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The Shingles Expert

ARCHITECT BOOK

Valleys

Nails

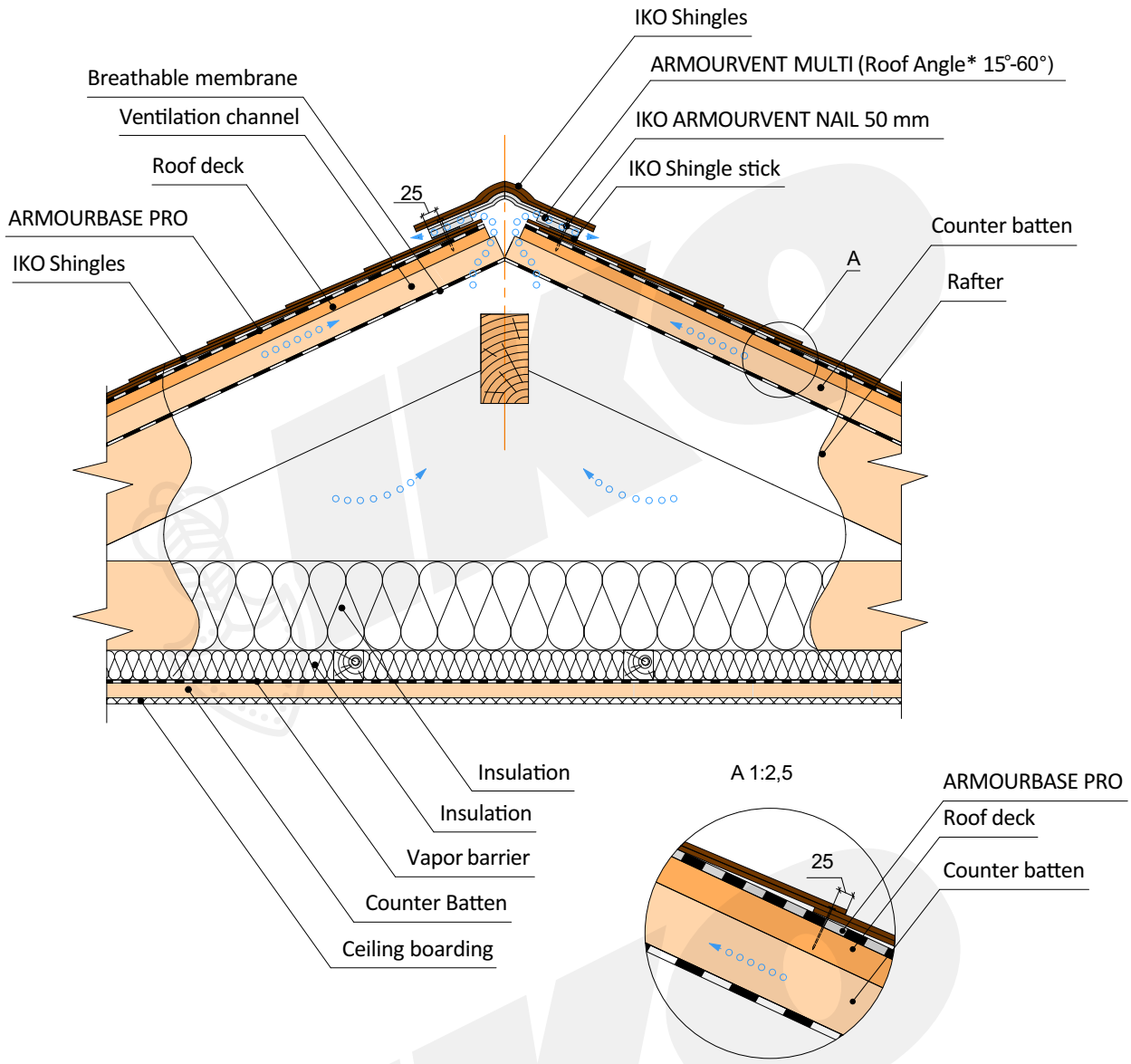
Starterstrip

Mastics

Ventilation

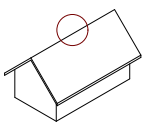
Underlayments

1.1 Attic with ridge ventilation. (cold attic)



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

* Cambridge Xtreme exception 9.5 ° up

ARMOURVENT MULTI APPLICATION		DESIGN SCALE 1:10	

1.2 Ventilated ridge. (insulated roof)

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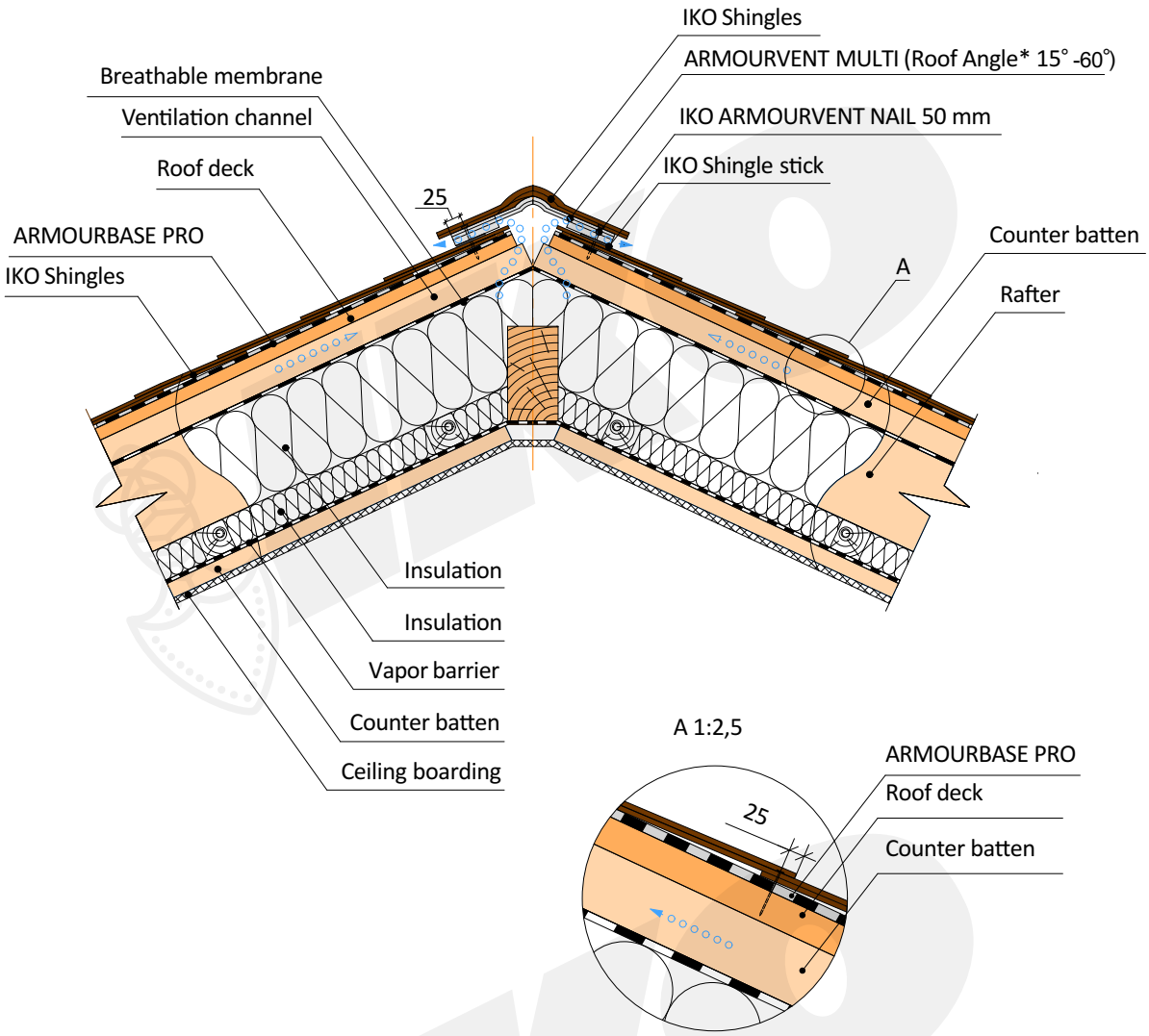

Specification	Armourvent Multi	Armourvent Multi Plus
Dimension	6 m; 22,8 cm	6 m; 28,5 cm
Application		Cambridge Xtreme 9.5 °/ Xpress
	Armourglass	Monarch-Diamant
	Victorian	DiamantShield
	Monarch	ArmourShield
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		Superglass/ -Biber
Angle	15° - 60°	15°-60°*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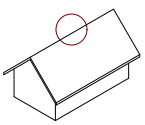
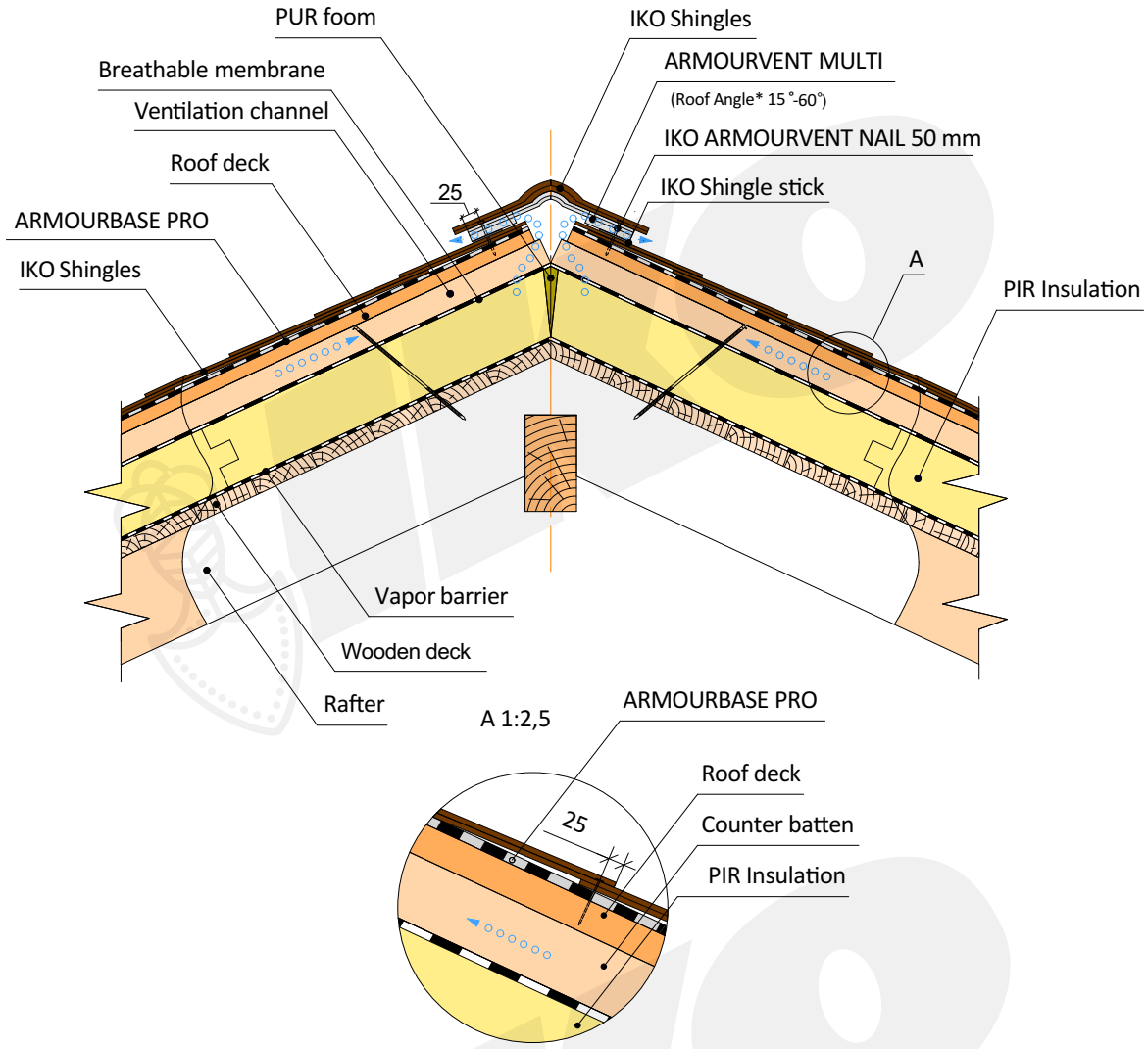
* Cambridge Extreme exception 9.5°up

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
Application		Cambridge Xtreme 9.5 °/ Xpress
	Armourglass	Monarch-Diamant
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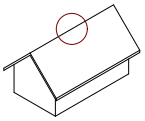
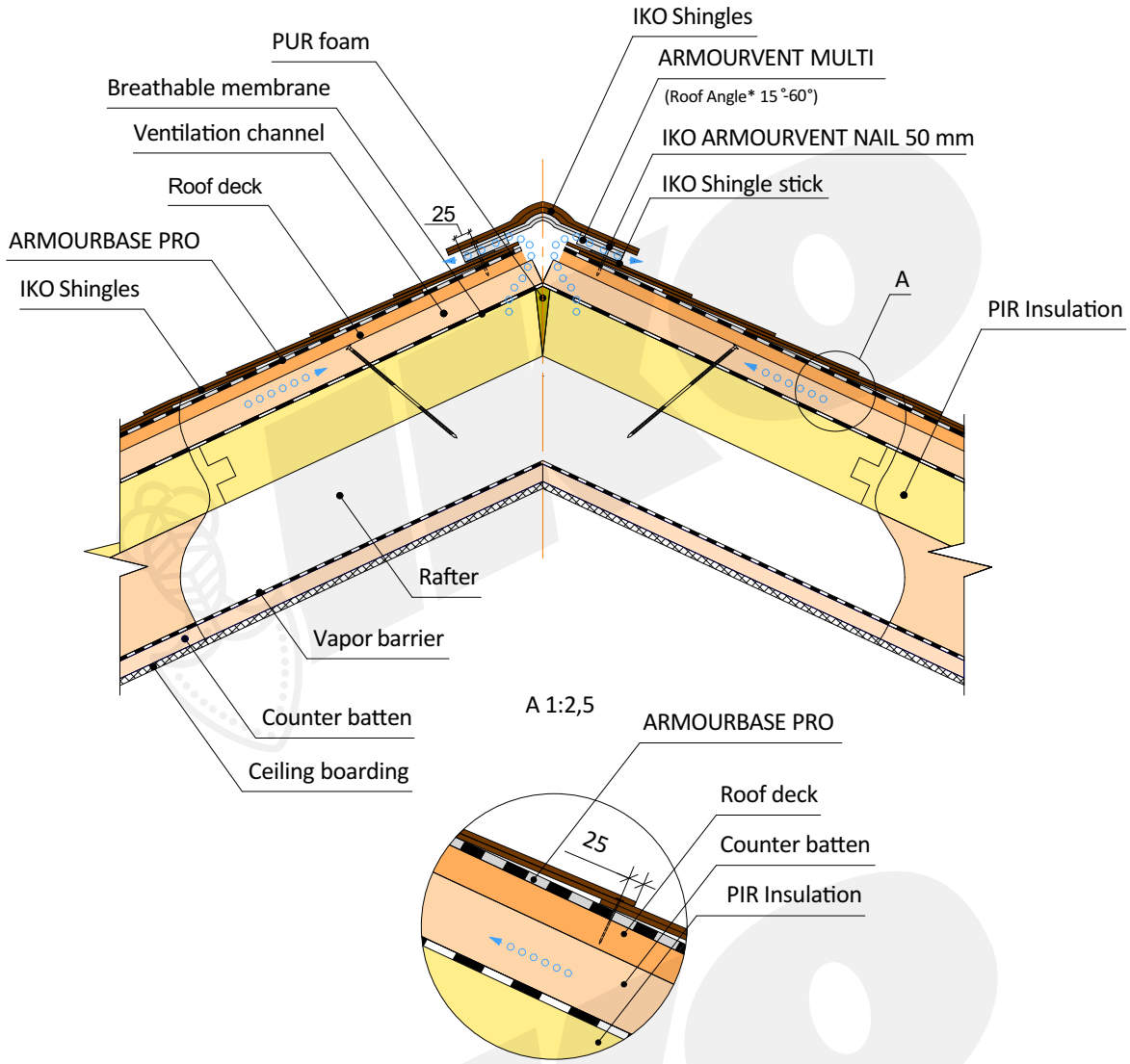
	Monarch	ArmourShield
		Diamant
		Superglass/ -Biber
Angle	15°-60°	15°-60°*
Ventilation Area	275 cm^2/m	275 cm^2/m

* Cambridge Xtreme exception 9.5 ° up

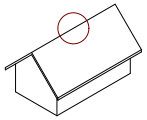
ARMOURVENT MULTI APPLICATION		DESIGN SCALE 1:10	

1.4 Ventilated ridge.
(PIR insulation above rafters)

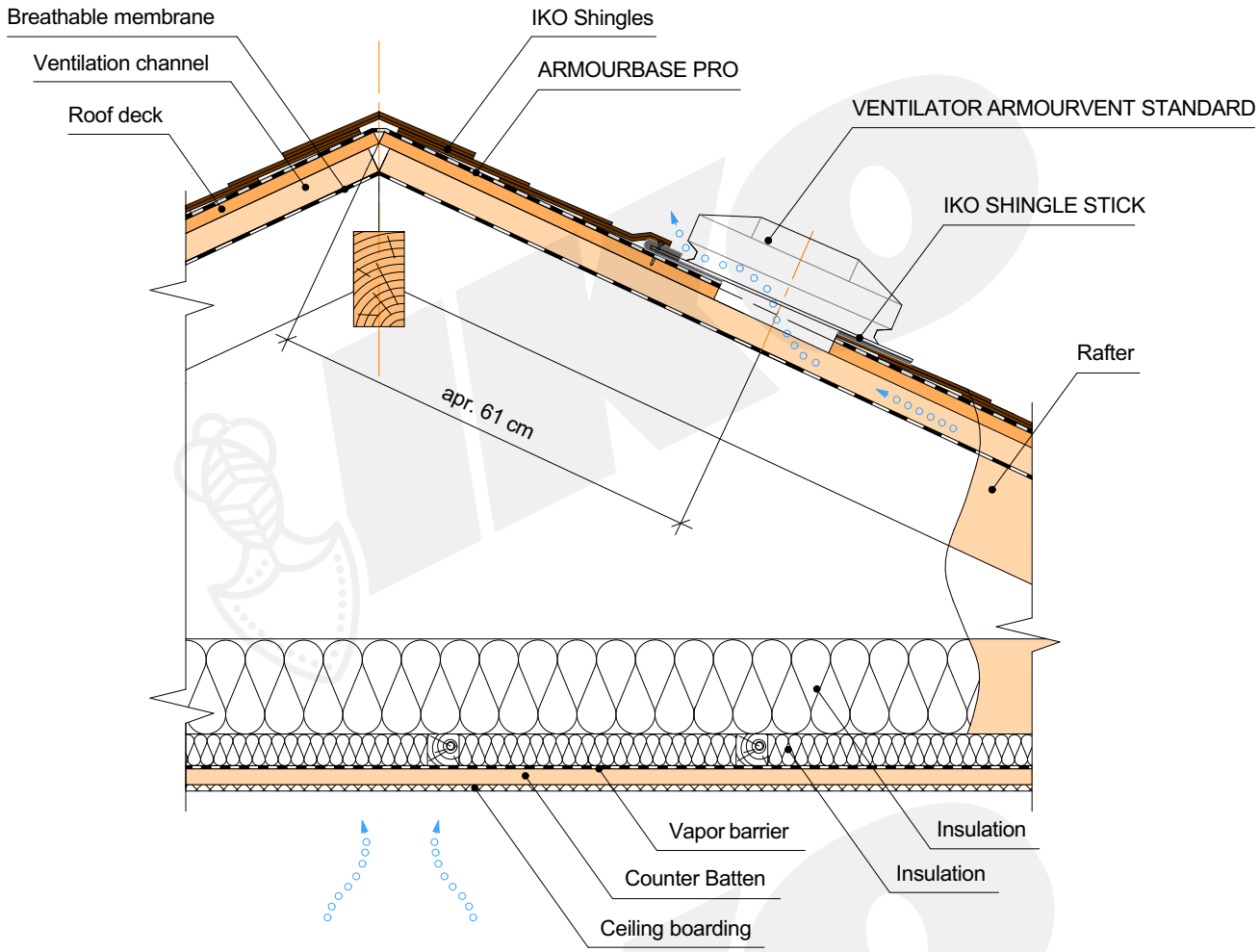


Specification	Armourvent Multi	Armourvent Multi Plus
Dimension	6 m; 22,8 cm	6 m; 28,5 cm
Application		Cambridge Xtreme 9.5 °/ Xpress
	Armourglass	Monarch-Diamant
	Victorian	DiamantShield
	Monarch	ArmourShield
		Diamant
		Superglass/ -Biber
Angle	15°-60°	15°-60°*
Ventilation Area	275 cm^2/m	275 cm^2/m

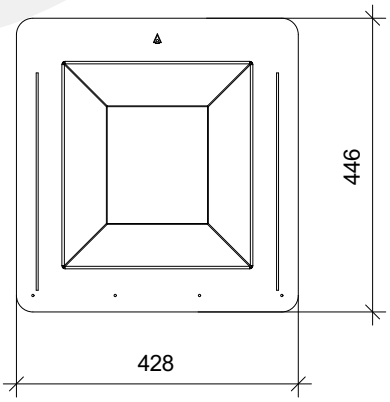
* Cambridge Xtreme exception 9.5 ° up

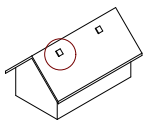
ARMOURVENT MULTI APPLICATION		DESIGN SCALE 1:10	

2.1 Attic with ArmourVent Standard Ventilation. (cold attic)

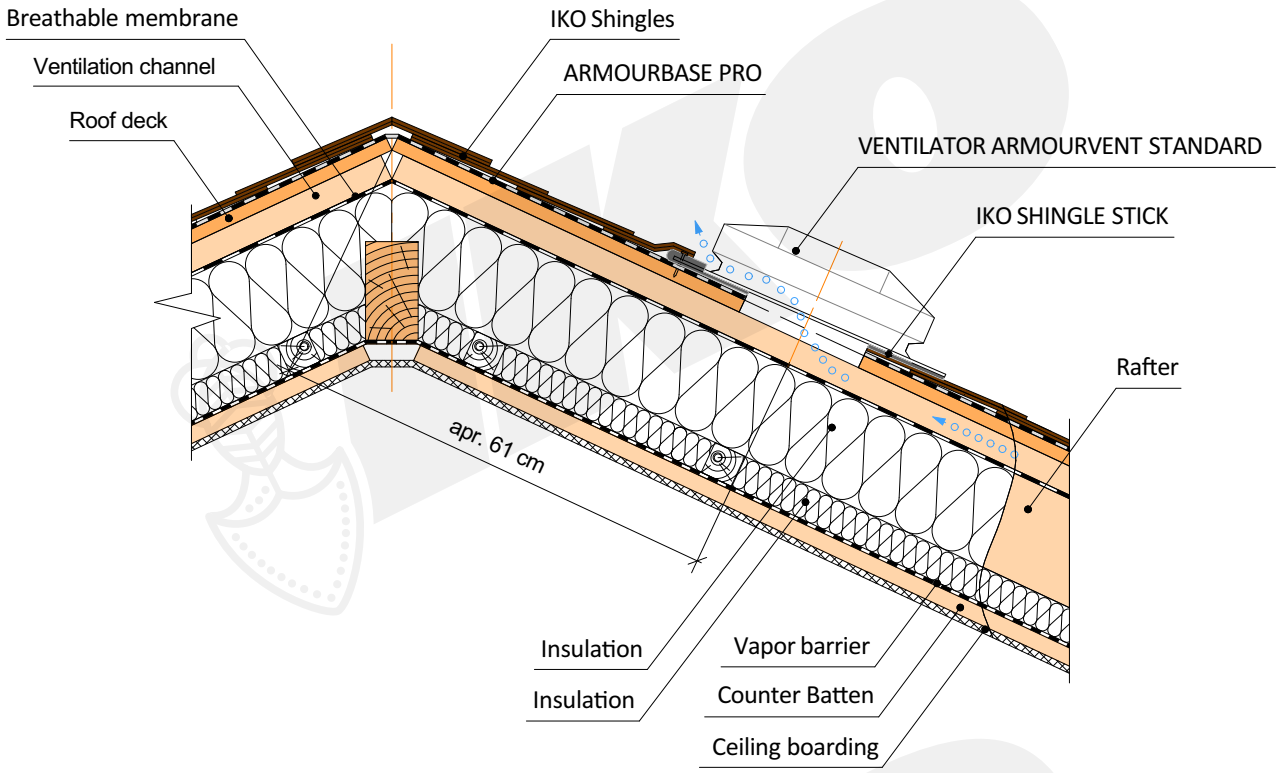


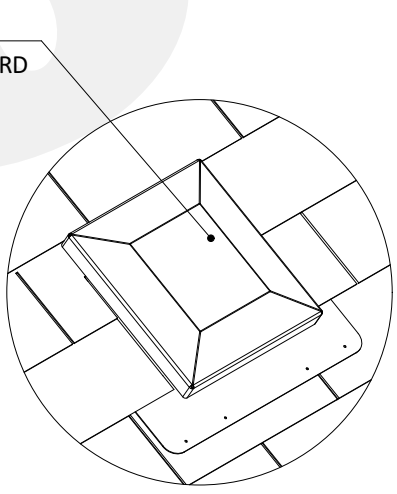
Specification	Armourvent Standard
Dimension	43x45x11 cm
Ventilation Area	322 cm ^{2} /pc
Colors	black, brown
Slope	14-45 °
Material	PP with UV inhibitors additives



ARMOURVENT STANDARD APPLICATION		DESIGN SCALE 1:10	

2.2 Ridge with ArmourVent Standard Ventilation. (insulated roof)





Specification	Armourvent Standard
Dimension	43x45x11 cm
Ventilation Area	322 cm^2/pc
Colors	black, brown
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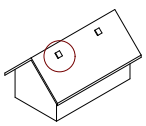
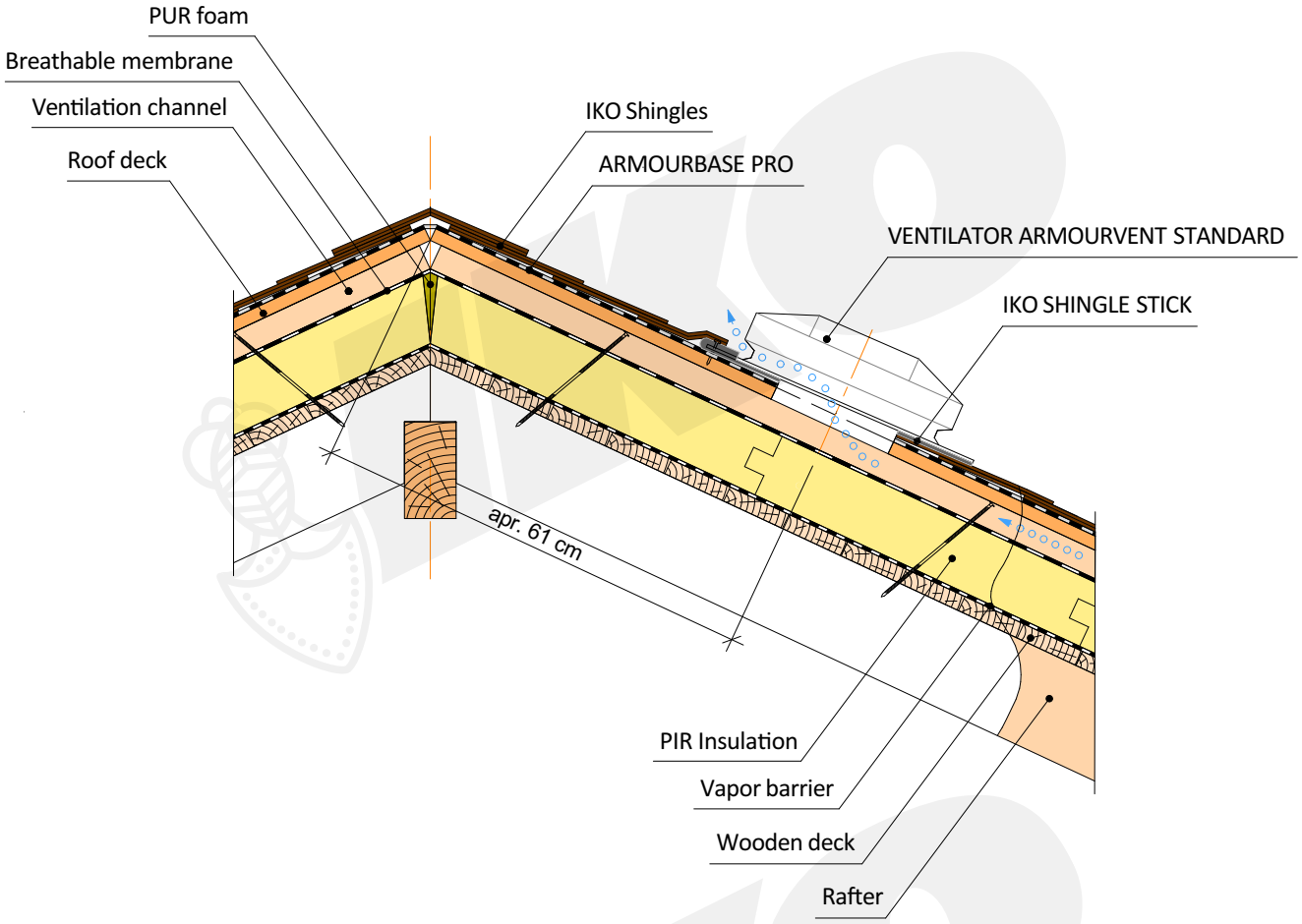
Material	PP with UV inhibitors additives

ARMOURVENT STANDARD APPLICATION		DESIGN SCALE 1:10	

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



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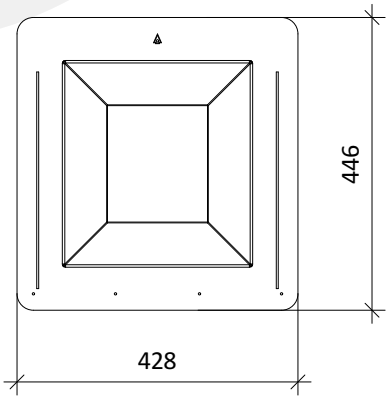
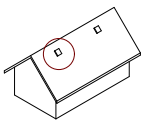
Dimension	43x45x11 cm
Ventilation Area	322 cm^2/pc
Colors	black, brown
Slope	14-45°
Material	PP with UV inhibitors additives



ARMOURVENT STANDARD APPLICATION		DESIGN SCALE 1:10	

2.4 Ridge with ArmourVent Standard Ventilation (PIR insulation above rafters)

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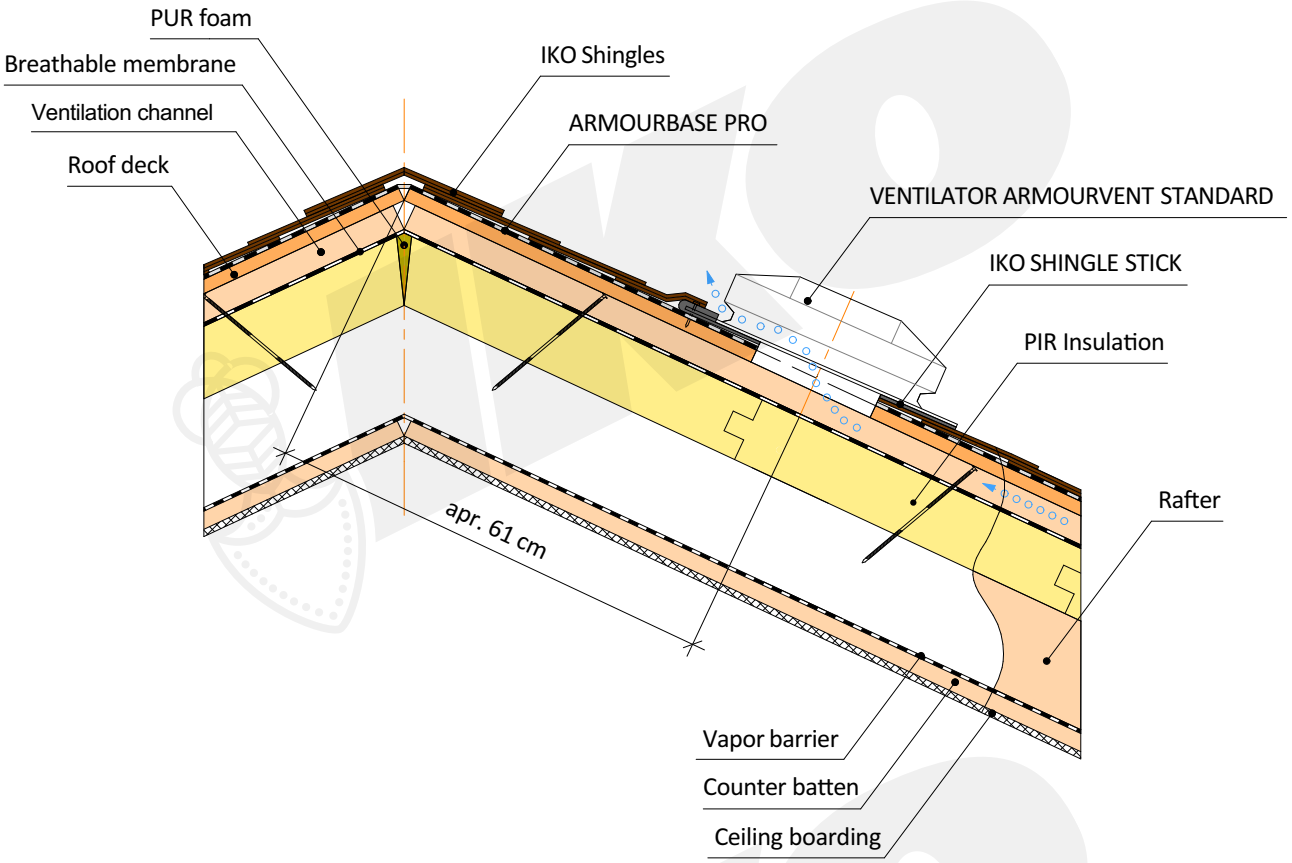
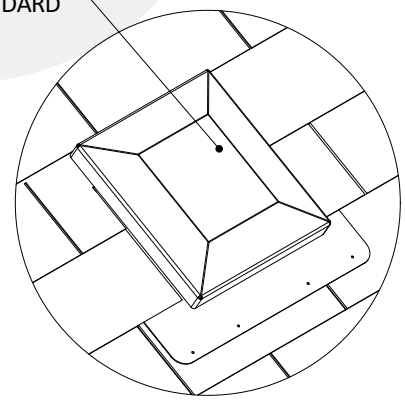


VENTILATOR
ARMOURVENT STANDARD



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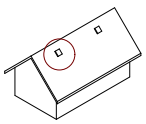
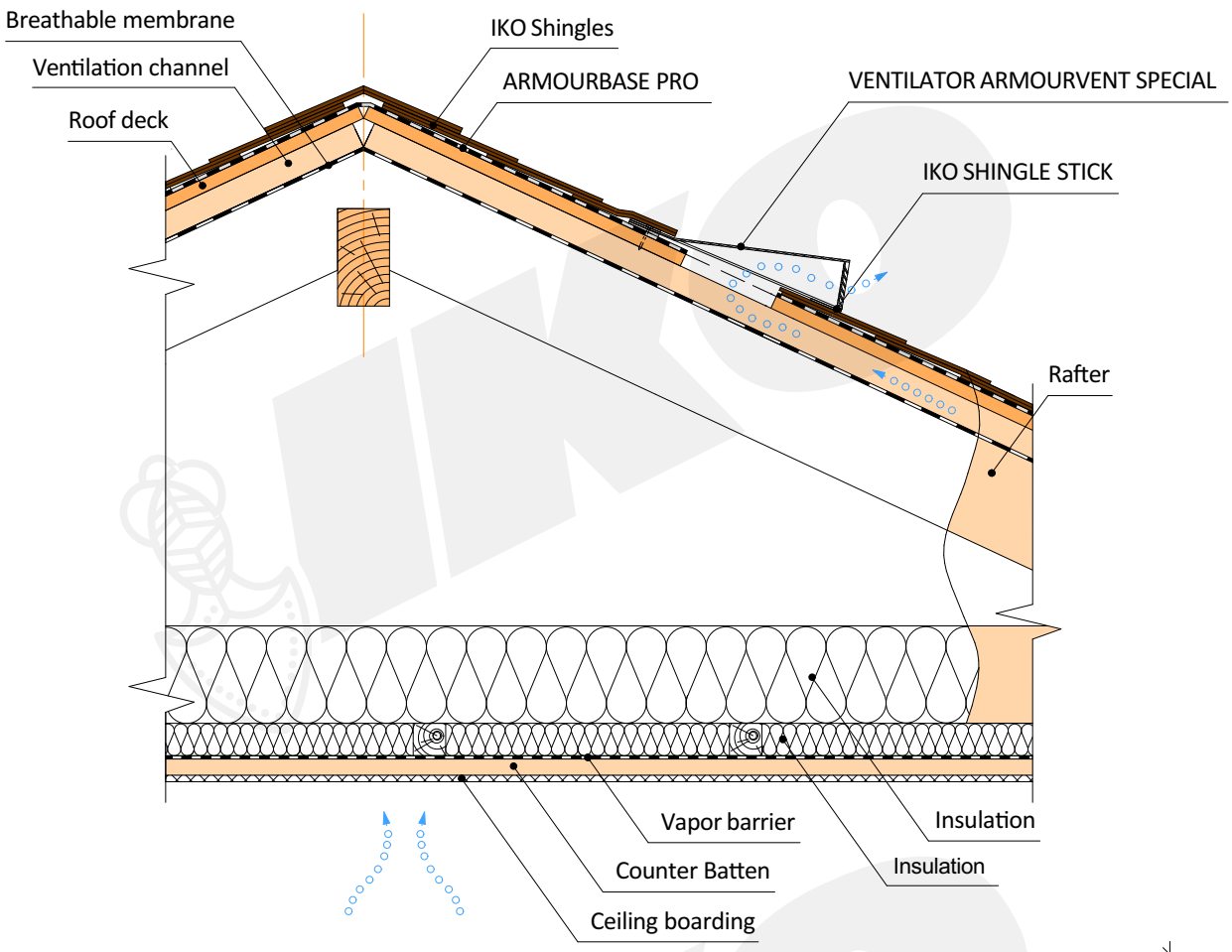
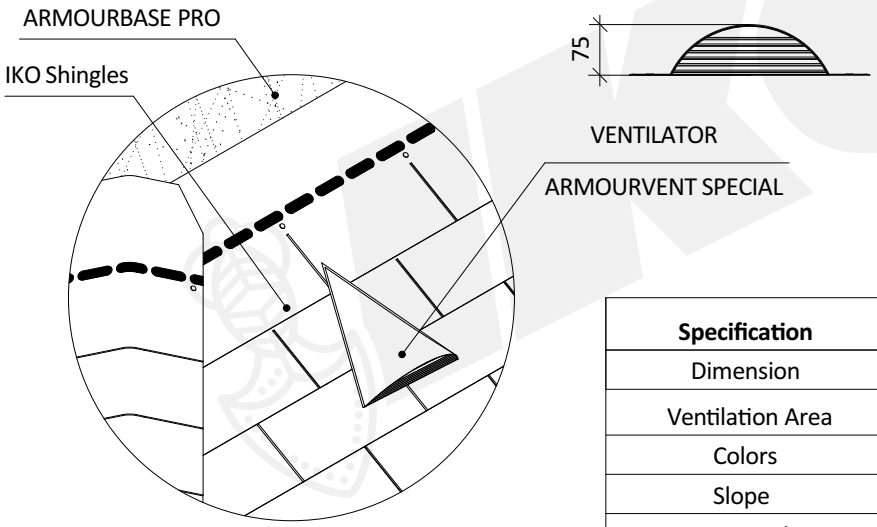
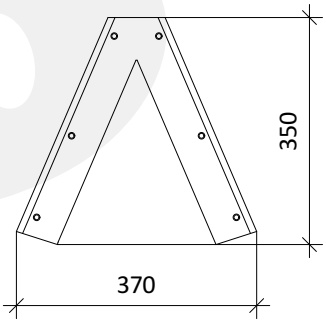
ARMOURVENT STANDARD APPLICATION		DESIGN SCALE 1:10	

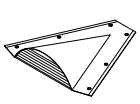
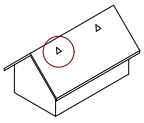
3.1 Attic with ArmourVent Special Ventilation. (cold attic)



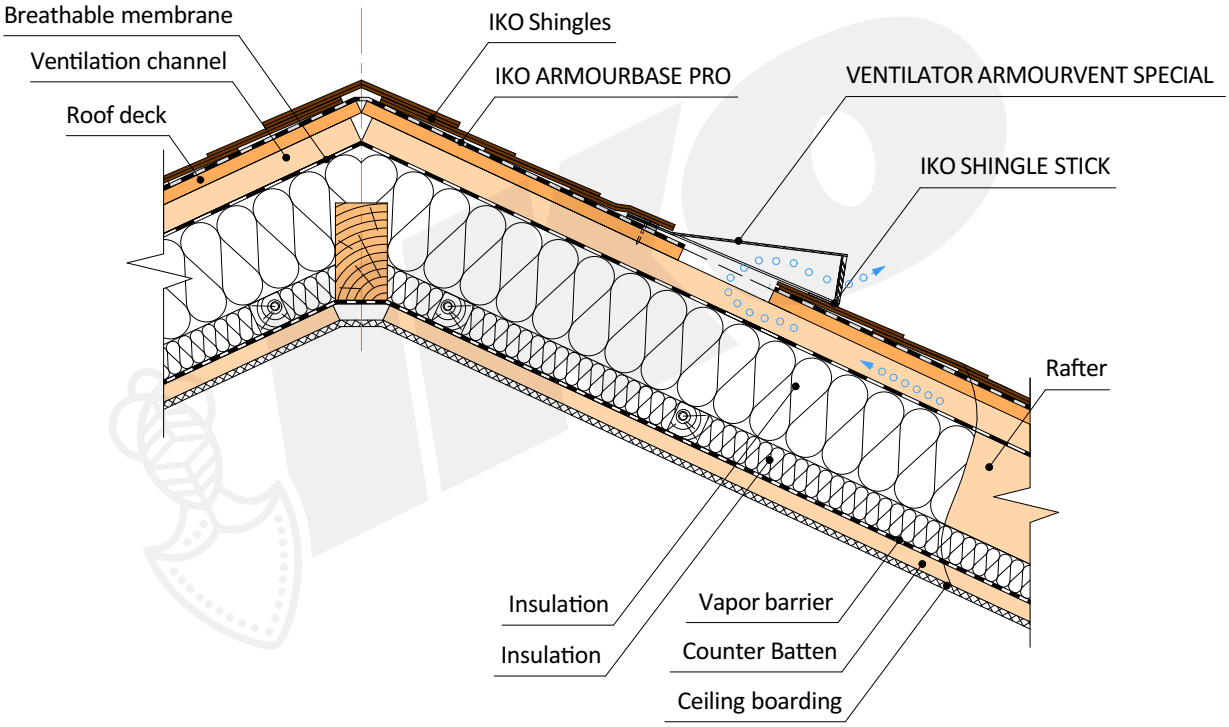


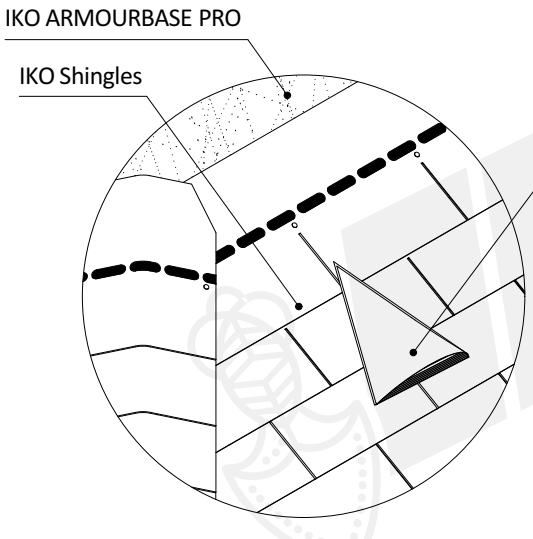


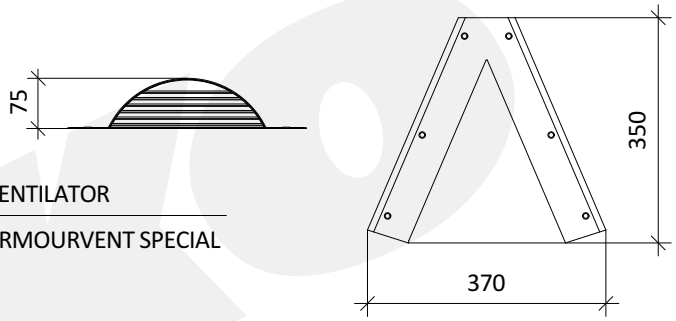
Specification	Armourvent Special
Dimension	37x35x7,5 cm
Ventilation Area	30 cm^2/pc
Colors	black, red
Slope	15-85°
Material	PP with UV inhibitors additives

ARMOURVENT SPECIAL			DESIGN SCALE 1:10	

3.2 Roof ventilator Armourvent Special. (insulated roof)







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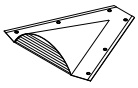
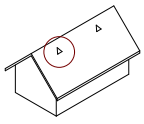
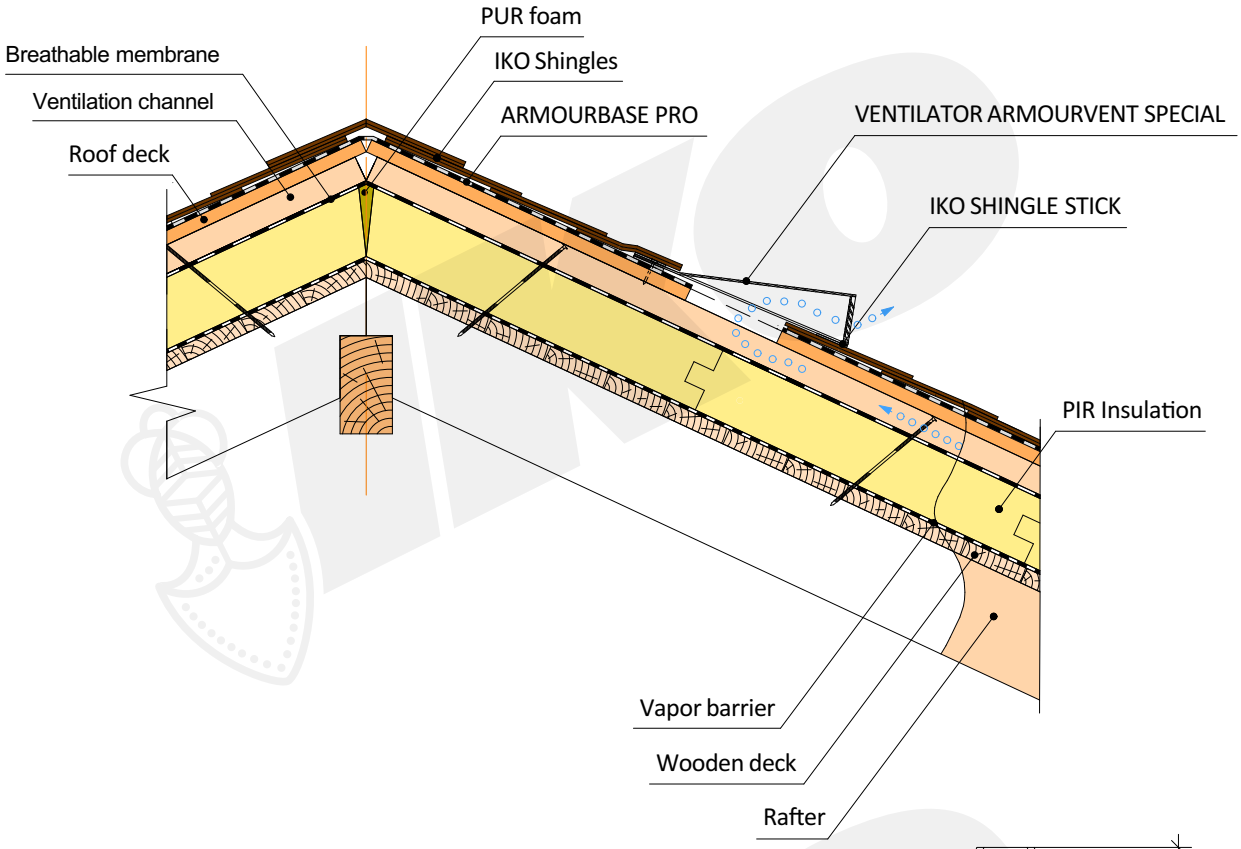
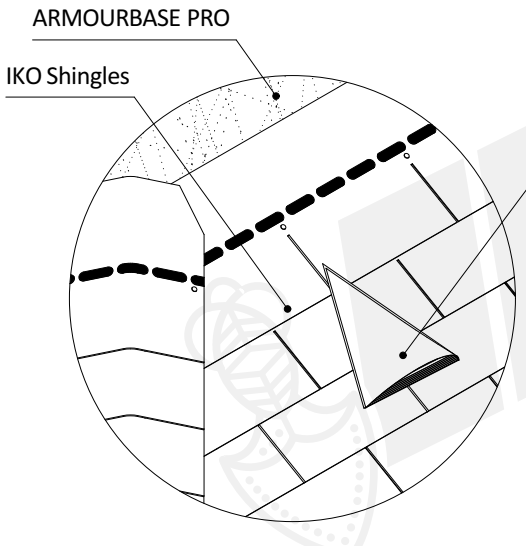
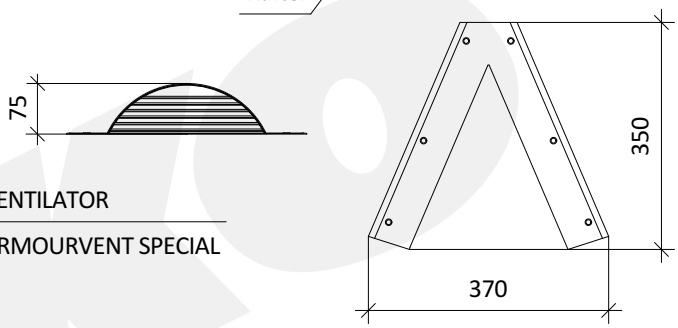
ARMOURVENT SPECIAL			DESIGN SCALE 1:10	

3.3 Roof ventilator Armourvent Special. (PIR insulation on sheating)







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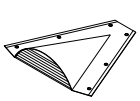
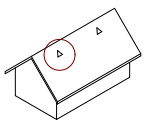
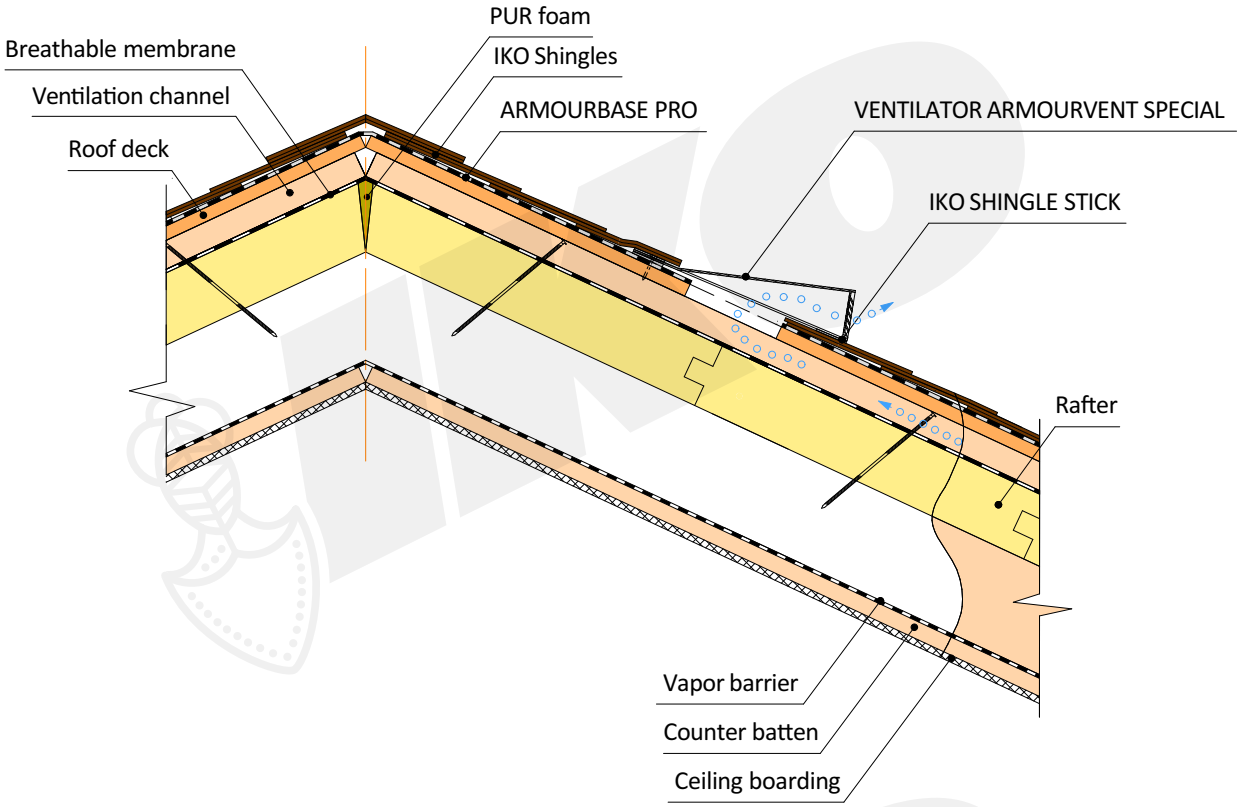
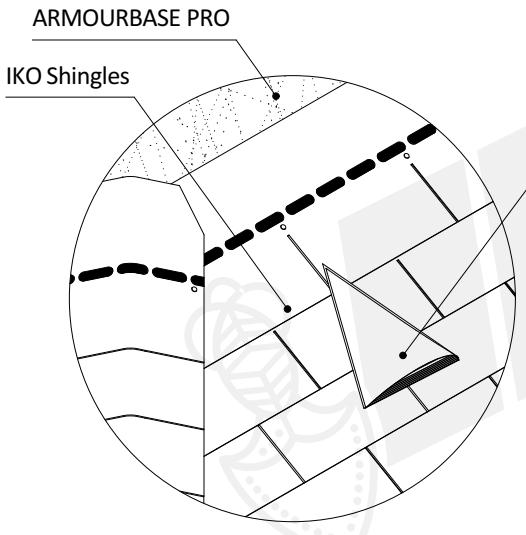
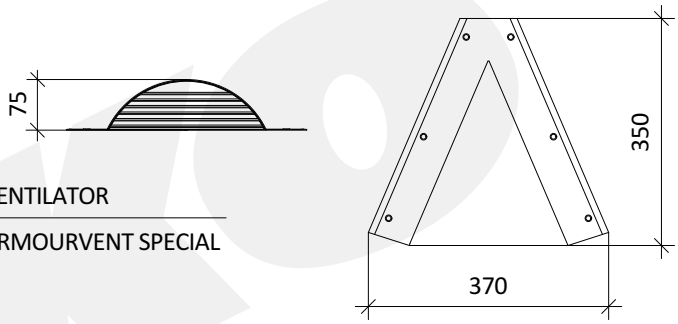
ARMOURVENT SPECIAL			DESIGN SCALE 1:10	

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







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Colors	black, red
Slope	15-85°
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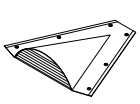
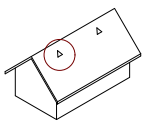
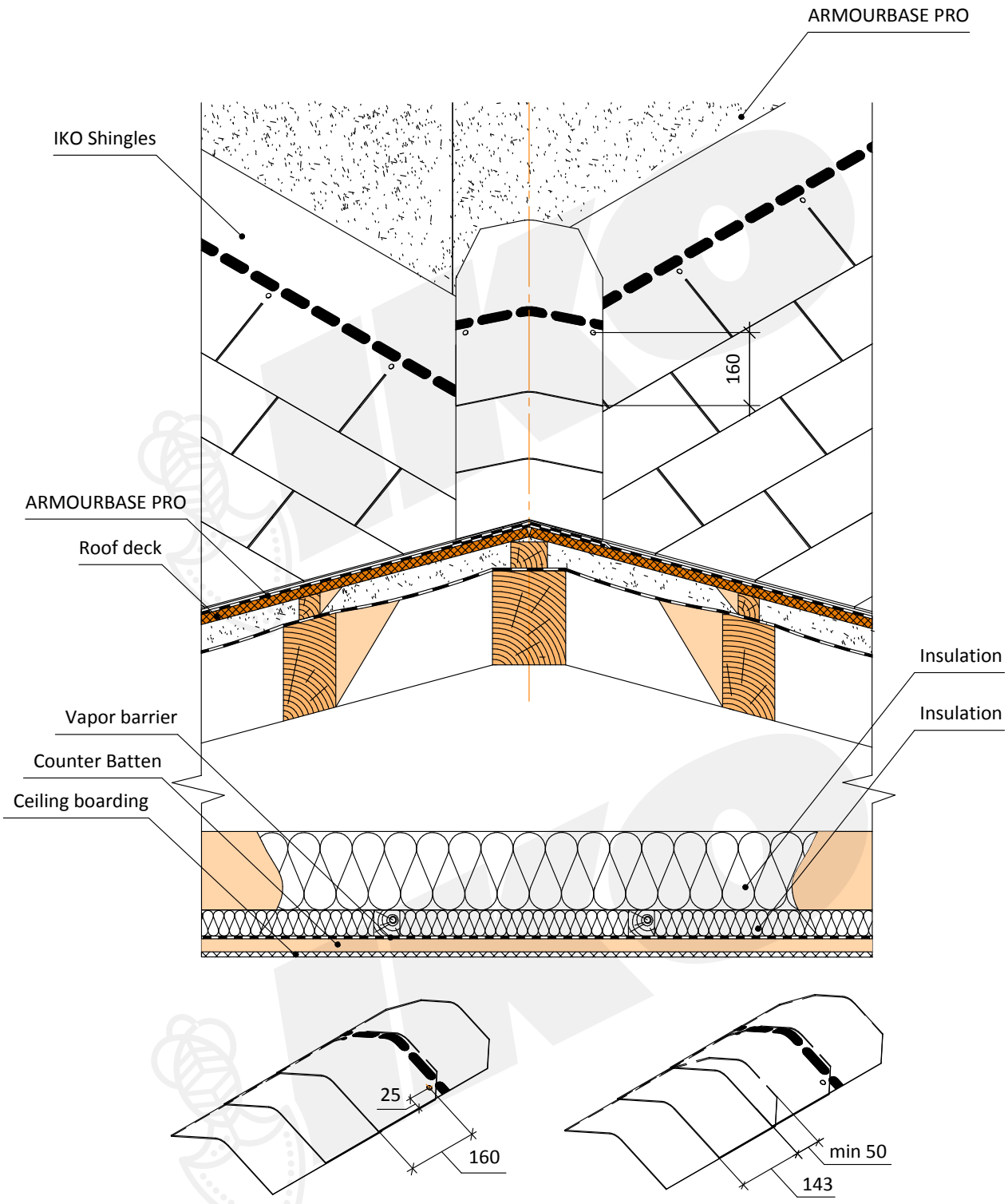
ARMOURVENT SPECIAL			DESIGN SCALE 1:10	

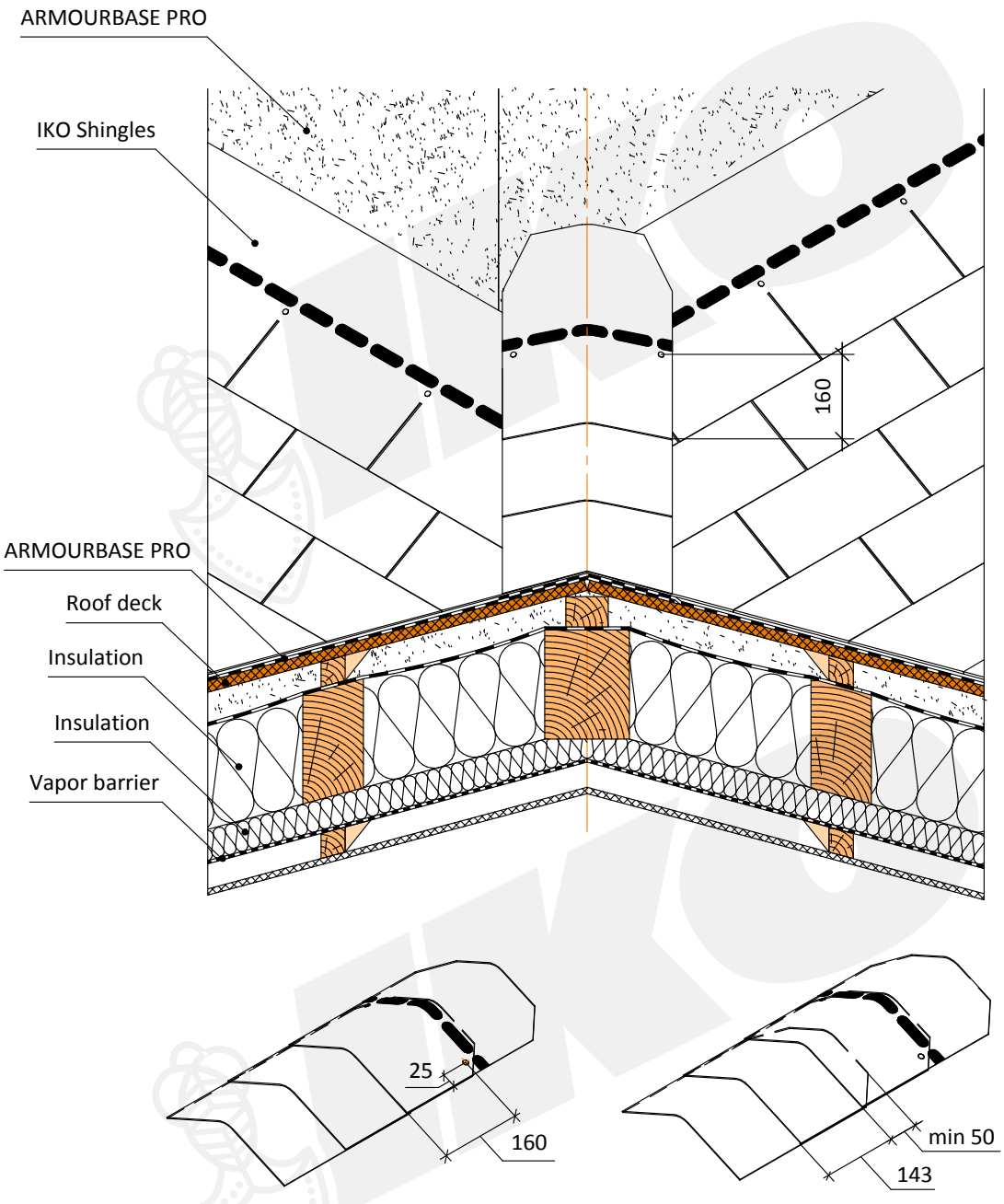
4.1 Hip.
(cold attic)



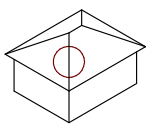
Apply the hip and ridge shingles double thickness by stacking two pieces and bending them over the hip or the ridge. Always ensure that, when installing the ridge covering shingle tabs, the nails of the upper shingle course (on both sides of the ridge) are covered.

HIP. COLD ATTIC		DESIGN SCALE 1:10	PAGE

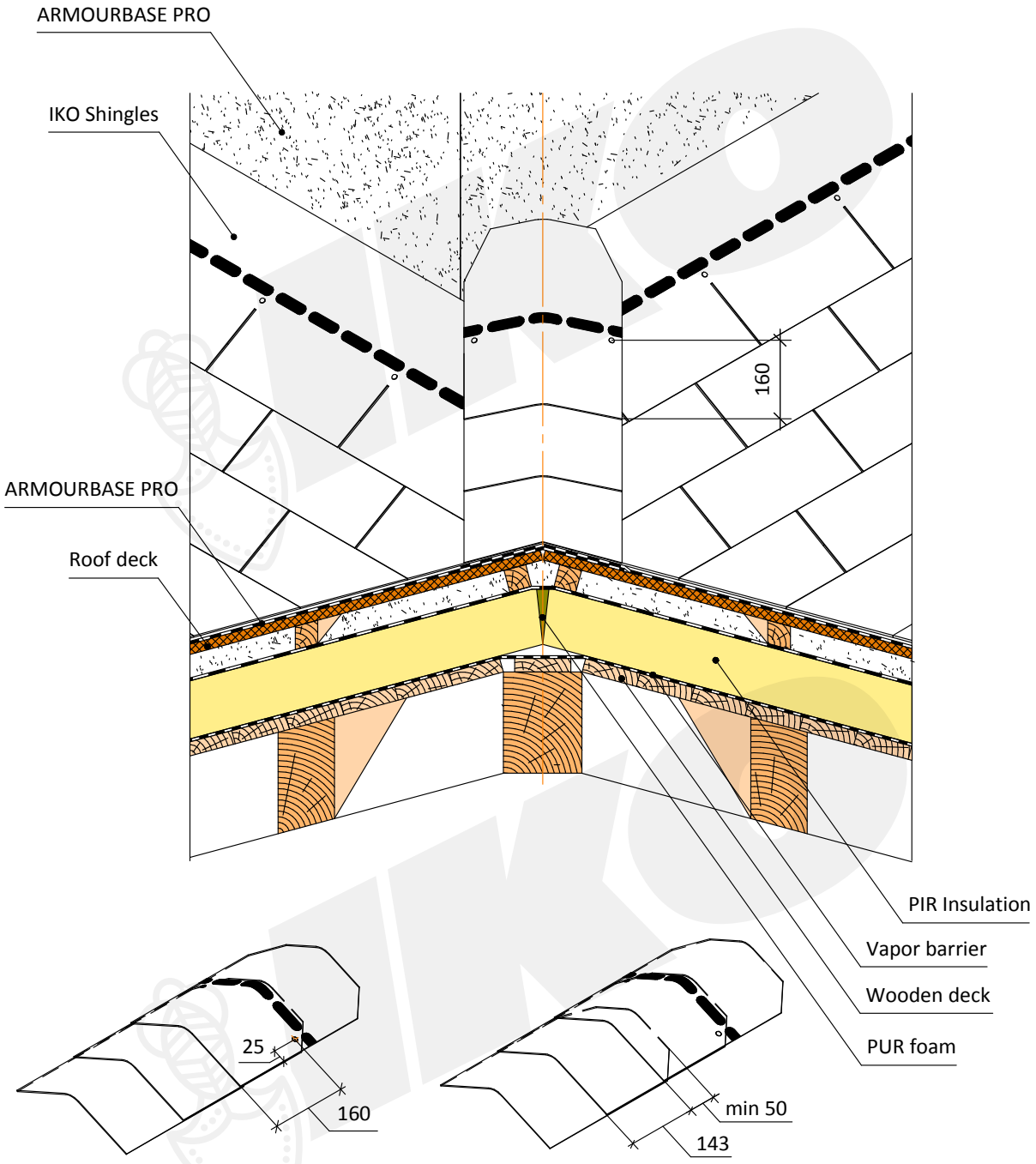
4.2 Hip.
(insulated roof)



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.

HIP (INSULATED ROOF)		DESIGN SCALE 1:10	PAGE

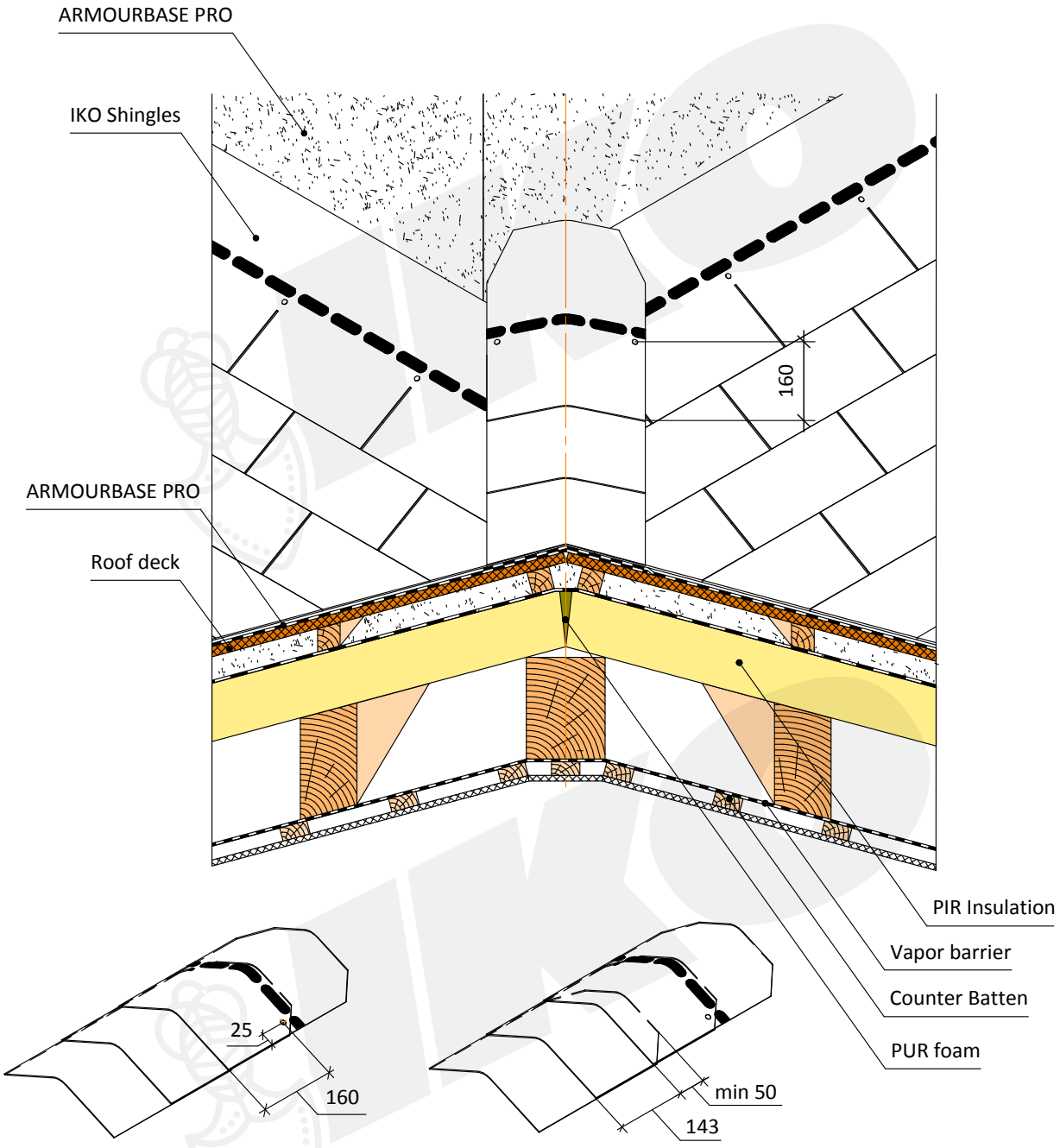
4.3 Hip.
(PIR insulation on sheathing)



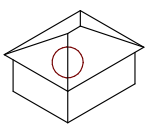
Apply the hip and ridge shingles double thickness by stacking two pieces and bending them over the hip or the ridge. Always ensure that, when installing the ridge covering shingle tabs, the nails of the upper shingle course (on both sides of the ridge) are covered.

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	

5.2 Open Valley. (cold attic)

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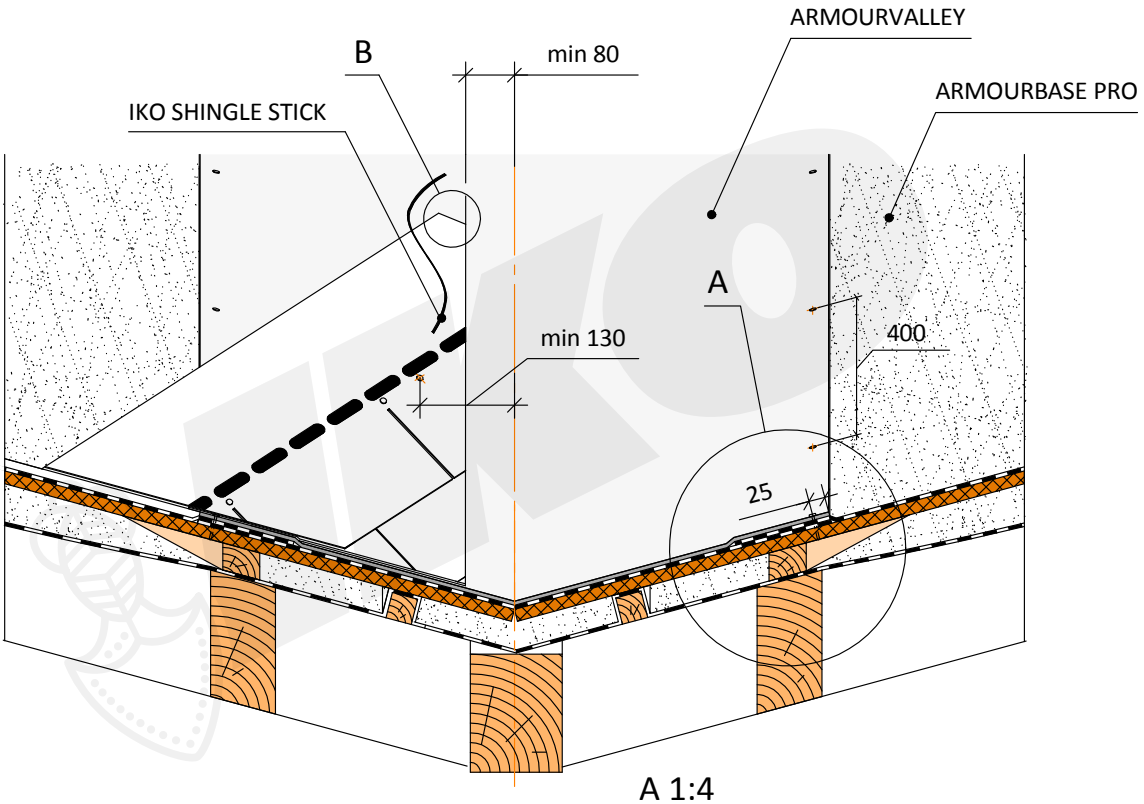
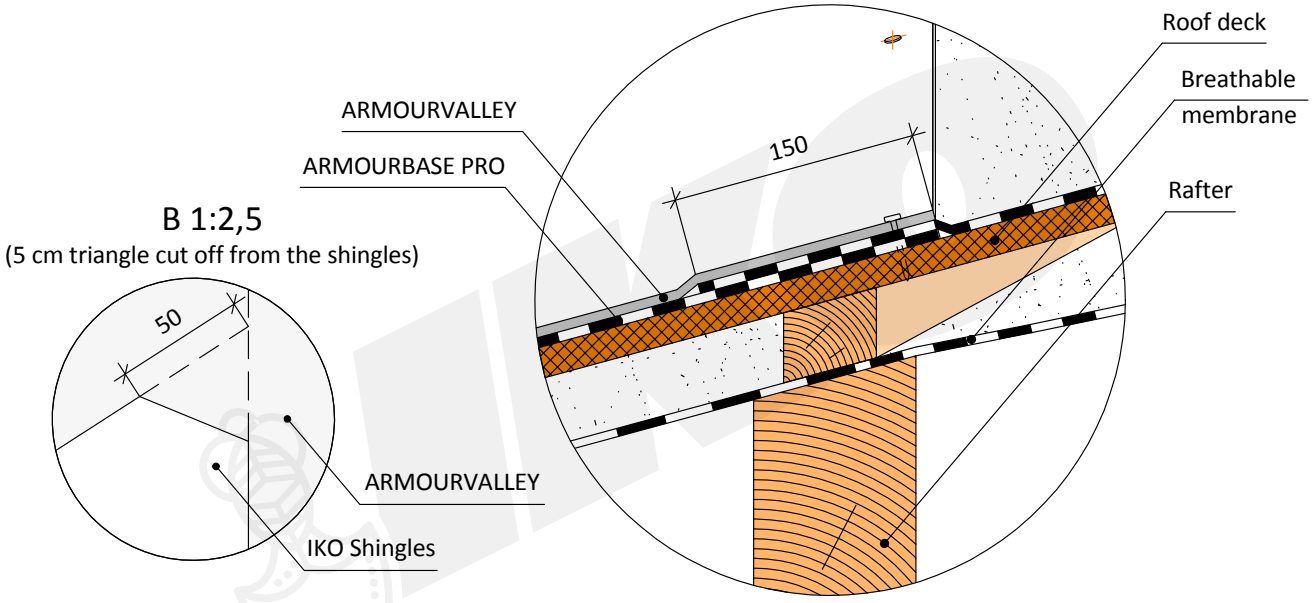
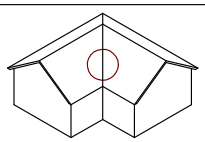


A 1:4



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	

5.2 Open Valley. (insulated roof)

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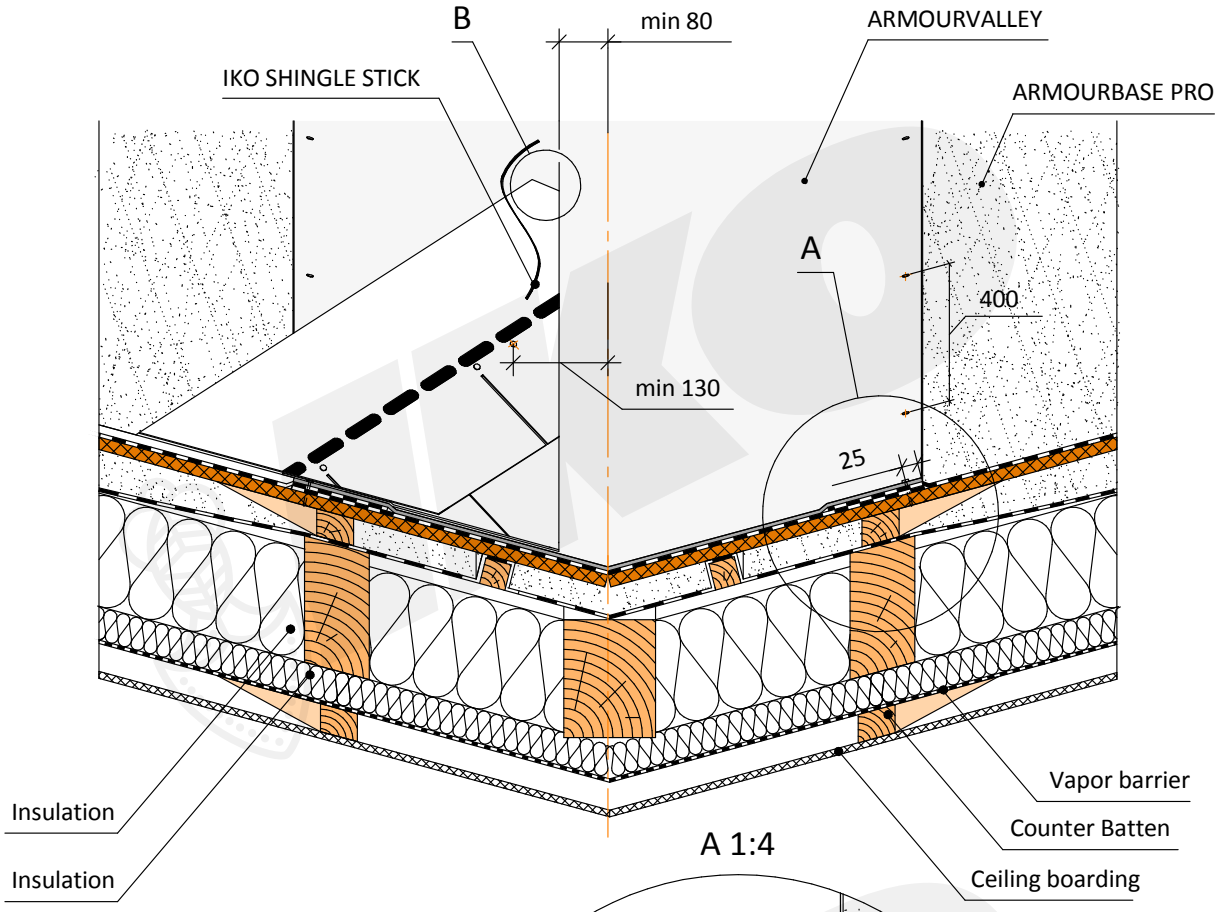
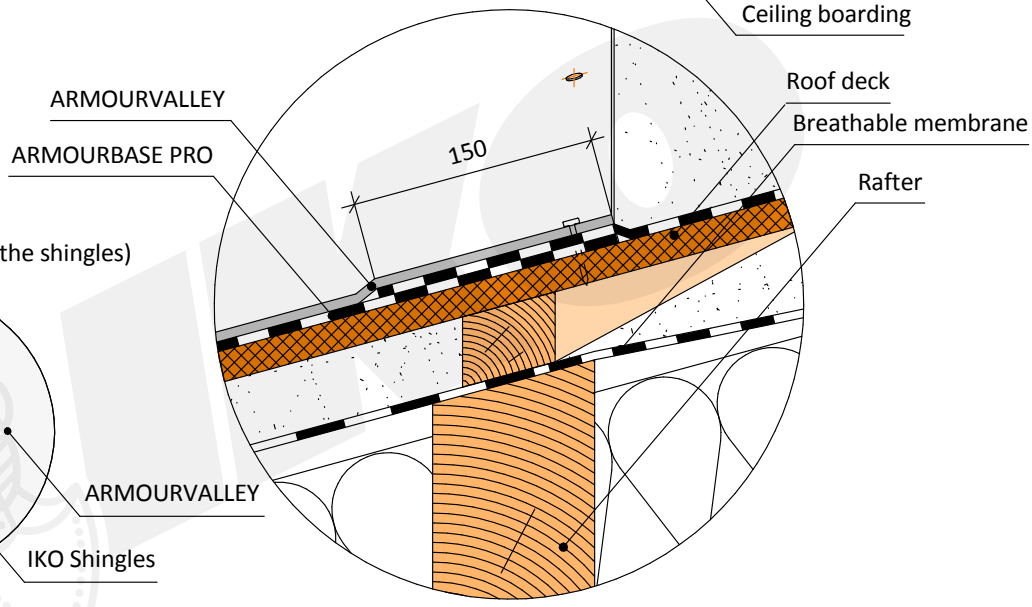
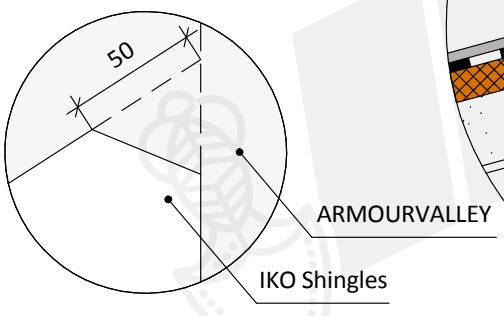


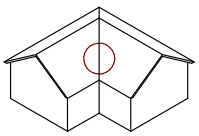
A 1:4



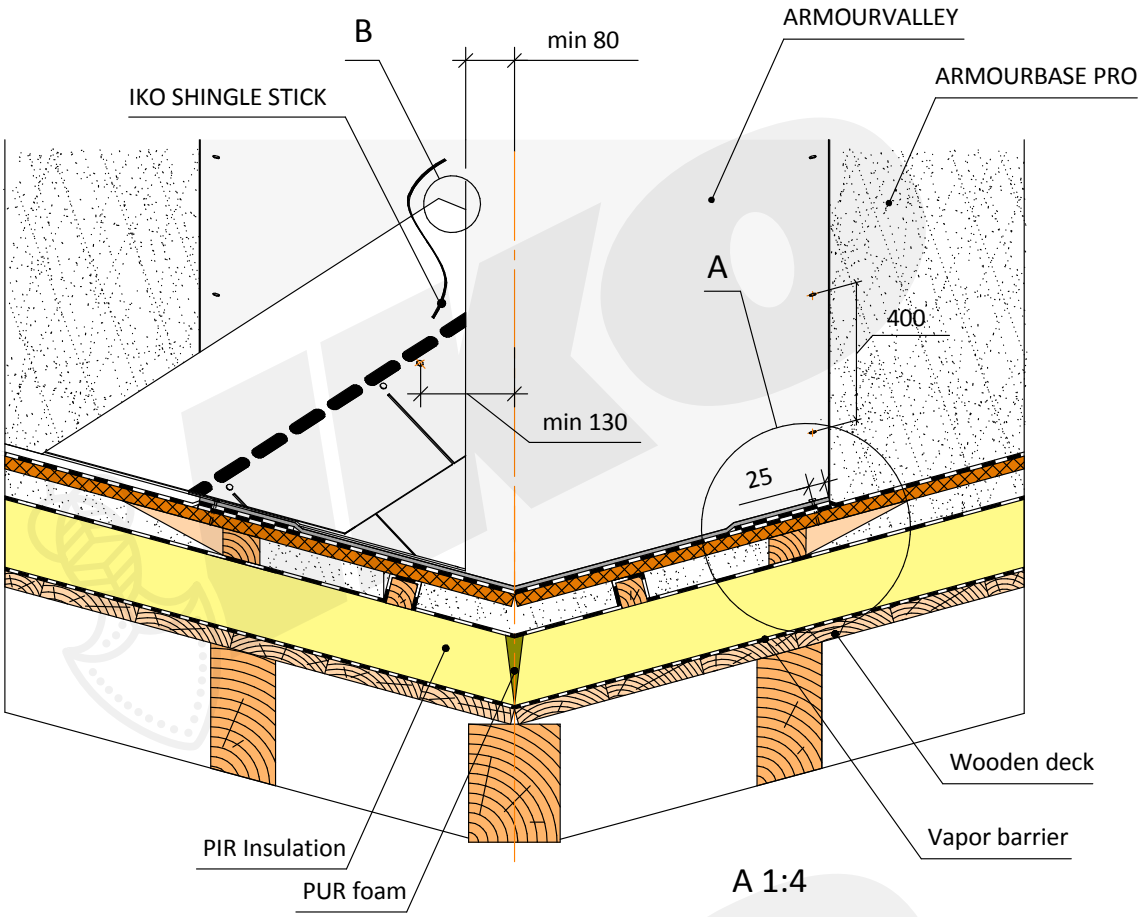
B 1:2,5
(5 cm triangle cut off from the shingles)



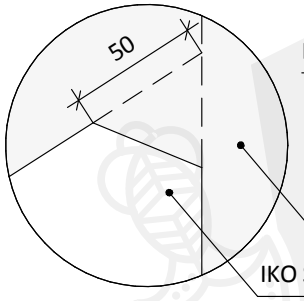
Snap two chalk lines from the ridge to the eaves 8 cm apart increasing in width by 1 cm per meter towards the eaves. Trim the shingles to these lines and cut a 5 cm triangle off the top corner to direct the water into the valley. Bond the valley end of each shingle with IKO Shingle Stick®/IKO Plastal 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		DESIGN SCALE 1:10	

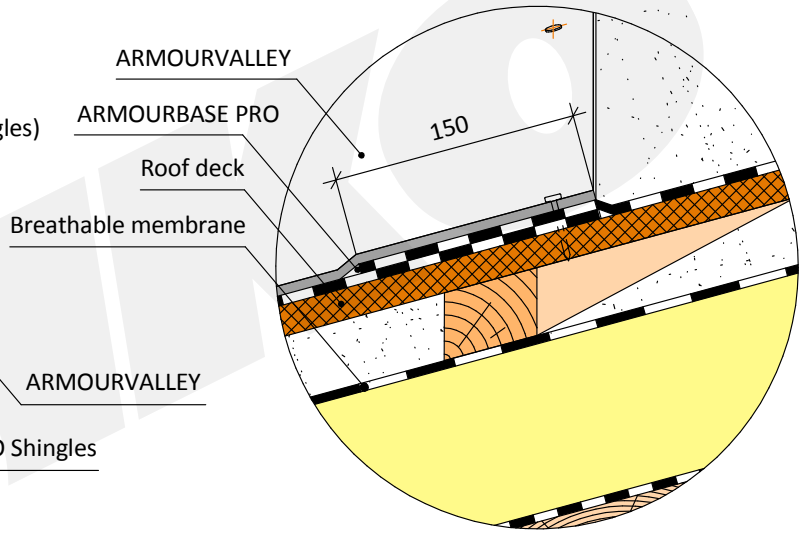
5.3 Open Valley.
(PIR insulation on sheathing)



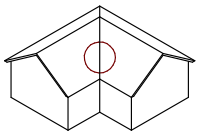
B 1:2,5
(5 cm triangle cut off from the shingles)



A 1:4



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)

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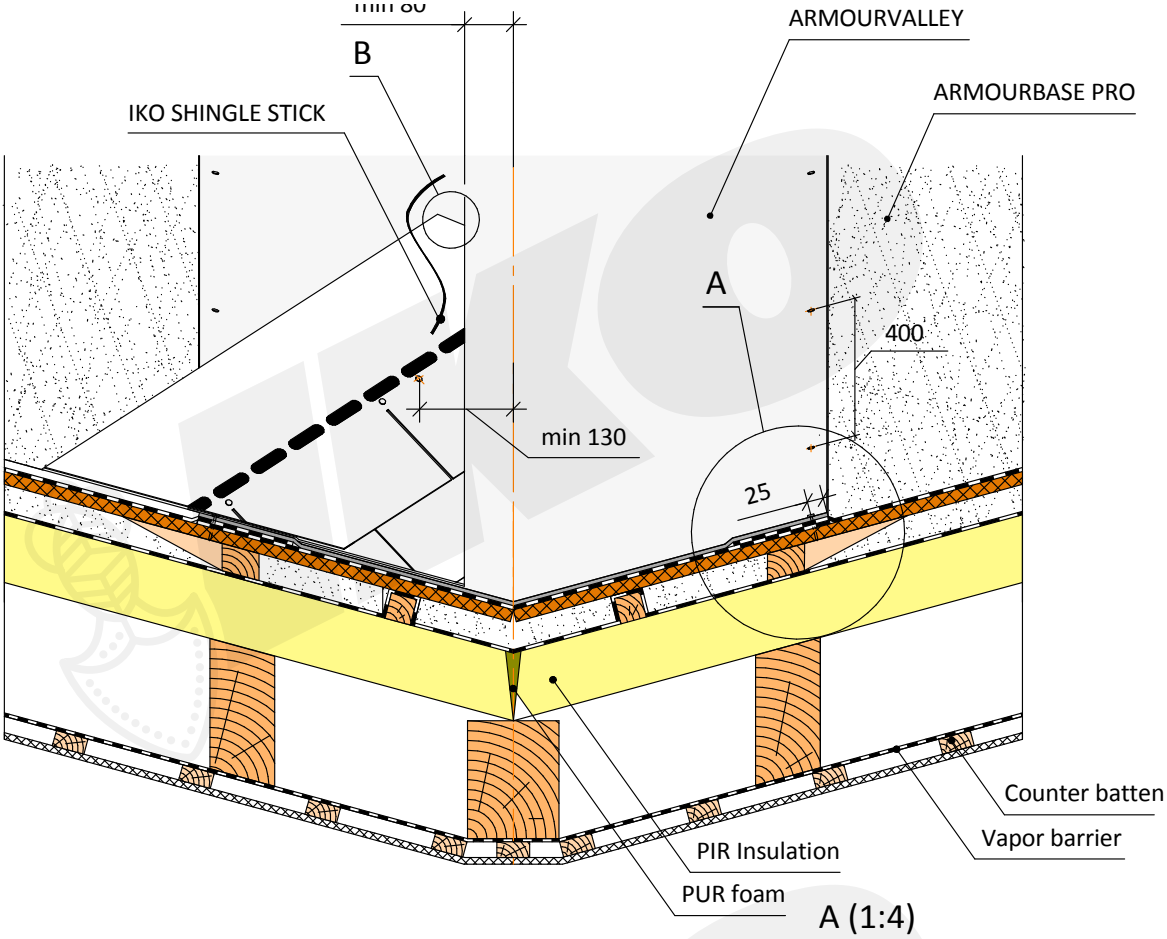
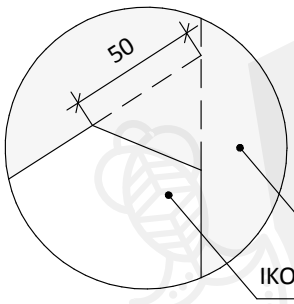
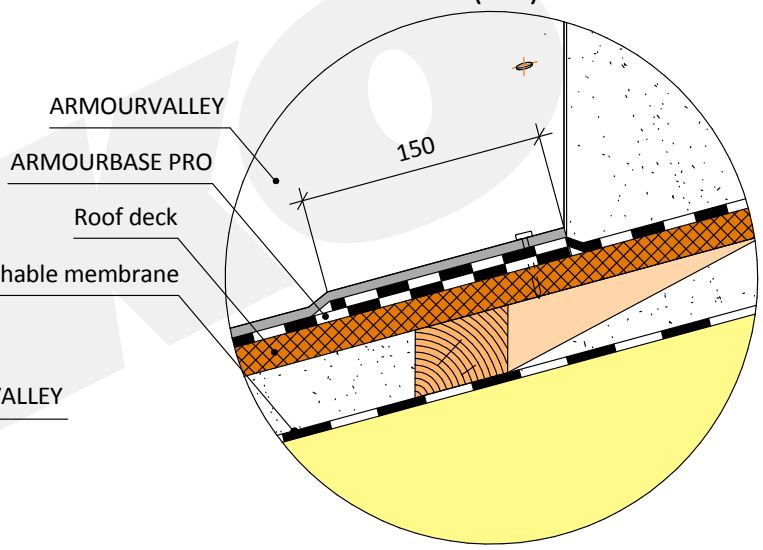


B 1:2,5

(5 cm triangle cut off from the shingles)



A (1:4)



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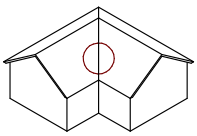
OPEN VALLEY. PIR INSULATION ABOVE RAFTERS		DESIGN SCALE 1:10	

6.1 Eave.
(cold attic)

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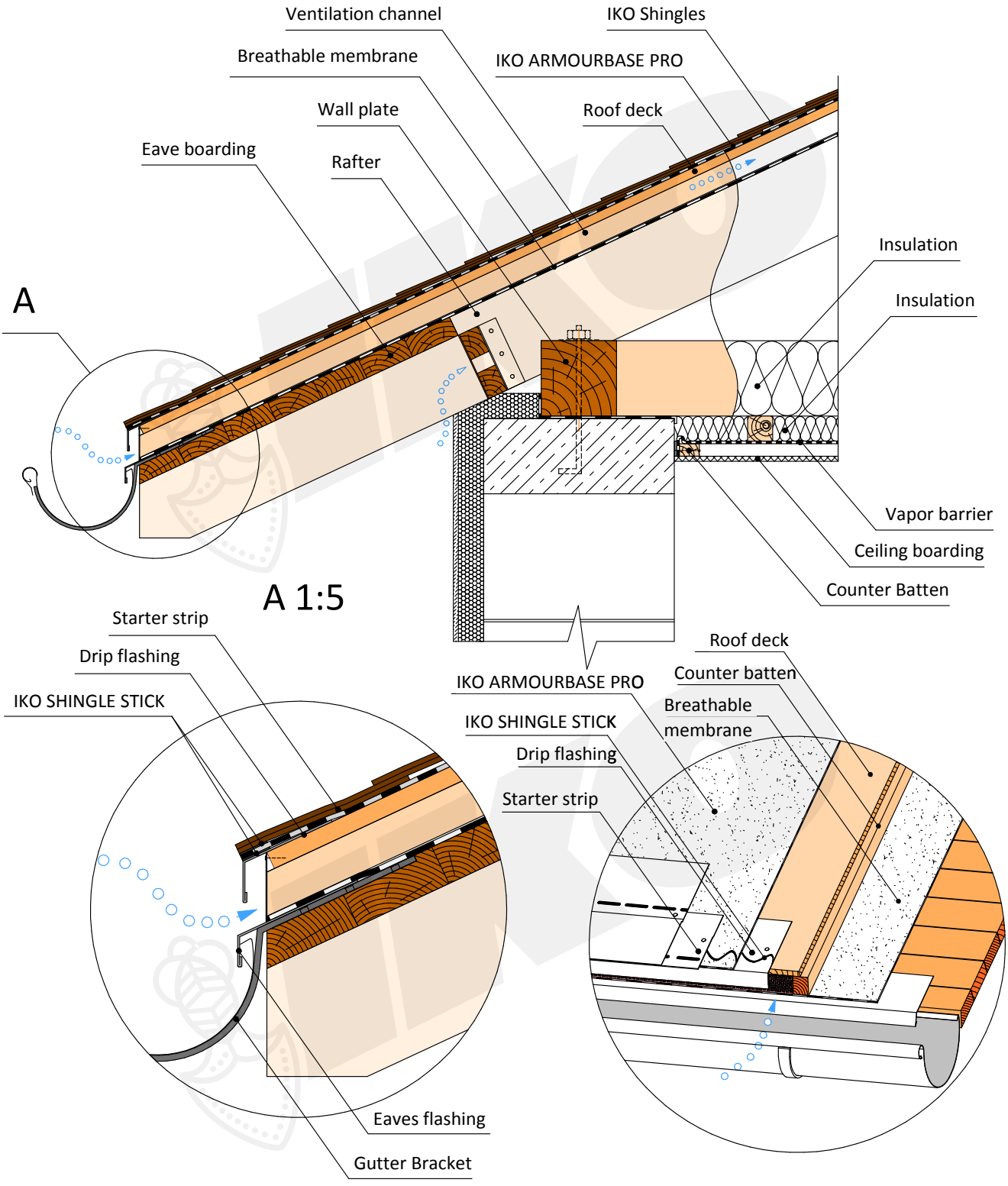
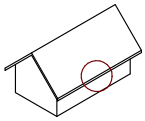


EAVE		DESIGN SCALE 1:10	

6.2 Eave. Insulation between rafters. (insulated roof)

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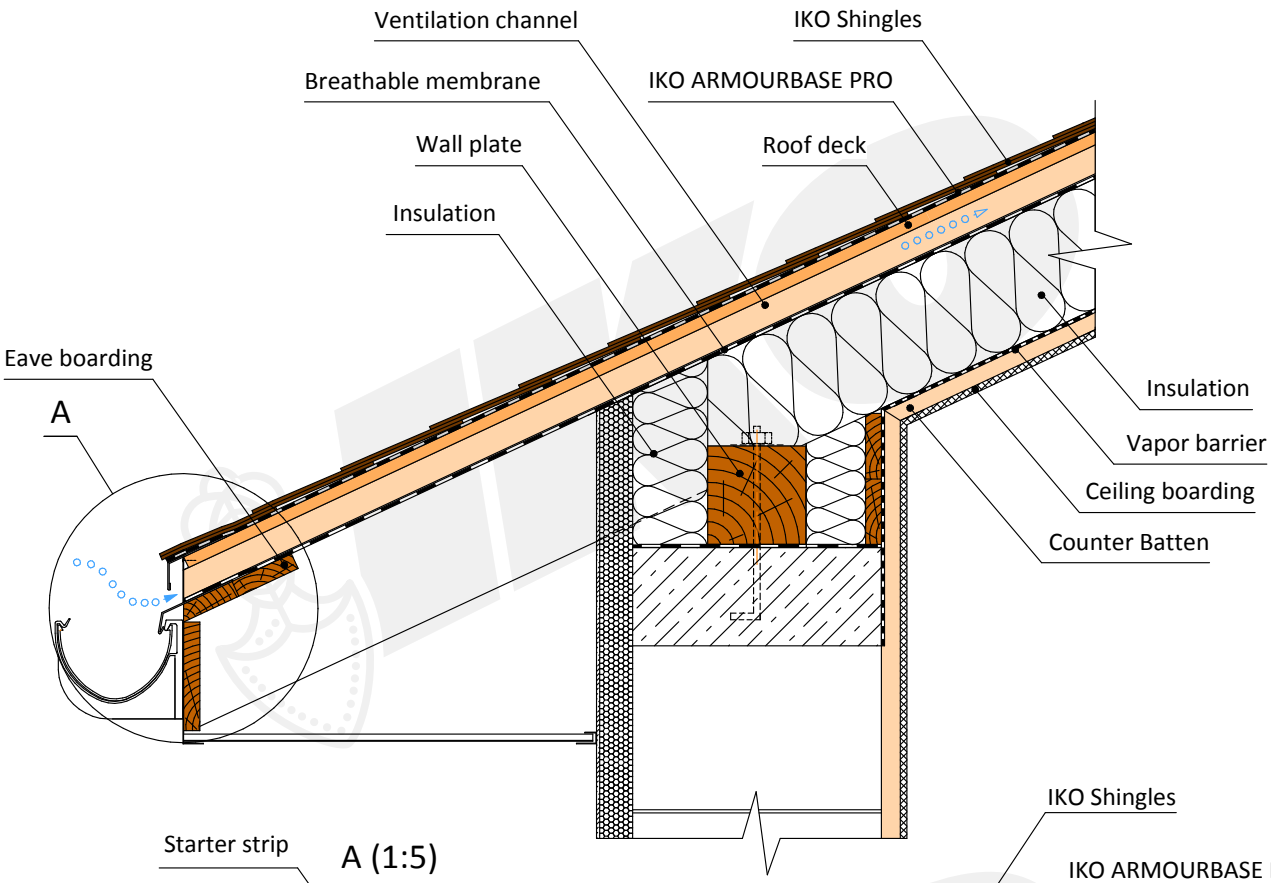
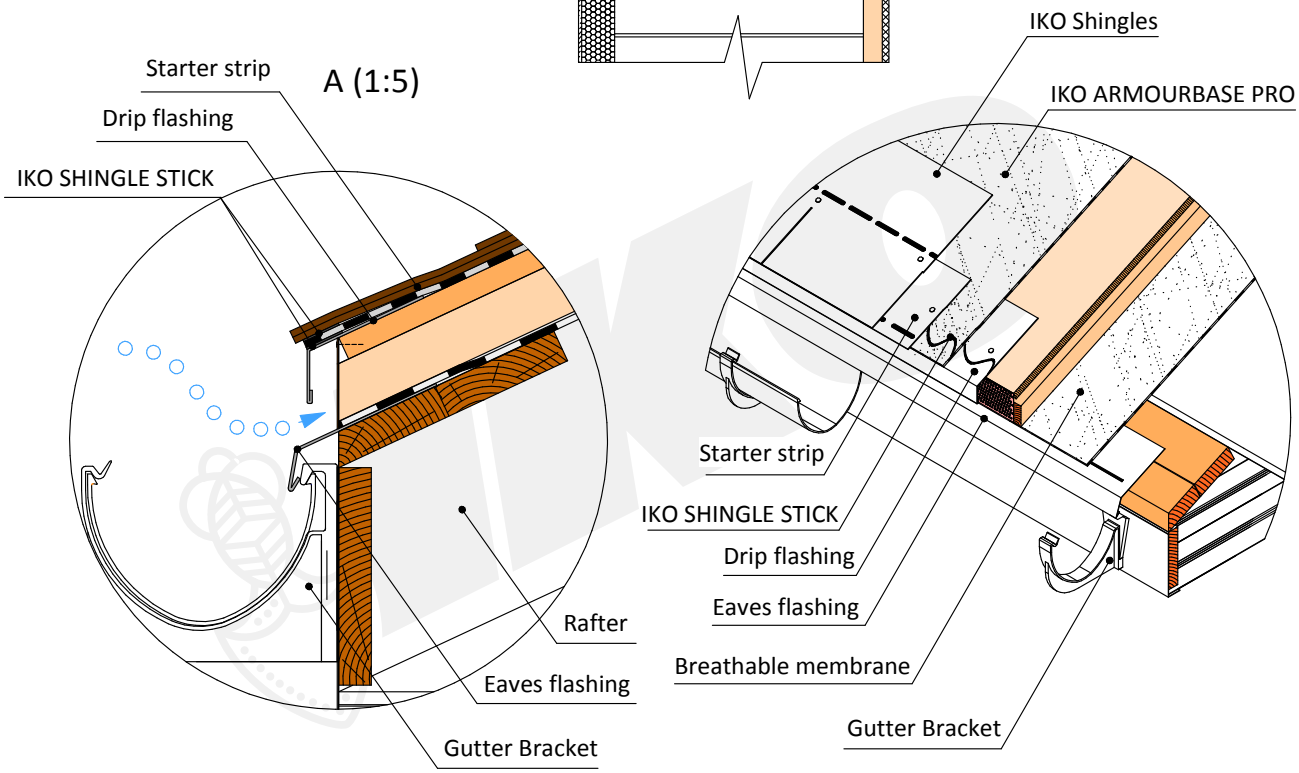
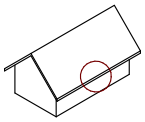


A (1:5)



EAVE. INSULATION BETWEEN RAFTERS		DESIGN SCALE 1:10	

6.3 Eave.
(PIR Insulation on sheathing)

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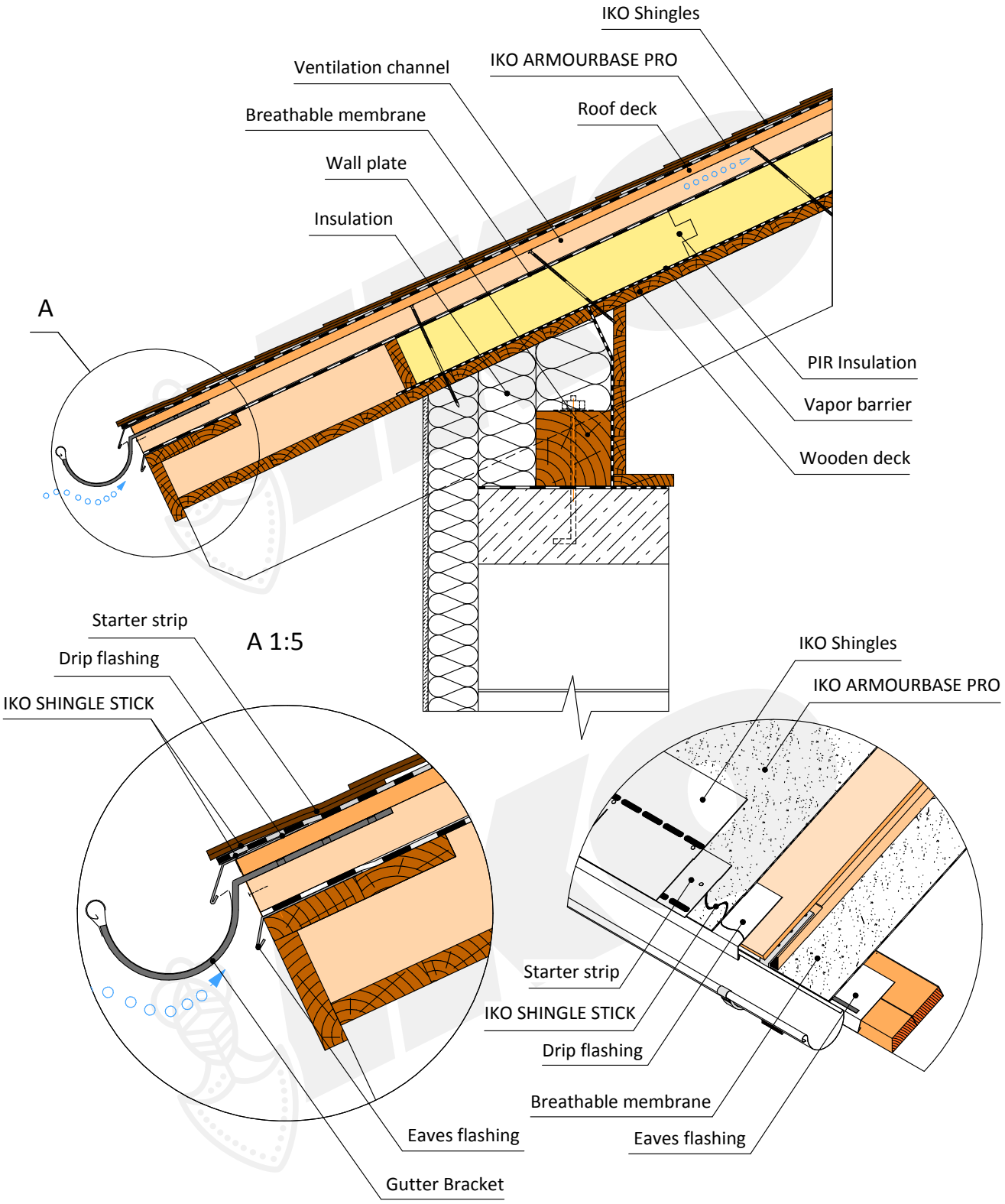
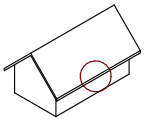
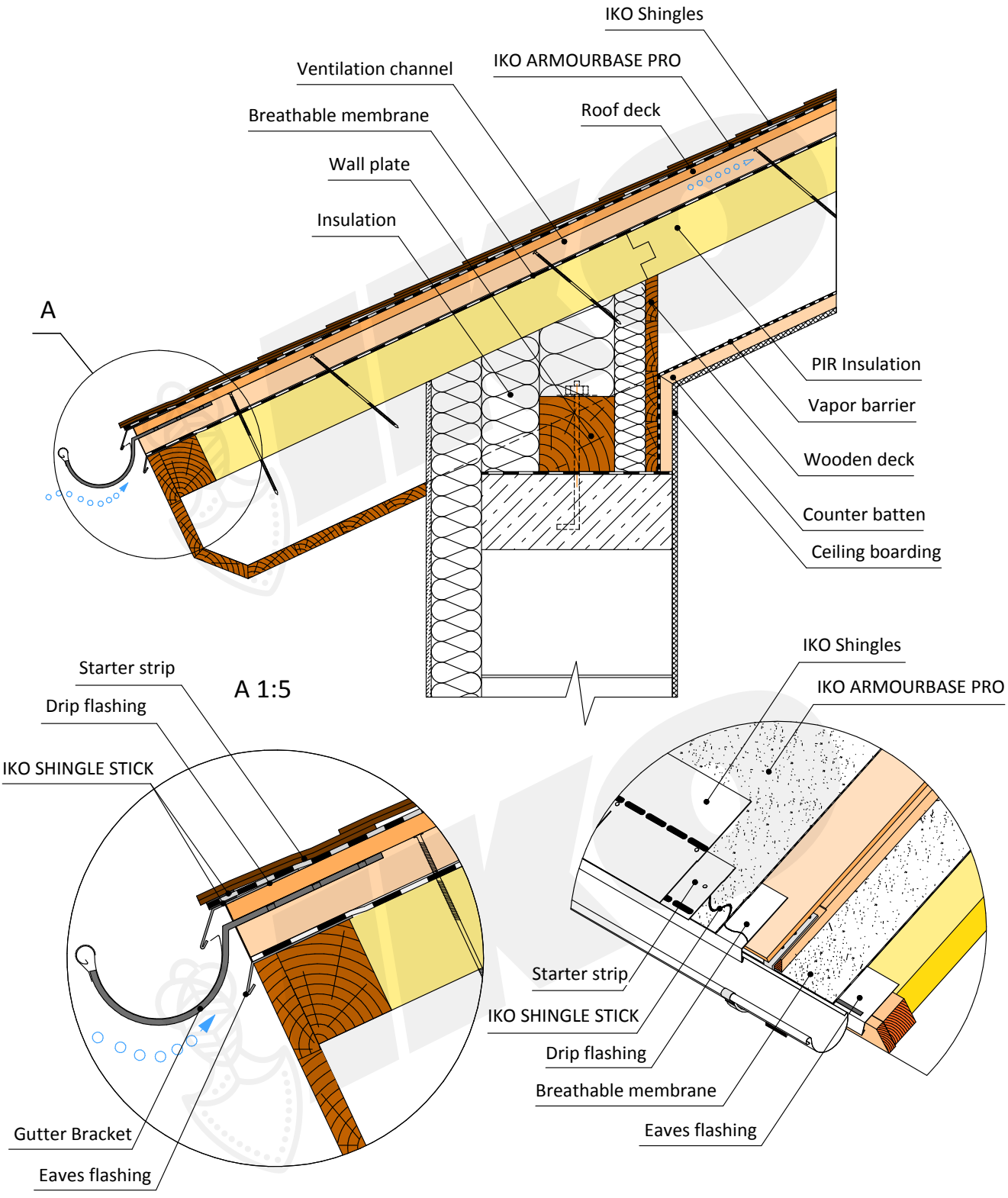


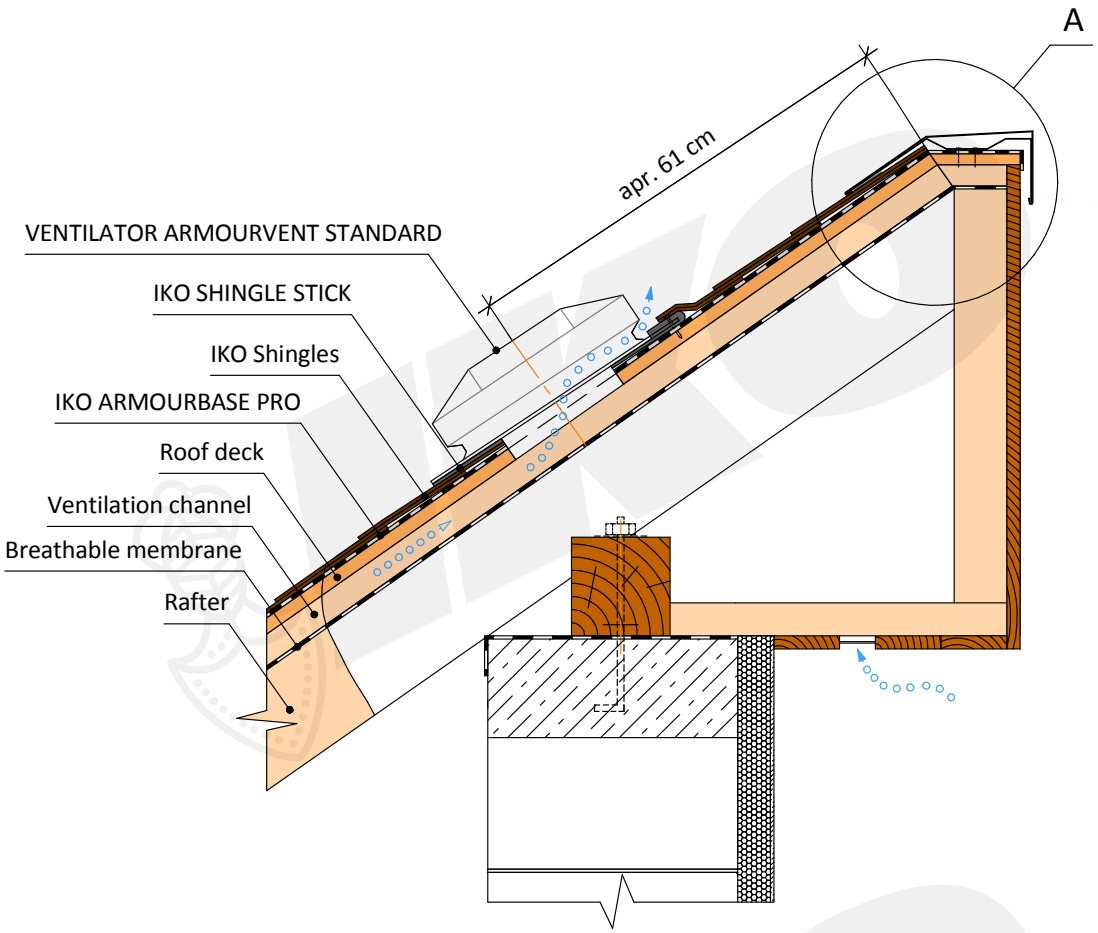
EAVE. PIR INSULATION ON SHEATHING		DESIGN SCALE 1:10	

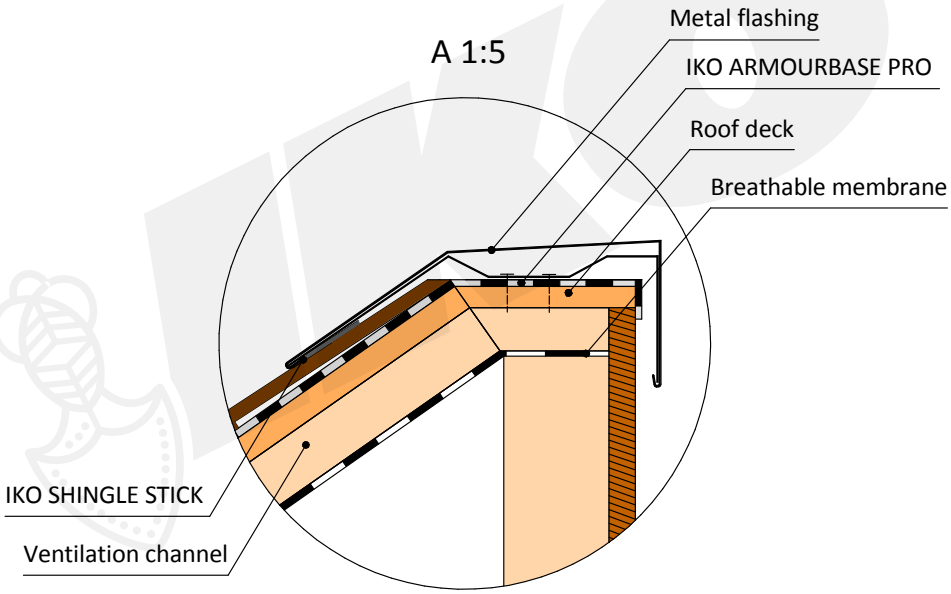
6.4 Eave.
(PIR Insulation on the rafter)

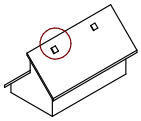


EAVE. PIR INSULATION ON RAFTER		DESIGN SCALE 1:10	

7.1 Shed roof. (cold attic)





SHED ROOF. COLD ATTIC		DESIGN SCALE 1:10	

7.2 Shed roof.
(insulated roof)

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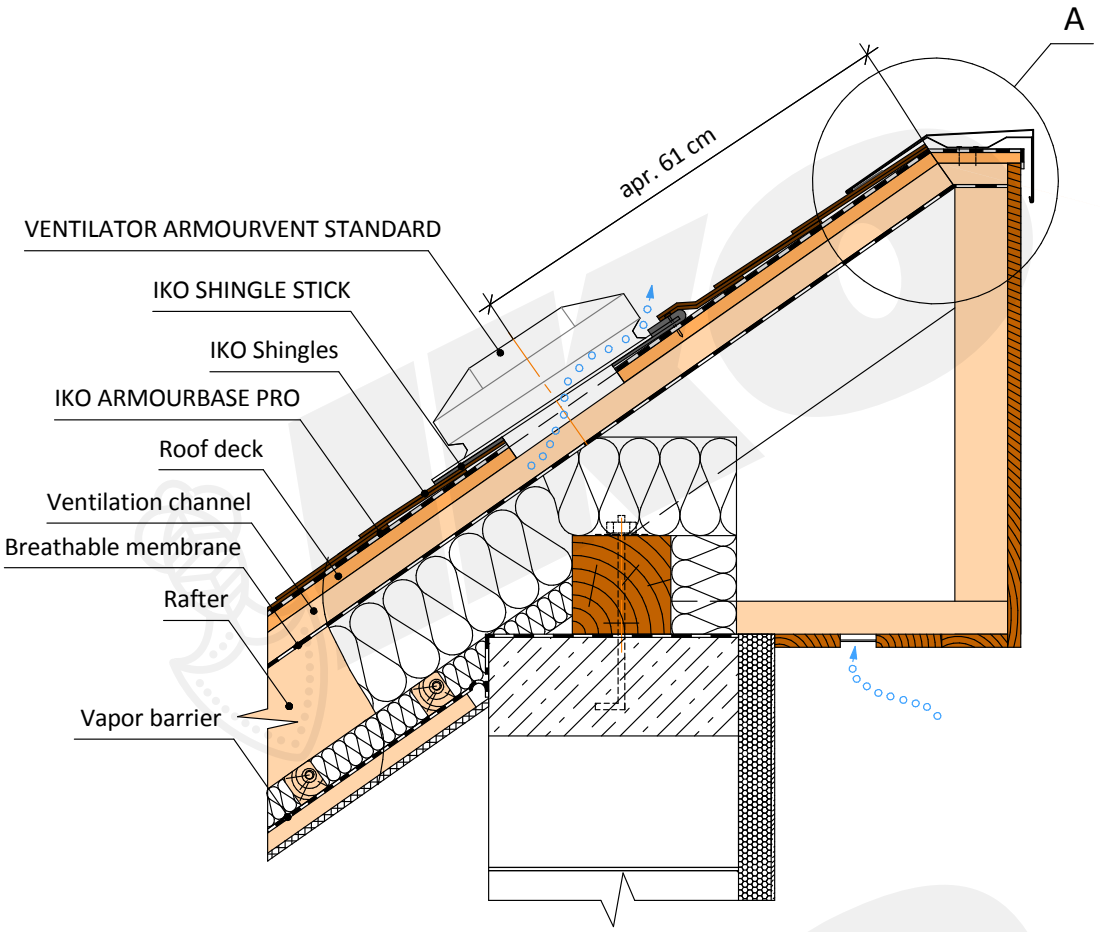
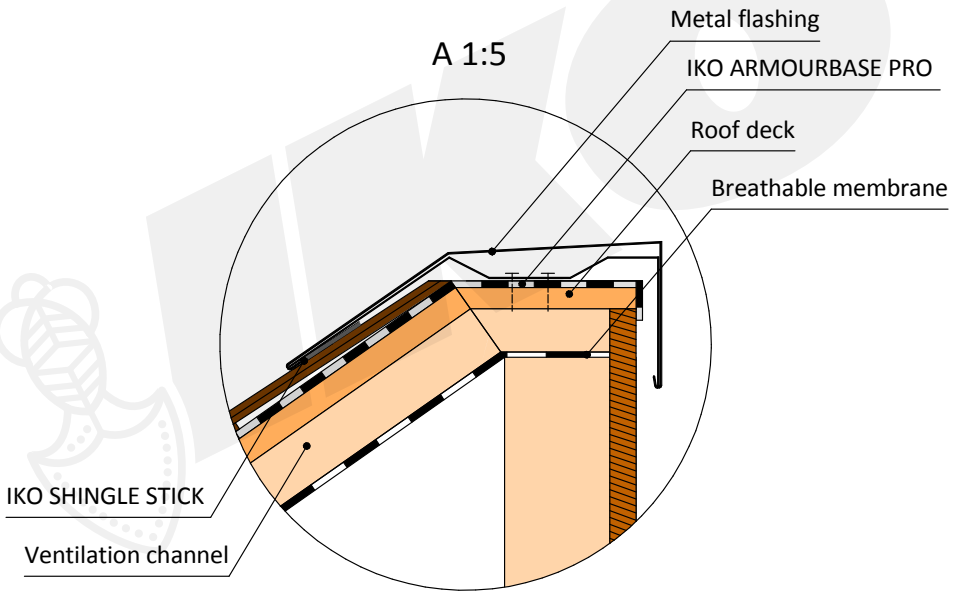
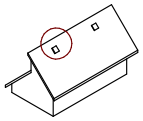
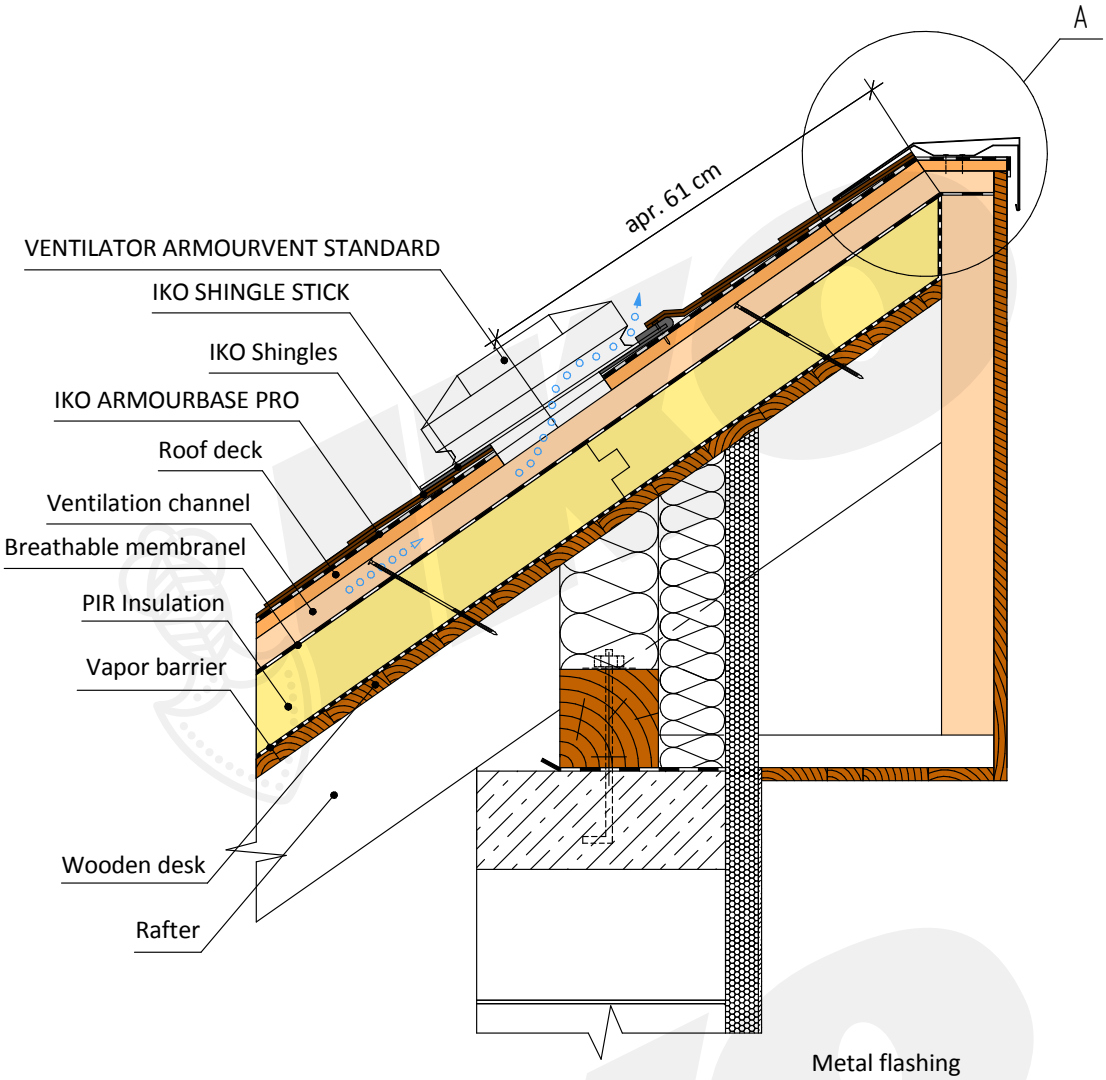


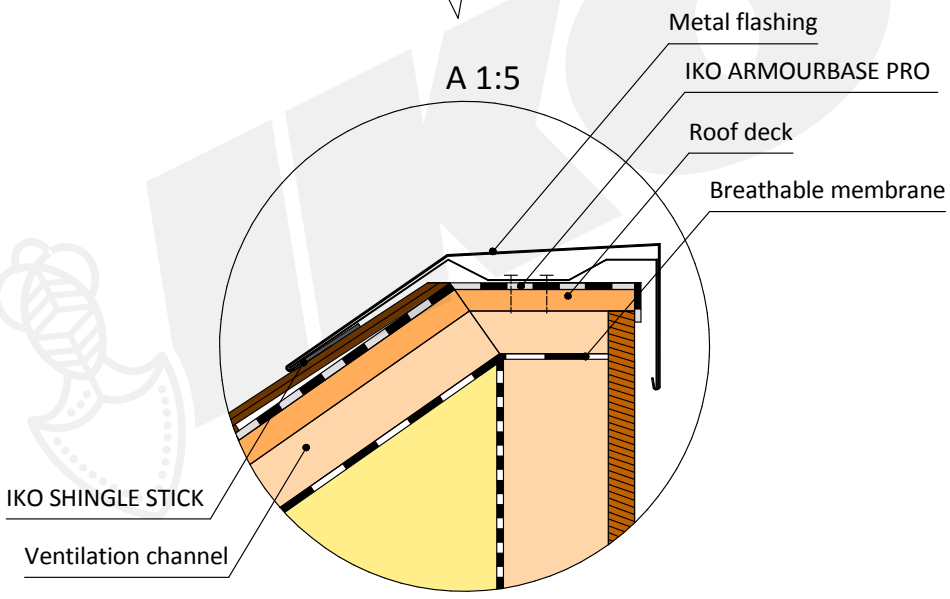


SHED ROOF. INSULATED ROOF		DESIGN SCALE 1:10	

7.3 Shed roof.
(PIR insulation on sheathing)



A 1:5



SHED ROOF. PIR INSULATION ON SHEATHING		DESIGN SCALE 1:10	

7.4 Shed roof.
(PIR insulation above rafters)

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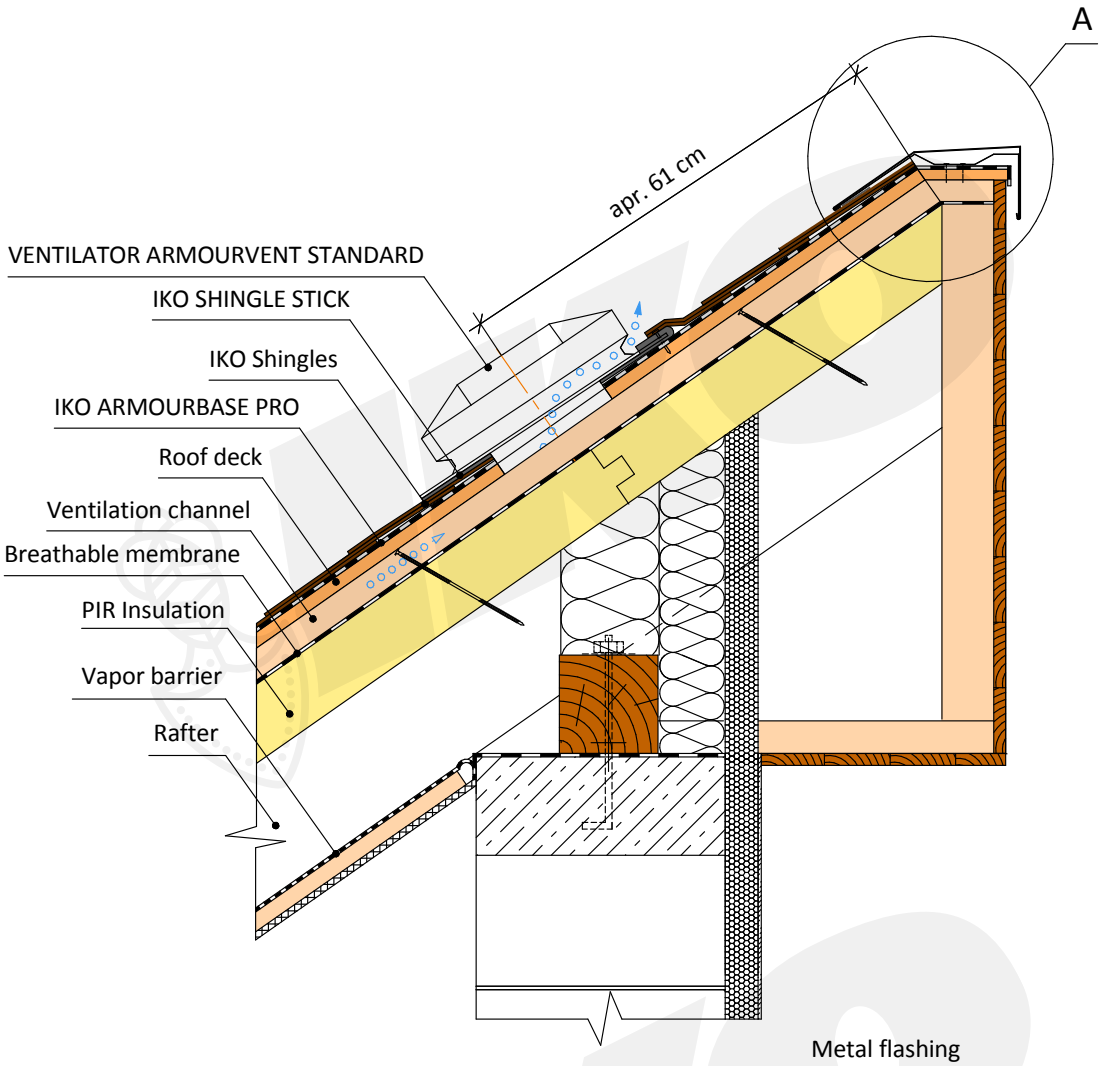
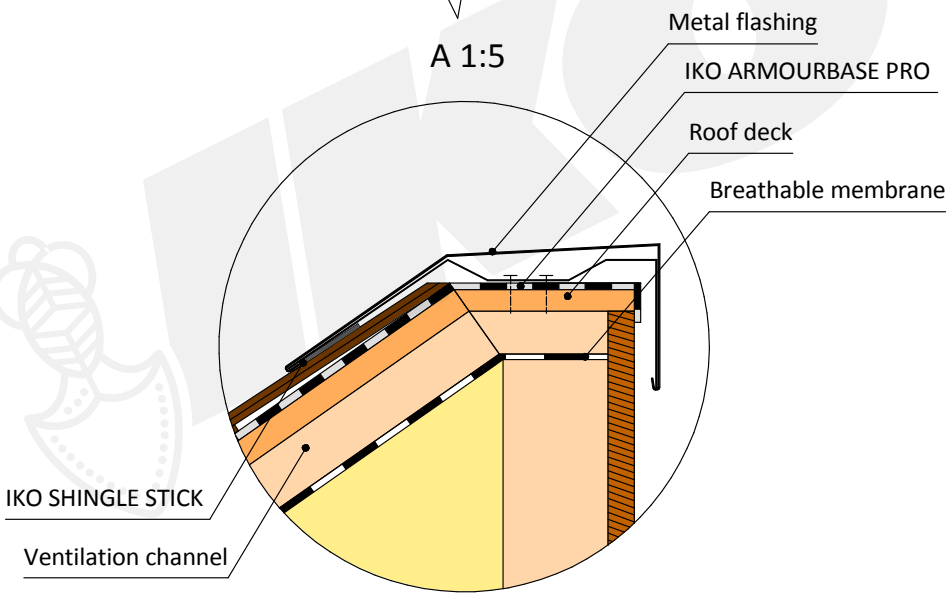
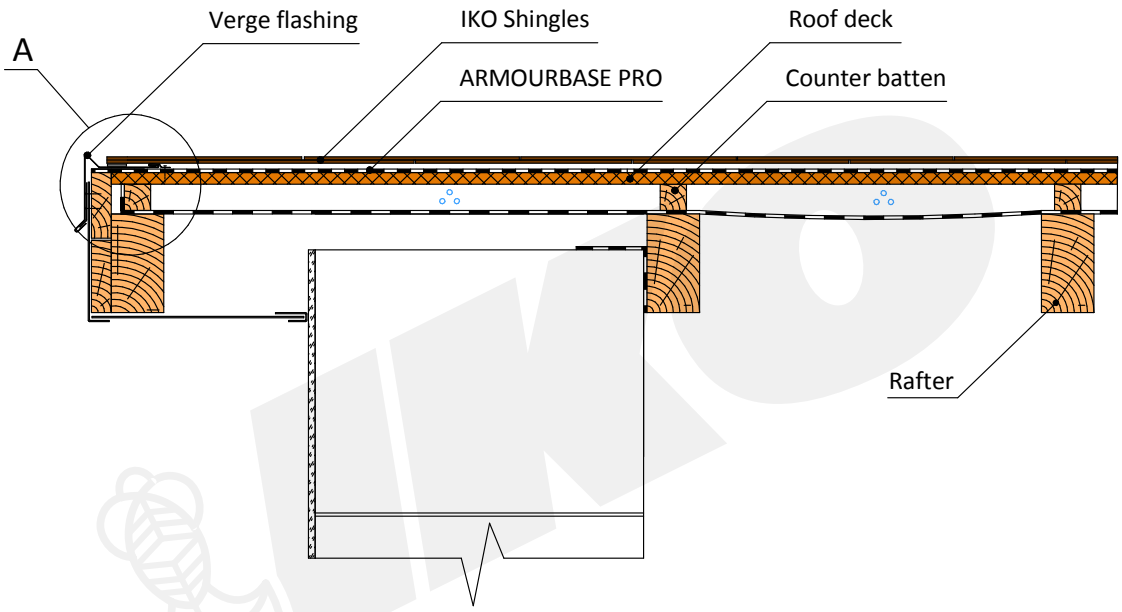


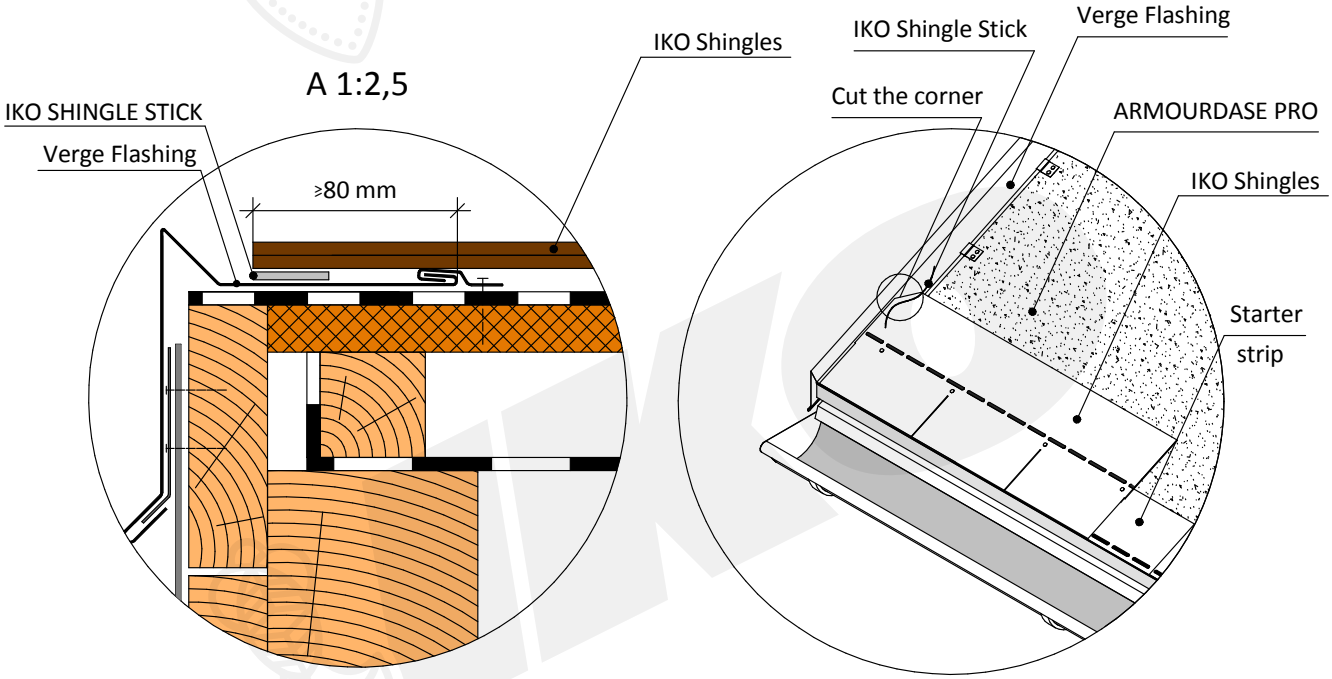
A 1:5



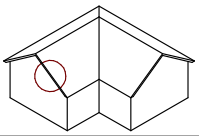
SHED ROOF. PIR INSULATED ABOVE RAFTERS		DESIGN SCALE 1:10	

8.1 Gable.
(cold attic)

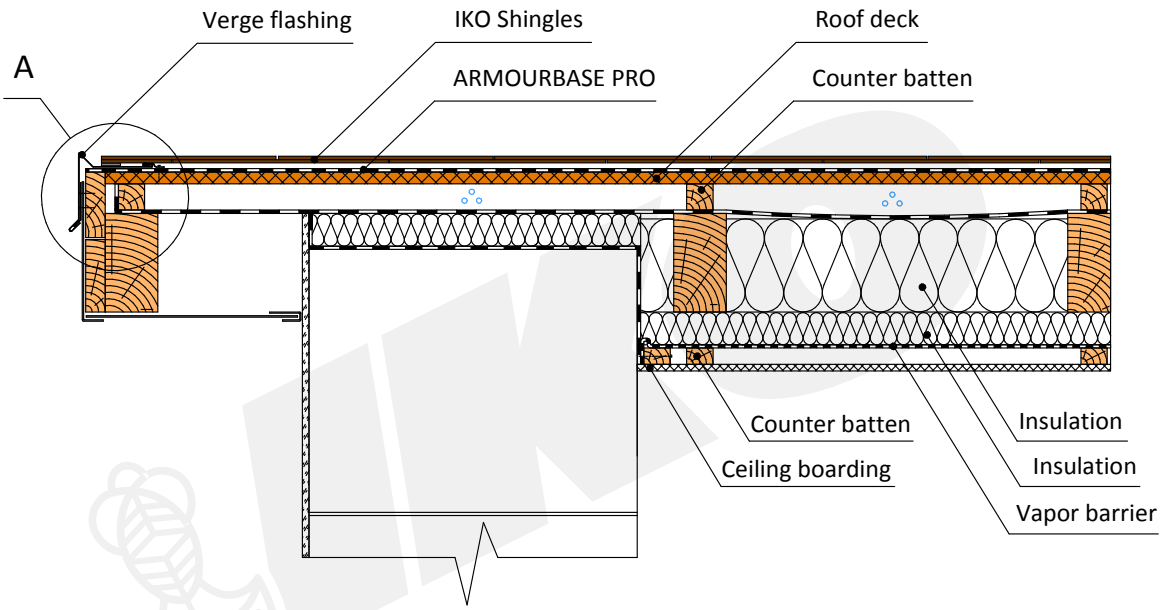




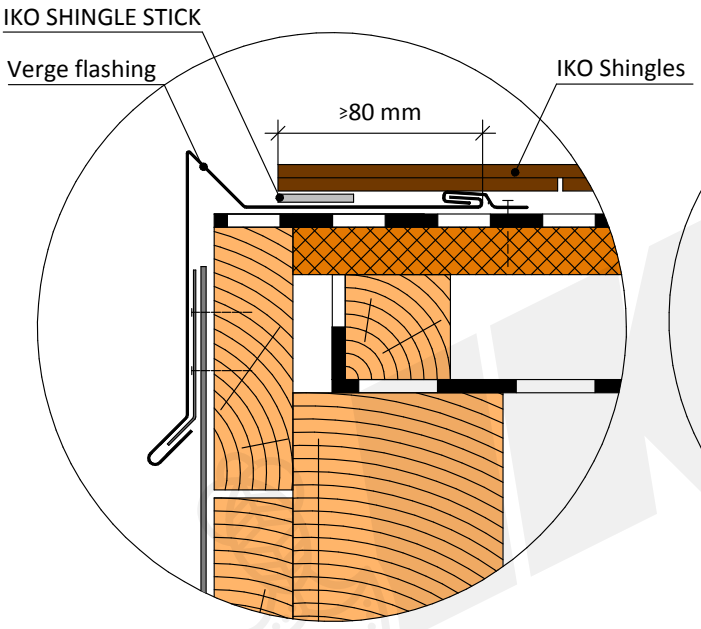
The courses of shingles are laid loose over this turned-up edge and overlap the sheet metal by ≥ 80 mm. The courses are not nailed or stuck down around the sheet metal profile. To prevent water being sucked below shingles laid flat, the top corner of each asphalt shingle is cut off at an angle. Seal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

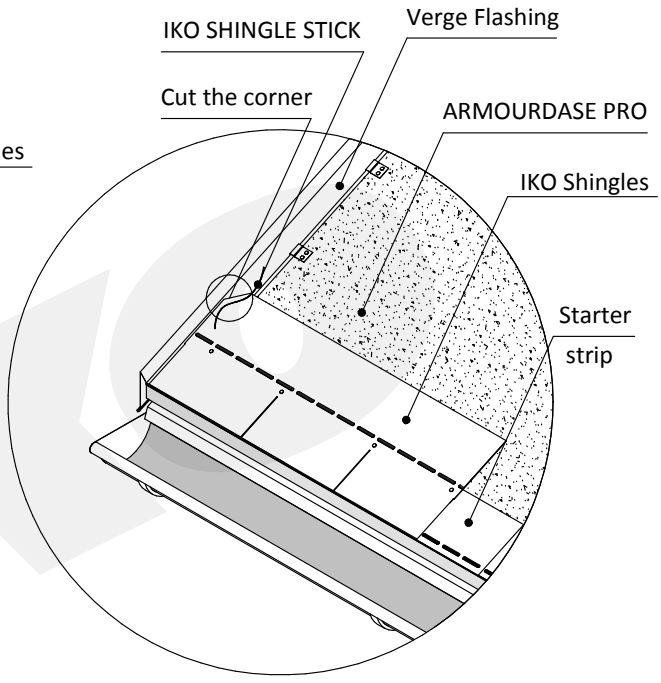
GABLE		DESIGN SCALE 1:10	PAGE

8.2 Gable.
(insulated roof)

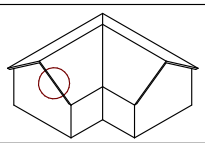


A 1:2,5

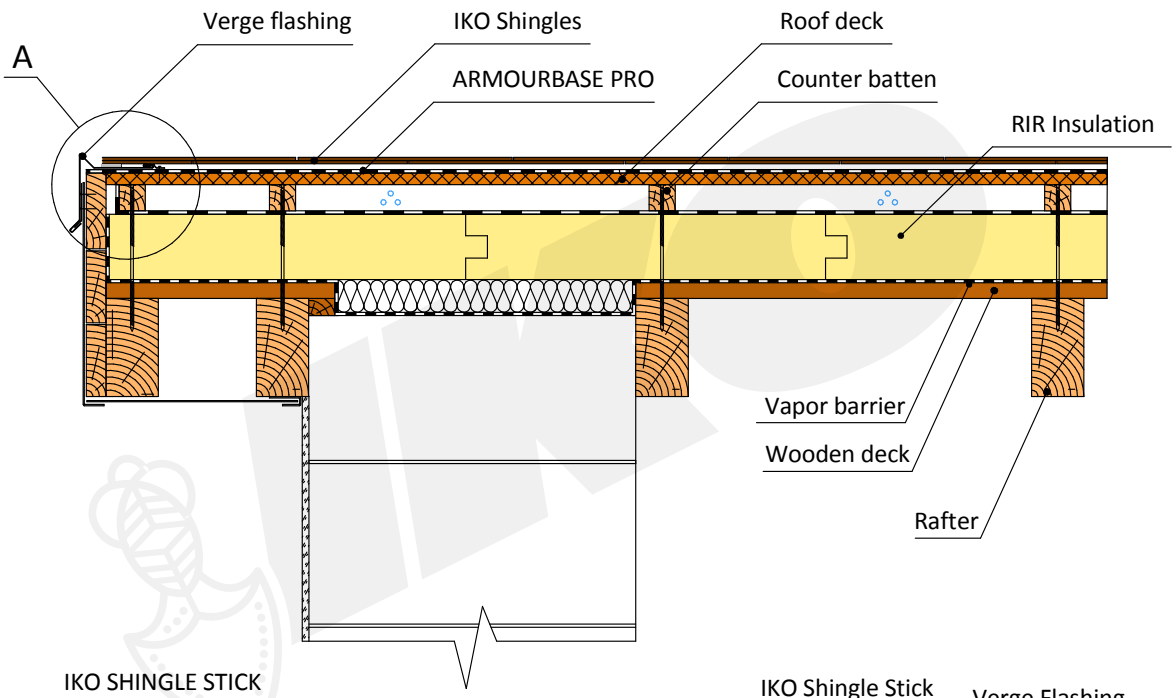


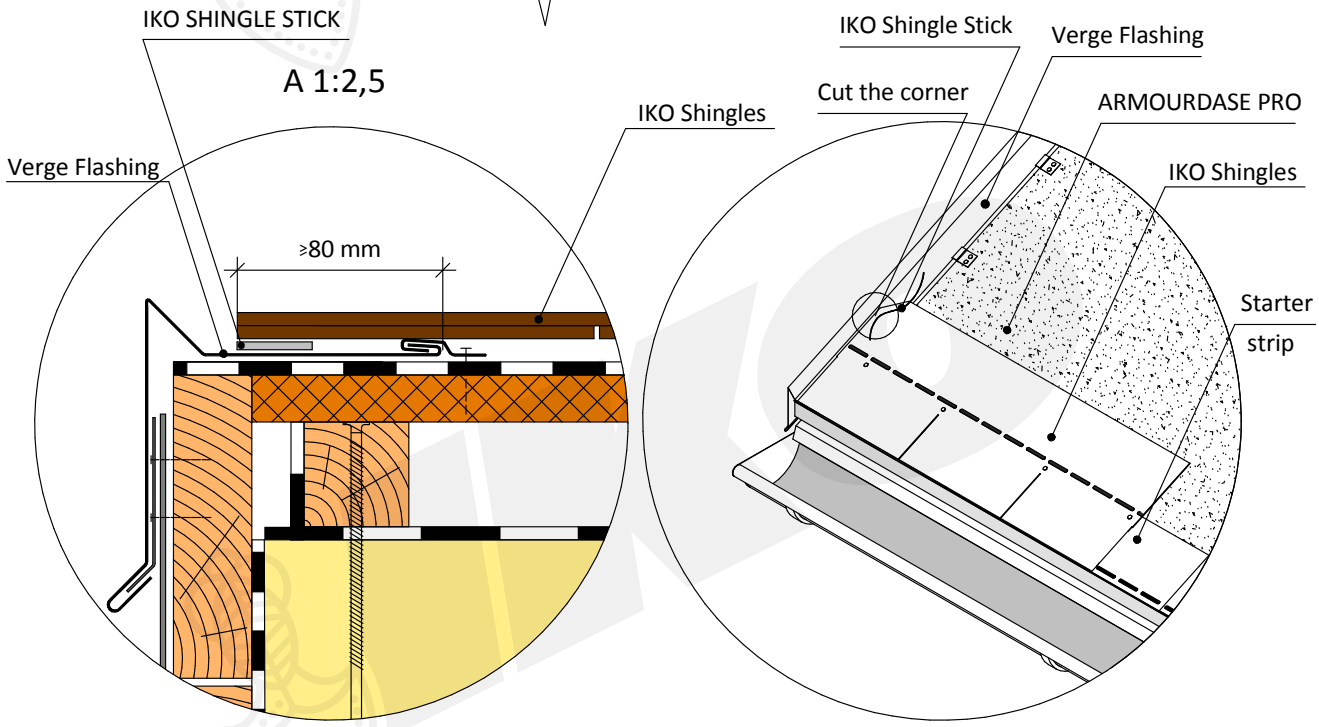


The courses of shingles are laid loose over this turned-up edge and overlap the sheet metal by ≥ 80 mm. The courses are not nailed or stuck down around the sheet metal profile. To prevent water being sucked below shingles laid flat, the top corner of each asphalt shingle is cut off at an angle. Seal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

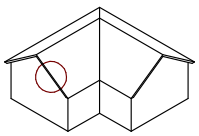
GABLE (INSULATED ROOF)		DESIGN SCALE 1:10	PAGE

8.3 Gable.
(PIR insulation on sheathing)

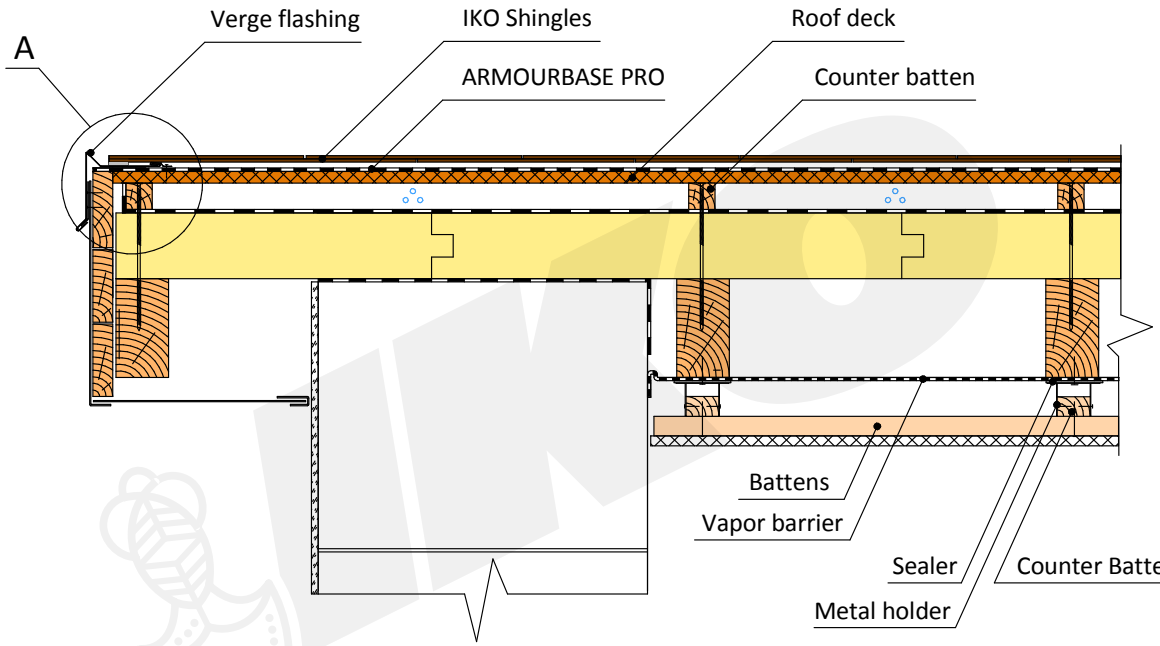


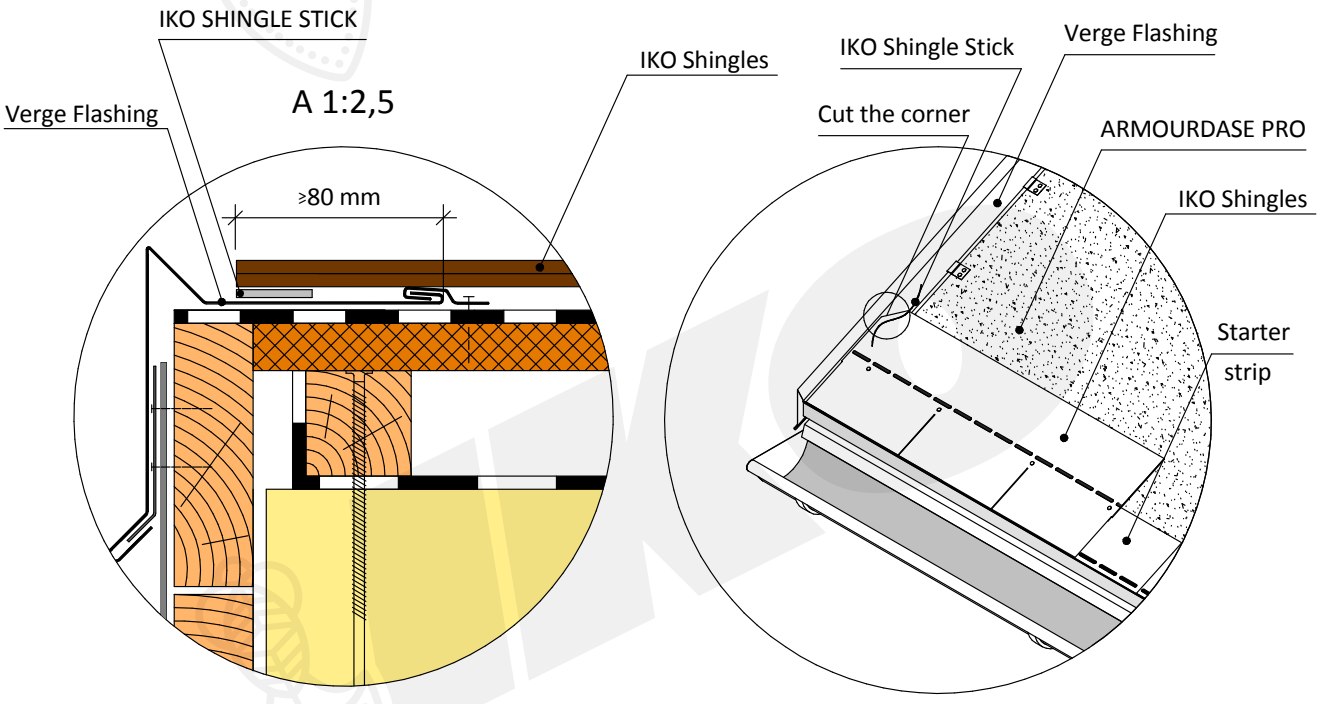


The courses of shingles are laid loose over this turned-up edge and overlap the sheet metal by ≥ 80 mm. The courses are not nailed or stuck down around the sheet metal profile. To prevent water being sucked below shingles laid flat, the top corner of each asphalt shingle is cut off at an angle. Seal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

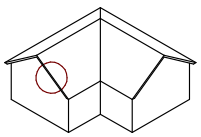
GABLE (PIR INSULATION ON SHEATHING)		DESIGN SCALE 1:10	PAGE

8.4 Gable.
(PIR insulation above rafters)

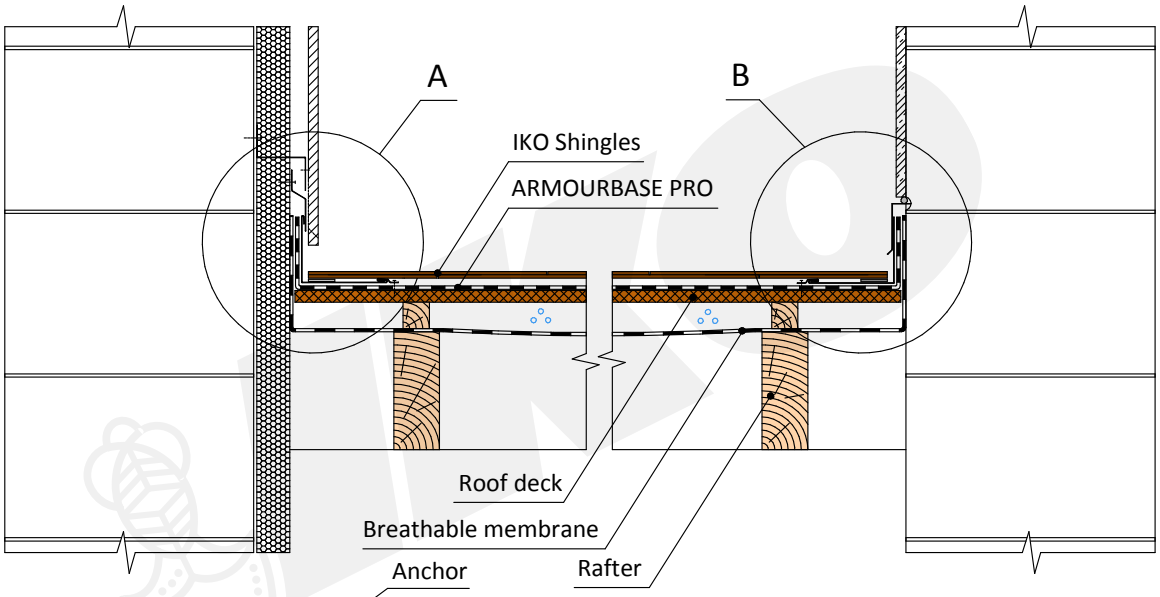


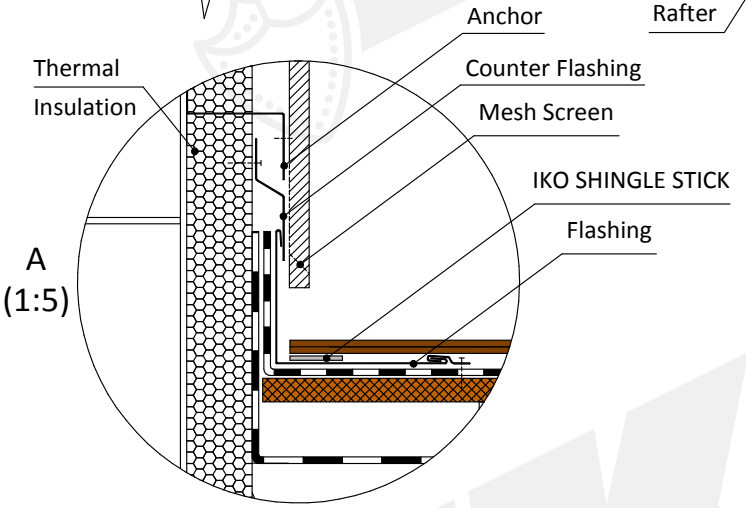


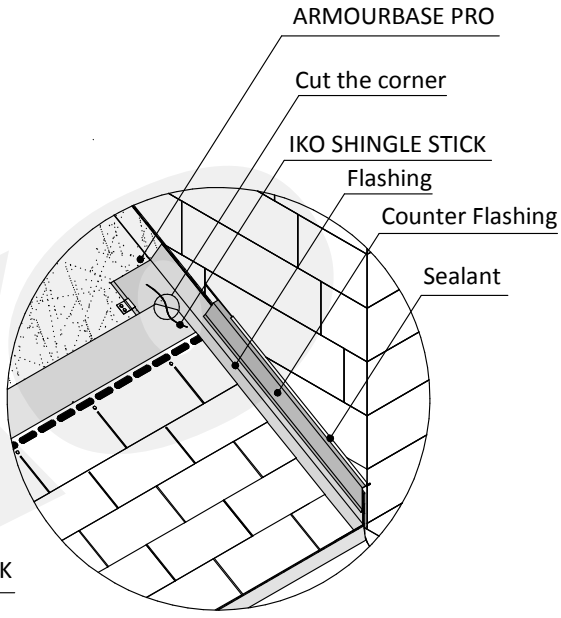
The courses of shingles are laid loose over this turned-up edge and overlap the sheet metal by ≥ 80 mm. The courses are not nailed or stuck down around the sheet metal profile. To prevent water being sucked below shingles laid flat, the top corner of each asphalt shingle is cut off at an angle. Seal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

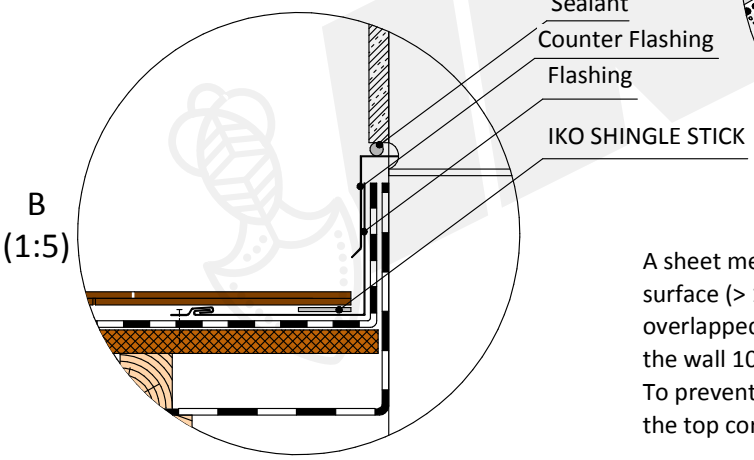
GABLE (PIR INSULATION ABOVE RAFTERS)		DESIGN SCALE 1:10	PAGE

9.1 Flashing against vertical sidewall. (cold attic)

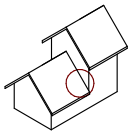




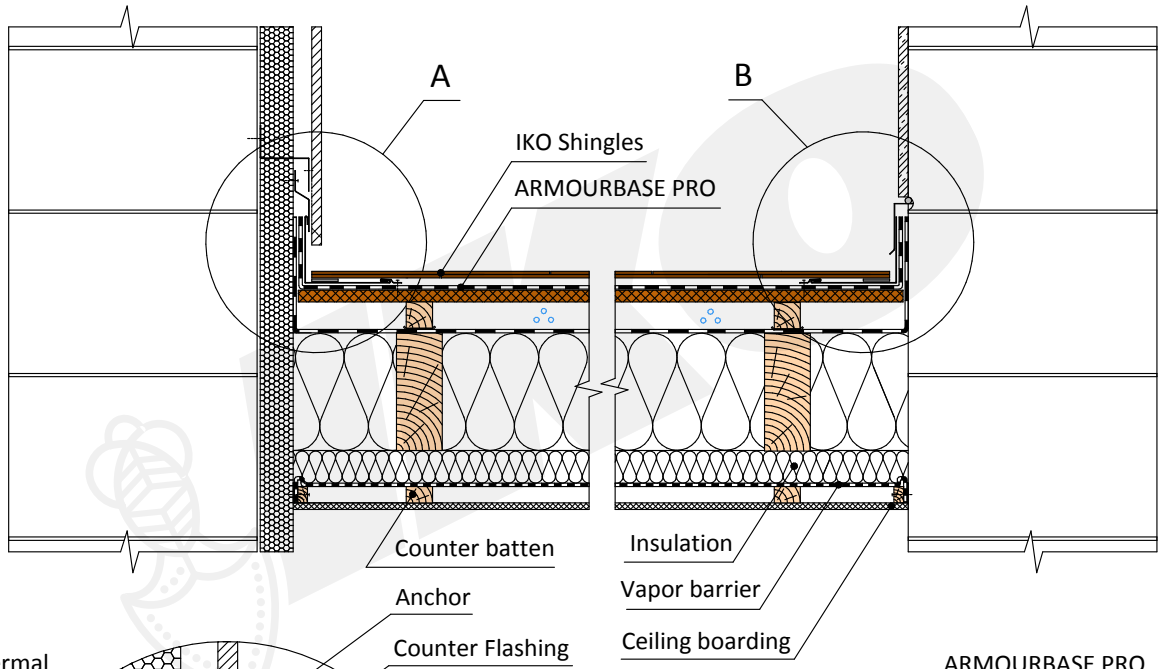


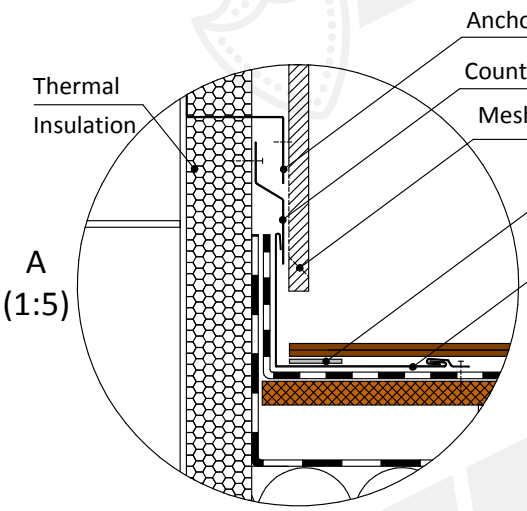


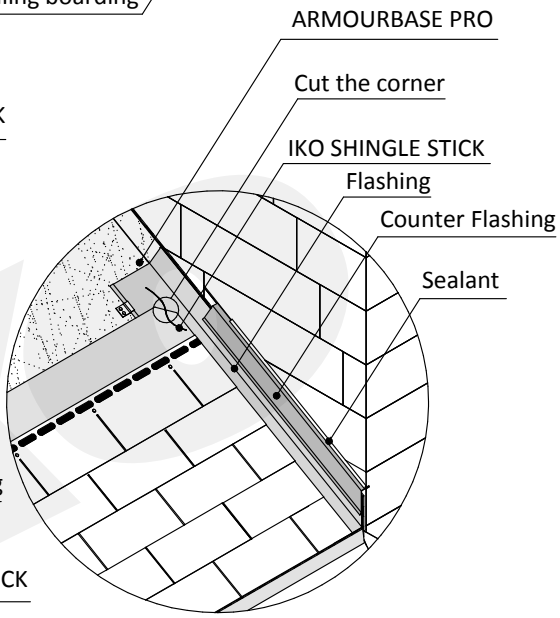
A sheet metal gutter tucked under the shingles on a roof surface (> 100mm) must have a turned-up edge , be overlapped by the shingles > 100 mm and turned up the wall 100-150 mm (depending on a pitch).
To prevent water being sucked below shingles laid flat, the top corner of each shingle is cut off at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

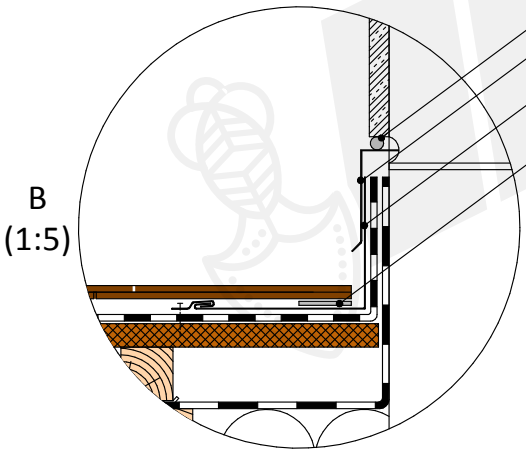
FLASHING AGAINST VERTICAL SIDEWALL		DESIGN SCALE 1:10	

9.2 Flashing against vertical sidewall. (insulated roof)

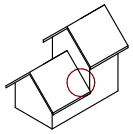








A sheet metal gutter tucked under the shingles on a roof surface (> 100 mm) must have a turned-up edge , be overlapped by the shingles > 100 mm and turned up the wall 100-150 mm (depending on a pitch).
To prevent water being sucked below shingles laid flat, the top corner of each shingle is cut off at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

FLASHING AGAINST VERTICAL SIDEWALL (INSULATED ROOF)		DESIGN SCALE 1:10	

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

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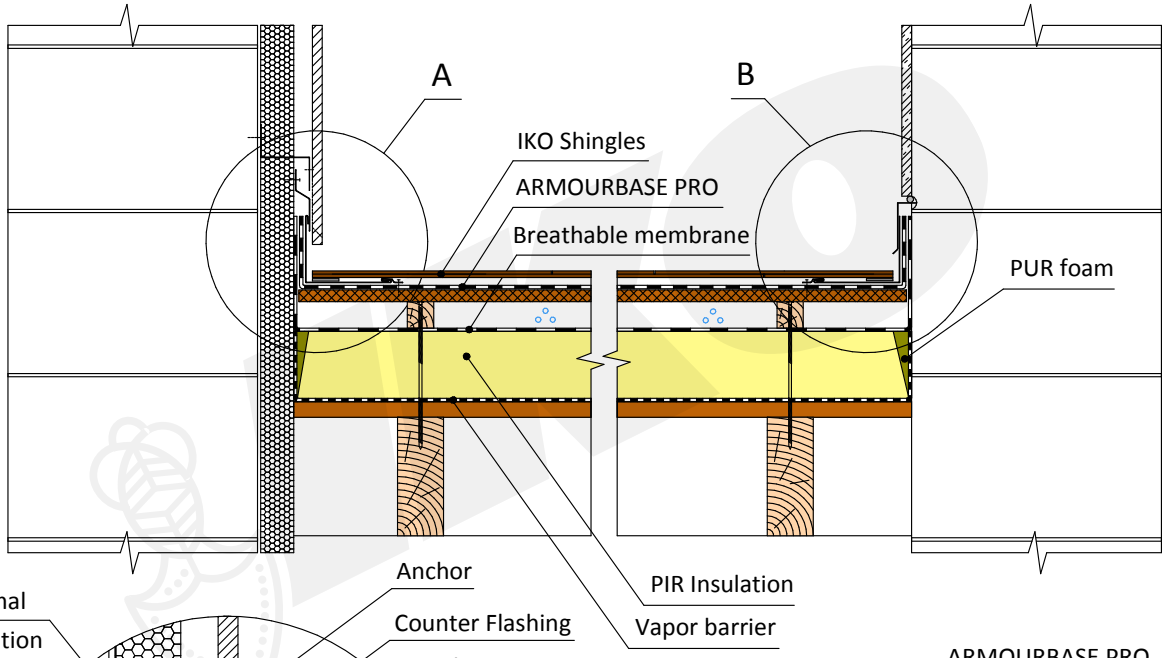
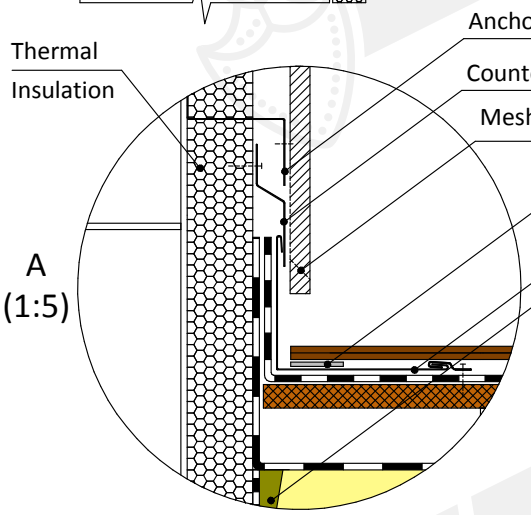
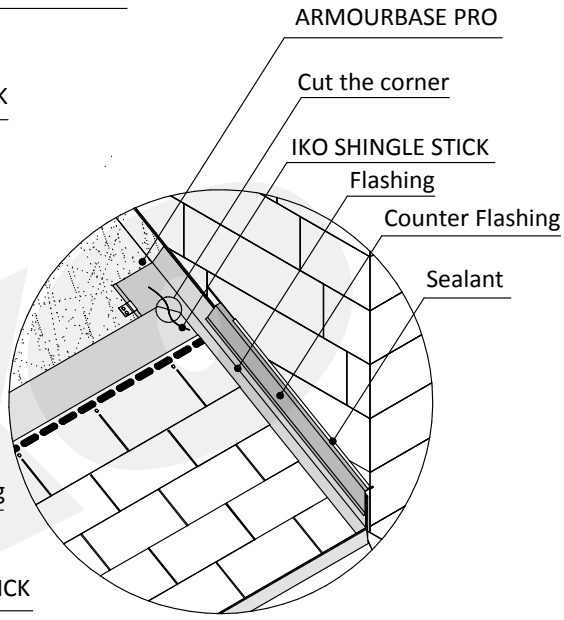
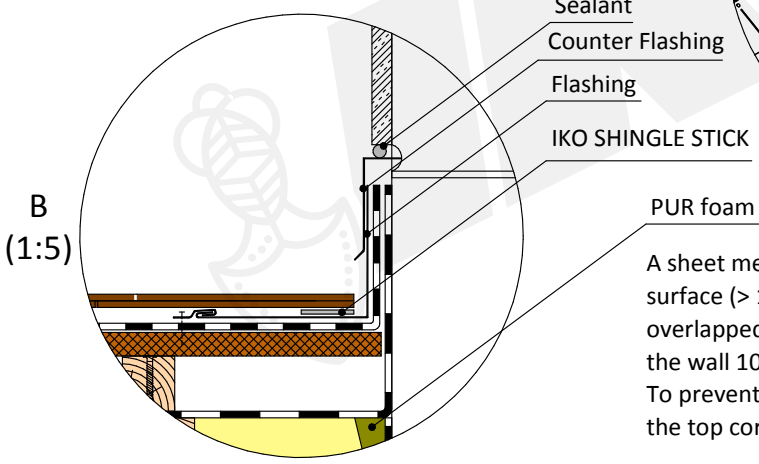
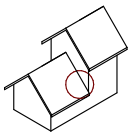




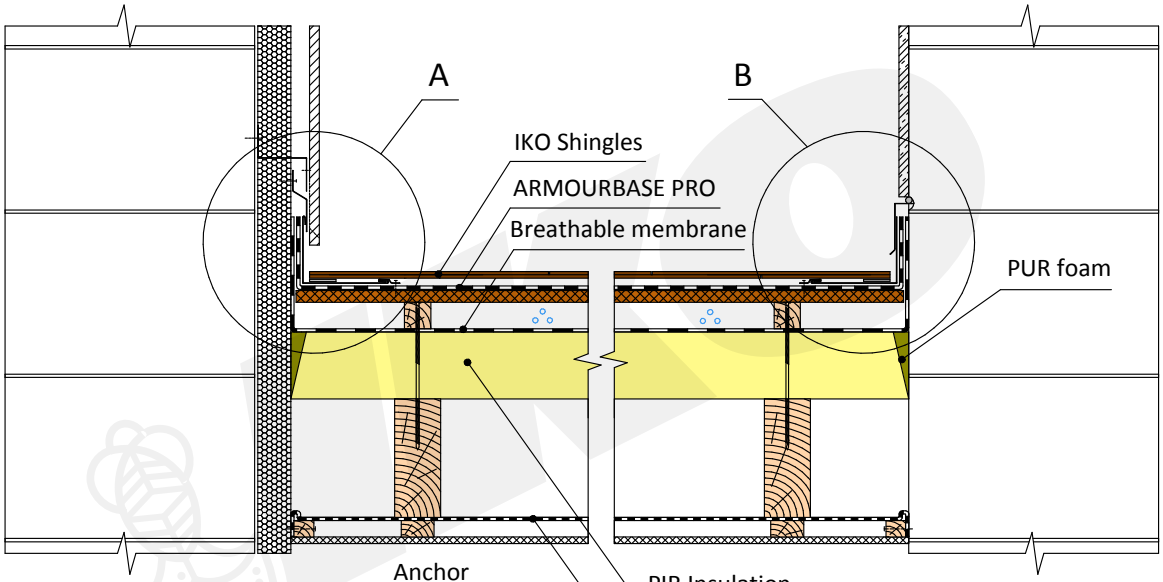


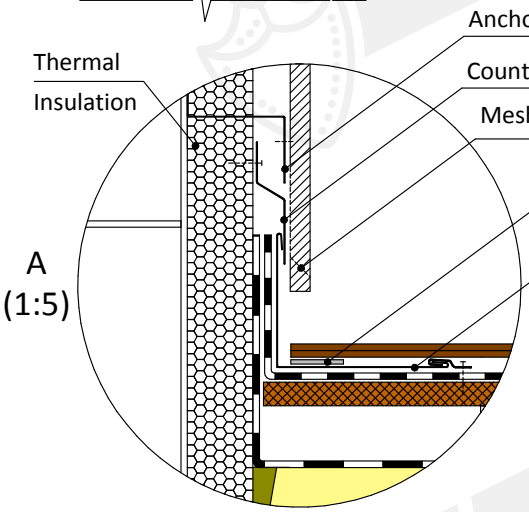


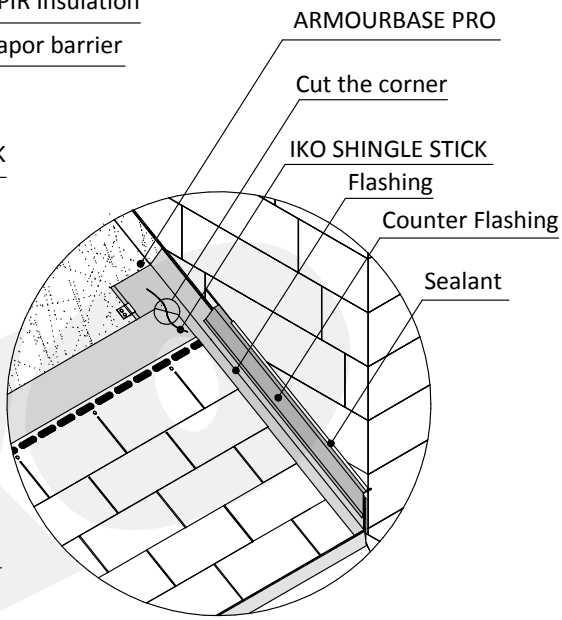
A sheet metal gutter tucked under the shingles on a roof surface (> 100 mm) must have a turned-up edge , be overlapped by the shingles > 100 mm and turned up the wall 100-150 mm (depending on a pitch).
To prevent water being sucked below shingles laid flat, the top corner of each shingle is cut off at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

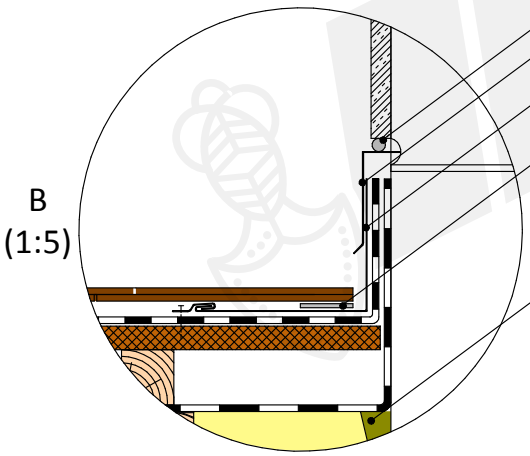
FLASHING AGAINST VERTICAL SIDEWALL. PIR INSULATION ON SHEATHING		DESIGN SCALE 1:10	

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

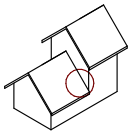




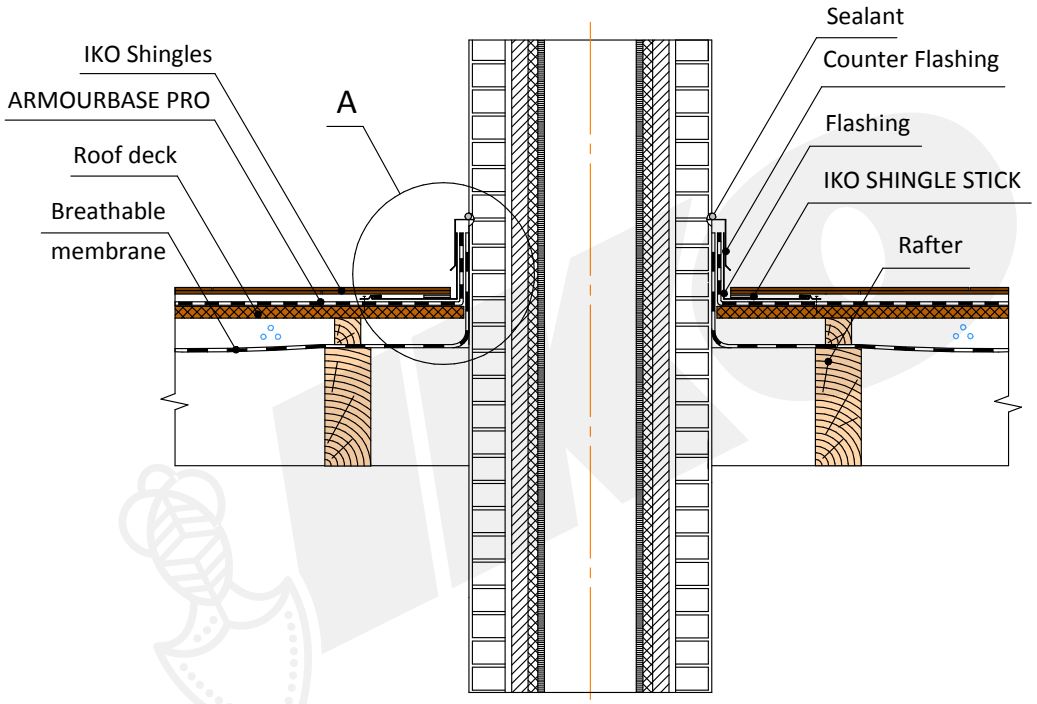


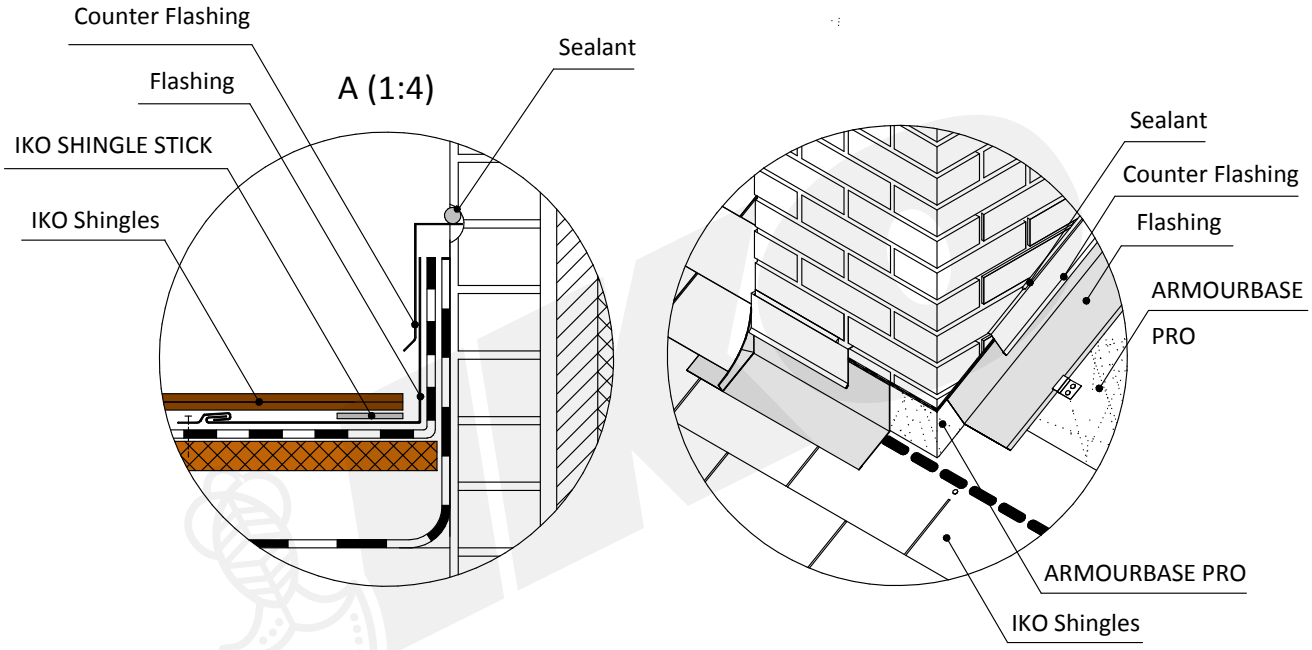


A sheet metal gutter tucked under the shingles on a roof surface (> 100 mm) must have a turned-up edge , be overlapped by the shingles > 100 mm and turned up the wall 100-150 mm (depending on a pitch).
To prevent water being sucked below shingles laid flat, the top corner of each shingle is cut off at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

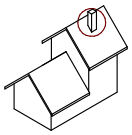
FLASHING AGAINST VERTICAL SIDEWALL. PIR INSULATION ABOVE RAFTERS		DESIGN SCALE 1:10	

10.1 Chimney. Cross section. (cold attic)

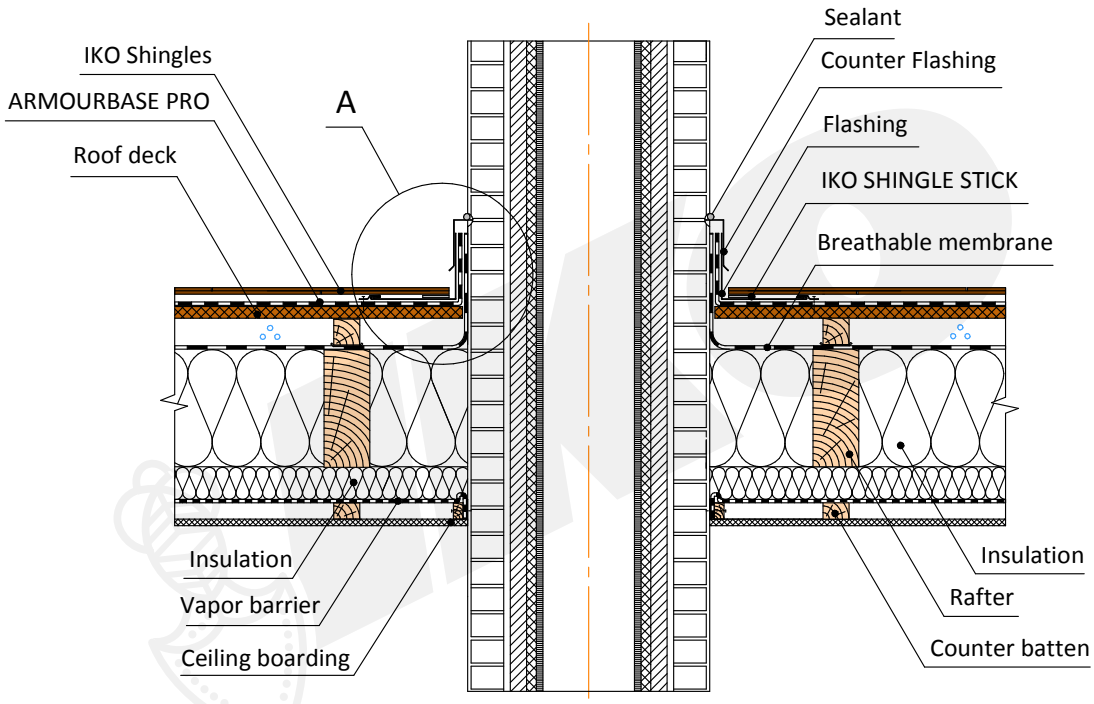


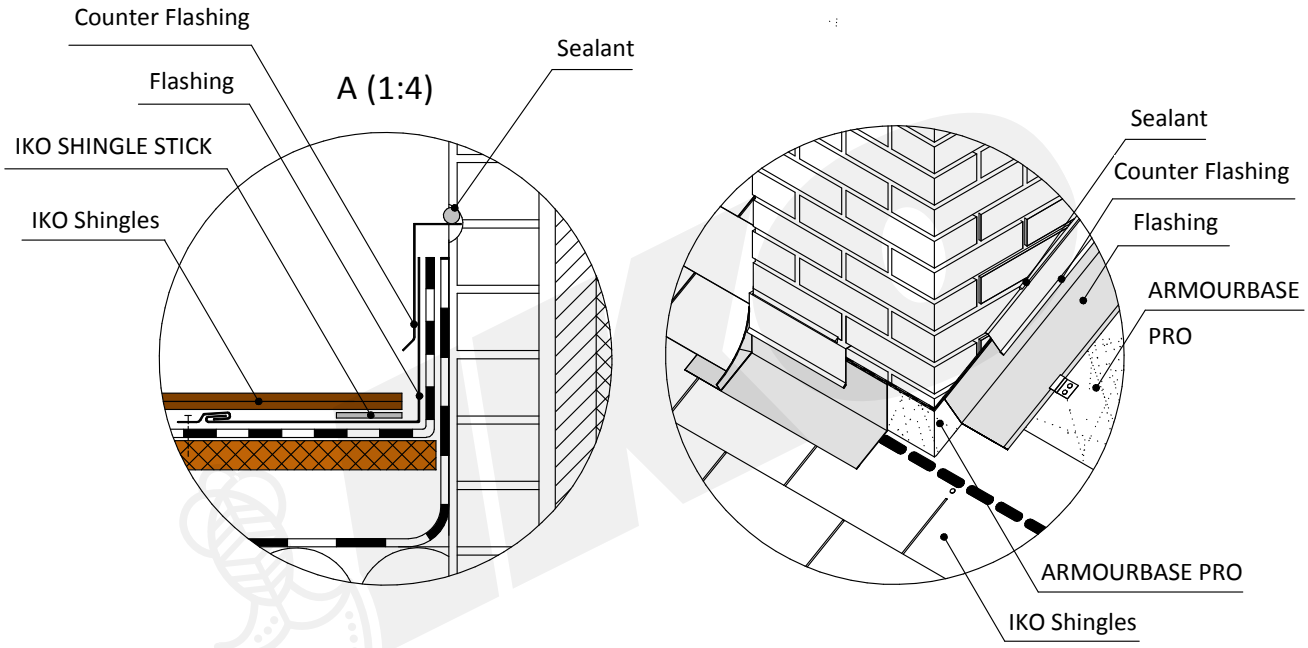


Horizontal leg of metal flashing should be > 100 mm wide and include a turned up edge. The courses of shingles are laid loose over this turned up edge. Metal flashing turned up the chimney stack on min. 100 mm. This high must be enlarged with the reduction of roof pitch to 150 mm (< 15°) or/and according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

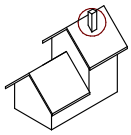
CHIMNEY. CROSS SECTION		DESIGN SCALE 1:10	

10.2 Chimney. Cross section. (insulated roof)

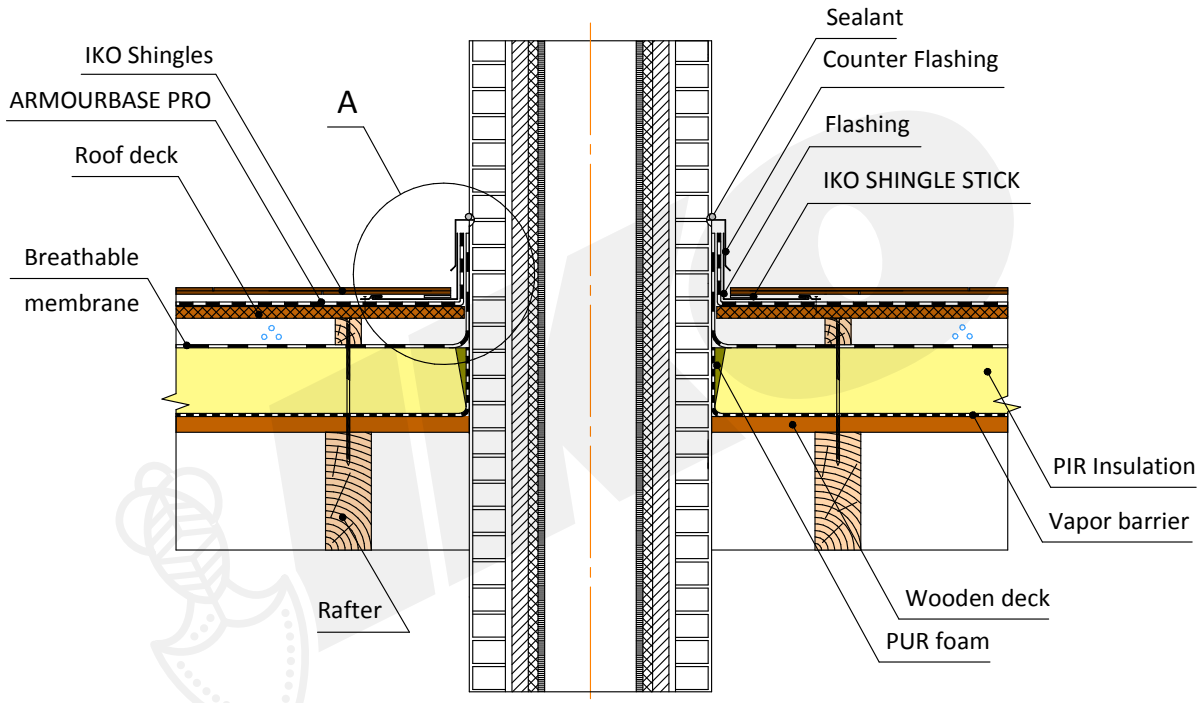


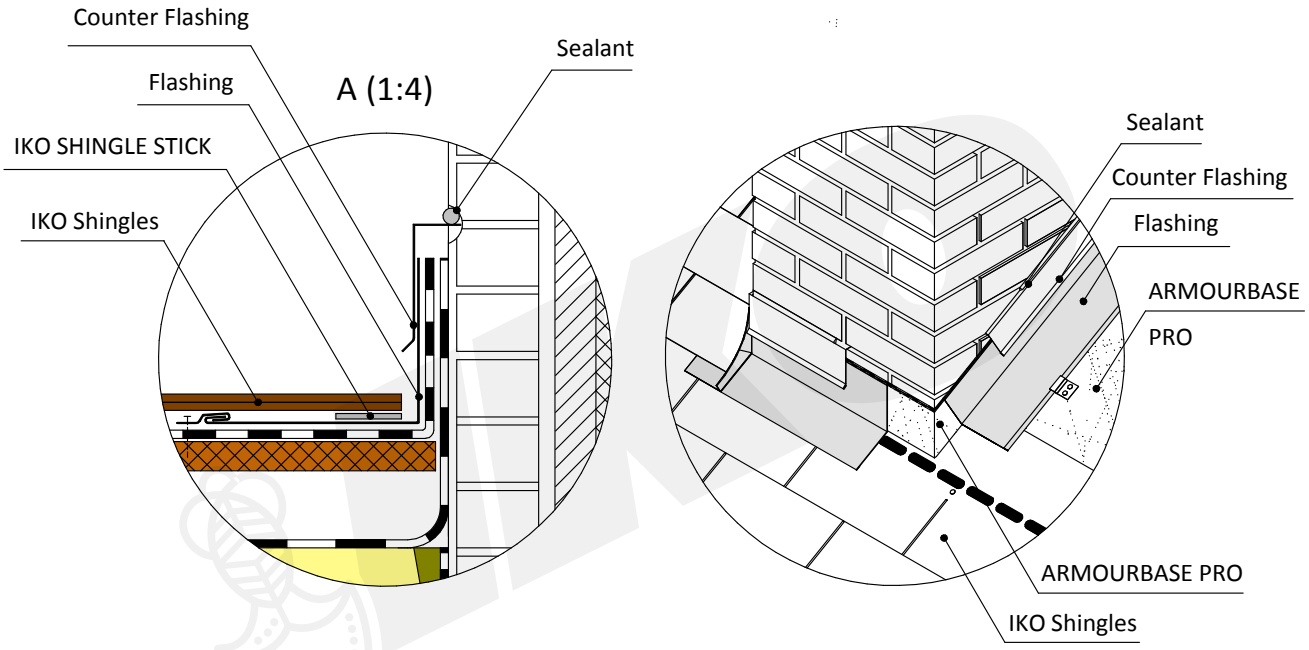


Horizontal leg of metal flashing should be > 100 mm wide and include a turned up edge. The courses of shingles are laid loose over this turned up edge. Metal flashing turned up the chimney stack on min. 100 mm. This high must be enlarged with the reduction of roof pitch to 150 mm (< 15°) or/and according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

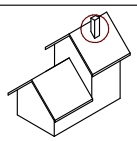
CHIMNEY. CROSS SECTION. INSULATED ROOF		DESIGN SCALE 1:10	

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

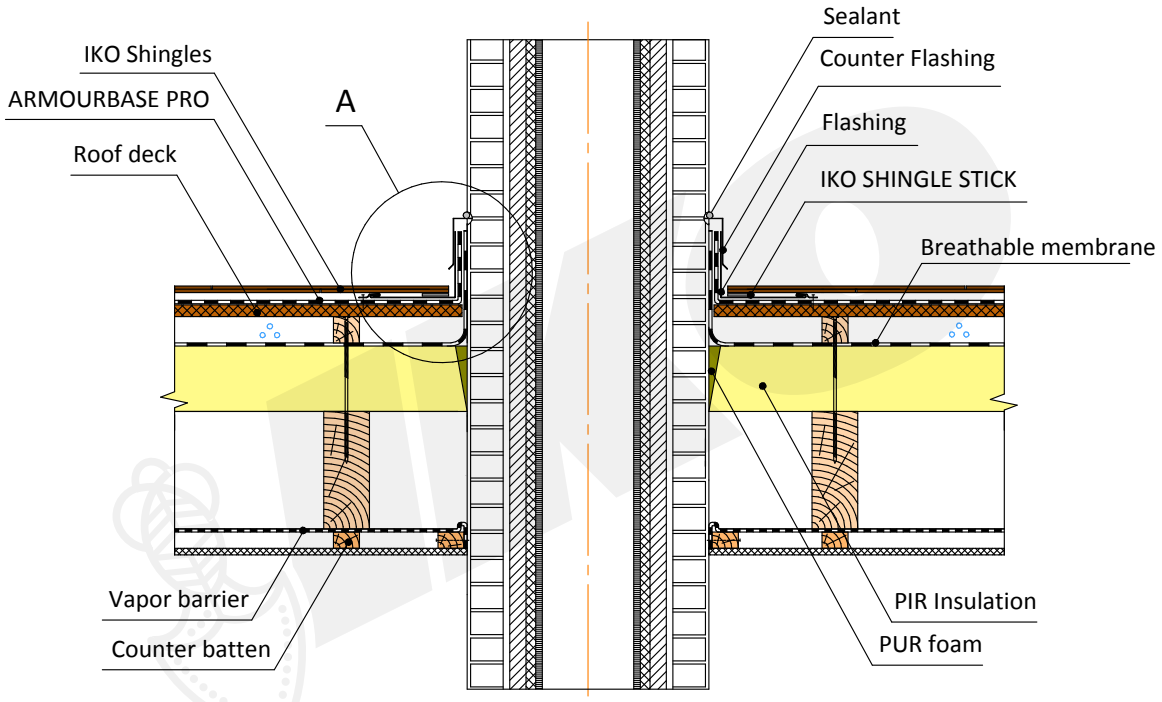


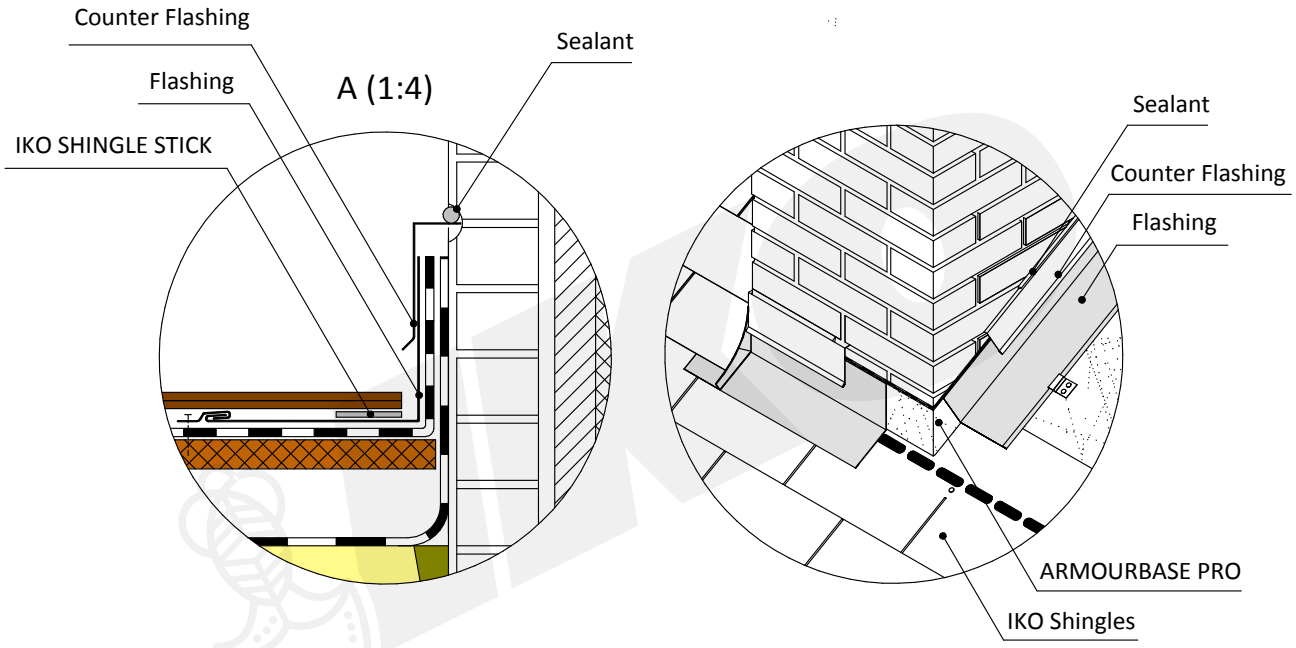


Horizontal leg of metal flashing should be > 100 mm wide and include a turned up edge. The courses of shingles are laid loose over this turned up edge. Metal flashing turned up the chimney stack on min. 100 mm. This high must be enlarged with the reduction of roof pitch to 150 mm (< 15°) or/and according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

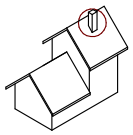
CHIMNEY. CROSS SECTION. PIR INSULATION ON SHEATHING		DESIGN SCALE 1:10	

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

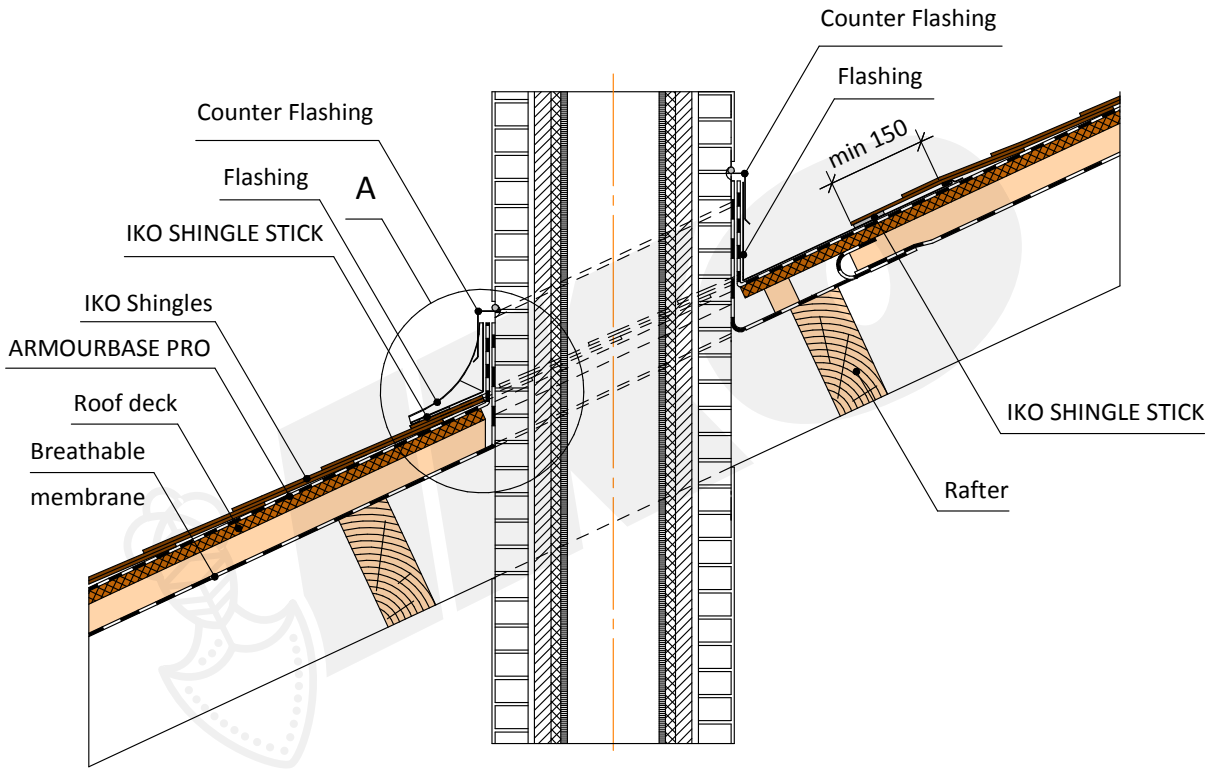




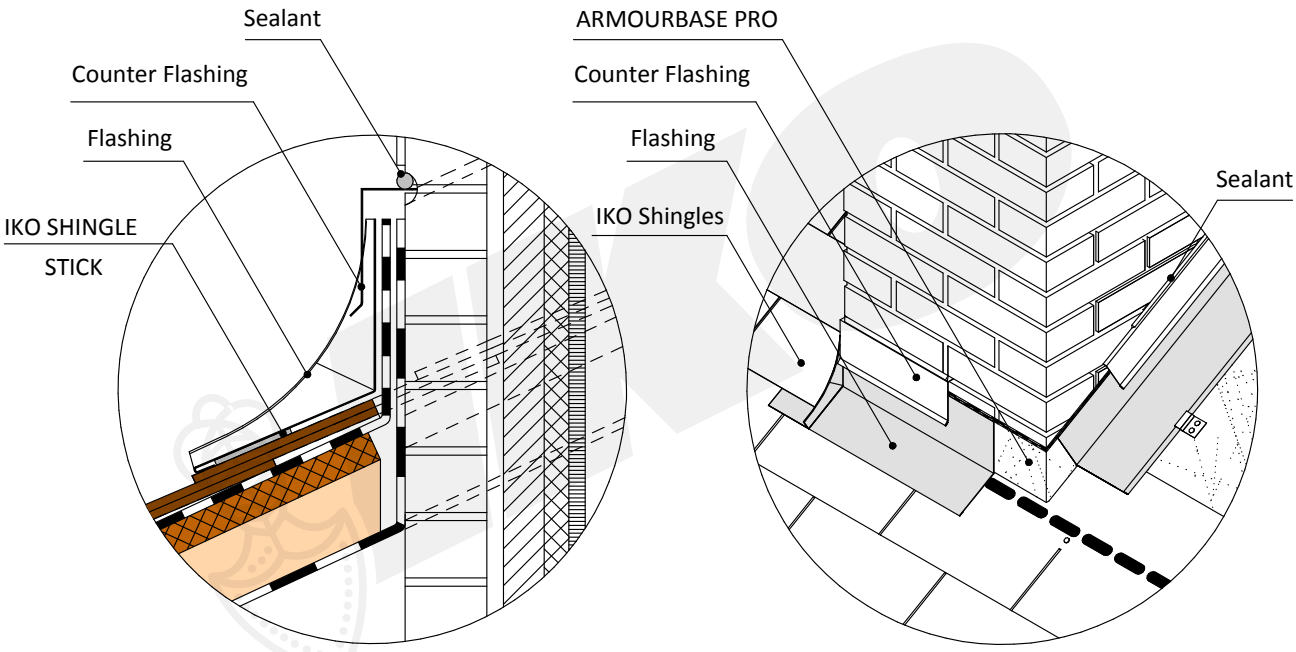
Horizontal leg of metal flashing should be > 100 mm wide and include a turned up edge. The courses of shingles are laid loose over this turned up edge. Metal flashing turned up the chimney stack on min. 100 mm. This high must be enlarged with the reduction of roof pitch to 150 mm (< 15°) or/and according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

CHIMNEY. CROSS SECTION. PIR INSULATION ABOVE RAFTERS		DESIGN SCALE 1:10	

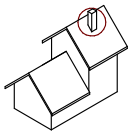
11.1 Chimney. Longitudinal section. (cold attic)



A (1:4)



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		DESIGN SCALE 1:10	

11.2 Chimney. Longitudinal section. (insulated roof)

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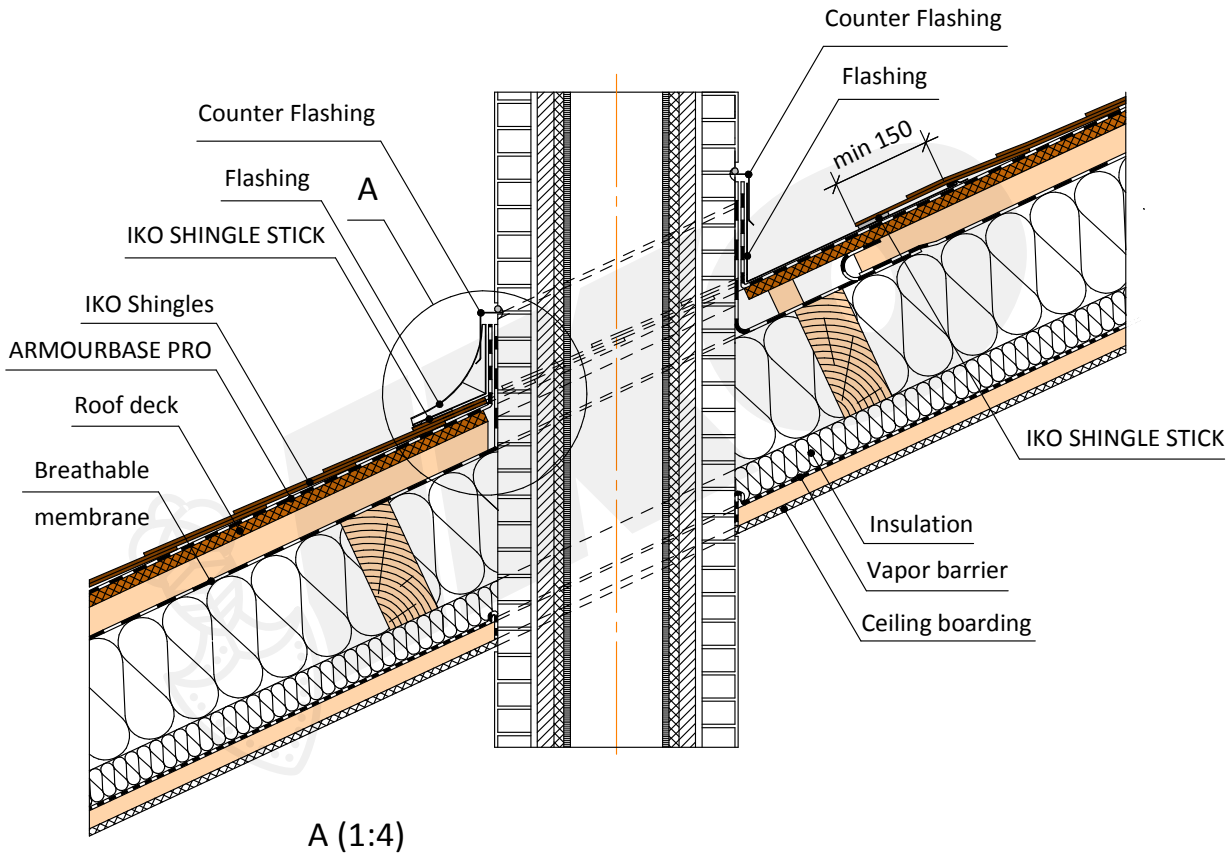
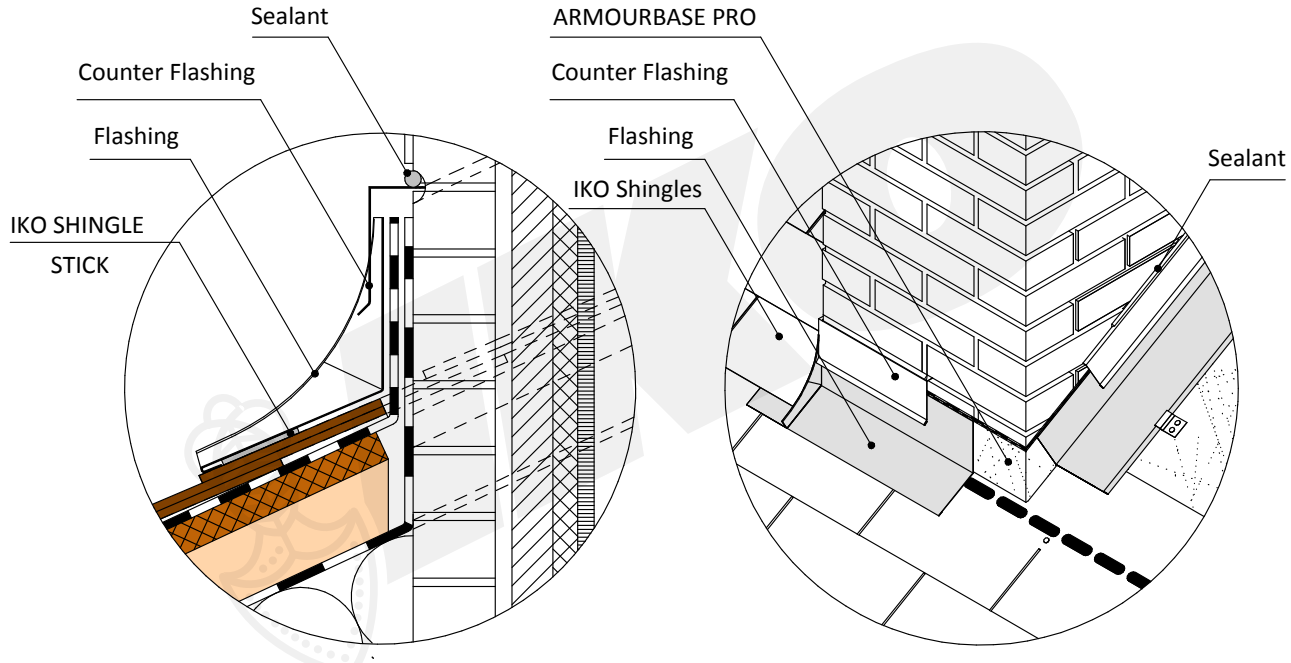
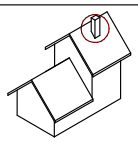


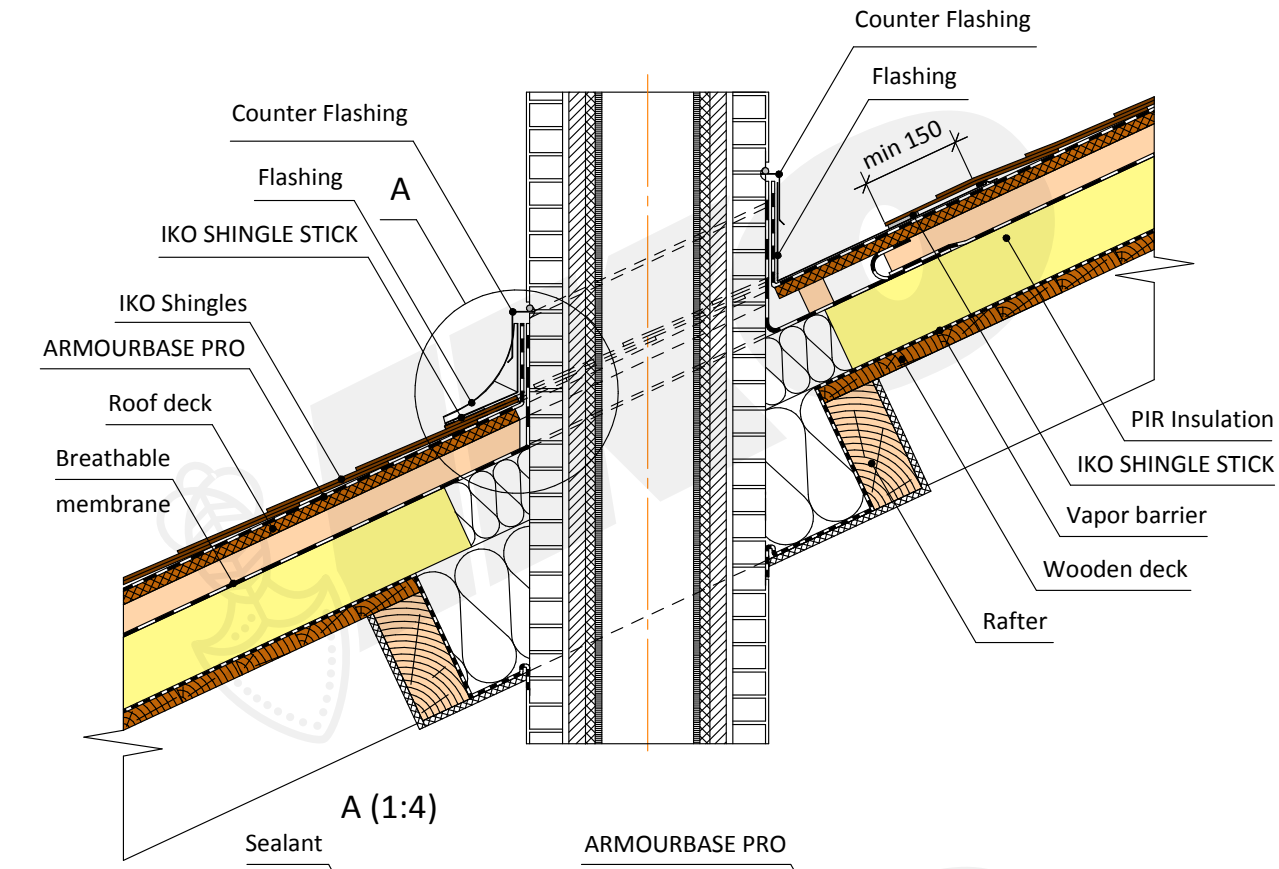
A (1:4)



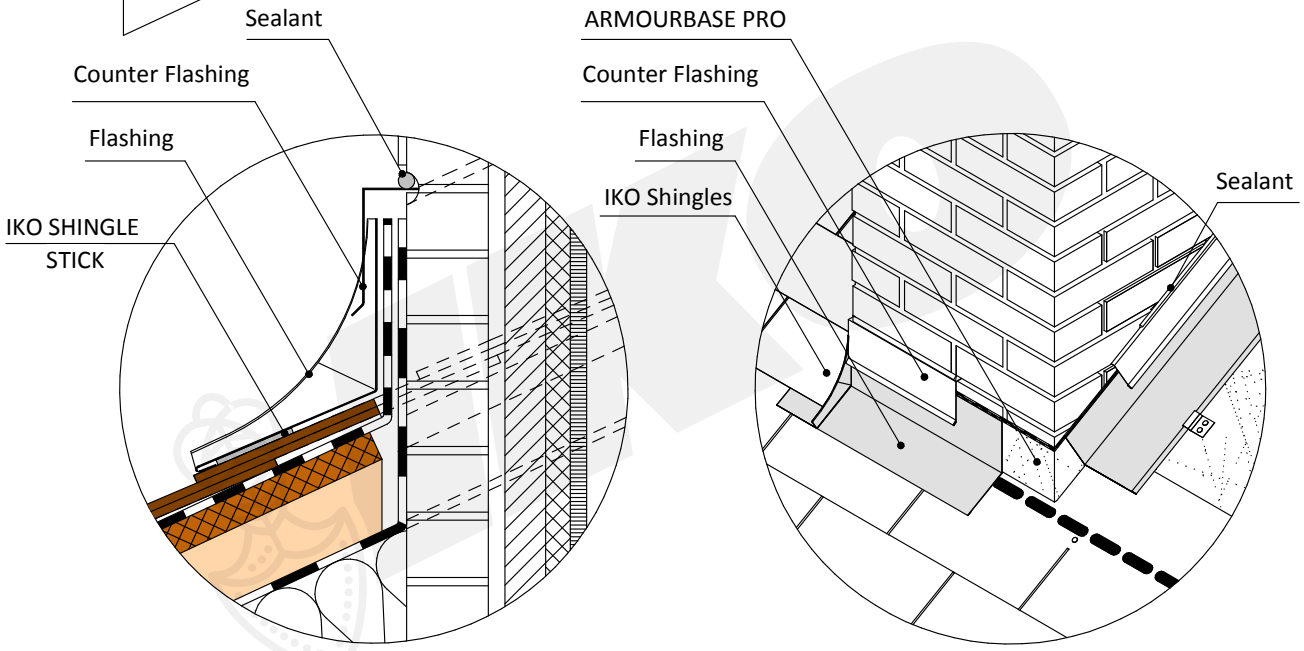
On the ridge side roof is finished with a flashing acting as a back gutter, with is turned up the chimney stack (min. 150 mm above roof surface). On the eave side apron flashing is overlapped the shingles (min. 100 mm) and is turned up the chimney stack (min. 100 mm).

Chimney. Longitudinal section. Insulated roof		DESIGN SCALE 1:10	

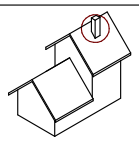
11.3 Chimney. Longitudinal section. (PIR insulation on sheathing)



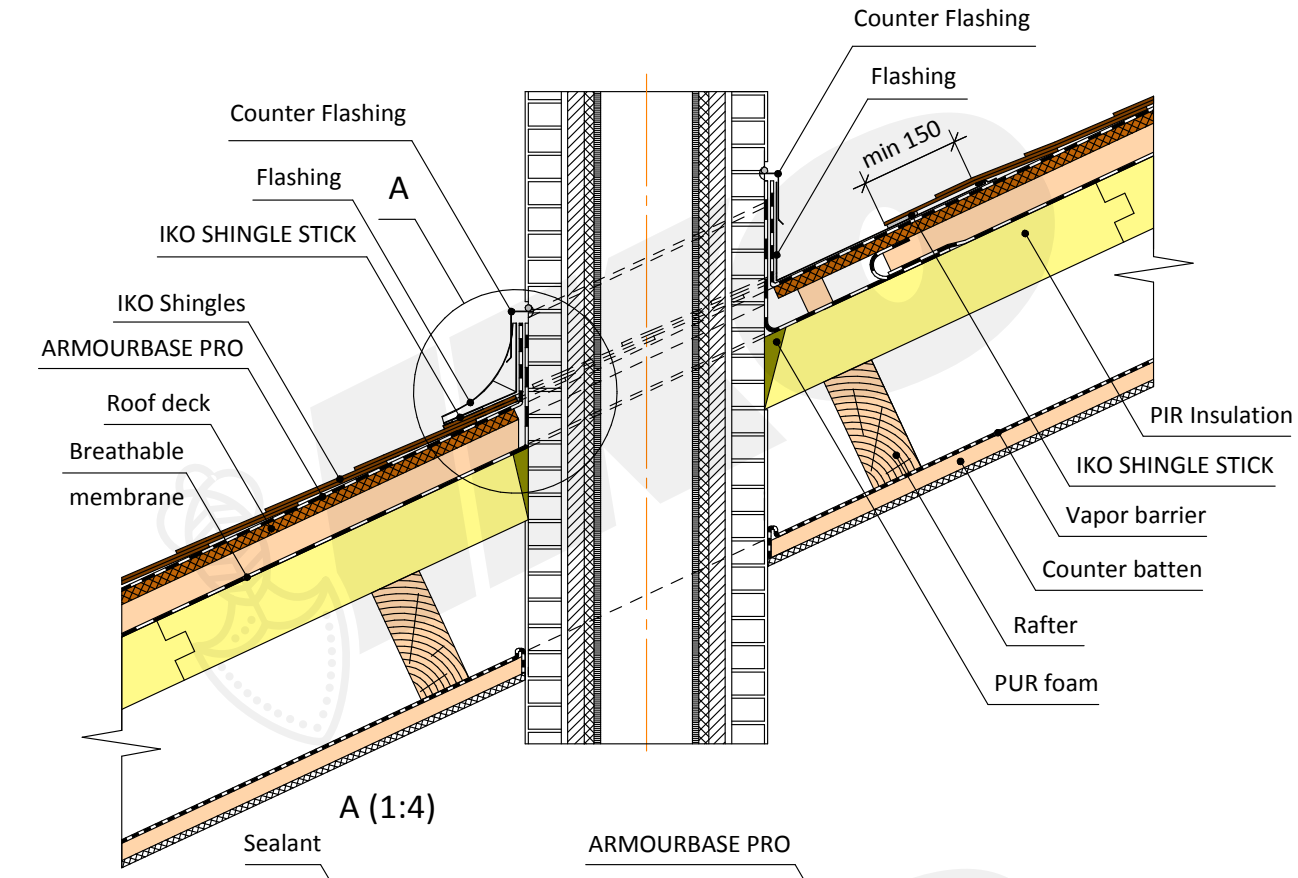
A (1:4)



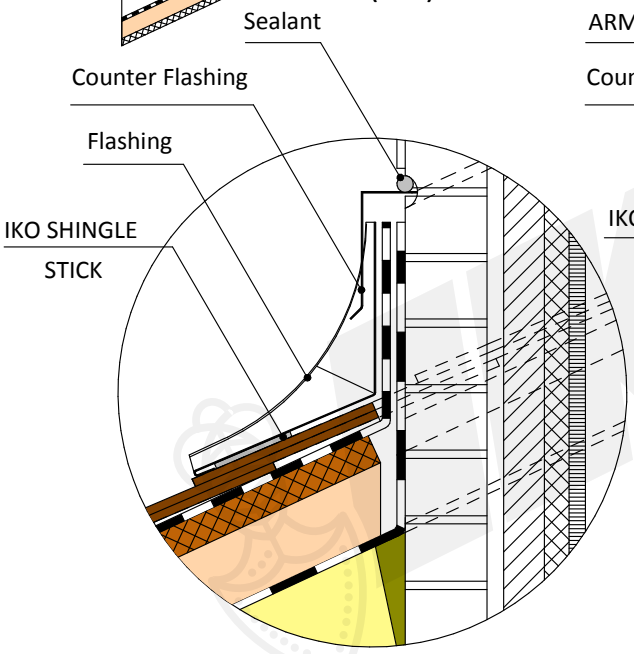
On the ridge side roof is finished with a flashing acting as a back gutter, with is turned up the chimney stack (min. 150 mm above roof surface). On the eave side apron flashing is overlapped the shingles (min. 100 mm) and is turned up the chimney stack (min. 100 mm).

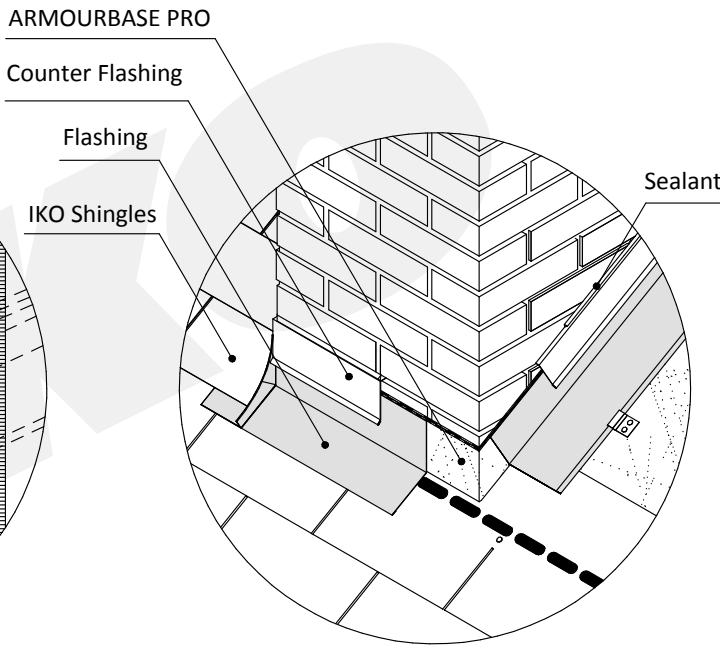
CHIMNEY. LONGITUDINAL SECTION. PIR INSULATION ON SHEATHING		DESIGN SCALE 1:10	

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

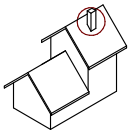


A (1:4)

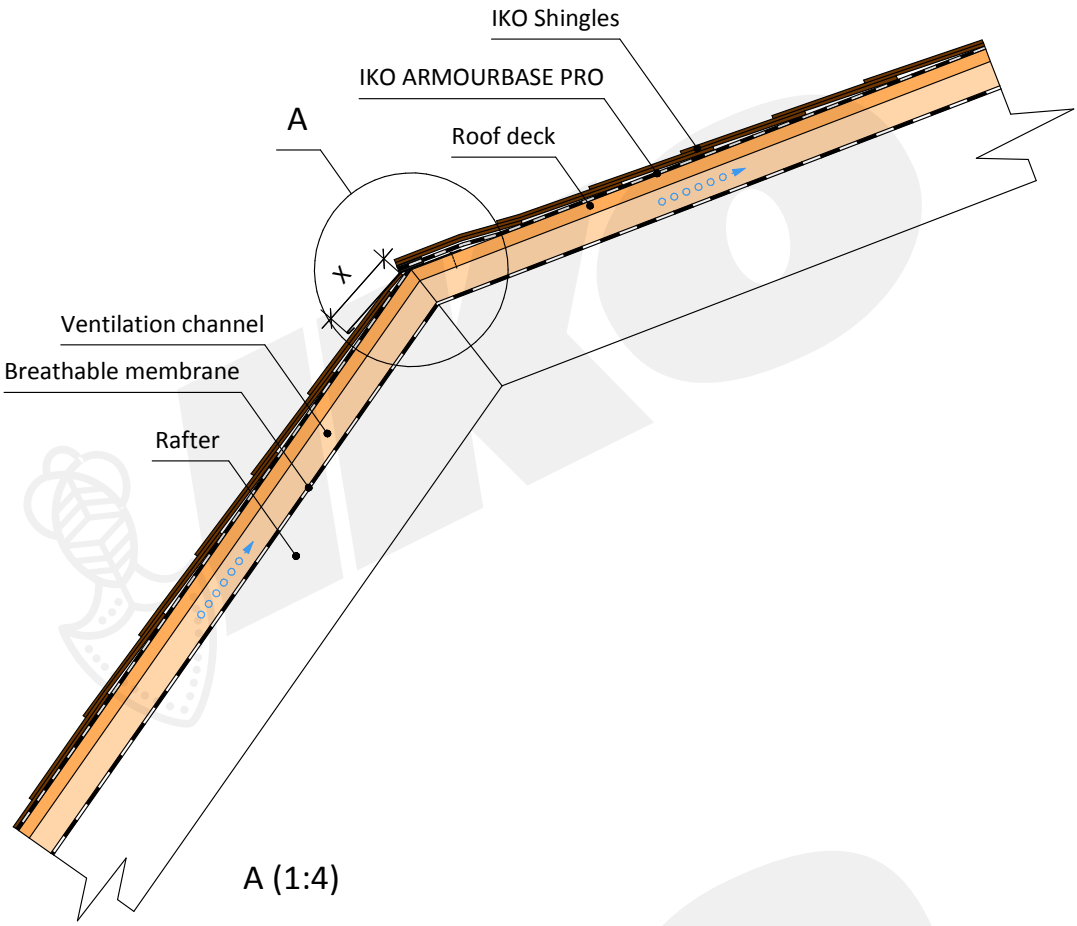




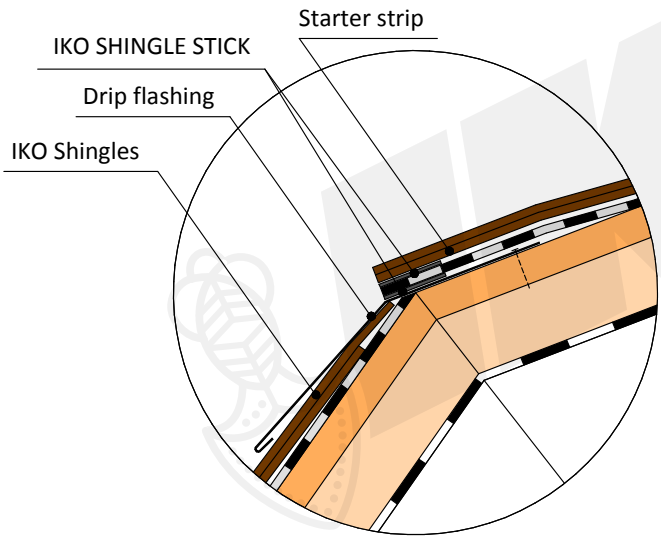
On the ridge side roof is finished with a flashing acting as a back gutter, with is turned up the chimney stack (min. 150 mm above roof surface). On the eave side apron flashing is overlapped the shingles (min. 100 mm) and is turned up the chimney stack (min. 100 mm).

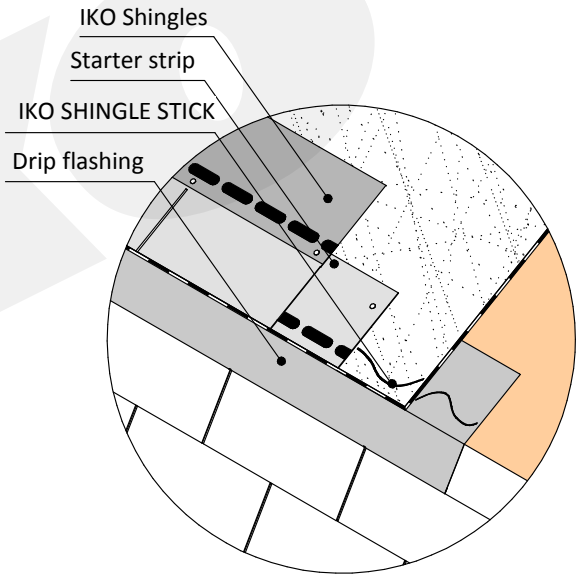
CHIMNEY. LONGITUDINAL SECTION. PIR INSULATION ABOVE RAFTERS		DESIGN SCALE 1:10	

12.1 Change in a roof slope (cold attic)

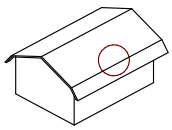


A (1:4)

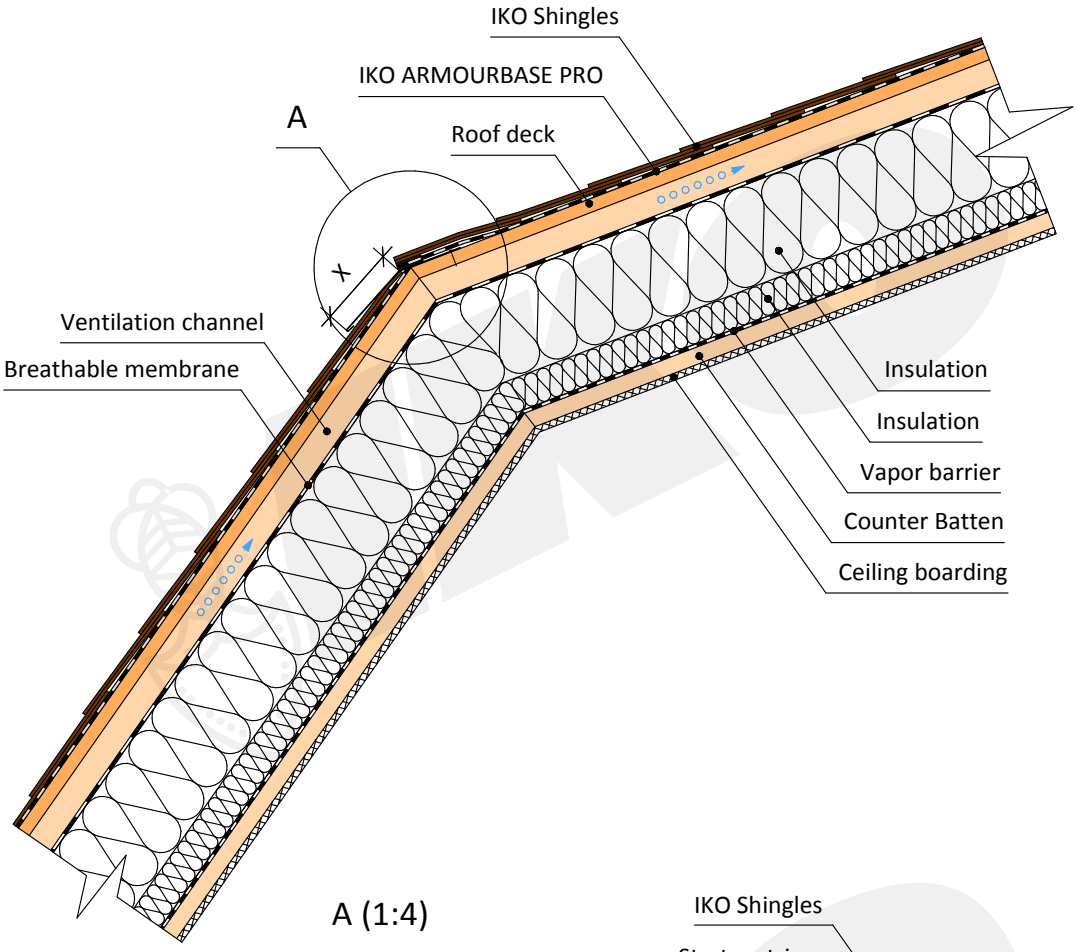




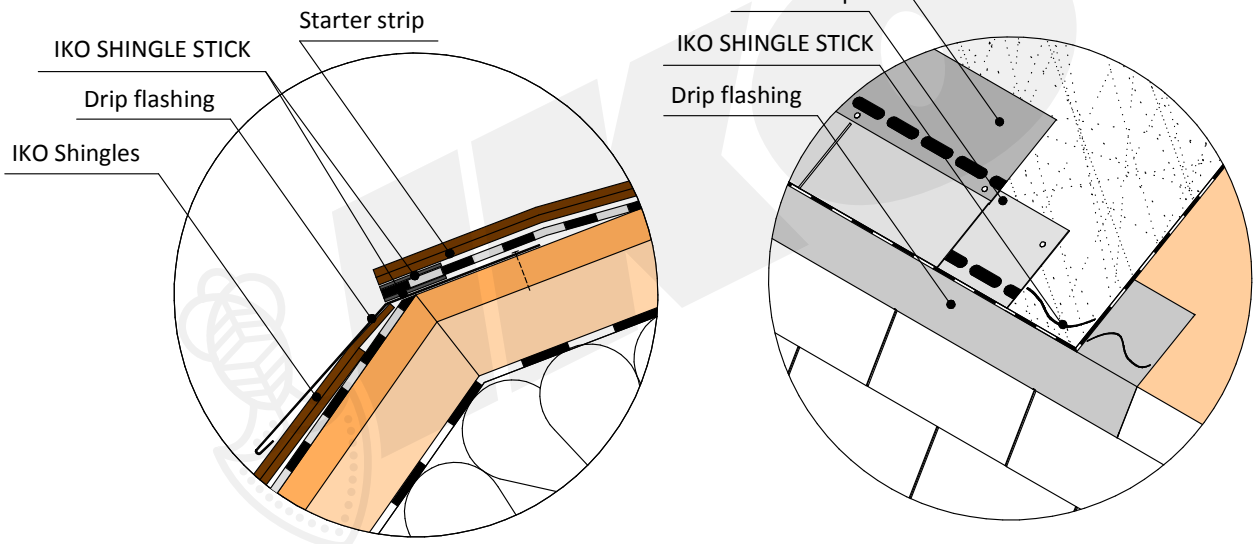
X - min 120, should be enlarge with a decreasing angle of a slope and/or requirements of local codes

CHANGE IN A ROOF SLOPE		DESIGN SCALE 1:10	

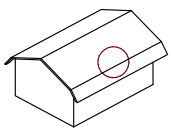
12.2 Mansard roof. (insulated roof)



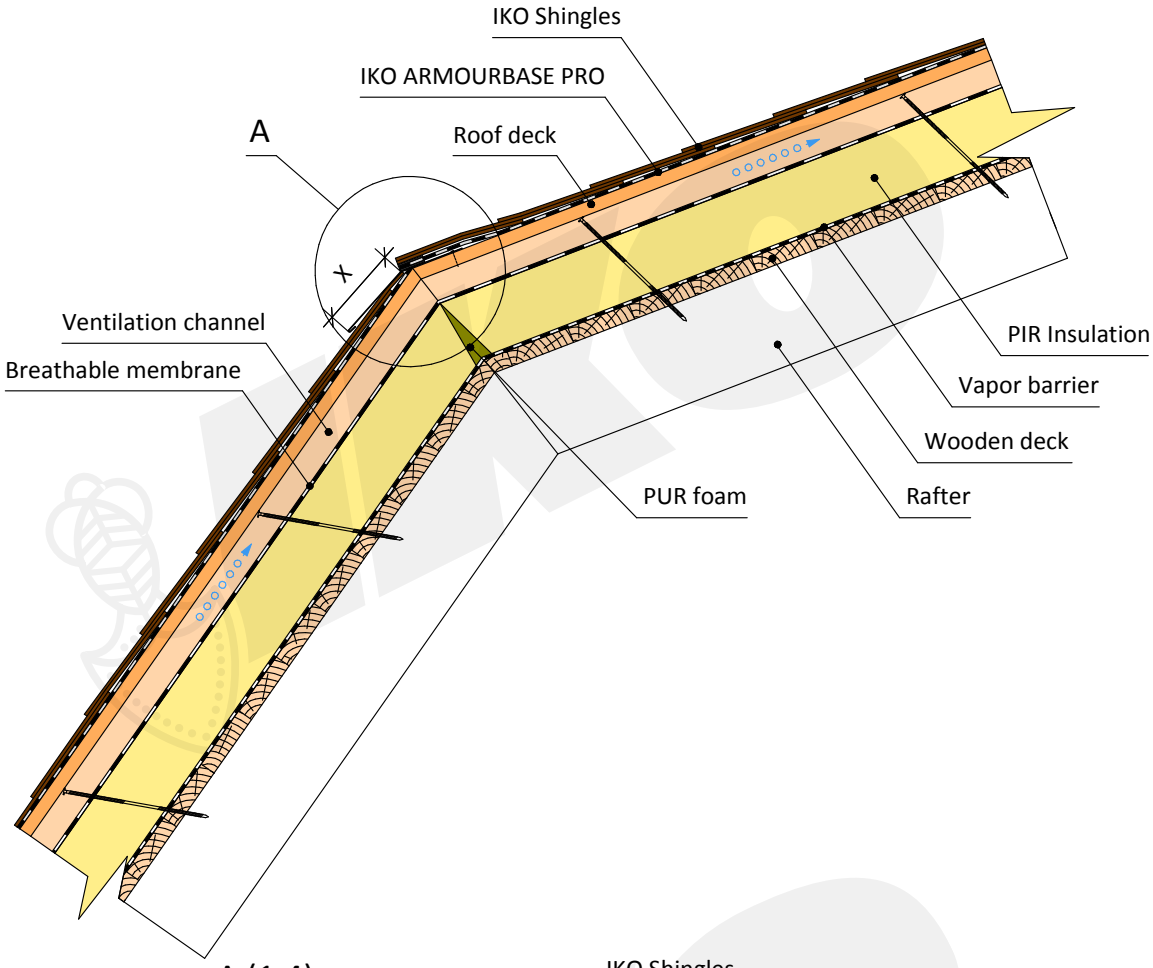
A (1:4)



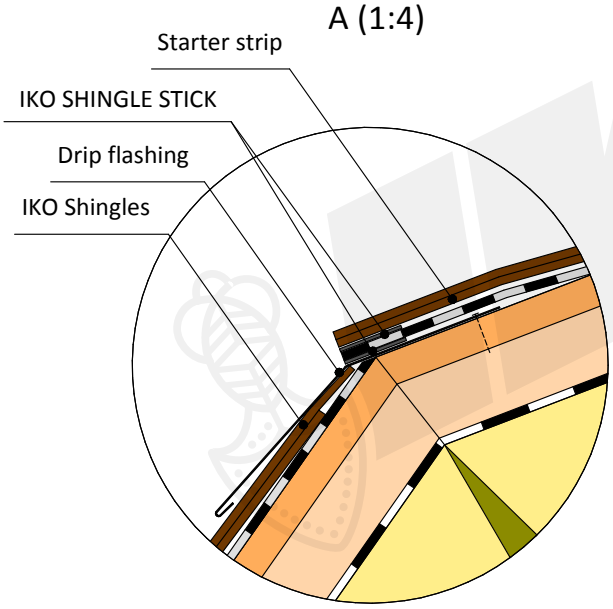
X - min 120, should be enlarge with a decreasing angle of a slope and/or requirements of local codes

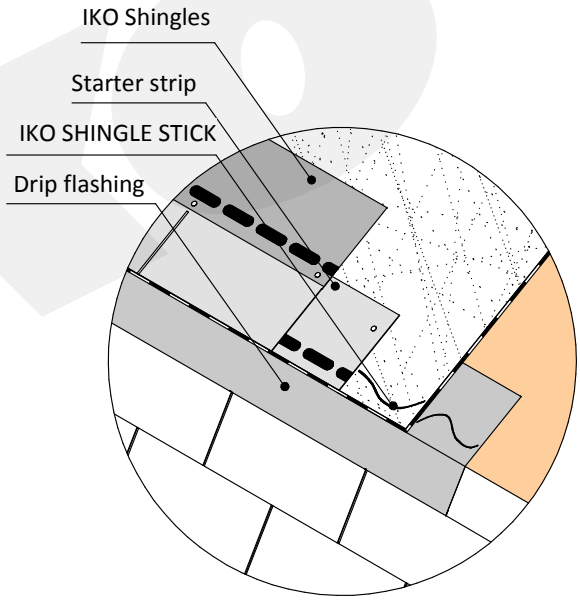
MANSARD ROOF. INSULATED		DESIGN SCALE 1:10	

12.3 Mansard roof.
(PIR insulation on sheathing)

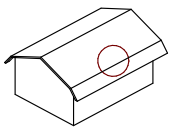


A (1:4)





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		DESIGN SCALE 1:10	

12.4 Mansard roof
(PIR insulation above rafters)

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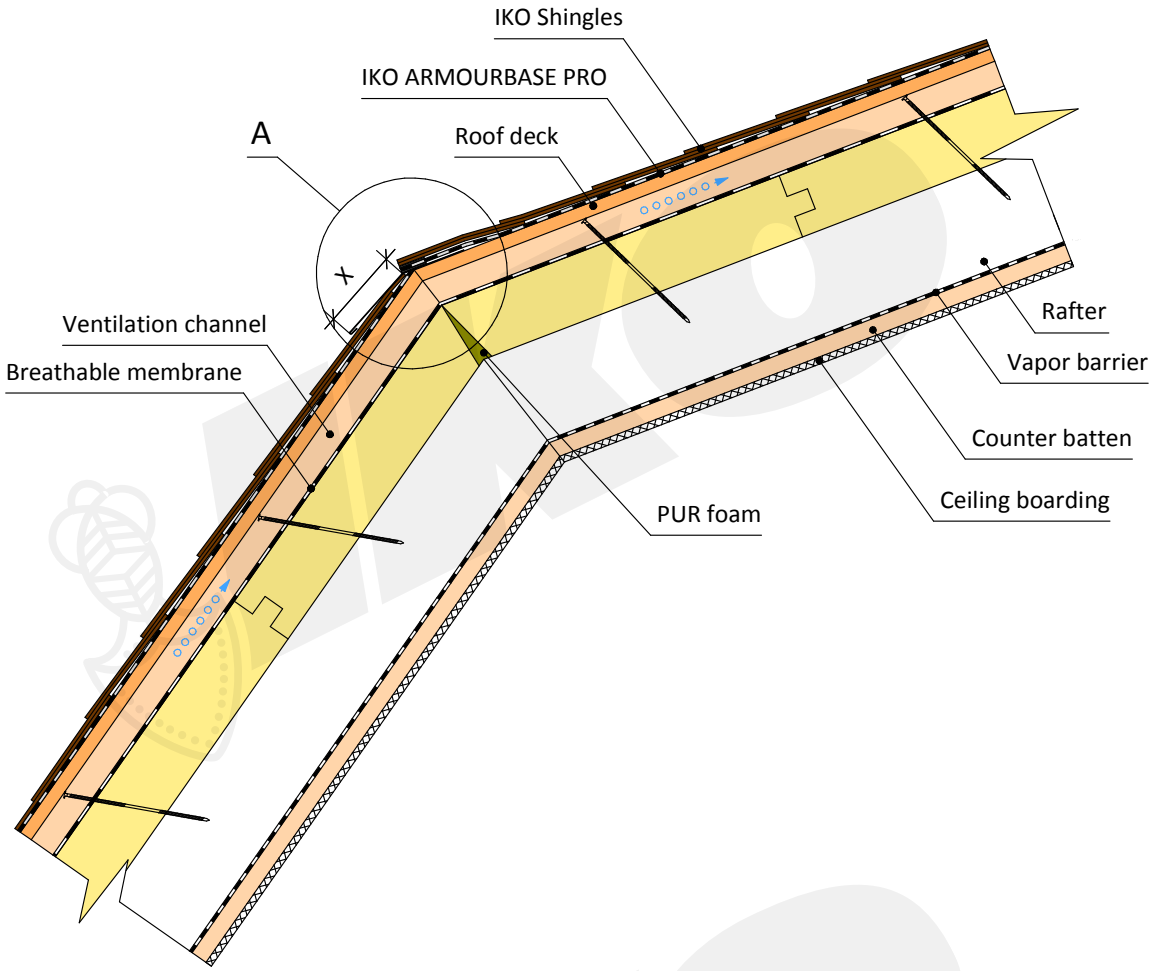
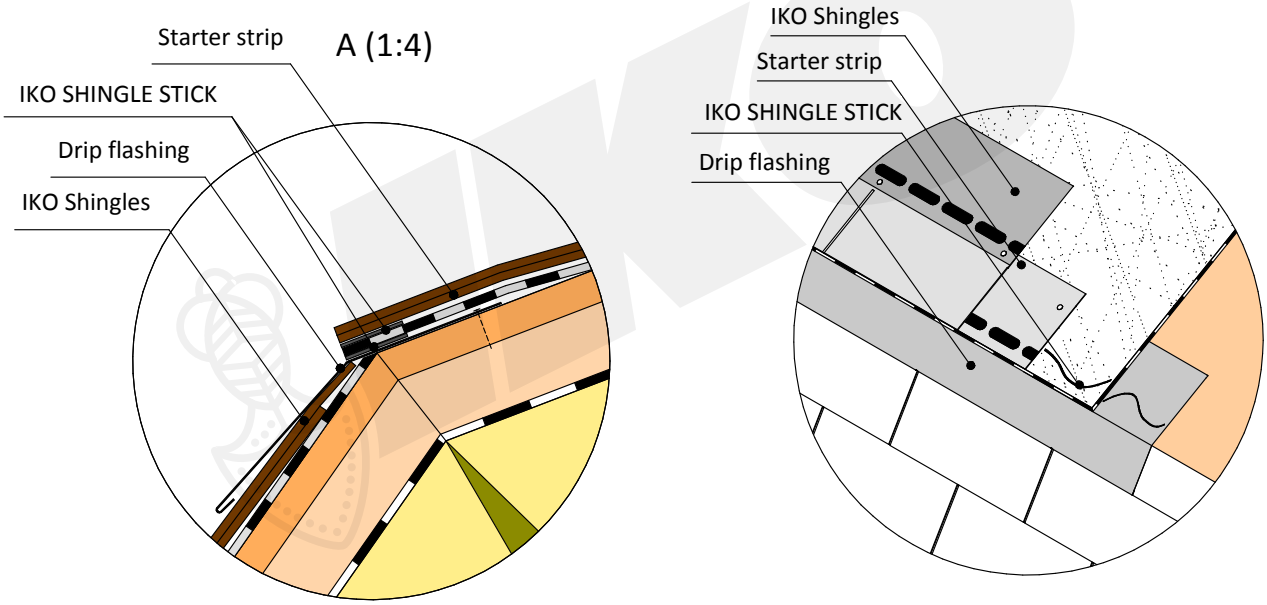
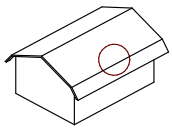
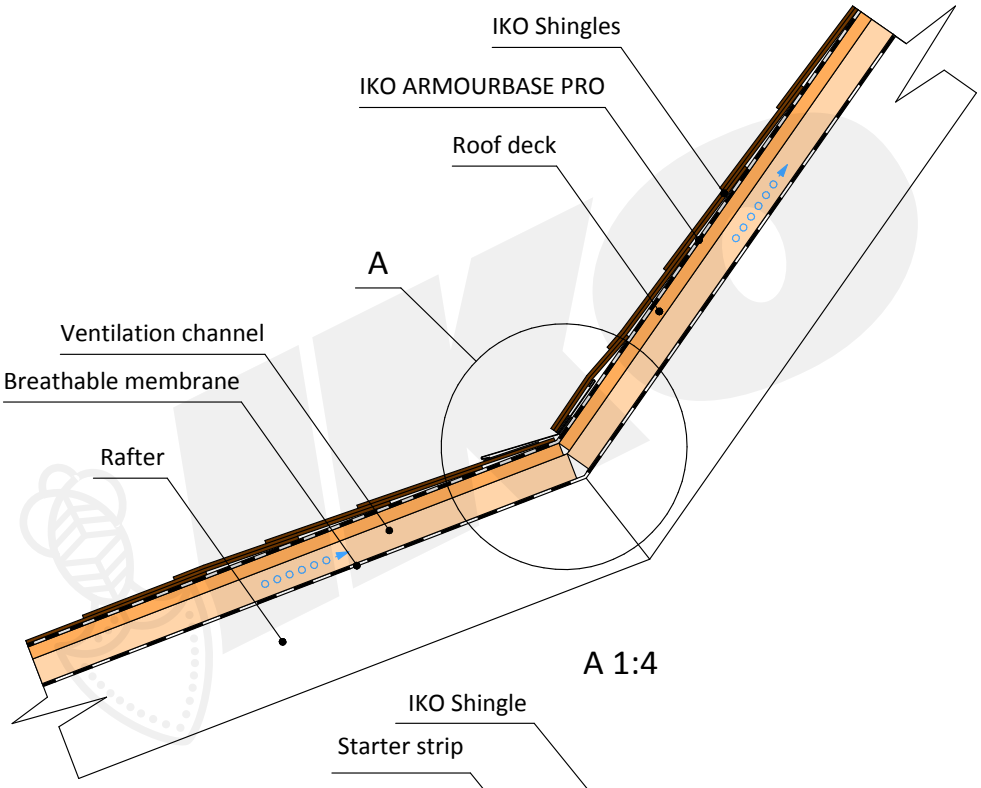




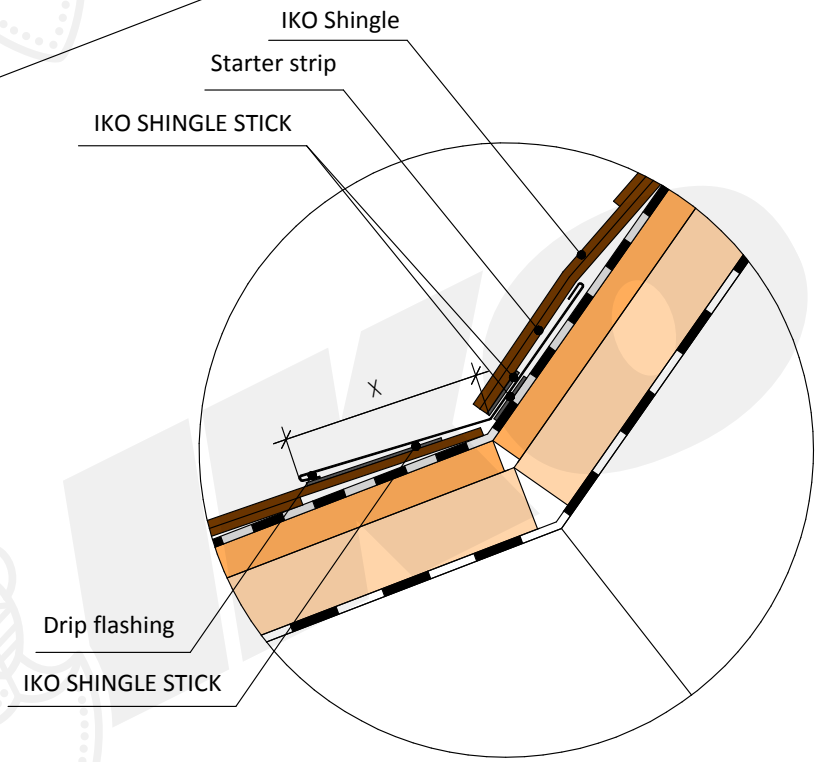
X - min 120, should be enlarge with a decreasing angle of a slope and/or requirements of local codes

MANSARD ROOF. PIR INSULATION ABOVE RAFTERS		DESIGN SCALE 1:10	

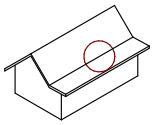
13.1 Slope inclination. (cold attic)



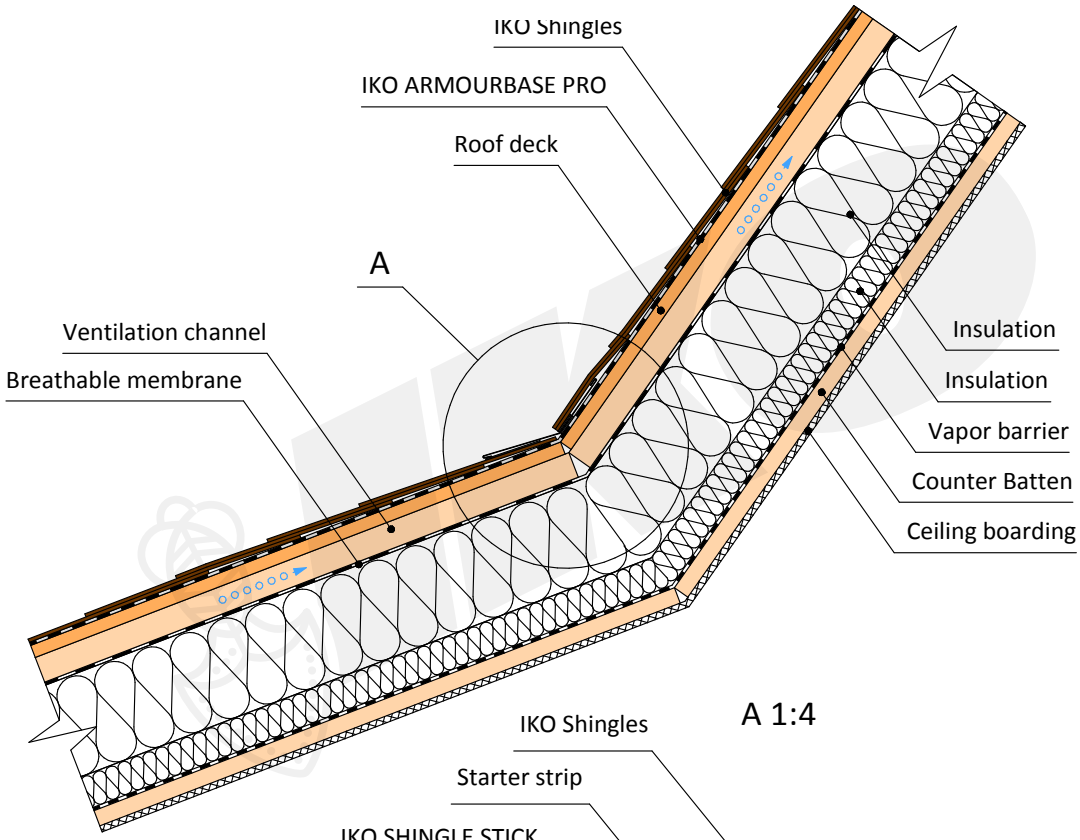
A 1:4



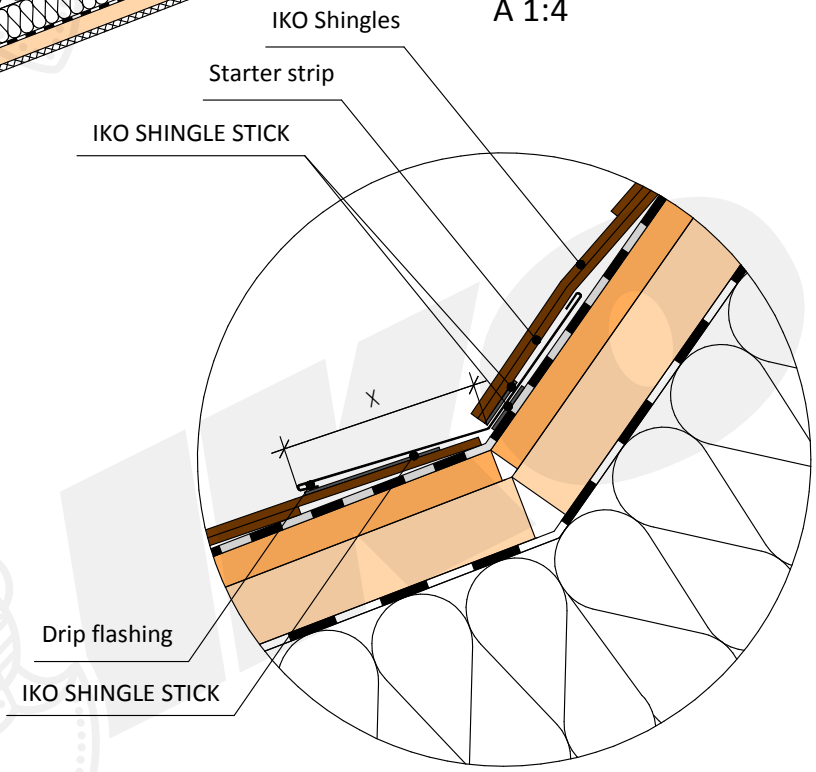
X - min 120 mm, should be enlarge with a decreasing angle of a slope and/or requirements of local codes

SLOPE INCLINATION. COLD ATTIC		DESIGN SCALE 1:10	

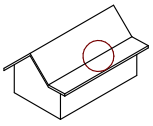
13.2 Slope inclination. (insulated roof)



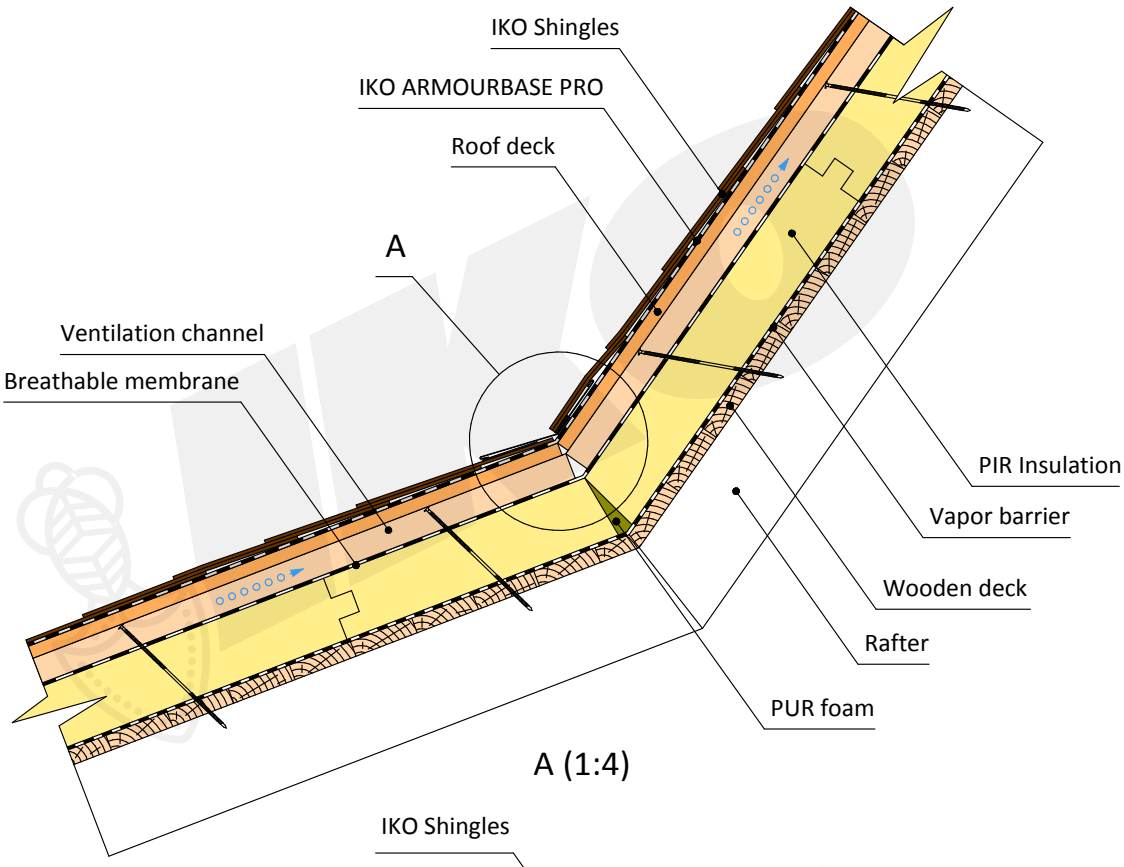
A 1:4



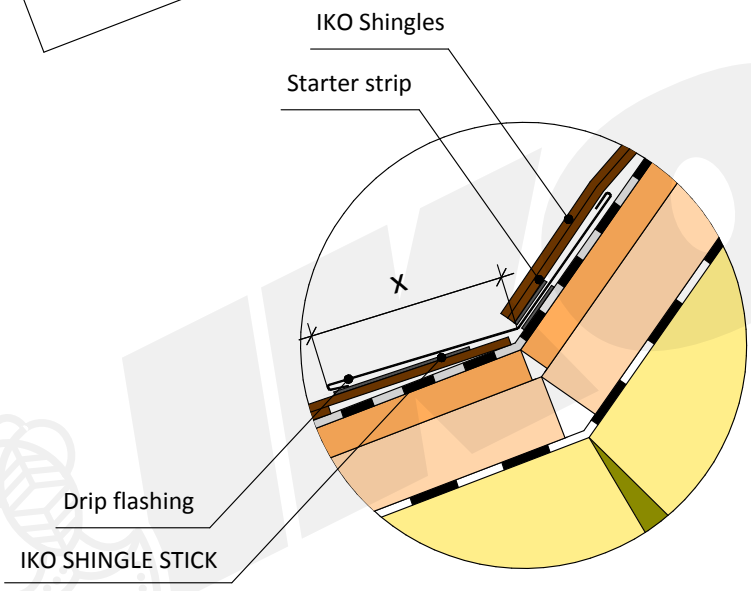
X - min 120 mm, should be enlarge with a decreasing angle of a slope and/or requirements of local codes

SLOPE INCLINATION		DESIGN SCALE 1:10	

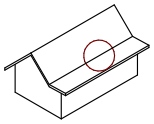
13.3 Slope inclination. (PIR insulation on sheathing)



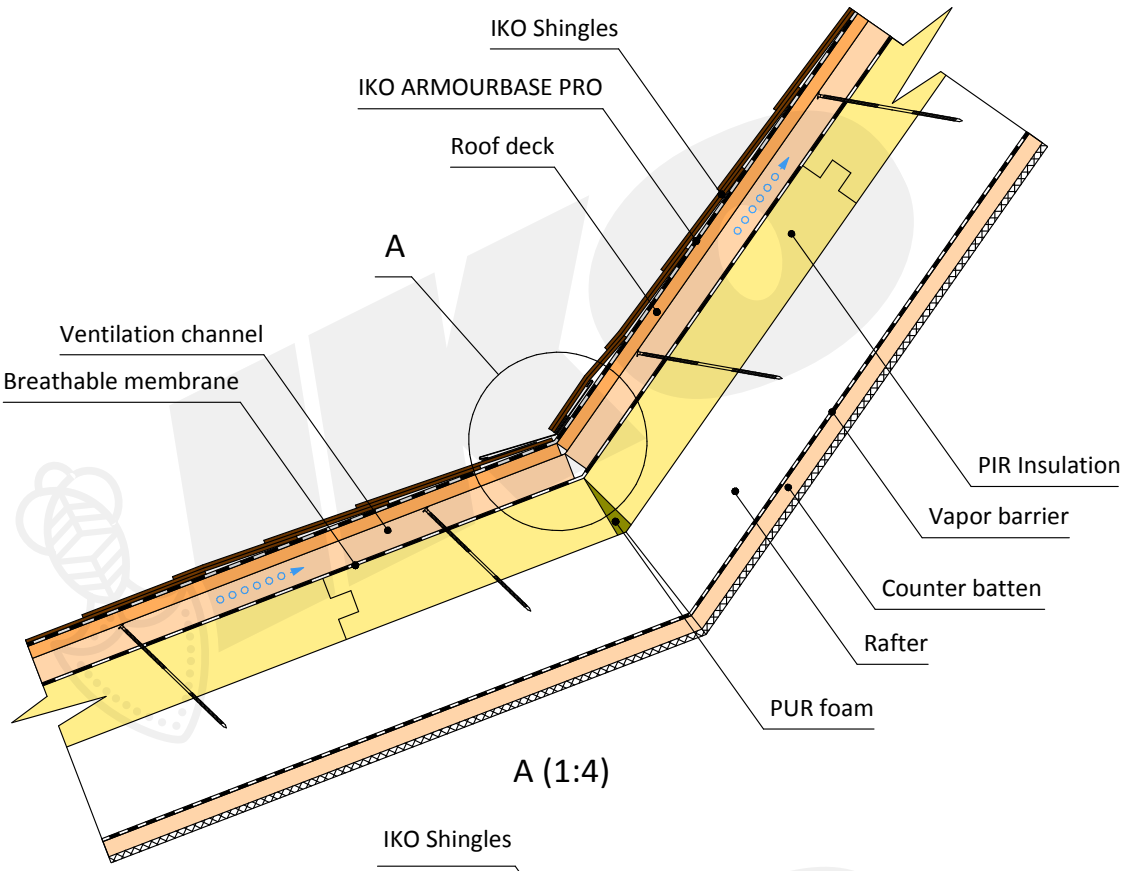
A (1:4)



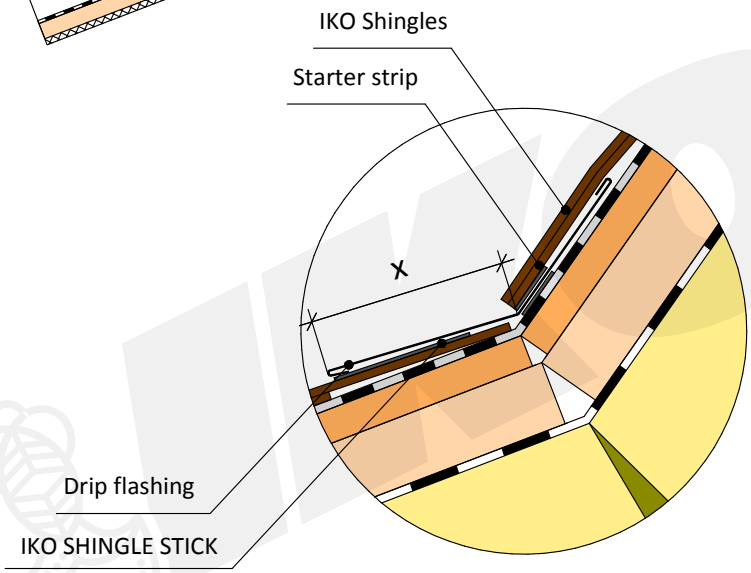
X - min 120 mm, should be enlarge with a decreasing angle of a slope and/or requirements of local codes

SLOPE INCLINATION. PIR INSULATION ON SHEATHING		DESIGN SCALE 1:10	

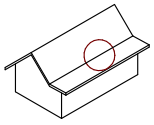
13.4 Slope inclination.
(PIR insulation above rafters)



A (1:4)



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		DESIGN SCALE 1:10	