1.1 Attic with ridge ventilation.
(cold attic)

**Specification**

<table>
<thead>
<tr>
<th>Specification</th>
<th>Armourvent Multi</th>
<th>Armourvent Multi Plus</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dimension</td>
<td>6 m; 22,8 cm</td>
<td>6 m; 28,5 cm</td>
</tr>
<tr>
<td>Application</td>
<td>Armourglass</td>
<td>Cambridge Xtreme 9.5° /Xpress</td>
</tr>
<tr>
<td></td>
<td>Victorian</td>
<td>Monarch-Diamant</td>
</tr>
<tr>
<td></td>
<td>Monarch</td>
<td>DiamantShield</td>
</tr>
<tr>
<td>Angle</td>
<td>15°-60°</td>
<td>ArmourShield</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Diamant</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Superglass/-Biber</td>
</tr>
<tr>
<td>Ventilation Area</td>
<td>275 cm² /m</td>
<td>275 cm² /m</td>
</tr>
</tbody>
</table>

* Cambridge Xtreme exception 9.5° up

**Design Scale 1:10**
1.2 Ventilated ridge. (insulated roof)

---

<table>
<thead>
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</tr>
<tr>
<td>ArmourShield</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Diamant</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Superglass/-Biber</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Angle</td>
<td>15° - 60°</td>
<td>15°-60°**</td>
</tr>
<tr>
<td>Ventilation Area</td>
<td>275 cm²/m</td>
<td>275 cm²/m</td>
</tr>
</tbody>
</table>

* Cambridge Extreme exception 9.5° up

---

ARMOURVENT MULTI APPLICATION

DESIGN SCALE 1:10
1.3 Ventilated ridge.
(PIR insulation on sheathing)

<table>
<thead>
<tr>
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<th>Armourvent Multi</th>
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<td></td>
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<td>Monarch-Diamant</td>
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<tr>
<td></td>
<td>Monarch</td>
<td>ArmourShield</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Diamant</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Superglass/ -Biber</td>
</tr>
<tr>
<td>Angle</td>
<td>15°-60*</td>
<td>15°-60**</td>
</tr>
<tr>
<td>Ventilation Area</td>
<td>275 cm² /m</td>
<td>275 cm² /m</td>
</tr>
</tbody>
</table>

* Cambridge Xtreme exception 9.5 ° up
1.4 Ventilated ridge.
(PIR insulation above rafters)

**Specification**

<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
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<td></td>
</tr>
<tr>
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<td></td>
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<td></td>
<td>Superglass/-Biber</td>
</tr>
<tr>
<td><strong>Angle</strong></td>
<td>15°-60°</td>
<td>15°-60°**</td>
</tr>
<tr>
<td><strong>Ventilation Area</strong></td>
<td>275 cm²/m</td>
<td>275 cm²/m</td>
</tr>
</tbody>
</table>

* Cambridge Xtreme exception 9.5 ° up
2.1 Attic with ArmourVent Standard Ventilation.
(cold attic)

Breathable membrane
Ventilation channel
IKO Shingles
ARMOURBASE PRO
Vapor barrier
Insulation
Ceiling boarding
Counter Batten
IKO SHINGLE STICK
IKO SHINGLE STICK
Rafter
VENTILATOR ARMOURVENT STANDARD

Specication | Armourvent Standard
---|---
Dimension | 43x45x11 cm
Ventilation Area | 322 cm³/pc
Colors | black, brown
Slope | 14-45°
Material | PP with UV inhibitors additives

www.iko.be
2.2 Ridge with ArmourVent Standard Ventilation.
(insulated roof)

<table>
<thead>
<tr>
<th>Specification</th>
<th>Armourvent Standard</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dimension</td>
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<td>Ventilation Area</td>
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</tr>
<tr>
<td>Colors</td>
<td>black, brown</td>
</tr>
<tr>
<td>Slope</td>
<td>14-45°</td>
</tr>
<tr>
<td>Material</td>
<td>PP with UV inhibitors additives</td>
</tr>
</tbody>
</table>

www.iko.be
2.3 Ridge with ArmourVent Standard Ventilation. (PIR Insulation on sheathing)

<table>
<thead>
<tr>
<th>Specification</th>
<th>Armourvent Standard</th>
</tr>
</thead>
<tbody>
<tr>
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<td>14-45°</td>
</tr>
<tr>
<td>Material</td>
<td>PP with UV inhibitors additives</td>
</tr>
</tbody>
</table>

PIR Insulation

Vapor barrier

Wooden deck

Rafter

Roof deck

Breathable membrane

Ventilation channel

PUR foam

IKO Shingles

ARMOURBASE PRO

VENTILATOR ARMOURVENT STANDARD

IKO SHINGLE STICK

PIR Insulation on sheathing

www.iko.be

Application Design Scale 1:10
2.4 Ridge with ArmourVent Standard Ventilation (PIR insulation above rafters)

<table>
<thead>
<tr>
<th>Specification</th>
<th>Armourvent Standard</th>
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<tbody>
<tr>
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</tr>
<tr>
<td>Slope</td>
<td>14-45°</td>
</tr>
<tr>
<td>Material</td>
<td>PP with UV inhibitors additives</td>
</tr>
</tbody>
</table>
3.1 Attic with ArmourVent Special Ventilation. (cold attic)

<table>
<thead>
<tr>
<th>Specification</th>
<th>Armourvent Special</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dimension</td>
<td>37x35x7,5 cm</td>
</tr>
<tr>
<td>Ventilation Area</td>
<td>30 cm²/pc</td>
</tr>
<tr>
<td>Colors</td>
<td>black, red</td>
</tr>
<tr>
<td>Slope</td>
<td>15-85°</td>
</tr>
<tr>
<td>Material</td>
<td>PP with UV inhibitors additives</td>
</tr>
</tbody>
</table>
3.2 Roof ventilator Armourvent Special.
(insulated roof)

<table>
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<tr>
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</tr>
<tr>
<td>Material</td>
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</tbody>
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3.3 Roof ventilator Armourvent Special.
(PIR insulation on sheathing)

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<td>15-85°</td>
</tr>
<tr>
<td>Material</td>
<td>PP with UV inhibitors additives</td>
</tr>
</tbody>
</table>
3.4 Roof ventilator Armourvent Special.  
(PIR insulation above rafters)

- Breathable membrane
- Ventilation channel
- Roof deck
- PUR foam
- IKO Shingles
- ARMOURBASE PRO
- VENTILATOR ARMOURVENT SPECIAL
- IKO SHINGLE STICK
- Vapor barrier
- Counter batten
- Ceiling boarding
- Rafter

**Specification**

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</tbody>
</table>

**Design Scale**: 1:10
Apply the hip and ridge shingles double thickness by stacking two pieces and bending them over the hip or the ridge. Always ensure that, when installing the ridge covering shingle tabs, the nails of the upper shingle course (on both sides of the ridge) are covered.
Apply the hip and ridge shingles double thickness by stacking two pieces and bending them over the hip or the ridge. Always ensure that, when installing the ridge covering shingle tabs, the nails of the upper shingle course (on both sides of the ridge) are covered.
4.3 Hip.
(PIR insulation on sheathing)

Apply the hip and ridge shingles double thickness by stacking two pieces and bending them over the hip or the ridge. Always ensure that, when installing the ridge covering shingle tabs, the nails of the upper shingle course (on both sides of the ridge) are covered.
Apply the hip and ridge shingles double thickness by stacking two pieces and bending them over the hip or the ridge. Always ensure that, when installing the ridge covering shingle tabs, the nails of the upper shingle course (on both sides of the ridge) are covered.
5.2 Open Valley.
(cold attic)

Snap two chalk lines from the ridge to the eaves 8 cm apart increasing in width by 1 cm per meter towards the eaves. Trim the shingles to these lines and cut a 5 cm triangle off the top corner to direct the water into the valley. Bond the valley end of each shingle with IKO Shingle Stick®/IKO Plastal Stick® and nail the shingles 5 cm back from the chalk line. Seal every shingle on the valley with bituminous mastic Shingle/Plastal Stick.
Snap two chalk lines from the ridge to the eaves 8 cm apart increasing in width by 1 cm per meter towards the eaves. Trim the shingles to these lines and cut a 5 cm triangle off the top corner to direct the water into the valley. Bond the valley end of each shingle with IKO Shingle Stick®/IKO Plastal Stick® and nail the shingles 5 cm back from the chalk line. Seal every shingle on the valley with bituminous mastic Shingle/Plastal Stick.
5.3 Open Valley.
(PIR insulation on sheathing)

Snap two chalk lines from the ridge to the eaves 8 cm apart increasing in width by 1 cm per meter towards the eaves. Trim the shingles to these lines and cut a 5 cm triangle off the top corner to direct the water into the valley. Bond the valley end of each shingle with IKO Shingle Stick®/IKO Plastal Stick® and nail the shingles 5 cm back from the chalk line. Seal every shingle on the valley with bituminous mastic Shingle/Plastal Stick.
5.4 Open Valley.
(PIR insulation above rafters)

Snap two chalk lines from the ridge to the eaves 8 cm apart increasing in width by 1 cm per meter towards the eaves. Trim the shingles to these lines and cut a 5 cm triangle off the top corner to direct the water into the valley. Bond the valley end of each shingle with IKO Shingle Stick®/IKO Plastal Stick® and nail the shingles 5 cm back from the chalk line. Seal every shingle on the valley with bituminous mastic Shingle/Plastal Stick.

OPEN VALLEY.
PIR INSULATION
ABOVE RAFTERS

DESIGN SCALE 1:10
6.1 Eave.
(cold attic)

- Eave boarding
- Drip flashing
- Starter strip
- IKO SHINGLE STICK
- IKO ARMOURBASE PRO
- Breathable membrane
- Eaves flashing
- Gutter Bracket
- Ventilation channel
- Breathable membrane
- Wall plate
- Rafter
- Roof deck
- IKO Shingles
- IKO ARMOURBASE PRO
- Insulation
- Insulation
- Vapor barrier
- Ceiling boarding
- Counter Batten

www.iko.be
6.2 Eave. Insulation between rafters. (insulated roof)
6.3 Eave. (PIR Insulation on sheathing)

- Ventilation channel
- Breathable membrane
- Wall plate
- Insulation
- IKO Shingles
- IKO ARMOURBASE PRO
- Roof deck
- PIR Insulation
- Vapor barrier
- Wooden deck
- Drip flashing
- IKO SHINGLE STICK
- Starter strip
- IKO SHINGLE STICK
- Drip flashing
- Breathable membrane
- Eaves flashing
- Gutter Bracket

EAVE. PIR INSULATION ON SHEATHING

DESIGN SCALE 1:10
6.4 Eave.
(PIR Insulation on the rafter)

- Drip flashing
- IKO SHINGLE STICK
- Gutter Bracket
- Eaves flashing
- Starter strip
- Ventilation channel
- Breathable membrane
- Wall plate
- Insulation
- IKO ARMOURBASE PRO
- PIR Insulation
- Vapor barrier
- Wooden deck
- Counter batten
- Ceiling boarding

EAVE. PIR INSULATION ON RAFTER
DESIGN SCALE 1:10
7.1 Shed roof.
(cold attic)
7.2 Shed roof. (insulated roof)
7.3 Shed roof.
(PIR insulation on sheathing)
7.4 Shed roof. (PIR insulation above rafters)
The courses of shingles are laid loose over this turned-up edge and overlap the sheet metal by > 80 mm. The courses are not nailed or stuck down around the sheet metal profile. To prevent water being sucked below shingles laid flat, the top corner of each asphalt shingle is cut off at an angle. Seal every shingle on the verge flashing with bituminous mastic Shingle/Plastal Stick.
The courses of shingles are laid loose over this turned-up edge and overlap the sheet metal by ≥ 80 mm. The courses are not nailed or stuck down around the sheet metal profile. To prevent water being sucked below shingles laid flat, the top corner of each asphalt shingle is cut off at an angle. Seal every shingle on the verge flashing with bituminous mastic Shingle/Plastal Stick.
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9.1 Flashing against vertical sidewall.  
(cold attic)

A sheet metal gutter tucked under the shingles on a roof surface (> 100mm) must have a turned-up edge, be overlapped by the shingles > 100 mm and turned up the wall 100-150 mm (depending on a pitch). To prevent water being sucked below shingles laid flat, the top corner of each shingle is cut off at an angle.
9.2 Flashing against vertical sidewall. (insulated roof)

A sheet metal gutter tucked under the shingles on a roof surface (> 100 mm) must have a turned-up edge, be overlapped by the shingles > 100 mm and turned up the wall 100-150 mm (depending on a pitch). To prevent water being sucked below shingles laid flat, the top corner of each shingle is cut off at an angle.
9.3 Flashing against vertical sidewall.
(PIR insulation on sheathing)

A sheet metal gutter tucked under the shingles on a roof surface (> 100 mm) must have a turned-up edge, be overlapped by the shingles > 100 mm and turned up the wall 100-150 mm (depending on a pitch). To prevent water being sucked below shingles laid flat, the top corner of each shingle is cut off at an angle.
9.4 Flashing against vertical sidewall.
(PIR insulation above rafters)

A sheet metal gutter tucked under the shingles on a roof surface (> 100 mm) must have a turned-up edge, be overlapped by the shingles > 100 mm and turned up the wall 100-150 mm (depending on a pitch). To prevent water being sucked below shingles laid flat, the top corner of each shingle is cut off at an angle.
Horizontal leg of metal flashing should be > 100 mm wide and include a turned up edge. The courses of shingles are laid loose over this turned up edge. Metal flashing turned up the chimney stack on min. 100 mm. This high must be enlarged with the reduction of roof pitch to 150 mm (< 15°) or/and according to requirements of the local building codes. The junction must be subsequently be with counter flashing let into a groove, fixed and sealed. Seal every shingle on the flashing with bituminous mastic Shingle/Plastal Stick.
Horizontal leg of metal flashing should be > 100 mm wide and include a turned up edge. The courses of shingles are laid loose over this turned up edge. Metal flashing turned up the chimney stack on min. 100 mm. This high must be enlarged with the reduction of roof pitch to 150 mm (< 15°) or and according to requirements of the local building codes. The junction must be subsequently be protected with counter flashing let into a groove, fixed and sealed. Seal every shingle on the flashing with bituminous mastic Shingle/Plastal Stick.
10.3 Chimney. Cross section.
(PIR insulation on sheathing)

Horizontal leg of metal flashing should be > 100 mm wide and include a turned up edge. The courses of shingles are laid loose over this turned up edge. Metal flashing turned up the chimney stack on min. 100 mm. This high must be enlarged with the reduction of roof pitch to 150 mm (< 15⁰) or and according to requirements of the local building codes. The junction must be subsequently be with counter flashing let into a groove, fixed and sealed. Seal every shingle on the flashing with bituminous mastic Shingle/Plastal Stick.
10.4 Chimney. Cross section.
(PIR insulation above rafters)

Horizontal leg of metal flashing should be > 100 mm wide and include a turned up edge. The courses of shingles are laid loose over this turned up edge. Metal flashing turned up the chimney stack on min. 100 mm. This high must be enlarged with the reduction of roof pitch to 150 mm (< 15°) or/and according to requirements of the local building codes. The junction must be subsequently be counter flashing let into a groove, fixed and sealed. Seal every shingle on the flashing with bituminous mastic Shingle/Plastal Stick.
11.1 Chimney. Longitudinal section.
(cold attic)

On the ridge side roof is finished with a flashing acting as a back gutter, with is turned up the chimney stack (min. 150 mm above roof surface). On the eave side apron flashing is overlapped the shingles (min. 100 mm) and is turned up the chimney stack (min. 100 mm).
11.2 Chimney. Longitudinal section. (insulated roof)

On the ridge side roof is finished with a flashing acting as a back gutter, with is turned up the chimney stack (min. 150 mm above roof surface). On the eave side apron flashing is overlapped the shingles (min. 100 mm) and is turned up the chimney stack (min. 100 mm).
On the ridge side roof is finished with a flashing acting as a back gutter, with is turned up the chimney stack (min. 150 mm above roof surface). On the eave side apron flashing is overlapped the shingles (min. 100 mm) and is turned up the chimney stack (min. 100 mm).
11.4 Chimney. Longitudinal section.
(PIR insulation above rafters)

On the ridge side roof is finished with a flashing acting as a back gutter, with is turned up the chimney stack (min. 150 mm above roof surface). On the eave side apron flashing is overlapped the shingles (min. 100 mm) and is turned up the chimney stack (min. 100 mm).
12.1 Change in a roof slope (cold attic)

X - min 120, should be enlarged with a decreasing angle of a slope and/or requirements of local codes.
12.2 Mansard roof. (insulated roof)

X - min 120, should be enlarge with a decreasing angle of a slope and/or requirements of local codes

MANSARD ROOF
INSULATED

DESIGN SCALE 1:10
12.3 Mansard roof.
(PIR insulation on sheathing)

X - min 120, should be enlarge with a decreasing angle of a slope and/or requirements of local codes
12.4 Mansard roof
(PIR insulation above rafters)

- Breathable membrane
- Ventilation channel
- Roof deck
- IKO Shingles
- IKO ARMOURBASE PRO
- Vapor barrier
- Counter batten
- Ceiling boarding
- PUR foam
- Starter strip

X - min 120, should be enlarged with a decreasing angle of a slope and/or requirements of local codes

X: Breathable membrane

A (1:4)

MANSARD ROOF.
PIR INSULATION
ABOVE RAFTERS

DESIGN SCALE 1:10
13.1 Slope inclination. (cold attic)

- Breathable membrane
- Ventilation channel
- Roof deck
- IKO Shingles
- IKO ARMOURBASE PRO
- Rafter
- Starter strip
- IKO SHINGLE STICK
- Drip flashing
- IKO SHINGLE STICK

X - min 120 mm, should be enlarge with a decreasing angle of a slope and/or requirements of local codes
13.2 Slope inclination.  
(insulated roof)

X - min 120 mm, should be enlarge with a decreasing angle of a slope and/or requirements of local codes
13.3 Slope inclination. (PIR insulation on sheathing)

SLOPE INCLINATION.
PIR INSULATION ON SHEATHING

X - min 120 mm, should be enlarged with a decreasing angle of a slope and/or requirements of local codes

www.iko.be
13.4 Slope inclination. (PIR insulation above rafters)

X - min 120 mm, should be enlarge with a decreasing angle of a slope and/or requirements of local codes.