

ROOFER HANDBOOK

for clay roof tiles

2025



swisspor^{ton}

CONTENTS

INTERLOCKING ROOF TILES	3.
BALANCE®	5.
RAPIDO®	7.
NOMINA®	9.
RIDGE TILES	11.
TITANIA®	13.
SIMPLA®	15.
MAXIMA PRO®	17.
RIDGE TILES	19.
EXTRUDED ROOF TILES	21.
"HORTOBÁGY"	23.
"RONA" segment cut	25.
"RONA" straight cut	27.
AMBIENTE® pointed cut	29.
AMBIENTE® segment cut	29.
AMBIENTE® straight cut	29.
KLASSIK® rounded cut	30.
KLASSIK® 20x40 rounded cut "Austrian plain tile"	33.
KLASSIK® 20x40 straight cut "Vienna bag"	33.
RIDGE TILES	36.
BATTEN DISTANCES - OVERVIEW	37.
INTERLOCKING ROOF TILES	37.
SIDE INTERLOCKING PLAIN TILES	37.
PLAIN ROOF TILES	38.
ABOVE THE RAFTER INSULATION	39.
swisspor PIR	39.
swisspor PIR PLUS	40.
EAVE DETAIL	42.
VERGE DETAIL	43.
HIP AND RIDGE DETAIL	44.
VALLEY DETAIL	44.
UNDERLAYMENTS	45.
swisspor ECO	45.
swisspor BASIC	46.
swisspor PRO	47.
swisspor ULTRA	48.

NOMINA



INTERLOCKING ROOF TILES

BALANCE®



TITANIA®



NOMINA®



SIMPLA®



RAPIDO®



MAXIMA PRO®





	min.	avg.	max.
Covering width	274 mm	275 mm	277 mm
Covering length	406 mm	419 mm	431 mm
	max.	avg.	min.
Requirement	9,0 pcs/m ²	8,7 pcs/m ²	8,4 pcs/m ²
Surface weight	44,1 kg/m ²	42,6 kg/m ²	41,2 kg/m ²
Weight	4,9 kg/piece		
Packaging	4 pieces/package	192 pieces/package	
Covering method	in mesh		
Standard roof pitch	22 °		
Unsupported underlayment	„ECO“	$\geq 16^\circ$	
Windproof underlayment	„BASIC“	$\geq 14^\circ$	
Watertight underlayment	„PRO“	$\geq 12^\circ$	
Waterproof underlayment	„ULTRA“	$\geq 10^\circ$	

67 - 265 - 275 - 275 - 275 - 275 - 275 - 275 - 260 - 67

Structural width = 26.5 cm + 27.5 cm × (n - 2) + 26 cm

Requirement for covering width

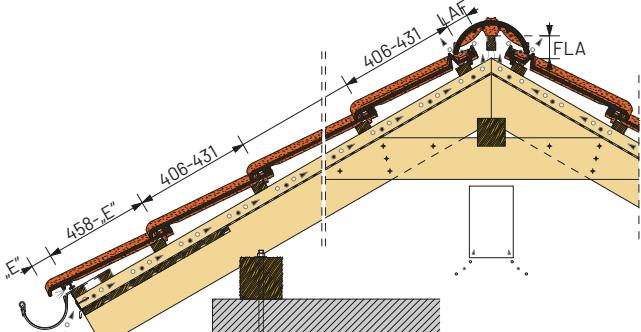
Ridge connection ventilation tile and shed roof tile

Cc. 3,6 pcs/m

Requirement for covering length

Verge tile, double wave tile

Cc. 2,4 pcs/m



„PF“ ridge tile (2,5 pcs/m) and 30x50 roof batten

Roof pitch	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°
LAF [mm]	95	90	90	80	80	80	75	75	75	75	75
FLA [mm]	100	95	90	80	70	60	50	45	30	25	20

„PF“ ridge tile (2,5 pcs/m) and 40x60 roof batten

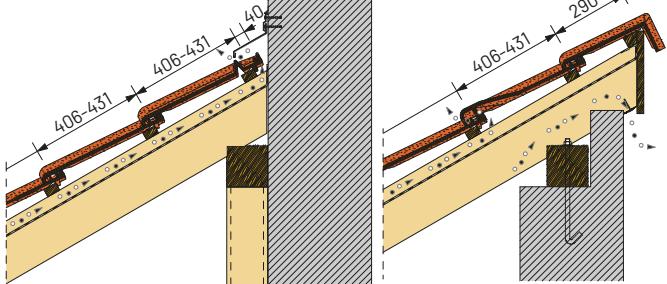
Roof pitch	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°
LAF [mm]	95	90	90	80	80	80	75	75	75	75	75
FLA [mm]	105	105	100	90	80	70	60	55	40	35	30

„PR“ ridge tile (2,5 pcs/m) and 30x50 roof batten

Roof pitch	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°
LAF [mm]	95	90	90	80	80	80	75	75	75	75	75
FLA [mm]	100	95	90	80	70	60	50	45	30	25	20

„PR“ ridge tile (2,5 pcs/m) and 40x60 roof batten

Roof pitch	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°
LAF [mm]	95	90	90	75	75	75	70	65	60	60	60
FLA [mm]	105	105	100	90	80	70	60	55	40	35	30



Out-ventilation cross-section

Ridge connection ventilation tile

Cc. 23 m

Ventilation tile LQ37

37,5 cm²/pcs

Every tile is ventilation tile

135 cm²/m

Every second tile is ventilation tile

67,5 cm²/m

Every third tile is ventilation tile

45 cm²/m



	min.	avg.	max.		
Covering width	277 mm	278 mm	280 mm		
Covering length	410 mm	425 mm	440 mm		
	max.	avg.	min.		
Requirement	8,8 pcs/m ²	8,4 pcs/m ²	8,1 pcs/m ²		
Surface weight	48,4 kg/m ²	43,7 kg/m ²	42,1 kg/m ²		
Weight	5,2 kg/piece				
Packaging	4 pieces/package	168 pieces/package			
Covering method	in binding / in mesh				
Standard roof pitch	25°				
Unsupported underlayment	„ECO“	≥ 18°			
Windproof underlayment	„BASIC“	≥ 16°			
Watertight underlayment	„PRO“	≥ 14°			
Waterproof underlayment	„ULTRA“	≥ 10°			

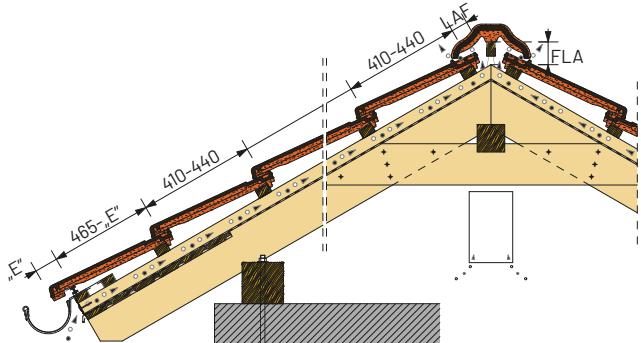
Requirement for covering width Requirement for covering length

Ridge connection ventilation tile and shed roof tile

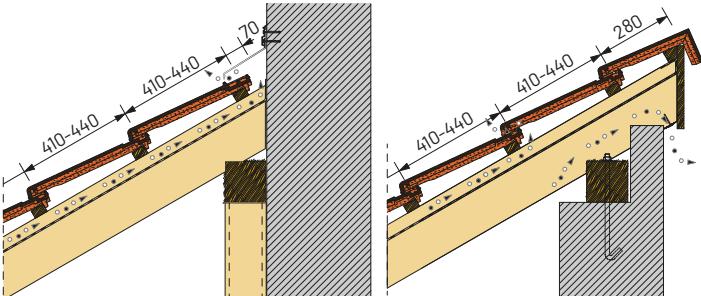
Cc. 3,6 pcs/m

Verge tile, double wave tile

Cc. 2,4 pcs/m



„PF“ ridge tile (2,5 pcs/m) and 30×50 roof batten											
Roof pitch	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°
LAF [mm]	75	70	70	65	60	60	60	60	60	55	X
FLA [mm]	110	95	85	75	65	60	50	35	30	30	X
„PF“ ridge tile (2,5 pcs/m) and 40×60 roof batten											
Roof pitch	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°
LAF [mm]	75	70	70	60	55	55	55	50	45	40	X
FLA [mm]	120	105	95	85	75	70	60	45	40	20	X
„PR“ ridge tile (2,5 pcs/m) and 30×50 roof batten											
Roof pitch	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°
LAF [mm]	75	70	70	65	60	60	60	60	60	55	X
FLA [mm]	110	95	85	75	65	60	50	35	30	30	X
„PR“ ridge tile (2,5 pcs/m) and 40×60 roof batten											
Roof pitch	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°
LAF [mm]	75	70	70	60	55	55	55	50	45	40	X
FLA [mm]	120	105	95	85	75	70	60	45	40	20	X



	Out-ventilation cross-section	Ventilated rafter lengths
Ridge connection ventilation tile	115 cm ² /m	Cc. 23 m
Ventilation tile LQ37	37,5 cm ² /pc	
Every tile is ventilation tile	135 cm ² /m	Cc. 27 m
Every second tile is ventilation tile	67,5 cm ² /m	Cc. 13,5 m
Every third tile is ventilation tile	45 cm ² /m	Cc. 9 m

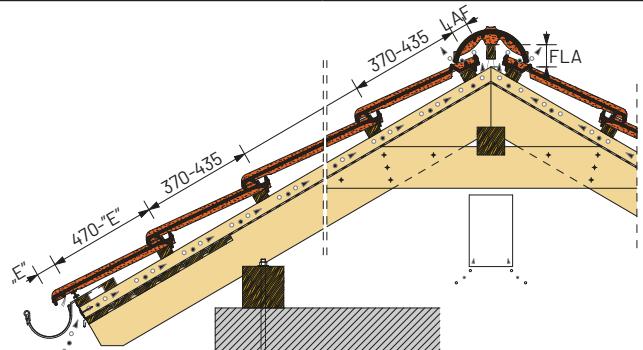


	min.	avg.	max.
Covering width	275 mm	277 mm	280 mm
Covering length	370 mm	402 mm	435 mm
	max.	avg.	min.
Requirement	9,8 pcs/m ²	9,0 pcs/m ²	8,2 pcs/m ²
Surface weight	57,8 kg/m ²	53,1 kg/m ²	48,4 kg/m ²
Weight		5,9 kg/piece	
Packaging	4 pieces/package	192 pieces/package	
Covering method	in mesh		
Standard roof pitch	25 °		
Unsupported underlayment	„ECO“	$\geq 18^\circ$	
Windproof underlayment	„BASIC“	$\geq 16^\circ$	
Watertight underlayment	„PRO“	$\geq 14^\circ$	
Waterproof underlayment	„ULTRA“	$\geq 10^\circ$	

(1) Between 370 mm and 405 mm batten distance, the top corner of the verge tiles must be cut along the perforations.



Requirement for covering width	Requirement for covering length
Ridge connection ventilation tile and shed roof tile	Verge tile, double wave tile
Cc. 3,6 pcs/m	Cc. 2,5 pcs/m



„PF“ ridge tile (2,5 pcs/m) and 30×50 roof batten

Roof pitch	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°
LAF [mm]	80	75	70	65	60	60	60	60	50	X	X
FLA [mm]	120	110	100	90	80	70	60	50	45	X	X

„PF“ ridge tile (2,5 pcs/m) and 40×60 roof batten

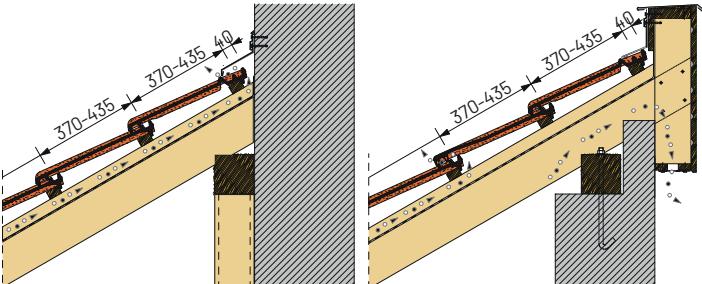
Roof pitch	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°
LAF [mm]	75	70	65	60	55	50	50	45	35	X	X
FLA [mm]	125	120	110	100	95	85	75	65	60	X	X

„PR“ ridge tile (2,5 pcs/m) and 30×50 roof batten

Roof pitch	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°
LAF [mm]	80	75	70	65	60	60	60	60	50	X	X
FLA [mm]	120	110	100	90	80	70	60	50	45	X	X

„PR“ ridge tile (2,5 pcs/m) and 40×60 roof batten

Roof pitch	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°
LAF [mm]	75	70	65	60	55	50	50	45	35	X	X
FLA [mm]	125	120	110	100	95	85	75	65	60	X	X

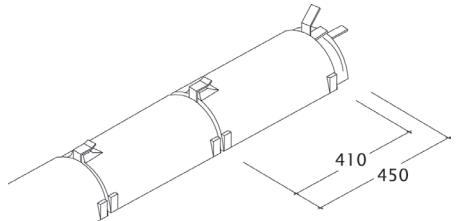
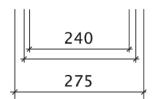


Out-ventilation cross-section

Ridge connection ventilation tile	115 cm ² /m	Cc. 23 m
Ventilation tile LQ37	37,5 cm ² /pc	
Every tile is ventilation tile	135 cm ² /m	Cc. 27 m
Every second tile is ventilation tile	67,5 cm ² /m	Cc. 13,5 m
Every third tile is ventilation tile	45 cm ² /m	Cc. 9 m

RIDGE TILES

„PF“ ridge tile 2,5 pcs/m



Closing plate



Functional closing plate



Hip starter



Hip starter shell-shaped

Hip starter rounded

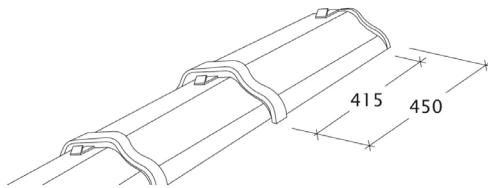
3 way hip cap tile



4 way hip cap tile



„PR“ ridge tile 2,5 pcs/m



Closing plate



Functional closing plate



Hip starter



Hip starter shell-shaped

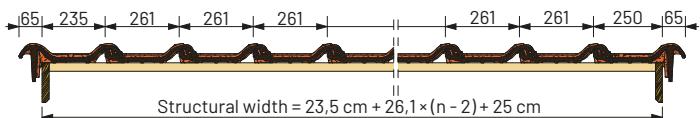
3 way hip cap tile

4 way hip cap tile

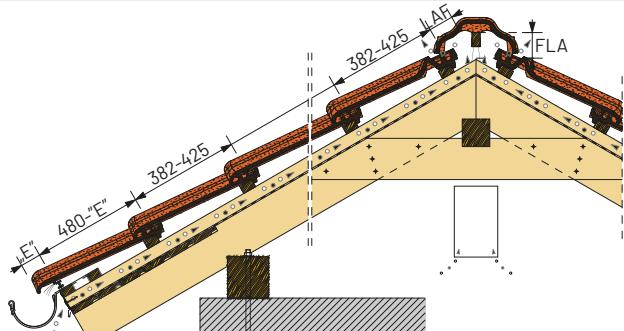




	min.	avg.	max.		
Covering width	260 mm	262 mm	264 mm		
Covering length	382 mm	403 mm	425 mm		
	max.	avg.	min.		
Requirement	10,1 pcs/m ²	9,5 pcs/m ²	9,0 pcs/m ²		
Surface weight	52,5 kg/m ²	49,4 kg/m ²	46,8 kg/m ²		
Weight	5,2 kg/piece				
Packaging	4 pieces/package	192 pieces/package			
Covering method	in mesh				
Standard roof pitch	22 °				
Unsupported underlayment	„ECO“	$\geq 16^\circ$			
Windproof underlayment	„BASIC“	$\geq 14^\circ$			
Watertight underlayment	„PRO“	$\geq 12^\circ$			
Waterproof underlayment	„ULTRA“	$\geq 10^\circ$			



Requirement for covering width	Requirement for covering length
Ridge connection ventilation tile and shed roof tile	Verge tile, double wave tile
Cc. 3,8 pcs/m	Cc. 2,5 pcs/m



„PT“ ridge tile (2,5 pcs/m) and 30x50 roof batten

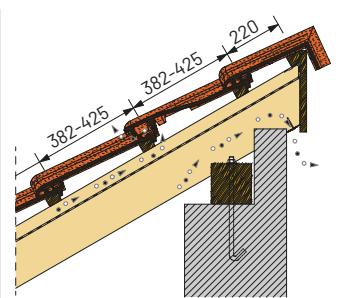
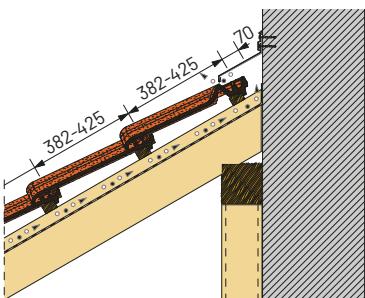
Roof pitch	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°
LAF [mm]	90	90	90	90	90	85	80	80	80	75	75
FLA [mm]	110	110	100	80	70	70	65	55	45	35	30

„PT“ ridge tile (2,5 pcs/m) and 40x60 roof batten

Roof pitch	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°
LAF [mm]	90	90	90	85	85	80	75	70	65	60	60
FLA [mm]	120	120	110	90	80	80	75	65	55	45	40

„PT“ ridge tile (2,5 pcs/m) and 50x50 roof batten

Roof pitch	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°
LAF [mm]	85	85	85	80	80	70	65	60	55	50	45
FLA [mm]	130	130	120	100	90	95	90	80	75	65	70



	Out-ventilation cross-section	Ventilated rafter lengths
Ridge connection ventilation tile	115 cm ² /m	Cc. 23 m
Ventilation tile LQ32	32,0 cm ² /pcs	
Every tile is ventilation tile	121,6 cm ² /m	Cc. 24,3 m
Every second tile is ventilation tile	60,8 cm ² /m	Cc. 12,1 m
Every third tile is ventilation tile	40,5 cm ² /m	Cc. 8,1 m

	min.	avg.	max.
Covering width	260 mm	262 mm	263 mm
Covering length	338 mm	352 mm	366 mm
	max.	avg.	min.
Requirement	11,4 pcs/m ²	10,9 pcs/m ²	10,4 pcs/m ²
Surface weight	54,7 kg/m ²	52,3 kg/m ²	49,9 kg/m ²
Weight	4,8 kg/pieces		
Packaging	4 pieces/package	192 pieces/package	
Covering method	in binding		
Standard roof pitch	25°		
Unsupported underlayment	„ECO“	≥18°	
Windproof underlayment	„BASIC“	≥16°	
Watertight underlayment	„PRO“	≥14°	
Waterproof underlayment	„ULTRA“	≥10°	
$\text{Structural width} = 20 \text{ cm} + 26,2 \times (n - 2) + 25 \text{ cm}$			

Requirement for covering width

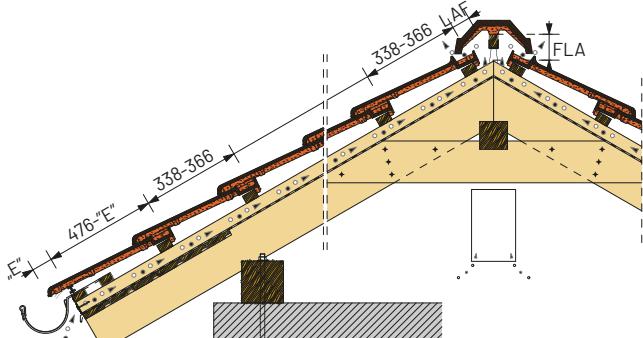
Ridge connection ventilation tile and shed roof tile

Cc. 3,8 pcs/m

Requirement for covering length

Verge tile, double wave tile

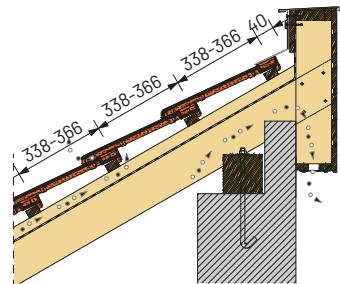
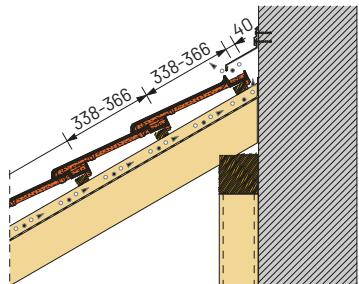
Cc. 2,9 pcs/m

**„PS“ ridge tile (2,5 pcs/m) and 30x50 roof batten**

Roof pitch	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°
LAF [mm]	X	75	70	70	70	65	65	70	90	100	X
FLA [mm]	X	120	110	90	80	60	60	55	20	15	X

„PS“ ridge tile (2,5 pcs/m) and 40x60 roof batten

Roof pitch	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°
LAF [mm]	X	75	70	65	65	60	60	60	75	85	X
FLA [mm]	X	130	120	100	90	70	70	65	30	25	X

**Out-ventilation cross-section**

Ridge connection ventilation tile

115 cm²/m

Cc. 23 m

Ventilation tile LQ35

35,0 cm²/pcs

Every tile is ventilation tile

133 cm²/m

Cc. 26,6 m

Every second tile is ventilation tile

66,5 cm²/m

Cc. 13,3 m

Every third tile is ventilation tile

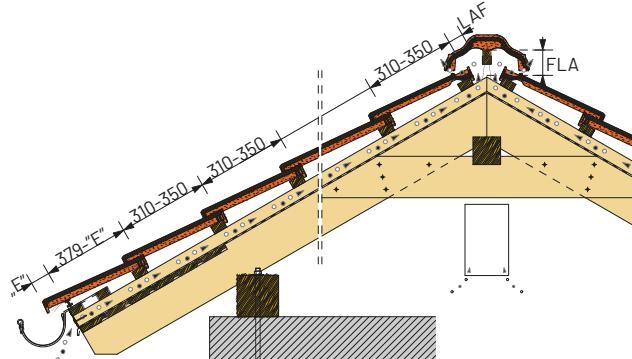
44,3 cm²/m

Cc. 8,9 m

MAXIMA PRO®



	min.	avg.	max.
Covering width	300 mm	300 mm	300 mm
Covering length	310 mm	330 mm	350 mm
	max.	avg.	min.
Requirement	10,8 pcs/m ²	10,1 pcs/m ²	9,5 pcs/m ²
Surface weight	40,0 kg/m ²	37,4 kg/m ²	35,2 kg/m ²
Weight		3,7 kg/piece	
Packaging	4 pieces/package	240 pieces/package	
Covering method	in mesh		
Standard roof pitch	22°		
Unsupported underlayment	„ECO“		≥16°
Windproof underlayment	„BASIC“		≥14°
Watertight underlayment	„PRO“		≥12°
Waterproof underlayment	„ULTRA“		≥10°
50	250	300	300
			300
			300
			300
			280
			50
Structural width = 25 cm + 30cm × (n-2) + 28cm			
Requirement for covering width	Ridge connection ventilation tile and shed roof tile		
Requirement for covering length	Verge tile, double wave tile		
Cc. 3,3 pcs/m		Cc. 3,0 pcs/m	



„PT“ ridge tile (2,5 pcs/m) and 30x50 roof batten

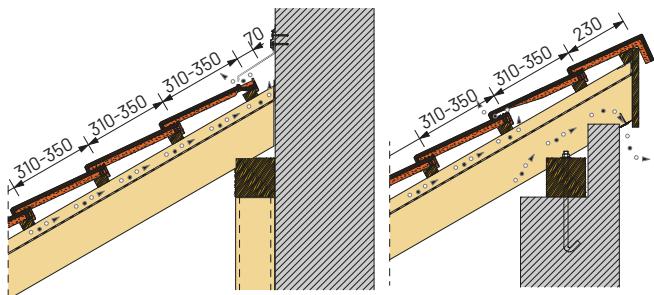
Roof pitch	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°
LAF [mm]	115	110	100	100	100	100	100	100	105	110	X
FLA [mm]	105	95	85	75	65	55	45	35	25	10	X

„PT“ ridge tile (2,5 pcs/m) and 40x60 roof batten

Roof pitch	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°
LAF [mm]	115	110	100	95	95	95	95	90	90	95	95
FLA [mm]	110	105	95	85	75	65	55	45	35	20	10

„PT“ ridge tile (2,5 pcs/m) and 50x50 roof batten

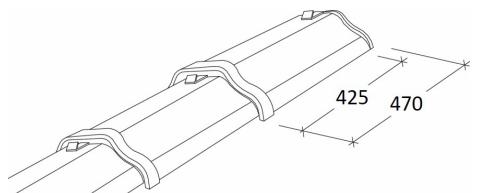
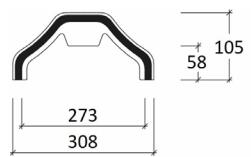
Roof pitch	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°
LAF [mm]	110	105	95	90	90	85	85	80	80	85	85
FLA [mm]	120	115	105	95	85	80	70	60	50	35	25



Ridge connection ventilation tile	115 cm ² /m	Cc. 23 m
Ventilation tile LQ35	35,0 cm ² /pcs	
Every tile is ventilation tile	115,5 cm ² /m	Cc. 23,1 m
Every second tile is ventilation tile	57,8 cm ² /m	Cc. 11,6 m
Every third tile is ventilation tile	38,5 cm ² /m	Cc. 7,7 m

RIDGE TILES

„PT“ ridge tile 2,5 pcs/m



Closing plate



Functional closing plate



Hip starter



Hip starter shell-shaped



Hip starter, rounded



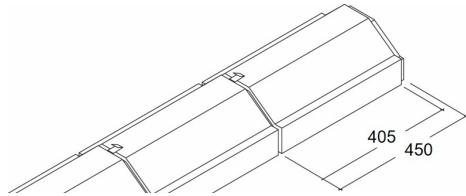
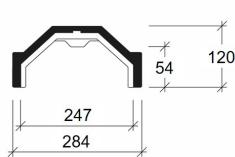
3 way hip cap tile



4 way hip cap tile



„PS“ ridge tile 2,5 pcs/m



Closing plate



Functional closing plate



Hip starter

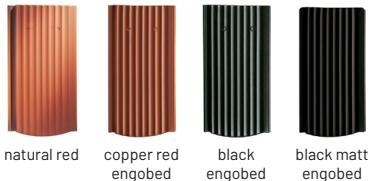


3 way hip cap tile

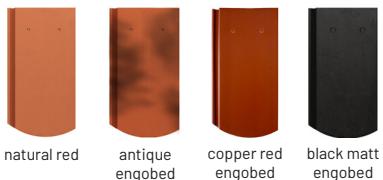


EXTRUDED ROOF TILES

„HORTOBÁGY”



RONA® segment cut



RONA® straight cut



17x38cm CASTA®



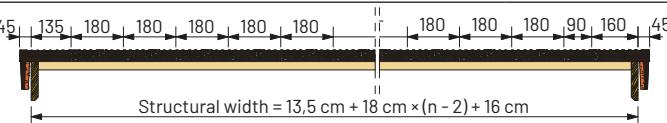
18x38cm CLASSIC®

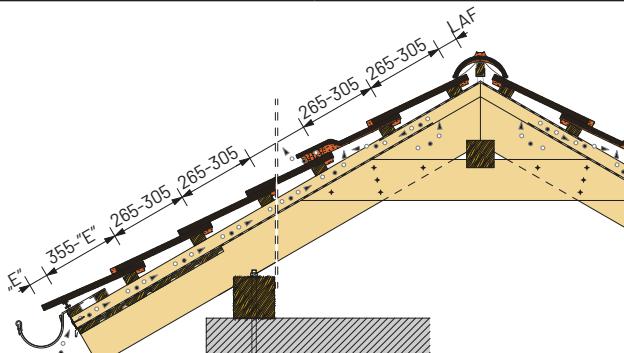


20x40cm

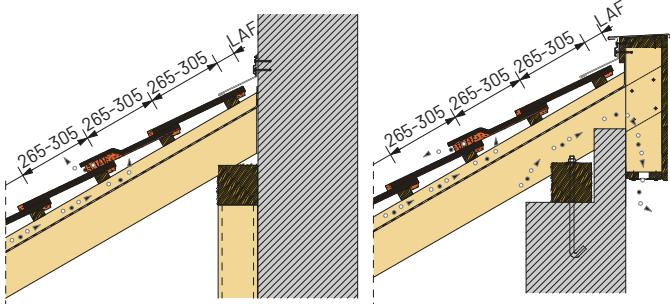




Covering widthth		180 mm							
		<30°	30°-50°	35°-40°	40°-45°	45°<			
Covering length		265 mm	274 mm	285 mm	295 mm	305 mm			
Requirement		21,0 pcs/m ²	20,2 pcs/m ²	19,5 pcs/m ²	18,8 pcs/m ²	18,2 pcs/m ²			
Surface weight		52,1 kg/m ²	50,1 kg/m ²	48,4 kg/m ²	46,6 kg/m ²	45,1 kg/m ²			
Weight		2,5 kg/pcs							
Packaging		6 pcs/package		324 pcs/pallet					
Covering method		in binding							
Standard roof pitch		30°							
Unsupported underlayment		„ECO“							
Windproof underlayment		„BASIC“							
Watertight underlayment		„PRO“							
Waterproof underlayment		„ULTRA“							
									
Requirement for covering width		Requirement for covering length							
Ventilation tile		Verge tile							
Cc. 5,5 pcs/m		Cc. 3,3 - 3,8 pcs/m							



„BZ“ ridge tile (3,0 pcs/m) and 30×50 roof batten											
Roof pitch	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°
LAF [mm]	55	55	55	55	55	55	50	50	50	50	50

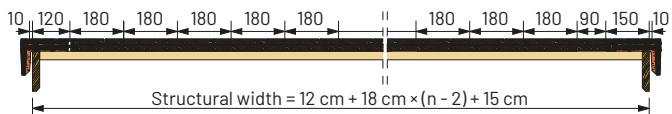


	Out-ventilation cross-section	Ventilated rafter lengths
Ventilation tile LQ10	55,56 cm ² /m	Cc. 11 m
Ventilation tile LQ25	25 cm ² /pcs	
Every tile is ventilation tile	137,5 cm ² /m	Cc. 27,2 m
Every second tile is ventilation tile	68,8 cm ² /m	Cc. 13,6 m
Every third tile is ventilation tile	45,8 cm ² /m	Cc. 9,1 m

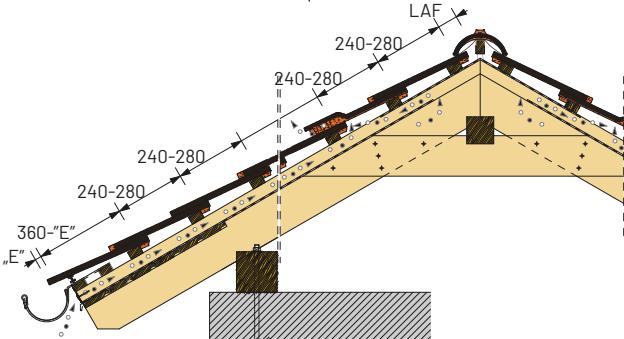


Covering width	180 mm								
	<30°	30°-35°	35°-40°	40°-45°	45°<				
Covering length	240 mm	250 mm	260 mm	270 mm	280 mm				
Requirement	23,1 pcs/m ²	22,2 pcs/m ²	21,4 pcs/m ²	20,6 pcs/m ²	19,8 pcs/m ²				
Surface weight	58,9 kg/m ²	56,6 kg/m ²	54,6 kg/m ²	52,5 kg/m ²	50,5 kg/m ²				
Weight	2,6 kg/kg/pcs								
Packaging	6 pcs/package	324 pcs/pallet							
Covering method	in binding								
Standard roof pitch	30°								

Unsupported underlayment	„ECO“	≥24°
Windproof underlayment	„BASIC“	≥22°
Watertight underlayment	„PRO“	≥18°
Waterproof underlayment	„ULTRA“	≥10°

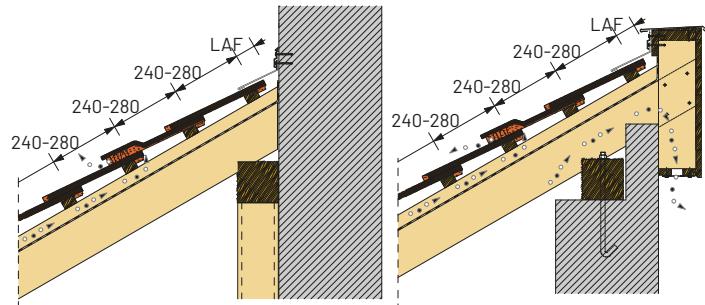


Requirement for covering width	Requirement for covering length
Ventilation tile Cc. 5,5 pcs/m	Verge tile Cc. 3,6 - 4,1 pcs/m LAF

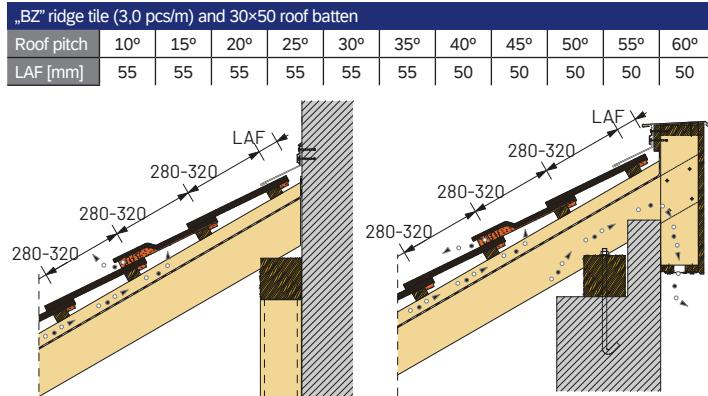
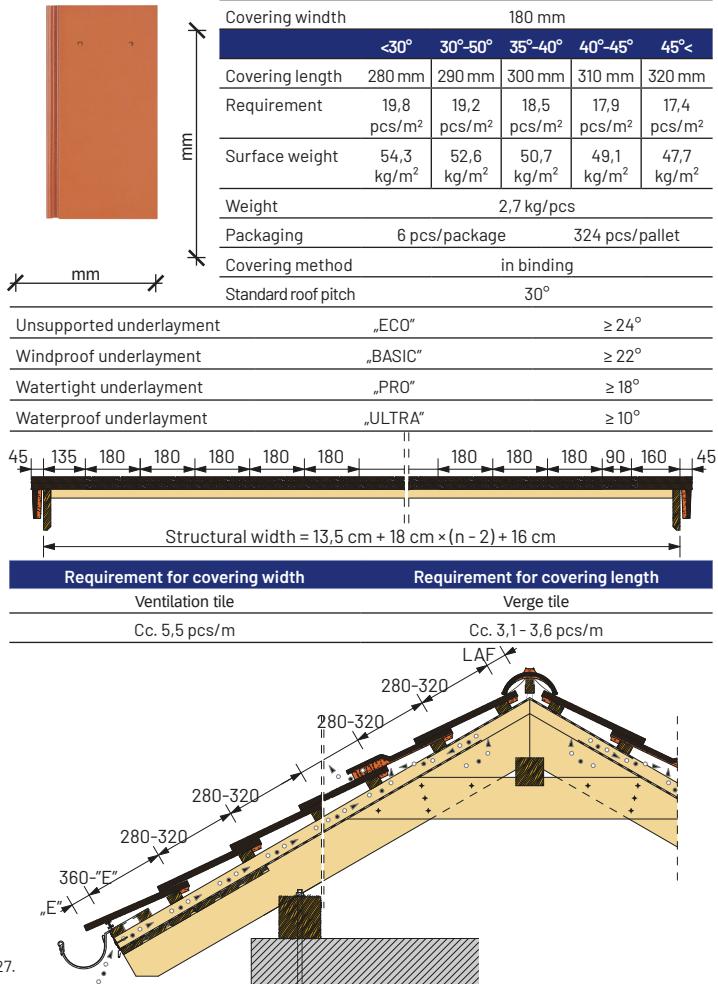


„BZ“ ridge tile (3,0 pcs/m) and 30×50 roof batten

Roof pitch	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°
LAF [mm]	55	55	55	55	55	55	50	50	50	50	50



	Out-ventilation cross-section	Ventilated rafter lengths
Ventilation tile LQ10	55,56 cm ² /m	Cc. 11 m
Ventilation tile LQ25	25 cm ² /pcs	
Every tile is ventilation tile	137,5 cm ² /m	Cc. 27,2 m
Every second tile is ventilation tile	68,8 cm ² /m	Cc. 13,6 m
Every third tile is ventilation tile	45,8 cm ² /m	Cc. 9,1 m



	Out-ventilation cross-section	Ventilated rafter lengths
Ventilation tile LQ10	55,56 cm ² /m	Cc. 11 m
Ventilation tile LQ25	25 cm ² /pcs	
Every tile is ventilation tile	137,5 cm ² /m	Cc. 27,2 m
Every second tile is ventilation tile	68,8 cm ² /m	Cc. 13,6 m
Every third tile is ventilation tile	45,8 cm ² /m	Cc. 9,1 m

CASTA® round cut

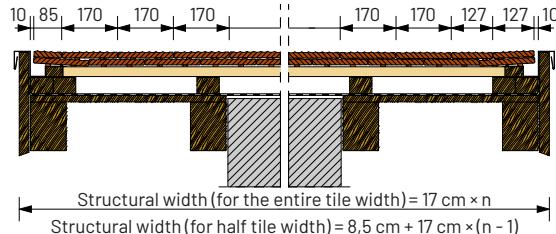


Covering width	170 mm							
	<30°	30°-50°	35°-40°	40°-45°	45°<			
Covering length	145 mm	150 mm	155 mm	160 mm	160 mm			
Requirement	40,6 pcs/m ²	39,3 pcs/m ²	38 pcs/m ²	36,8 pcs/m ²	35,7 pcs/m ²			
Surface weight	85,26 kg/m ²	83,79 kg/m ²	79,8 kg/m ²	77,28 kg/m ²	74,97 kg/m ²			
Weight	2,1 kg/pcs							
Packaging	6 pcs/package		480 pcs/pallet					
Covering method	in binding, double cover, crown cover							
Standard roof pitch	30°							

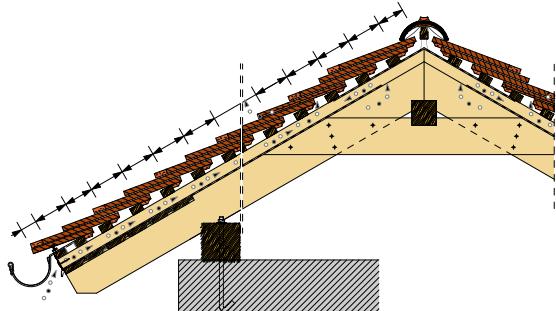
CASTA® "honeycomb" cut



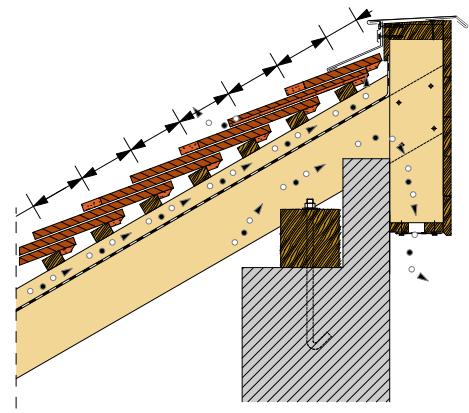
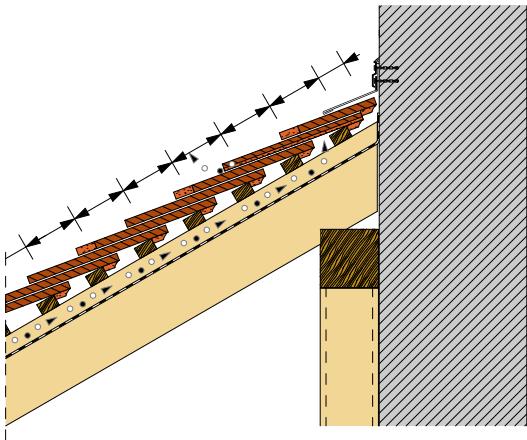
Covering width	170 mm							
	<30°	30°-50°	35°-40°	40°-45°	45°<			
Covering length	145 mm	150 mm	155 mm	160 mm	160 mm			
Requirement	40,6 pcs/m ²	39,3 pcs/m ²	38 pcs/m ²	36,8 pcs/m ²	35,7 pcs/m ²			
Surface weight	85,26 kg/m ²	83,79 kg/m ²	79,8 kg/m ²	77,28 kg/m ²	74,97 kg/m ²			
Weight	2,1 kg/pcs							
Packaging	6 pcs/package		480 pcs/pallet					
Covering method	in binding, double cover, crown cover							
Standard roof pitch	30°							
Unsupported underlayment	„ECO“							
Windproof underlayment	„BASIC“							
Watertight underlayment	„PRO“							
Waterproof underlayment	„ULTRA“							



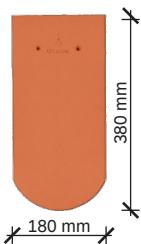
Requirement for covering width		Requirement for covering length										
Ventilation tile	3/4 tile	Cc. 5,9 pcs/m	Cc. 6,2 - 7,0 pcs/m									
„BZ“ ridge tile (3,0 pcs/m) and 30×50 roof batten												
Roof pitch	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°	
LAF [mm]	X	X	90	85	80	75	75	75	75	80	X	



Out-ventilation cross-section	Ventilated rafter lengths
Ventilation tile LQ9	cm ² /m
Every tile is ventilation tile	cm ² /m
Every second tile is ventilation tile	cm ² /m
Every third tile is ventilation tile	cm ² /m
	Cc. m

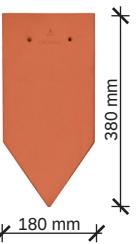


KLASSIK® rounded cut



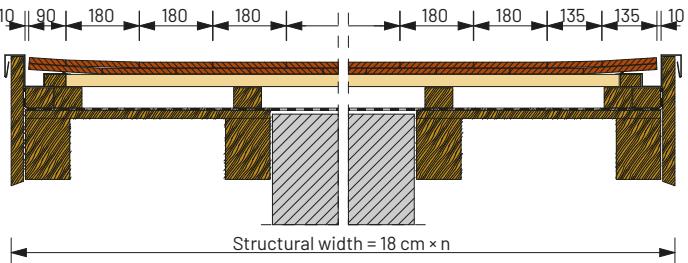
Covering width		180 mm					
		<30°	30°-35°	35°-40°	40°-45°	45°<	
Covering length	145 mm	150 mm	155 mm	160 mm	165 mm		
Requirement	38,3 pcs/m ²	37,0 pcs/m ²	35,8 pcs/m ²	34,7 pcs/m ²	33,6 pcs/m ²		
Surface weight	68,9 kg/m ²	66,6 kg/m ²	64,4 kg/m ²	62,5 kg/m ²	60,5 kg/m ²		
Weight	1,8 kg/pcs						
Packaging	8 pcs/package		480 pcs/pallet				
Standard roof pitch	30°						

AMBIENTE® pointed cut



Covering width		180 mm					
		<30°	30°-35°	35°-40°	40°-45°	45°<	
Covering length	145 mm	150 mm	155 mm	160 mm	165 mm		
Requirement	38,3 pcs/m ²	37,0 pcs/m ²	35,8 pcs/m ²	34,7 pcs/m ²	33,6 pcs/m ²		
Surface weight	65,1 kg/m ²	62,9 kg/m ²	60,9 kg/m ²	59,0 kg/m ²	57,1 kg/m ²		
Weight	1,7 kg/pcs						
Packaging	8 pcs/package		480 pcs/pallet				
Standard roof pitch	30°						

Unsupported underlayment „ECO“ ≥24°
Windproof underlayment „BASIC“ ≥22°
Watertight underlayment „PRO“ ≥18°
Waterproof underlayment „ULTRA“ ≥10°

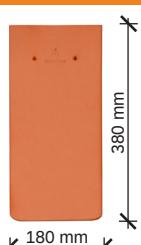


AMBIENTE® segment cut

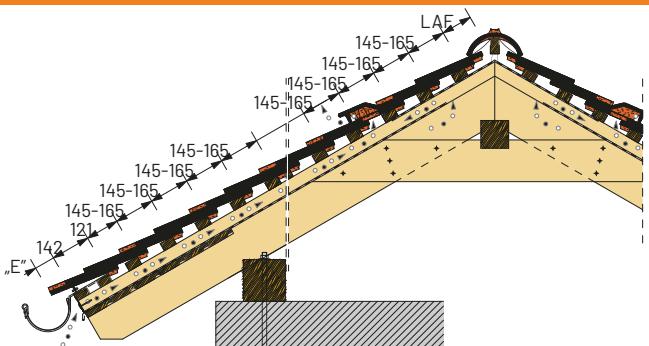


Covering width		180 mm					
		<30°	30°-35°	35°-40°	40°-45°	45°<	
Covering length	145 mm	150 mm	155 mm	160 mm	165 mm		
Requirement	38,3 pcs/m ²	37,0 pcs/m ²	35,8 pcs/m ²	34,7 pcs/m ²	33,6 pcs/m ²		
Surface weight	72,8 kg/m ²	70,3 kg/m ²	68,0 kg/m ²	65,9 kg/m ²	63,8 kg/m ²		
Weight	1,9 kg/pcs						
Packaging	8 pcs/package		480 pcs/pallet				
Standard roof pitch	30°						

AMBIENTE® straight cut



Covering width		180 mm					
		<30°	30°-35°	35°-40°	40°-45°	45°<	
Covering length	145 mm	150 mm	155 mm	160 mm	165 mm		
Requirement	38,3 pcs/m ²	37,0 pcs/m ²	35,8 pcs/m ²	34,7 pcs/m ²	33,6 pcs/m ²		
Surface weight	72,8 kg/m ²	70,3 kg/m ²	68,0 kg/m ²	65,9 kg/m ²	63,8 kg/m ²		
Weight	1,9 kg/pcs						
Packaging	8 pcs/package		480 pcs/pallet				
Standard roof pitch	30°						

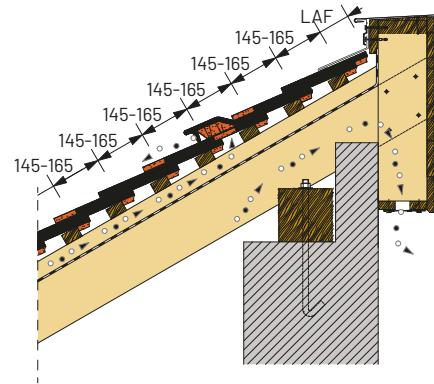
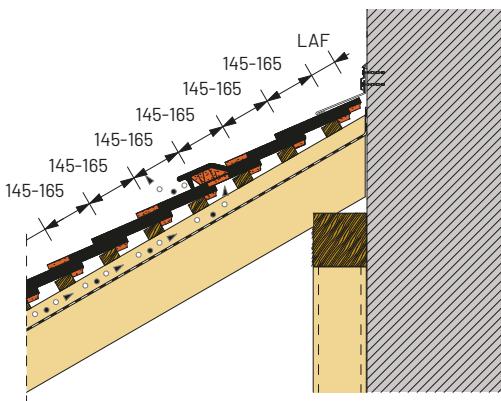


„BZ“ ridge tile (3,0 pcs/m) and 30×50 roof batten

Roof pitch	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°
LAF [mm]	X	X	90	85	80	75	75	75	75	80	X

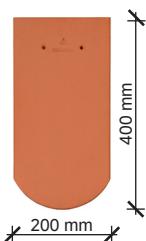
„BZ“ ridge tile (3,0 pcs/m) and 40×60 roof batten

Roof pitch	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°
LAF [mm]	X	X	85	80	75	70	70	65	60	65	X



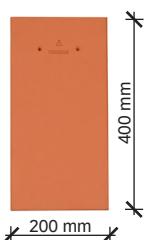
	Out-ventilation cross-section	Ventilated rafter lengths
Ventilation tile LQ10	55,56 cm ² /m	Cc. 11 m
Ventilation tile LQ25	25 cm ² /pcs	
Every tile is ventilation tile	137,5 cm ² /m	Cc. 27,2 m
Every second tile is ventilation tile	68,8 cm ² /m	Cc. 13,6 m
Every third tile is ventilation tile	45,8 cm ² /m	Cc. 9,1 m

20x40 rounded cut „Austrian plain tile“



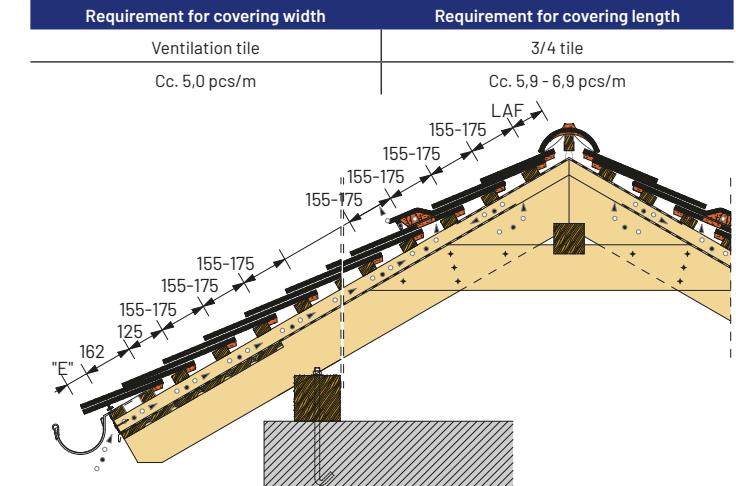
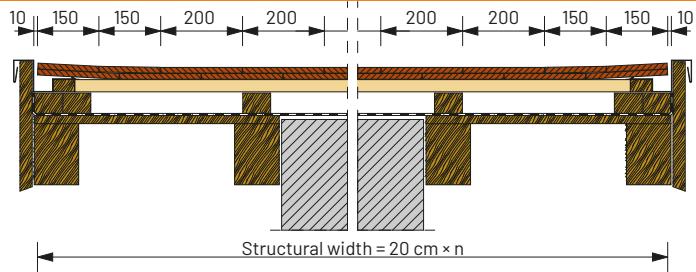
Covering width	200 mm				
	<30°	30°-35°	35°-40°	40°-45°	45°<
Covering length	155 mm	160 mm	165 mm	170 mm	175 mm
Requirement	32,3 pcs/m ²	31,3 pcs/m ²	30,4 pcs/m ²	29,5 pcs/m ²	28,6 pcs/m ²
Surface weight	71,1 kg/m ²	68,9 kg/m ²	66,9 kg/m ²	64,9 kg/m ²	62,9 kg/m ²
Weight	2,2 kg/pcs				
Packaging	8 pcs/packaging	480 pcs/pallet			
Standard roof pitch	30°				

20x40 straight cut „Vienna bag“

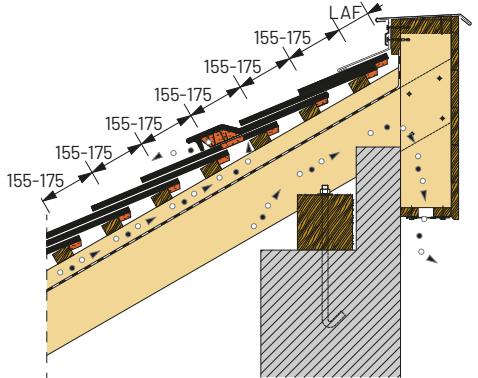
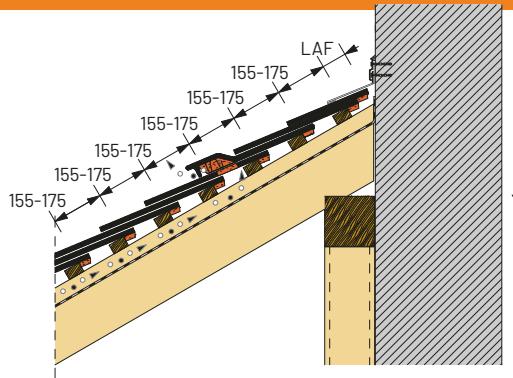


Covering width	200 mm				
	<30°	30°-35°	35°-40°	40°-45°	45°<
Covering length	155 mm	160 mm	165 mm	170 mm	175 mm
Requirement	32,3 pcs/m ²	31,3 pcs/m ²	30,4 pcs/m ²	29,5 pcs/m ²	28,6 pcs/m ²
Surface weight	74,6 kg/m ²	72,3 kg/m ²	70,2 kg/m ²	68,2 kg/m ²	66,1 kg/m ²
Weight	2,3 kg/pcs				
Packaging	8 pcs/packaging	480 pcs/pallet			
Standard roof pitch	30°				

Unsupported underlayment	„ECO“	≥24°
Windproof underlayment	„BASIC“	≥22°
Watertight underlayment	„PRO“	≥18°
Waterproof underlayment	„ULTRA“	≥10°



Roof pitch	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°
Roof pitch	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°

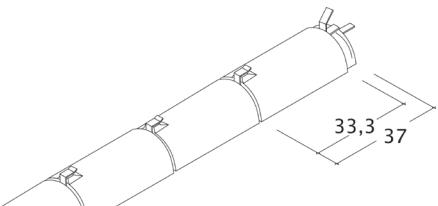
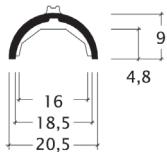


Out-ventilation cross-section

Ventilated rafter lengths

Ventilation tile LQ10	50,0 cm ² /m	Cc. 10 m
Ventilation tile LQ25	25 cm ² /pcs	
Every tile is ventilation tile	125 cm ² /m	Cc. 25,0 m
Every second tile is ventilation tile	62,5 cm ² /m	Cc. 12,5 m
Every third tile is ventilation tile	41,7 cm ² /m	Cc. 8,3 m

„BZ“ ridge tile 3,0 pcs/m



Closing plate



Hip starter



3 way hip cap tile



4 way hip cap tile



BATTEN DISTANCES - OVERVIEW

INTERLOCKING ROOF TILES

Model	Batten distance [mm] overview																	
	1.) The corner of the verge tile should be cutted in the marked range!																	
„BALANCE“	310	320	330	340	350	360	370	380	390	400	410	420	430	440	450			406-431 mm
„TITANIA“																		382-425 mm
„NOMINA“																		1.) 370-405 mm 405-435 mm
„SIMPLA“																		338-386 mm
„RAPIDO“																		410-440 mm
„MAXIMA PRO“																		310-350 mm

SIDE INTERLOCKING PLAIN TILES

Model	Batten distance [mm] overview																
	The batten distance should be choosen according to the roof pitch!																
„Hortobágy“	200	210	220	230	240	250	260	270	280	290	300	310	320	330	340		265-305 mm
„RONA segment cut“																	240-280 mm
„RONA straight cut“																	280-320 mm

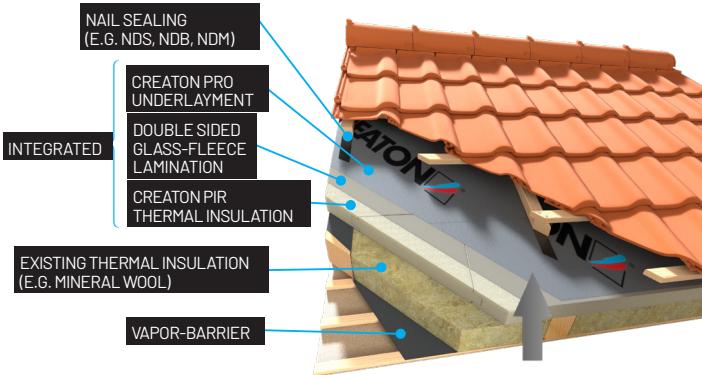
PLAIN ROOF TILES

Model	Batten distance [mm] overview																
	The batten distance should be choosen according to the roof pitch!																
18x38 double cover	100	110	120	130	140	150	160	170	180	190	200	210	220	230	240	145-165 mm	
20x40 double cover																	155-175 mm
18x38 crown cover	220	230	240	250	260	270	280	290	300	310	320	330	340	350	360	290-330 mm	
20x40 crown cover																	310-350 mm

ABOVE THE RAFTER INSULATION

swisspor PIR TETTO Classic

swisspor PIR is primarily recommended for the renovation of existing roof structures as an additional thermal insulation layer. Thanks to the special vapor-permeable coating of the boards, they enable the moisture in the rafters and in the existing thermal insulation between the rafters to migrate.



swisspor PIR TETTO Alu

swisspor PIR PLUS offers an ideal solution for all new pitched roofs. On both sides of the boards, there is an aluminum coating (associated layer), which retains the warm heat rays leaving the interior in winter, and reflects the external solar radiation in summer.



Thickness [mm]	Heat conductivity λ [W/mK]	Thermal transmittance U [W/(m²K)]	Packaging* (board/ package)	Surface (m²/package)	Weight (kg/package)
50	0,025	0,417	24	69,69	127,84
80	0,025	0,272	15	43,55	125,05
100	0,025	0,223	12	34,84	124,96
120	0,024	0,183	10	29,04	125
140	0,024	0,158	8	23,23	127,36
160	0,024	0,14	7	20,33	117,31
180	0,024	0,125	6	17,42	113,5
200	0,024	0,114	6	17,42	125,02
220	0,024	0,104	5	14,52	115,4
240	0,024	0,095	5	14,52	125

Thickness [mm]	Heat conductivity λ [W/mK]	Thermal transmittance U [W/(m²K)]	Packaging* (board/ package)	Surface (m²/package)	Weight (kg/package)
80	0,022	0,243	15	43,55	125,05
100	0,022	0,199	12	34,84	124,96
120	0,022	0,169	10	29,04	125
140	0,022	0,146	8	23,23	127,36
160	0,022	0,129	7	20,33	117,31
180	0,022	0,115	6	17,42	113,5
200	0,022	0,105	6	17,42	125,02
220	0,022	0,095	5	14,52	115,4
240	0,022	0,088	5	14,52	125
240	0,024	0,095	5	14,52	125

swisspor PIR TETTO Classic Difuplan

swisspor PIR TETTO Alu Difuplan

ABOVE THE RAFTER INSULATION



FIX AND GATHER LOAD FROM THE COUNTER BATTEN

Special screws has to be used to secure the insulation between the counter batten the rafters.

Due to the more favorable load transfer, the screws must be screwed in at an angle of 67° with the counter batten!

The min. size of the counter batten has to be 40 x 60 mm! Pre-drilling of the counter batten is not necessary.

RELIEVE THE LOAD AGAINST THE PIR BOARD

FIX AND GIVE THE LOAD TO THE RAFTER

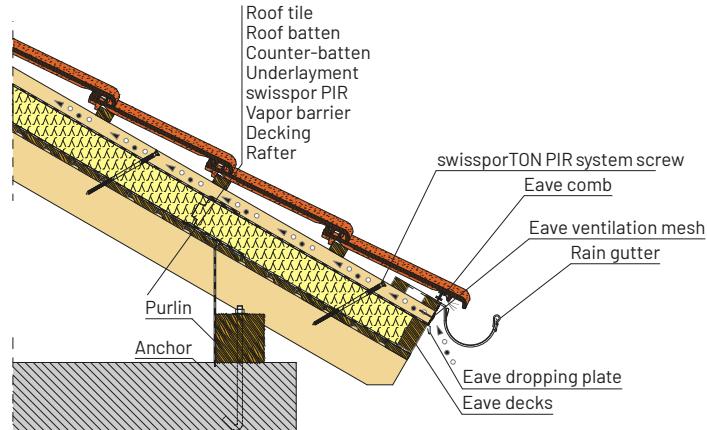
Thickness of the thermal insulation [mm]	Screw size	Article number	Packaging (pcs/package)
50	8 x 165 ⁽¹⁾	4061957	50
80	8 x 225 ⁽²⁾	4061958	50
100	8 x 255 ⁽²⁾	4061959	50
120	8 x 275 ⁽²⁾	4064530	50
140	8 x 302 ⁽²⁾	4061960	50
160	8 x 302 ⁽²⁾	4061960	50
180	8 x 335 ⁽²⁾	4061961	50
200	8 x 365 ⁽²⁾	4061962	50
220	8 x 397 ⁽²⁾	4061963	50

⁽¹⁾The length of the screws are determined for 50 mm counter-batten height.

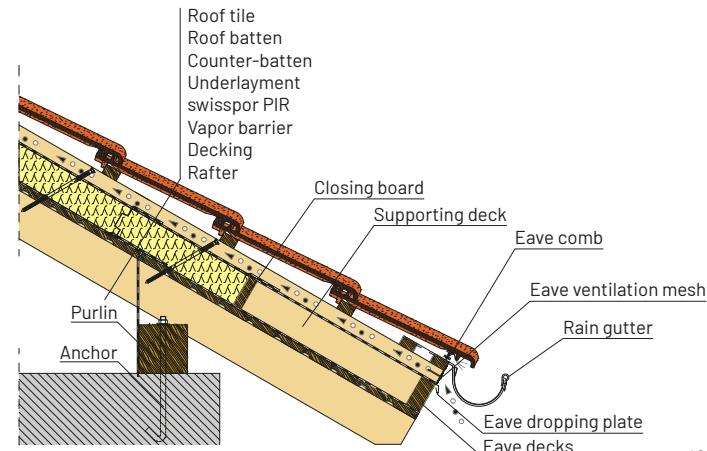
⁽²⁾The length of the screws are determined for 19 mm thick decks and 50 mm counter-batten height.



EAVE DETAIL FOR SMALL OVERHANG

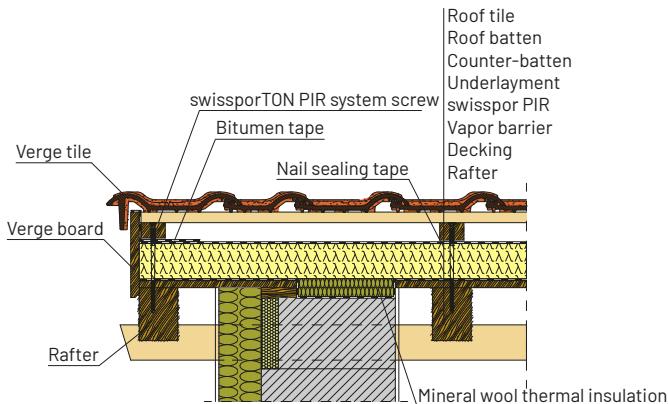


EAVE DETAIL FOR LARGE OVERHANG

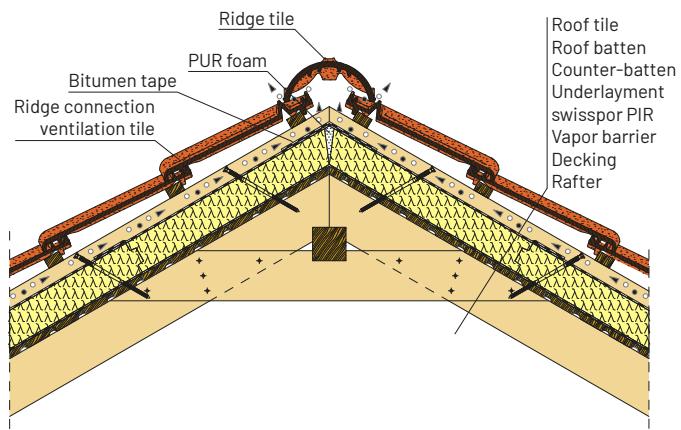


ABOVE THE RAFTER INSULATION

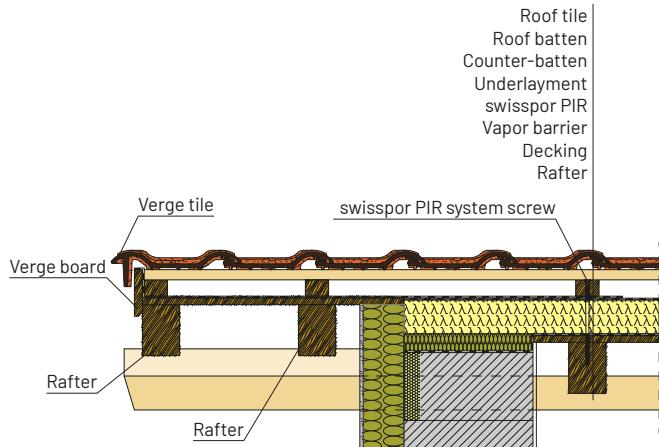
VERGE DETAIL FOR SMALL OVERHANG



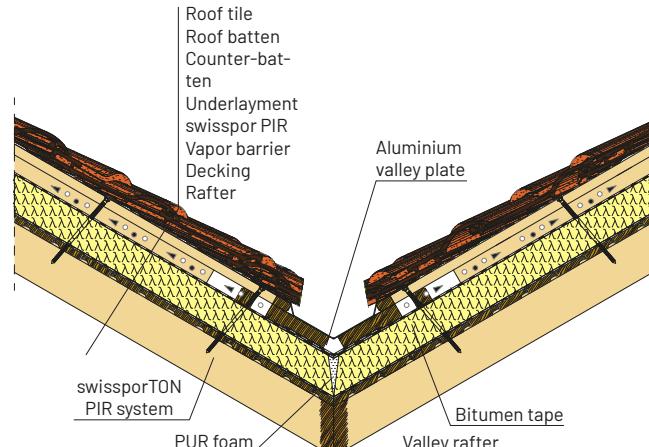
HIP AND RIDGE DETAIL



VERGE DETAIL FOR LARGE OVERHANG



VALLEY DETAIL



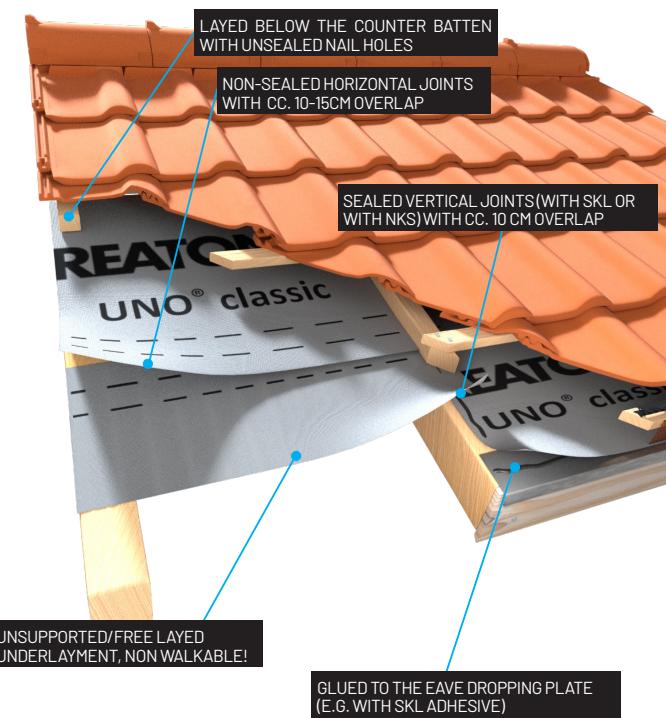
UNDERLAYMENTS

swissporTON ECO

3-layer vapor permeable roof foil: microporous PP membrane between the outer and inner PP protective film.

It is suitable for unsupported and free layed underlays.

The ECO[®] roofing membrane is not suitable for laying on decking.



swissporTON BASIC

3-layer vapor permeable roof foil: microporous PP membrane between the outer and inner PP protective film.

It is suitable for windproof, unsupported and free layed underlays.

The two integrated adhesive strip for the easy and economical installation.

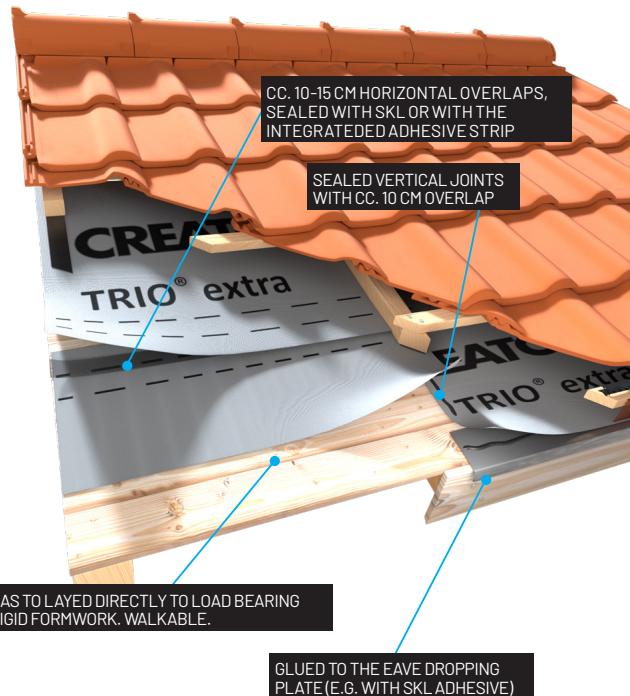
It has to be installed with sealed overlaps, on the top of a completed formwork such as rigid insulation. Can not be considered as a walkable underlayment!



UNDERLAYMENTS

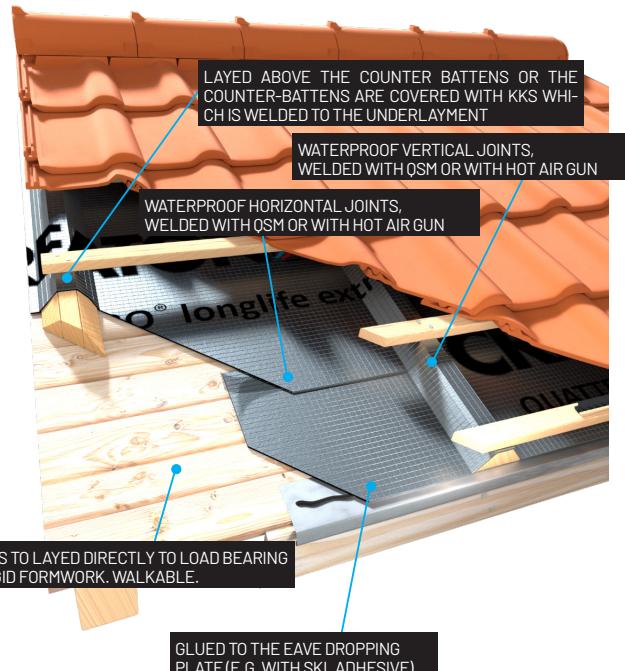
swissporTON PRO

4 layered underlayment: PP vapor permeable membrane and reinforcing mesh between the two PP protective non-woven layer.
 Suitable for waterproof, windproof, unsupported and free layed application.
 The two integrated adhesive strip for the easy and economical installation.
 It has to be installed with sealed overlaps, on the top of a completed formwork such as rigid insulation. Can not be considered as a walkable underlayment!



swissporTON ULTRA

Can be used as a waterproof underlayment for single- or double ventilated roof structures.
 Can be used as a waterproof underlayment on a rigid formwork (such as wooden decking) with welded joints.
 Multi layered vapor permeable underlayment: TPU copolymer coating in both side and PES fleece in the middle.
 TPU coating for more effective welding, and more durable against mechanical effects.
 The additional adhesive tape on the back makes the installation easier.



UNDERLAYMENTS

Model	DIN	swisspor	„ECO“	„BASIC“	„PRO“	„ULTRA“
„BALANCE“	22°		16°	14°	12°	10°
„RAPIDO“	22°		18°	16°	14°	10°
„NOMINA“	22°		18°	16°	14°	10°
„TITANIA“	22°		16°	14°	12°	10°
„SIMPLA“	22°		18°	16°	14°	10°
„MAXIMA PRO“	22°		16°	14°	12°	10°
„Hortobágy“	35°	30°	24°	22°	18°	10°
„RONA“	35°	30°	24°	22°	18°	10°
„KLASSIK“	30°	30°	24°	22°	18°	10°
„AMBIENTE“	30°	30°	24°	22°	18°	10°
	Adhesive					
	For foil seams and for other connections.		cc. 19 m adhesion			
	Seam adhesive tape					
	To seal longitudinal and transverse seams.		50 mm wide 25 m/roll			
	Nail sealing tape					
	To seal nail holes below the counter battens.		Butyl raw material 50 mm wide 10 m/roll			
	Nail sealing tape					
	To seal nail holes below the counter battens.		PE raw material 60 mm wide 30 m/roll			

	Nail sealing mastic	
	To seal nail holes below the counter battens.	
	Connection tape	
	For sealing connections (e.g. wall edges).	
	Welding liquid & bottle	
	For welding the longitudinal and transverse joints of ULTRA.	
	„ULTRA“ hot air gun	
	For welding the longitudinal and transverse joints of ULTRA.	
	Counter-batten tape	
	To cover the counter batten for welded waterproof underlays.	
	„ULTRA“ external corner	
	For waterproof wall corner joint.	

UNDERLAYMENTS

Accessories	ECO® classic	"BASIC"	"PRO"	"ULTRA"
Adhesive	✓	✓	✓	✓
Seam adhesive tape	✓	✓	✗	✗
Nail sealing tape	✓	✓	✓	✓
Nail sealing tape	✓	✓	✓	✗
Nail sealing mastic	✓	✓	✓	✗
Connection tape	✓	✓	✓	✗
Welding liquid & bottle	✗	✗	✗	✓
"ULTRA" hot air gun	✗	✗	✗	✓
Counter-batten tape	✗	✗	✗	✓
"ULTRA" external corner	✗	✗	✗	✓

NOTES



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We reserve the right for color differentiations
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