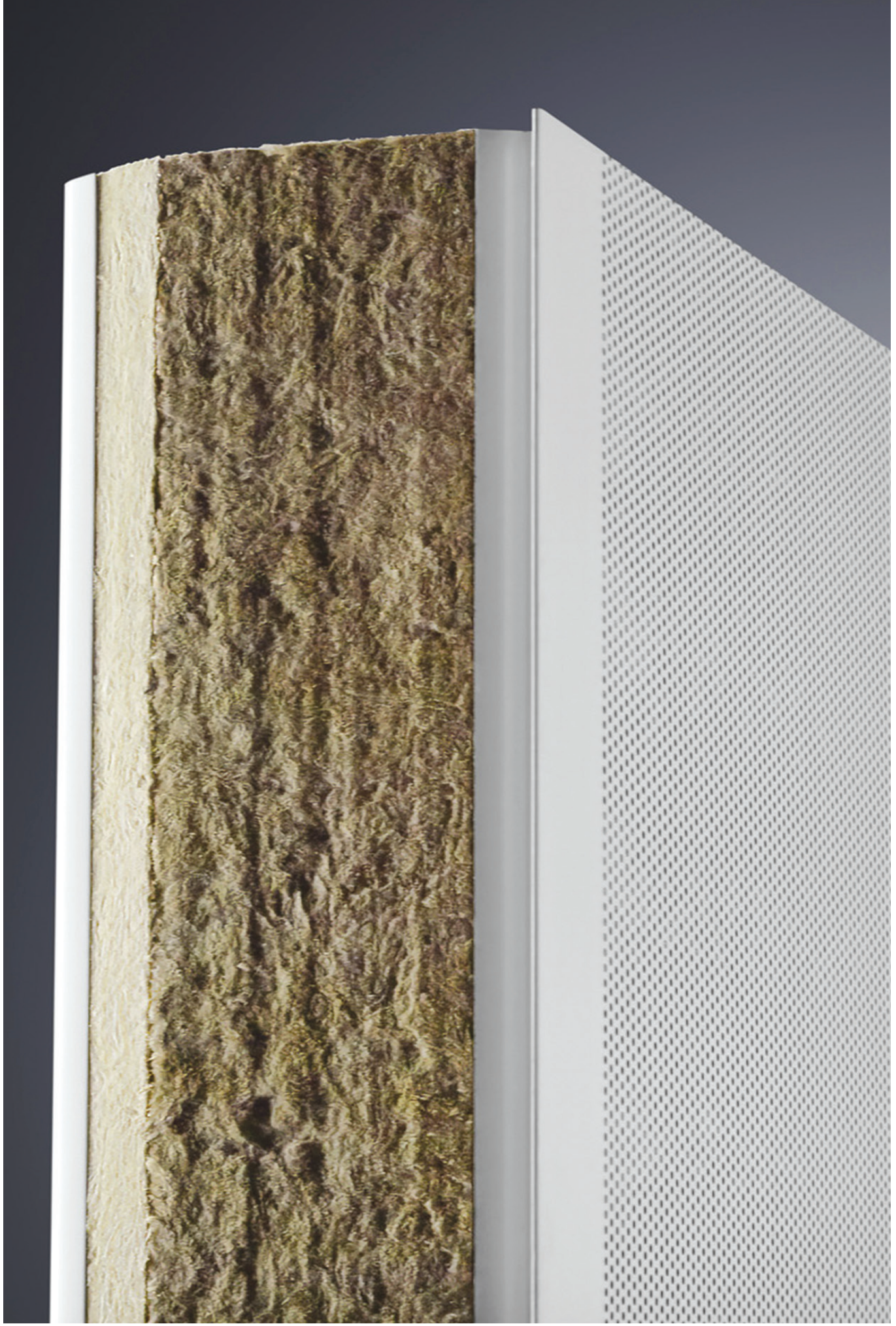
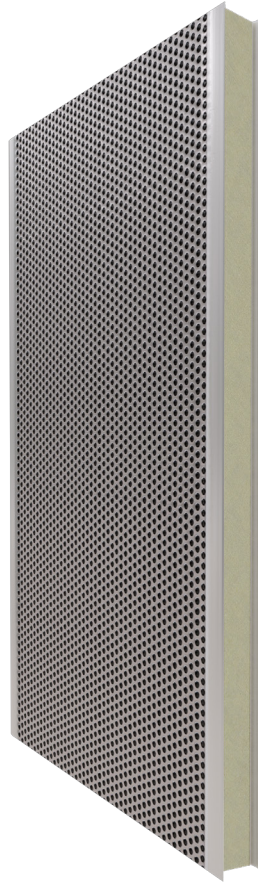




ThermaMagma WAL EchoLock

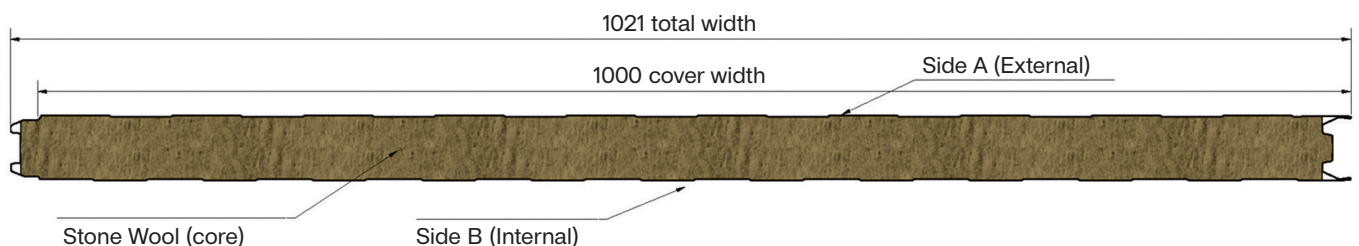
Self-supporting, exposed-fix insulated wall panels with an external metal facing, an internal perforated metal facing, and a stone wool core. They are suitable for wall cladding where enhanced acoustic performance is required



Available in

Effective width 1000mm and 1170mm | Nominal thickness from 50mm to 200 mm

Bespoke lengths: 2m to 14m, depending on project requirements

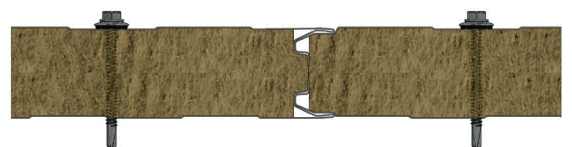


They are fixed to the supporting structure using the standard concealed-fix method.

They can be installed either vertically or horizontally.

For horizontal installation, the use of a top hat is recommended to cover the vertical joint.

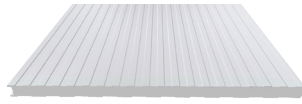
Sealing materials must be used on both horizontal and vertical joints.



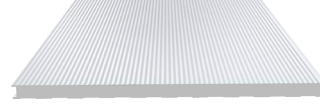
External facing profile options



Flat



Box 100 (50-50)



Microrib

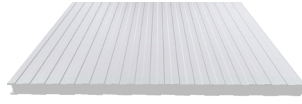


Embossed

Internal facing profile options



Flat



Box 83 (39-44)

Holes Ø3mm, 5mm pitch (centre-to-centre), open area 28% of total surface.

Available in two colours: RAL 9005 to reduce reflection and RAL 9002.

Technical Specifications

Dimensional Tolerances

(according to the EN 14509)

Metal Sheet Thickness > 0,50mm

Panel thickness	$\pm 2 \text{ mm} / \pm 2 \%$	$D \leq 100 \text{ mm} / D > 100 \text{ mm}$
Deviation from flatness	$\leq 0,6 \text{ mm} / \leq 1,0 \text{ mm} / \leq 1,5 \text{ mm}$	$Li = 200 \text{ mm} / Li = 400 \text{ mm}$ $Li = 700 \text{ mm}$
Depth of light profile	$\pm 30 \% / \pm 0,3 \text{ mm} / \pm 10 \%$	$ds \leq 1 \text{ mm} / 1 \leq ds < 3 \text{ mm}$ $3 \leq ds < 5 \text{ mm}$
Panel length	$\pm 5 \text{ mm} / \pm 10 \text{ mm}$	$L \leq 3000 \text{ mm} / L \leq 3000 \text{ mm}$
Effective cover width	$\pm 2 \text{ mm}$	$W = 1000 \text{ mm}$
Deviation from squareness	$\leq 6 \text{ mm}$	$W = 1000 \text{ mm}$
Deviation from straightness	$\leq 1 \text{ mm/m}$	$\leq 5 \text{ mm}$
Bowing (Length)	$\leq 2 \text{ mm/m}$	$\leq 20 \text{ mm}$
Bowing (Width)	$\leq 8,5 \text{ mm/m} / \leq 10 \text{ mm/m}$	$h \leq 10 \text{ mm} / h \leq 10 \text{ mm}$
Pitch of profile	$\pm 2 \text{ mm} / \pm 3 \text{ mm}$	$h \leq 50 \text{ mm} / h \leq 50 \text{ mm}$
Ribs width	$\pm 1 \text{ mm}$	For b1 value
Valleys width	$\pm 2 \text{ mm}$	For b1 value

Panel weight and thermal transmittance were calculated based on:

- Core density 100 kg/m³
- Core thermal conductivity 0.033 W/mK
- Steel sheet thicknesses 0.50 / 0.50 mm
- Coating SP

(Standards EN 14509 and EN 10211-2)

Sound reduction was measured according to EN ISO 140-3 and the classification was made according to EN ISO 717-1

Fire resistance

Stone wool panels are classified as A2-s1,d0. They do not contribute to fire spread, do not ignite, produce very limited smoke, and do not generate flaming or non-flaming droplets or particles.

The fire classification was determined in accordance with EN 13501-1 and EN 13501-2.

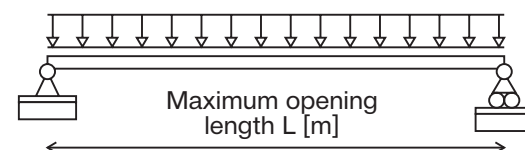
Panel nominal thickness	Panel weight	Thermal Transmittance	Sound reduction R _w (C;C _{tr})
[mm]	[kg/m ²]	U [W/m ² .K]	Perforated-[dB]
50	13,9	0,69	33 (-1;-4)
60	14,6	0,54	-
80	16,9	0,41	-
100	18,6	0,32	35 (-1;-3)
120	20,9	0,27	-
150	23,9	0,22	-
200	29,2	0,16	-

Max load in span Load bearing capacity (kg/m²)

Single Span Load Table

PANEL THICKNESS

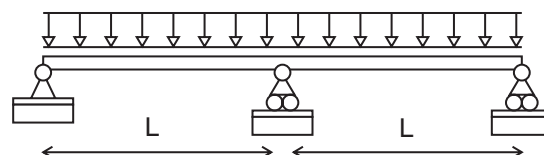
	1,50	1,75	2,00	2,25	2,50	2,75	3,00	3,25	3,50	3,75	4,00	4,25	4,50	4,75	5,00	5,50	6,00
50	145	120	105	95	85	75	70	55	-	-	-	-	-	-	-	-	-
60	175	150	130	115	100	90	85	70	60	-	-	-	-	-	-	-	-
80	240	205	180	160	145	130	110	90	85	70	60	55	-	-	-	-	-
100	305	260	230	205	180	165	140	120	100	90	80	70	60	55	-	-	-
120	370	315	280	250	220	180	175	145	125	105	90	85	75	65	60	-	-
150	415	355	310	275	250	225	210	185	160	145	120	105	95	85	75	65	55
200	-	-	-	-	-	-	-	205	190	180	160	150	130	115	105	95	75



Multi Span Load Table

PANEL THICKNESS

	1,50	1,75	2,00	2,25	2,50	2,75	3,00	3,25	3,50	3,75	4,00	4,25	4,50	4,75	5,00	5,50	6,00
50	135	110	95	85	75	65	55	-	-	-	-	-	-	-	-	-	-
60	165	140	115	100	85	75	60	55	-	-	-	-	-	-	-	-	-
80	185	160	135	110	95	80	75	60	55	50	-	-	-	-	-	-	-
100	190	170	140	125	100	85	80	70	60	55	50	-	-	-	-	-	-
120	-	-	150	135	110	90	85	75	65	60	55	50	-	-	-	-	-
150	-	-	-	145	115	100	90	85	75	70	60	55	50	-	-	-	-
200	-	-	-	-	125	115	105	95	85	80	70	65	60	55	50	-	-



Calculations were carried out in accordance with EN 14509; the values indicate the maximum allowable load or the serviceability limit state (l/100). The facings are steel, with external / internal sheet thicknesses of 0.50 / 0.50 mm respectively. The support width is 120 mm. The anchoring system must be capable of withstanding the maximum allowable loads. The values indicated in the table are indicative.