





THO

Nails



Valleys

Starterstrip



Mastics

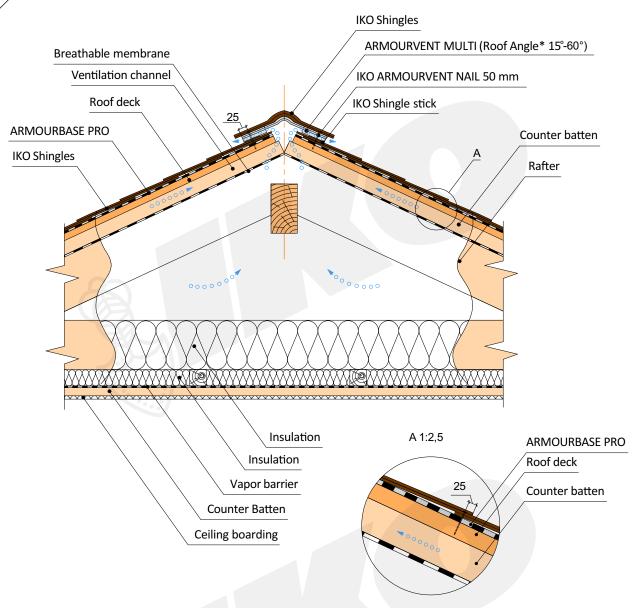




Underlayments

### 1.1 Attic with ridge ventilation





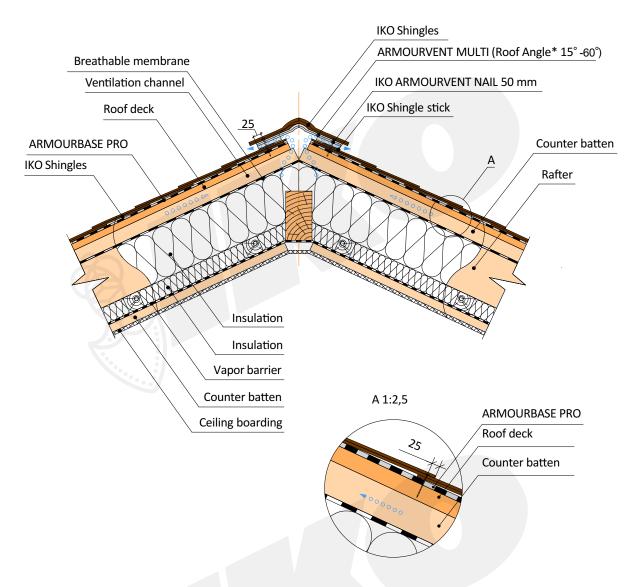
Specification	Armourvent Multi	Armourvent Multi Plus
Dimension	6 m; 22,8 cm	6 m; 28,5 cm
20		Cambridge Xtreme 9.5 °/ Xpress
	Armourglass	Monarch-Diamant
Application	Victorian	DiamantShield
Application	Monarch	ArmourShield
		Diamant
		Superglass/ -Biber
Angle	15°-60°	15°-60°*
Ventilation Area	275 cm <sup>2</sup> /m	275 cm²/m

<sup>\*</sup> Cambridge Xtreme exception 9.5 ° up

ARMOURVENT MULTI APPLICATION		DESIGN SCALE 1:10	
------------------------------	--	-------------------	--

### 1.2 Ventilated ridge - insulated roof





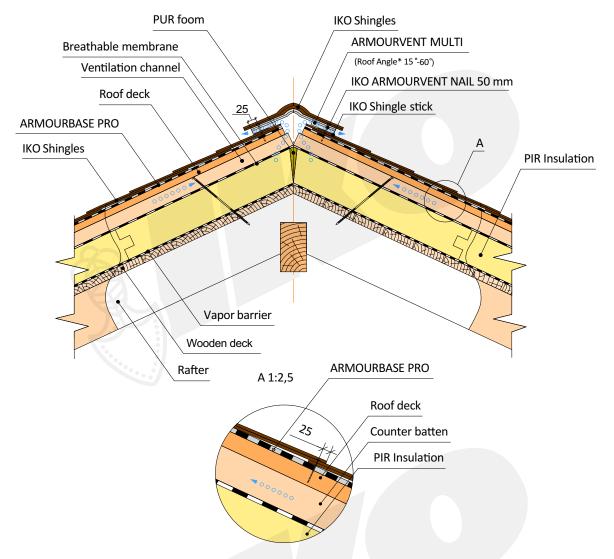
Specification	Armourvent Multi	Armourvent Multi Plus
Dimension	6 m; 22,8 cm	6 m; 28,5 cm
		Cambridge Xtreme 9.5 °/ Xpress
	Armourglass	Monarch-Diamant
Application	Victorian	DiamantShield
	Monarch	ArmourShield
		Diamant
		Superglass/ -Biber
Angle	15° - 60°	15°-60°*
Ventilation Area	275 cm <sup>2</sup> /m	275 cm <sup>2</sup> /m

<sup>\*</sup> Cambridge Extreme exception 9.5°up

ARMOURVENT MULTI APPLICATION		DESIGN SCALE 1:10	
------------------------------	--	-------------------	--

# 1.3 Ventilated ridge. PIR insulation on sheathing





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

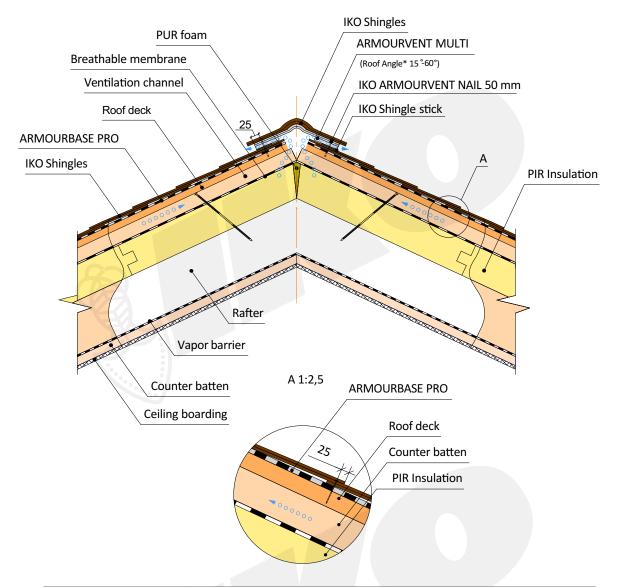
<sup>\*</sup> Cambridge Xtreme exception 9.5 ° up

ARMOURVENT MULTI APPLICATION



### 1.4 Ventilated ridge insulation above rafters





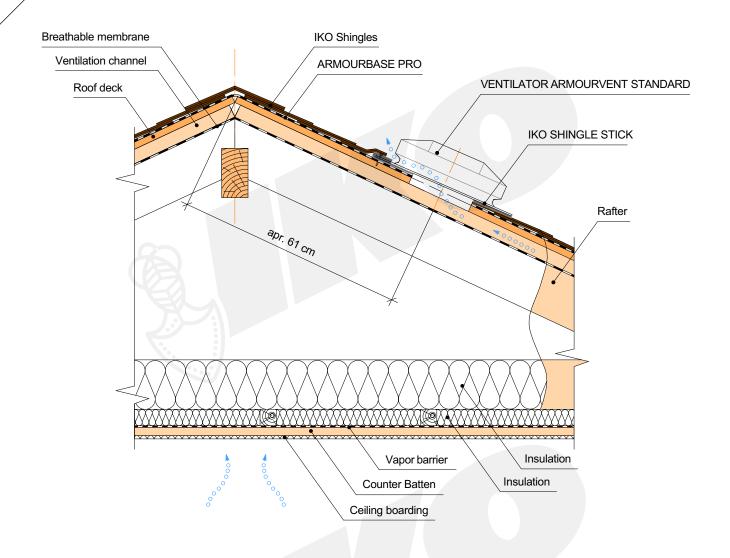
Specification	Armourvent Multi	Armourvent Multi Plus
Dimension	6 m; 22,8 cm	6 m; 28,5 cm
		Cambridge Xtreme 9.5 °/ Xpress
	Armourglass	Monarch-Diamant
Application	Victorian	DiamantShield
Application	Monarch	ArmourShield
		Diamant
		Superglass/-Biber
Angle	15°-60°	15°-60°*
Ventilation Area	275 cm²/m	275 cm <sup>2</sup> /m

<sup>\*</sup> Cambridge Xtreme exception 9.5 ° up

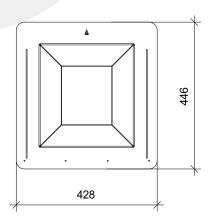
ARMOURVENT MULTI APPLICATION		DESIGN SCALE 1:10	
------------------------------	--	-------------------	--

### 2.1 Attic with ArmourVent Standard Ventilation





Specification	Armourvent Standard
Dimension	43x45x11 cm
Ventilation Area	322 cm <sup>2</sup> /pc
Colors	black, brown
Slope	14-45 °
Material	PP with UV inhibitors additives

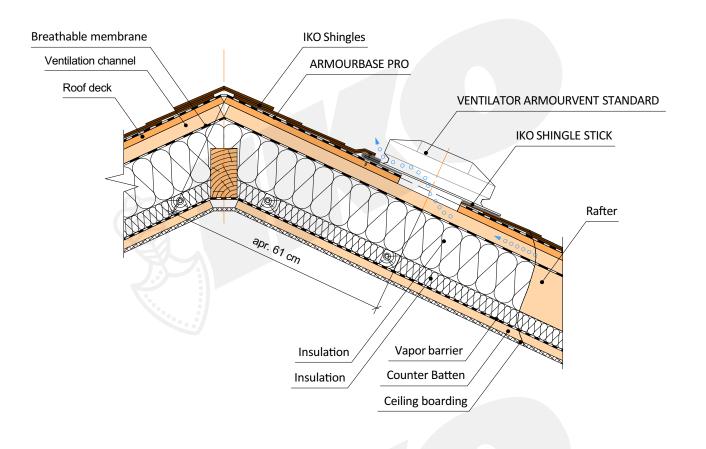


ARMOURVENT STANDARD
APPLICATION



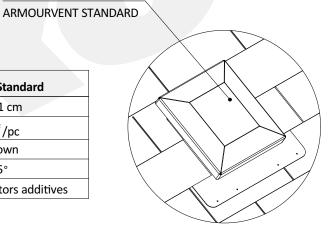
### 2.2 Ridge with ArmourVent Standard Ventilation





**VENTILATOR** 

SpecificationArmourvent StandardDimension43x45x11 cmVentilation Area322 cm²/pcColorsblack, brownSlope14-45°MaterialPP with UV inhibitors additives

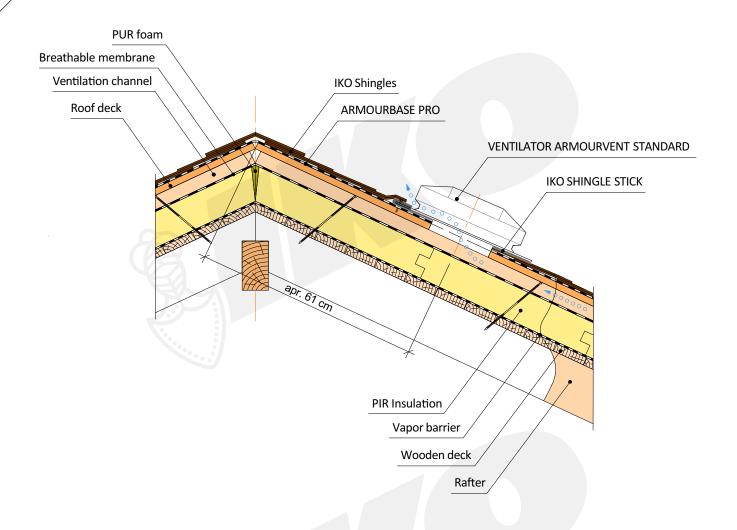


ARMOURVENT STANDARD
APPLICATION

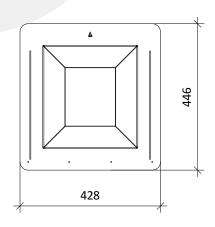


# 2.3 Ridge with ArmourVent Standard Ventilation PIR Insulation on sheathing





Specification	Armourvent Standard
Dimension	43x45x11 cm
Ventilation Area	322 cm <sup>2</sup> /pc
Colors	black, brown
Slope	14-45°
Material	PP with UV inhibitors additives

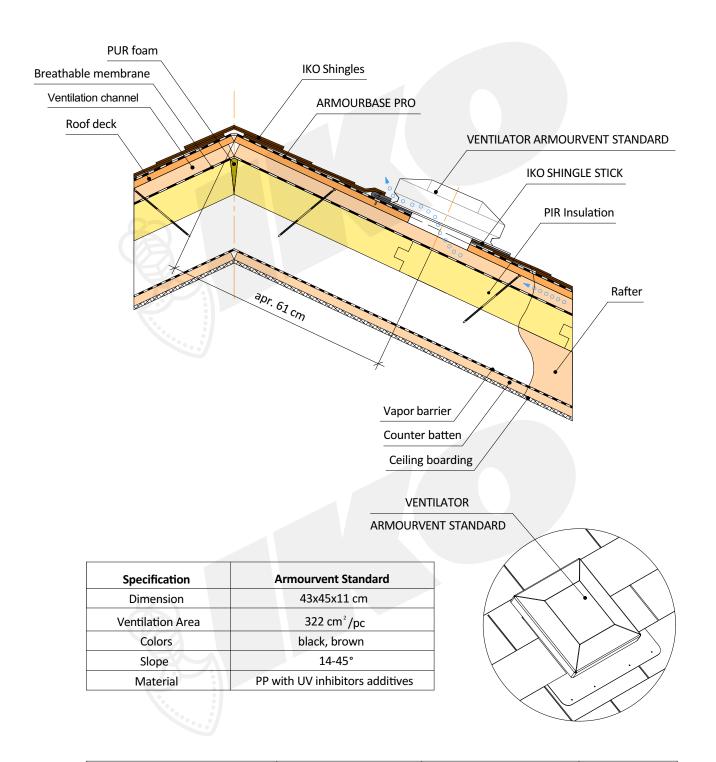


ARMOURVENT STANDARD APPLICATION



# 2.4 Ridge with ArmourVent Standard Ventilation Insulation above rafters



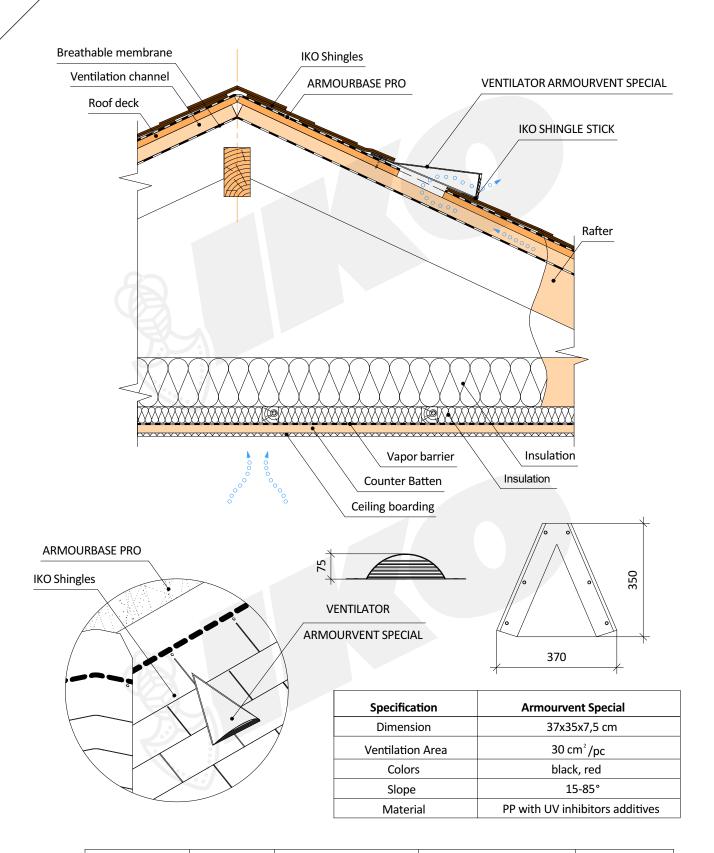


ARMOURVENT STANDARD
APPLICATION



### 3.1 Attic with ArmourVent Special Ventilation





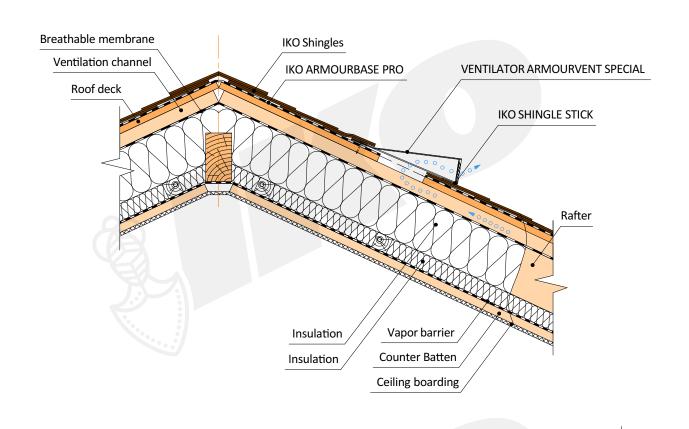


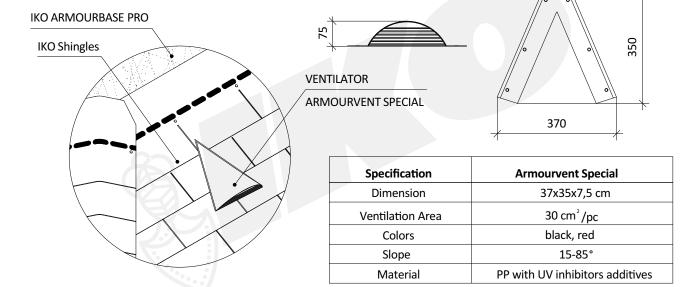




# 3.2 Roof ventilator Armourvent Special (insulated roof)







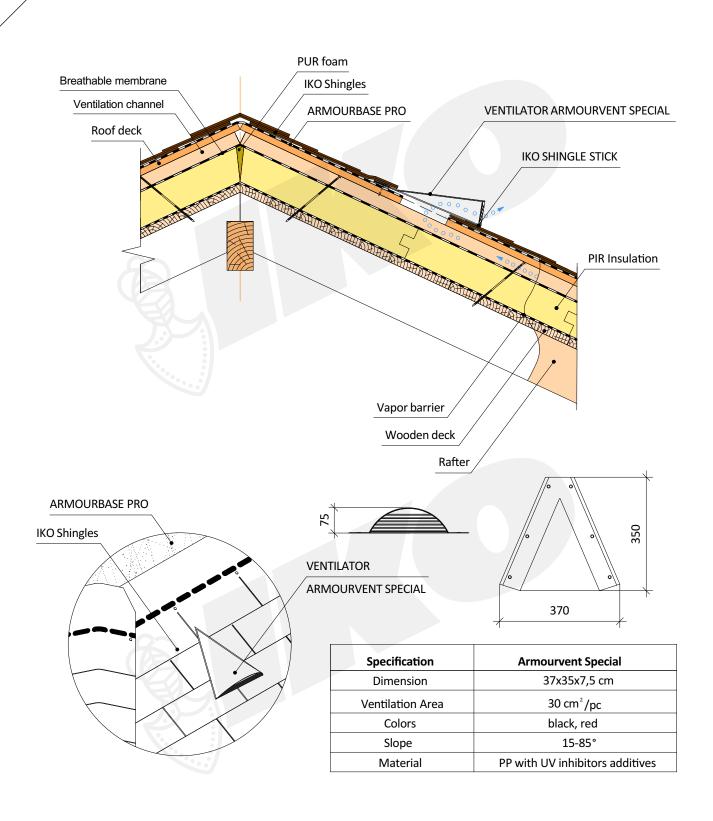
ARMOURVENT SPECIAL





## 3.3 Roof ventilator Armourvent Special (PIR insulation above rafters)





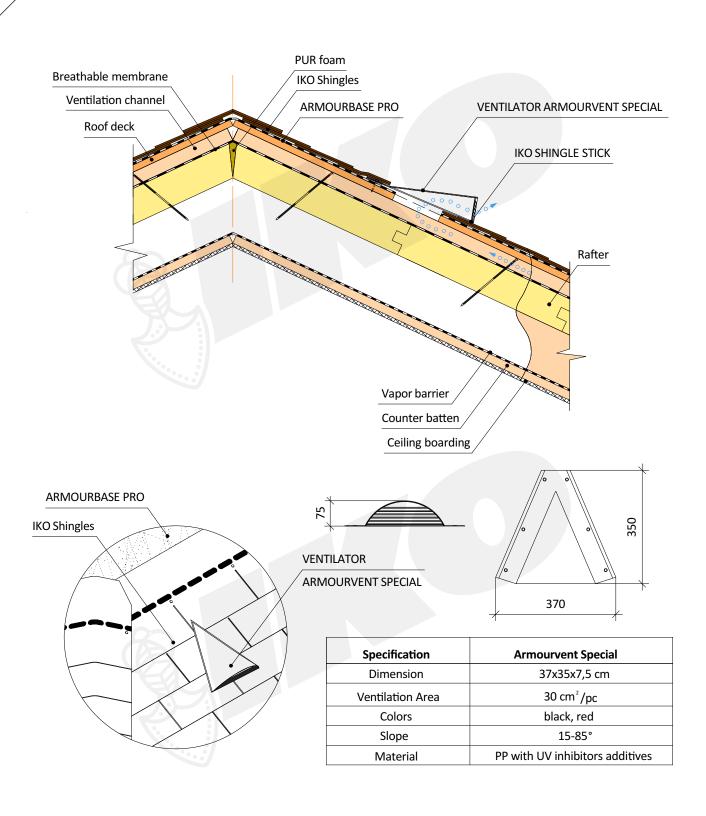
ARMOURVENT
SPECIAL





### 3.4 Roof ventilator Armourvent Special (PIR insulation above rafters)





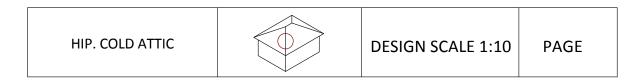
ARMOURVENT SPECIAL





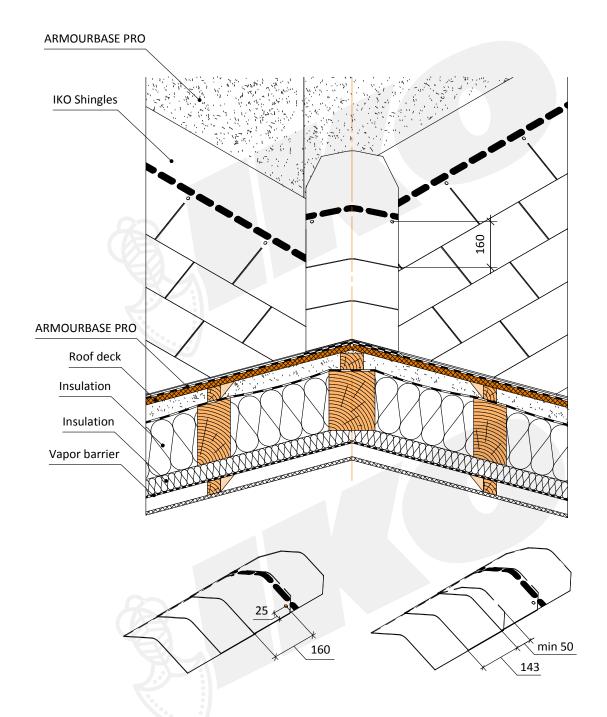
# 4.1 Hip. Cold attic The Shingles Expert www.iko.be ARMOURBASE PRO **IKO Shingles** ARMOURBASE PRO Roof deck Insulation Insulation Vapor barrier **Counter Batten** Ceiling boarding min 50 160

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.

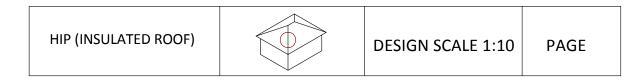


### 4.2 Hip (Insulated roof)



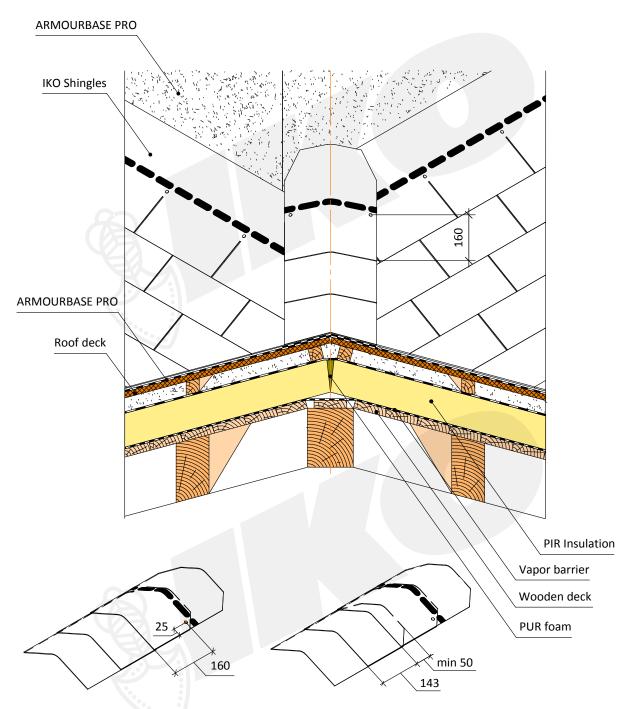


Apply the hip and ridge shingles double thickness by stacking two pieces and bending them over the hip or the ridge. Always ensure that, when installing the ridge covering shingle tabs, the nails of the upper shingle course (on both sides of the ridge) are covered.



# 4.3 Hip (PIR insulation on sheathing)





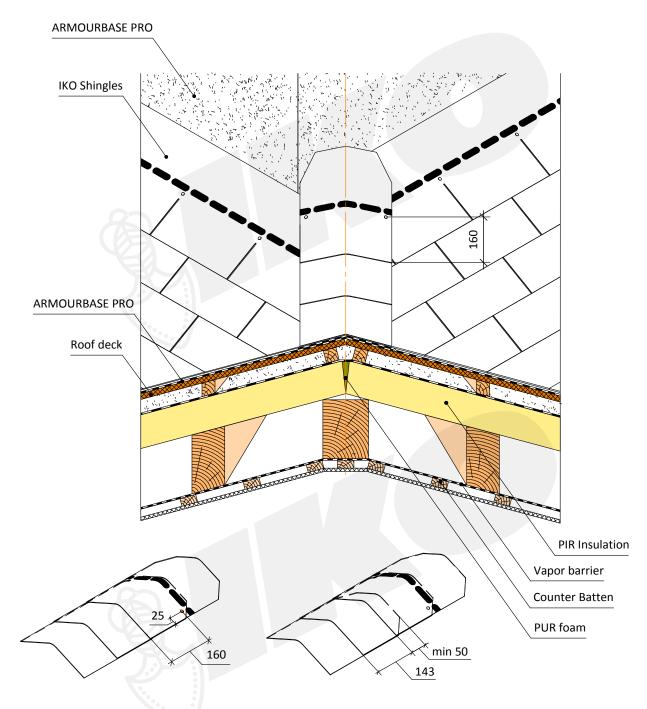
Apply the hip and ridge shingles double thickness by stacking two pieces and bending them over the hip or the ridge. Always ensure that, when installing the ridge covering shingle tabs, the nails of the upper shingle course (on both sides of the ridge) are covered.

HIP (PIR INSULATION ON SHEATING)

DESIGN SCALE 1:10 PAGE

### 4.4 Hip (PIR insulation above rafters)





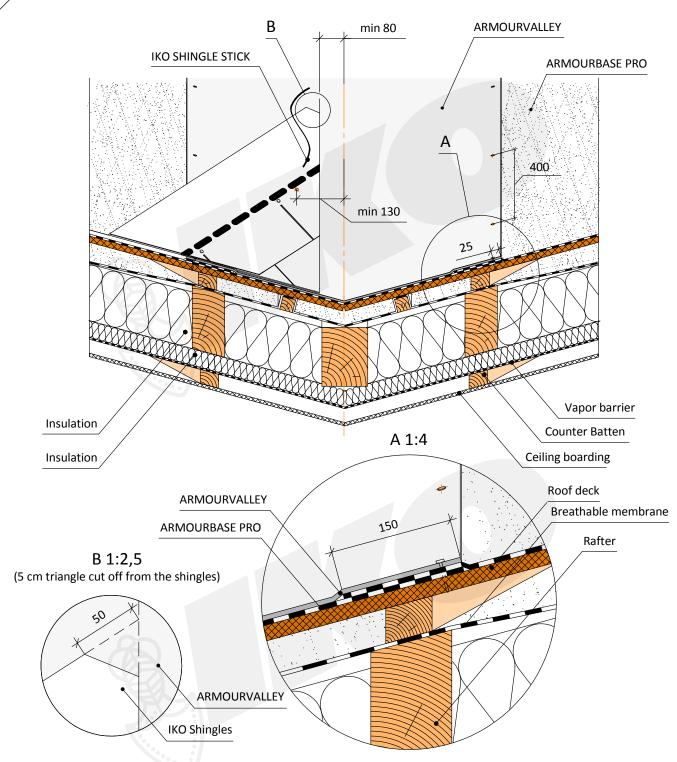
Apply the hip and ridge shingles double thickness by stacking two pieces and bending them over the hip or the ridge. Always ensure that, when installing the ridge covering shingle tabs, the nails of the upper shingle course (on both sides of the ridge) are covered.

HIP (PIR INSULATION ABOVE RAFTERS)

DESIGN SCALE 1:10

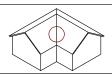
#### 5.1 Open Valley. Insulated roof





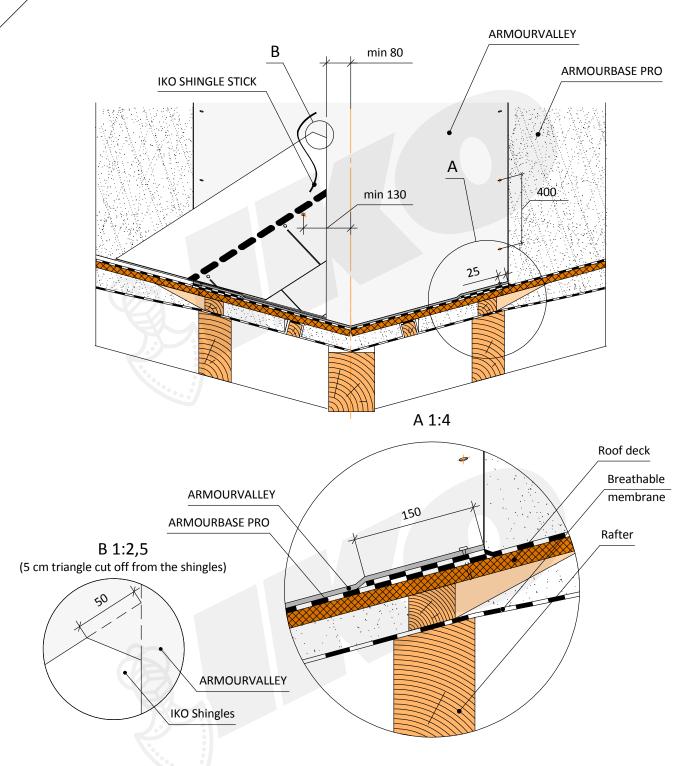
Snap two chalk lines from the ridge to the eaves 8 cm apart increasing in width by 1 cm per meter towards the eaves. Trim the shingles to these lines and cut a 5 cm triangle off the top corner to direct the water into the valley. Bond the valley end of each shingle with IKO Shingle Stick®/IKO Plastal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



#### 5.2 Open Valley. Cold attic





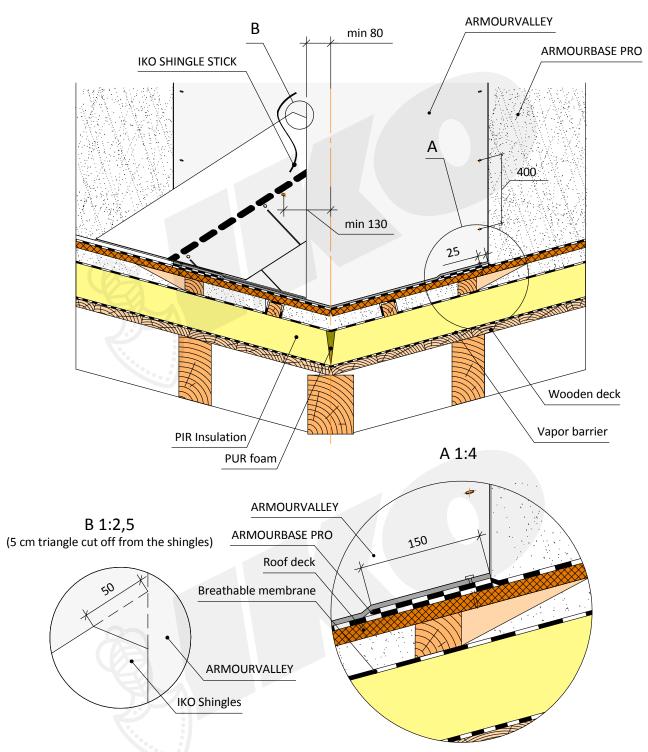
Snap two chalk lines from the ridge to the eaves 8 cm apart increasing in width by 1 cm per meter towards the eaves. Trim the shingles to these lines and cut a 5 cm triangle off the top corner to direct the water into the valley. Bond the valley end of each shingle with IKO Shingle Stick®/IKO Plastal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

OPEN VALLEY.
COLD ATTIC

DESIGN SCALE 1:10

# 5.3 Open Valley.(PIR insulation on sheathing)





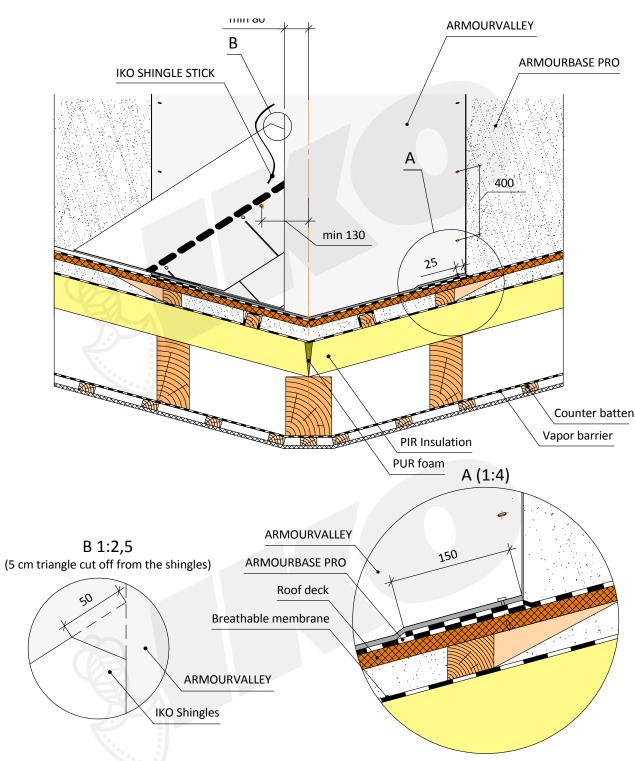
Snap two chalk lines from the ridge to the eaves 8 cm apart increasing in width by 1 cm per meter towards the eaves. Trim the shingles to these lines and cut a 5 cm triangle off the top corner to direct the water into the valley. Bond the valley end of each shingle with IKO Shingle Stick®/IKO Plastal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

OPEN VALLEY.
PIR INSULATION
ON SHEATHING

DESIGN SCALE 1:10

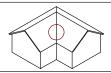
### 5.4 Open Valley.(PIR insulation above rafters)





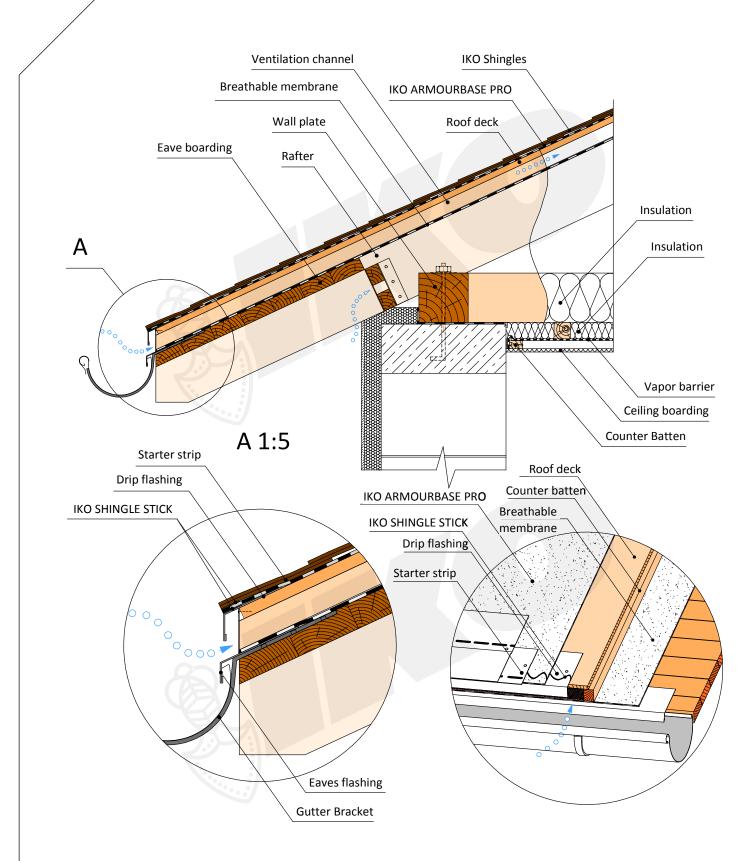
Snap two chalk lines from the ridge to the eaves 8 cm apart increasing in width by 1 cm per meter towards the eaves. Trim the shingles to these lines and cut a 5 cm triangle off the top corner to direct the water into the valley. Bond the valley end of each shingle with IKO Shingle Stick®/IKO Plastal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



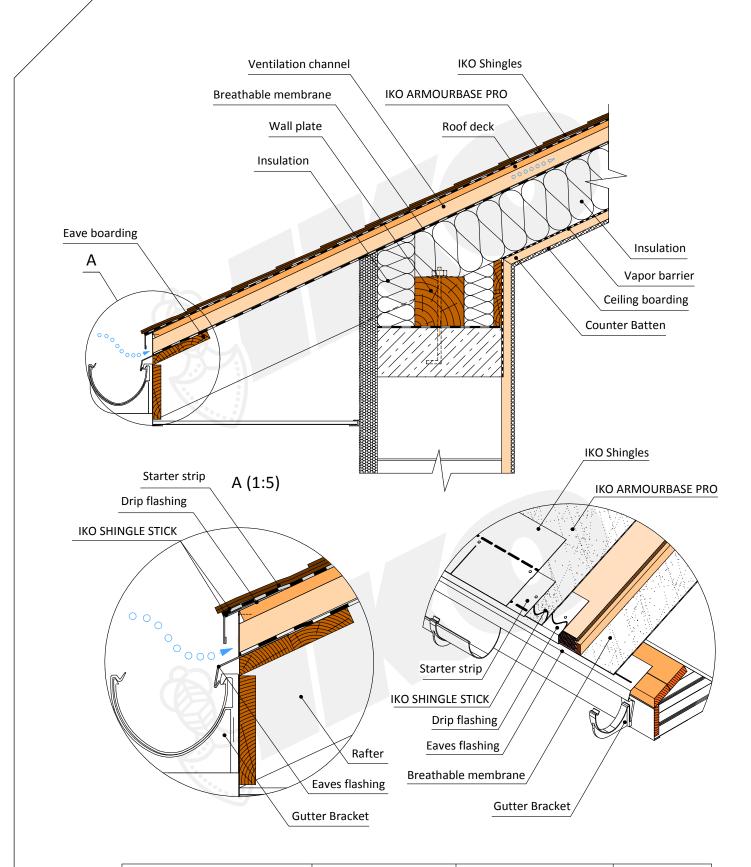
### 1.1 Attic with ridge ventilation





#### 6.2 Eave. Insulation between rafters



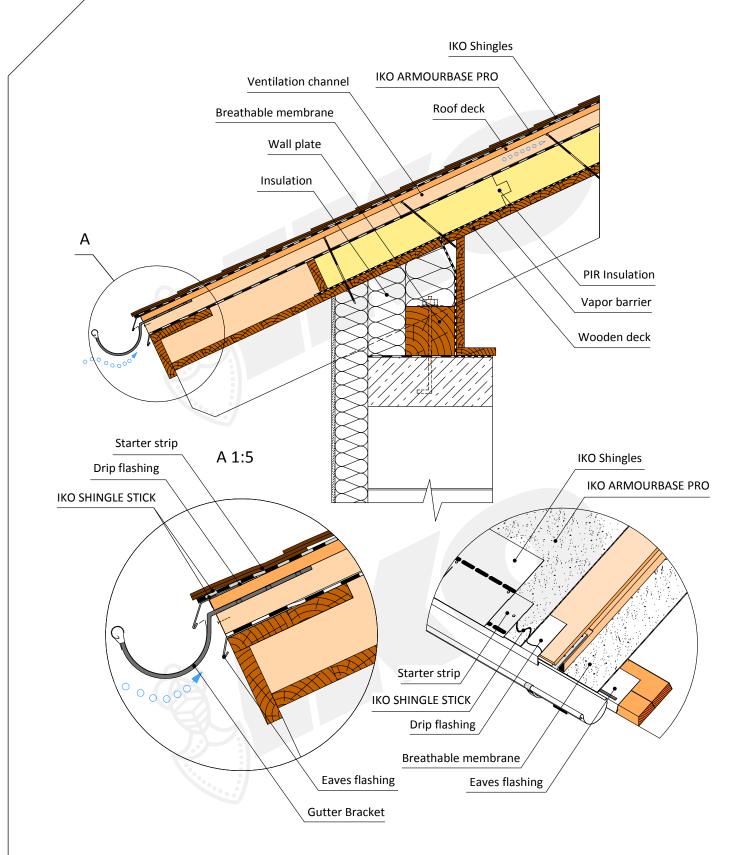


EAVE. INSULATION BETWEEN RAFTERS



### 6.3 Eave. PIR Insulation on sheathing



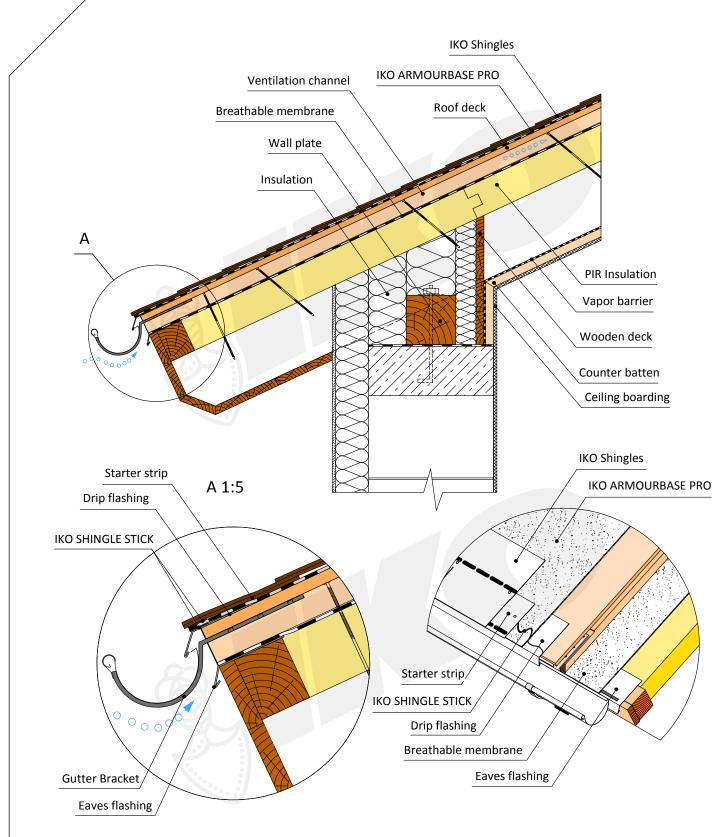


EAVE. PIR INSULATION
ON SHEATHING



#### 6.4 Eave. PIR Insulation on rafter



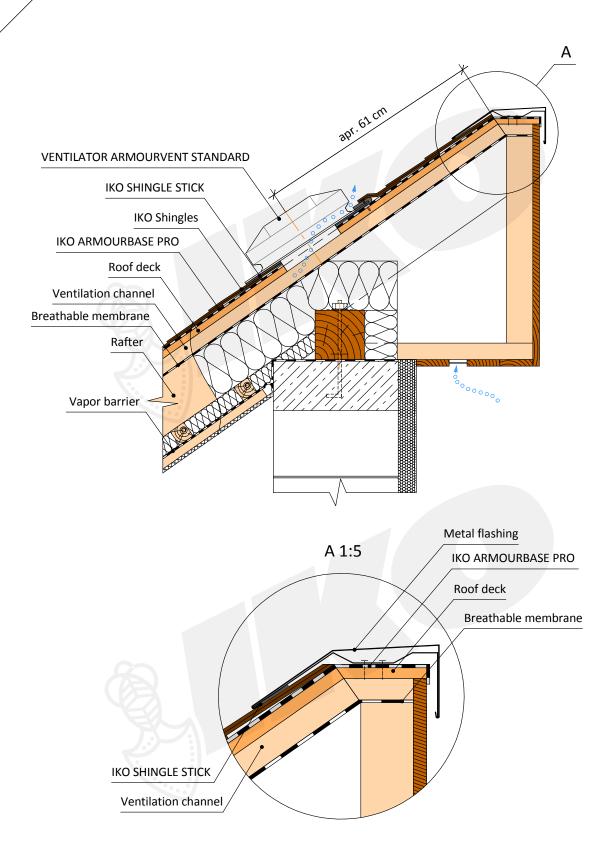


EAVE. PIR INSULATION
ON RAFTER



### 7.1 Shed roof. Insulated roof



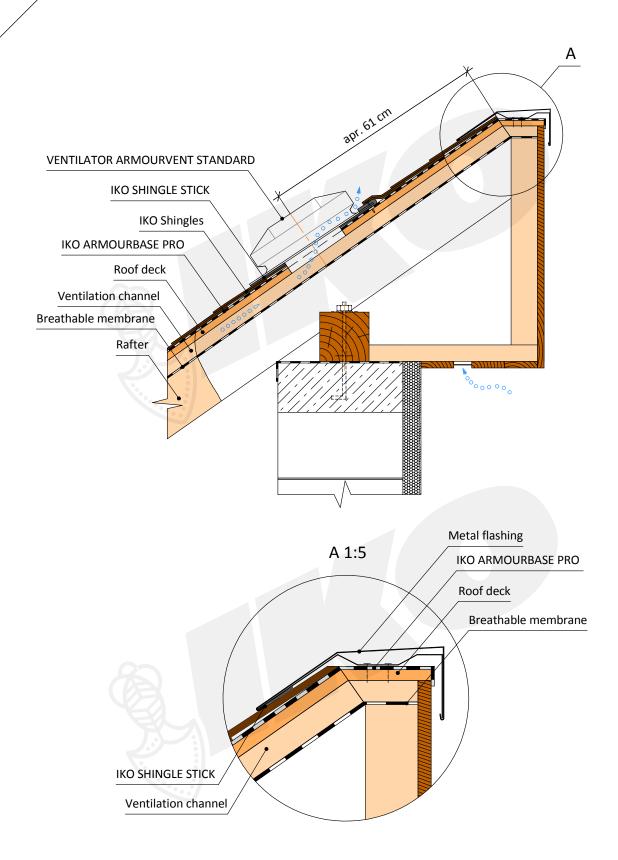


SHED ROOF.
INSULATED ROOF



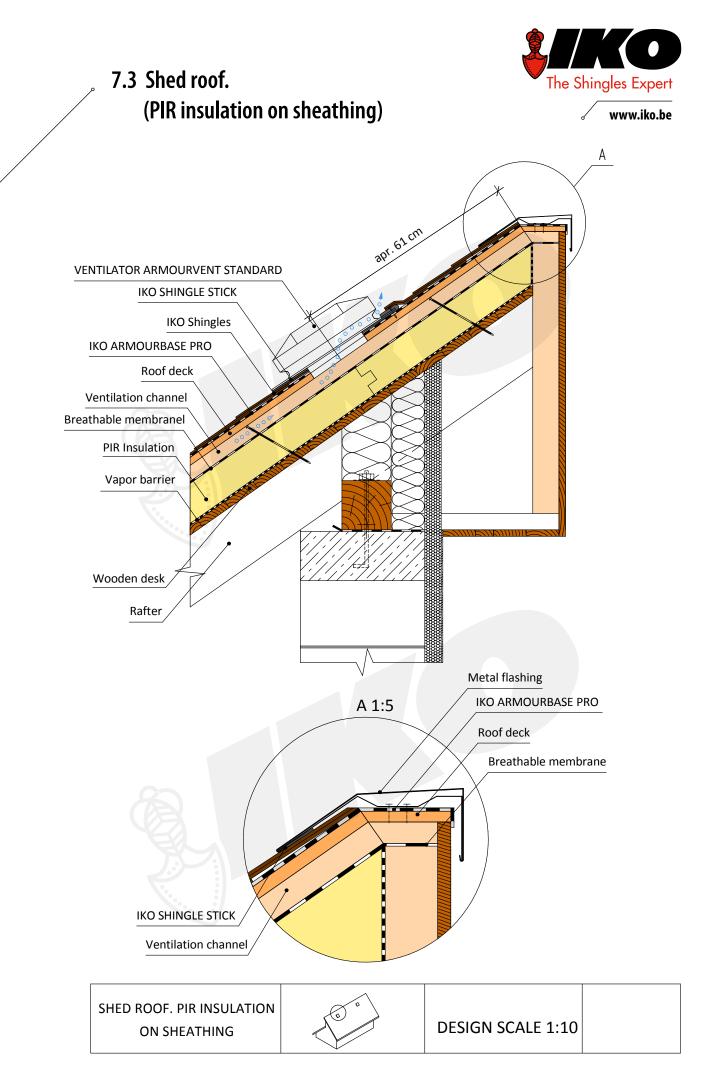
#### 7.2 Shed roof. Cold Attic





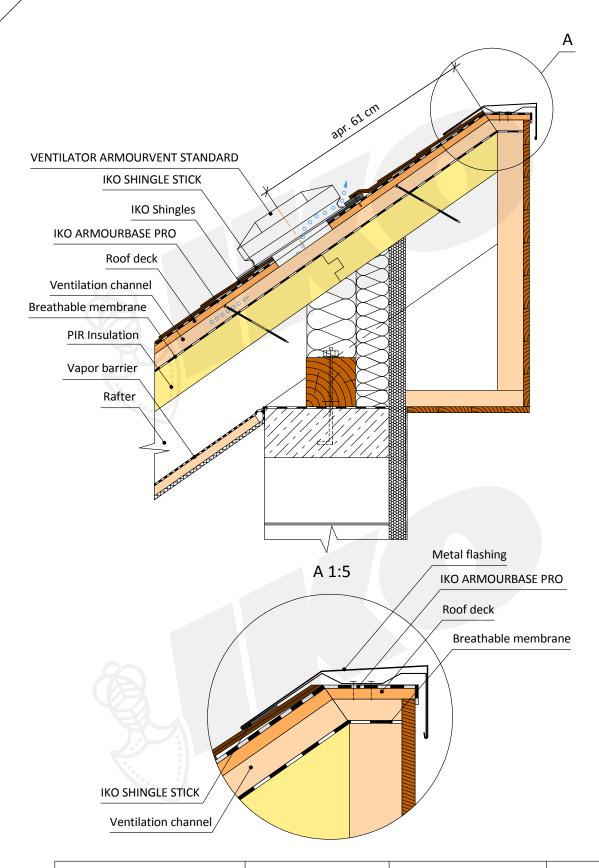
SHED ROOF.
COLD ATTIC





# 7.4 Shed roof. (PIR insulation above rafters)



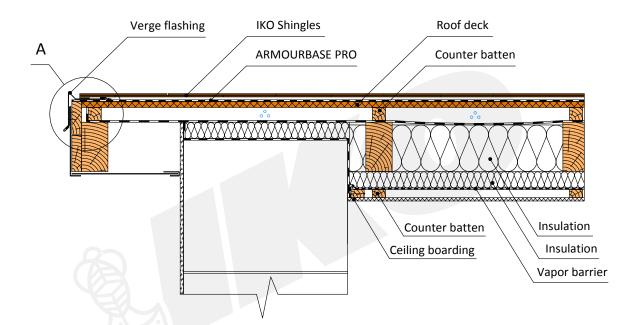


SHED ROOF. PIR INSULATED
ABOVE RAFTERS

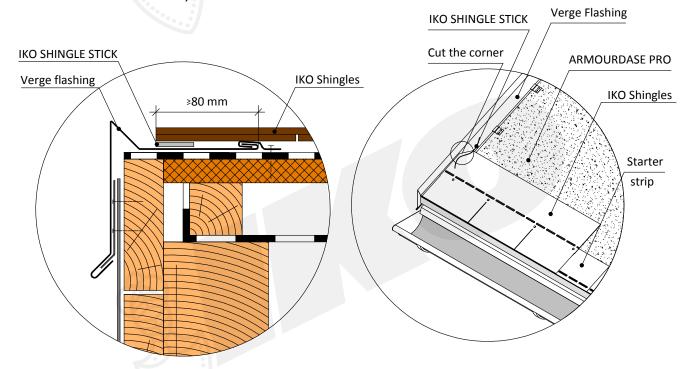


#### 8.1 Gable. (Insulation roof)









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.

GABLE (INSULATED ROOF)

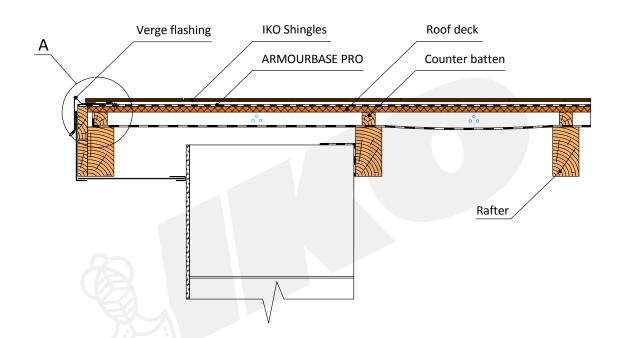


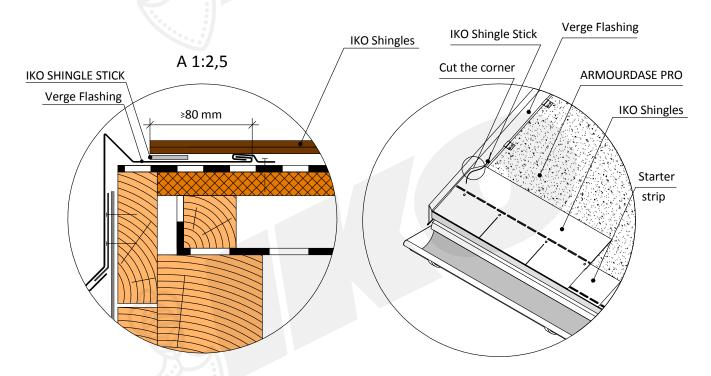
**DESIGN SCALE 1:10** 

**PAGE** 

#### 8.2 Gable.





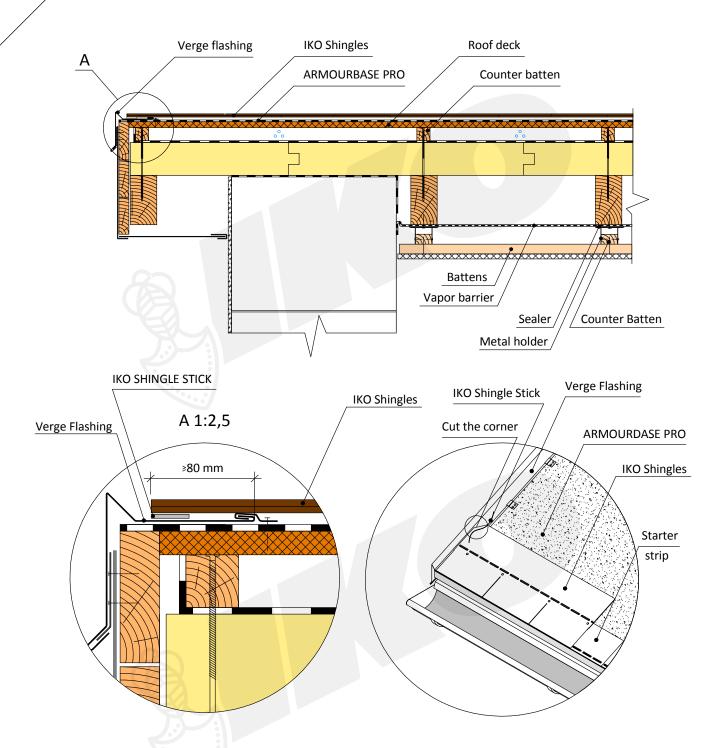


The courses of shingles are laid loose over this turned-up edge and overlap the sheet metal by  $\ge$  80 mm. The courses are not nailed or stuck down around the sheet metal profile. To prevent water being sucked below shingles laid flat, the top corner of each asphalt shingle is cut off at an angle. Seal every shingle on the verge flashing with bituminous mastic Shingle/Plastal Stick.

GABLE DESIGN SCALE 1:10 PAGE

# 8.3 Gable. (PIR insulation above rafters)





The courses of shingles are laid loose over this turned-up edge and overlap the sheet metal by  $\ge$  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.

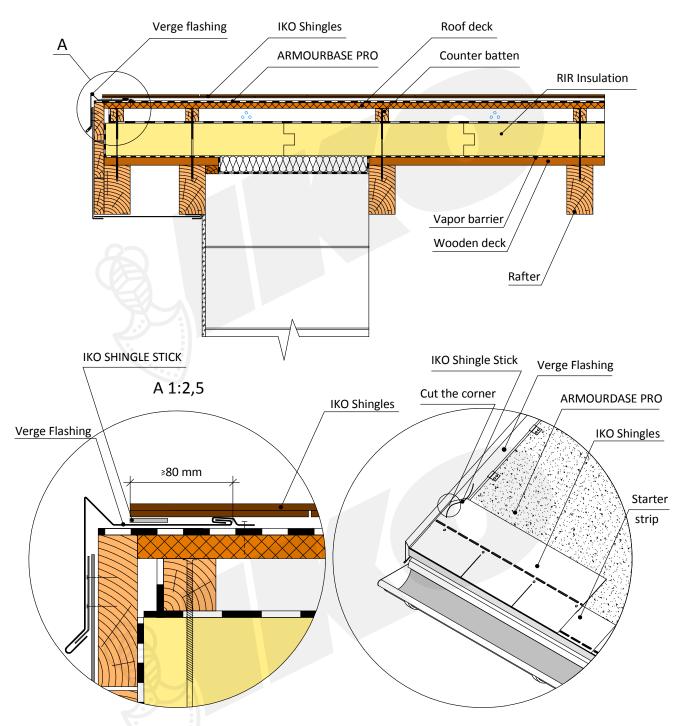
GABLE (PIR INSULATION ABOVE RAFTERS)

DESIGN SCALE 1:10

PAGE

# 8.4 Gable. (PIR insulation on sheathing)





The courses of shingles are laid loose over this turned-up edge and overlap the sheet metal by  $\ge$  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.

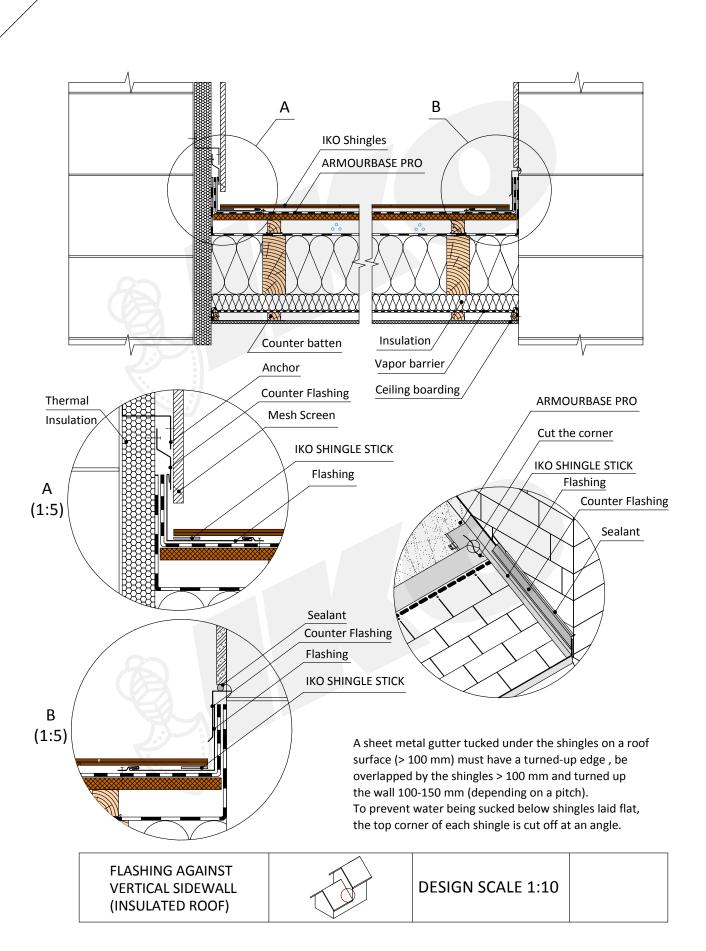
GABLE (PIR INSULATION ON SHEATHING)

DESIGN SCALE 1:10

PAGE

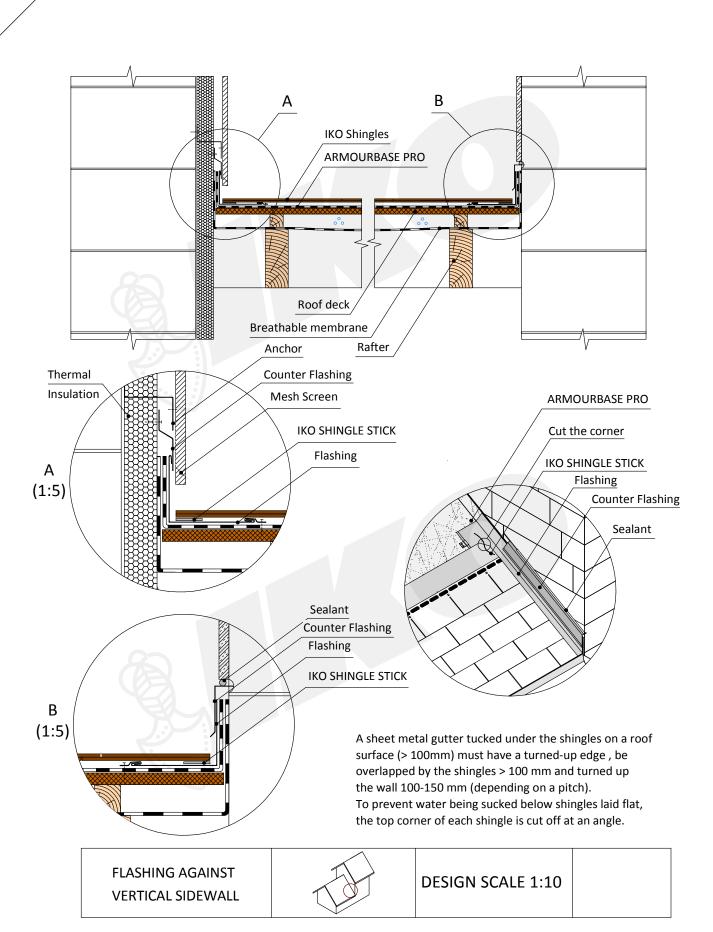
### 9.1 Flashing against vertical sidewall. (Insulated roof)





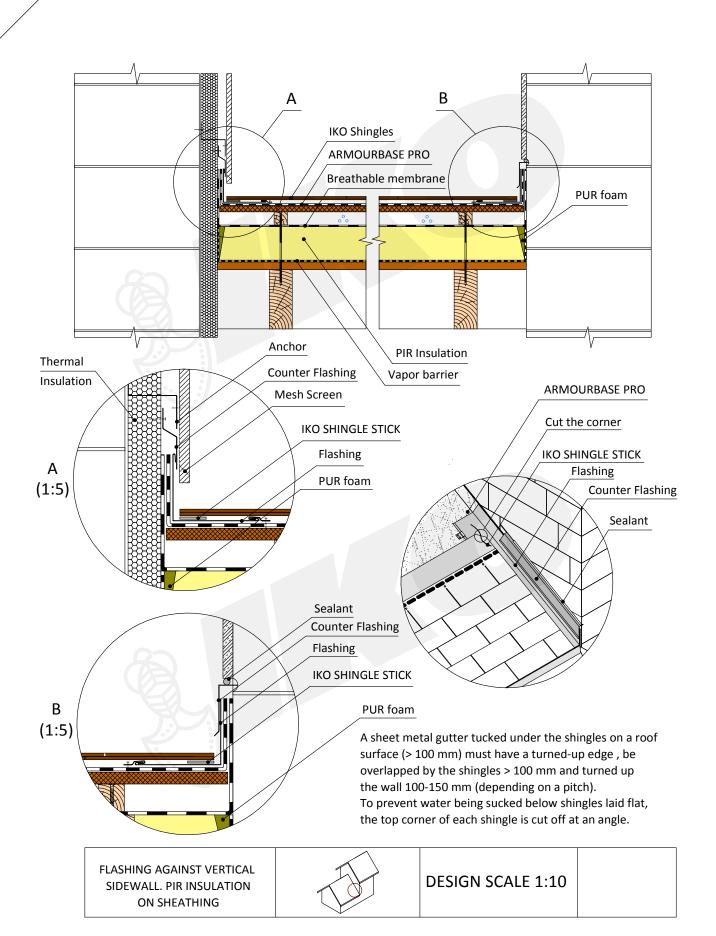
#### 9.2 Flashing against vertical sidewall.





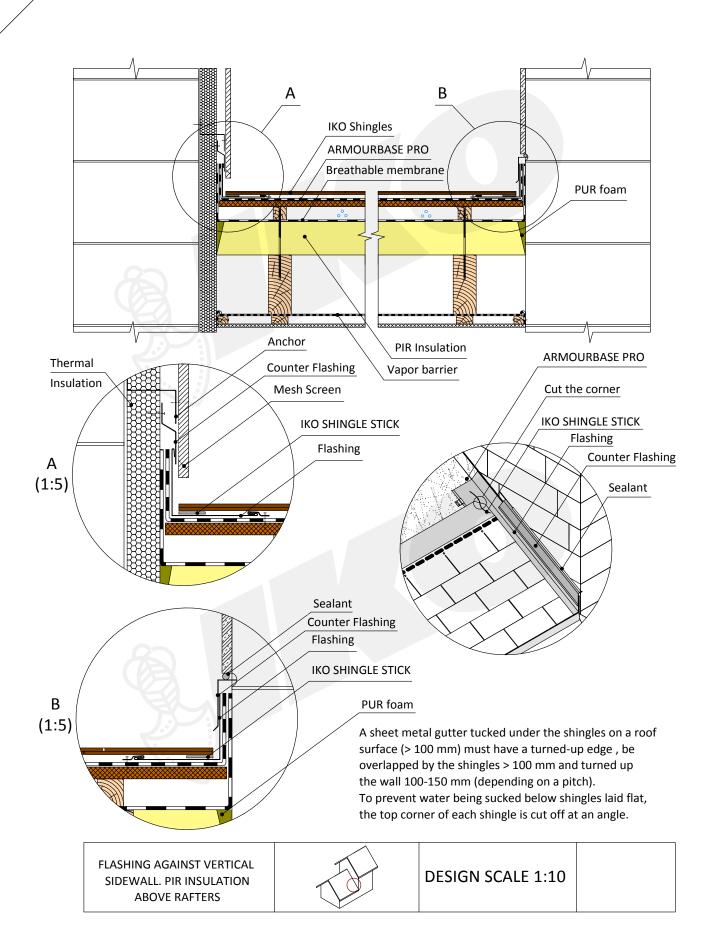
# 9.3 Flashing against vertical sidewall.(PIR insulation on sheathing)





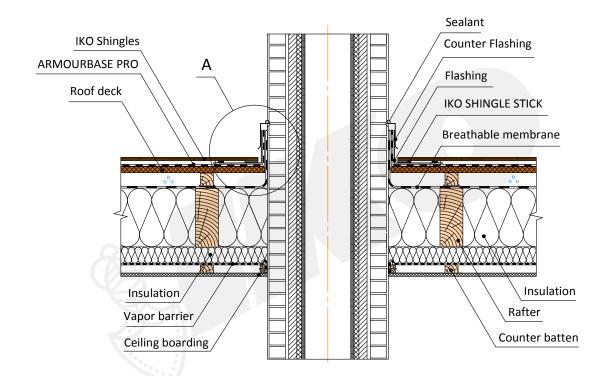
# The Shingles Expert www.iko.be

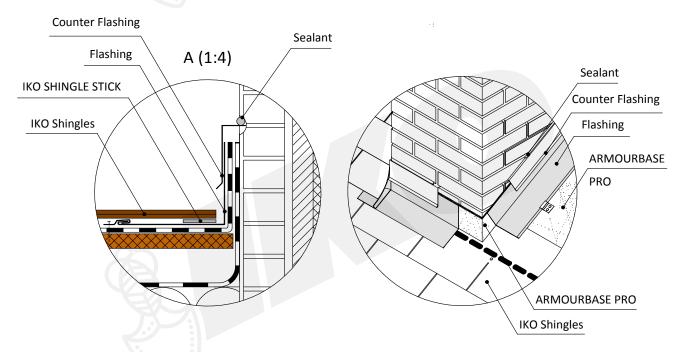
### 9.4 Flashing against vertical sidewall. (PIR insulation above rafters)



#### 10.1 Chimney. Cross section. Insulated roof







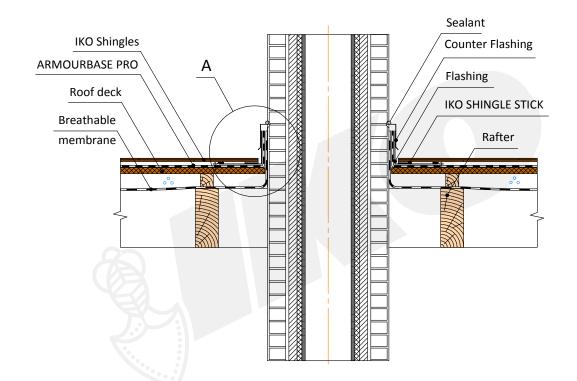
Horizontal leg of metal flashing should be > 100 mm wide and include a turned up edge. The courses of shingles are laid loose over this turned up edge. Metal flashing turned up the chimney stack on min. 100 mm. This high must be enlarged with the reduction of roof pitch to 150 mm ( $< 15^{\circ}$ ) or/and 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.

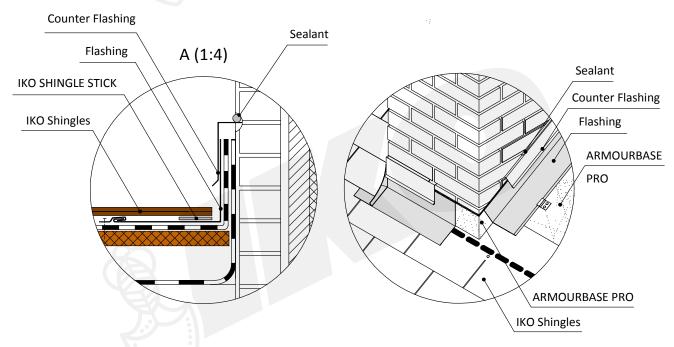
CHIMNEY. CROSS SECTION.
INSULATED ROOF



#### 10.2 Chimney. Cross section.





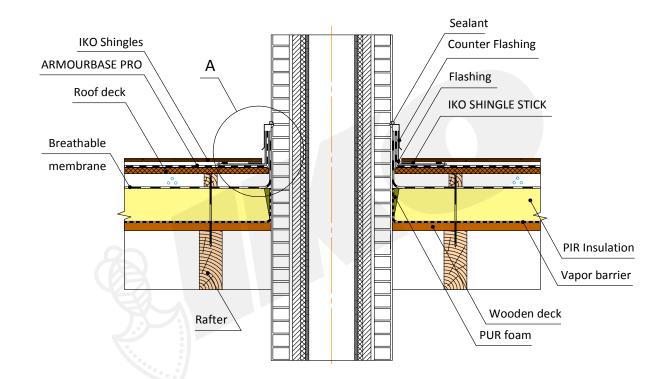


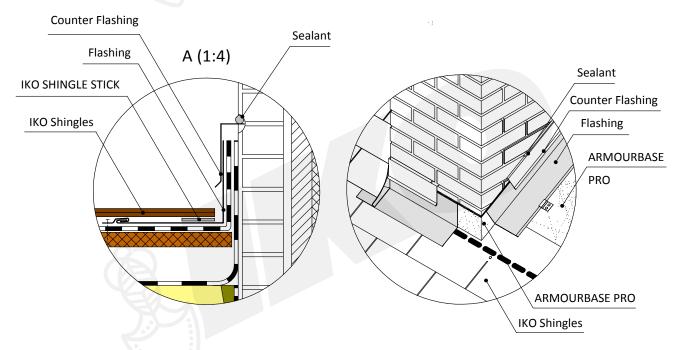
Horizontal leg of metal flashing should be > 100 mm wide and include a turned up edge. The courses of shingles are laid loose over this turned up edge. Metal flashing turned up the chimney stack on min. 100 mm. This high must be enlarged with the reduction of roof pitch to 150 mm ( $< 15^{\circ}$ ) or/and 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.

CHIMNEY. CROSS SECTION		DESIGN SCALE 1:10	
------------------------	--	-------------------	--

### 10.3 Chimney. Cross section.(PIR insulation on sheathing)







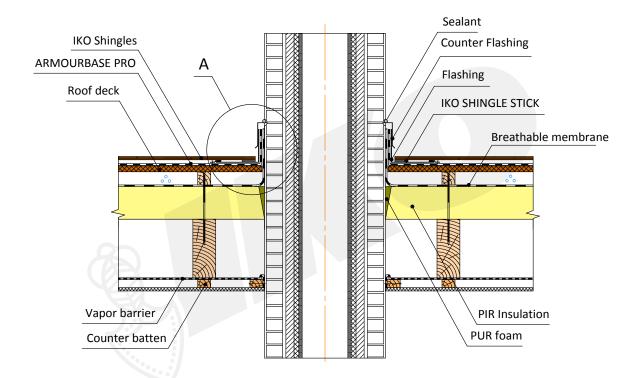
Horizontal leg of metal flashing should be > 100 mm wide and include a turned up edge. The courses of shingles are laid loose over this turned up edge. Metal flashing turned up the chimney stack on min. 100 mm. This high must be enlarged with the reduction of roof pitch to 150 mm ( $< 15^{\circ}$ ) or/and 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.

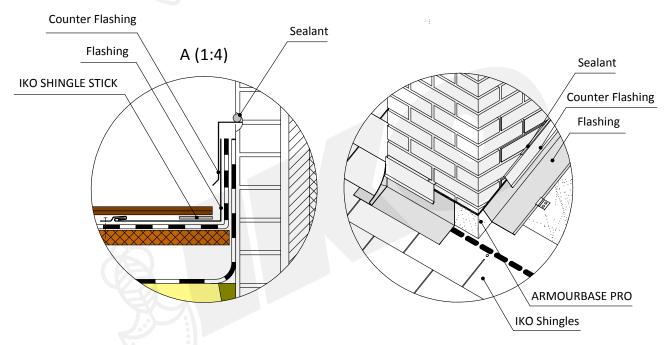
CHIMNEY. CROSS SECTION.
PIR INSULATION
ON SHEATHING



#### 10.4 Chimney. Cross section. (PIR insulation above rafters)







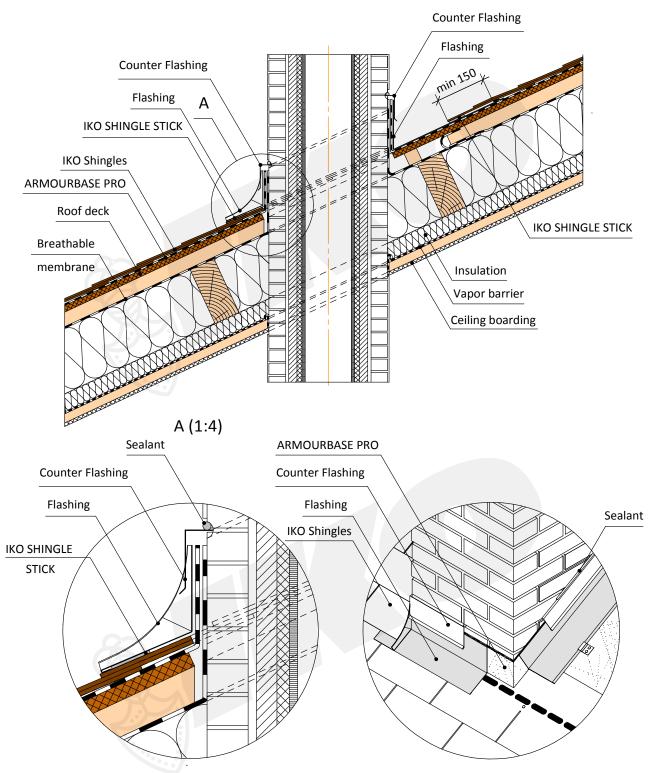
Horizontal leg of metal flashing should be > 100 mm wide and include a turned up edge. The courses of shingles are laid loose over this turned up edge. Metal flashing turned up the chimney stack on min. 100 mm. This high must be enlarged with the reduction of roof pitch to 150 mm ( $< 15^{\circ}$ ) or/and 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.

CHIMNEY. CROSS SECTION.
PIR INSULATION
ABOVE RAFTERS



### 11.1 Chimney. Longitudinal section. Insulated roof





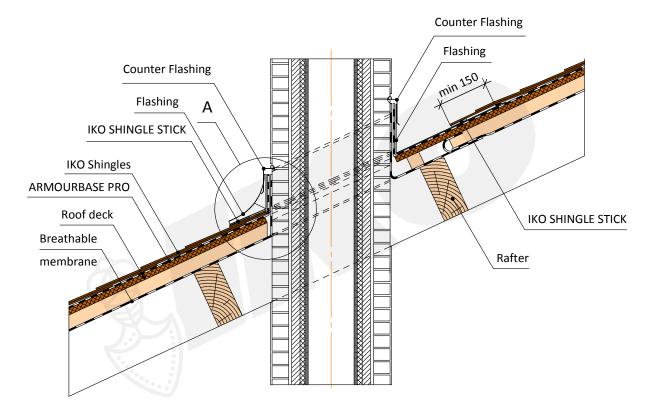
On the ridge side roof is finished with a flashing acting as a back gutter, with is turned up the chimney stack (min. 150 mm above roof surface). On the eave side apron flashing is overlapped the shingles (min. 100 mm) and is turned up the chimney stack (min. 100 mm).

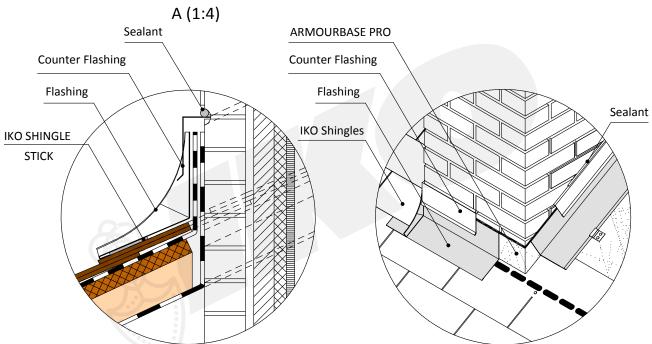
Chimney.
Longitudinal section.
Insulated roof

DESIGN SCALE 1:10

#### 11.2 Chimney. Longitudinal section. Cold Attic







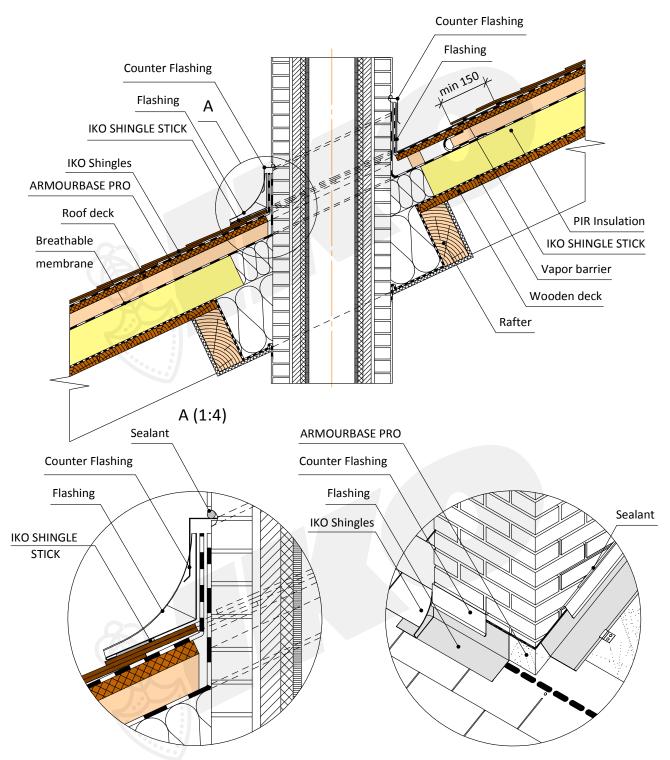
On the ridge side roof is finished with a flashing acting as a back gutter, with is turned up the chimney stack (min. 150 mm above roof surface). On the eave side apron flashing is overlapped the shingles (min. 100 mm) and is turned up the chimney stack (min. 100 mm).

CHIMNEY. LONGITUDINAL SECTION. COLD ATTIC



### 11.3 Chimney. Longitudinal section. (PIR insulation on sheathing)





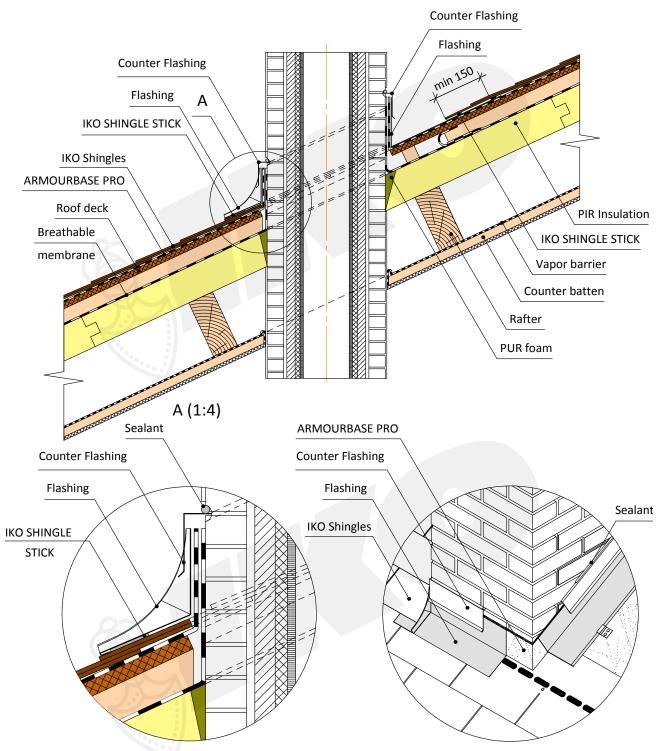
On the ridge side roof is finished with a flashing acting as a back gutter, with is turned up the chimney stack (min. 150 mm above roof surface). On the eave side apron flashing is overlapped the shingles (min. 100 mm) and is turned up the chimney stack (min. 100 mm).

CHIMNEY.
LONGITUDINAL SECTION.
PIR INSULATION ON SHEATHING



### 11.4 Chimney. Longitudinal section. (PIR insulation above rafters)





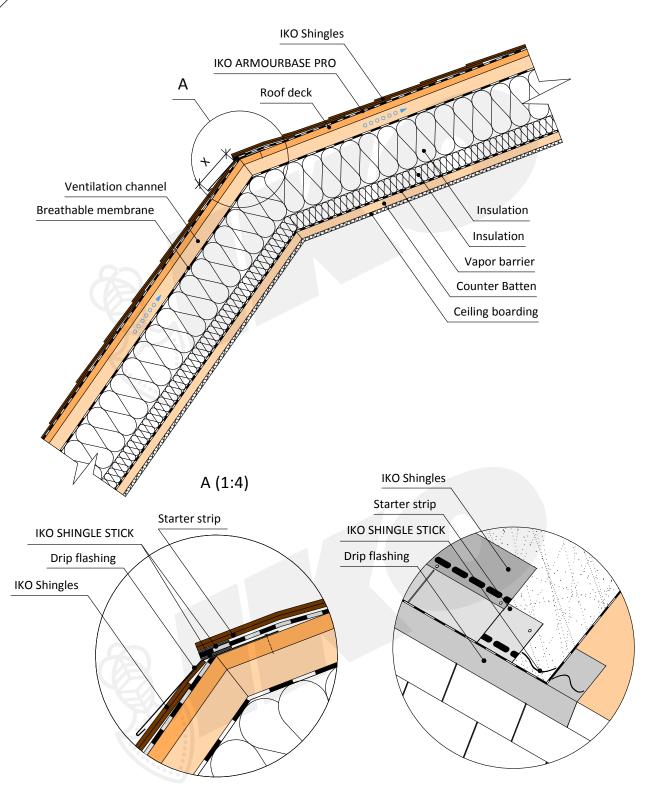
On the ridge side roof is finished with a flashing acting as a back gutter, with is turned up the chimney stack (min. 150 mm above roof surface). On the eave side apron flashing is overlapped the shingles (min. 100 mm) and is turned up the chimney stack (min. 100 mm).

CHIMNEY. LONGITUDINAL SECTION. PIR INSULATION ABOVE RAFTERS



#### 12.1 Mansard roof. Insulated





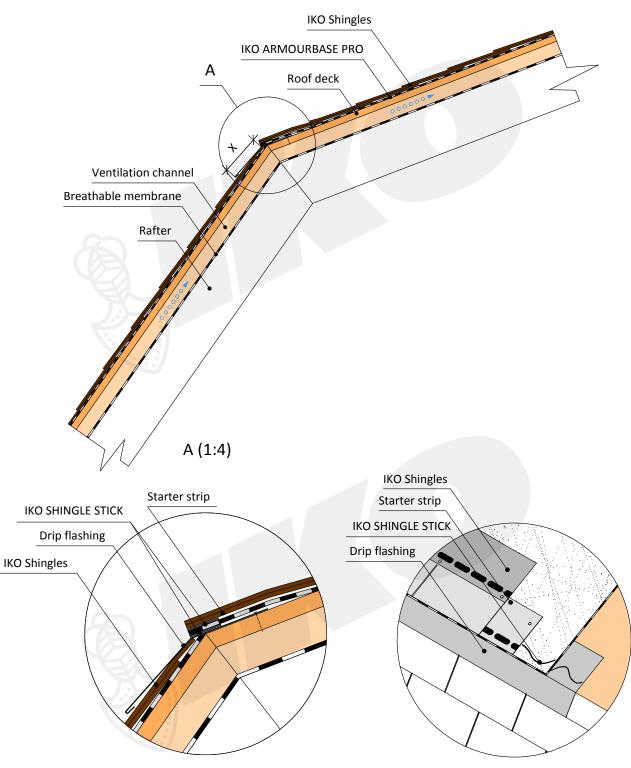
X - min 120, should be enlarge with a decreasing angle of a slope and/or requirements of local codes

MANSARD ROOF.
INSULATED



#### 12.2 Change in a roof slope





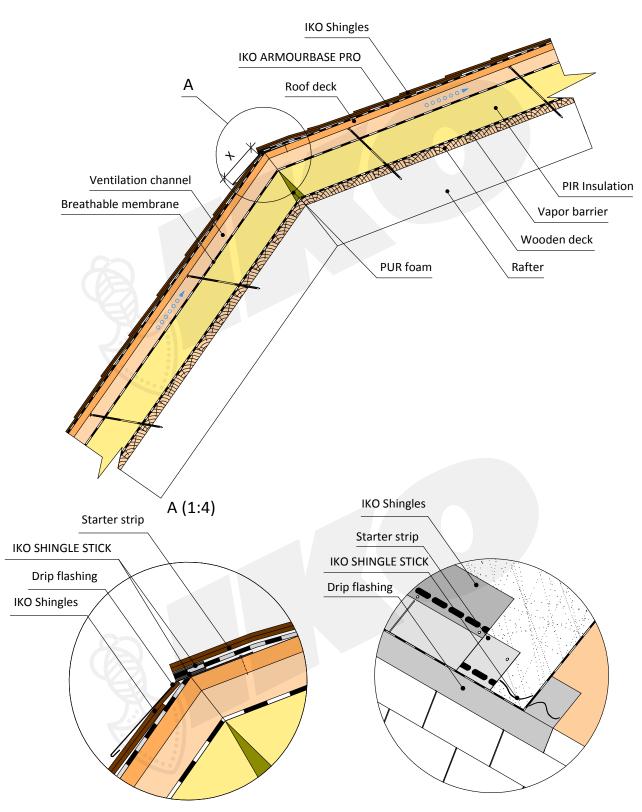
X - min 120, should be enlarge with a decreasing angle of a slope and/or requirements of local codes

CHANGE IN A ROOF SLOPE



### 12.3 Mansard roof (PIR insulation above rafters)





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

MANSARD ROOF. PIR INSULATION ON SHEATHING



### 12.4 Mansard roof (PIR insulation above rafters)



**IKO Shingles** IKO ARMOURBASE PRO Α Roof deck Rafter Ventilation channel Vapor barrier Breathable membrane Counter batten Ceiling boarding PUR foam **IKO Shingles** Starter strip A (1:4) Starter strip **IKO SHINGLE STICK** IKO SHINGLE STICK Drip flashing Drip flashing **IKO Shingles** 

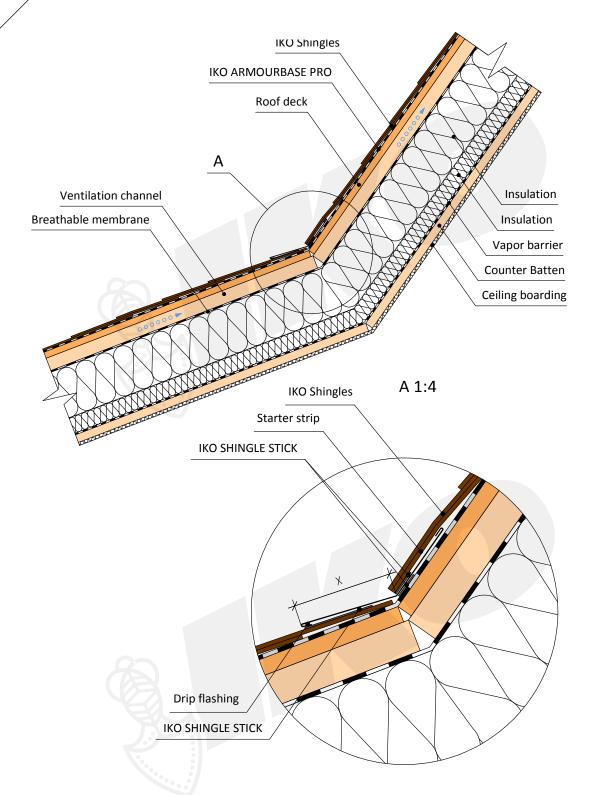
X - min 120, should be enlarge with a decreasing angle of a slope and/or requirements of local codes

MANSARD ROOF.
PIR INSULATION
ABOVE RAFTERS



#### 13.1 Slope inclination



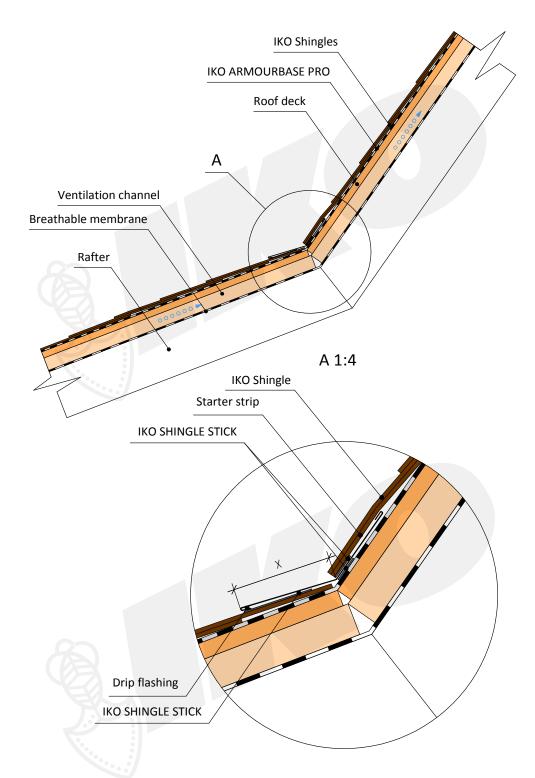


X - min 120 mm, should be enlarge with a decreasing angle of a slope and/or requirements of local codes

SLOPE INCLINATION DESIGN SCALE 1:10

#### 13.2 Slope inclination. Cold attic





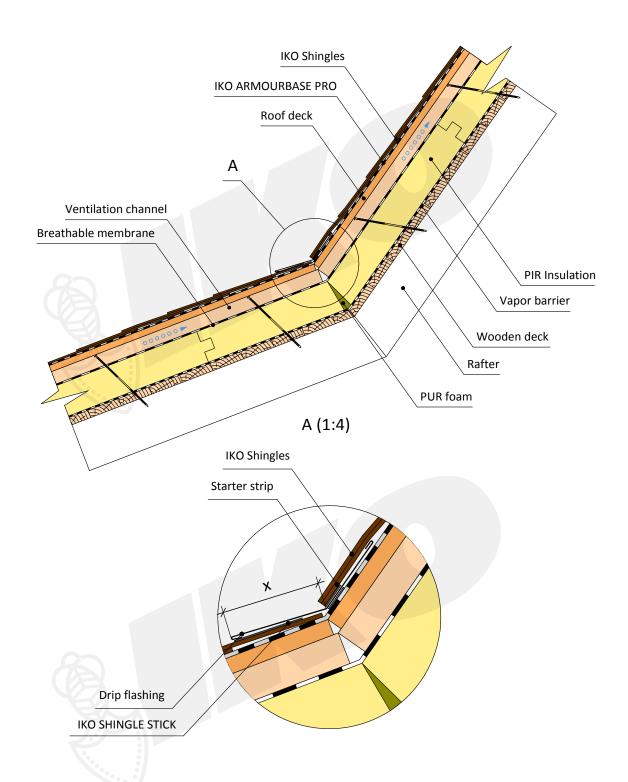
X - min 120 mm, should be enlarge with a decreasing angle of a slope and/or requirements of local codes

SLOPE INCLINATION.
COLD ATTIC



## 13.3 Slope inclination (PIR insulation on sheathing)





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

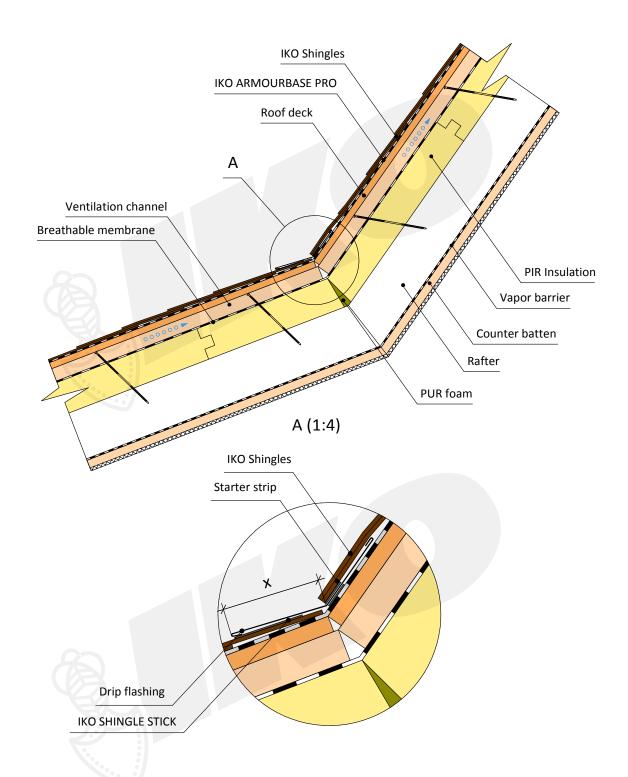
SLOPE INCLINATION.

PIR INSULATION ON SHEATHING



### 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

SLOPE INCLINATION.
PIR INSULATION ABOVE RAFTERS

