

SOLAR THERMAL **COLLECTORS**

VENMAN flat solar thermal collectors have an undivided selective coating or Strip, powerful insulation and have been designed with high thermal capacity and low pressure drop. Further down you will find all the technical features of the available models.

H81 Collector



TECHNICAL SPECIFICATIONS

TECHNICAL DATA	MEASUREMENT UNIT (SI)	COLLECTOR'S CHARACTERISTICS H81 - FULL FACE			
		H81 – 15	H81 – 20	H81 – 22	H81 – 25
TYPE					
Extrenal dimensions (height × width × thickness)	mm	1460×960×80	1960×960×80	1960×1040×80	1960×1210×80
Gross area	m ²	1,40	1,88	2,04	2,37
Aperture area	m ²	1,32	1,79	2,01	2,27
Absorber area	m ²	1,35	1,83	1,71	2,33
Absorber capacity	L	1,45	1,63	1,63	1,81
Compact Tray / thickness	mm	Pre-painted galvanized metal sheet / 0.5			
Glass		Clear, tempered			
Insulation (Back and side) thickness / density	mm / Kg/m ³	Mineral glass wool 30mm / density 24 kg/m ³ . Product specifically designed for collectors, with very low conductivity to avoid losses. It is certified that it prevents glass fogging of the collector.			
Absorber		Copper harp-type, Full Face Aluminum Selective Surface. Laser welding.			
Absorbtion	%	95			
Emission	%	5			
Header copper tube Ø / thickness	mm	Ø 22 / 0,70			
Riserer copper tube Ø / thickness	mm	Ø 8 / 0,40			
Number of vertical risers	No.	10	10	10	11
Maximum operating pressure	Bar	10			
Heat transfer mean		Antifreeze and water solution (<i>monopropylene glycol</i>)			
Layout		Vertical			
Weight (empty & packed)	Kg	30	37	38	41





**AVAILABLE
IN DIFFERENT
COLOURS**
(PRE-PAINTED
GALVANIZED
STEEL SHEET)



RAL 9006 RAL 9007

**ALTERNATIVE
EXTERNAL
MATERIALS**



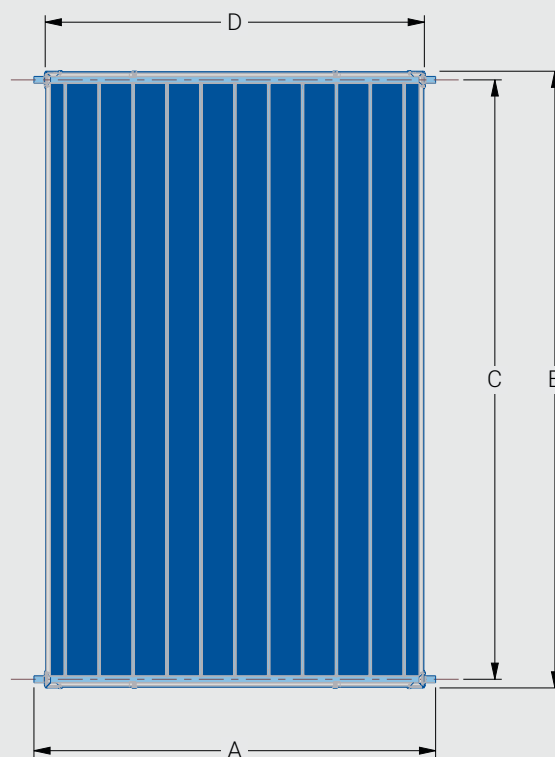
MAGNELIS

H81 – 15	
A	1030 mm
B	1460 mm
C	1405 mm
D	960 mm

H81 – 20	
A	1030 mm
B	1960 mm
C	1910 mm
D	960 mm

H81 – 22	
A	1030 mm
B	1960 mm
C	1910 mm
D	1040 mm

H81 – 25	
A	1280 mm
B	1960 mm
C	1910 mm
D	1210 mm



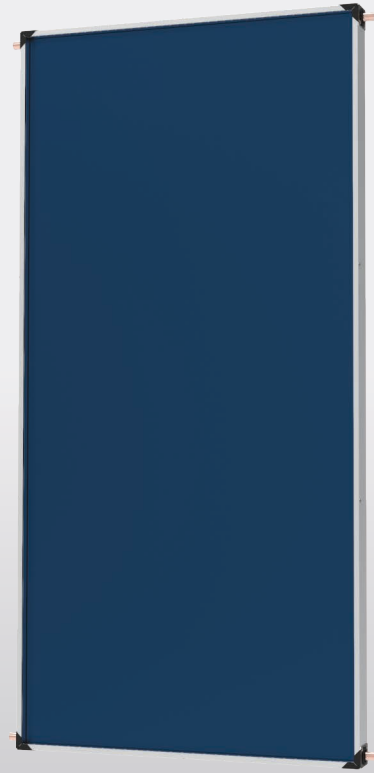
H81 Collector Aluminium



TECHNICAL SPECIFICATIONS

TECHNICAL DATA	MEASUREMENT UNIT (SI)	COLLECTOR'S CHARACTERISTICS H81 ALUMINIUM - FULL FACE		
		H81 – 20 ALUMINIUM	H81 – 22 ALUMINIUM	H81 – 25 ALUMINIUM
Extrenal dimensions (height × width × thickness)	mm	1965×960×80	1960×1040×80	1965×1210×80
Gross area	m ²	1,88	2,04	2,38
Aperture area	m ²	1,79	2,01	2,28
Absorber area	m ²	1,85	1,71	2,34
Absorber capacity	L	1,52	1,63	1,74
Compact Tray / thickness	mm	Aluminum sheet metal / 0,60		
Glass		Clear, tempered		
Insulation (Back and side) thickness / density	mm / Kg/m ³	Mineral glass wool 30mm / density 24 kg/m ³ . Product specifically designed for collectors, with very low conductivity to avoid losses. It is certified that it prevents glass fogging of the collector.		
Absorber		Copper harp-type, Full Face Aluminum Selective Surface. Laser welding.		
Absorbtion	%	95		
Emission	%	5		
Header copper tube Ø / thickness	mm	Ø 22 / 0,70		
Riserer copper tube Ø / thickness	mm	Ø 8 / 0,40		
Number of vertical risers	No.	10	10	11
Maximum operating pressure	Bar	10		
Heat transfer mean		Antifreeze and water solution (<i>monopropylene glycol</i>)		
Layout		Vertical		
Weight (empty & packed)	Kg	27	29	33

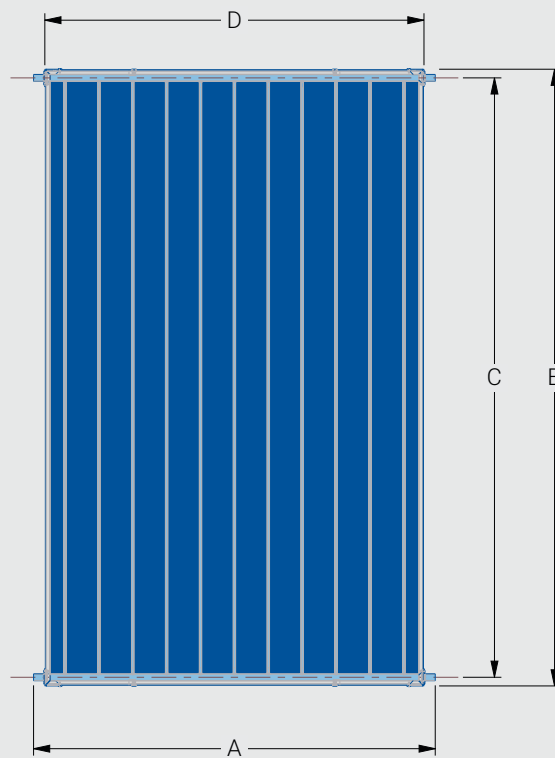




H81 – 20 ALUMINIUM	
A	1030 mm
B	1965 mm
C	1910 mm
D	960 mm

H81 – 22 ALUMINIUM	
A	1030 mm
B	1965 mm
C	1910 mm
D	1040 mm

H81 – 25 ALUMINIUM	
A	1280 mm
B	1965 mm
C	1910 mm
D	1210 mm



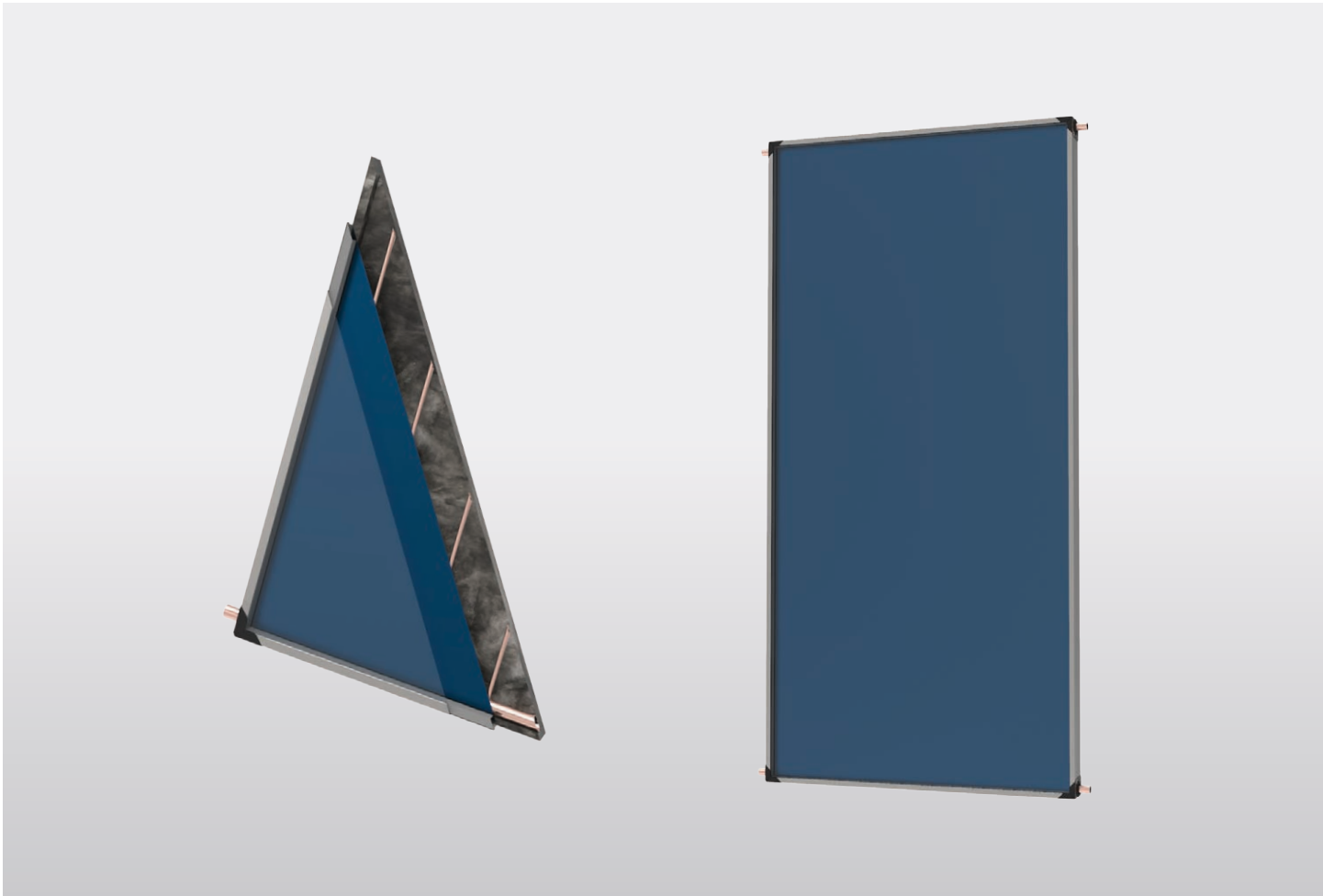
H81 MP Collector



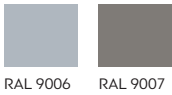
TECHNICAL SPECIFICATIONS

TECHNICAL DATA	MEASUREMENT UNIT (SI)	COLLECTOR'S CHARACTERISTICS H81 MP - FULL FACE	
		H81 MP – 20	H81 MP – 25
TYPE			
Extrenal dimensions (height × width × thickness)	mm	1970×965×80	1970×1220×80
Gross area	m ²	1,90	2,40
Aperture area	m ²	1,80	2,29
Absorber area	m ²	1,85	2,34
Absorber capacity	L	1,60	1,90
Compact Tray / thickness	mm	Pre-painted galvanized metal sheet / 0.5	
Glass		Low iron, mat prismatic, extra clear, tempered	
Insulation (Back and side) thickness / density	mm / Kg/m ³	Mineral glass wool 30mm / density 24 kg/m ³ . Product specifically designed for collectors, with very low conductivity to avoid losses. It is certified that it prevents glass fogging of the collector.	
Absorber		Copper harp-type, Full Face Aluminum Selective Surface. Laser welding.	
Absorbtion	%	95	
Emission	%	5	
Header copper tube Ø / thickness	mm	Ø 22 / 0,70	
Riserer copper tube Ø / thickness	mm	Ø 8 / 0,40	
Number of vertical risers	No.	10	11
Maximum operating pressure	Bar	10	
Heat transfer mean		Antifreeze and water solution (<i>monopropylene glycol</i>)	
Layout		Vertical	
Weight (empty & packed)	Kg	33	41





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STEEL SHEET)



RAL 9006 RAL 9007

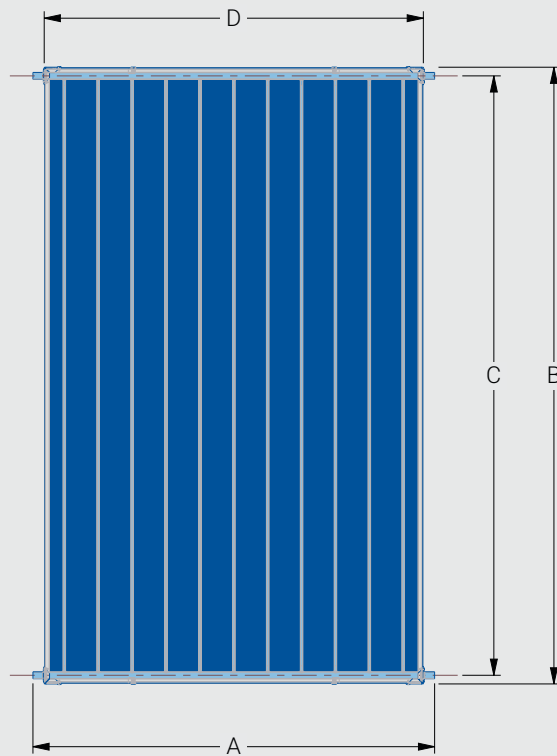
ALTERNATIVE
EXTERNAL
MATERIALS



MAGNELIS

H81 MP – 20	
A	1030 mm
B	1960 mm
C	1910 mm
D	960 mm

H81 MP – 25	
A	1280 mm
B	1960 mm
C	1910 mm
D	1210 mm



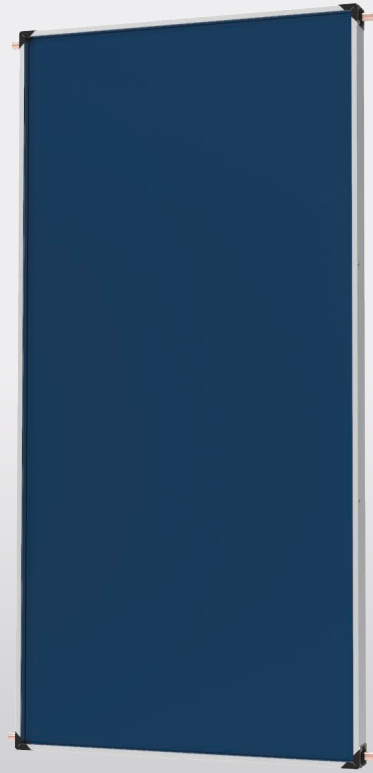
H81 MP Collector Aluminium



TECHNICAL SPECIFICATIONS

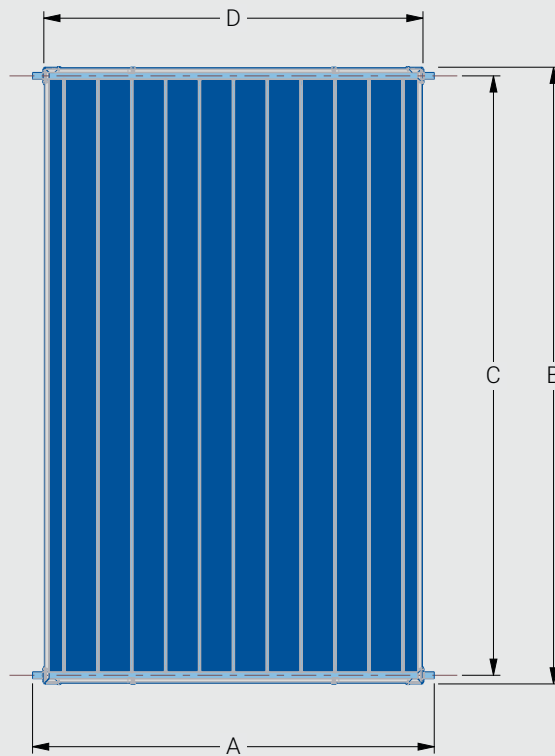
TECHNICAL DATA	MEASUREMENT UNIT (SI)	COLLECTOR'S CHARACTERISTICS H81 MP ALUMINIUM - FULL FACE	
		H81 MP – 20 ALUMINIUM	H81 MP – 25 ALUMINIUM
TYPE			
Extrenal dimensions (height × width × thickness)	mm	1970×965×80	1970×1220×80
Gross area	m ²	1,90	2,40
Aperture area	m ²	1,80	2,29
Absorber area	m ²	1,85	2,34
Absorber capacity	L	1,60	1,90
Compact Tray / thickness	mm	Aluminum sheet metal / 0,60	
Glass		Low iron, mat prismatic, extra clear, tempered	
Insulation (Back and side) thickness / density	mm / Kg/m ³	Mineral glass wool 30mm / density 24 kg/m ³ . Product specifically designed for collectors, with very low conductivity to avoid losses. It is certified that it prevents glass fogging of the collector.	
Absorber		Copper harp-type, Full Face Aluminum Selective Surface. Laser welding.	
Absorbtion	%	95	
Emission	%	5	
Header copper tube Ø / thickness	mm	Ø 22 / 0,70	
Riserer copper tube Ø / thickness	mm	Ø 8 / 0,40	
Number of vertical risers	No.	10	11
Maximum operating pressure	Bar	10	
Heat transfer mean		Antifreeze and water solution (<i>monopropylene glycol</i>)	
Layout		Vertical	
Weight (empty & packed)	Kg	27	33





H81 MP – 20 ALUMINIUM	
A	1030 mm
B	1965 mm
C	1910 mm
D	960 mm

H81 MP – 25 ALUMINIUM	
A	1280 mm
B	1965 mm
C	1910 mm
D	1210 mm



H81

Horizontal Collector



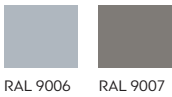
TECHNICAL SPECIFICATIONS

TECHNICAL DATA	MEASUREMENT UNIT (SI)	COLLECTOR'S CHARACTERISTICS H81S - FULL FACE	
		H81S – 20	H81S – 25
TYPE			
Extrenal dimensions (height × width × thickness)	mm	960×1965×80	1210×1965×80
Gross area	m ²	1,88	2,38
Aperture area	m ²	1,79	2,28
Absorber area	m ²	1,85	2,34
Absorber capacity	L	1,94	2,15
Frame / thickness	mm	Pre-painted galvanized metal sheet / 0,5	
Glass		Clear, tempered	
Insulation (Back and side) thickness / density	mm / Kg/m ³	Mineral glass wool 30mm / density 24 kg/m ³ . Product specifically designed for collectors, with very low conductivity to avoid losses. It is certified that it prevents glass fogging of the collector.	
Absorber		Copper harp-type, Full Face Aluminum Selective Surface. Laser welding.	
Absorbtion	%	95	
Emission	%	5	
Header copper tube Ø / thickness	mm	Ø 22 / 0,70	
Riserer copper tube Ø / thickness	mm	Ø 8 / 0,40	
Number of vertical risers	No.	16	17
Maximum operating pressure	Bar	10	
Heat transfer mean		Antifreeze and water solution (<i>monopropylene glycol</i>)	
Layout		Horizontal	
Weight (empty & packed)	Kg	34	42





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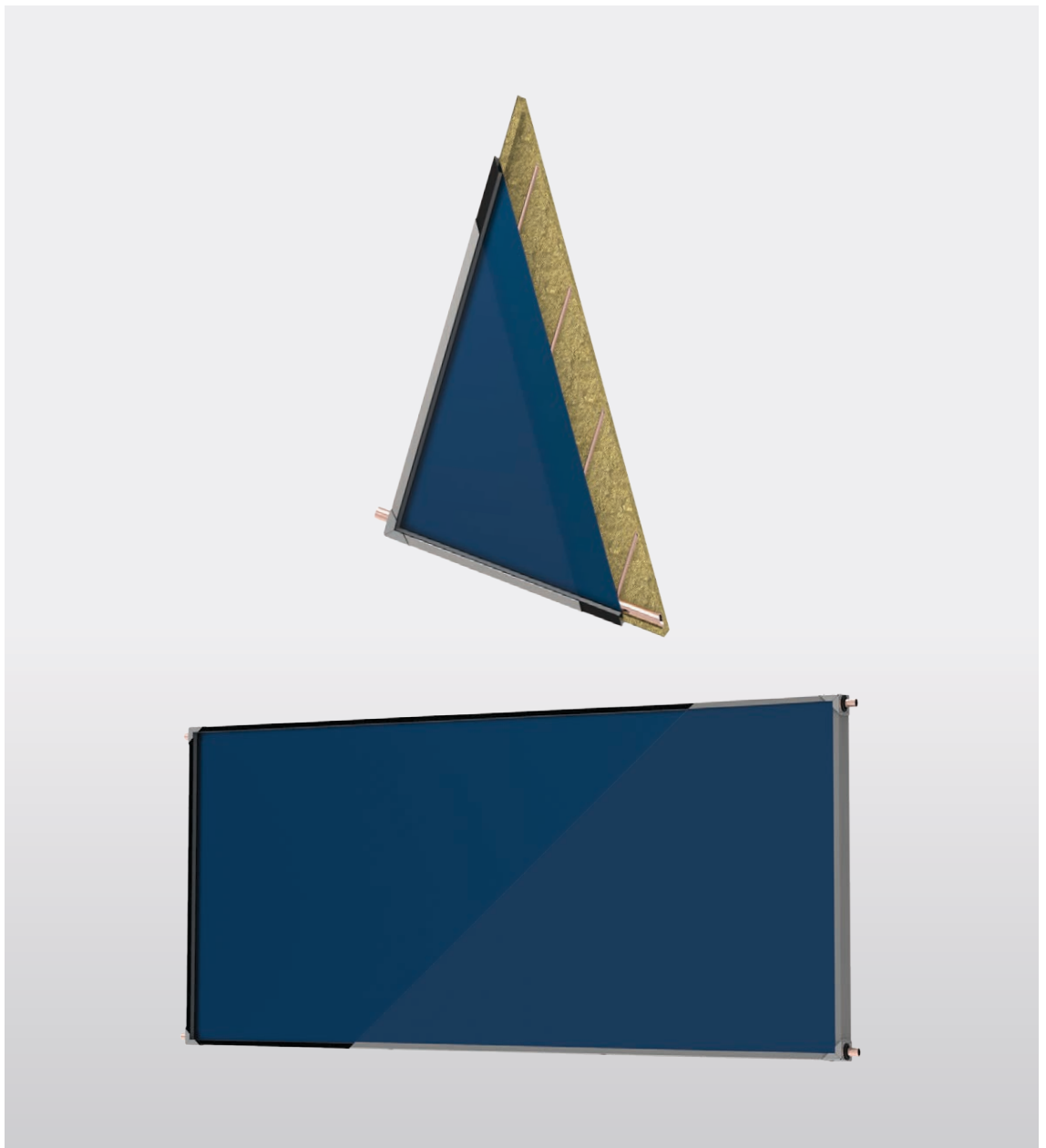


RAL 9006 RAL 9007

ALTERNATIVE
EXTERNAL
MATERIALS

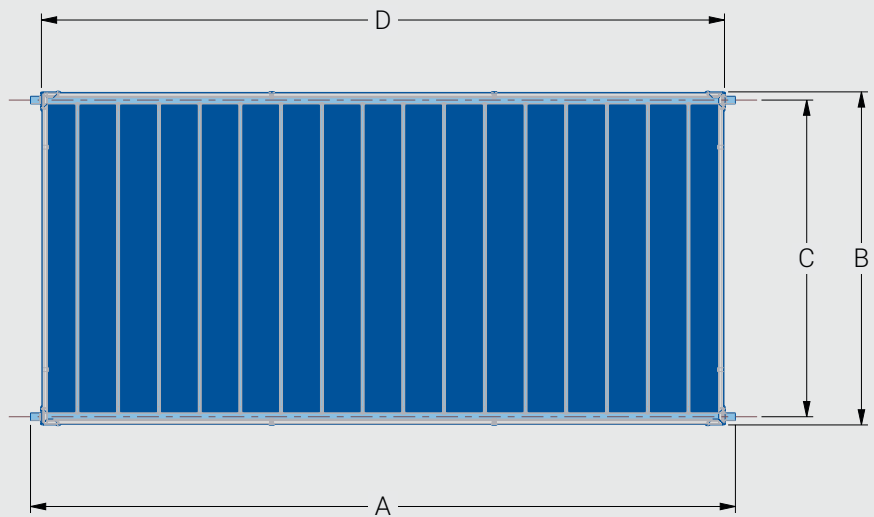


MAGNELIS



H81S – 20	
A	2028 mm
B	960 mm
C	911 mm
D	1965 mm

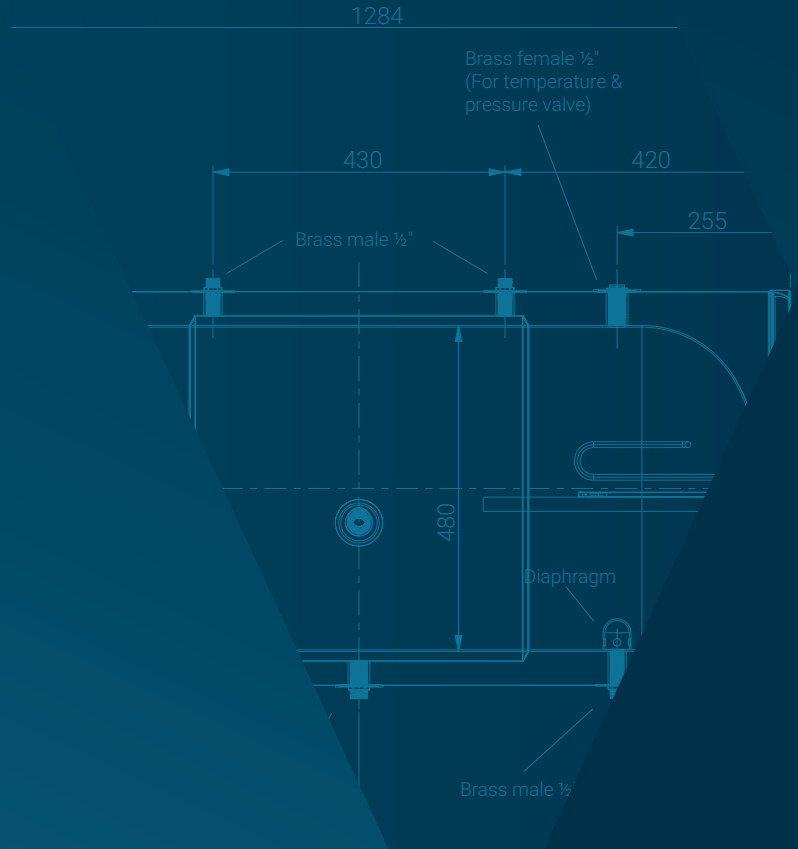
H81S – 25	
A	2028 mm
B	1210 mm
C	1161 mm
D	1965 mm







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