



## INSULATED PANELS Product Overview



## AST® L/S/S+/F/F+/E (wall, visible fix)



- External profiling: Micro, Line 150, Line 200, Line 600, Smooth
- Interior profiling: Line 150, Line 200, Line 600, Smooth
- Max. production length: 12.00 m
- Modular width: 1,200 mm

Panel Type	Element thickness (D) mm	Dead load (kg/m²) <sup>3)</sup>	U-value (W/m²K) acc. EN 14509 <sup>1)</sup>	Fire behaviour acc. EN 13501-1 <sup>2)</sup>	Fire rating, max <sup>2)</sup> (horizontal/vertical)	R <sub>w</sub> (dB)
AST® L	80	15	0.45	A2-s1,d0	NPD	27–32
	100	17	0.37			
	120	18	0.30			
	150	21	0.24			
	175	22	0.21			
	200	24	0.18			
	240	27	0.15			
AST® S	300	31	0.12		EI 120 / EI 180	
	80	17	0.48	A2-s1,d0	EI 30 / EI 30	27–32
	100	19	0.38		EI 60 / EI 60	
	120	21	0.32		EI 90 / EI 90	
	150	23	0.26		EI 180 / EI 180	
	175	25	0.22		EI 240 / EI 240	
	200	28	0.19		EI 240 / EI 240	
AST® S+	240	32	0.16		EI 240 / EI 240	
	300	37	0.13		EI 240 / EI 240	
AST® S+	100	19	0.38	A2-s1,d0	EI 120 / EI 120	27–32
	120	21	0.32		EI 120 / EI 120	
AST® F	80	19	0.53	A2-s1,d0	EI 45 / EI 90	27–32
	100	21	0.43		EI 45 / EI 120	
	120	24	0.36		EI 45 / EI 120	
	150	27	0.29		EI 240 / EI 240	
	175	30	0.25		EI 240 / EI 240	
	200	33	0.22		EI 240 / EI 240	
	240	38	0.18		EI 240 / EI 240	
AST® F+	300	45	0.14		EI 240 / EI 240	
	100	21	0.43	A2-s1,d0	EI 120 / EI 120	27–32
	120	24	0.36		EI 120 / EI 120	
AST® E	50	16	0.77	A2-s1,d0	EI 45 / EI 45	27–32
	80	19	0.53		EI 45 / EI 90	
	100	22	0.43		EI 45 / EI 120	
	120	24	0.36		EI 45 / EI 120	
	150	28	0.29		EI 240 / EI 240	
	175	31	0.25		EI 240 / EI 240	
	200	34	0.22		EI 240 / EI 240	
	240	39	0.18		EI 240 / EI 240	
AST® E	300	47	0.14		EI 240 / EI 240	
	300	47	0.14		EI 240 / EI 240	

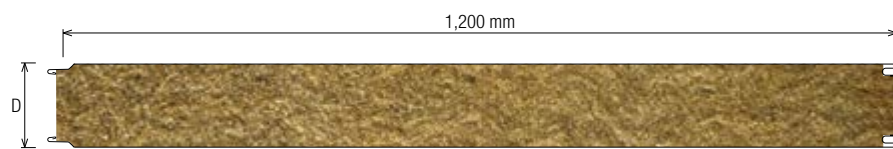
## AST® S acoustic (wall and ceiling, visible fix)



- External profiling: Line 150, Line 200, Line 600, Smooth
- Interior profiling: Perforated
- Max. production length: 12.00 m
- Modular width: 1,200 mm

Panel Type	Element thickness (D) mm	Dead load (kg/m²) <sup>3)</sup>	U-value (W/m²K) acc. EN 14509 <sup>1)</sup>	Fire behaviour acc. EN 13501-1 <sup>2)</sup>	Fire rating	Sound reduction (dB)		
						R <sub>w</sub>	R' <sub>w</sub> +C	R' <sub>w</sub> +C <sub>tr</sub>
AST® S	50 * (AST-E)	16	0.77	NPD	NPD	29	27	26
	80	17	0.48			30		25
	100	19	0.38					
	120	21	0.32				29	
	150	23	0.26					
	200	28	0.19					
	240	32	0.16					

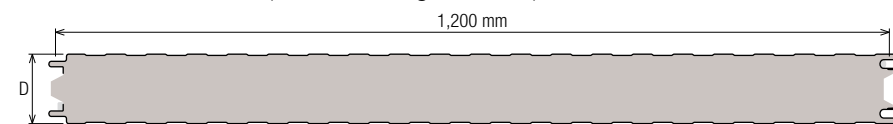
## AST® E (ceiling, visible fix)



- External profiling: Micro, Line 150, Line 200, Line 600, Smooth
- Interior profiling: Line 150, Line 200, Line 600, Smooth
- Max. production length: 12.00 m
- Modular width: 1,200 mm

Panel Type	Element thickness (D) mm	Dead load (kg/m <sup>2</sup> ) <sup>3)</sup>	U-value (W/m²K) acc. EN 14509 <sup>1)</sup>	Fire behaviour acc. EN 13501-1 <sup>2)</sup>	Fire rating, max <sup>2)</sup> (horizontal/vertical)	R <sub>w</sub> (dB)
AST® E	50	16	0.77	A2-s1,d0	NPD	27–32
	80	19	0.53		EI 60	
	100	22	0.43		EI 180	
	120	24	0.36			
	150	28	0.29			
	175	31	0.25			
	200	34	0.22			
	240	39	0.18			
300	47	0.14				

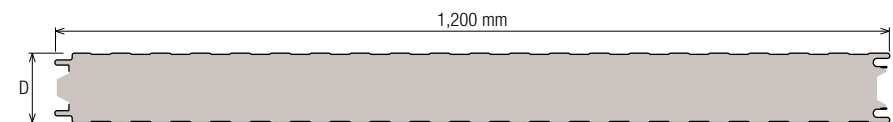
## QuadCore® R (wall and ceiling, visible fix)



- External profiling: Box, Minibox, Micro, Micro 50, Line 200, Smooth
- Interior profiling: Box, Minibox, Deep Minibox
- Max. production length: 15.00 m
- Modular width: 1,200 mm

Panel Type	Element thickness (D) mm	Dead load (kg/m <sup>2</sup> ) <sup>3)</sup>	U-value (W/m <sup>2</sup> K) acc. EN 14509 <sup>1)</sup>	Fire behaviour acc. EN 13501-1 <sup>2)</sup>	Fire rating, max <sup>2)</sup> (horizontal/vertical)	R <sub>v</sub> (dB)
R	80	11.69	0.23	B-s1,d0	EI 15	25–27
	100	12.49	0.18		EI 30	
	120	13.29	0.15			
	150	14.49	0.12			
	170	15.29	0.11			
	200	16.49	0.09			

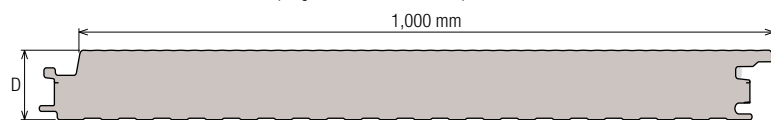
## QuadCore® C (coldstore, visible fix)



- External profiling: Box, Minibox, Micro, Micro 50, Line 200, Smooth
- Interior profiling: Box, Minibox, Deep Minibox
- Max. production length: 15.00 m
- Modular width: 1,200 mm

Panel Type	Element thickness (D) mm	Dead load (kg/m <sup>2</sup> ) <sup>3)</sup>	U-value (W/m <sup>2</sup> K) acc. EN 14509 <sup>1)</sup>	Fire behaviour acc. EN 13501-1 <sup>2)</sup>	Fire rating, max <sup>2)</sup> (horizontal/vertical)	R <sub>w</sub> (dB)
C	80	11.69	0.23	B-s1,d0	EI 15	25–27
	100	12.49	0.18		EI 30	
	120	13.29	0.15			
	150	14.49	0.12			
	170	15.29	0.11			
	200	16.49	0.09			

## QuadCore® M (façade, hidden fix)



- External profiling: Box, Micro, Micro 50, Line 200, Smooth
- Interior profiling: Box, Minibox, Deep Minibox
- Max. production length: 15.00 m
- Modular width: 1,000 mm

Panel Type	Element thickness (D) mm	Dead load (kg/m <sup>2</sup> ) <sup>3)</sup>	U-value (W/m <sup>2</sup> K) acc. EN 14509 <sup>1)</sup>	Fire behaviour acc. EN 13501-1 <sup>2)</sup>	Fire rating, max <sup>2)</sup> (horizontal/vertical)	R <sub>w</sub> (dB)
M	100	12.77	0.18	B-s1,d0	EI 15	26
	150	14.77	0.12			

Notes:

**NPD** No performance determined (not tested)

1) U-values including surface resistance R<sub>si</sub>+R<sub>se</sub> = 0.17 m<sup>2</sup>K/W and the influence of joints.

2) The maximum achievable fire resistance is given. In terms of fire behaviour, AST panels are classified in Euroclass A2-s1,d0 and QuadCore panels in B-s1,d0. Exceptions are Paroc Print panels, which are rated C-s1,d0 and acoustic panels, which are not fire resistant. For more information on details and spans, please contact Paroc Panel Systems/Technical Support.

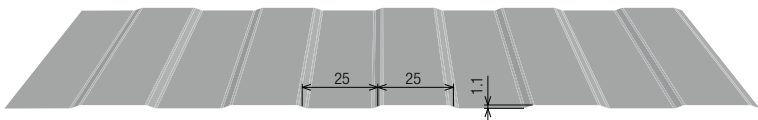
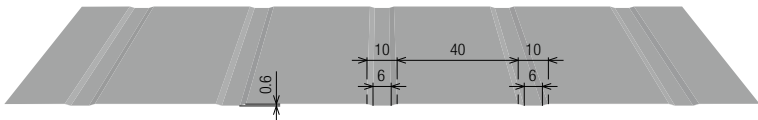
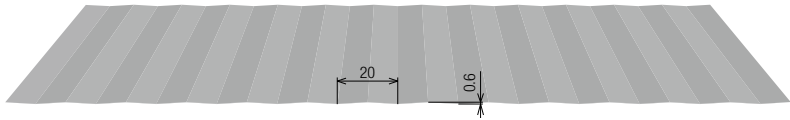
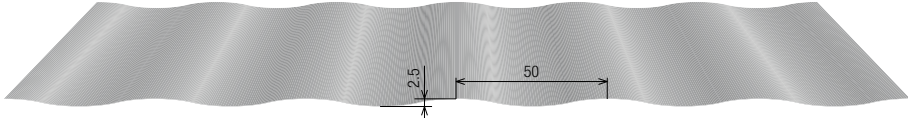

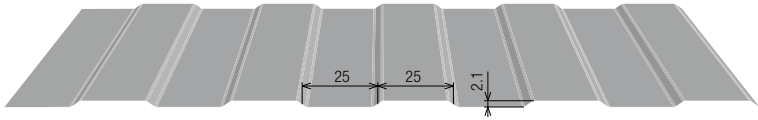
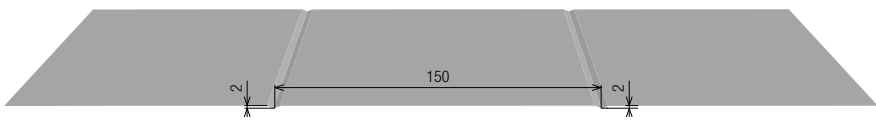
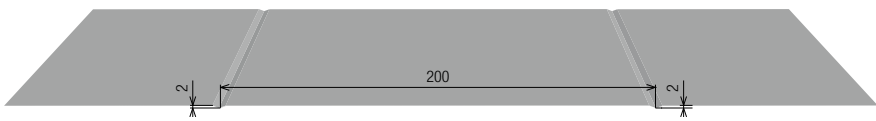
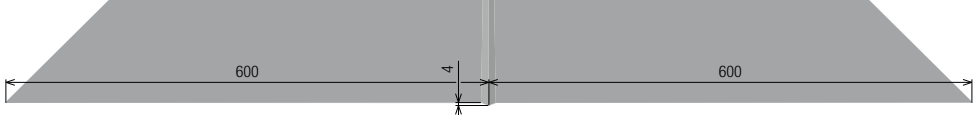
3) Panels with standard facings.

4) Steel thickness for smooth profiling of AST panels min. 0.6 mm. For smooth profiling of QuadCore panels, please contact Paroc Panel System/Technical Support.

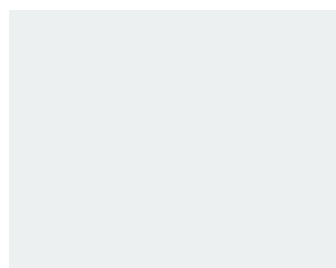
The information provided in this technical data is subject to technical modifications.

Details of features can be guaranteed only as far as these are explicitly confirmed in writing on a case by case basis.

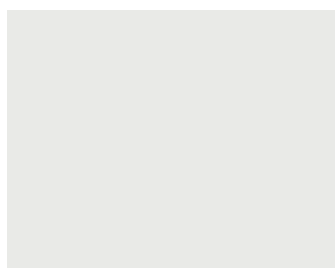
## Profilations

Profiling	Dimensions/Used on panel
Minibox	<p>QuadCore® R QuadCore® C QuadCore® M</p> 
Box	<p>QuadCore® R QuadCore® C QuadCore® M</p> 
Micro	<p>AST® L/S/S+/F/F+/E AST® E QuadCore® R QuadCore® C QuadCore® M</p> 
Micro 50	<p>QuadCore® R QuadCore® C QuadCore® M</p> 
Smooth	<p>AST® L/S/S+/F/F+/E AST® S acoustic AST® E QuadCore® R QuadCore® C QuadCore® M</p> 
Deep Minibox	<p>QuadCore® R QuadCore® C QuadCore® M</p> 
Line 150	<p>AST® L/S/S+/F/F+/E AST® S acoustic AST® E</p> 
Line 200	<p>AST® L/S/S+/F/F+/E AST® S acoustic AST® E QuadCore® R QuadCore® C QuadCore® M</p> 
Line 600	<p>AST® L/S/S+/F/F+/E AST® S acoustic AST® E</p> 

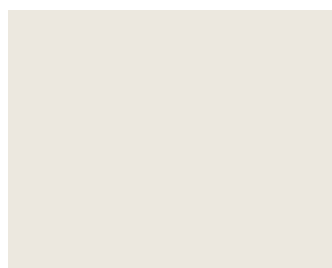
## Standard Colours



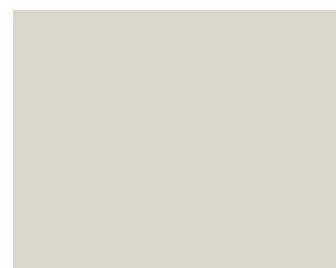
**Bright White** FS-1  
FoodSafe 0,5/0,6



**Pure White** 0101  
PVDF 0,6/Polyester 0,5/0,6/0,7



**Howlite White** 0020  
PVDF 0,6/Polyester 0,5/0,6/0,7



**Howlite Grey** 9002  
PVDF 0,6/Polyester 0,5/0,6



**Goldstone Red** 0029  
PVDF 0,6



**Agate Blue** 0035  
PVDF 0,6



**Agate Grey** 0021  
PVDF 0,6/Polyester 0,5/0,6



**Moonstone** 7035  
PVDF 0,6



**Silver** 9006  
PVDF 0,6



**Silver Matt** 9006M  
Matt PVDF 0,6



**Dark Silver** 9007  
PVDF 0,6



**Dark Silver Matt** 9007M  
Matt PVDF 0,6



**Graphite Grey** 7024  
PVDF 0,6



**Graphite Grey Matt** 7024M  
Matt PVDF 0,6



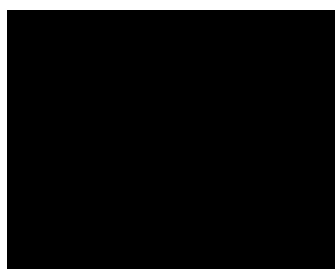
**Hematite Silver** 0045  
PVDF 0,6



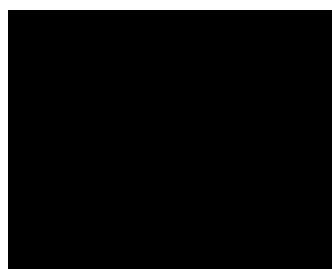
**Hematite Silver Matt** 0045M  
Matt PVDF 0,6



**Onyx** 7016  
PVDF 0,6



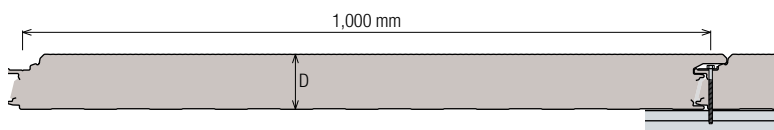
**Jet** 9005  
PVDF 0,6




**Jet Matt** 9005M  
PVDF 0,6

## Hoesch isowand vario® (wall, hidden fix)

POWERED BY  
**QuadCore**  
TECHNOLOGY



- External profiling: M, F, C, L (47 mm)
- Interior profiling: Q, F
- Std. delivery length: 3.00 – 13.50 m
- max. production length: 15 m
- Modular width: 1,000 mm
- Insulation core: Available with QuadCore®
- Std. cover steel thickness outside ( $t_{nom1}$ ): 0.60 mm\*\*
- Std. cover steel thickness inside ( $t_{nom2}$ ): 0.50 mm\*\*

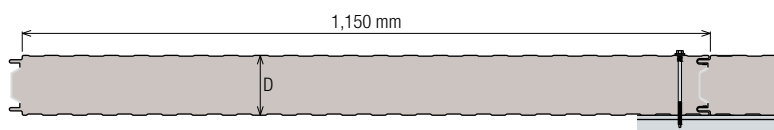
Type of installation	Element thickness (D) mm	Dead load (kg/m²)	U-value (W/m²K) acc. EN 14509 incl. joint influence		Fire behaviour					R <sub>w</sub> (dB)
			IPN 3		Classification acc. EN 13501-1	Fire resistance class for use as wall acc. to EN 13501-2†				
						Exterior wall		Internal wall		
						vertical	horizontal	vertical	horizontal	
Vertical or horizontal	60*	12.1	0.42	-	B-s1,d0	-				27
	80	12.9	0.29							
	100	13.7	0.23							
	120	14.5	0.19							
	140	15.2	0.16							
						EI 30-e (o→i)	-			
						E 30 (o←i)	-			
						EI 30 (o↔i) EW 30 (o↔i)		EI 30 EW 30		

\* standard delivery length: 3.10 – 13.50 m


\*\* other steel thicknesses on request

## Hoesch® Thermowand HF (wall, visible fix)

POWERED BY  
**QuadCore**  
TECHNOLOGY



- External profiling: Q, B, M<sup>1)</sup>, E, W
- Interior profiling: Q, D
- Std. delivery length: 3.00 – 13.50 m
- max. production length: 18.00 m
- Modular width: 1,000, 1,150 mm
- Insulation core: Available with QuadCore®
- Std. cover steel thickness outside ( $t_{nom}$ ): 0.60 mm\*\*
- Std. cover steel thickness inside ( $t_{int}$ ): 0.40 mm\*\*

Type of installation	Element thickness (D) mm	Dead load (kg/m²)	U-value (W/m²K) acc. EN 14509 incl. joint influence		Fire behaviour			R <sub>w</sub> (dB)		
			IPN 3		Classification acc. EN 13501-1	Fire resistance class acc. to EN 13501-2				
						Exterior wall	Internal wall			
Vertical or horizontal	40	10.2	0.59	FM 4881	B-s2,d0	–	–	24		
	60	10.9	0.36		B-s1,d0			25		
	80	11.7	0.27						26	
	100	12.5	0.22							27
	120	13.2	0.18							
	150	14.4	0.15							
	170	15.1	0.13							
	200	16.3	0.11							

1) only possible with 0.6 mm outer cover shell

\* NC: from 80 – 200 mm, 0.5 mm on both sides, supplied without factory sealing tape On-site special sealing of the joint possible (according to requirements).

\*\* Other steel thicknesses on request

† The specifications are only valid for selected sheet thicknesses. Subject to technical modifications. The information provided in this technical data is subject to technical modifications. Details of features can be guaranteed only as far as these are explicitly confirmed in writing on a case by case basis.

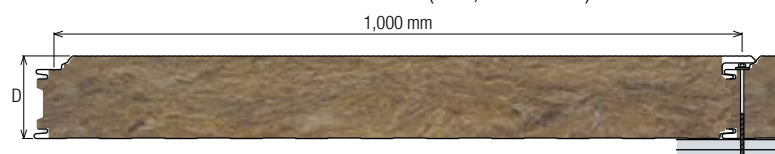
POWERED BY  
**QuadCore**  
TECHNOLOGY

More thermal efficiency less ordinary design.





## Hoesch® isorock vario (wall, hidden fix)

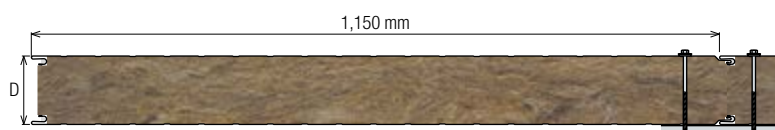


- External profiling: Q, B, E, F, C
- Interior profiling: Q, F
- Std. delivery length: 3.00 – 13.50 m
- max. production length: on request
- Modular width: 1,000 mm
- More modular widths: on request
- Std. cover steel thickness outside ( $t_{nom1}$ ): 0.75 mm\*
- Std. cover steel thickness inside ( $t_{nom2}$ ): 0.50 mm\*

Type of installation	Element thickness (D) mm	Dead load (kg/m²)		U-value (W/m²K) acc. EN 14509 incl. joint influence		Classification acc. EN 13501-1	Fire behaviour								R <sub>w</sub> (dB)	
							Fire resistance class acc. EN 13501-2 <sup>‡</sup>									
		Mineral wool		Exterior wall				Internal wall								
				Type S1			Type S2		Type S1		Type S2					
		Type S1	Type S2	Type S1	Type S2		vertical	horiz.	vertical	horiz.	vertical	horiz.	vertical	horiz.		
Vertical or horizontal	80	19.1	21.8	0.53	0.60	A2-s1,d0	–		–	EI 240-ef (o→i)	–		–		32	
	100	21.1	24.5	0.42	0.47				EI 30 (o↔i)	–			EI 30	–		
	120	23.1	27.2	0.35	0.39		–	EI 120-ef (o→i) E 120 (o↔i)	EI 60 (o↔i)	EI 90 (o↔i)	–		EI 60	EI 90		
	140	25.1	29.9	0.30	0.34				EI 120 (o↔i)				EI 120			
	150	26.1	31.2	0.28	0.31											
	175	28.6	34.6	0.24	0.27											
	200	31.1	37.9	0.21	0.24											

\* other steel thicknesses on request

## Hoesch® isorock HP (wall, visible fix)

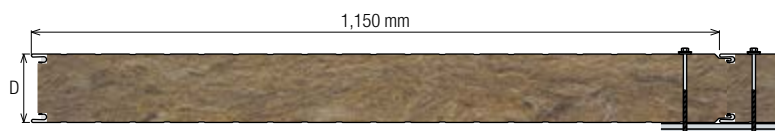


- External profiling: Q, B, E, F
- Interior profiling: Q, F
- Std. delivery length: 3.00 – 13.50 m
- max. production length: 14.3 m from 100 mm thickness
- Modular width: 1,000, 1,150, 1,200 mm
- More modular widths: on request
- Std. cover steel thickness outside ( $t_{nom1}$ ): 0.60 mm\*
- Std. cover steel thickness inside ( $t_{nom2}$ ): 0.50 mm\*


Type of installation	Element thickness (D) mm	Dead load (kg/m²)		U-value (W/m²K) acc. EN ISO 10211-2		<div>FM APPROVED</div>		Fire behaviour										R <sub>w</sub> (dB)	
				Mineral wool			Classification acc. EN 13501-1		Fire resistance class acc. to EN 13501-2 <sup>‡</sup>										
									Exterior wall				Internal wall						
		Type S1		Type S2			Type S1		Type S2		Type S1		Type S2		Type S1		Type S2		
		Type S1	Type S2	Type S1	Type S2		Type S1	Type S2	Type S1	Type S2	vert.	horiz.	vert.	horiz.	vert.	horiz.	vert.		horiz.
Vertical or horizontal	80	18.4	18.8	0.54	0.54	–	A2-s1,d0	currently in the certification process						currently in the certification process				32	
	100	20.7	21.2	0.44	0.44														
	120	23.0	23.6	0.37	0.37														
	150	26.4	27.2	0.29	0.29														
	175	29.3	30.2	0.25	0.25														
	200	32.2	33.2	0.22	0.22														

\* other steel thicknesses on request

## Hoesch® isorock HP akustik\*\* (wall, visible fix)



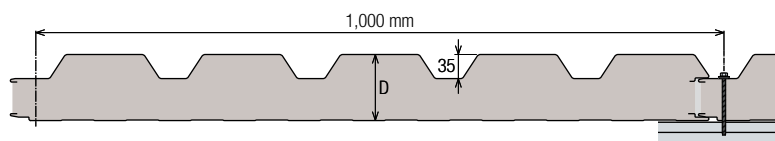
- External profiling: Q, B, M, E, F
- Interior profiling: F (perforated)
- Std. delivery length: 2.00 m – 8.00 m
- max. production length: 14.3 m
- Modular width: 1,000, 1,150, 1,200 mm
- More modular widths: on request
- Std. cover steel thickness outside ( $t_{nom1}$ ): 0.50 mm\*
- Std. cover steel thickness inside ( $t_{nom2}$ ): 0.60 mm\*

Type of installation	Element thickness (D) mm	Dead load (kg/m²)	U-value (W/m²K) acc. EN ISO 10211-2		Fire behaviour						R <sub>w</sub> (dB)		
			Mineral wool		Fire resistance class acc. to EN 13501-2 <sup>‡</sup>								
					Exterior wall			Internal wall					
					Type S1		Type S1						
		vert.		horiz.		vert.		horiz.					
Vertical or horizontal	80	17.2	0.54	-	A2-s1,d0	-		-		35			
	100	19.5	0.44										
	120	21.8	0.37										
	140	24.1	0.32										
	150	25.3	0.29										


\* other steel thicknesses on request

\*\* for indoor application only

## Hoesch® Thermowand TL (wall, visible fix)

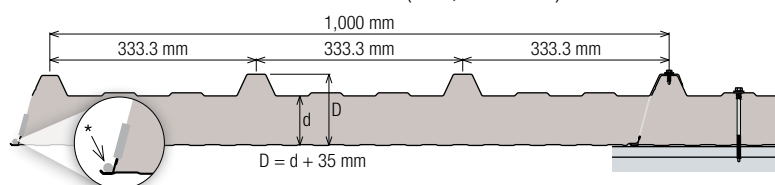


- External profiling: T
- Interior profiling: Q
- Std. delivery length: 3.00 – 13.50 m
- max. production length: 18.00 m
- Modular width: 1,000 mm
- Std. cover steel thickness outside ( $t_{nom1}$ ): 0.60 mm\*
- Std. cover steel thickness inside ( $t_{nom2}$ ): 0.40 mm\*




Type of installation	Element thickness (D) mm	Dead load (kg/m²)	U-value (W/m²K) acc. EN ISO 10211-2		Fire behaviour						R <sub>w</sub> (dB)
			IPN 3		Classification acc. EN 13501-1	Fire resistance class acc. to EN 13501-2 <sup>+</sup>					
						Exterior wall		Internal wall			
						vertical	horizontal	vertical	horizontal		
Vertical or horizontal	96	12.6	0.34	FM 4880 FM 4881	B-s2,d0	—				26	
	130	13.9	0.22								

\* other steel thicknesses on request

## Hoesch® isodach RD (roof, visible fix)



- External profiling: trapezoidal
- Interior profiling: Q
- Std. delivery length: 3.00 – 13.50 m
- max. production length: 22.5 m
- Max. cut back: 300 mm
- PVC sealing tape in overlap joint – factory made
- Std. cover steel thickness outside ( $t_{nom1}$ ): 0.50 mm\*\*\*
- Std. cover steel thickness inside ( $t_{nom2}$ ): 0.40 mm\*\*\*

Minimum roof pitch application	Core thickness (d) mm <sup>1)</sup>	Dead load (kg/m²)	U-value (W/m²K) acc. EN 14509 incl. joint influence			Fire behaviour		R <sub>w</sub> (dB)
			IPN	IPN 1		Classification acc. EN 13501-1	Fire resistance class acc. to EN 13501-2 <sup>‡</sup>	
 4 ° (7 %)  6 ° (10 %)	25	9.4	0.78	–	–	B-s1,d0	–	26
	40	10.0	0.52	–				
	60	10.5	–	0.33	–	B-s2,d0	REI 30**	
	80	11.2		0.25				
	100	11.9		0.21				
	120	12.6		0.17				
	140	13.3		0.15				
	160	13.9		0.13				

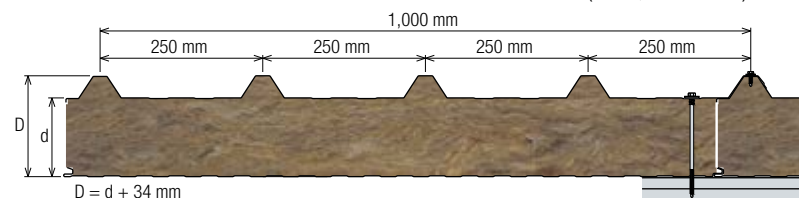
1) 50 mm and 70 mm available upon request - minimum quantity 1,000 sqm

\* with additional sealing tape on-site




\*\* For element thicknesses > 100 mm, please observe item 6.2 of the classification report.

\*\*\* other steel thicknesses on request

## Hoesch® Thermorock Dach FG (roof, visible fix)



- External profiling: trapezoidal
- Interior profiling: Q
- Std. delivery length: 3.00 – 13.00 m
- max. production length: 13.00 m
- Max. cut back: 300 mm
- Std. cover steel thickness outside ( $t_{nom1}$ ): 0.60 mm
- Std. cover steel thickness inside ( $t_{nom2}$ ): 0.50 mm

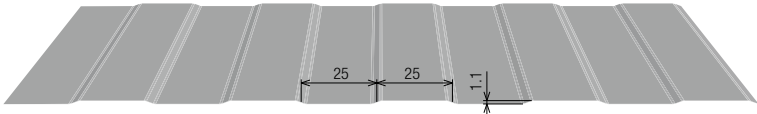
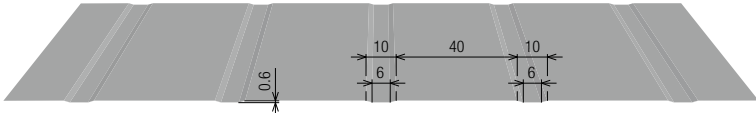
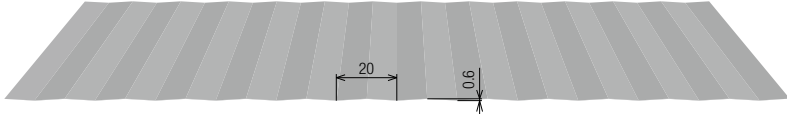
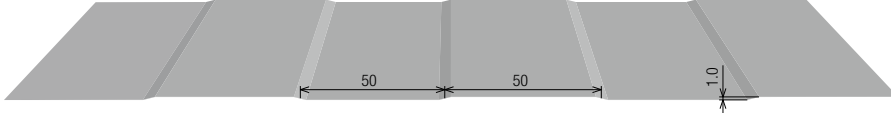
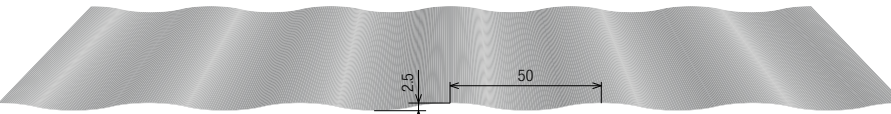

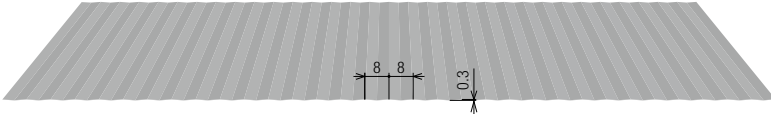
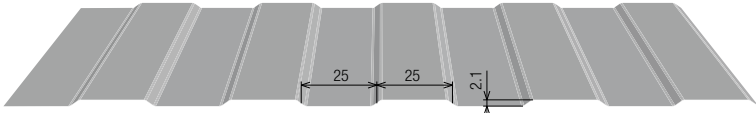
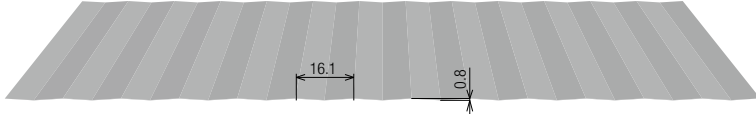
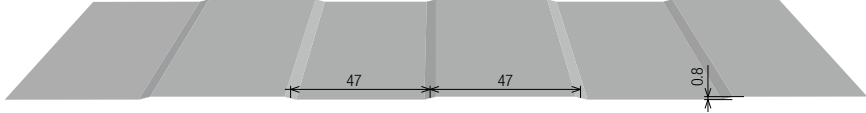
Minimum roof pitch application	Core thickness (d) mm <sup>1)</sup>	Dead load (kg/m²)	U-value (W/m²K) acc. EN 14509 incl. joint influence	 FM APPROVED	Fire behaviour		R <sub>w</sub> (dB)
			Mineral wool		Classification acc. EN 13501-1	Fire resistance class acc. to EN 13501-2 <sup>+</sup>	
 5 ° (8.7 %)  8 ° (14.1 %)	80	20.5	0.53	-	-	REI 90	31
	100	21.8	0.42		A2-s1,d0	REI 120	32
	120	24.0	0.35				
	150	27.3	0.28				
	175	30.1	0.24				
	200	32.8	0.21				

The information provided in this technical data is subject to technical modifications.

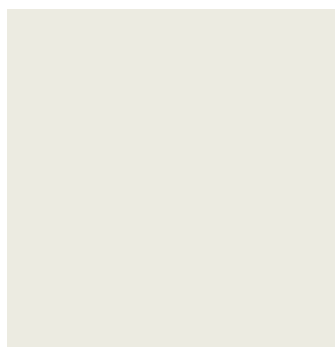
Details of features can be guaranteed only as far as these are explicitly confirmed in writing on a case by case basis.



## Profilations

Profiling	Dimensions/Used on panel
<b>Q</b> (minibox)	<div> Hoesch isowand vario®  Hoesch® Thermowand HF  Hoesch® isorock vario Hoesch® isorock HP  Hoesch® isorock HP akustik  Hoesch® Thermowand TL  Hoesch® isodach RD </div> 
<b>B</b> (box)	<div> Hoesch® isorock vario Hoesch® isorock HP  Hoesch® isorock HP akustik  Hoesch® Thermowand HF </div> 
<b>M</b> (micro)	<div> Hoesch isowand vario®  Hoesch® Thermowand HF  Hoesch® isorock HP  Hoesch® isorock HP akustik </div> 
<b>E</b> (eurobox)	<div> Hoesch isowand vario®  Hoesch® isorock vario Hoesch® isorock HP  Hoesch® isorock HP akustik </div> 
<b>W</b> (wave)	<div> Hoesch® Thermowand HF </div> 
<b>F</b> (flat)	<div> Hoesch isowand vario®  Hoesch® isorock vario Hoesch® isorock HP  Hoesch® isorock HP akustik </div> 
<b>C</b> (micro Hoesch 8 mm)	<div> Hoesch® isorock vario </div> 
<b>D</b> (deep minibox)	<div> Hoesch isowand vario®  Hoesch® Thermowand HF </div> 
<b>V</b> (V-profile)	<div> Hoesch isowand vario® </div> 
<b>L</b> (Linear)	<div> Hoesch isowand vario® </div> 

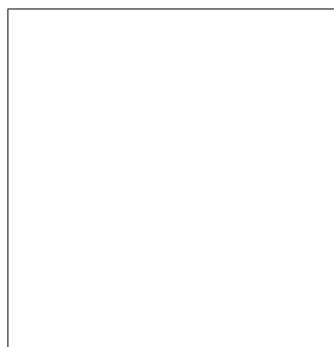
## Standard colours



**PES 9002**



**PES 9006**



**PES 9010**



**PES 3000**  
(RD)



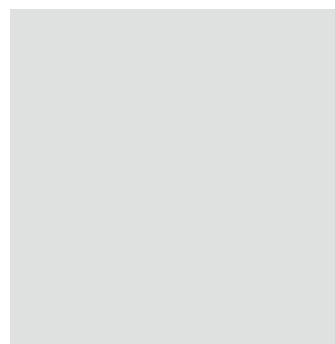
**PES 3009**  
(RD)



**PES 5010**  
(RD, NF)



**PES 6020**  
(RD, NF)



**PES 7035**  
(RD, IV, HW, NF, HH)



**PES 7016**



**PES 8004**  
(RD)



**PES 9007**



**Spectrum 9006**  
(RD, NF)



**Spectrum 9007**  
(RD, NF)



**Spectrum 7016**  
(RD, NF)



**Spectrum 3009**  
(RD)

<sup>1)</sup> Please note delivery time and minimum order quantity. Other colours and coatings available on request.

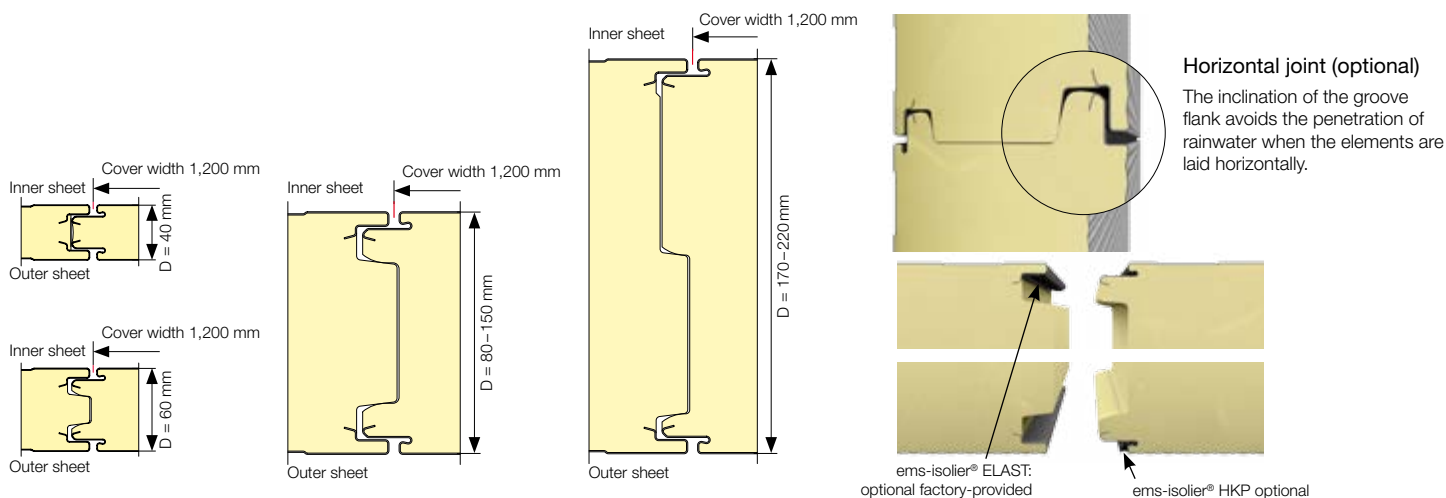
## ems-isolier® Panel EM



- Insulation core: PIR (IPN3)
- External profiling: L, H, V, E (on request)
- Interior profiling: L, H, D, E (on request)
- External steel sheets: Standard coating SP 25 µm
- Internal steel sheets: Standard coating DU 15 µm
- Max. production length: 20 m, lengths less than 2 m on request
- Modular width: 1,200 mm (other widths on request)
- Conformity: acc. to EN 14509, CE marking
- Approval: (load bearing) DIBt approval (abZ) No. Z-10.4-679

Element thickness (D) mm	Dead load (kg/m²)	U-value (W/m²K) acc. EN 14509 incl. joint influence	Fire behaviour				R <sub>w</sub> (dB)	
			Classification acc. EN 13501-1	Fire resistance class for use as wall acc. to EN 13501-2				
				Exterior wall		Internal wall		
				vertical	horizontal	vertical		horizontal
40	10.8	0.55	B-s2,d0*	-	-	-	-	25
60	12.4	0.36	B-s1,d0					
80	13.2	0.26						
100	14.0	0.21						
120	14.8	0.18						
140	15.5	0.15						
150	15.9	0.14						
170	16.7	0.12						
200	17.9	0.11		EI 30 (o ↔ i) EI 45 (o ↔ i) EW 60 (o ↔ i)	EI 30 EI 45 EW 60			
220	18.7	0.10						

\* only for  $t_{nom1}/t_{nom2} = 0.60/0.50$  mm



Note: Deviation in colour and colour changes on the cut surface of the IPN3 insulation core are based on weather influence. While panels are stored outside UV-light might modify the colour of the core. This does not affect the quality of the panel and is no reason for complaint.

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## ems-isolier® Panel POLAR



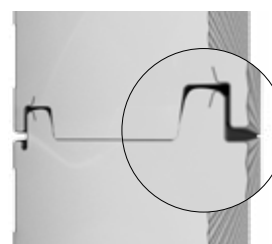
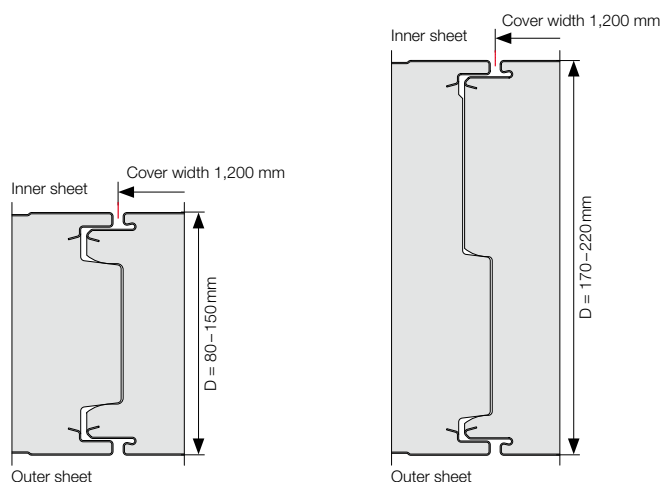
POWERED BY  
**QuadCore**  
TECHNOLOGY

- External profiling: L, H, V, E (on request)
- Interior profiling: L, H, D, E (on request)
- External steel sheets: Standard coating SP 25 µm
- Internal steel sheets: Standard coating DU 15 µm
- Max. production length: 24 m, lengths less than 2 m on request
- Modular width: 1,200 mm (other widths on request)

Element thickness (D) mm	Dead load (kg/m²)	U-value <sup>1)</sup> (W/m²K) acc. EN 14509 incl. joint influence	Fire behaviour					R <sub>w</sub> (dB)
			Classification acc. EN 13501-1	Fire resistance class for use as wall acc. to EN 13501-2				
				Exterior wall		Internal wall		
				vertical	horizontal	vertical	horizontal	
80	12.4	0.23	B-s2,d0	–	–	–	–	25
100	13.2	0.18						
120	14.0	0.15						
140	14.8	0.13						
150	15.2	0.12						
170	16.0	0.11						
200	17.2	0.09						
220	18.0	0.08						
				EI 30 (o ↔ i) EW 30 (o ↔ i)		EI 30 EW 30		
				EI 60 (o ↔ i) <sup>2)</sup> EW 60 (o ↔ i) <sup>2)</sup>		EI 60 <sup>2)</sup> EW 60 <sup>2)</sup>		

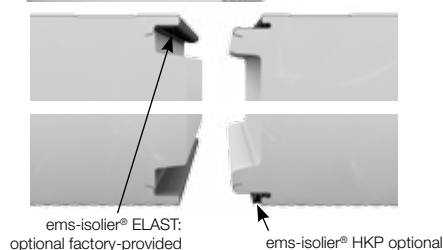
<sup>1)</sup> Assessment value based on the test report No. L1-16-109 and 050-020472

<sup>2)</sup> only for  $t_{\text{nom1}}/t_{\text{nom2}} = 0.60/0.60$  mm



### Horizontal joint (optional)

The inclination of the groove flank avoids the penetration of rainwater when the elements are laid horizontally.



Note: Deviation in colour and colour changes on the cut surface of the QuadCore® insulation core are based on weather influence.

While panels are stored outside UV-light might modify the colour of the core. This does not affect the quality of the panel and is no reason for complaint.

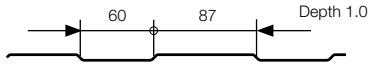

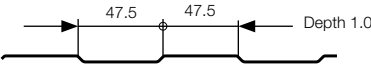

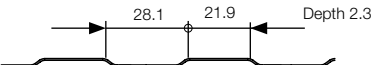

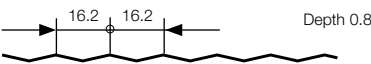



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# Profilations and Colours

## Profilations

Profiling	Outer sheet	Inner sheet	
<b>L</b> Slightly profiled 	✓	✓	
<b>H</b> Slightly profiled 	✓	✓	
<b>D</b> deep Profile 		✓	
<b>V</b> V-profiled 	✓		
<b>E</b> Flat 	on request	on request	

Nominal dimensions in mm, tolerances in accordance with works specifications.

## Standard shades

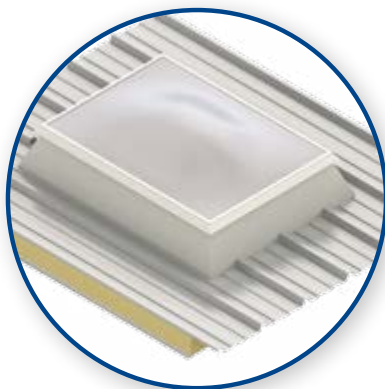
Type of panel		Wall/Ceiling	
		EM/Polar	
Width module		1,200 mm	
Steel		1,270 × 0.50 mm	1,270 × 0.60 mm
Stainless steel	V2A 1.4301	✓	
PEI (DU)	9002	✓	✓
PES (SP)	9001	✓	✓
	9002	✓	✓
	9006		✓
	9010	✓	✓
LMF	9001		✓
	9003		✓
	9010		✓
FS 4000	9002		✓
	9010		✓

More colours on request.

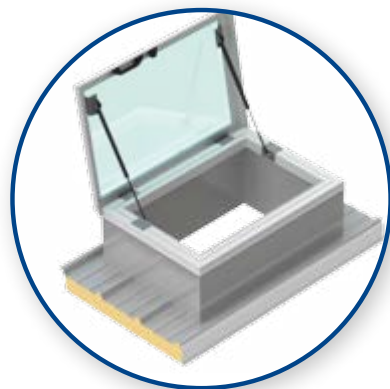
## DAYLIGHT- AND VENTILATION SOLUTIONS



Rooflight



Lightdome



Built-In Hatch



Built-In Velux Window

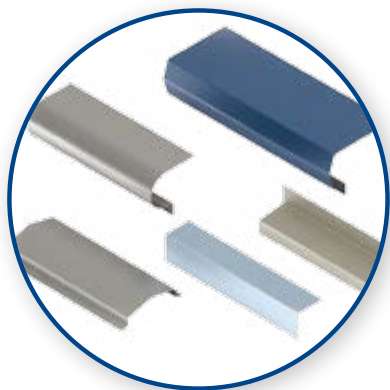


Lightdomes

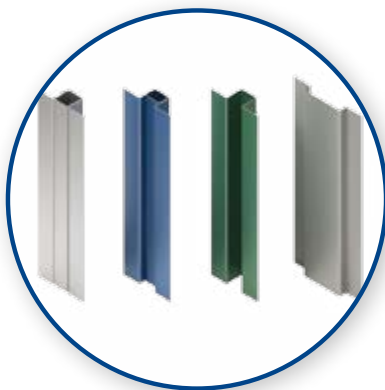


Louvres

## FIXINGS AND AESTHETIC ELEMENTS



Flashings



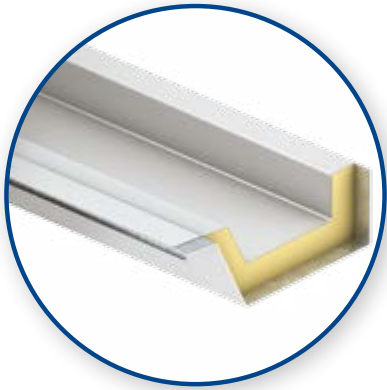
Top hats



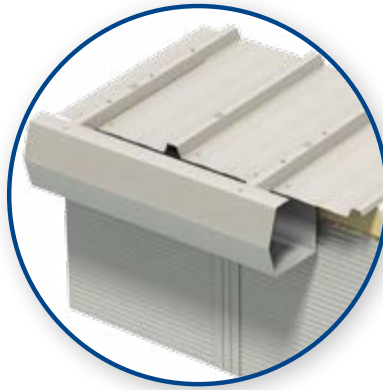
Fixings



## INSULATED GUTTER SYSTEMS

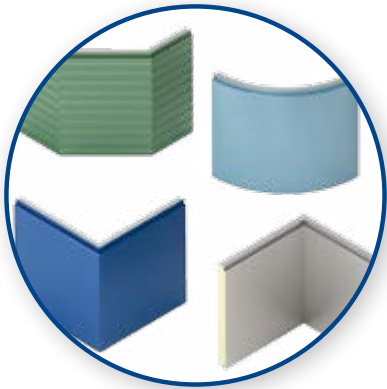


Insulated gutters

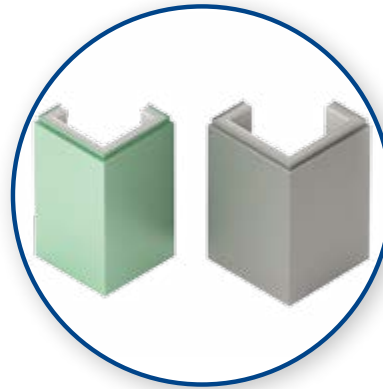


Highline Gutter

## INSULATED CORNER ELEMENTS

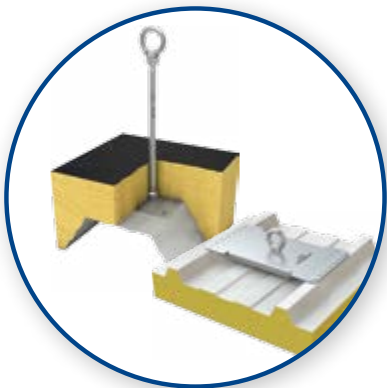


Insulated Corners



Column Casings and Facings

## SAFETY AND SPECIAL SOLUTIONS



Safety Solutions



Barriersystems  
KPSBarrier S/D/H



Barriersystems  
KPSPost



### **Paroc Panel System**

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Parainen, FI-21600  
Finland

### **Jan Rysavy**

Sales Manager

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