment such as a parapet or building wall using a vertical ventilated kerb. It has an integral insect mesh and spacer feet to provide a continuous strip of ventilation to the roof void as required by current Building Regulations. It requires a cover flashing in a suitable material.

Material

Stainless steel, vinyl coated GRP insect mesh, intumescent material (FR version only)

Ventilation

25mm continuous air gap equivalent.

Dimensions

OA girth 220mm, length 1000mm

Compatibility

Mastic asphalt roof covering up to 20mm thick – vertical kerb.

Installation

The AB3 is fitted over the ventilated upstand and screwed to the abutment wall using suitable non-ferrous fixings. Secondary non-ferrous fixings should be installed to prevent wind uplift. Lengths should be butted together and can be mitred at corners or trimmed to length with a large pair of tin snips.

A flashing is required to the ventilator profile which should be installed in accordance with current industry best practice guidelines. The lower edge of the flashing should be welted around the bottom edge of the ventilator. The use of the CF Clipfast Clips should be considered where it is possible that the flashing might slip off the ventilator over time and the welt disengage from the lower edge (see page 49).

Please note

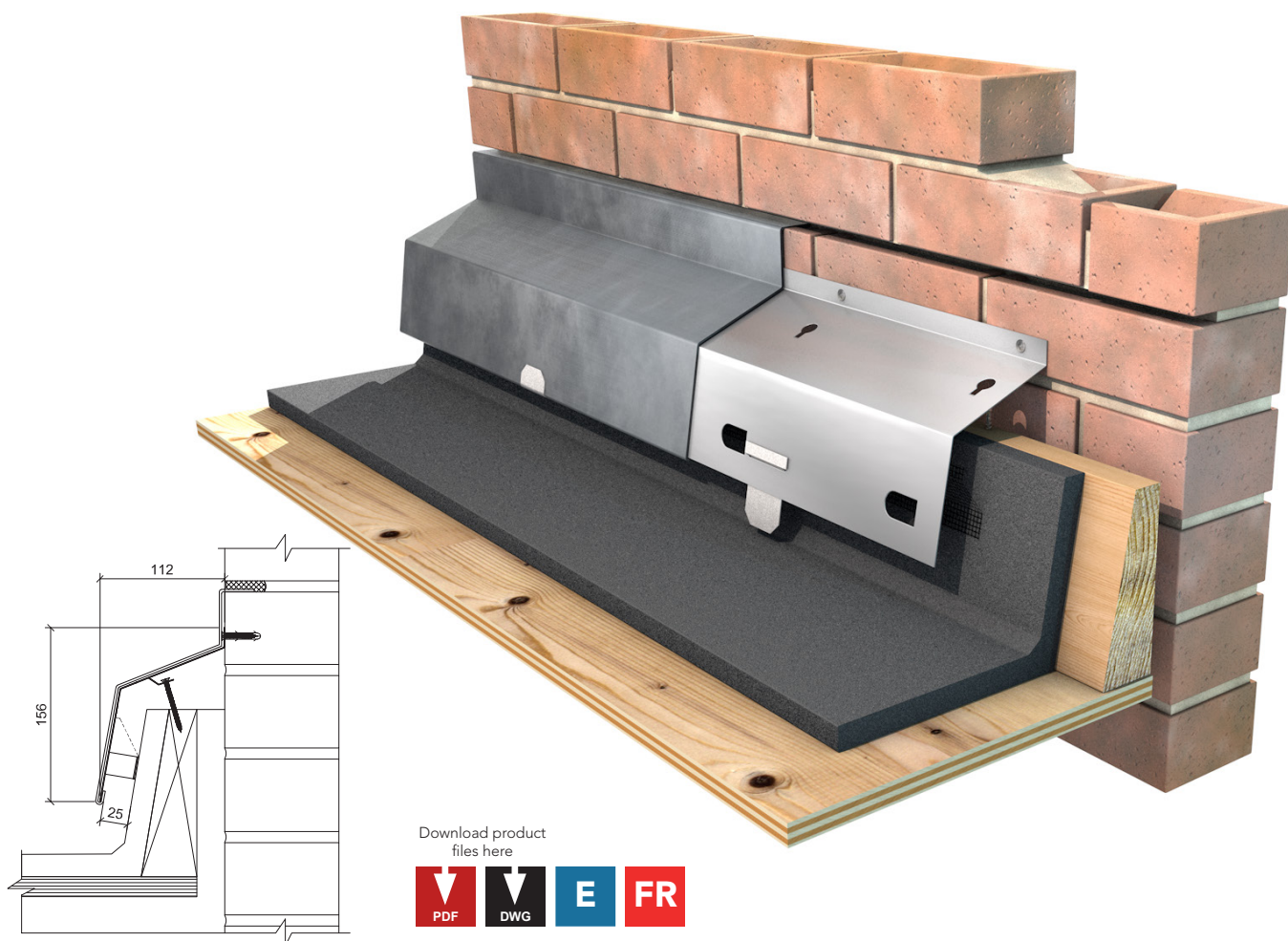
Standard Airtrak details as shown assume moderate weather conditions. Small amounts of moisture may be admitted under heavy storm conditions. Where more severe weather conditions are likely, consideration should be given to increasing the vertical overlap dimension to upstands and to slating or tiling to improve the integrity of the weathering detail. For slate and tile details we also recommend the use of the Airtrak LPS where appropriate. Contact Nicholson for further technical help.

To specify

Airtrak AB3 Abutment Ventilator
Airtrak AB3-E Increased Exposure Abutment Ventilator
Airtrak AB3-FR Fire Resisting Abutment Ventilator

Available from: Nicholson Roof Products, www.nicholsonsts.com
info@nicholsonsts.com, 01763 295828.

Airtrak AB4
Abutment Ventilator for
mastic asphalt – splayed kerb



Description

The AB4 is a stainless steel profile which provides ventilation at the interface of a mastic asphalt roof with an abutment such as a parapet or building wall using a splayed ventilated kerb. It has an integral insect mesh and spacer feet to provide a continuous strip of ventilation to the roof void as required by current Building Regulations. It requires a cover flashing in a suitable material.

Material

Stainless steel, vinyl coated GRP insect mesh, intumescent material (FR version only)

Ventilation

25mm continuous air gap equivalent.

Dimensions

OA girth 220mm, length 1000mm

Compatibility

Mastic asphalt roof covering up to 20mm thick – splayed kerb.

Installation

The AB4 is fitted over the ventilated upstand and screwed to the abutment wall using suitable non-ferrous fixings. Secondary non-ferrous fixings should be installed to prevent wind uplift. Lengths should be butted together and can be mitred at corners or trimmed to length with a large pair of tin snips.

A flashing is required to the ventilator profile which should be installed in accordance with current industry best practice guidelines. The lower edge of the flashing should be welted around the bottom edge of the ventilator. The use of the CF Clipfast Clips should be considered where it is possible that the flashing might slip off the ventilator over time and the welt disengage from the lower edge (see page 49).

Please note

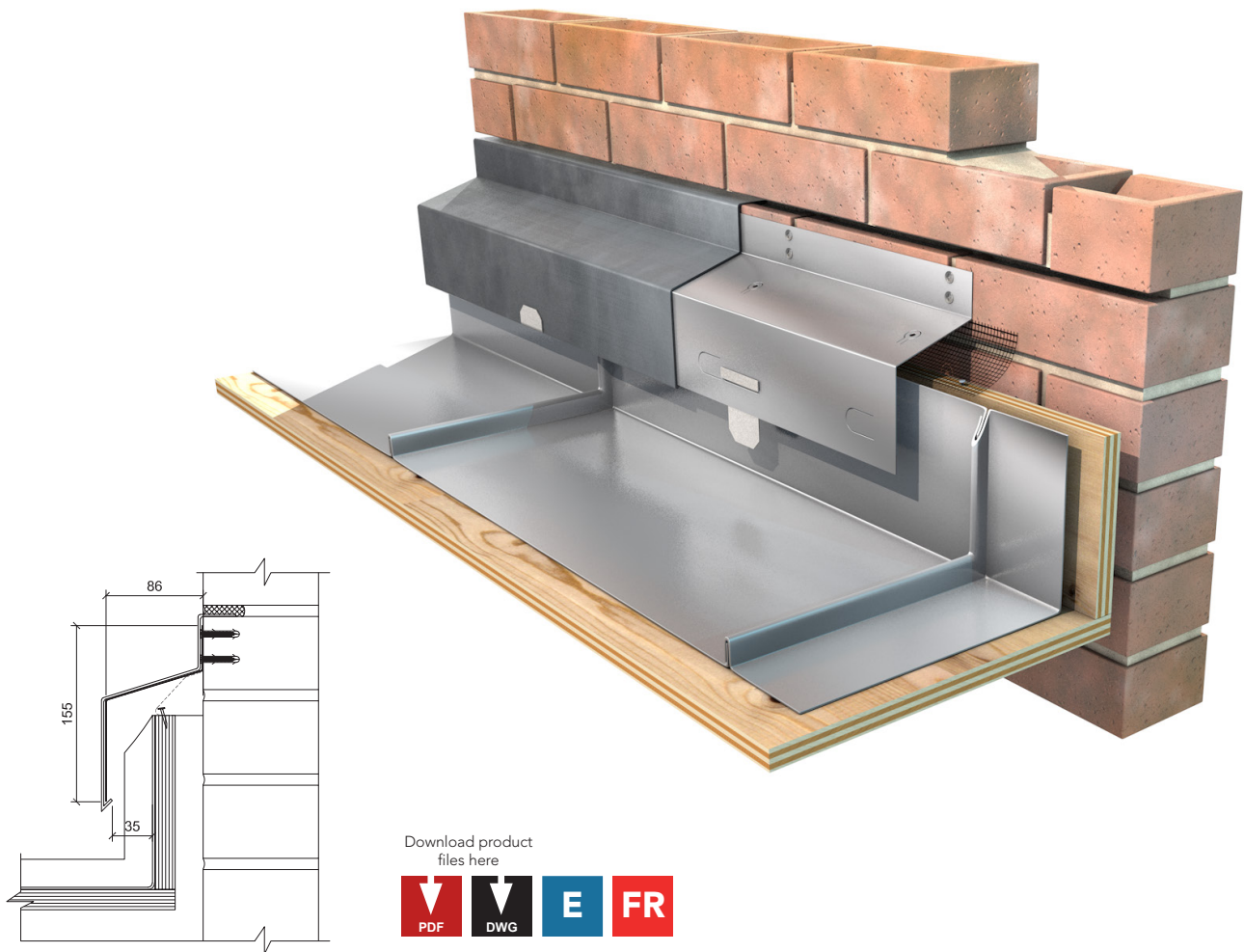
Standard Airtrak details as shown assume moderate weather conditions. Small amounts of moisture may be admitted under heavy storm conditions. Where more severe weather conditions are likely, consideration should be given to increasing the vertical overlap dimension to upstands and to slating or tiling to improve the integrity of the weathering detail. For slate and tile details we also recommend the use of the Airtrak LPS where appropriate. Contact Nicholson for further technical help.

To specify

Airtrak AB4 Abutment Ventilator
Airtrak AB4-E Increased Exposure Abutment Ventilator
Airtrak AB4-FR Fire Resisting Abutment Ventilator

Available from: Nicholson Roof Products, www.nicholsonsts.com
info@nicholsonsts.com, 01763 295828.

Airtrak AB5 Abutment Ventilator for hard metal roofing



Description

The AB5 is a stainless steel profile which provides ventilation at the interface of a fully supported hard metal roof with an abutment such as a parapet or building wall. It is supplied with a insect mesh to provide a continuous strip of ventilation to the roof void as required by current Building Regulations. It allows the upstand of the metal roofing to move perpendicularly to the upstand as caused by the expansion and contraction normally associated with this type of roofing. It requires a cover flashing in a suitable material.

Material

Stainless steel, vinyl coated GRP insect mesh, intumescent material (FR version only)

Ventilation

25mm continuous air gap equivalent.

Dimensions

OA girth 220mm, length 1000mm

Compatibility

Hard metal roof coverings.

Installation

The insect mesh supplied separately is nailed to the top of the ventilated upstand. The AB5 is fitted over the ventilated upstand and screwed to the abutment wall using suitable non-ferrous fixings should be installed. Secondary non-ferrous fixing should

be installed to prevent wind uplift. Lengths should be butted together and can be mitred at corners or trimmed to length with a large pair of tin snips.

A flashing is required to the ventilator profile which should be installed in accordance with current industry best practice guidelines. The lower edge of the flashing should be welded around the bottom edge of the ventilator. The use of the CF Clipfast Clips should be considered where it is possible that the flashing might slip off the ventilator over time and the welt disengage from the lower edge (see page 49).

Please note

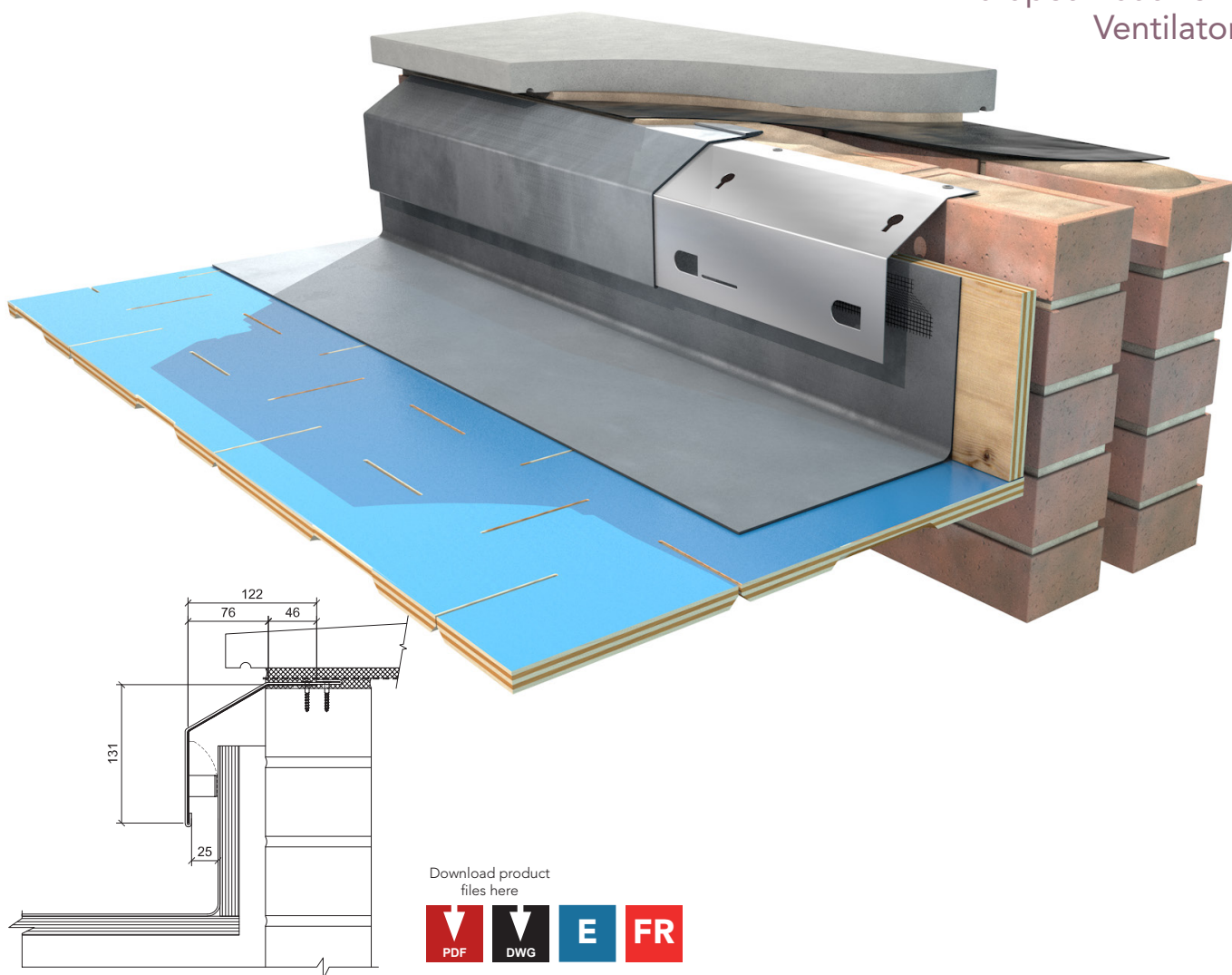
Standard Airtrak details as shown assume moderate weather conditions. Small amounts of moisture may be admitted under heavy storm conditions. Where more severe weather conditions are likely, consideration should be given to increasing the vertical overlap dimension to upstands and to slating or tiling to improve the integrity of the weathering detail. For slate and tile details we also recommend the use of the Airtrak LPS where appropriate. Contact Nicholson for further technical help.

To specify

Airtrak AB5 Abutment Ventilator
Airtrak AB5-E Increased Exposure Abutment Ventilator
Airtrak AB5-FR Fire Resisting Abutment Ventilator

Available from: Nicholson Roof Products, www.nicholsonsts.com
info@nicholsonsts.com, 01763 295828.

Airtrak AB6
Parapet Abutment
Ventilator



Description

The AB6 is a stainless steel profile which provides ventilation at the interface of a fully supported metal, membrane or liquid applied flat roof with a parapet wall abutment. The fixing tab turns horizontally and can be fixed into the top of the parapet wall. It has an integral insect mesh and spacer feet to provide a continuous strip of ventilation to the roof void as required by current Building Regulations. It requires a cover flashing in a suitable material.

Material

Stainless steel, vinyl coated GRP insect mesh, intumescent material (FR version only)

Ventilation

25mm continuous air gap equivalent.

Dimensions

OA girth 220mm, length 1000mm

Compatibility

All roof coverings up to 10mm in thickness.

Installation

The AB6 is fitted over the ventilated upstand and screwed to the top of the parapet wall using suitable non-ferrous fixings. Secondary non-ferrous fixings should be installed to prevent wind uplift. Lengths should be butted together and can be mitred at corners or trimmed to length with a large pair of tin snips.

A flashing is required to the ventilator profile which should be installed in accordance with current industry best practice guidelines. The lower edge of the flashing should be welded around the bottom edge of the ventilator. The use of the CF Clipfast Clips should be considered where it is possible that the flashing might slip off the ventilator over time and the welt disengage from the lower edge (see page 49).

Please note

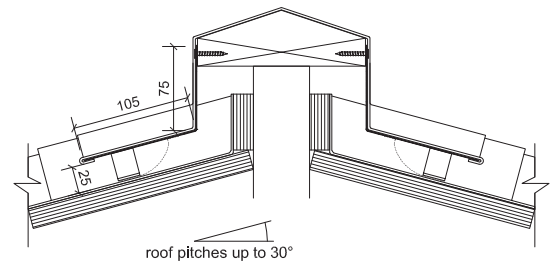
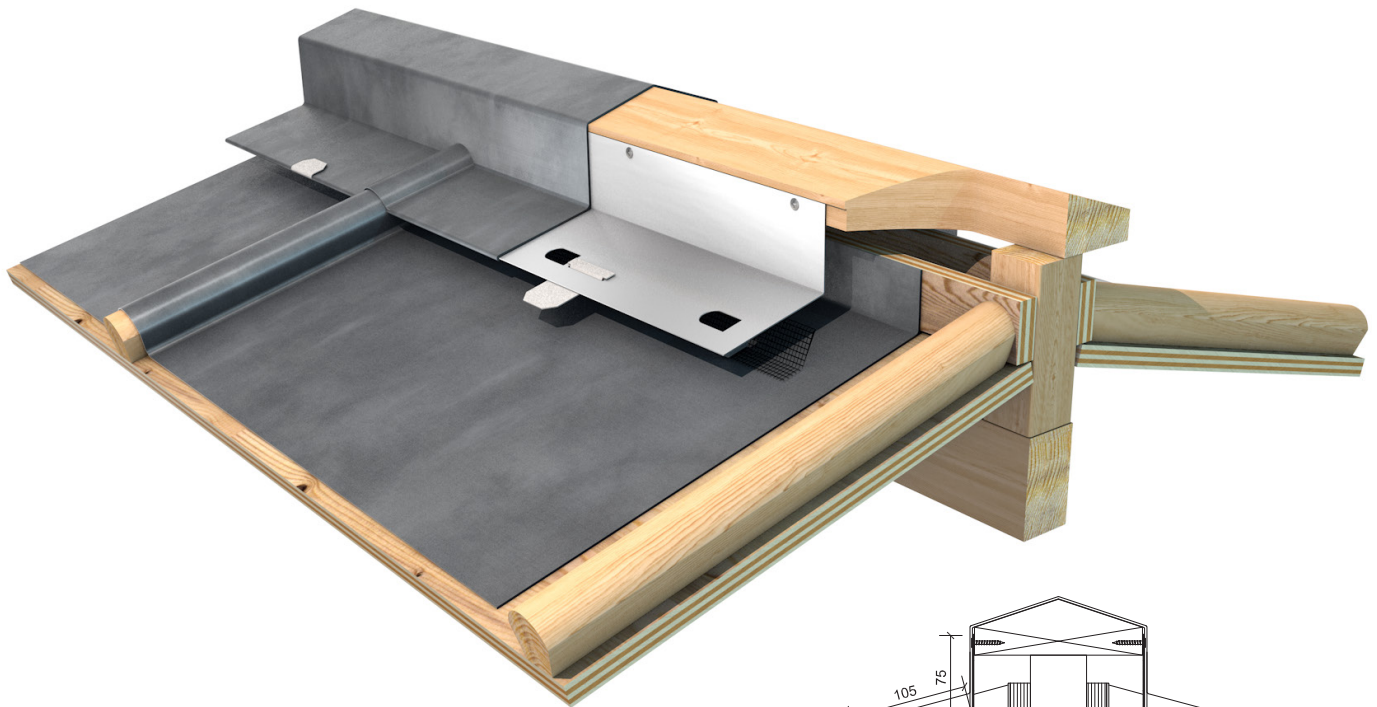
Standard Airtrak details as shown assume moderate weather conditions. Small amounts of moisture may be admitted under heavy storm conditions. Where more severe weather conditions are likely, consideration should be given to increasing the vertical overlap dimension to upstands and to slating or tiling to improve the integrity of the weathering detail. For slate and tile details we also recommend the use of the Airtrak LPS where appropriate. Contact Nicholson for further technical help.

To specify

- Airtrak AB6 Parapet Wall Abutment Ventilator
- Airtrak AB6-E Increased Exposure Parapet Wall Abutment Ventilator
- Airtrak AB6-FR Fire Resisting Parapet Wall Abutment Ventilator

Available from: Nicholson Roof Products, www.nicholsonsts.com
info@nicholsonsts.com, 01763 295828.

Airtrak BRV1 Between Roll Ventilator Type 1



Download product files here



Description

The BRV1 ventilator is designed to ventilate the top of a pitched lead roof either at an abutment with a wall or at a ridge. It is designed for pitches from 0°-30° and is located between the rolls and provides a ventilation path under the flashing. It provides an unobtrusive alternative to cumbersome timber constructions, especially on ridges.

Material

Stainless steel, vinyl coated GRP insect mesh, intumescent material (FR version only)

Ventilation

25mm continuous air gap equivalent.

Dimensions

OA girth 180mm, length 1000mm

Compatibility

For ventilating lead ridge details from 0°-30°.

Installation

The top of the lead bay below the BRV1 is turned up 50mm in front of a ventilated upstand providing at least a 25mm air path into the roof void. The upstand should be welded to the over cloak and undercloak on each side of the bay and any fixings in the head of the bay should be sealed with solder or lead welded dabs. The BRV1 is pre-bent to the correct angle and is fixed to

the to the ridge detail with non-ferrous fixings. The ventilator is trimmed to length using a large pair of tin snips and sits between the rolls of the completed bays. A lead flashing is dressed over the central capping detail and down over the ventilator welting around the bottom edge of the ventilator. The flashing should be clipped on the rolls to avoid the lead slipping down the ventilator in time.

Please note

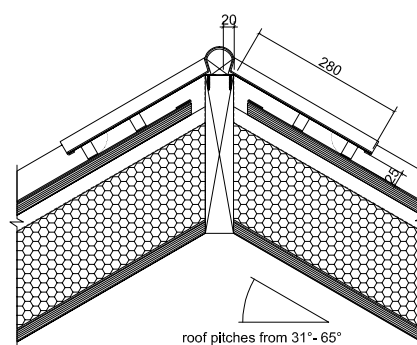
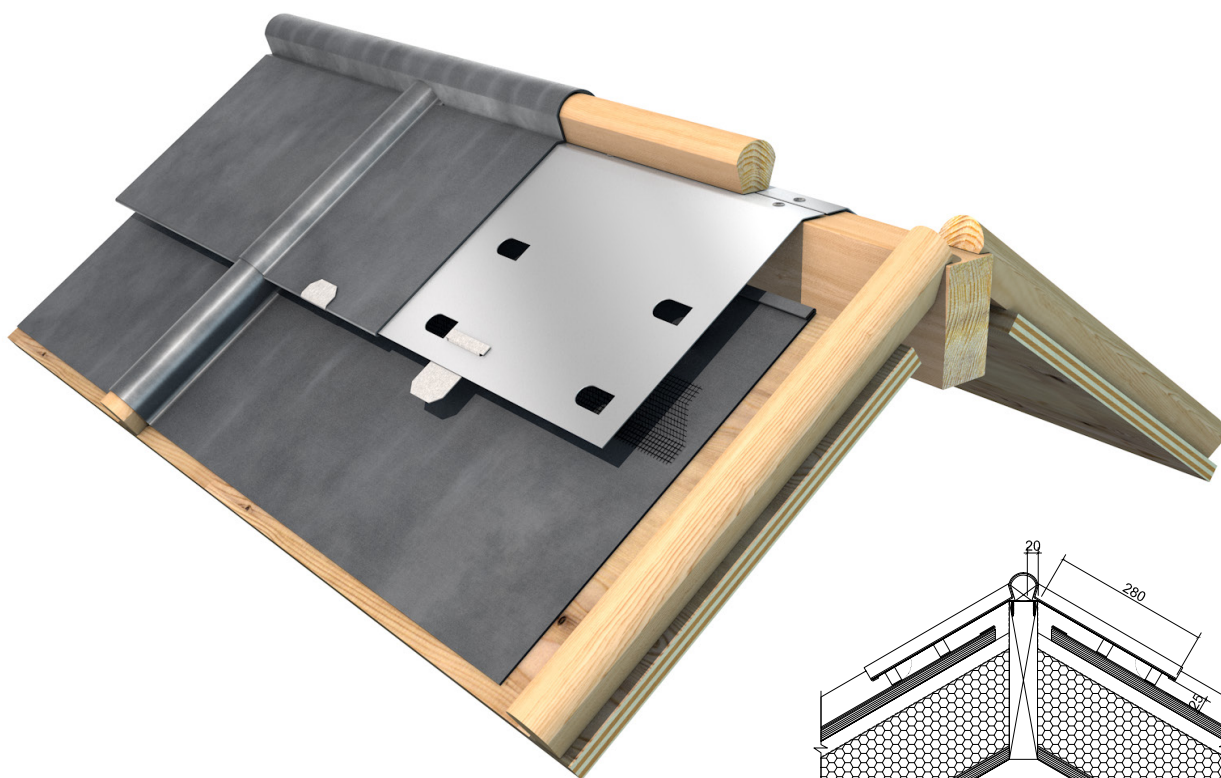
Standard Airtrak details as shown assume moderate weather conditions. Small amounts of moisture may be admitted under heavy storm conditions. Where more severe weather conditions are likely, consideration should be given to increasing the vertical overlap dimension to upstands and to slating or tiling to improve the integrity of the weathering detail. For slate and tile details we also recommend the use of the Airtrak LPS where appropriate. Contact Nicholson for further technical help.

To specify

Airtrak BRV1 Between Roll Ventilator for roof pitches up to 30°
Airtrak BRV1-E Increased Exposure Between Roll Ventilator for roof pitches up to 30°
Airtrak BRV1-FR Fire Resisting Between Roll Ventilator for roof pitches up to 30°

Available from: Nicholson Roof Products, www.nicholsonsts.com
info@nicholsonsts.com, 01763 295828.

Airtrak BRV2
Between Roll Ventilator Type 2



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Description

The BRV2 ventilator is designed to ventilate the top of a pitched lead roof either at an abutment with a wall or at a ridge. It is designed for pitches from 31°-65° and is located between the rolls and provides a ventilation path under the flashing. It provides an unobtrusive alternative to cumbersome timber constructions, especially on ridges.

Material

Stainless steel, vinyl coated GRP insect mesh, intumescent material (FR version only)

Ventilation

25mm continuous air gap equivalent.

Dimensions

OA girth 300mm, length 700mm

Compatibility

For ventilating lead ridge details from 31°-65°.

Installation

The top of the lead bay below the BRV requires a welted return of at least 25mm which is welded to the roll upstands at each side of the bay. The BRV is pre-bent to the correct angle and is fixed to the ridge detail with non ferrous fixings. The fixing tab can be bent to a horizontal plane or vertical plane as required. The

ventilator is trimmed to length using a large pair of tin snips and sits between the rolls of the completed bays. A lead flashing is dressed over the central roll detail and down over the ventilator welting around the bottom edge of the ventilator. The flashing should be clipped on the rolls to avoid the lead slipping down the ventilator in time.

Please note

Standard Airtrak details as shown assume moderate weather conditions. Small amounts of moisture may be admitted under heavy storm conditions. Where more severe weather conditions are likely, consideration should be given to increasing the vertical overlap dimension to upstands and to slating or tiling to improve the integrity of the weathering detail. For slate and tile details we also recommend the use of the Airtrak LPS where appropriate. Contact Nicholson for further technical help.

To specify

Airtrak BRV2 Between Roll Ventilator for roof pitches from 31°-65°
Airtrak BRV2-E Increased Exposure Between Roll Ventilator for roof pitches from 31°-65°

Airtrak BRV2-FR Fire Resisting Between Roll Ventilator for roof pitches from 31°-65°

Available from: Nicholson Roof Products, www.nicholsonsts.com
info@nicholsonsts.com, 01763 295828.

Airtrak CL Cladding Ventilator



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Description

The CL Cladding Ventilator can be used to introduce ventilation into metal cladding from 60°-90° pitch. It can be used in a horizontal or raking plane and provides a neat and unobtrusive airpath to ventilate the void behind the cladding.

Material

Stainless steel, vinyl coated GRP insect mesh, intumescent material (FR version only)

Ventilation

25mm continuous air gap equivalent.

Dimensions

OA girth 145mm, length 1000mm

Compatibility

For ventilating metal cladding from 60°-90° pitch.

Installation

The CL is fitted over a 25mm wide continuous opening into a 1mm x 25mm rebate on the top edge of the cladding above the aperture using non-ferrous fixings. The ventilator can be mitred at corners and trimmed to length with a large pair of tin snips. The metal roof covering is dressed down the face of the ventilator and welted around the bottom edge to prevent wind uplift.

The Airtrak CF Clipfast Clips can be used with the CL Cladding Ventilator to prevent flashing creep (see page 49).

Please note

Standard Airtrak details as shown assume moderate weather conditions. Small amounts of moisture may be admitted under heavy storm conditions. Where more severe weather conditions are likely, consideration should be given to increasing the vertical overlap dimension to upstands and to slating or tiling to improve the integrity of the weathering detail. For slate and tile details we also recommend the use of the Airtrak LPS where appropriate. Contact Nicholson for further technical help.

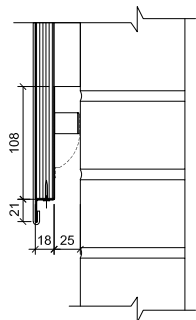
To specify

Airtrak CL Cladding Ventilator
Airtrak CL-E Increased Exposure Cladding Ventilator
Airtrak CL-FR Fire Resisting Cladding Ventilator

Available from: Nicholson Roof Products, www.nicholsonsts.com
info@nicholsonsts.com, 01763 295828.

Airtrak VT18
Airtrak VT25
Ventilated Edge Trim

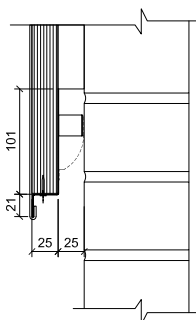
VT18



Download product files here



VT25



Download product files here



Description

The VT Ventilated Edge Trim provides a continuous ventilation detail to the bottom edge of a plywood fascia or cladding. It protects the edge of the plywood from exposure to the weather and also provides a continuous clipped detail for the metal cladding. It is available in two versions for 18mm and 25mm thick plywood.

Material

Stainless steel, vinyl coated GRP insect mesh, intumescent material (FR version only)

Ventilation

25mm continuous air gap equivalent.

Dimensions

OA girth 145mm, length 1000mm
VT18 for 18mm thick plywood
VT25 for 25mm thick plywood

Compatibility

For use with 18mm and 25mm plywood.

Installation

The VT Ventilator is fitted to the edge of the plywood prior to it being fixed in position into the edge of the plywood using non-ferrous fixings. The lead cladding to the ventilator is welded around the edge of the ventilator to prevent wind uplift. Lengths

should be butted together or lapped by 10mm if required. The ventilator can be mitred at corners and trimmed to length with a large pair of tin snips.

Please note

Standard Airtrak details as shown assume moderate weather conditions. Small amounts of moisture may be admitted under heavy storm conditions. Where more severe weather conditions are likely, consideration should be given to increasing the vertical overlap dimension to upstands and to slating or tiling to improve the integrity of the weathering detail. For slate and tile details we also recommend the use of the Airtrak LPS where appropriate. Contact Nicholson for further technical help.

To specify

Airtrak VT18 Ventilated Trim for 18mm board
Airtrak VT18-E Increased Exposure Ventilated Trim for 18mm board
Airtrak VT18-FR Fire Resisting Ventilated Trim for 18mm board
Airtrak VT25 Ventilated Trim for 25mm board
Airtrak VT25-E Increased Exposure Ventilated Trim for 25mm board
Airtrak VT25-FR Fire Resisting Ventilated Trim for 25mm board

Available from: Nicholson Roof Products, www.nicholsonsts.com
info@nicholsonsts.com, 01763 295828.

- Airtrak EA75 Eaves Ventilator
- Airtrak EA100 Eaves Ventilator
- Airtrak EA120 Eaves Ventilator
- Airtrak EA150 Eaves Ventilator



EA100 Eaves Ventilator

Description

The EA ventilators provide a 25mm ventilation path into the roof void at the eaves or edge of a flat roof. They are available with different vertical downstand drip dimensions for various locations such as drip edges to parapets, dormer roofs, flat roofs etc.

Material

Stainless steel, vinyl coated GRP insect mesh, intumescent material (FR version only)

Ventilation

25mm continuous air gap equivalent.

Dimensions

- EA75 75mm downstand, OA girth 100mm, length 1000mm
- EA100 100mm downstand, OA girth 125mm, length 1000mm
- EA120 120mm downstand, OA girth 145mm, length 1000mm
- EA150 150mm downstand, OA girth 180mm, length 1000mm

Compatibility

For ventilating metal, membrane or liquid roof coverings.

Installation

The EA is fitted into a 1mm x 25mm rebate on the leading edge of the roof deck using non-ferrous fixings. The ventilator can be mitred at corners and trimmed to length with a large pair of tin snips. The metal roof covering is dressed down the face of the ventilator and welted around the bottom edge to prevent wind uplift. For membrane and liquid applied roof coverings, a suitable metal flashing material should be used to cover the ventilator welting around the lower edge and extending onto the roof to facilitate a lap joint in accordance with the manufacturers

instructions. The use of the CF Clip Fast Clips should be considered where it is possible that the flashing might slip off the ventilator over time and the welt disengage from the lower edge (see page 49).

Please note

Standard Airtrak details as shown assume moderate weather conditions. Small amounts of moisture may be admitted under heavy storm conditions. Where more severe weather conditions are likely, consideration should be given to increasing the vertical overlap dimension to upstands and to slating or tiling to improve the integrity of the weathering detail. For slate and tile details we also recommend the use of the Airtrak LPS where appropriate. Contact Nicholson for further technical help.

To specify

- Airtrak EA75 Eaves Ventilator
- Airtrak EA75-E Increased Exposure Eaves Ventilator

- Airtrak EA100 Eaves Ventilator
- Airtrak EA100-E Increased Exposure Eaves Ventilator
- Airtrak EA100-FR Fire Resisting Eaves Ventilator

- Airtrak EA120 Eaves Ventilator
- Airtrak EA120-E Increased Exposure Eaves Ventilator
- Airtrak EA120-FR Fire Resisting Eaves Ventilator

- Airtrak EA150 Eaves Ventilator
- Airtrak EA150-E Increased Exposure Eaves Ventilator
- Airtrak EA150-FR Fire Resisting Eaves Ventilator

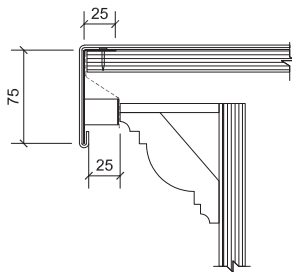
Available from: Nicholson Roof Products, www.nicholsonsts.com
info@nicholsonsts.com, 01763 295828.

Airtrak EA75 Eaves Ventilator
 Airtrak EA100 Eaves Ventilator
 Airtrak EA120 Eaves Ventilator
 Airtrak EA150 Eaves Ventilator



EA120 Eaves Ventilator

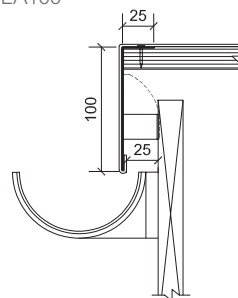
EA75



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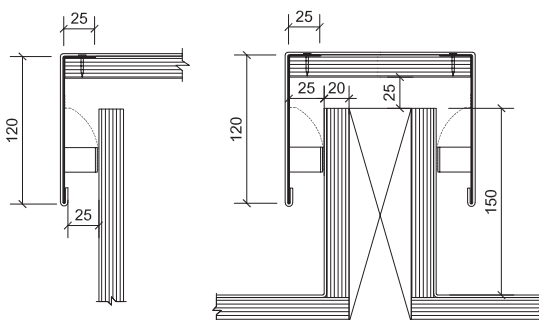
EA100



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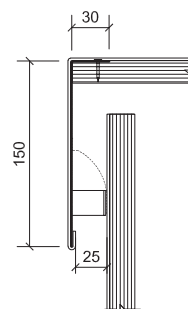
EA120



Download product files here



EA150

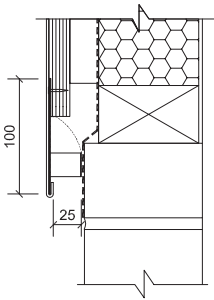


Download product files here



Airtrak IL100 Inline Ventilator
 Airtrak IL145 Inline Ventilator
 Airtrak IL180 Inline Ventilator

Airtrak IL100 Inline Ventilator



Download product files here



Description

The IL can be used at the foot or head of vertical or pitched cladding to provide a continuous airgap for ventilation. Its inconspicuous profile allows effective ventilation whilst keeping the visual impact of the detail to a minimum.

Material

0.7mm stainless steel, vinyl coated GRP insect mesh.

Ventilation

25mm continuous air gap equivalent.

Dimensions

- IL100 OA girth 100mm, OA girth 125mm, length 1000mm
- IL145 OA girth 145mm, OA girth 145mm, length 1000mm
- IL180 OA girth 180mm, OA girth 180mm, length 1000mm

Compatibility

For use with lead and hard metal roofing for various ventilation details.

Installation

The IL is a flat profiled ventilator that can be fixed with non-ferrous fixings to raking and straight edges to introduce a drip edge and ventilation. The ventilator can be mitred at corners and trimmed to length with a large pair of tin snips. Ensure that a minimum of 25mm airflow is achieved throughout the ventilation detail.

The IL can be formed to a curved substrate in the horizontal plane.

Please note

Standard Airtrak details as shown assume moderate weather conditions. Small amounts of moisture may be admitted under heavy storm conditions. Where more severe weather conditions are likely, consideration should be given to increasing the vertical overlap dimension to upstands and to slating or tiling to improve the integrity of the weathering detail. For slate and tile details we also recommend the use of the Airtrak LPS where appropriate. Contact Nicholson for further technical help.

To specify

- Airtrak IL100 Inline Ventilator
- Airtrak IL100-E Increased Exposure Inline Ventilator
- Airtrak IL100-FR Fire Resisting Inline Ventilator

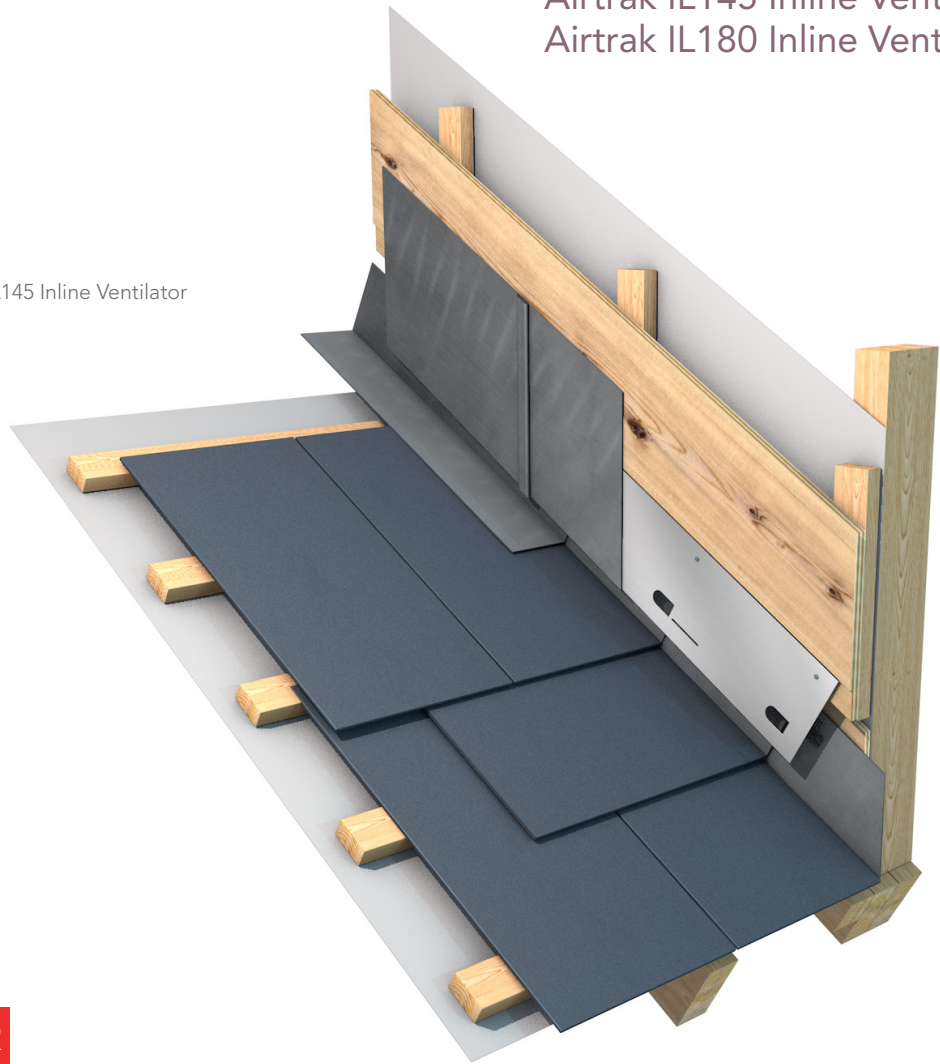
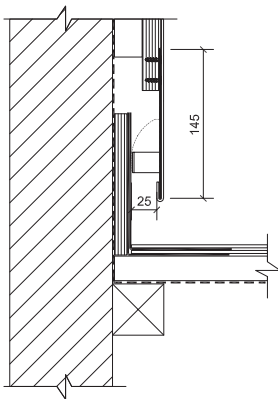
- Airtrak IL145 Inline Ventilator
- Airtrak IL145-E Increased Exposure Inline Ventilator
- Airtrak IL145-FR Fire Resisting Inline Ventilator

- Airtrak IL180 Inline Ventilator
- Airtrak IL180-E Increased Exposure Inline Ventilator
- Airtrak IL180-FR Fire Resisting Inline Ventilator

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Airtrak IL100 Inline Ventilator
Airtrak IL145 Inline Ventilator
Airtrak IL180 Inline Ventilator

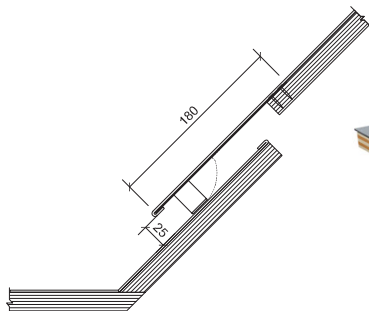
Airtrak IL145 Inline Ventilator



Download product files here



Airtrak IL180 Inline Ventilator

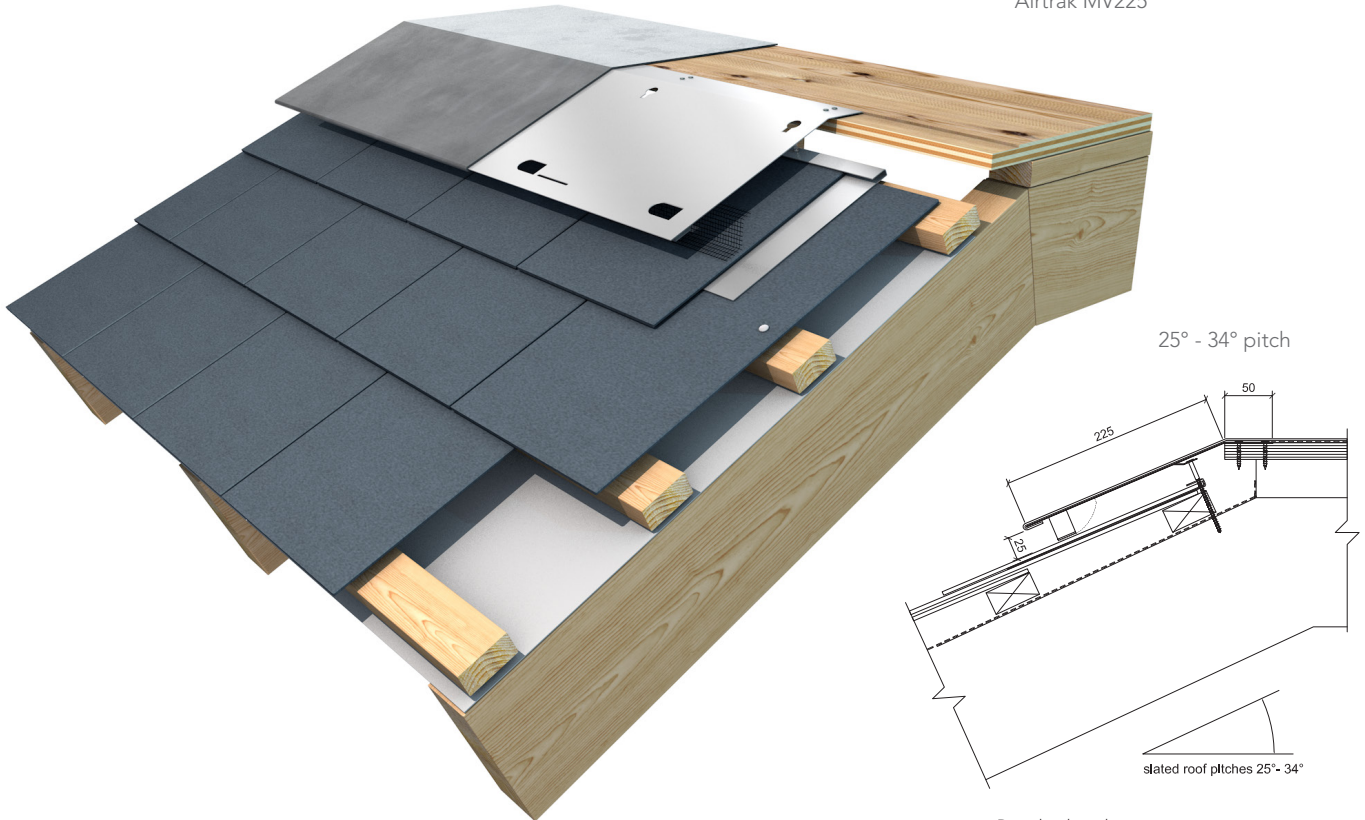


Download product files here



Airtrak MV Mansard Ventilator for Slated Roofing

Airtrak MV225



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Description

The MV Mansard Ventilator for slated roofing is used to introduce ventilation into a flat roof where it falls out onto a slated pitched roof. The stainless steel profile is covered by the flat roofing material or flashing. To maintain the integrity of the detail as the pitch reduces, the MV Mansard Ventilator is used with the LPS225 Low Pitch Soaker (page 50).

Material

Stainless steel, vinyl coated GRP insect mesh, intumescent material (FR version only)

Ventilation

25mm continuous air gap equivalent.

Dimensions

Cover to roof pitch

MV150 150mm, OA girth 180mm, length 1000mm
 MV200 200mm, OA girth 240mm, length 1000mm
 MV225 225mm, OA girth 275mm, length 1000mm

Compatibility

For use at the junction of a slated roof with metal, membrane or liquid roof coverings.
 MV150 60°-90° pitch
 MV200 45°-59° pitch
 MV200 + LPS225 35°-44° pitch
 MV225 + LPS225 25°-34° pitch

Installation

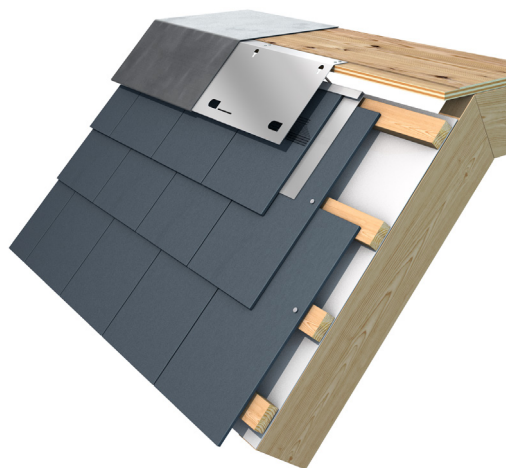
Where required, the LPS225 Low Pitch Soaker is installed underneath the eaves course of the slating. The top edge is welded over the top of the eaves course to provide a check for wind blown rain. The MV Mansard Ventilator is fitted to a 1mm rebate in the edge of the flat roof with non ferrous fixings and extends down over the slates. Additional secondary fixings should be used to provide resistance to wind uplift. Lengths should be butted together or lapped by 10mm if required. The ventilator can be mitred at corners and trimmed to length with a large pair of tin snips. The ventilator should be parallel to the surface of the top slate. For lead roof coverings, the lead covering is dressed down the face of the ventilator and welded around the lower edge. For membrane and liquid applied roof coverings, a suitable metal flashing material should be used to cover the ventilator welding around the lower edge and extending onto the roof to facilitate a lap joint in accordance with the manufacturers instructions. These flashings should not be installed in lengths exceeding 1m and have a minimum lap of 150mm at the joints. The use of the CF Clip Fast Clips should be considered where it is possible that the flashing might slip off the ventilator over time and the welt disengage from the lower edge (see page 49).

Please note

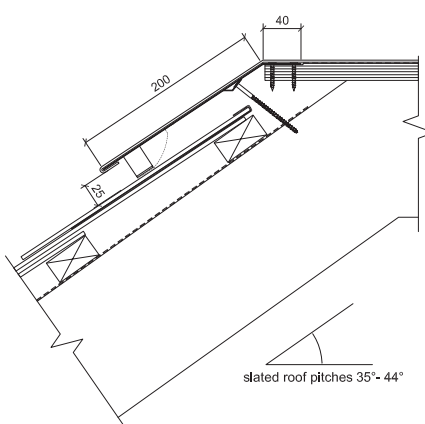
Standard Airtrak details as shown assume moderate weather conditions. Small amounts of moisture may be admitted under heavy storm conditions. Where more severe weather conditions are likely, consideration should be given to increasing the vertical overlap dimension to upstands and to slating or tiling to improve the integrity of the weathering detail. For slate and tile details we also recommend the use of the Airtrak LPS where appropriate. Contact Nicholson for further technical help.

Airtrak MV Mansard Ventilator for Slated Roofing

Airtrak MV200



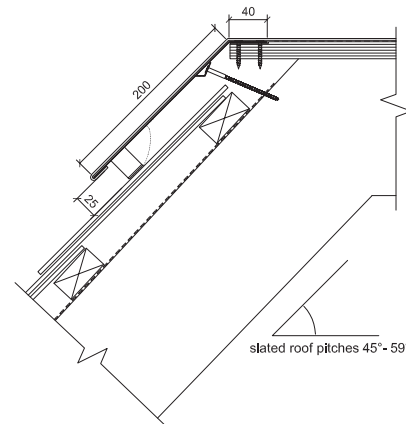
35° - 44° pitch



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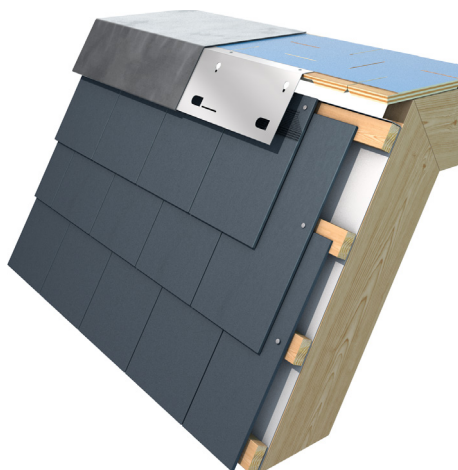
45° - 59° pitch



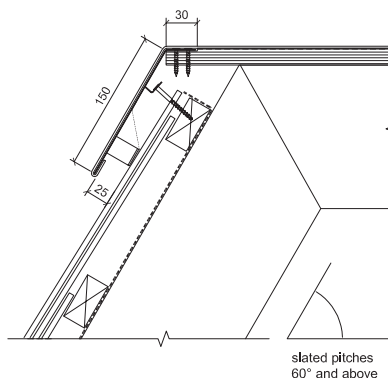
Download product files here



Airtrak MV150



60° - 90° pitch



Download product files here



To specify for pitch 60°-90°

- Airtrak MV150 Mansard Ventilator for slated pitches 60°-90°
- Airtrak MV150-E Increased Exposure Mansard Ventilator for slated pitches 60°-90°
- Airtrak MV150-FR Fire Resisting Mansard Ventilator for slated pitches 60°-90°

To specify for pitch 45°-59°

- Airtrak MV200 Mansard Ventilator for slated roof pitches 45°- 59°
- Airtrak MV200-E Increased Exposure Mansard Ventilator for slated roof pitches 45°-59°
- Airtrak MV200-FR Fire Resisting Mansard Ventilator for slated roof pitches 45°-59°

To specify for pitch 35°-44°

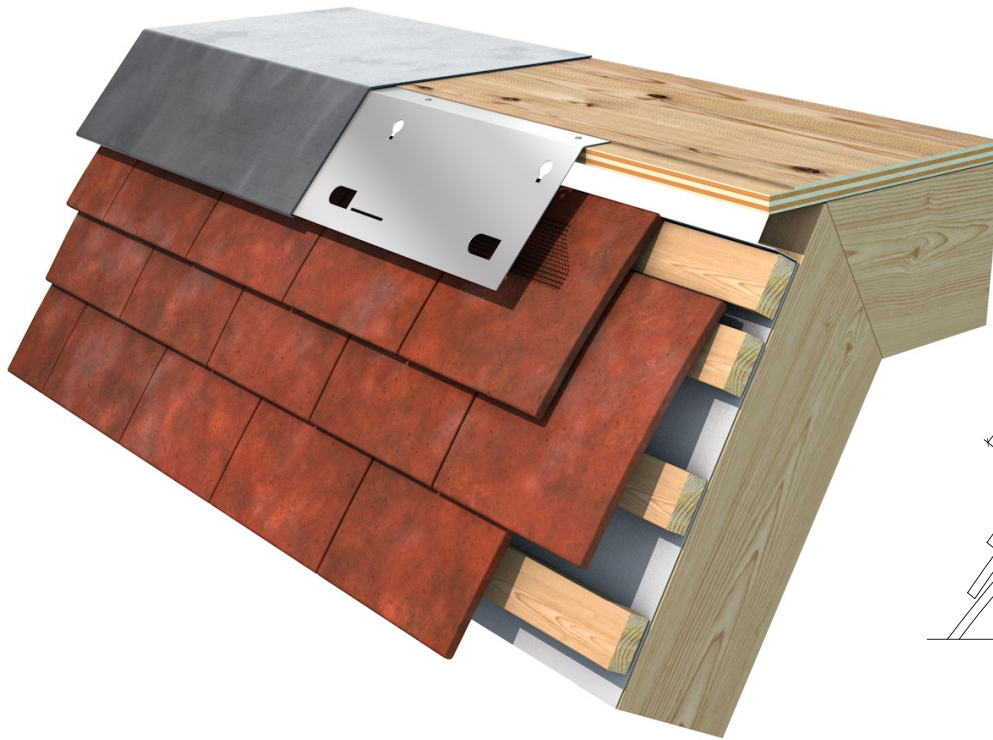
- Airtrak MV200 Mansard Ventilator for slated roof pitches 35°- 44° with the LPS 225 Low Pitch Soaker
- Airtrak MV200-E Increased Exposure Mansard Ventilator for slated roof pitches 35°-44° with the LPS 225 Low Pitch Soaker
- Airtrak MV200-FR Fire Resisting Mansard Ventilator for slated roof pitches 35°-44° with the 225 LPS Low Pitch Soaker

To specify for pitch 25°-34°

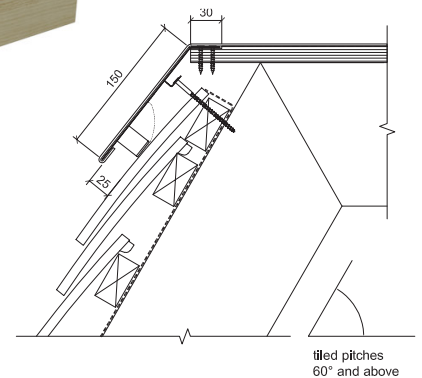
- Airtrak MV225 Mansard Ventilator for slated roof pitches of 25°- 34° with the LPS 225 Low Pitch Soaker
- Airtrak MV225-E Increased Exposure Mansard Ventilator for slated roof pitches of 25°-34° with the LPS 225 Low Pitch Soaker
- Airtrak MV225-FR Fire Resisting Mansard Ventilator for slated roof pitches of 25°-34° with the LPS 225 Low Pitch Soaker

Available from: Nicholson Roof Products, www.nicholsonsts.com
info@nicholsonsts.com, 01763 295828.

Airtrak MV Mansard Ventilator for Tiled Roofing



Airtrak MV150
60° - 90° pitch



Download product files here



Description

The MV Mansard Ventilator for tiled roofing is used to introduce ventilation into a flat roof where it falls out onto a tiled pitched roof. The stainless steel profile is covered by the flat roofing material or flashing. To maintain the integrity of the detail as the pitch reduces, the MV Mansard Ventilator is used with the LPS Low Pitch Soaker (page 50).

Material

Stainless steel, vinyl coated GRP insect mesh, intumescent material (FR version only)

Ventilation

25mm continuous air gap equivalent.

Dimensions

Cover to roof pitch

MV150 150mm, OA girth 180mm, length 1000mm
 MV200 200mm, OA girth 240mm, length 1000mm
 MV225 225mm, OA girth 275mm, length 1000mm

Compatibility

For use at the junction of a slated roof with metal, membrane or liquid roof coverings.

MV150 60°-90° pitch
 MV200 45°-59° pitch
 MV200 + LPS 35°-44° pitch
 MV225 + LPS 30°-34° pitch

Installation

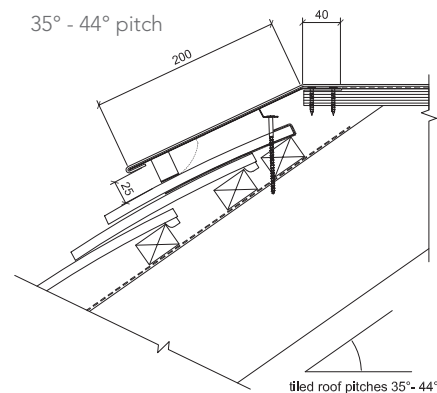
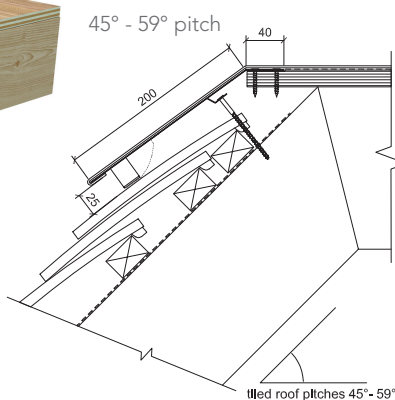
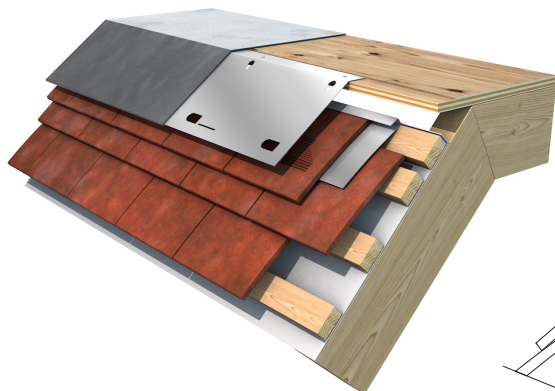
Where required, the LPS Low Pitch Soaker is installed underneath the eaves course of the tiling. The top edge is welded over the top of the eaves course to provide a check for wind blown rain. The MV Mansard Ventilator is fitted to a 1mm rebate in the edge of the flat roof with non-ferrous fixings and extends down over the slates. Additional secondary fixings should be used to provide resistance to wind uplift. Lengths should be butted together or lapped by 10mm if required. The ventilator can be mitred at corners and trimmed to length with a large pair of tin snips. The ventilator should be parallel to the surface of the top tile. For lead roof coverings, the lead covering is dressed down the face of the ventilator and welded around the lower edge. For membrane and liquid applied roof coverings, a suitable metal flashing material should be used to cover the ventilator welding around the lower edge and extending onto the roof to facilitate a lap joint in accordance with the manufacturers instructions. These flashings should not be installed in lengths exceeding 1m and have a minimum lap of 150mm at the joints. The use of the CF Clip Fast Clips should be considered where it is possible that the flashing might slip off the ventilator over time and the welt disengage from the lower edge (see page 49).

Please note

Standard Airtrak details as shown assume moderate weather conditions. Small amounts of moisture may be admitted under heavy storm conditions. Where more severe weather conditions are likely, consideration should be given to increasing the vertical overlap dimension to upstands and to slating or tiling to improve the integrity of the weathering detail. For slate and tile details we also recommend the use of the Airtrak LPS where appropriate. Contact Nicholson for further technical help.

Airtrak MV Mansard Ventilator for Tiled Roofing

Airtrak MV200



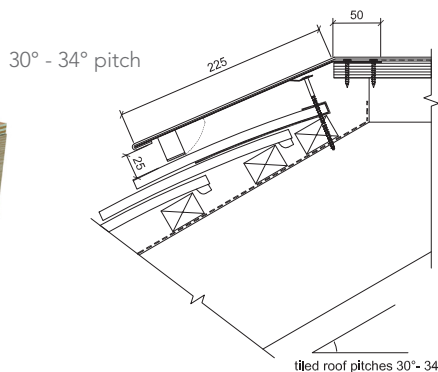
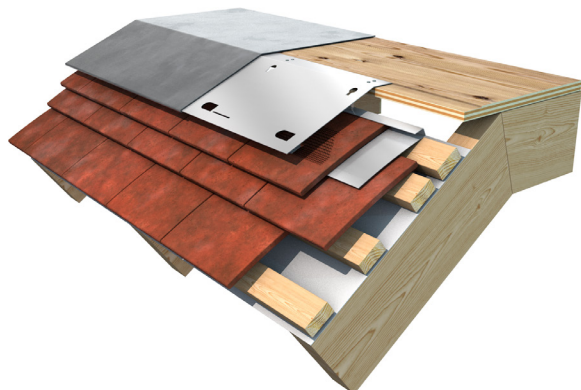
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Airtrak MV225



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To specify for pitch 60°-90°

Airtrak MV150 Mansard Ventilator for tiled roof pitches 60°-90°
 Airtrak MV150-E Increased Exposure Mansard Ventilator for tiled roof pitches 60°-90°
 Airtrak MV150-FR Fire Resisting Mansard Ventilator for tiled roof pitches 60°-90°

To specify for pitch 45°-59°

Airtrak MV200 Mansard Ventilator for tiled roof pitches of 45°-59°
 Airtrak MV200-E Increased Exposure Mansard Ventilator for tiled roof pitches of 45°-59°
 Airtrak MV200-FR Fire Resisting Mansard Ventilator for tiled roof pitches of 45°-59°

To specify for pitch 35°-44°

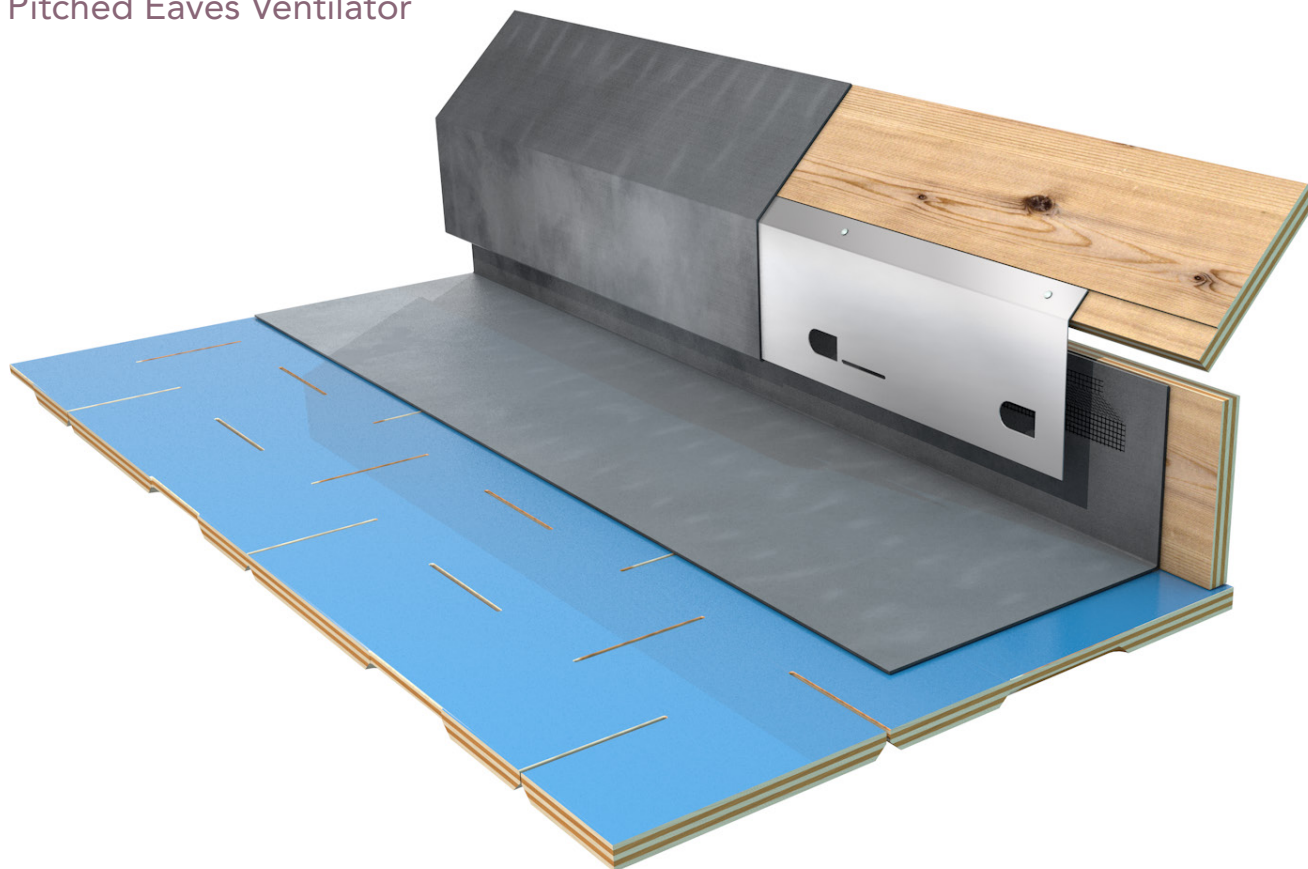
Airtrak MV200 Mansard Ventilator for tiled roof pitches 35°-44° with the LPS 150 Low Pitch Soaker
 Airtrak MV200-E Increased Exposure Mansard Ventilator for tiled roof pitches 35°-44° with the LPS 150 Low Pitched Soaker
 Airtrak MV200-FR Fire Resisting Mansard Ventilator for tiled roof pitches 35°-44° with the LPS 150 Low Pitch Soaker

To specify for pitch 30°-34°

Airtrak MV225 Mansard Ventilator for tiled roof pitches of 30°-34° with the LPS 150 Low Pitch Soaker
 Airtrak MV225-E Increased Exposure Mansard Ventilator for tiled roof pitches of 30°-34° with the LPS 150 Low Pitch Soaker
 Airtrak MV225-FR Fire Resisting Mansard Ventilator for tiled roof pitches of 30°-34° with the LPS 150 Low Pitch Soaker

Available from: Nicholson Roof Products, www.nicholsonsts.com
info@nicholsonsts.com, 01763 295828.

Airtrak PE100
Airtrak PE120
Airtrak PE150
Pitched Eaves Ventilator



Description

The PE Pitched Eaves Ventilator provides an unobtrusive ventilation path into the roof void at the bottom of a pitched roof slope. It is covered by the flashing or roofing material and is available in different downstand dimensions and supplied pre bent to a specified angle.

Material

Stainless steel, vinyl coated GRP insect mesh, intumescent material (FR version only)

Ventilation

25mm continuous air gap equivalent.

Dimensions

Downstand dimension:

PE100 100mm downstand, OA girth 125mm, length 1000mm

PE120 120mm downstand, OA girth 145mm, length 1000mm

PE150 150mm downstand, OA girth 180mm, length 1000mm

Compatibility

For providing ventilation in metal, membrane and liquid roof coverings.

Installation

The PE Pitched Eaves Ventilator is fitted to a 1mm rebate in the edge of the pitched roof deck with nonferrous fixings and extends down over a ventilated upstand. Additional secondary fixings should be used to provide resistance to wind uplift. Lengths should be butted together or lapped by 10mm if required. The ventilator can be mitred at corners and trimmed to length with a large pair of tin snips. The metal roof covering is dressed down the face of the ventilator and welted around the lower edge. For membrane and liquid applied roof coverings, a suitable metal

flashing material should be used to cover the ventilator welting around the lower edge and extend onto the roof to facilitate a lap joint in accordance with the manufacturers instructions. The use of the CF Clip Fast Clips should be considered where it is possible that the flashing might slip off the ventilator over time and the welt disengage from the lower edge (see page 49).

Please note

Standard Airtrak details as shown assume moderate weather conditions. Small amounts of moisture may be admitted under heavy storm conditions. Where more severe weather conditions are likely, consideration should be given to increasing the vertical overlap dimension to upstands and to slating or tiling to improve the integrity of the weathering detail. For slate and tile details we also recommend the use of the Airtrak LPS where appropriate. Contact Nicholson for further technical help.

To specify

Airtrak PE100 Pitched Eaves Ventilator

Airtrak PE100-E Increased Exposure Pitched Eaves Ventilator

Airtrak PE100-FR Fire Resisting Pitched Eaves Ventilator

Airtrak PE120 Pitched Eaves Ventilator

Airtrak PE120-E Increased Exposure Pitched Eaves Ventilator

Airtrak PE120-FR Fire Resisting Pitched Eaves Ventilator

Airtrak PE150 Pitched Eaves Ventilator

Airtrak PE150-E Increased Exposure Pitched Eaves Ventilator

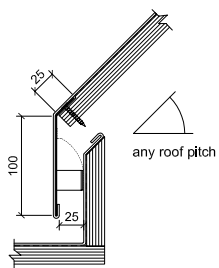
Airtrak PE150-FR Fire Resisting Pitched Eaves Ventilator

Available from: Nicholson Roof Products, www.nicholsonsts.com
info@nicholsonsts.com, 01763 295828.

Airtrak PE100
 Airtrak PE120
 Airtrak PE150
 Pitched Eaves Ventilator



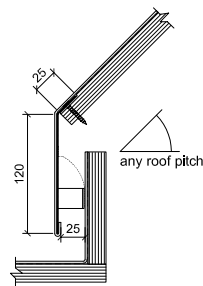
Airtrak PE100



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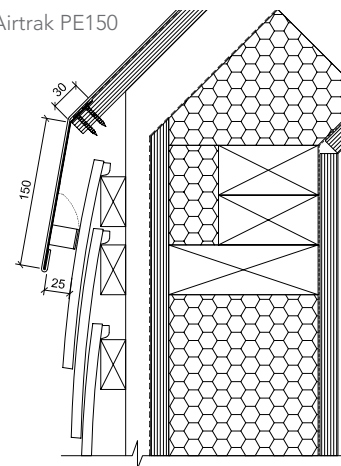
Airtrak PE120



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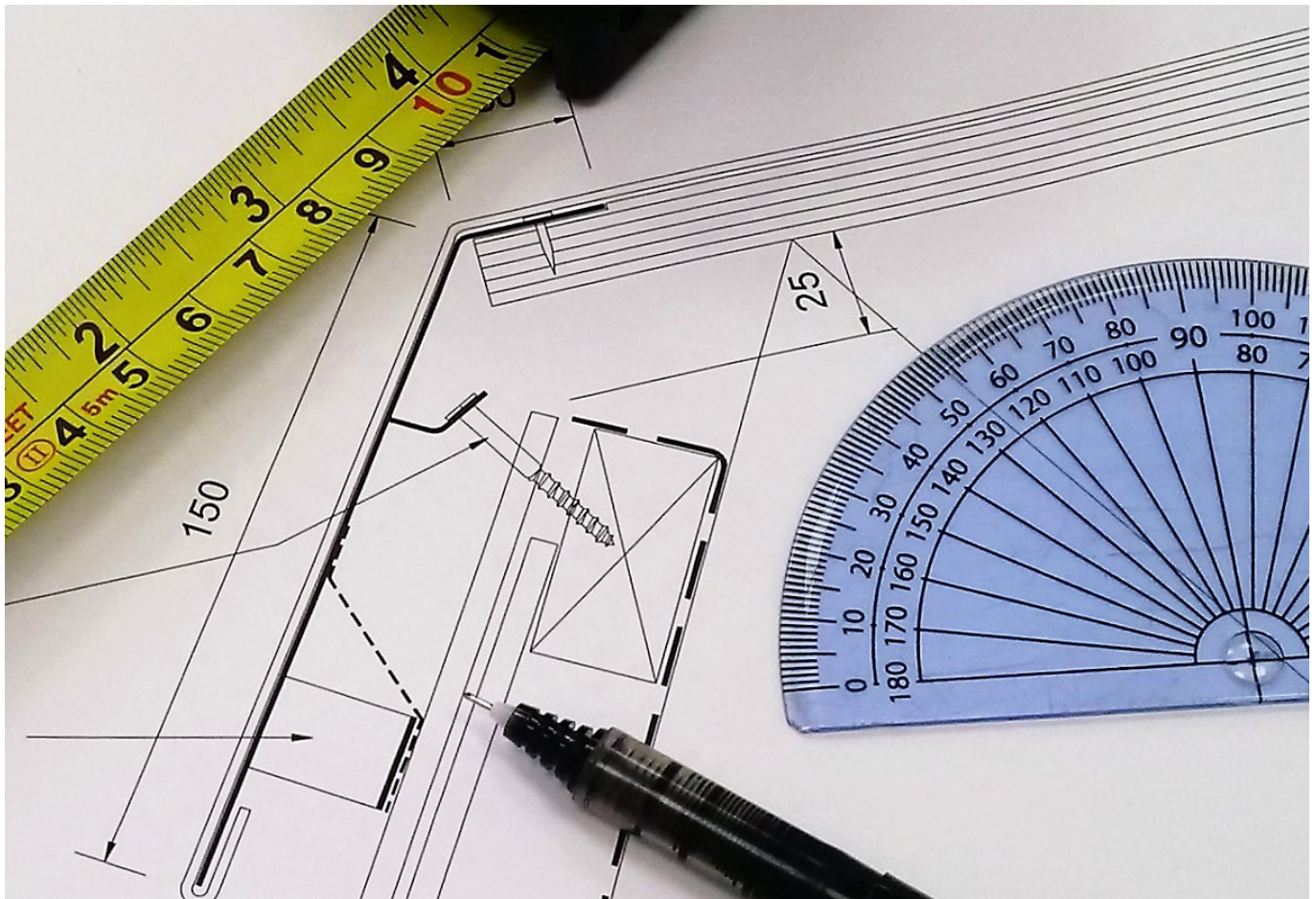
Airtrak PE150



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Airtrak Bespoke Ventilators



Bespoke ventilators

Whilst the Airtrak range of ventilators provide a proprietary solution for many of the commonly encountered roof ventilation details, it is recognised that it is not possible to cover every situation that will arise. Consequently, Nicholson provides a popular service whereby bespoke Airtrak ventilators can quickly and easily be specified and obtained to ensure that an effective ventilation detail is achieved.

For designers and specifiers

If this service is required at design or specification stage, an enquiry should be made of the Airtrak Technical team who will assist in providing a solution to the requirement. If necessary, a unique specification reference can be provided for inclusion on drawings and in specifications. This helps to ensure that the correct ventilator is the subject of tendering and ordering processes and that the correct ventilator arrives on site when required.

For contractors

Commonly, the need for a bespoke ventilator often only comes to light once on site as the ventilator needs to integrate with the existing or 'as built' parameters of the actual site conditions. Again, the Airtrak Technical team are willing to work with contractors to achieve the best solution.

Availability

Bespoke ventilators can normally be produced within a day or two of the design being agreed with a majority being despatched for a next day delivery. Using our CNC controlled fabrication processes we can fabricate to virtually any design within the capabilities of the stainless steel sheet metal we use.

Bespoke ventilator enquiries

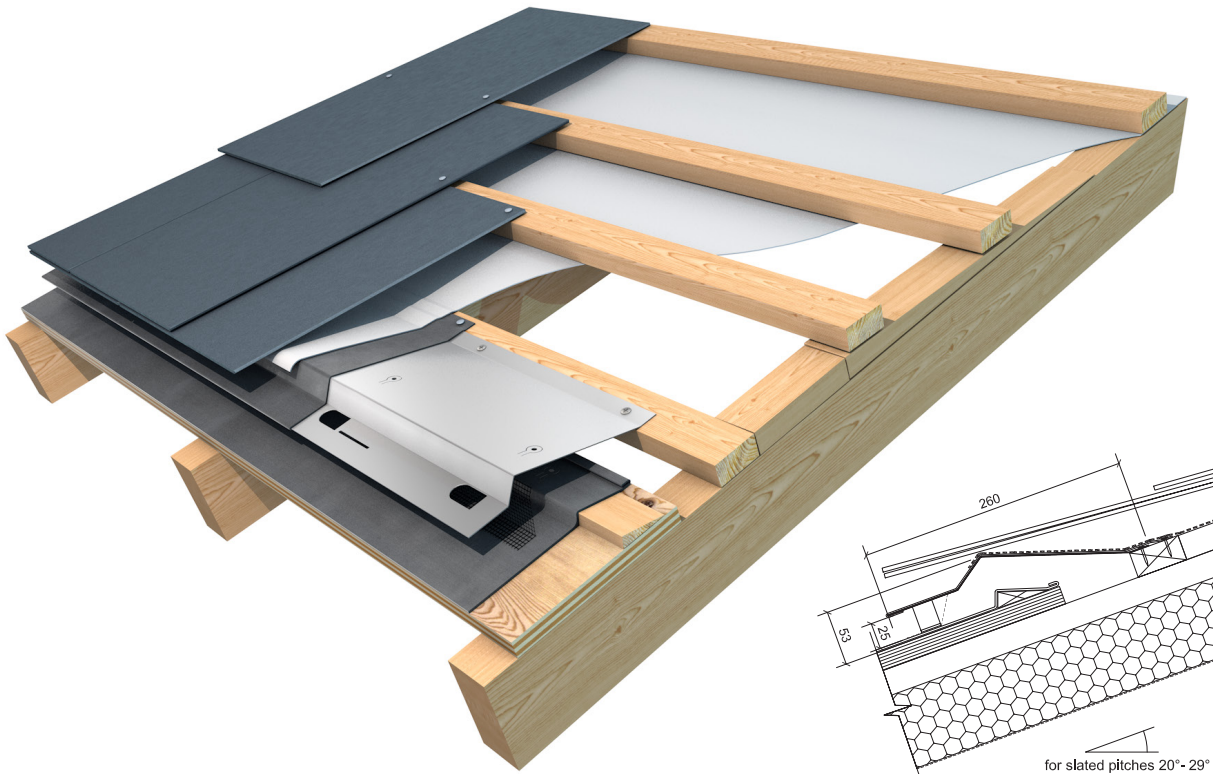
It is recommended that the initial enquiry is made by email to technical@nicholsonsts.com accompanied by a section or drawing showing the requirement. The Airtrak Technical Team will then respond accordingly.

Eton College, Windsor, Berkshire
Products used: Airtrak-VA200, Airtrak-VR200



Linear ventilators for slated and tiled roofing

Airtrak LB20
Layboard Ventilator
 for slated roof pitches of 20°-29°



Download product files here



Description

The LB20 Layboard Ventilator is for slated roofs from pitch 20°-29°. The ventilator introduces 25mm ventilation over the layboard into the roof void and acts as a rest for the eaves course. The LB20 requires a lead cover flashing and should be laid in a line parallel to the slate coursing.

Material

Stainless steel, vinyl coated GRP insect mesh, intumescent material (FR version only)

Ventilation

25mm continuous air gap equivalent.

Dimensions

OA girth 275mm, length 1000mm

Compatibility

For use at the junction of a slated roof with a leadlined gutter or flat roof. For roof pitches of 20°-29°.

Installation

The LB20 is fitted to a 25mm batten running parallel with the layboard and the slate coursing battens. Note that this ventilator should be installed in a straight line which remains parallel to the slating battens. If the ventilator is installed so that it follows the rake of the gutter sole or steps up as the gutter widens, the kick produced by the ventilator can cause the slates to sit unevenly. The ventilator can be mitred at corners and trimmed to length with a large pair of tin snips. The LB20 should be covered with

a code 4 or 5 lead flashing which is nailed to the batten and welted around the bottom edge of the ventilator. To minimise the kick effect that the LB20 has on the slates at the eaves, a 25mm sprocket can be used under the lower roofing battens as shown in the section on this page. The roofing membrane should be routed over the ventilator before the slating is commenced. Some support for the roofing membrane may be required to prevent backfall and ponding occurring. Ensure that a minimum of 25mm airflow is achieved throughout the detail.

Please note

Standard Airtrak details as shown assume moderate weather conditions. Small amounts of moisture may be admitted under heavy storm conditions. Where more severe weather conditions are likely, consideration should be given to increasing the vertical overlap dimension to upstands and to slating or tiling to improve the integrity of the weathering detail. For slate and tile details we also recommend the use of the Airtrak LPS where appropriate. Contact Nicholson for further technical help.

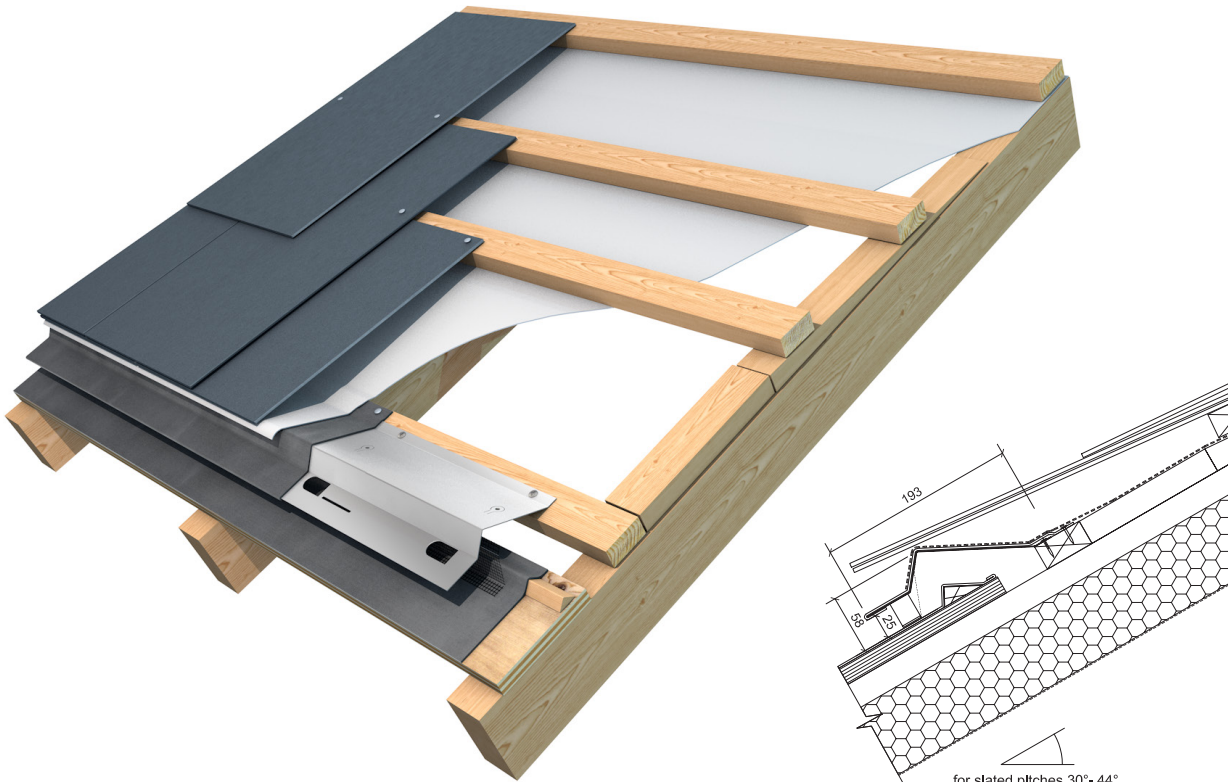
To specify

Airtrak LB20 Layboard Ventilator for slated roof pitches 20°-29°
 Airtrak LB20-E Increased Exposure Layboard Ventilator for slated roof pitches 20°-29°

Airtrak LB20-FR Fire Resisting Layboard Ventilator for slated roof pitches 20°-29°

Available from: Nicholson Roof Products, www.nicholsonsts.com
info@nicholsonsts.com, 01763 295828.

Airtrak LB30
Layboard Ventilator
for roof pitches of 30°-44°



Download product files here



Description

The LB30 Layboard Ventilator is for slated or tiled roofs from pitch 30°-44°. The ventilator introduces 25mm ventilation over the layboard into the roof void and acts as a rest for the eaves course. The LB30 requires a lead cover flashing and should be laid in a line parallel to the slate coursing.

Material

Stainless steel, vinyl coated GRP insect mesh, intumescent material (FR version only)

Ventilation

25mm continuous air gap equivalent.

Dimensions

OA girth 220mm, length 1000mm

Compatibility

For use at the junction of a slated roof with a leadlined gutter or flat roof. For roof pitches of 30°-44°.

Installation

The LB30 is fitted to a 25mm batten running parallel with the layboard and the slate coursing battens. Note that this ventilator should be installed in a straight line which remains parallel to the slating battens. Any deviation will cause the slates to sit unevenly. The ventilator can be mitred at corners and trimmed to length with a large pair of tin snips. The LB30 should be covered with a code 4 or 5 lead flashing which is nailed to the batten and welted

around the bottom edge of the ventilator. To minimise the kick effect that the LB30 has on the slates at the eaves, a 25mm sprocket can be used under the lower roofing battens as shown in the section on this page.

The roofing membrane should be routed over the ventilator before the slating is commenced. Some support for the roofing membrane may be required to prevent backfall and ponding occurring. Ensure that a minimum of 25mm airflow is achieved throughout the detail.

Please note

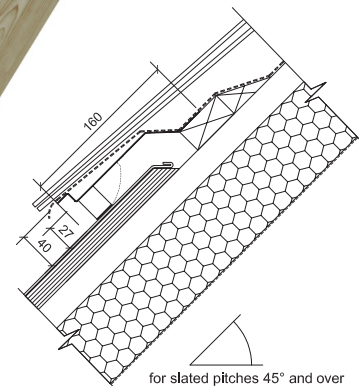
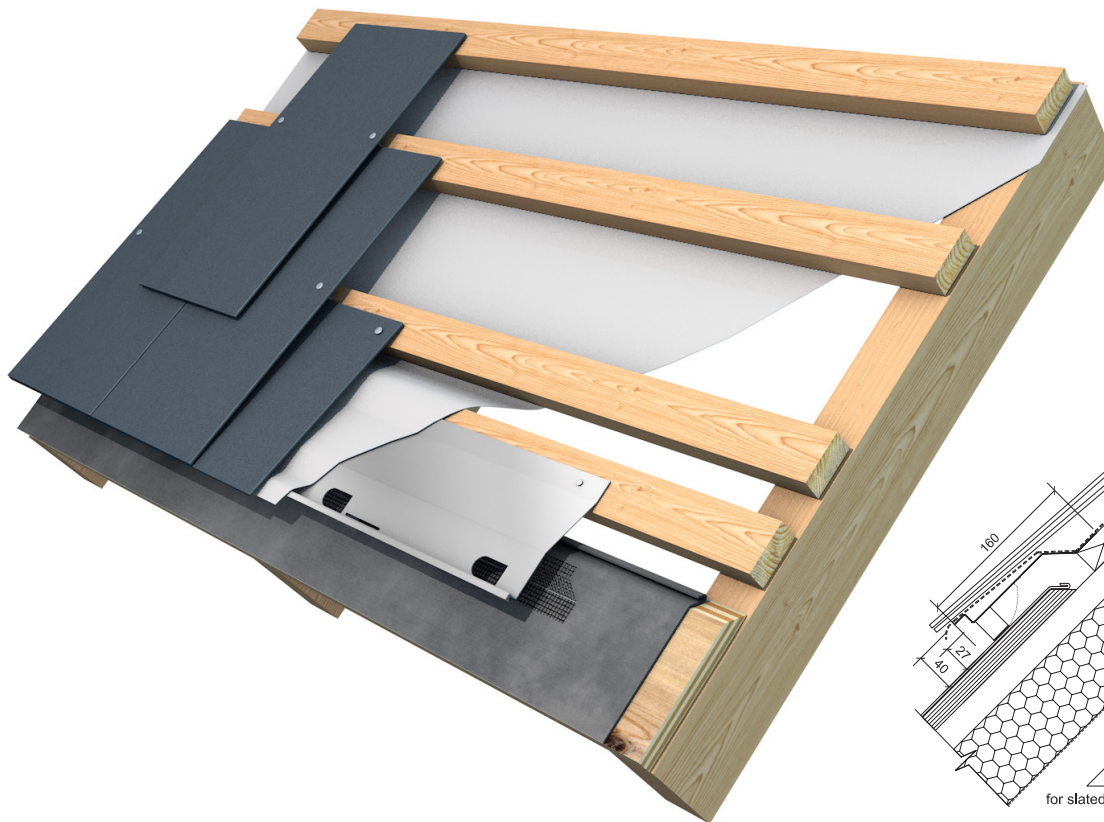
Standard Airtrak details as shown assume moderate weather conditions. Small amounts of moisture may be admitted under heavy storm conditions. Where more severe weather conditions are likely, consideration should be given to increasing the vertical overlap dimension to upstands and to slating or tiling to improve the integrity of the weathering detail. For slate and tile details we also recommend the use of the Airtrak LPS where appropriate. Contact Nicholson for further technical help.

To specify

Airtrak LB30 Layboard Ventilator for pitches 30°-44°
Airtrak LB30-E Increased Exposure Layboard Ventilator for pitches 30°-44°
Airtrak LB30-FR Fire Resisting Layboard Ventilator for pitches 30°-44°

Available from: Nicholson Roof Products, www.nicholsonsts.com
info@nicholsonsts.com, 01763 295828.

Airtrak LB45
Layboard Ventilator
for roof pitches of 45° and over



Download product files here



Description

The LB45 Layboard Ventilator is for slated and tiled roofs and can be used to introduce ventilation over the layboard into the roof void. It acts as a rest for the eaves course and provides ventilation with minimal visual effect.

Material

Stainless steel, vinyl coated GRP insect mesh, intumescent material (FR version only)

Ventilation

25mm continuous air gap equivalent.

Dimensions

OA girth 180mm, length 1000mm

Compatibility

For use at the junction of a slated or tiled roof with a leadlined gutter or flat roof. For roof pitches of 45° and above.

Installation

The LB45 is fitted to a 25mm batten running parallel with the layboard and the slate coursing battens. Note that this ventilator should be installed in a straight line which remains parallel to the slating battens. Any deviation will cause the slates to sit unevenly. The ventilator can be mitred at corners and trimmed to length with a large pair of tin snips.

The roofing membrane should be routed over the ventilator before the slating is commenced. Some support for the roofing membrane may be required to prevent backfall and ponding occurring. Ensure that a minimum of 25mm airflow is achieved throughout the detail.

Please note

Standard Airtrak details as shown assume moderate weather conditions. Small amounts of moisture may be admitted under heavy storm conditions. Where more severe weather conditions are likely, consideration should be given to increasing the vertical overlap dimension to upstands and to slating or tiling to improve the integrity of the weathering detail. For slate and tile details we also recommend the use of the Airtrak LPS where appropriate. Contact Nicholson for further technical help.

To specify

Airtrak LB45 Layboard Ventilator for pitches over 45°
Airtrak LB45-E Increased Exposure Layboard Ventilator for pitches over 45°
Airtrak LB45-FR Fire Resisting Layboard Ventilator for pitches over 45°

Available from: Nicholson Roof Products, www.nicholsonsts.com
info@nicholsonsts.com, 01763 295828.

Airtrak RTV
Ridge Tile Ventilator



Description

The RTV Ridge Tile Ventilator enables the ventilation of most ridge tiles using traditional wet laid methods. This is especially useful where the existing ridge needs to be retained or on heritage properties where a dry ridge system may be inappropriate. The RTV has a certified and storm rated weather strip to the underside. This serves to check wind driven rain on face of the tile or slates and also to seal any fixings through into the top batten. An expanded stainless steel mesh on the face of the RTV provides a key for the mortar bedded ridge tiles.

Material

Stainless steel, vinyl coated GRP insect mesh, stainless steel expanded metal lath, intumescent material (FR version only)

Ventilation

5mm continuous air gap equivalent.

Dimensions

OA girth 125mm, length 1000mm.

Compatibility

Providing ventilation to a tiled roof ridge at a pitch of over 35° in conjunction with the Airtrak LPS150 Low Pitch Soaker.

Providing ventilation to a slated roof ridge at a pitch of over 25° in conjunction with the Airtrak LPS225 Low Pitch Soaker.

Installation

The roofing membrane under the slates or tiling should be turned up the back of the topmost batten to reveal a 10mm air gap into the ventilated roof void. The Airtrak LPS Low Pitch Soaker is installed underneath the top course of slates or tiles with the 25mm bend facing upwards. The top course of slates or tiles are then fixed in position through the LPS. The 25mm section of the LPS is the welted over the top of the slates or tiles to form a welted return to catch any wind driven rain on the surface of

the slates or tiles. The RTV is positioned over the top row of tiles or slates to suit the size of ridge tile being used. The fixing tab can be bent to the correct angle allowing it to be secured with non ferrous fixings into the ridge. Further fixing should be made into the top batten using the holes provided in the RTV and drilling through the slates or tiles. The ridge tiles are then cemented into position in the traditional way.

Please note

Standard Airtrak details as shown assume moderate weather conditions. Small amounts of moisture may be admitted under heavy storm conditions. Where more severe weather conditions are likely, consideration should be given to increasing the vertical overlap dimension to upstands and to slating or tiling to improve the integrity of the weathering detail. For slate and tile details we also recommend the use of the Airtrak LPS where appropriate. Contact Nicholson for further technical help.

To specify for tiled roof

Airtrak RTV Ridge Tile Ventilator for tiled roof pitches 35° and over

Airtrak RTV-E Increased Exposure Ridge Tile Ventilator for tiled roof pitches 35° and over

Airtrak RTV-FR Fire Resisting Ridge Tile Ventilator for tiled roof pitches 35° and over

To specify for slated roof

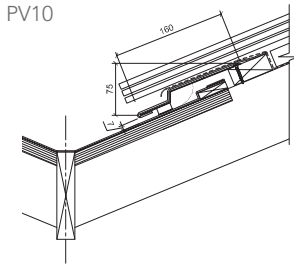
Airtrak RTV Ridge Tile Ventilator for slated roof pitches 25° and over

Airtrak RTV-E Increased Exposure Ridge Tile Ventilator for slated roof pitches 25° and over

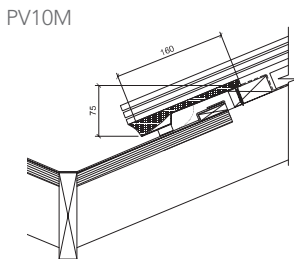
Airtrak RTV-FR Fire Resisting Ridge Tile Ventilator for slated roof pitches 25° and over

Available from: Nicholson Roof Products, www.nicholsonsts.com
info@nicholsonsts.com, 01763 295828.

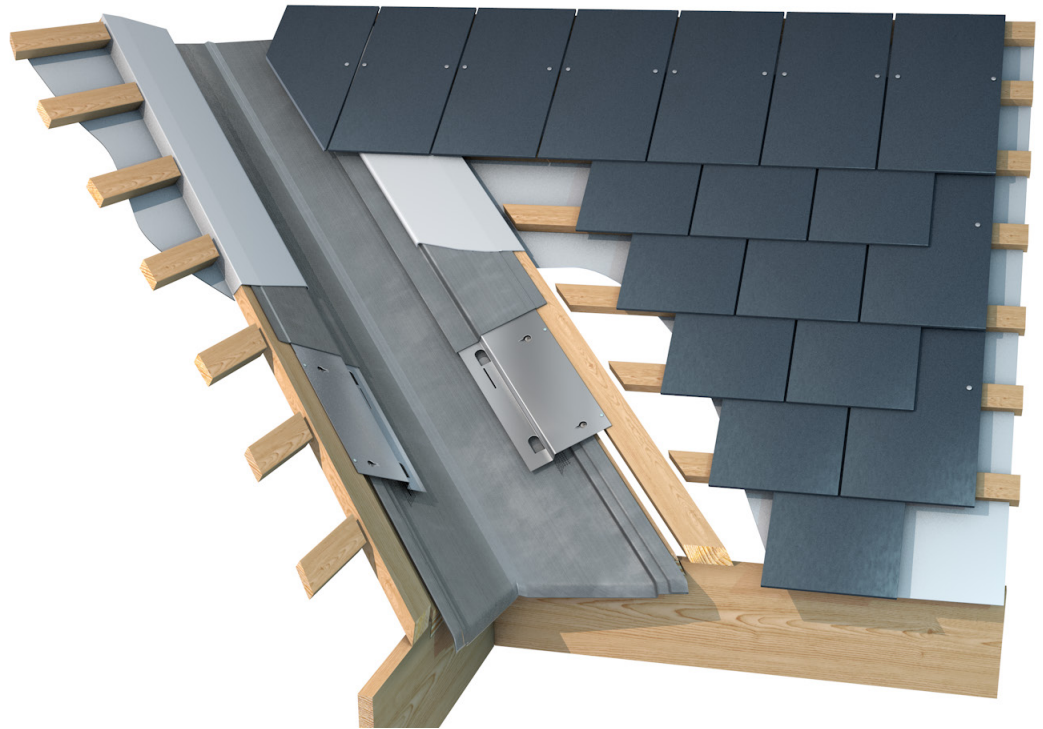
Airtrak PV10
Airtrak PV10-M
Pitched Valley Ventilator



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Download product files here



Description

The PV10 and PV10M Pitched Valley Ventilators provide a 10mm continuous ventilation detail to a pitched valley between two roof pitches. The PV10M has an additional expanded metal mesh element for where the verge of the valley needs to be bedded on cement.

Material

Stainless steel, vinyl coated GRP insect mesh, intumescent material (FR version only)

Ventilation

PV10 5mm continuous air gap equivalent
PV10M 5mm continuous air gap equivalent

Dimensions

OA girth 170mm, length 1000mm.

Compatibility

For providing ventilation in a tiled or slated pitched valley down to 40° pitch. Lower pitches may be accommodated depending upon using wider slates or tiles if available.

Installation

The valley boards must be laid between the rafters and the valley lining should terminate over a 10mm water check batten. The PV Ventilator is fitted to a 25mm batten running parallel to the valley but set back by 10mm to allow the ventilation into the rafter void. Lengths should be butted together. The ventilator can be mitred at corners and trimmed to length with a large pair of tin snips. For the PV10 Ventilator a code 4 or 5 lead flashing is dressed to

the ventilator welting around the exposed edge and being nailed to the timber batten. Ensure that the roofing battens are stopped short of the valley batten by 10mm to allow drainage. The roofing membrane should be brought out over the ventilator and trimmed back after tiling or slating. For the PV10-M Ventilator, the valley verge tiling is bedded on cement on the expanded metal mesh.

Please note

Standard Airtrak details as shown assume moderate weather conditions. Small amounts of moisture may be admitted under heavy storm conditions. Where more severe weather conditions are likely, consideration should be given to increasing the vertical overlap dimension to upstands and to slating or tiling to improve the integrity of the weathering detail. For slate and tile details we also recommend the use of the Airtrak LPS where appropriate. Contact Nicholson for further technical help.

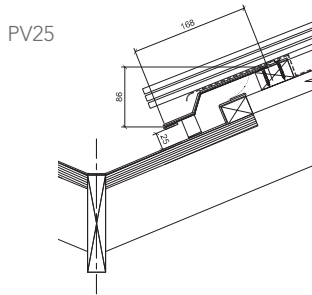
To specify

Airtrak PV10 Pitched Valley Ventilator 5mm
Airtrak PV10-E Increased Exposure Pitched Valley Ventilator 5mm
Airtrak PV10-FR Fire Resisting Pitched Valley Ventilator 5mm

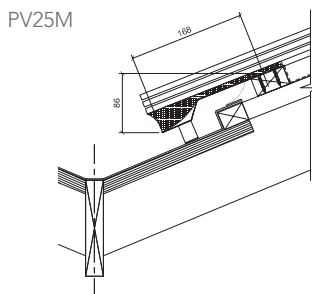
Airtrak PV10M Pitched Valley Ventilator 5mm - mortar bed
Airtrak PV10M-E Increased Exposure Pitched Valley Ventilator 5mm - mortar bed
Airtrak PV10M-FR Fire Resisting Pitched Valley Ventilator 5mm - mortar bed

Available from: Nicholson Roof Products, www.nicholsonsts.com
info@nicholsonsts.com, 01763 295828.

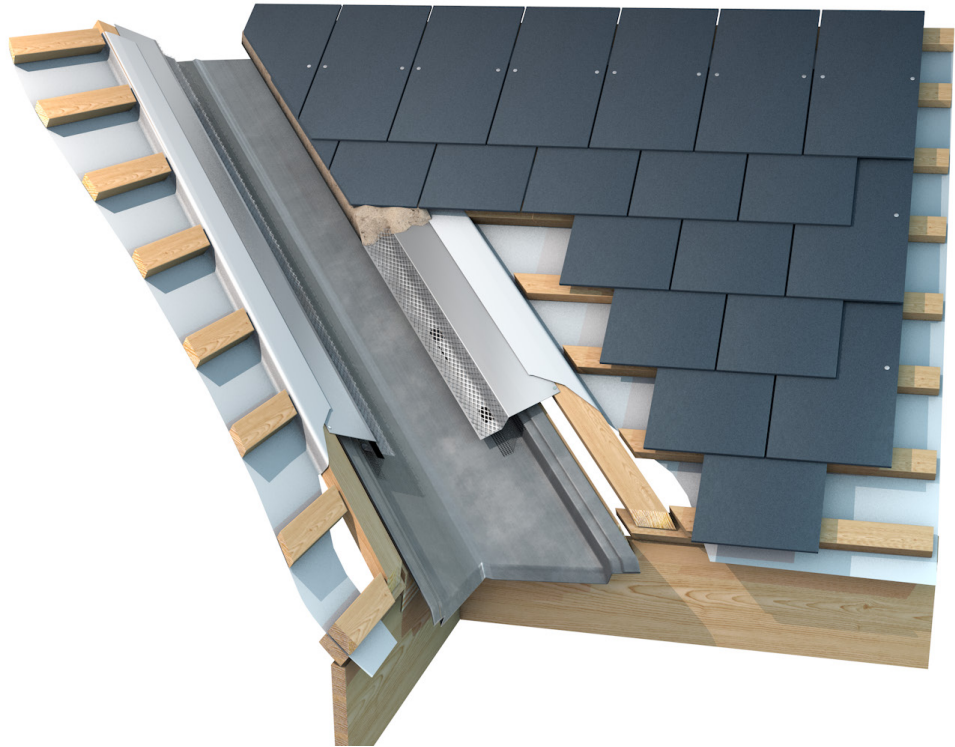
Airtrak PV25
Airtrak PV25-M
Pitched Valley Ventilator



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Description

The PV25 and PV25M Pitched Valley Ventilators provide a 25mm continuous ventilation detail to a pitched valley between two roof pitches. The PV25M has an additional expanded metal mesh element for where the verge of the valley needs to be bedded on cement.

Material

Stainless steel, vinyl coated GRP insect mesh, intumescent material (FR version only)

Ventilation

25mm continuous air gap equivalent.

Dimensions

OA girth 180mm, length 1000mm.

Compatibility

For providing ventilation in a tiled or slated pitched valley down to 40° pitch. Lower pitches may be accommodated depending upon using wider slates or tiles if available. It should be noted that 25mm counterbattens are required for this product – see sections.

Installation

The valley boards must be laid between the rafters and the valley lining should terminate over a 25mm water check batten. The PV Ventilator is fitted to a 25mm batten running parallel to the valley but set back by 25mm to allow the ventilation into the rafter void. Lengths should be butted together. The ventilator can be mitred at corners and trimmed to length with a large pair of tin snips.

For the PV25-M Ventilator a code 4 or 5 lead flashing is dressed to the ventilator welting around the exposed edge and being nailed to the timber batten. Ensure that the roofing battens are stopped short of the valley batten by 10mm to allow drainage. The roofing membrane should be brought out over the ventilator and trimmed back after tiling or slating. For the PV25-M Ventilator, the valley verge tiling is bedded on cement on the expanded metal mesh.

Please note

Standard Airtrak details as shown assume moderate weather conditions. Small amounts of moisture may be admitted under heavy storm conditions. Where more severe weather conditions are likely, consideration should be given to increasing the vertical overlap dimension to upstands and to slating or tiling to improve the integrity of the weathering detail. For slate and tile details we also recommend the use of the Airtrak LPS where appropriate. Contact Nicholson for further technical help.

To specify

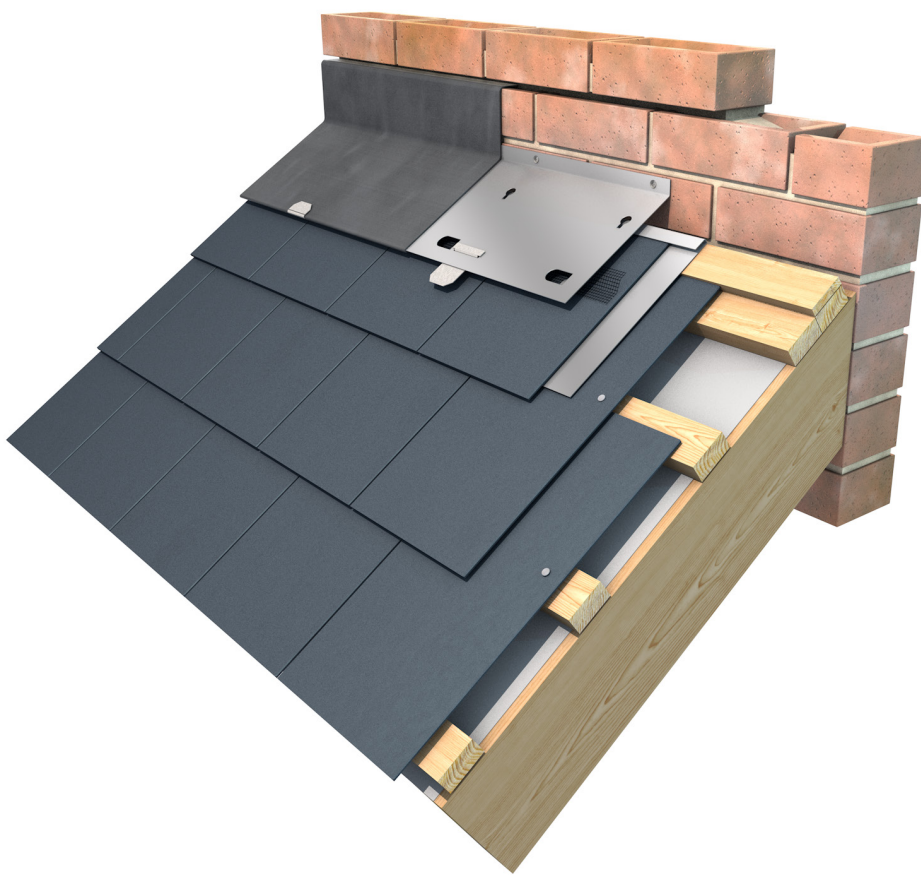
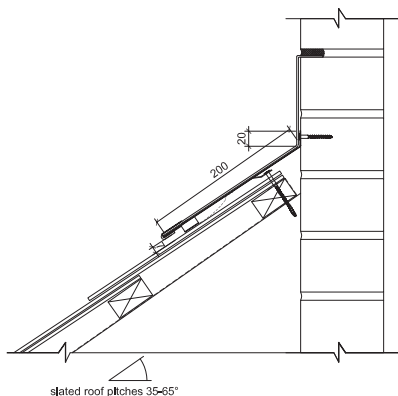
Airtrak PV25 Pitched Valley Ventilator 25mm
Airtrak PV25-E Increased Exposure Pitched Valley Ventilator 25mm
Airtrak PV25-FR Fire Resisting Pitched Valley Ventilator 25mm

Airtrak PV25M Pitched Valley Ventilator 25mm - mortar bed
Airtrak PV25M-E Increased Exposure Pitched Valley Ventilator 25mm - mortar bed
Airtrak PV25M-FR Fire Resisting Pitched Valley Ventilator 25mm - mortar bed

Available from: Nicholson Roof Products, www.nicholsonsts.com
info@nicholsonsts.com, 01763 295828.

Airtrak VA Ventilated Apron for slated and tiled roofing

VA200 35° - 65° pitch, slate



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Description

The VA Ventilated Apron is used to introduce ventilation at the head of slated or tiled pitch where it abuts a wall. The stainless steel profile is supplied pre-bent to suit the roof pitch and is fixed to the abutment wall and covered with a flashing. To maintain the integrity of the detail as the pitch reduces, the VA Ventilated Apron is used with the LPS Low Pitch Soaker (see page 50). The VA Ventilated Apron is supplied pre-bent to the correct angle which should be advised at the time of order.

Material

Stainless steel, vinyl coated GRP insect mesh, intumescent material (FR version only)

Ventilation

5mm continuous air gap equivalent

Dimensions

Cover to roof pitch

VA200 200mm OA girth 220mm, length 1000mm

VA250 250mm OA girth 275mm, length 1000mm

Compatibility

For use at the junction of a slated or tiled roof with an abutment.

Slate:

VA200 35°-65° pitch

VA200 + LPS225 25°-34° pitch

VA250 + LPS225 20°-24° pitch

Tile:

VA200 45°-65° pitch

VA200 + LPS 28°-44° pitch

Installation

Where necessary, the LPS Low Pitch Soaker is installed underneath the eaves course of the slating or tiling. The top edge is welded over the top of the eaves course to provide a check for wind blown rain. The VA Ventilated Apron is fitted to the abutment wall using non ferrous fixings and extends down over the slates or tiles. Additional secondary fixings should be used in the ventilator to provide resistance to wind uplift. Lengths should be butted together or lapped by 10mm if required. The ventilator can be mitred at corners and trimmed to length with a large pair of tin snips. The ventilator should be parallel to the surface of the top slate. A metal flashing should be used to weather the ventilator and chased into the wall above the ventilator. The flashing is dressed down the face of the ventilator and welded around the lower edge. The use of the CF Clipfast Clips is recommended to restrain the flashing from slipping down the face of the ventilator (see page 49).

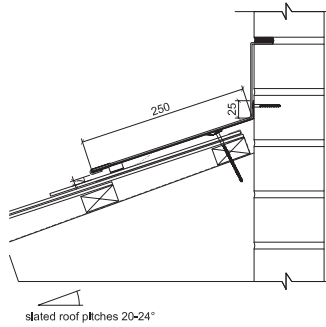
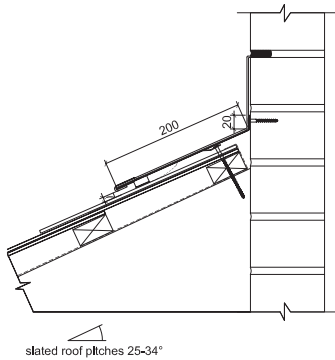
Please note

Standard Airtrak details as shown assume moderate weather conditions. Small amounts of moisture may be admitted under heavy storm conditions. Where more severe weather conditions are likely, consideration should be given to increasing the vertical overlap dimension to upstands and to slating or tiling to improve the integrity of the weathering detail. For slate and tile details we also recommend the use of the Airtrak LPS where appropriate. Contact Nicholson for further technical help.

Airtrak VA
Ventilated Apron for
slated and tiled roofing

VA200 25° - 34° pitch, slate

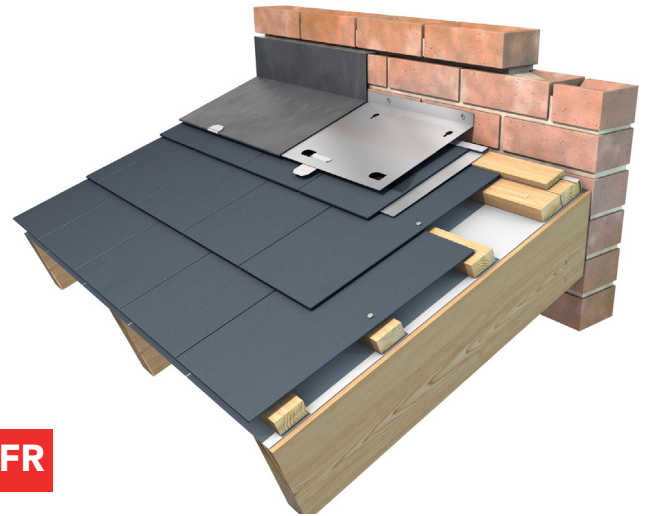
VA250 20° - 24° pitch, slate



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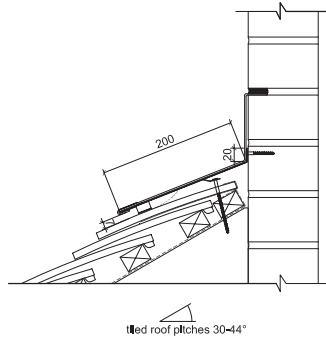
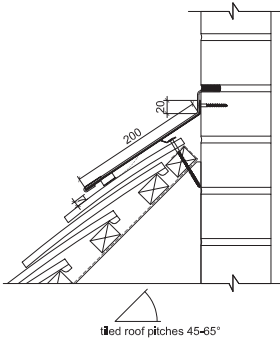


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VA200 45° - 65° pitch, tile

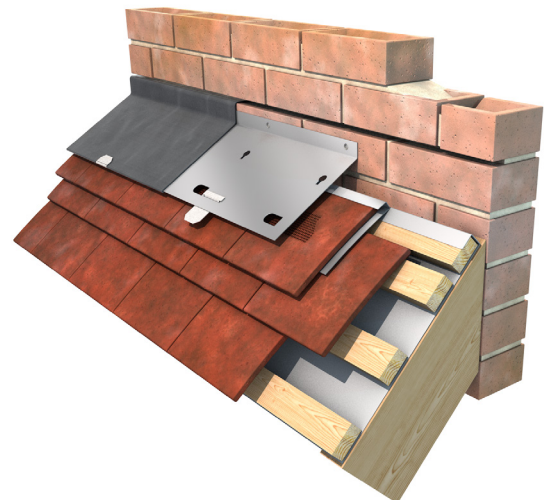
VA200 30° - 44° pitch, tile



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To specify for slated roof pitch 35°-65°

Airtrak VA200 Ventilated Abutment for slated roof pitches 35°-65°
Airtrak VA200-E Increased Exposure Ventilated Abutment for slated roof pitches 35°-65°
Airtrak VA200-FR Fire Resisting Ventilated Abutment for slated roof pitches 35°-65°

To specify for slated roof pitch 25°-34°

Airtrak VA200 Ventilated Abutment for slated roofs 25°-34° with LPS 225 Low Pitch Soaker
Airtrak VA200-E Increased Exposure Ventilated Abutment for slated roofs 25°-34° with LPS 225 Low Pitch Soaker.
Airtrak VA200-FR Fire Resisting Ventilated Abutment for slated roofs 25°-34° with LPS 225 Low Pitch Soaker

To specify for slated roof pitch 20°-24°

Airtrak VA250 Ventilated Abutment for slated roof pitches 20°-24° with LPS 225 Low Pitch Soaker.
Airtrak VA250-E Increased Exposure Ventilated Abutment for slated roof pitches 20°-24° with LPS 225 Low Pitch Soaker.
Airtrak VA250-FR Fire Resisting Ventilated Abutment for slated roof pitches 20°-24° with LPS 225 Low Pitch Soaker.

To specify for tiled roof pitch 45°-65°

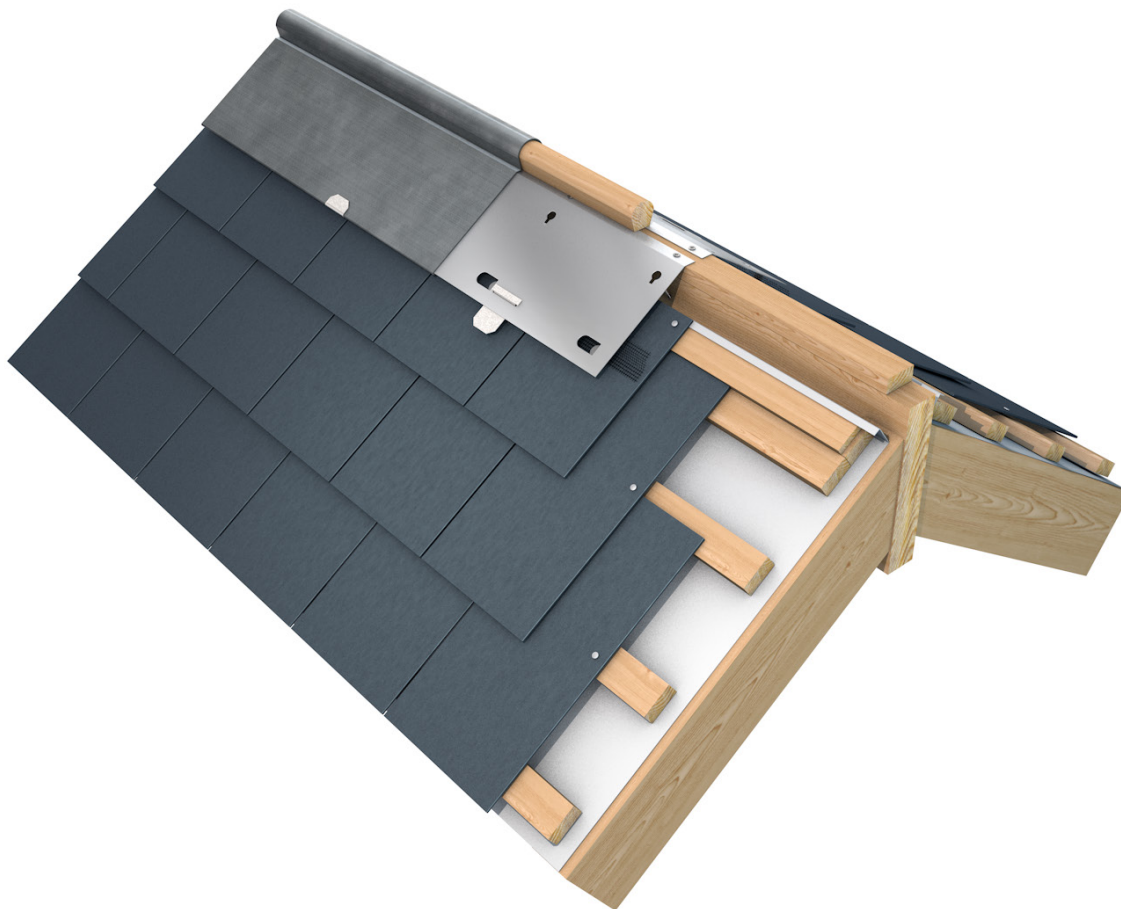
Airtrak VA200 Ventilated Abutment for tiled roof pitches 45°-65°
Airtrak VA200-E Increased Exposure Ventilated Abutment for tiled roof pitches 45°-65°
Airtrak VA200-FR Fire Resisting Ventilated Abutment for tiled roof pitches 45°-65°

To specify for tiled roof pitch 30°-34°

Airtrak VA200 Ventilated Abutment for tiled roof pitches 30°-34° with LPS 150 Low Pitch Soaker
Airtrak VA200-E Increased Exposure Ventilated Abutment for tiled roof pitches 30°-34° with LPS 150 Low Pitch Soaker
Airtrak VA200-FR Fire Resisting Ventilated Abutment for tiled roof pitches 30°-34° with LPS 150 Low Pitch Soaker

Available from: Nicholson Roof Products, www.nicholsonsts.com
info@nicholsonsts.com, 01763 295828.

Airtrak VR
Ventilated Ridge
 for slated and tiled roofing



Description

The VR Ventilated Ridge is used to introduce ventilation at the head of slated or tiled pitch where it reaches the ridge. The stainless steel profile is supplied pre bent to suit the roof pitch and is fixed to the ridge timber and covered with the ridge flashing. To maintain the integrity of the detail as the pitch reduces, the VR Ventilated Ridge is used with the LPS Low Pitch Soaker (see page 50).

Material

Stainless steel, vinyl coated GRP insect mesh, intumescent material (FR version only)

Ventilation

5mm continuous air gap equivalent.

Dimensions

Cover to roof pitch

VR200 200mm, OA girth 220mm, length 1000mm

VR250 250mm, OA girth 275mm, length 1000mm

Compatibility

For use at the junction of a slated or tiled roof to provide ventilation at the ridge.

Slate:

VR200 35°-65° pitch

VR200 + LPS225 25°-34° pitch

VR250 + LPS 225 20°-24° pitch

Tile:

VR200 45°-65° pitch

VR200 + LPS 28°-44° pitch

Installation

Where necessary, the LPS Low Pitch Soaker is installed underneath the eaves course of the slating or tiling. The top edge is welted over the top of the eaves course to provide a check for wind blown rain. The VR Ventilated Ridge is fitted to the ridge timbers using non ferrous fixings and extends down over the slates or tiles. Additional secondary fixings should be used in the ventilator to provide resistance to wind uplift.

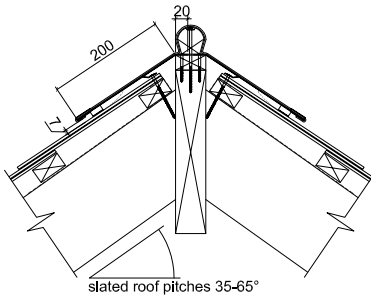
Lengths should be butted together or lapped by 10mm if required. The ventilator can be mitred at corners and trimmed to length with a large pair of tin snips. The ventilator should be parallel to the surface of the top slate. A metal flashing should be used to weather the ridge and dressed down over the ventilator and welted around the lower edge. The use of the CF Clipfast Clips is recommended to restrain the flashing from slipping down the face of the ventilator (see page 49).

Please note

Standard Airtrak details as shown assume moderate weather conditions. Small amounts of moisture may be admitted under heavy storm conditions. Where more severe weather conditions are likely, consideration should be given to increasing the vertical overlap dimension to upstands and to slating or tiling to improve the integrity of the weathering detail. For slate and tile details we also recommend the use of the Airtrak LPS where appropriate. Contact Nicholson for further technical help.

Airtrak VR Ventilated Ridge for slated and tiled roofing

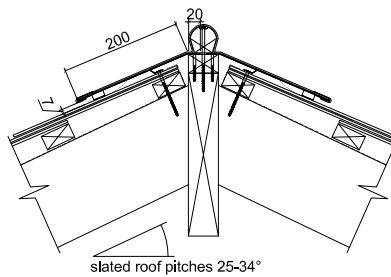
VR200 35° - 65° pitch, slate



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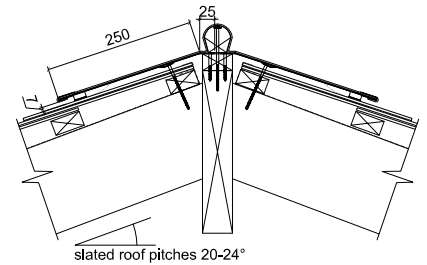
VR200 25° - 34° pitch, slate



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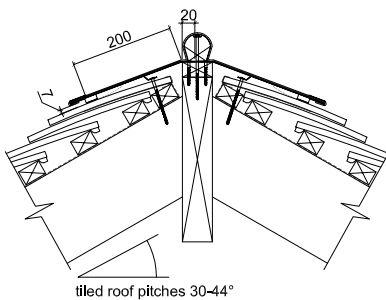
VR250 20° - 24° pitch, slate



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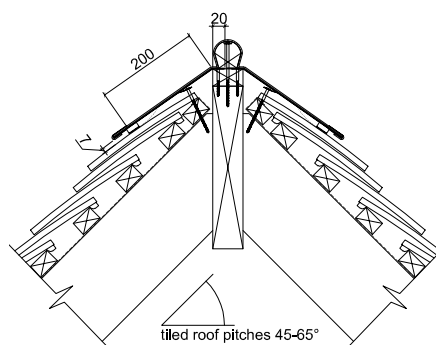
VR200 30° - 44° pitch, tile



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VR200 45° - 65° pitch, tile



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To specify for slated roof pitch 35°-65°

Airtrak VR200 Ventilated Ridge for slated roof pitches 35°-65°
Airtrak VR200-E Increased Exposure Ventilated Ridge for slated roof pitches 35°-65°
Airtrak VR200-FR Fire Resisting Ventilated Ridge for slated roof pitches 35°-65°

To specify for slated roof pitch 25°-34°

Airtrak VR200 Ventilated Ridge for slated roof pitches 25°-34° with LPS 225 Low Pitch Soaker
Airtrak VR200-E Increased Exposure Ventilated Ridge for slated roof pitches 25°-34° with LPS 225 Low Pitch Soaker
Airtrak VR200-FR Fire Resisting Ventilated Ridge for slated roof pitches 25°-34° with LPS 225 Low Pitch Soaker

To specify for slated roof pitch 20°-24°

Airtrak VR250 Ventilated Ridge for slated roof 20°-24° with LPS 225 Low Pitch Soaker
Airtrak VR250-E Increased Exposure Ventilated Ridge for slated roof 20°-24° with LPS 225 Low Pitch Soaker
Airtrak VR250-FR Fire Resisting Ventilated Ridge for slated roof 20°-24° with LPS 225 Low Pitch Soaker

To specify for tiled roof pitch 45°-65°

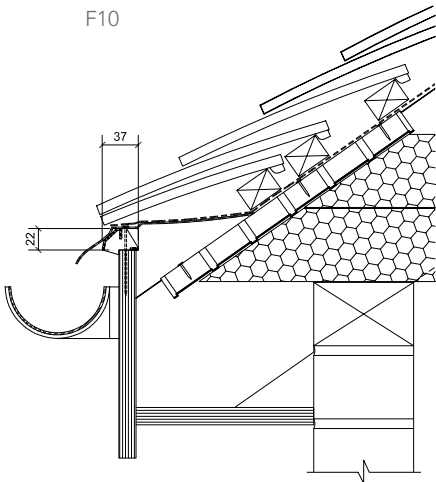
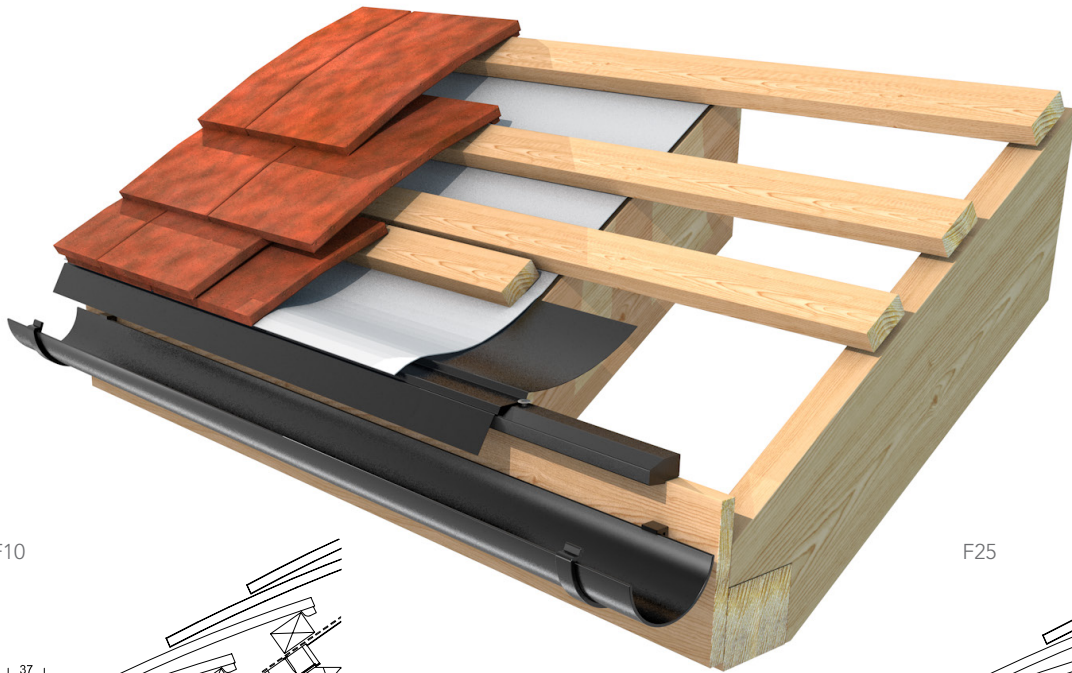
Airtrak VR200 Ventilated Ridge for tiled roof pitches 45°-65°
Airtrak VR200-E Increased Exposure Ventilated Ridge for tiled roof pitches 45°-65°
Airtrak VR200-FR Fire Resisting Ventilated Ridge for tiled roof pitches 45°-65°

To specify for tiled roof pitch 30°-44°

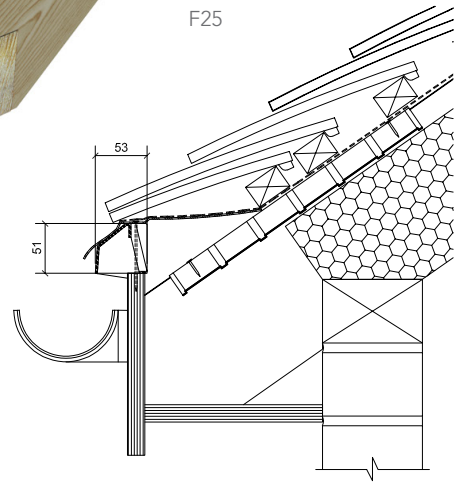
Airtrak VR200 Ventilated Ridge for tiled roof pitches 30°-44° with LPS 150 Low Pitch Soaker
Airtrak VR200-E Increased Exposure Ventilated Ridge for tiled roof pitches 30°-44° with LPS 150 Low Pitch Soaker
Airtrak VR200-FR Fire Resisting Ventilated Ridge for tiled roof pitches 30°-44° with LPS 150 Low Pitch Soaker

Available from: Nicholson Roof Products, www.nicholsonsts.com
info@nicholsonsts.com, 01763 295828.

Airtrak F10
Airtrak F25
Fascia Ventilator



F10



F25

Download product files here



Download product files here



Description

The F10 and F25 Fascia Ventilators provide regulation meeting ventilation to the roof void over the eaves fascia board avoiding unsightly soffit ventilation. They include an integral insect mesh.

Material

Polypropylene

Ventilation

F10 10mm continuous ventilation equivalent.

F25 25mm continuous ventilation equivalent.

Dimensions

F10 Width 37mm Height 27mm Length 1000mm

F25 Width 53mm Height 51mm Length 1000mm

Compatibility

Use the F10 To introduce ventilation to the eaves of slated and tiled roof pitches.

Use the F25 to introduce ventilation to the eaves of slated and tiled warm roof pitches either over or under the roof membrane

Installation

The F10 and F25 are fixed to the top of the fascia board using non-ferrous nails or screws butting the lengths end to end. It is advisable to provide a support for the roofing felt behind the ventilator to avoid it sagging and blocking the airpath into the roof void. The Airtrak EC Eaves carrier may be used for this purpose.

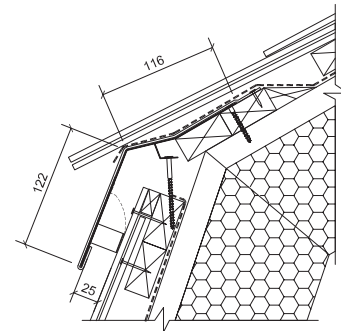
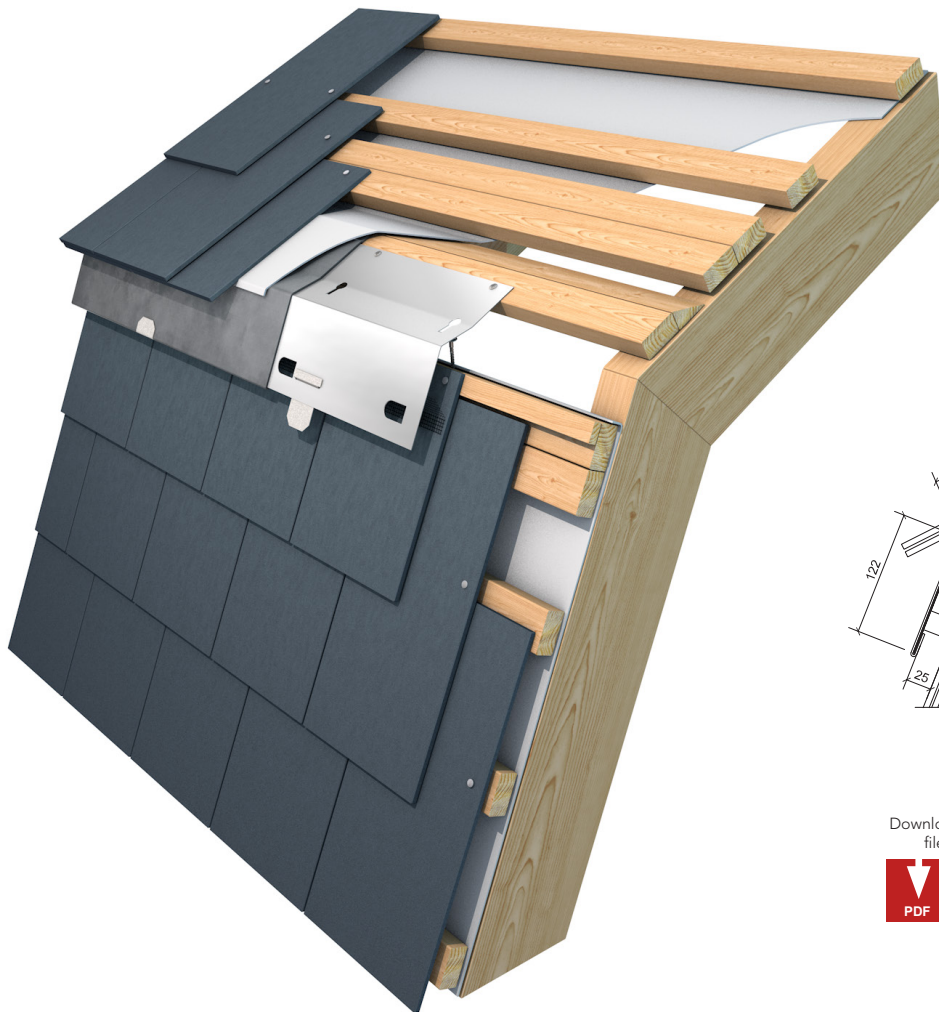
To specify

Airtrak F10 Fascia Ventilator 10mm

Airtrak F25 Fascia Ventilator 25mm

Available from: Nicholson Roof Products, www.nicholsonsts.com
info@nicholsonsts.com, 01763 295828.

Airtrak CP
Change of Pitch Ventilator



Download product files here



Description

The CP can be used to introduce ventilation at the change of pitch in a slated or tiled mansard roof. The profile is bent to a specific angle which allows it to be included at this point in the roof.

Material

Stainless steel, vinyl coated GRP insect mesh, intumescent material (FR version only)

Ventilation

25mm continuous air gap equivalent.

Dimensions

OA girth 240mm, length 1000mm

Compatibility

For use with tiled and slated roofing. Lower pitch 65° minimum.

Installation

The CP Ventilator is fitted over the change of pitch and fixed to the lowest batten with non-ferrous fixings. Additional secondary fixings should be used in to provide resistance to wind uplift. Lengths should be butted together or lapped by 10mm if required. The ventilator can be mitred at corners and trimmed

to length with a large pair of tin snips The CP Ventilator should be covered with a code 4 or 5 lead flashing which is fixed to a timber batten at the top and welted around the lower edge of the ventilator. Ensure that the roofing membrane comes over the top of the ventilator using timber fillets as necessary to avoid ponding.

Please note

Standard Airtrak details as shown assume moderate weather conditions. Small amounts of moisture may be admitted under heavy storm conditions. Where more severe weather conditions are likely, consideration should be given to increasing the vertical overlap dimension to upstands and to slating or tiling to improve the integrity of the weathering detail. For slate and tile details we also recommend the use of the Airtrak LPS where appropriate. Contact Nicholson for further technical help.

To specify

Airtrak CP Change of Pitch Ventilator
Airtrak CP-E Increased Exposure Change of Pitch Ventilator
Airtrak CP-FR Fire Resisting Change of Pitch Ventilator

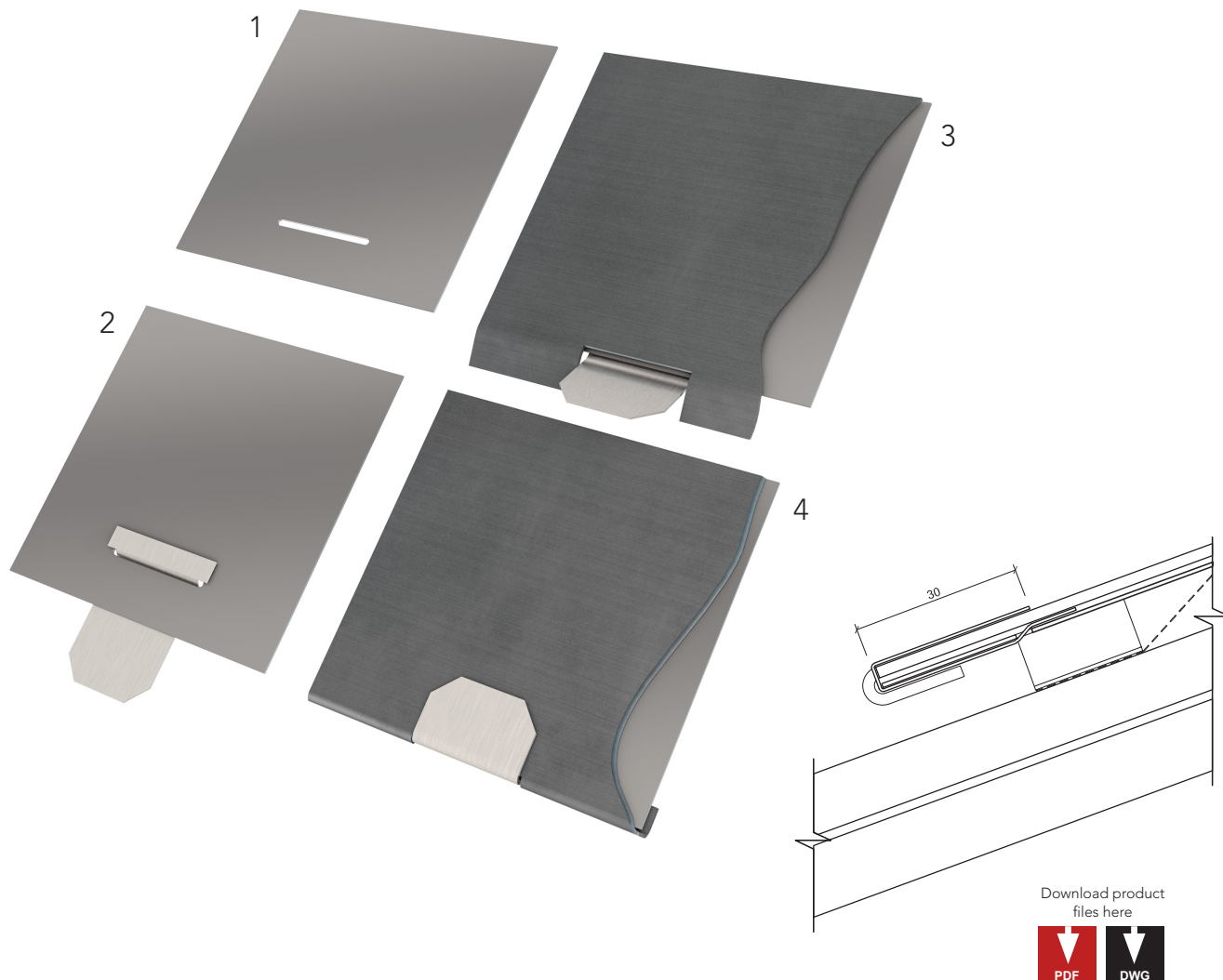
Available from: Nicholson Roof Products, www.nicholsonsts.com
info@nicholsonsts.com, 01763 295828.

German Gymnasium Restaurant, Kings Cross, London
Products used: Airtrak-VR200



Ventilation accessories

Airtrak CF ClipFast Clips



Download product files here



Description

The CF Clipfast Clips are used in situations where the flashing to the ventilator could slip or creep and the welded edge become disengaged in the process of time. They are available in stainless steel and copper and locate in the slots found in the lower edge of the ventilators. These slots are spaced at approximately 330mm centres. The CF is particularly recommended for use with the Airtrak VA and VR ventilators.

Material

Stainless steel, terne coated stainless steel, copper

Dimensions

OA length 70mm, OA width 60mm.

Compatibility

Fixing clip for securing lead flashings to the Airtrak ventilators to prevent flashing creep over time.

Installation

The Airtrak ventilators are pre slotted at 330mm centres to receive the CF Clipfast Clips. The CF should be dropped into the slots from the front prior to dressing the flashing over the ventilator. The flashing should extend 25mm past the lower edge of the

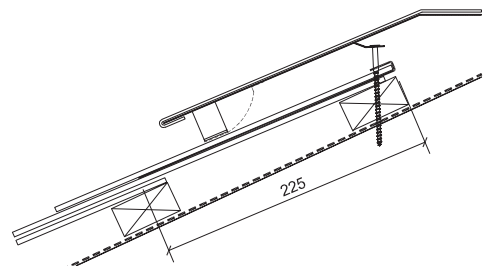
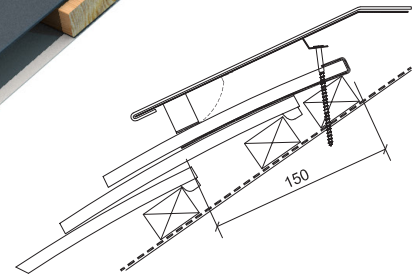
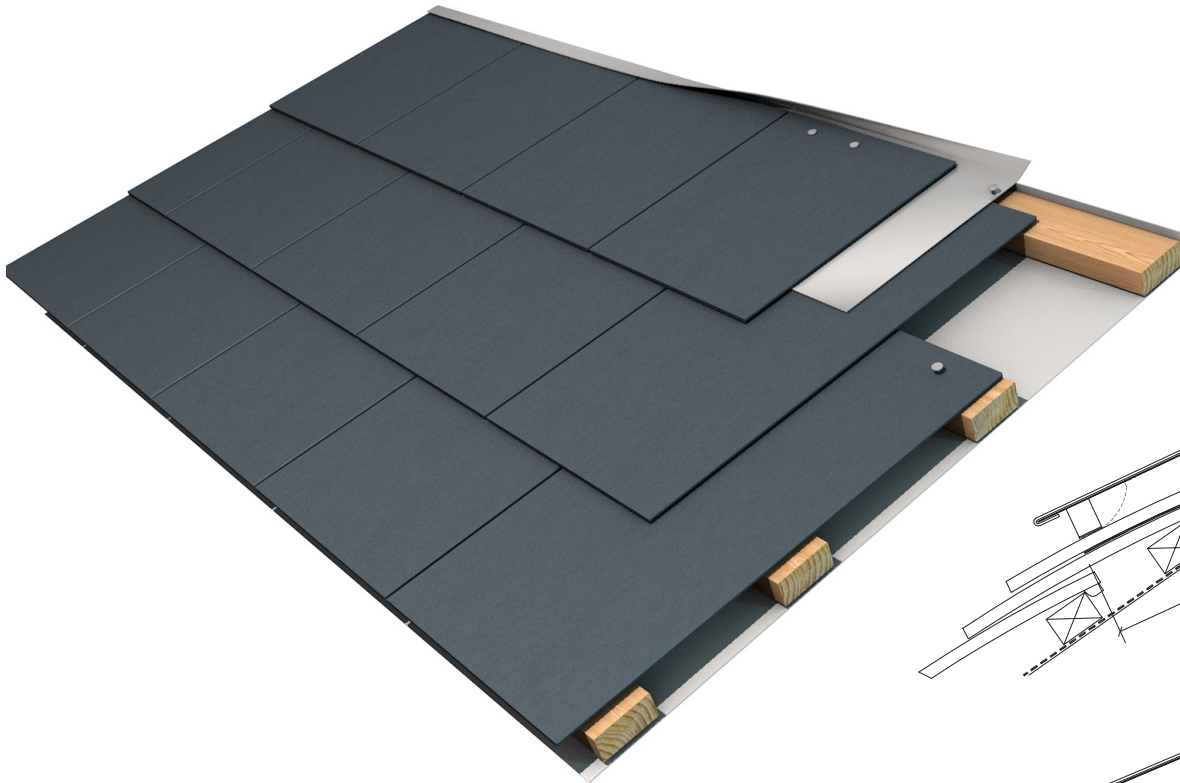
ventilator and a 55mm cut out should be made where the CF Clips are located. Once the flashing has been welded around the ventilator, the CF clips can be welded and crimped on to the face of the flashing using seaming pliers

To specify

Airtrak CF Clipfast Clip 0.5mm stainless steel
 Airtrak CF-E Increased Exposure Clipfast Clip
 Airtrak CF-TCS Clipfast Clip 0.5mm terne coated stainless steel
 Airtrak CF-CU Clipfast Clip 0.6mm copper

Available from: Nicholson Roof Products, www.nicholsonsts.com
info@nicholsonsts.com, 01763 295828

Airtrak LPS Low Pitch Soaker
 LPS150 for tiled roofing
 LPS225 for slated roofing



Download product files here



Description

The LPS is an additional flashing used with low pitch roofing to increase the weatherproofness of the ventilation detail at the head of slating or tiling.

Material

0.5mm aluminium.

Ventilation

n/a

Dimensions

LPS150 OA girth 175mm, length 1000mm.

LPS225 OA girth 250mm, length 1000mm.

Compatibility

LPS150 150mm Low Pitch Soaker for use with plain tiles

LPS225 225mm Low Pitch Soaker for use with slates

Installation

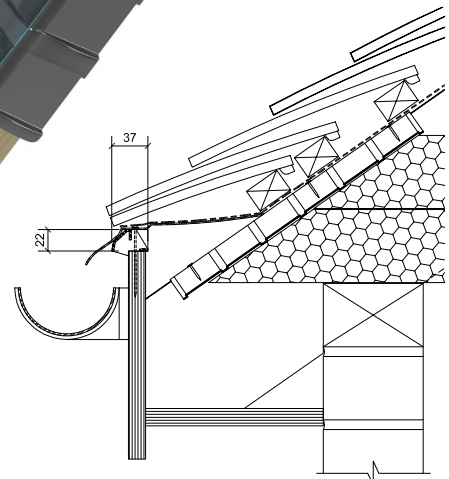
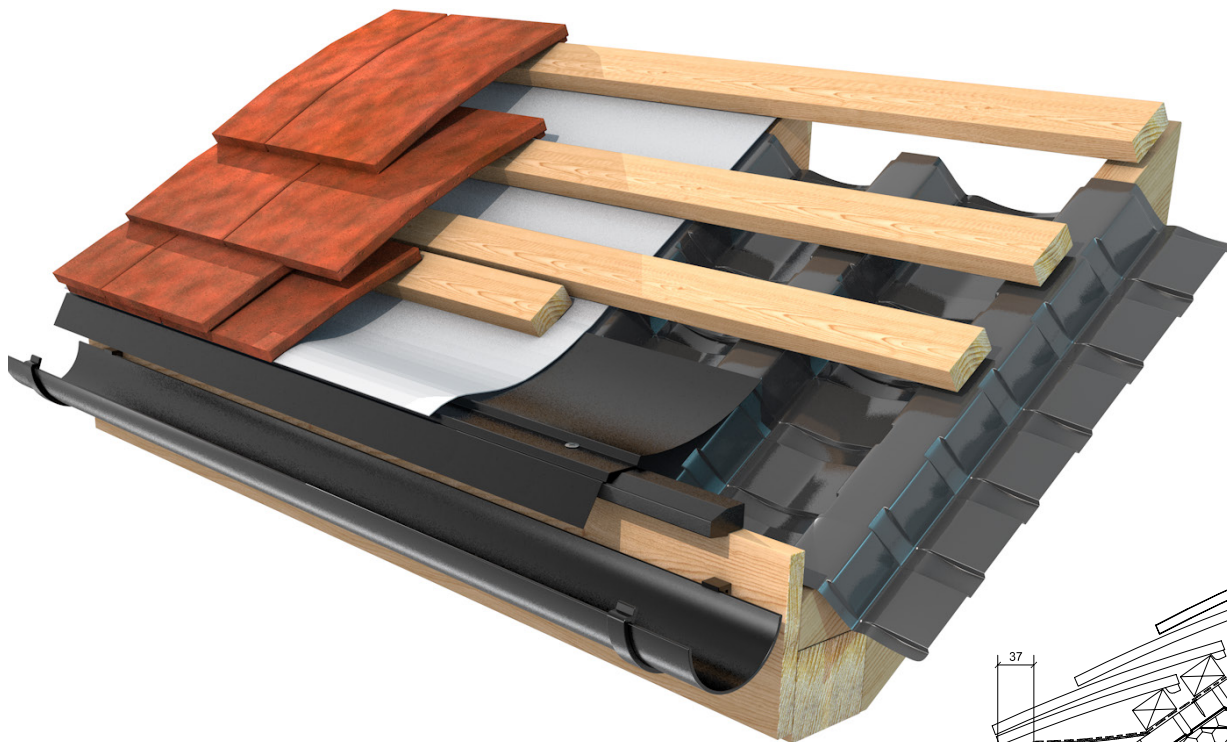
The LPS is supplied pre bent with a 25mm tab folded to 90°. It is installed underneath the top row of slates or tiles (eaves course) and is positioned so that the 25mm fold will turn up just above the head of the eave course. The LPS should be lapped by 100mm and can be trimmed to length using metal snips. The eave course is then fixed through the LPS. Once the eave course is fixed, the 25mm tab is dressed down over the top of the eave course to form a loose welt.

To specify

Airtrak LPS150 Low Pitch Soaker for tiles
 Airtrak LPS225 Low Pitch Soaker for slates

Available from: Nicholson Roof Products, www.nicholsonsts.com
info@nicholsonsts.com, 01763 295828

Airtrak RV
Roll Vent



Download product files here



Description

The RV Roll Ventilator ensures that the airpath at the eaves is unobstructed by the insulation where it sits above the wall plate.

Material

Black UPVC.

Ventilation

25mm continuous airpath.

Dimensions

35mm high x 350mm wide x 6000mm long.

Compatibility

Use the RV at the eaves of a roof over 15° where the roof void is to be ventilated. The RV can be used with rafters at 400mm and 600mm centres.

Installation

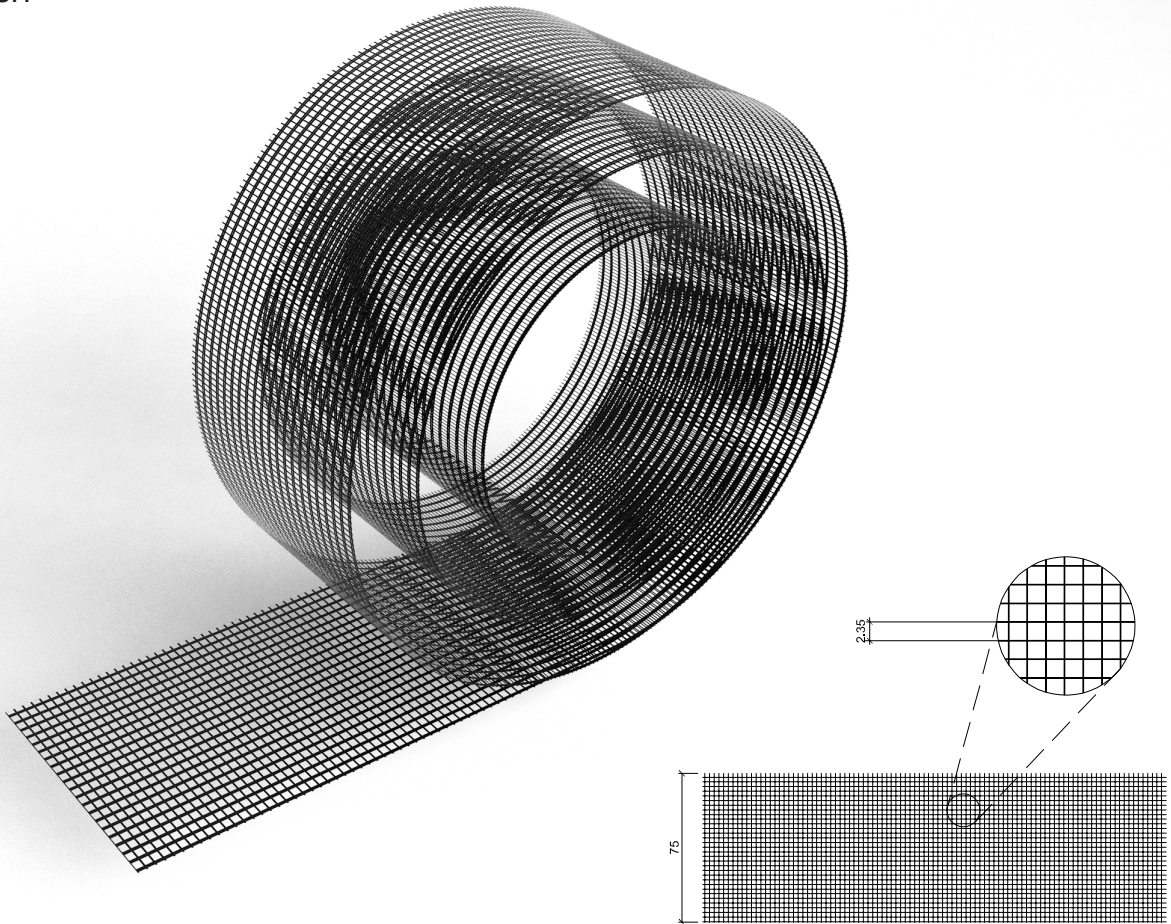
The RV is rolled out over the rafters directly over the wall plate and nailed in position. For deepfill loft insulation two rows of the RV may be required to maintain the ventilation path.

To specify

Airtrak RV Roll Vent

Available from: Nicholson Roof Products, www.nicholsonsts.com
info@nicholsonsts.com, 01763 295828

Airtrak IM Insect Mesh



Download product files here



Description

The Airtrak IM Insect mesh is supplied in a handy 75mm wide strip and can be ordered by the metre. The increased size of the mesh provides optimum airflow whilst excluding unwanted insects from the roof void.

Material

Black vinyl coated GRP insect mesh

Ventilation

Free open area - 66% OA

Dimensions

75mm wide x 30m roll

Compatibility

For use with all roof void ventilation apertures

Installation

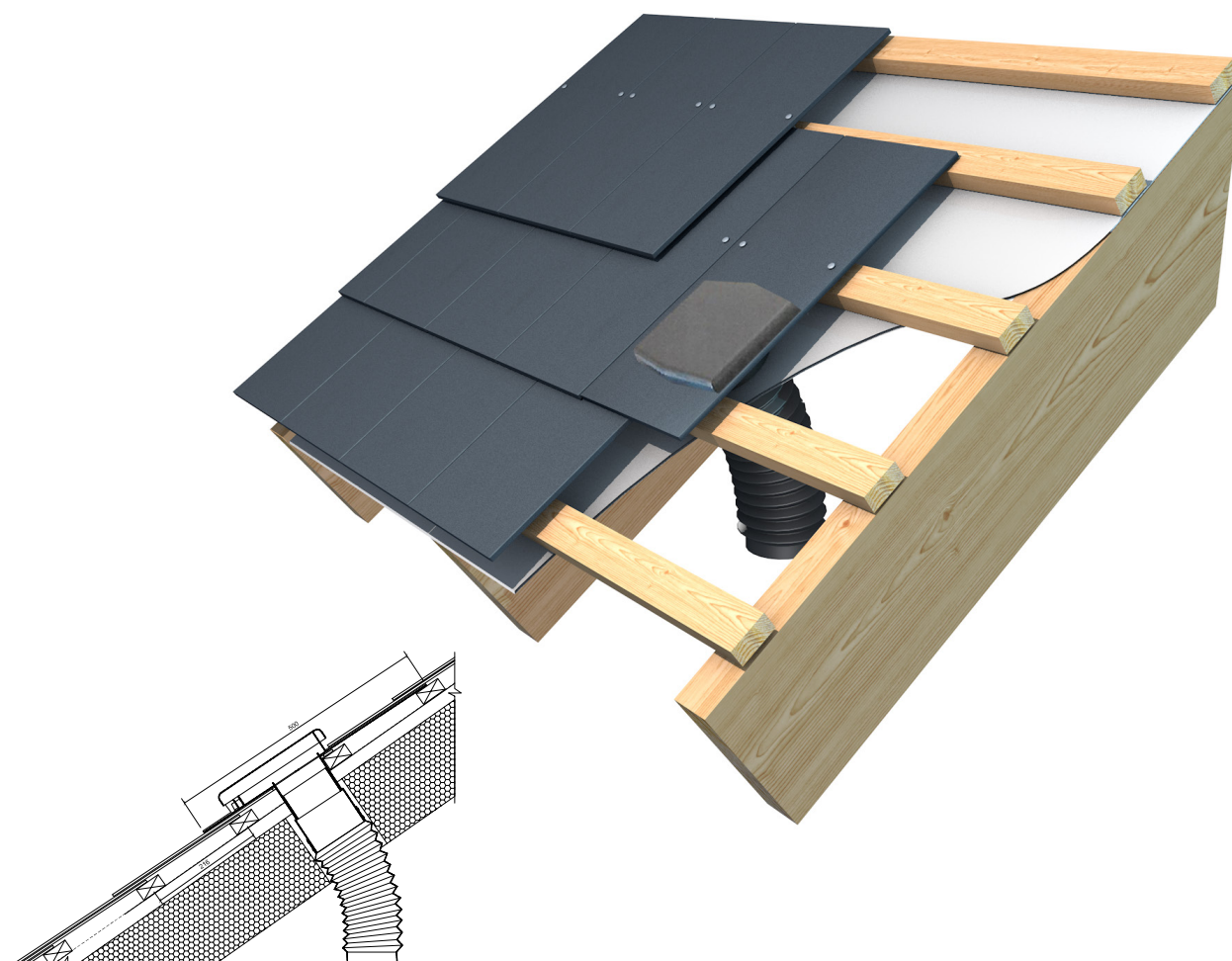
The Airtrak Insect mesh should be cut to the required length and fastened into position using non ferrous staples or nails.

To specify

Airtrak IM-1000 Insect mesh 75mm wide

Available from: Nicholson Roof Products, www.nicholsonsts.com
info@nicholsonsts.com, 01763 295828

Airtrak SLV/SLV-A Slate Vent/Slate Vent Adaptor



Download product files here



Description

An inconspicuous low profile roof ventilator designed to replace one slate providing ventilation to the roof void behind. The SLV can also be used as a terminal for a mechanical extract or a soil vent pipe by using the SLV-A Slate Vent Adaptor.

Material

Polypropylene, anthracite colour.

Ventilation

9000mm².

Dimensions

610mm x 305mm.

Compatibility

The SLV is designed for use in slated roofing and replaces either a standard 600mm x 300mm slate or a 500mm x 225mm slate.

The SLV-A provides a connection from the SLV to a 110mm SVP

Installation

The SLV replaces one normal slate (trim to guidelines provided for 500mm x 225mm slates). The slates directly below the SLV should be cut away to accommodate the felt penetration sleeve on the rear of the slate vent. Cut a cross in the roofing felt and fold back the corners upwards and nail to the top of the roof battens.

Position the ventilator and nail into position using the nail holes provided. Secure the front of the ventilator against wind uplift using a copper disc rivet.

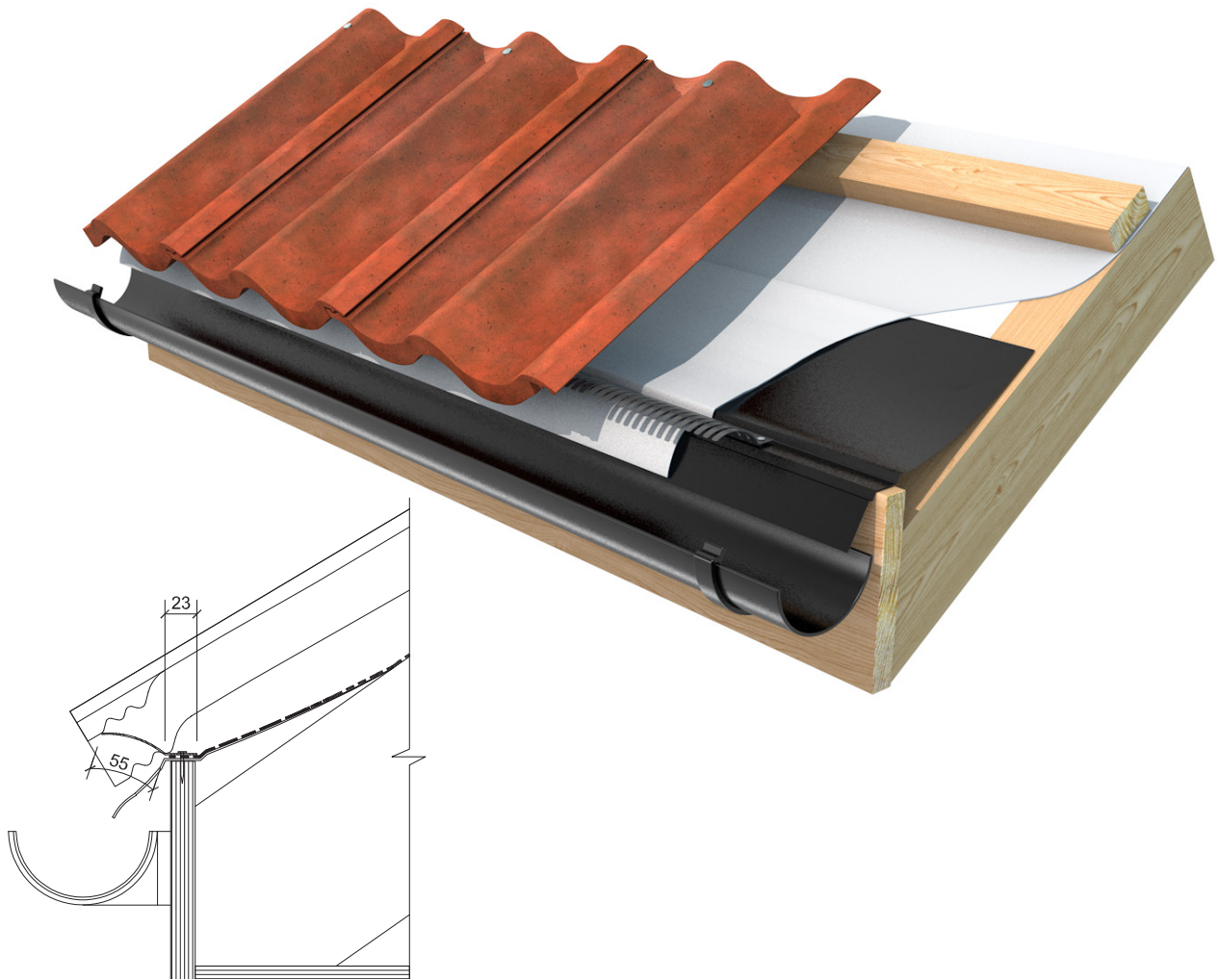
To specify

Airtrak SLV Slate Ventilator

Airtrak SLV-A Slate Ventilator Adaptor for extract fan and SVP termination

Available from: Nicholson Roof Products, www.nicholsonsts.com
info@nicholsonsts.com, 01763 295828

Airtrak CS Comb Strip
Airtrak EC Eaves Carrier



Download product files here



Description

The CS Comb Strip is designed to prevent the entry of birds and vermin into the batten void beneath profiled tiles. Its is nailed to the top of the fascia board and has flexible excluder which accommodates the profile in the tile.

The EC Eaves Carrier is a support profile which is nailed to the top of the fascia and extends backwards to prevent ponding caused by a backfall in the roofing membrane.

Material

CS Comb Strip Polypropylene
EC Eaves carrier MDPE

Ventilation

n/a

Dimensions

Airtrak CS Comb Strip:
OA width 80mm, length 1000mm

Airtrak EC Eaves Carrier:
OA width 250mm, length 1500mm

Compatibility

Airtrak CS Comb Strip can be used with all profiled tiles to exclude birds and insects at the eaves.

Airtrak EC Eaves Carrier is suitable for all eaves applications.

Installation

The CS Comb strip should be nailed to the top of the fascia board on which the profiled tiles rest. Lengths should be butted together.

The EC Eaves carrier is nailed to the top of the fascia and the support flap folded down to meet the roof pitch.

To specify

Airtrak CS Comb Strip
Airtrak EC Eaves Carrier

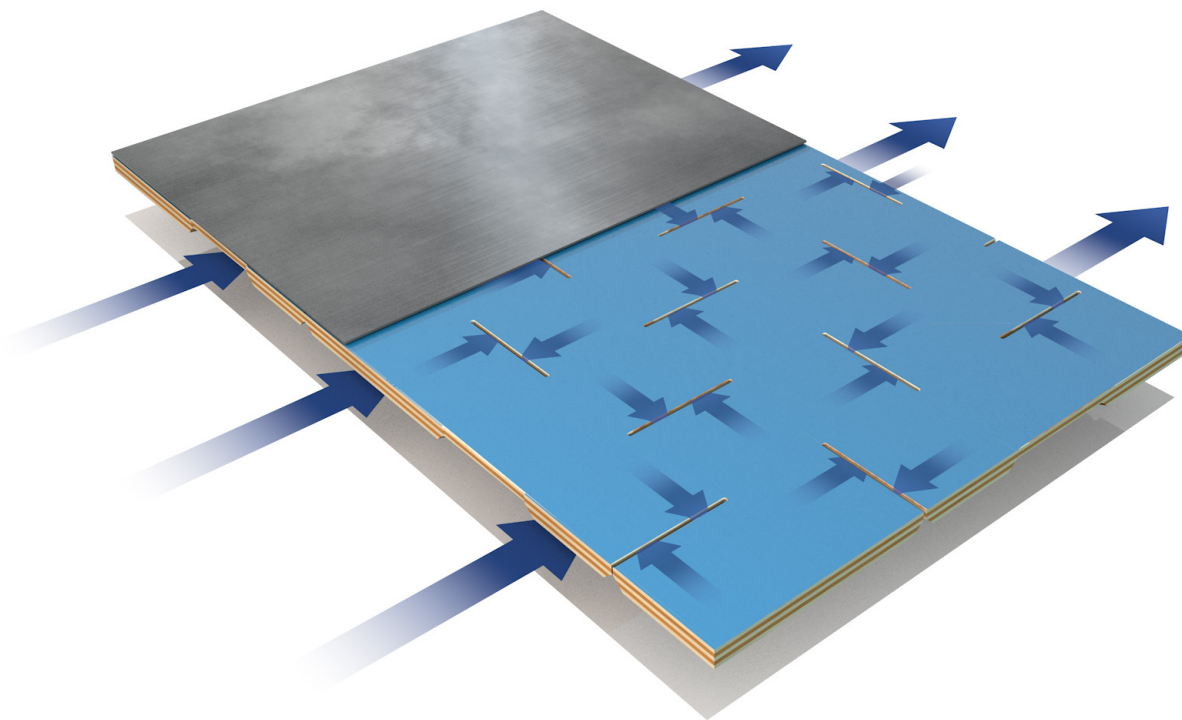
Available from: Nicholson Roof Products, www.nicholsonsts.com
info@nicholsonsts.com, 01763 295828

Clifton Cathedral, Clifton Park, Bristol
Products used: Airtrak-IL145, Airtrak-IL180,
Airtrak-MV200



Airboard roof deck for fully supported
metal roofing

Airtrak Airboard Roof decking for fully supported metal roofing



Description

The Airtrak Airboard decking system has been developed specifically for fully supported metal roofing and can be used in conjunction with the range of Airtrak ventilators. The patent pending protected design features perforations in hardwood sheet plywood to ensure that the ventilation of the roof void also extends to the underside of the metal roofing, the point where condensation is most likely to occur.

Due to the configuration of the slots, no part of the underside of the metal roof is further than 50mm from a ventilation slot ensuring that this area has a direct and quantifiable connection with the ventilated zone beneath the decking. This is important as any moisture ingress into fully supported metal roofing through the expansion joints can become trapped between the roofing deck and the metal roof covering where there is no direct connection to the ventilated void below.

Airtrak Airboard combines the advantage of a smooth engineered board finish with a direct connection to the ventilated zone beneath, only otherwise achievable using the traditional 'penny gap' boarding method. The effects of warping and twisted boards showing through the metal roof covering, often associated with the penny gap boarding method, are avoided and a consistent and quantifiable amount of ventilation through to the underside of the roof deck is achieved.

It may be used with or without a separating membrane between the plywood and the roofing material. Airboard has a liquid applied impervious coating to the uppermost face. This protects the board from damage by weather during the construction process and also prevents the migration of any chemicals and other compounds from the plywood towards the metal roofing.

Material

18mm plywood to BS EN 636-3, barrier coating

Ventilation

Approximately 14,800mm²/m²

Dimensions

1220mm x 2440mm

Compatibility

A support deck for all fully supported metal roofing applications.

Installation

Airtrak Airboard is fitted over the roofing structure in the normal way spanning the supporting trusses or joists. All joints should be either over a rafter, furring or trimming piece unless spanning between joists at not more than 400mm centres. Take care to ensure that the ventilation void of 50mm is maintained below the Airboard.

Airboard should be laid in such a way that no piece has a dimension smaller than 400mm where possible. Secure in place with non-ferrous fixing screws which should be finished slightly below the surface of the plywood. The fully supported metal roofing may be laid directly over the board with no further membrane or separating layer required.

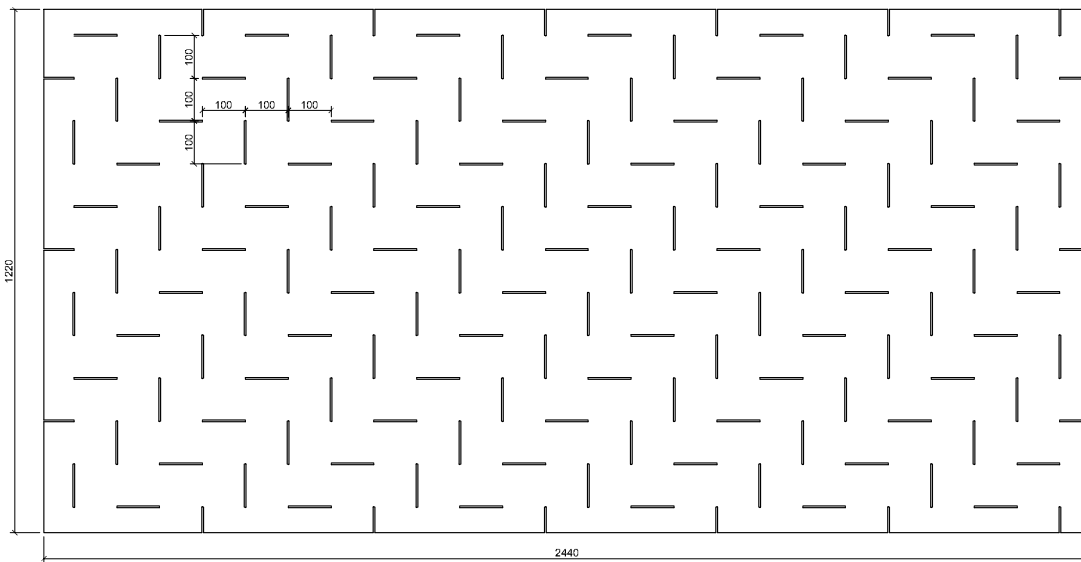
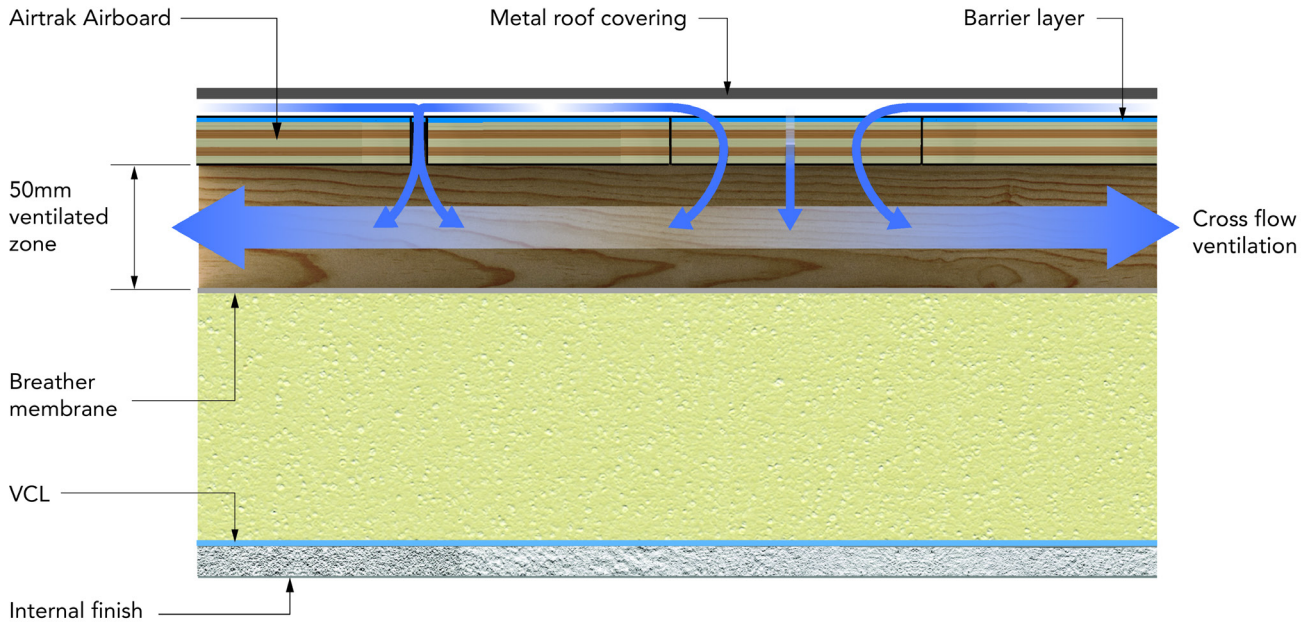
To specify

Airtrak Airboard Airtrak Airboard for fully supported metal roofing

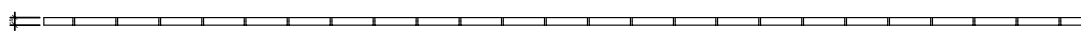
Available from: Nicholson Roof Products, www.nicholsonsts.com
info@nicholsonsts.com, 01763 295828

Airtrak Airboard Roof decking for fully supported metal roofing

Typical ventilated warm roof



TOP VIEW



SIDE VIEW

Download product files here



Airtrak – Frequently Asked Questions

Why should I use Airtrak?

Airtrak is an established and well known proprietary ventilation system that is designed and manufactured specifically for the purpose of ventilating roof voids. It provides an easily obtainable solution that is pre-fitted with insect mesh and avoids adhoc on-site construction. The stainless steel linear ventilators are strong and durable whilst ensuring minimal aesthetic impact on the character of the building.

When should I use Airtrak-FR?

Airtrak-FR is designed to help stop the spread of fire through the ventilation gaps required to meet Building Regulations. This can be either from an outside source to the roof void or from a roof void to an adjacent part of the building. This is particularly applicable where you have adjacent roof voids and ventilated roof structures near adjacent buildings where the spread of fire could travel via the ventilation gap. Another consideration is on heritage buildings where the age of the building and value to our architectural heritage make the further protective measures a sensible option.

How much ventilation do I need?

As a broad rule of thumb, flat roof areas require the equivalent of 25mm continuous ventilation (25,000mm² per linear metre) along two opposing sides of a roof so that cross ventilation is achieved. Ideally these are the two longest sides to ensure maximum ventilation efficiency. Pitched roofs with a fully supported metal roof covering also require a similar amount of ventilation.

Slated and tiled pitched roofing require differing amounts of ventilation affected by whether they are of a warm or cold construction, the roof pitch and the type of roof membrane used. Further details can be found on pages 6 & 7 of this brochure.

Is it best to use point ventilators or linear ventilators?

Generally speaking, the use of linear ventilators is a more efficient, economical and visually acceptable way of ventilating a roof void. The Airtrak linear ventilators deliver regulation meeting amounts of ventilation. This amount of ventilation is hard to replicate using point ventilators as so many are usually required. Another benefit of perimeter linear ventilators is that they cross all the roof/rafter voids whereas point ventilators will only ventilate the roof/rafter void they are located over.

However, where a roof has already been installed or the existing ventilation provisions need increasing, point ventilators provide a viable and effective way of introducing ventilation.

Can I use the Airtrak ventilation system with all types of roof coverings?

The Airtrak roof void ventilation system can be used with most types of roof coverings. This includes lead, copper, zinc and other hard metals as well as all membrane and liquid applied roof coverings. As the ventilators are stainless steel there is no danger of any significant bi-metallic corrosion.

How do I ventilate a parapet or tapering box gutter?

Parapet and tapering box gutters are often constrained in width as they progress to their outfall sometimes making ventilation

difficult. The use of point ventilators in narrow gutters and valleys is not recommended as these can become a point at which leaves and other debris can collect and ultimately cause a potential restriction to the free draining of the gutter.

The ideal arrangement is to have a linear ventilator under the slating or tiling on the layboard coupled with a ventilator along the parapet where there is sufficient gutter width to do so. Where there is not enough width it could arguably be the case that the layboard ventilator will be sufficient to avoid a build up of moisture vapour in that area.

Which side of the roofing membrane in a pitched roof should be ventilated?

This depends on the use of the roof void and the type of roofing membrane that is being used. Normally the ventilation should be on the underside of the roofing membrane as this is where the moisture vapour is likely to condense. However, where a LR roofing membrane (low resistance to moisture vapour) is being used in a warm roof situation and the external roof covering is relatively airtight (eg man made slates), it may be advisable to ventilate the batten void above the roofing membrane. More detail on this is available on pages 6 & 7.

Can lead roofing be laid on a warm roof construction?

Lead roofing can be laid on warm roof constructions but should still have a 50mm ventilation zone under the roof deck supporting the lead covering. It is not acceptable to lay lead roofing directly on insulation in a warm roof construction.

I can't see the ventilator that I require in this brochure

Please get in touch with our Airtrak Technical team by phone, email or via our website where you can upload details of your requirement and send them to us. It is very likely that we can provide a bespoke ventilator to meet your requirement.

Where can I purchase Airtrak?

Airtrak can be purchased directly from Nicholson with most card payments being accepted. Failing this, a number of the leading builders and roofing merchants have accounts with Nicholson and the Airtrak range can be purchased through these outlets.

Is there a minimum number of ventilators that can be purchased?

No. We will supply your requirement down to one ventilator.

Can I get a sample?

Samples may be requested. They are normally supplied on a sale or return basis. Our accurate sections provide critical installation dimensions which should in most cases enable the purchaser to establish whether the chosen ventilator is suitable.

Can I return ventilators once purchased?

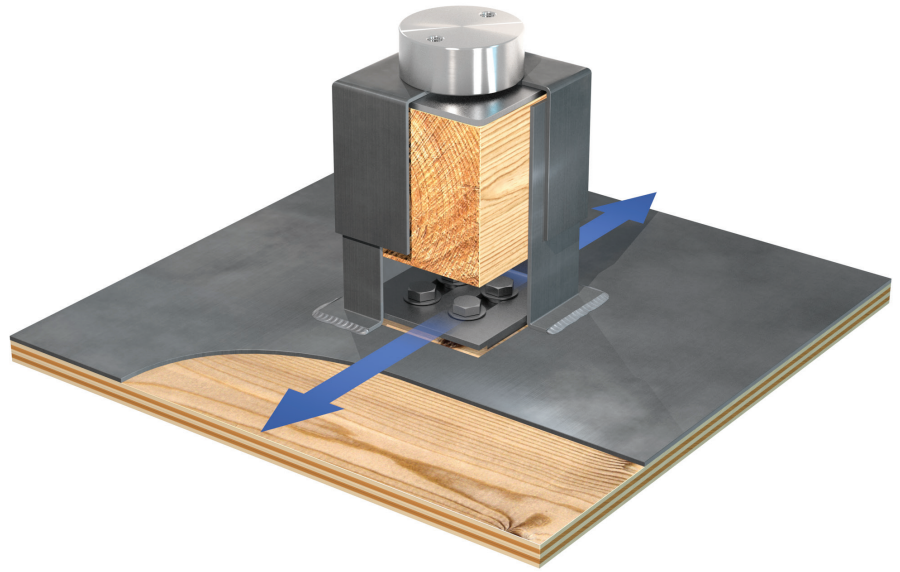
Nicholson operates a returns policy – details are available on our website. Standard ventilators may be returned subject to a restocking charge. However, ventilators that have been fabricated to customers specific requirements may not be refundable.

Other related Nicholson products

Rooftrak IFP-MR Integrated Fixing Point for Metal Roofing

The Rooftrak IFP-MR Integrated Fixing Point for metal roofing is part of the Rooftrak IFP family providing fixing points without compromising the integrity of the weathering membrane.

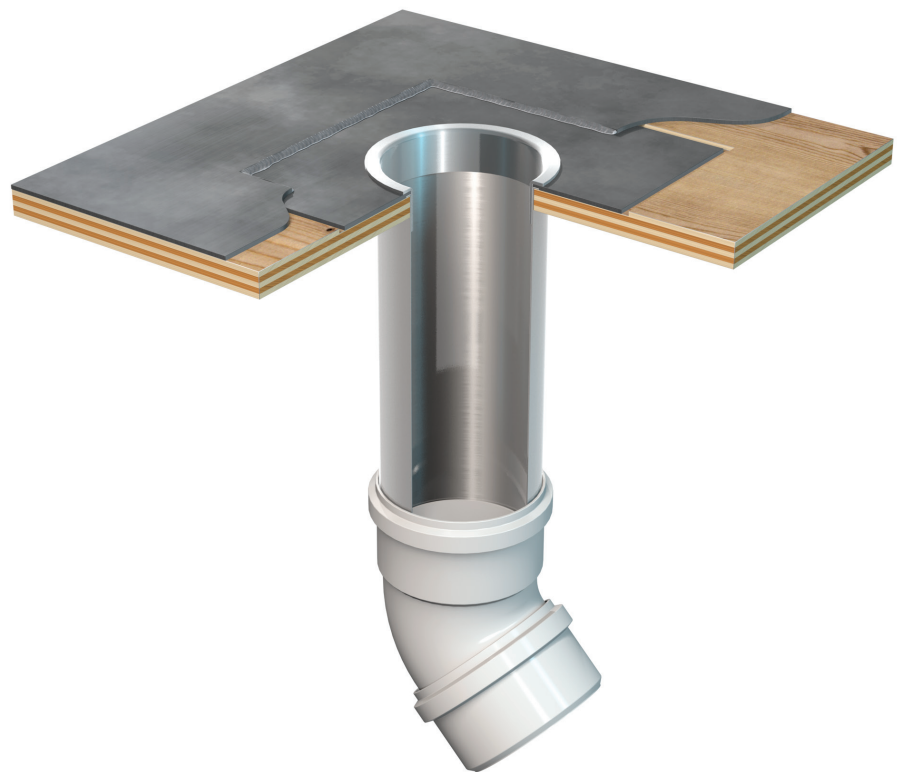
Metal roofing poses a challenge when it comes to fixing points as the natural expansion and contraction of the metal with temperature fluctuations has to be accommodated. The IFP-MR is a unique fitting that can move with any expansion and contraction of the metal roof by up to 30 mm. The IFP-MR can be factory fitted with a lead, zinc, copper (or any other sheet metal weathering flange) so that it integrates with the roof in question.



Roofport MRO Metal Roof Outlet

The Roofport MRO metal roof outlet is a 110mm diameter stainless steel outlet with a factory attached lead flange piece. The MRO can be used for internal outlets within lead roofs and gutters providing a firm spigot to which a watertight connection can easily be made.

The 110mm stainless steel spigot can be connected to the discharge pipework beneath the outlet via a standard 110mm push fit sealing socket or a timesaver type clamp. This ensures that the discharge pipework has a definite seal to the lead roof – particularly important for internally draining areas of the roof.





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