



SONIC SYSTEM
ACOUSTIC MODULAR PANEL
INFORMATION PACK



The
science
of silence

WELCOME TO THE SCIENCE OF SILENCE

At AcousTech, we're not just making noise control products. We're reimagining how sound moves through space.

Picture the result of decades of precision, experimentation, and a healthy obsession with doing things better. That's Sonic System: engineered, tested, and refined by Australia's leading acoustic minds.

These modular panels aren't just built to perform; they're built to protect. Protect people's hearing. Protect workplace productivity. And protect your business from risk, liability, and unwanted noise.

Backed by over 25 years of experience from our Flexshield roots, AcousTech's Sonic System is used by some of the country's most respected brands. It's the trusted choice when you demand not just reassurance, but results.

Whether your challenge is controlling HVAC plant noise, containing BESS operations, or enclosing high-output data centre equipment, rely on Sonic System. It's not just fit for purpose. It's purpose-built. For silence.

**JOHN
HOLLAND**



Kerfab

Fulton Hogan

THIESS

SHAPE



**COMO
ENGINEERS**



Santos

**CAPRAL
ALUMINIUM**



RioTinto

WHAT IS A SONIC SYSTEM ACOUSTIC MODULAR PANEL?

At AcousTech, we don't just block noise. We control how sound moves through industrial environments. Our Sonic System acoustic modular panels are precision-engineered, pre-fabricated soundproofing solutions designed to shape environments so that noise can't dominate. And because functional doesn't have to mean inflexible, each panel blends technical performance with refined design.

Developed for industrial use, the panels feature a unique interlocking modular system, allowing quick assembly, effortless reconfiguration, and tool-free installation.

Whether you're creating a permanent acoustic wall or a temporary sound barrier, Sonic System panels move with your needs. It's a modular system made by people obsessed with performance and design.

Every panel is built from the inside out to perform in tough Australian conditions:

- **Outer shell** of 0.8mm-thick solid steel for impact resistance
- **Core** of high-density Rockwool, built to absorb and attenuate
- **Optional layers** of sheet metal or visco-elastic materials for environments that demand next-level attenuation
- **Inner face** featuring perforated steel with micro-strengthening ribs and a five-size hole pattern. It's crafted for broad-frequency sound absorption without visual fatigue

We've spent years tuning every detail to give you results you can hear, and silence you can feel.

Where can Sonic System panels be used?

Anywhere noise is a problem, Sonic System is the answer.

Built for durability and acoustic performance, our high-density panels are faced in non-woven Rockwool to prevent fibre escape and ensure long-term integrity, even under tough Australian conditions.

These high performance, lightweight panels are suitable for:

- Acoustic enclosures
- Engine test cells and dyno booths
- Generator, pump and blower enclosures
- Transformer housings
- Temporary or permanent acoustic walls
- Mobile acoustic barrier systems

In other words, anywhere you need noise contained, controlled and maintained.

DIMENSIONS AND CHARACTERISTICS

The Sonic System acoustic modular panel is more than just a noise barrier. It's a precisely engineered building block in the science of silence. Each panel is 450mm wide as standard; a dimension carefully chosen to balance strength, handling ease, and adaptability across a wide range of applications. Whether you're enclosing a generator, dividing a noisy space, or constructing a full-scale acoustic shed, this modular size delivers structural confidence and design flexibility.

But it's not just the dimensions that matter. It's what's inside that counts.

We're talking:

- Inorganic and amorphous core**
 The panels resist mould, bacteria, and mildew, ensuring longevity and safety in sensitive environments.
- Corrosion-resistant perforations**
 A protective electrochemical treatment safeguards the fine apertures on the panel's perforated face, preventing rust and degradation over time.
- Volcanic Rockwool insulation**

Chemically neutral, non-corrosive, and thermally stable. This high-density core is the silent performer behind our proven acoustic results.

Discover the key dimensions and characteristics of the Sonic System acoustic modular panels in below table.

SONIC SYSTEM ACOUSTIC MODULAR PANEL DIMENSIONS AND CHARACTERISTICS

Specifications	V50	V100	V100SP	V225	VR
Dimensions					
Standard Width	450mm	450mm	450mm	450mm	1000mm
Thickness	50mm	100mm	100mm	50mm	50/100mm
Acoustic Performance					
NRC Rating	1.00	1.10	0.90	0.80	1.00
Rw Rating	31dB	37dB	45dB	24dB	34dB
Construction					
Internal Steel Sheet	0.50mm	0.50mm	0.50mm	0.50mm	0.50mm
External Steel Sheet	0.70mm	0.70mm	1.00mm	0.50mm	0.60mm
Weight					
Panel Weight (kg/m ²)	15.6	20.9	46	20.1	14.2
Thermal					
Thermal Transmittance (W/m ² K)	0.7	0.35	0.38	0.77	0.40

SONIC SYSTEM ACOUSTIC MODULAR PANEL V50 / V100 / V100SP / V225

Different builds. One obsession: performance. See a summary of the certifications, applications, and technical specifications for each Sonic System variant below.

SONIC SYSTEM ACOUSTIC MODULAR PANEL VARIATIONS

Panel Type	Sound Absorption	Sound Insulation	Reaction to Fire (Materials)
V50	NRC of 1.00 (ISO 354)	Rw31dB (AS/NZS ISO 717.1)	FRL of -/120/- (AS 1530.4 Sections 1,2,3)
V100	NRC of 1.10 (ISO 354)	Rw37dB (AS/NZS ISO 717.1)	FRL of -/120/- (AS 1530.4 Sections 1,2,3)
V100SP	NRC of 0.90 (ISO 354)	Rw45dB (AS/NZS ISO 717.1)	FRL of -/120/- (AS 1530.4 Sections 1,2,3)
V225	NRC of 0.80 (ISO 354)	Rw24dB (AS/NZS ISO 717.1)	FRL of -/120/- (AS 1530.4 Sections 1,2,3)
VR	NRC of 1.00 (ISO 354)	Rw34dB (AS/NZS ISO 717.1)	A1 Euroclass in compliance with EN 13501-1

SONIC SYSTEM ACOUSTIC MODULAR PANEL FIRE TEST DATA

SONIC SYSTEM ACOUSTIC MODULAR PANEL – FIRE TEST DATA

Test Parameter	Standard	Result	Testing Details
Fire Resistance Level (FRL)	AS 1530.4-2014 (Sections 1,2,3)	-/120/-	120 minutes fire rating achieved
Ignitability Index	AS/NZS 1530.3:1999	0	Testing conducted on complete panel system
Spread of Flame Index	AS/NZS 1530.3:1999	0	Testing conducted on complete panel system
Heat Evolved Index	AS/NZS 1530.3:1999	0	Testing conducted on complete panel system
Smoke Developed Index	AS/NZS 1530.3:1999	2	Testing conducted on complete panel system
Core Material	AS 1530.1:1994	Non-combustible	Rock wool core testing
Toxic Fume Emission	AS/NZS 1530.3:1999	Nil	Under fire conditions
Material Composition	Material Safety Testing	Inorganic & amorphous	Chemical neutrality verified

SONIC SYSTEM ACOUSTIC MODULAR PANEL WEATHER

Hydrophobic Rockwool core:	Actively repels water on contact. Rain simply beads off and runs away; the core does not absorb or wick moisture.
Inorganic Rockwool:	Will not support biological growth even if minor moisture is present (ASTM C1104). Remains clean and stable indefinitely.
Water absorption:	0.5kg/m ² (partial immersion test, BS EN ISO 29767) if core is submerged, uptake is negligible and dries out immediately with no long-term retention.

SPECIFYING MADE EASY

When your project demands certainty, Sonic System delivers more than data. It delivers clarity.

Below you'll find ready-to-use specification blocks for each Sonic System panel type written for quick copying, clear documentation, and confident compliance. Choose your panel, confirm your performance needs, and specify with precision.

SONIC SYSTEM ACOUSTIC MODULAR PANEL V50

System	Sonic System acoustic modular panel V50
Construction	50mm acoustic panel with solid steel faces, perforated internal face and high-density Rockwool core
Finish	Corrosion-resistant perforated steel
Acoustic Performance	Rw: 31dB NRC: 1.00

SONIC SYSTEM ACOUSTIC MODULAR PANEL V100

System	Sonic System acoustic modular panel V100
Construction	100mm acoustic panel with solid steel faces, perforated internal face and high-density Rockwool core
Finish	Corrosion-resistant perforated steel
Acoustic Performance	Rw: 37dB NRC: 1.10

SONIC SYSTEM ACOUSTIC MODULAR PANEL V100SP

System	Sonic System acoustic modular panel V100SP
Construction	100mm acoustic panel with perforated acoustic face, high-density Rockwool core, supported steel sheet reinforcement, and solid external steel sheet
Finish	Corrosion-resistant perforated steel
Acoustic Performance	Rw: 45dB NRC: 0.90

SONIC SYSTEM ACOUSTIC MODULAR PANEL V225

System	Sonic System acoustic modular panel V225
Construction	50mm acoustic panel with solid steel faces, perforated steel faces with central solid steel barrier sheet and Rockwool core
Finish	Corrosion-resistant perforated steel
Acoustic Performance	Rw: 24dB NRC: 0.80

SONIC SYSTEM ACOUSTIC MODULAR PANEL VR

System	AcousTech Sonic System Acoustic Roof Panel VR.
Construction	Self-supporting structural roof panel (50–200 mm) with Rockwool core
Finish	Pre-finished off-white steel with corrosion-resistant coating
Acoustic Performance	Rw: 34dB NRC: 1.00 Thermal Transmittance (U-value): 0.77–0.20 W/m²K

WHY ENGINEERS CHOOSE SONIC SYSTEM

- NATA-accredited laboratory testing
- Modular system allowing fast installation and reconfiguration
- Australian manufacturing designed for harsh industrial environments

INSTALLATION & INTEGRATION SUPPORT

FROM CONCEPT TO COMPLIANCE, ACOUSTECH HAS YOUR BACK

AcousTech delivers peace of mind.

From your very first call through to final sign-off, we're with you. Our team works shoulder-to-shoulder with engineers, builders, planners, and contractors, making sure every element of your noise control design is practical, buildable, and fully compliant, without disrupting timelines or budgets.

Whether it's a single panel or a full-scale acoustic wall system, we offer end-to-end support, ensuring every detail is considered and executed with precision.

How we work with you



SITE CONSULTATION & ACOUSTIC ASSESSMENT

We visit your site (either virtually or in-person) to assess noise sources, constraints, and compliance goals. From there, we recommend smart, engineered solutions tailored to your project.



PRE-CONSTRUCTION SUPPORT

Need drawings, load specs, acoustic performance figures, or BIM integration? We've got them ready. Our engineers work with yours to make sure our solutions are easy to specify and install.



CUSTOM DESIGN & MANUFACTURE

Every product we ship is manufactured to spec, never pulled off a shelf. We account for site conditions, weather exposure, airflow needs, service penetrations, fire safety, and more.



DELIVERY & INSTALLATION SUPPORT

We offer fast turnarounds and detailed installation packs. For more complex installations, our specialist teams or certified partners can be on-site to assist or manage the full install.



COMMISSIONING & CERTIFICATION

Where required, we offer NATA-accredited acoustic testing, post-installation checks, and full documentation for council, EPA, or internal reporting.

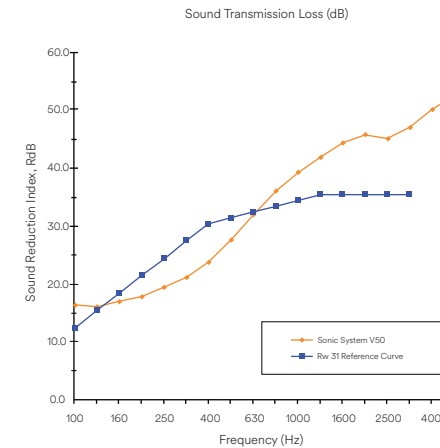


SONIC SYSTEM ACOUSTIC MODULAR PANEL

V50 SOUND TRANSMISSION LOSS

The V50 is as resilient as it is absorptive. Acoustic testing confirms an R_w 31, with performance exceeding 40dB reduction above 1000 Hz. This delivers reliable barrier performance in environments where keeping noise contained is just as important as controlling reflections.

TRANSMISSION LOSS CURVE DEMONSTRATING BARRIER PERFORMANCE RISING STEADILY TO MORE THAN 50dB AT HIGH FREQUENCIES.



MEASURED TRANSMISSION LOSS BY 1/3 OCTAVE BAND

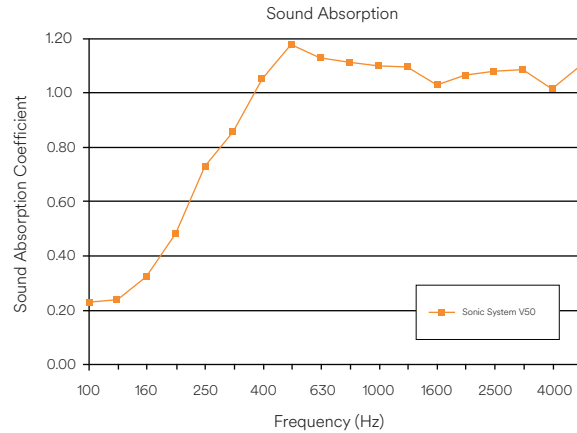
1/3 Octave Centre Frequency Hz	Sound Transmission Loss: R dB	Rw 31 Reference Curve	95% Confidence levels, dB
100	15.9	12	2.7
125	15.7	15	2.0
160	16.6	18	1.7
200	17.4	21	1.6
250	19.0	24	1.2
315	20.8	27	1.4
400	23.4	30	0.6
500	27.3	31	0.7
630	31.6	32	0.6
800	35.6	33	0.7
1000	38.8	34	0.6
1250	41.6	35	0.5
1600	44.0	35	0.6
2000	45.4	35	0.6
2500	44.7	35	0.6
3150	46.6	35	0.6
4000	49.7	-	0.7
5000	52.1	-	0.9

L-shaped Sonic System acoustic wall. 5.7m high x 15.0m x 8.0m, with hot-dipped steel framing, fully installed at GrainCorp Numurkah

SONIC SYSTEM ACOUSTIC MODULAR PANEL **V50 ABSORPTION DATA**

Independent reverberation room testing demonstrates exceptional absorption values, with coefficients (α_s) peaking at 1.18. This ensures the V50 controls reflections as effectively as it blocks airborne noise.

ABSORPTION CURVE SHOWING STRONG PERFORMANCE FROM MID TO HIGH FREQUENCIES.



ABSORPTION COEFFICIENTS ACROSS FREQUENCY RANGE

Octave Centre Frequency Bands, Hz	Average RT's for empty room. T60 _e	Average RT's for room with sample T60 _{ext}	Sound Absorption Coefficient α_s	95% Confidence Interval for α_s
100	7.145	5.963	0.23	0.13
125	6.508	5.467	0.24	0.11
160	8.395	6.319	0.32	0.11
200	9.319	6.008	0.48	0.09
250	9.351	5.094	0.73	0.06
315	7.830	4.296	0.86	0.06
400	7.055	3.698	1.05	0.07
500	6.682	3.400	1.18	0.06
630	6.299	3.365	1.13	0.06
800	6.210	3.359	1.11	0.06
1000	5.589	3.189	1.10	0.06
1250	5.122	3.032	1.10	0.04
1600	4.550	2.891	1.03	0.04
2000	4.085	2.663	1.06	0.05
2500	3.622	2.449	1.08	0.03
3150	3.121	2.204	1.08	0.06
4000	2.576	1.951	1.01	0.08
5000	2.193	1.692	1.10	0.16

SONIC SYSTEM ACOUSTIC MODULAR PANEL **LOADING PRESSURE V50**

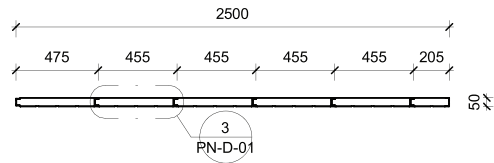
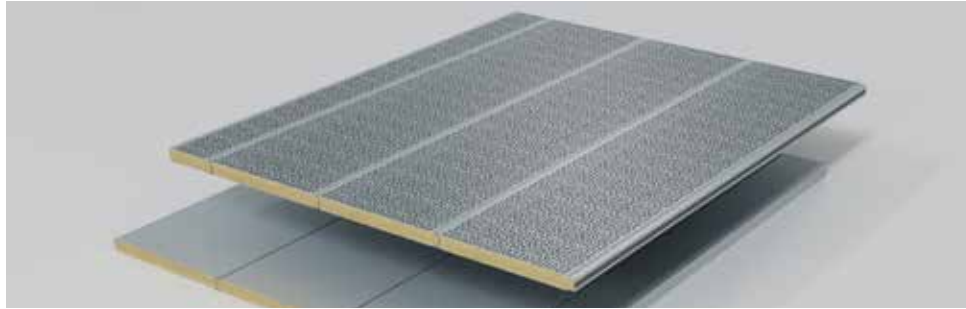
Engineered for real-world resilience, the V50 modular panel has been load tested and engineering-assessed in accordance with AS 1170.2. Depending on support spacing, it withstands ultimate wind loads up to 6.0 kPa.

SUPPORT CENTRES VS LOAD CAPACITY

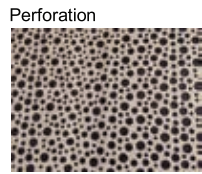
Panel Support Centres (m)	Maximum Ultimate Wind Load Pressure (kPa)
1.2m	6.0 kPa*
1.5m	6.0 kPa*
1.8m	4.3 kPa*
2.1m	3.1 kPa*
2.4m	2.4 kPa*
2.7m	1.9 kPa*

*Certified loading pressure test reports available upon request

SONIC SYSTEM ACOUSTIC MODULAR PANEL V50 DRAWINGS

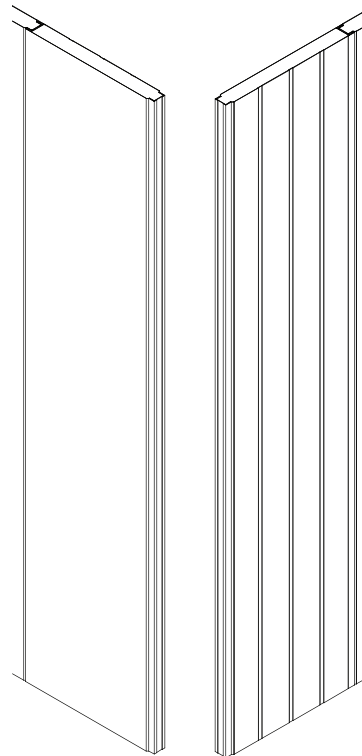
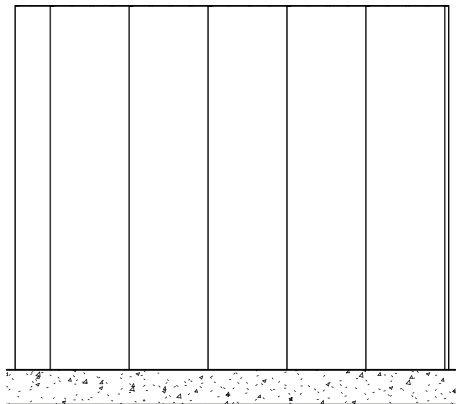


1 V50 - OVERALL PLAN

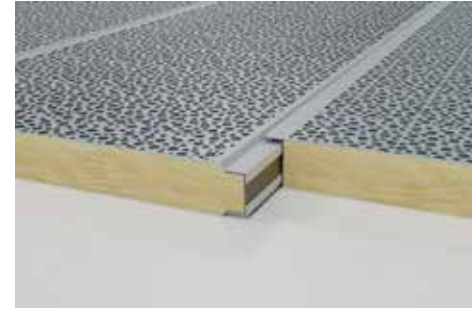


Measurements		
Cover	Length	Thickness
450mm	various	50mm

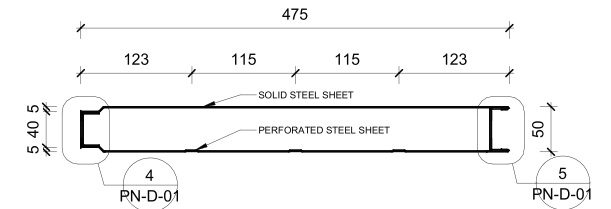
2 V50 - ELEVATION



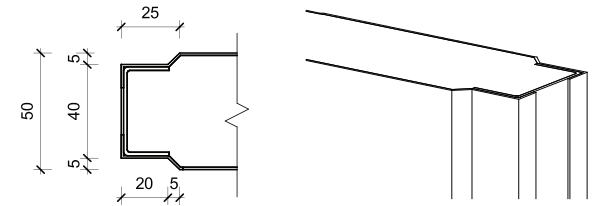
SONIC SYSTEM ACOUSTIC MODULAR PANEL V50 DRAWINGS



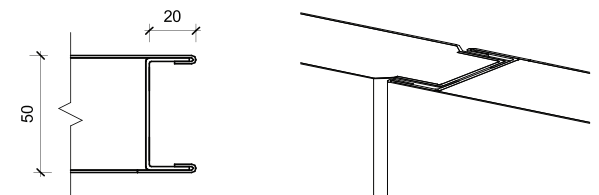
3 PLAN



4 DETAIL - A



5 DETAIL - B



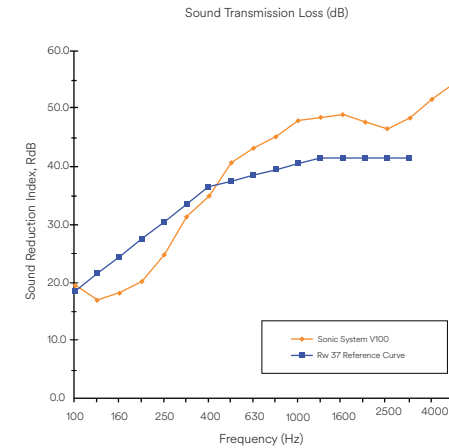


SONIC SYSTEM ACOUSTIC MODULAR PANEL

V100 SOUND TRANSMISSION LOSS

The V100 panel delivers airborne sound insulation with a Weighted Sound Reduction Index (Rw) of 37dB, tested in accordance with AS 1191-2002 and rated to AS/NZS ISO 717.1. Solid external steel skin with a perforated internal acoustic liner and high-density Rockwool core block airborne noise transmission, making the panel suited to separating noisy industrial processes from adjacent work areas or external environments.

TRANSMISSION LOSS CURVE DEMONSTRATING BARRIER PERFORMANCE RISING STEADILY TO MORE THAN 50dB AT HIGH FREQUENCIES.



MEASURED TRANSMISSION LOSS BY 1/3 OCTAVE BAND

1/3 Octave Centre Frequency Hz	Sound Transmission Loss: R dB	Rw 37 Reference Curve	95% Confidence levels, dB
100	19.1	18	2.5
125	16.5	21	2.3
160	17.7	24	2.1
200	19.7	27	1.5
250	24.4	30	1.3
315	30.9	33	1.4
400	34.5	36	1.2
500	40.2	37	0.8
630	42.7	38	0.7
800	44.7	39	0.7
1000	47.5	40	0.7
1250	48.0	41	0.4
1600	48.6	41	0.6
2000	47.2	41	0.8
2500	46.0	41	0.6
3150	48.0	41	0.7
4000	51.3	-	0.7
5000	54.0	-	0.5

Engineered acoustic shed featuring Sonic System acoustic modular panels, Sonic Series acoustic louvres, and Sonic Access acoustic doors. Installed for Fosterville Gold noise containment.

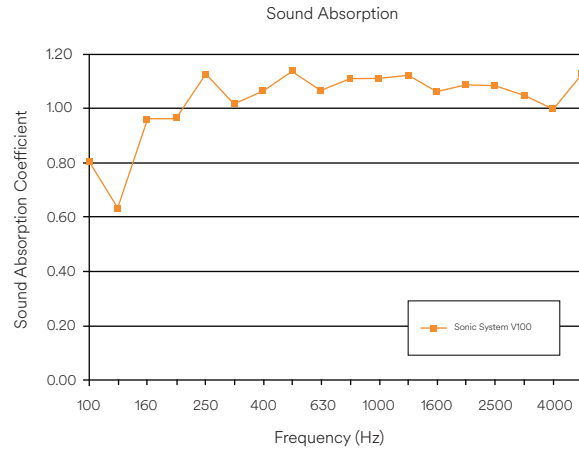
SONIC SYSTEM ACOUSTIC MODULAR PANEL

V100 ABSORPTION DATA

The V100 panel delivers high-performance sound absorption through its perforated internal face (38% open area) and high-density Rockwool core.

Tested in accordance with AS ISO 354 at RMIT University's reverberation chamber, the V100 achieves a Noise Reduction Coefficient (NRC) of 1.10, controlling reverberation in industrial environments.

ABSORPTION CURVE SHOWING STRONG PERFORMANCE FROM MID TO HIGH FREQUENCIES.



ABSORPTION COEFFICIENTS ACROSS FREQUENCY RANGE

Octave Centre Frequency Bands, Hz	Average RT's for empty room. $T60_e$	Average RT's for room with sample $T60_{avg}$	Sound Absorption Coefficient α_s	95% Confidence Interval for α_s
100	7.145	4.183	0.81	0.15
125	6.508	4.321	0.63	0.16
160	8.395	4.222	0.96	0.11
200	9.319	4.429	0.96	0.09
250	9.351	4.074	1.13	0.07
315	7.830	3.955	1.02	0.08
400	7.055	3.661	1.07	0.08
500	6.682	3.455	1.14	0.05
630	6.299	3.448	1.07	0.06
800	6.210	3.365	1.11	0.07
1000	5.589	3.170	1.11	0.06
1250	5.122	3.003	1.12	0.04
1600	4.550	2.851	1.06	0.05
2000	4.085	2.636	1.09	0.05
2500	3.622	2.434	1.08	0.05
3150	3.121	2.210	1.05	0.05
4000	2.576	1.940	1.00	0.08
5000	2.193	1.661	1.13	0.12

SONIC SYSTEM ACOUSTIC MODULAR PANEL

LOADING PRESSURE V100

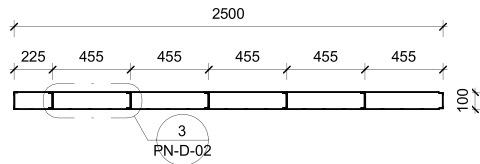
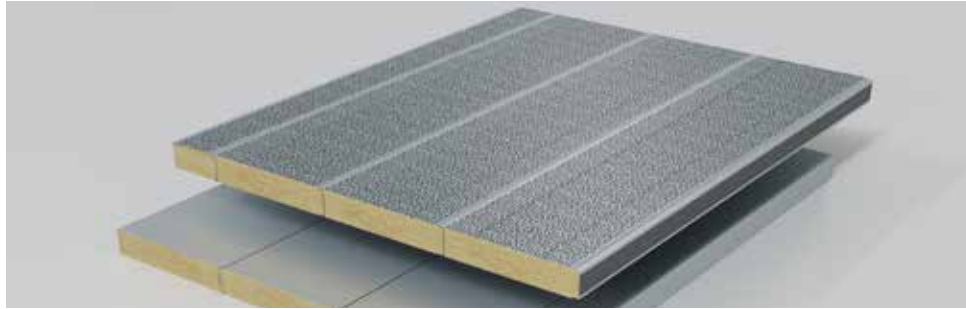
Engineered for real-world resilience, the V100 modular panel has been load tested and engineering assessed in accordance with AS 1170.2 (see support spacing table).

SUPPORT CENTRES VS LOAD CAPACITY

Panel Support Centres (m)	Maximum Ultimate Wind Load Pressure (kPa)
4.0m	2.58 kPa*
4.5m	2.04 kPa*
5.0m	1.65 kPa*
5.5m	1.36 kPa*
6.0m	1.15 kPa*

*Certified loading pressure test reports available upon request

SONIC SYSTEM ACOUSTIC MODULAR PANEL V100 DRAWINGS



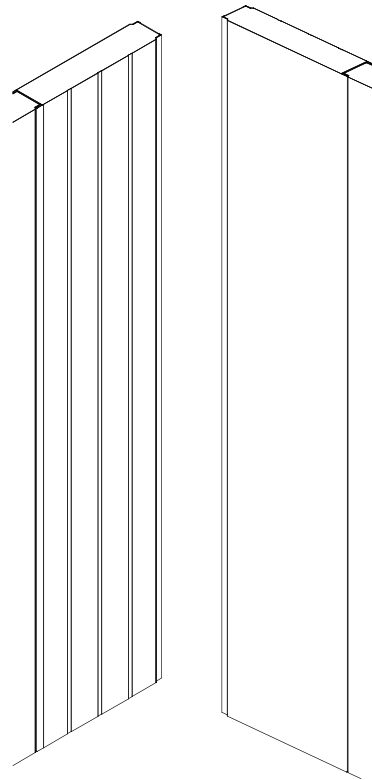
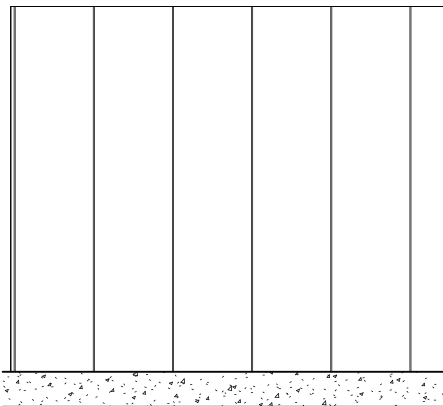
1 V100 - OVERALL PLAN

Perforation

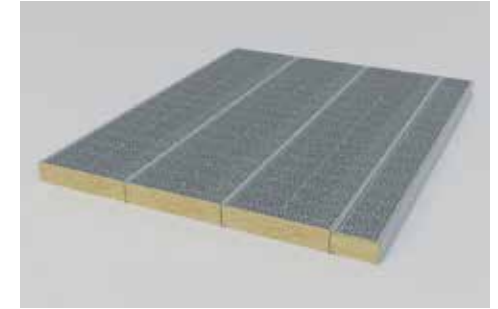
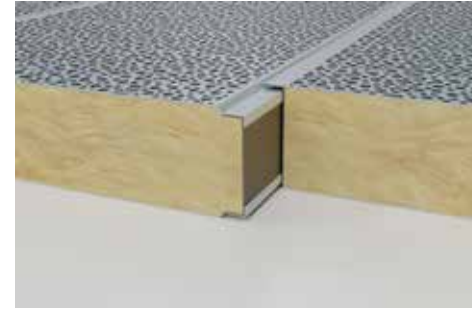


Measurements		
Cover	Length	Thickness
450mm	various	100mm

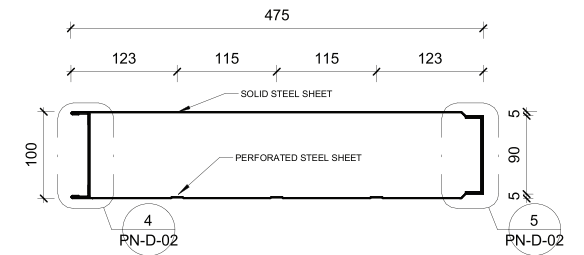
2 V100 - ELEVATION



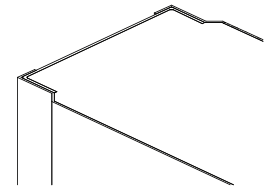
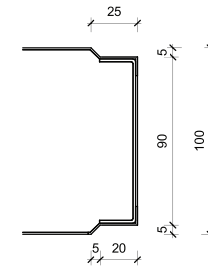
SONIC SYSTEM ACOUSTIC MODULAR PANEL V100 DRAWINGS



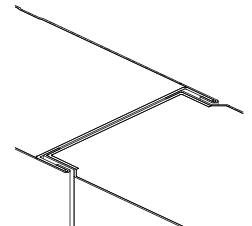
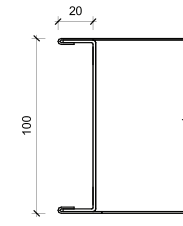
3 PLAN



4 DETAIL - A



5 DETAIL - B





*Engineered acoustic shed featuring Sonic System acoustic modular panels, Sonic Series acoustic louvres, and Sonic Access acoustic doors.
Installed for Fosterville Gold noise containment.*

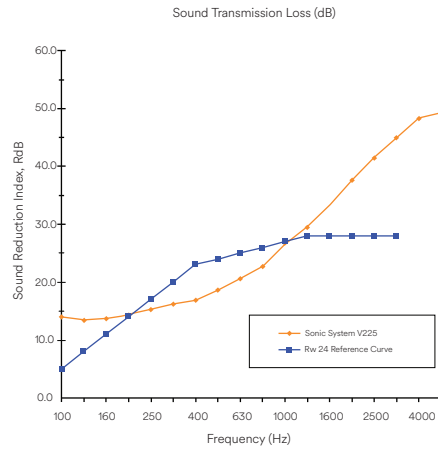
SONIC SYSTEM ACOUSTIC MODULAR PANEL

V225 SOUND TRANSMISSION LOSS

The V225 panel provides moderate sound insulation while delivering high dual-sided sound absorption, achieving a Weighted Sound Reduction Index (Rw) of 24dB, tested in accordance with AS 1191-2002 and rated to AS/NZS ISO 717.1. Sound attenuation is achieved through an integrated solid steel barrier core, decoupled by absorptive Rockwool layers on either side.

The construction contains noise while still allowing sound absorption on both sides of the panel.

TRANSMISSION LOSS CURVE DEMONSTRATING BARRIER PERFORMANCE RISING STEADILY TO MORE THAN 45dB AT HIGH FREQUENCIES.



MEASURED TRANSMISSION LOSS BY 1/3 OCTAVE BAND

1/3 Octave Centre Frequency Hz	Sound Transmission Loss: R dB	Rw 24 Reference Curve	95% Confidence levels, dB
100	14.0	5	2.8
125	13.4	8	2.6
160	13.7	11	1.6
200	14.4	14	2.2
250	15.3	17	0.9
315	16.3	20	1.5
400	16.9	23	0.7
500	18.7	24	0.9
630	20.6	25	0.6
800	22.8	26	0.9
1000	26.6	27	0.7
1250	29.6	28	0.7
1600	33.3	28	0.6
2000	37.6	28	0.7
2500	41.5	28	0.5
3150	45.0	28	0.6
4000	48.2	-	0.7
5000	49.3	-	0.8

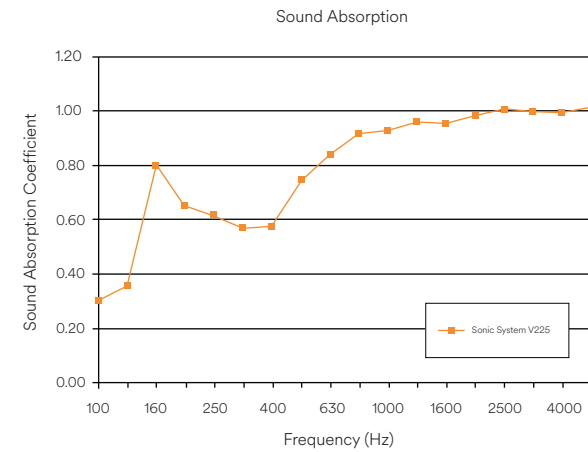
SONIC SYSTEM ACOUSTIC MODULAR PANEL

V225 ABSORPTION DATA

The V225 panel achieves strong sound absorption through its 38% perforated internal steel face and two layers of 25mm high-density Rockwool core.

Tested in accordance with AS ISO 354, the V225 delivers a sound absorption coefficient (α_s) of 0.80, suited to partition wall applications requiring high sound absorption and moderate sound separation.

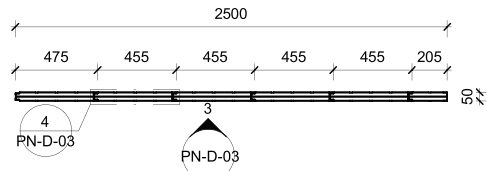
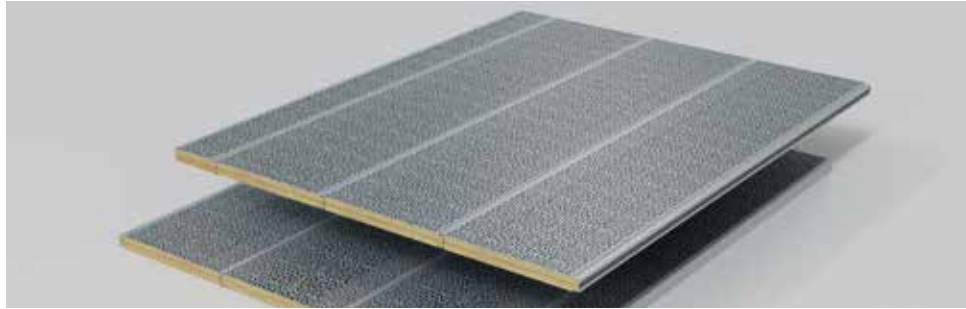
ABSORPTION CURVE SHOWING STRONG PERFORMANCE FROM MID TO HIGH FREQUENCIES.



ABSORPTION COEFFICIENTS ACROSS FREQUENCY RANGE

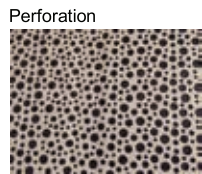
Octave Centre Frequency Bands, Hz	Average RT's for empty room. T60 _e	Average RT's for room with sample T60 _{abs}	Sound Absorption Coefficient α_s	95% Confidence Interval for α_s
100	7.145	5.653	0.30	0.14
125	6.508	5.074	0.35	0.10
160	8.395	4.602	0.80	0.12
200	9.319	5.338	0.65	0.08
250	9.351	5.470	0.62	0.06
315	7.830	5.066	0.56	0.06
400	7.055	4.705	0.57	0.05
500	6.682	4.149	0.74	0.06
630	6.299	3.818	0.84	0.06
800	6.210	3.652	0.92	0.05
1000	5.589	3.415	0.93	0.06
1250	5.122	3.194	0.96	0.04
1600	4.550	2.962	0.96	0.03
2000	4.085	2.729	0.98	0.05
2500	3.622	2.493	1.00	0.04
3150	3.121	2.244	1.00	0.05
4000	2.576	1.942	0.99	0.06
5000	2.193	1.700	1.01	0.12

SONIC SYSTEM ACOUSTIC MODULAR PANEL V225 DRAWINGS

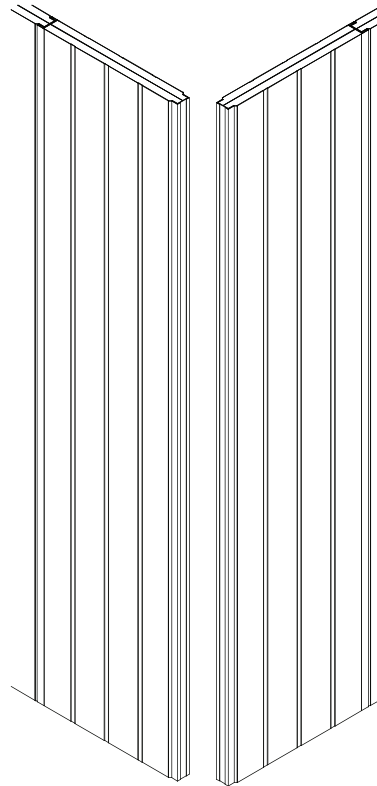
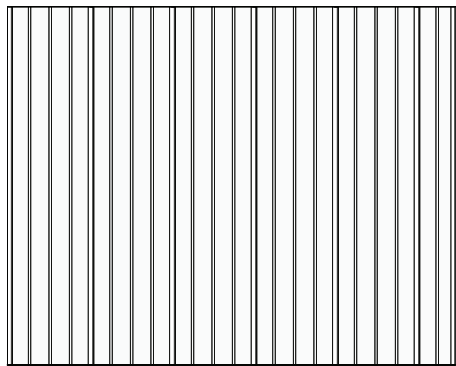


1 V225 - OVERALL PLAN

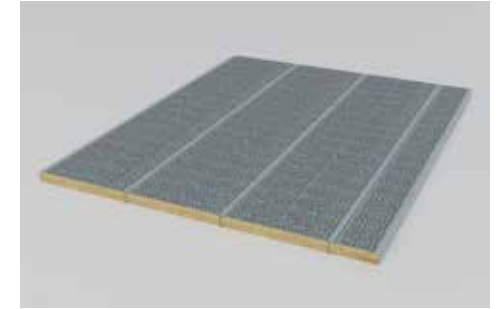
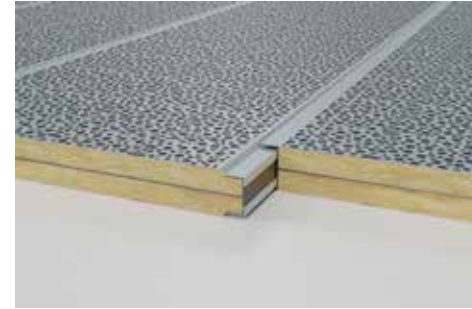
Measurements		
Width	Length	Thickness
450mm	various	50mm



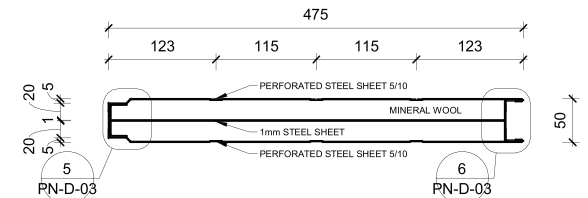
2 V225 - ELEVATION



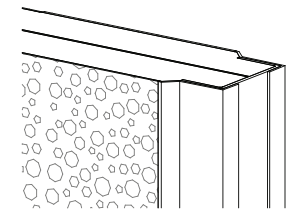
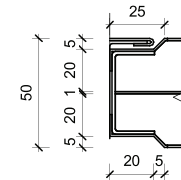
SONIC SYSTEM ACOUSTIC MODULAR PANEL V225 DRAWINGS



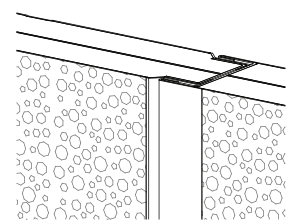
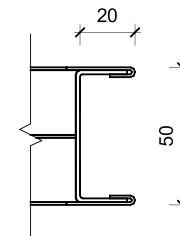
3 PLAN



4 DETAIL - A



5 DETAIL - B





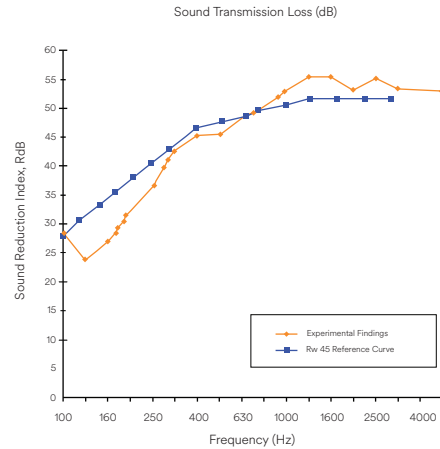
Central

Acoustic shed built with Sonic System panels for noise control in the resources sector.

SONIC SYSTEM ACOUSTIC MODULAR PANEL V100SP SOUND TRANSMISSION LOSS

The V100SP panel delivers high-performance airborne sound insulation, achieving a Weighted Sound Reduction Index (Rw) of 45dB, tested in accordance with AS 1191-2002, with Rw determined to AS/NZS ISO 717.1.

TRANSMISSION LOSS CURVE DEMONSTRATING BARRIER PERFORMANCE RISING STEADILY TO MORE THAN 60dB AT HIGH FREQUENCIES.



MEASURED TRANSMISSION LOSS BY 1/3 OCTAVE BAND

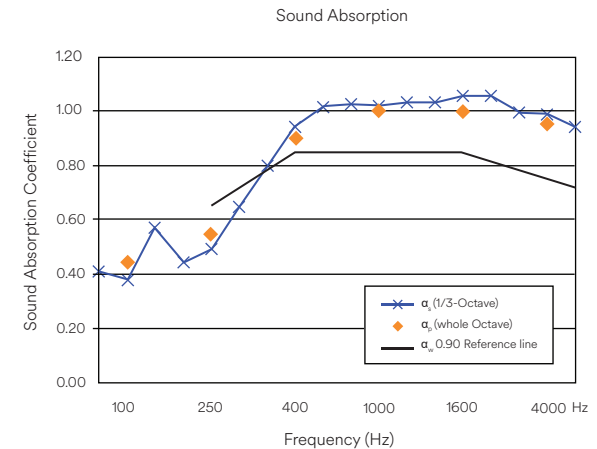
Frequency Hz	L ₁ dB	L ₂ dB	TS	R dB	Reference Curve
100	99.9	64.7	1.24	28.3	28.0
125	98.9	67.7	0.98	23.3	31.0
160	94.5	61.1	1.23	26.5	34.0
200	97.7	59.7	1.42	31.7	37.0
250	96.8	54.9	1.49	35.8	40.0
315	96.0	47.3	1.34	42.1	43.0
400	93.7	43.0	1.34	42.1	43.0
500	93.4	42.4	1.50	44.9	47.0
630	93.5	39.4	1.34	47.5	48.0
800	96.4	40.7	1.45	49.5	49.0
1000	94.8	36.1	1.39	52.3	50.0
1250	94.4	33.2	1.36	54.7	51.0
1600	93.5	32.1	1.34	54.8	51.0
2000	94.2	35.0	1.29	52.5	51.0
2500	95.2	33.6	1.18	54.5	51.0
3150	94.3	34.4	1.18	54.5	51.0
4000	95.0	35.0	1.11	52.6	-
5000	93.1	33.0	1.03	52.4	-

SONIC SYSTEM ACOUSTIC MODULAR PANEL V100SP ABSORPTION DATA

The V100SP panel achieves high sound absorption through its perforated acoustic face, acoustic fabric backing, and high-density Rockwool core.

Tested in accordance with AS ISO 354, the V100SP delivers a Noise Reduction Coefficient (NRC) of 0.90, delivering controlled absorption for high-containment environments.

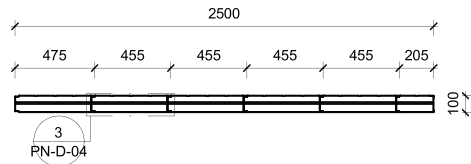
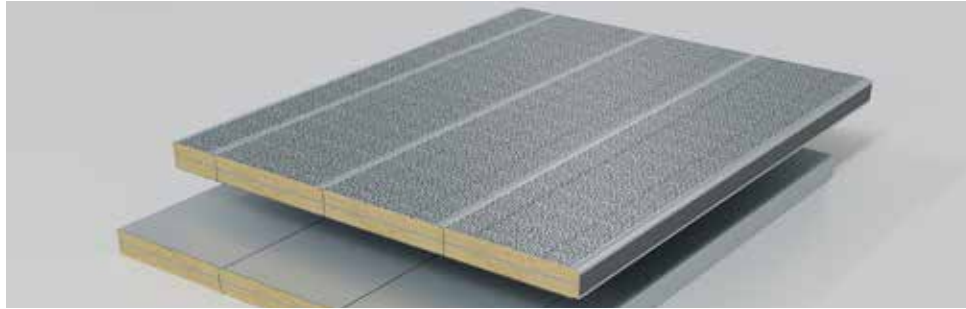
ABSORPTION CURVE SHOWING STRONG PERFORMANCE FROM MID TO HIGH FREQUENCIES.



ABSORPTION COEFFICIENTS ACROSS FREQUENCY RANGE

Frequency Hz	Absorption Coefficients		Reverberation times, T ₆₀ (sec)	
	α _s	α _n	Empty room	with Specimen
100	0.41	0.45	5.67	3.06
125	0.38		6.35	3.38
160	0.57		6.56	2.76
200	0.44	0.55	5.73	2.98
250	0.49		4.85	2.59
315	0.65		5.87	2.46
400	0.80		5.98	2.18
500	0.94	0.90	5.53	1.91
630	1.01		5.25	1.79
800	1.02		4.99	1.74
1000	1.02		4.87	1.74
1250	1.03		4.38	1.66
1600	1.03	1.00	3.81	1.57
2000	1.05		3.46	1.49
2500	1.05		3.07	1.42
3150	0.99		2.65	1.36
4000	0.99	0.95	2.14	1.23
5000	0.94		1.72	1.10

SONIC SYSTEM ACOUSTIC MODULAR PANEL V100SP DRAWINGS

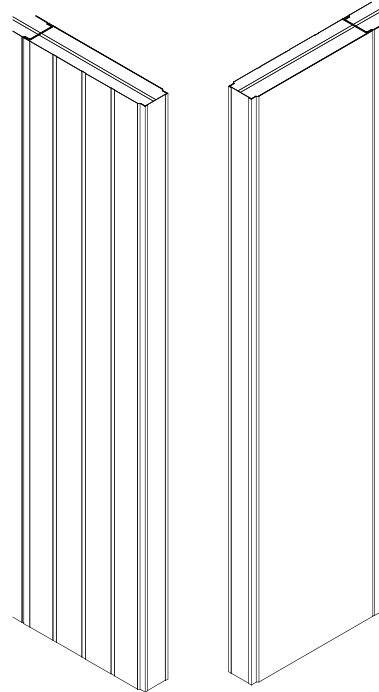
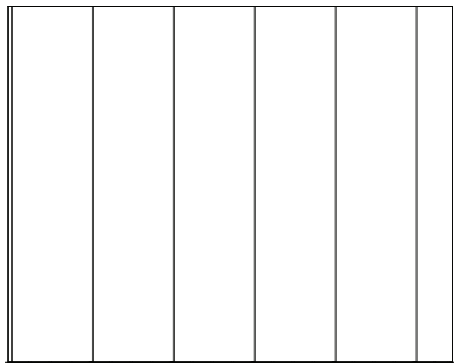


1 V100SP - OVERALL PLAN Perforation

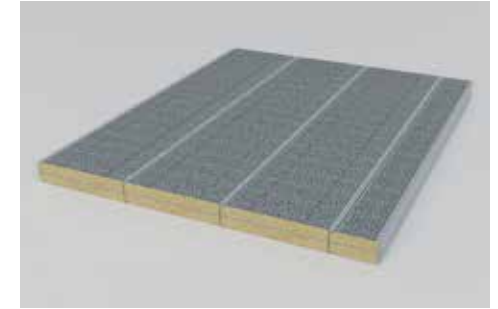
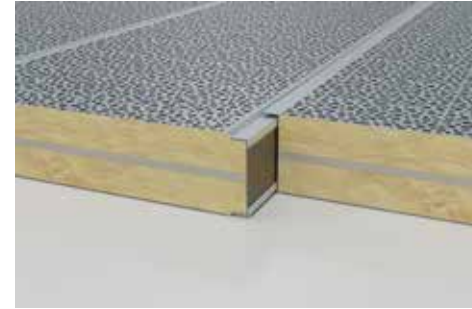
Measurements		
Width	Length	Thickness
450mm	various	100mm



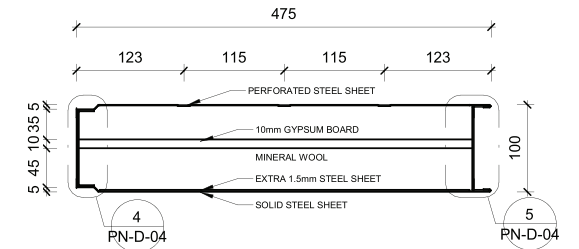
2 V100SP - ELEVATION



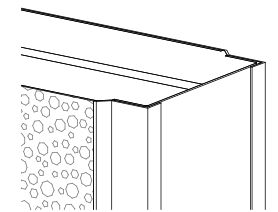
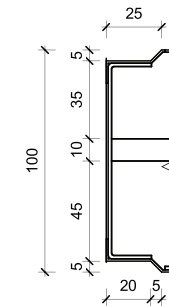
SONIC SYSTEM ACOUSTIC MODULAR PANEL V100SP DRAWINGS



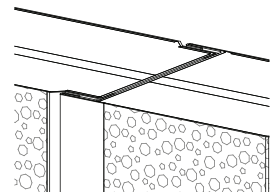
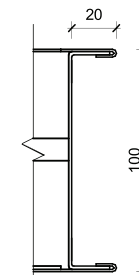
3 PLAN



4 DETAIL - A



5 DETAIL - B





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Food Park

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373798 A

Sonic System acoustic modular panel V50 noise wall in an 'L' shape on 2 sides of new cooling tower.

SONIC SYSTEM ACOUSTIC MODULAR PANEL VR STRUCTURAL PERFORMANCE

The VR panel is engineered as a self-supporting roof system with load-bearing capabilities tested in accordance with UNI EN 14509. Performance varies by thickness and span, with calculations provided for both Ultimate Limit States and Serviceability Limit States (deflection = 1/200 span).

LOAD BEARING CAPACITY TABLE

Thickness (mm)	Weight (kg/m ²)	Maximum Span Performance (P = kg/m ²) at Support Centres (cm)							
		150	200	250	300	350	400	450	500
50	14.2	215	160	125	90	60	50	-	-
60	15.2	245	180	140	110	90	70	50	-
80	17.2	295	215	170	140	120	95	75	60
100	19.2	330	240	190	160	130	120	100	85
120	21.2	345	255	200	165	135	125	120	110
150	24.2	350	260	205	170	140	130	125	115
200	29.2	365	265	210	175	145	135	130	120

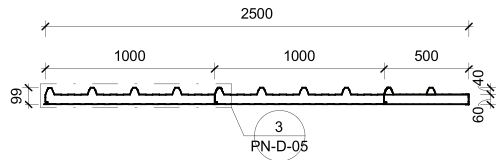
SONIC SYSTEM ACOUSTIC MODULAR PANEL VR THERMAL PERFORMANCE

The VR panel delivers excellent thermal insulation, with U-values ranging from 0.77 W/m²K (50mm) to 0.20 W/m²K (200mm), tested in accordance with UNI EN 14509 and EN ISO 6946.

THERMAL PERFORMANCE

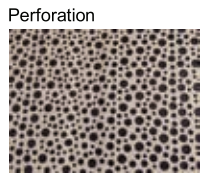
Panel Thickness (mm)	Thermal Transmittance U (W/m ² K) UNI EN 14509A.10	Avg. Thermal Transmission Coefficient λ (W/m ² K) EN ISO 6946
50	0.77	0.67
60	0.64	0.57
80	0.49	0.44
100	0.40	0.36
120	0.33	0.29
150	0.27	0.24

SONIC SYSTEM ACOUSTIC MODULAR PANEL VR DRAWINGS

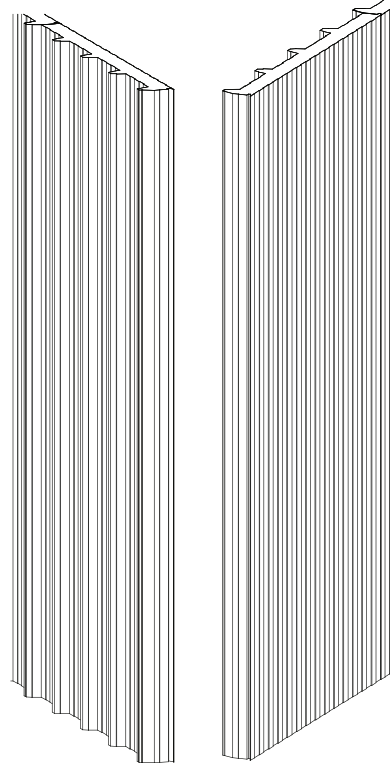
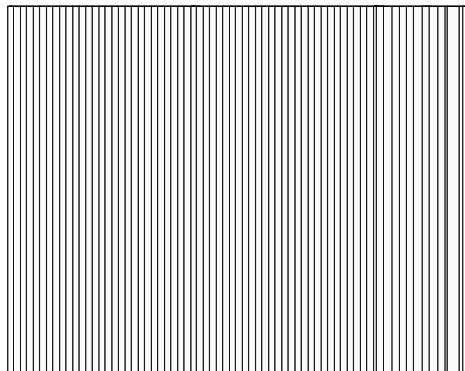


1 SONIC SYSTEM VR - OVERALL PLAN

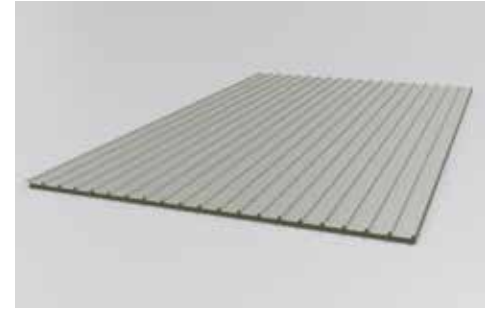
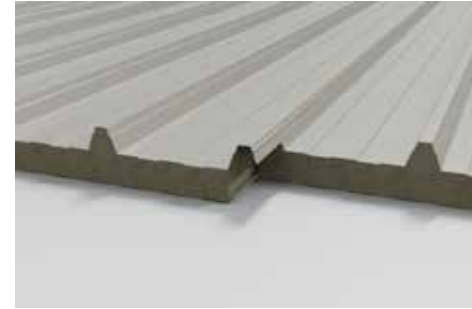
Measurements		
Width	Length	Thickness
1000mm	various	100mm



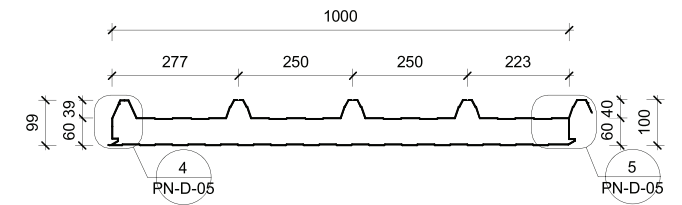
2 SONIC SYSTEM VR - ELEVATION



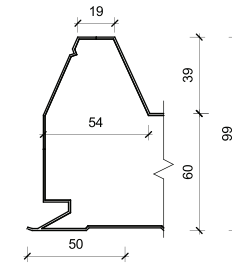
SONIC SYSTEM ACOUSTIC MODULAR PANEL VR DRAWINGS



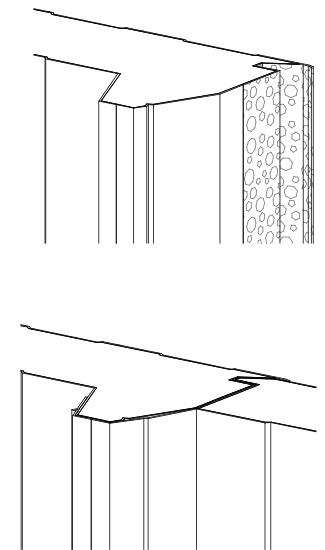
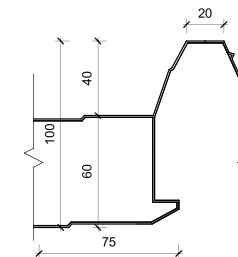
3 PLAN



4 DETAIL - A



5 DETAIL - B



SOUND CONTROL IN **MOTION**

SONIC SYSTEM ACOUSTIC MODULAR PANEL **USES**



Sonic acoustic enclosures

Acoustic enclosure at Geofabrics featuring Sonic System panels, acoustic doors, and Sonic Series acoustic louvres for comprehensive noise control.



Sonic acoustic wall linings

Sonic System acoustic wall lining installed for J&P Richardson to enhance sound absorption and reduce operational noise levels.



Sonic acoustic walls

Sonic acoustic wall for Pensar Water, reducing noise emissions from pumps.



Sonic acoustic mobiles

Sonic acoustic mobile panels supplied to Newcrest Mining. Modular, fire-retardant noise control on heavy-duty castors for flexible use in hot works areas.

SONIC SYSTEM ACOUSTIC MODULAR PANEL KEY APPLICATIONS



Project: Acoustically rated and treated office within a factory

Industry Type: Product Manufacturing

Client: Orora

Location: Penrith, NSW

Products used: Sonic System acoustic modular panel V100, with Sonic Access acoustic personnel door and Sonic acoustic windows



Project: Acoustic wall lining for a shed

Industry Type: Resources

Client: Como Engineers

Location: Mount Clear, VIC

Products used: Sonic System acoustic modular panel V50, with Sonic Access acoustic sliding door and Sonic Series acoustic louvres



Project: A tailored acoustic enclosure for pumps

Industry Type: Manufacturing

Client: Capral Limited

Location: Penrith, NSW

Products used: Sonic System acoustic modular panel - V50 & V100, Sonic Access acoustic doors and custom-engineered structural steel

SONIC SYSTEM ACOUSTIC MODULAR PANEL KEY APPLICATIONS



Project: North East Link Tunnel

Industry Type: Infrastructure

Client: Confidential

Location: VIC

Products used: Sonic System acoustic modular panels-V50



Project: Helicopter engine testing facility

Industry Type: Defence

Client: Australian Defence Force (ADF)

Location: Fishermans Bend, Melbourne

Products used: Sonic System acoustic modular panel-V50



Project: Acoustic Noise Wall

Industry Type: Manufacturing

Client: Graincorp Oilseeds

Location: Numurkah, VIC

Products used: Sonic System acoustic modular panels-V50

LET'S TALK **ACOUSTICS**

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At AcousTech, silence isn't the absence of sound. It's the presence of control.

It's the hush that lets a technician focus. The stillness that protects a worker's hearing. The calm that shields a community from disruption.

But silence doesn't happen by accident. It's engineered. Layer by layer, line by line, question by question.

We began by asking ourselves:

- What if noise barriers could install faster?
- What if absorption could reach broader frequencies?
- What if we could design panels tough enough for mine sites, but refined enough for research labs?

And so we experimented. We broke things. We started again.

Now, what you hear... is less. What you see... is a sleek, perforated panel.

And what you don't see?

Decades of design, testing, and re-engineering.

A rockwool core, tuned to absorb and attenuate.

A perforated faceplate that speaks the language of sound.

An obsession with details you may never notice. But always benefit from.

Because silence is more than a goal. It's our craft.

We are AcousTech.

And we've dedicated our lives to the science of silence.



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