

Perforated Plasterboard

Acoustic performance
with design freedom.

Make an impression



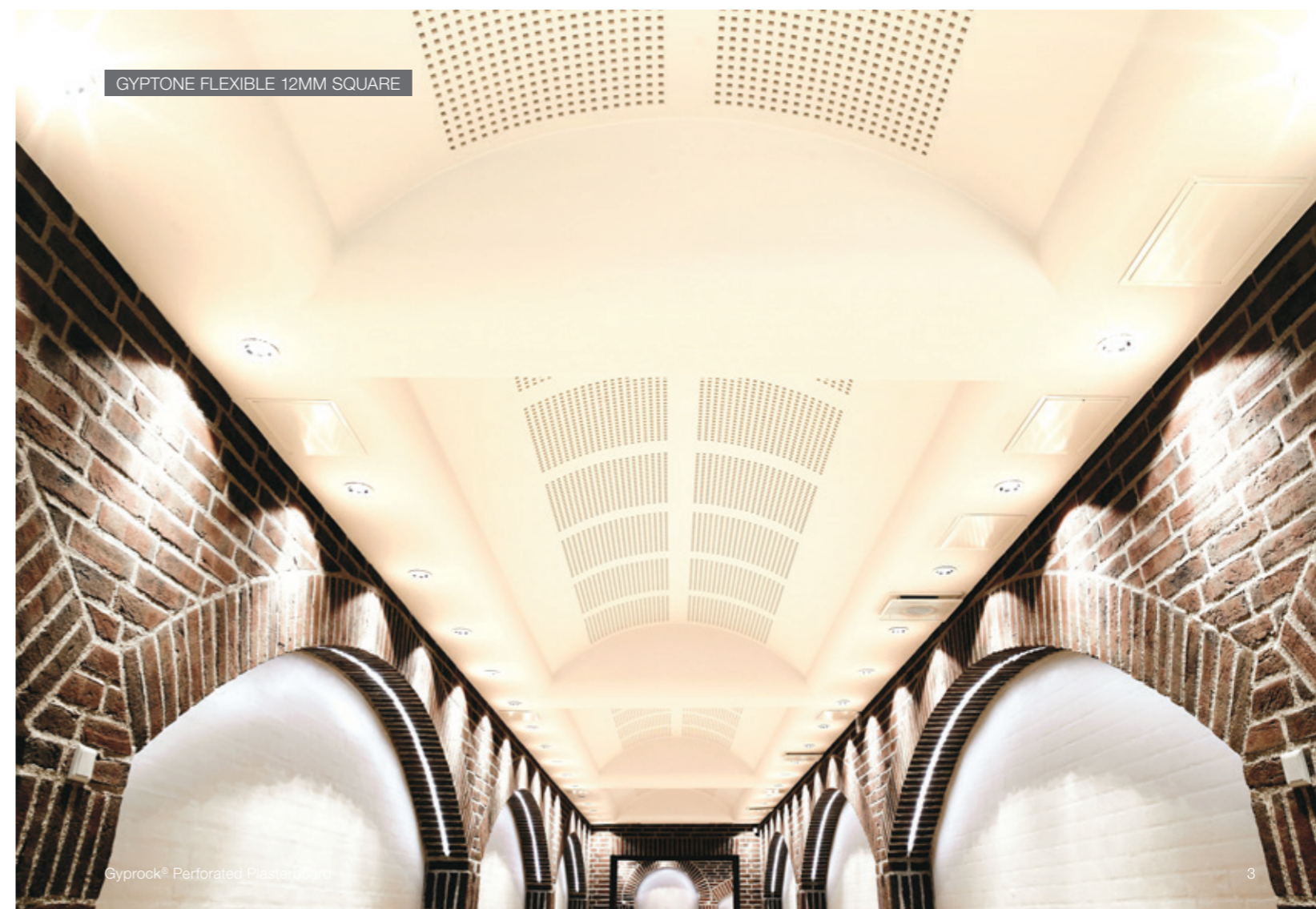
Excellence in design is achieved with a balance of aesthetics and functionality. The Gyprock range of perforated plasterboard allows architects and designers to create beautiful ceilings and walls that achieve high levels of acoustic performance.

The panel perforations together with acoustic fabric lining and insulation, where used, reduce echo and noise reverberation to create more comfortable environments for work and leisure.

Gyprock seeks to develop exclusive relationships with leading manufacturers throughout the world to deliver the best technologies and products to the Australian construction industry.

As part of the International Alliance program, the perforated range includes Rigitone™ options with edge to edge, continuous patterns and Gyptone™ options with patterns laid out in grids. Two Gyptone pattern options are also available in a flexible board for curved applications. These International Alliance program options were developed by worldwide plasterboard specialist, Saint-Gobain and feature innovative Activ'Air technology to help improve indoor air quality.

The contemporary patterns of the Rigitone and Gyptone ranges, along with the more traditional Gyprock Standard 6mm Round option provide a wide range of design versatility and acoustic performance for ceiling and wall projects.



GYPTONE FLEXIBLE 12MM SQUARE

Acoustic control

Good acoustic design includes control of both sound transmission and sound absorption. Sound transmission is controlled by using solid or cavity elements sealed to prevent sound leakage. To combat sound transmission, Gyprock provides a range of systems which achieve high transmission reduction targets.

Sound absorption is the control of sound within a room where absorbing surfaces reduce the amount of sound bouncing back into the room of origin. The total amount of sound absorption in a room and hence the reverberation time, is critically important for speech intelligibility, privacy and general noise levels.

Gyprock's range of perforated plasterboard provides high levels of reverberation control with much greater freedom for designers:

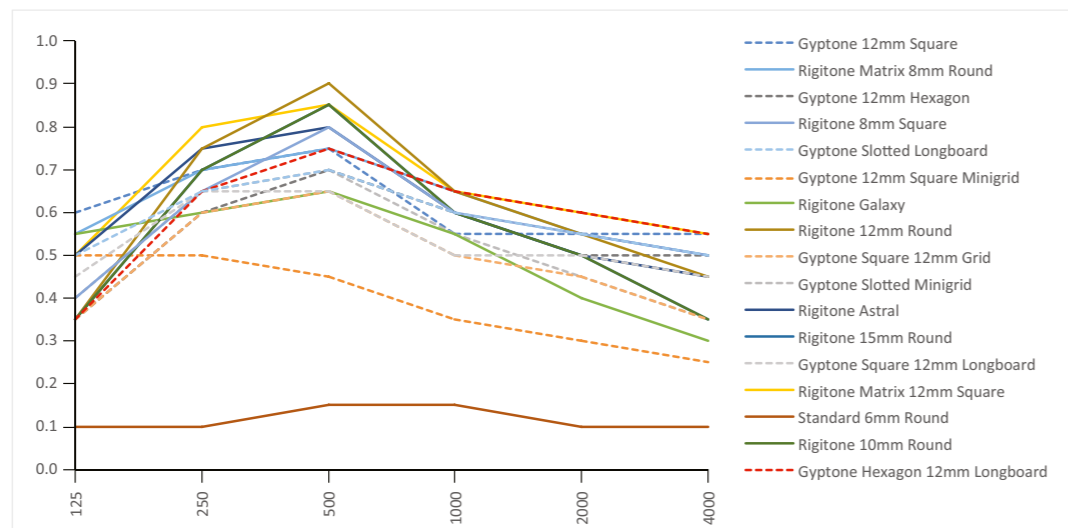
- Options suitable for ceilings and walls including flexible options for curved applications
- Plasterboard provides ease of installation and versatility
- The surface is more durable than mineral fibre or similar acoustic absorbers

Acoustic assessment

A material's sound absorbing properties are expressed by the noise reduction coefficient (NRC), a simple measure that averages the absorption values over just a few frequencies. NRC typically ranges from 0 (total reflection) to 1.00 (total absorption). For perforated products, the NRC is dependent on the amount of open surface area, the type of acoustic fabric, the use of additional insulation material and the depth of the air cavity (plenum) behind the lining. Boards in the Rigitone and Gyptone ranges were tested for sound absorption in CSIRO Melbourne and Auckland University laboratories. Testing was performed with air cavities of 200mm and, in some cases 600mm, with and without insulation (50mm CSR Bradford glasswool batts at 14kg/m³).

PKA Acoustic Consulting provided complete acoustic predictions based on this data for the Rigitone and Gyptone ranges and previous testing data for the Standard 6mm Round board, along with perforated and slotted resonance formula calculations, as well as their database of sound absorption coefficient and acoustic laboratory tests. The acoustic absorption performance summary graph below shows the absorption coefficients for the standard range of boards in the perforated plasterboard range, with an uninsulated 200mm cavity installation. The table opposite provides a quick comparison of the range's NRC values. Copies of the test reports are available by contacting DesignLINK Technical Support on 1800 621 117.

Acoustic absorption performance summary:
200mm plenum (air cavity), uninsulated (full details on following pages)



All boards in the Rigitone and Gyptone ranges are supplied with acoustic fabric backing as standard and were tested as supplied, resulting in far better acoustic performance results than Standard 6mm Round, which was tested as supplied without acoustic fabric. Standard 6mm Round is an entry level perforated product, often specified for aesthetics over performance. However, installers may use a third party acoustic fabric to provide far higher levels of acoustic performance if required.



NRC Value Summary: Standard Range (Full details on following pages)

Perforated Pattern	Sheet Size (mm)	Sheet Thickness (mm)	Open Area %	Acoustic Fabric	Plenum (Air Cavity)					
					65mm		200mm		600mm	
					Empty	Batts**	Empty	Batts**	Empty	Batts**
Gyprock Rigitone – Standard Range										
Matrix 8mm Round	1188 x 1998	12.5	15.50%	Black	0.60	0.70	0.65	0.75	0.65	0.75
Matrix 12mm Round	1200 x 2000	12.5	18.10%	Black	0.60	0.70	0.70	0.85	0.70	0.90
Matrix 15mm Round	1200 x 1980	12.5	19.60%	Black	0.55	0.70	0.65	0.90	0.65	0.90
Matrix 12mm Square	1200 x 2000	12.5	23.00%	Black	0.65	0.75	0.70	0.90	0.70	0.85
Astral	1188 x 1980	12.5	19.60%	Black	0.55	0.65	0.65	0.85	0.65	0.80
Galaxy	1200 x 1960	12.5	10.00%	Black	0.55	0.60	0.55	0.60	0.60	0.65
Gyprock Gyptone - Standard Range										
Hexagon 12mm	1200 x 2400	12.5	15.00%	Black	0.55	0.65	0.60	0.65	0.60	0.70
Square 12mm	1200 x 2400	12.5	16.00%	Black	0.55	0.70	0.65	0.70	0.65	0.70
Square 12mm Flexible	1200 x 2400	6.5	16.00%	Black	0.55	0.70	0.65	0.70	0.65	0.70
Slotted Minigrd	1200 x 2400	12.5	13.00%	Black	0.45	0.60	0.60	0.60	0.55	0.60
Slotted Minigrd Flexible	1200 x 2400	6.5	13.00%	Black	0.45	0.60	0.60	0.60	0.55	0.60
Square Minigrd	1200 x 2400	12.5	6.00%	Black	0.35	0.40	0.40	0.40	0.40	0.45
Gyprock Standard										
6mm Round	1200 x 3600	13	8.30%	Black	0.10	0.35	0.15	0.40	0.15	0.45

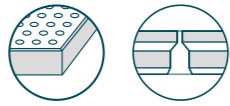
Bold values in all tables are test report data. Non-bold values are PKA's acoustic predictions. Values are for ceilings only. For wall values please contact DesignLINK.
**Batts denotes that 50mm Bradford glasswool batts (14kg/m³) were included in the cavity.

Three core ranges

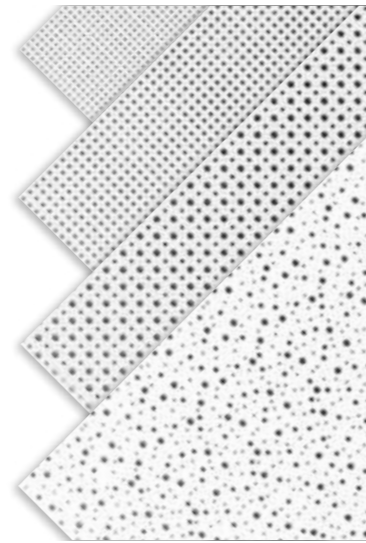
Gyprock Rigitone™ Range

Rigitone perforated plasterboard is a superior and modern acoustic solution that delivers a monolithic design due to its edge to edge pattern layouts. The Rigitone range combines functionality and aesthetics in the modern design of ceilings. Integrating lighting, ventilation systems, loudspeakers and such is straightforward and simple. Due to the variety of perforation sizes and patterns, board dimensions vary slightly but are nominally 1200mm x 2000mm x 12.5mm.

The majority of the boards in the Rigitone range, such as Matrix 8mm Round, Matrix 12mm Square, Astral & Galaxy feature a new chamfered edge for easier installation, while the Matrix 12mm Round & Matrix 15mm Round feature the traditional square edge. Both edge types are pre-primed and sanded, and are finished in the same way with Rigitone Filler used to create a continuous, seamless finish.



Square Edge Rigitone® Edge



Gyprock Gyptone™ Range

Gyptone perforated plasterboard contributes to aesthetics and excellent acoustics. The range features four contemporary perforation patterns, each with different percentages of open area providing a range of acoustic performance.

Gyptone Standard Options

The Gyptone plasterboards are supplied at a size of 1200mm x 2400mm x 12.5mm for acoustic walls and ceilings.

Unlike standard plasterboard, all four edges of the 12.5mm thick Gyptone perforated plasterboard products are recessed to make flush jointing quicker and easier with the normal tape and three coat jointing system.

Gyptone Flexible Options

Two of the three Gyptone patterns are available in a flexible board option at a size of 1200mm x 2400mm x 6.5mm. These are suitable for curved ceiling applications. The flexible boards have recesses along two long edges only as standard.



Gyprock Standard 6mm Round

6mm Round is the traditional Gyprock perforated board product that has been extensively used throughout Australia for many years. It provides an economical aesthetic solution for ceilings or walls. This 1200mm x 3600mm x 13mm board features recesses on the two long edges with square cuts at each short edge. Standard 6mm Round is supplied without an acoustic fabric backing and acoustic performance is adequate for most situations where moderate levels of attenuation are required.

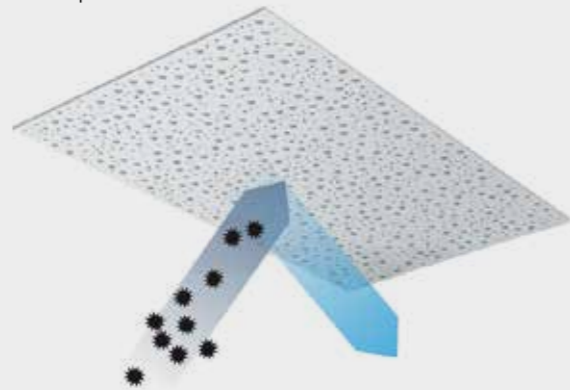


Activ'Air

Many materials, such as particleboard, furniture, carpets and paint emit formaldehyde, one of the most prevalent VOCs. This means that high concentrations of formaldehyde, which has been classified as a known carcinogen by The World Health Organisation and the US Department of Health, can frequently be found in the air we breathe in many indoor spaces.

Activ'Air is a patented technology that converts formaldehyde into non-harmful inert compounds that are permanently locked in the board and cannot be released back into the air. Controlled testing has shown that Activ'Air can reduce the concentration of formaldehyde within an environment by up to 60% when installed in ceilings, even when there is continuous airflow containing formaldehyde.

Installing Rigitone or Gyptone plasterboard containing Activ'Air technology to ceilings and/or walls will have an enduring impact on air quality and will improve the environment for people working and living in the space.



Activ'Air converts formaldehyde into inert compounds which are locked into the board, creating healthier indoor environments.

Acoustic fabric

Rigitone and Gyptone perforated plasterboard is supplied with a highly effective black acoustic fabric backing that dramatically improves the acoustic performance of the board. This unique fabric is exclusive to Gyprock and apart from improved acoustic performance, it provides other benefits:

- Eliminates dust from ceiling cavities coming down into the room
- Effectively masks the ceiling framework so that it is not seen from below through the perforations

Applications

Perforated plasterboard is best suited for installation in areas with less than 70% relative humidity. Gyptone boards support point loads up to 3kg. Adequate independent or additional support must be provided for services and lighting systems that exceed this limit.

Walls lined with Gyptone are more susceptible to damage from impact. When applying Gyptone to walls for additional acoustic performance and striking aesthetics, be sure to consider the use of the space. Non-trafficable areas are well suited to this application, as well as low-traffic areas which may better endure with a sheet of standard plasterboard fitted on the lower half of the wall.



Access panel solutions

Access panels are integrated into suspended ceilings to allow for inspection, service and maintenance work on the installations in the space above. Gyprock offers solutions for the Rigitone and Gyptone ranges that provide easy access but are barely perceptible in a continuous perforated ceiling pattern.

Rigitone Access Panels

These genuine International Alliance access panels consist of a metal frame that houses a matching perforated plasterboard panel. Pre-cut panels are supplied for the majority of the Rigitone patterns, and the Rigitone Galaxy is supplied frame only, with the panel required to be cut on site to suit.

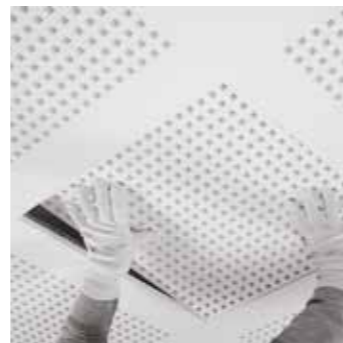
The well thought-out Rigitone system makes these prefabricated access panels easy and cost effective to install and maintains the high design quality of rooms with continuously perforated ceilings. Accurate installation is facilitated by fitting bolts, that assist with the alignment of the access panels. Rigitone Access Panels are nominally 500mm x 500mm x 12.5mm.

Note: Rigitone Astral Access Panel is 510mm x 510mm x 12.5mm nominally.



Gyptone™

Access panels are available in each of the Gyptone board patterns. These consist of a plasterboard frame that is easily set into the ceiling and a 510mm x 510mm hatch piece with a matching perforation pattern that fits neatly into the frame.





Rigitone Matrix

8mm Round (8/18)

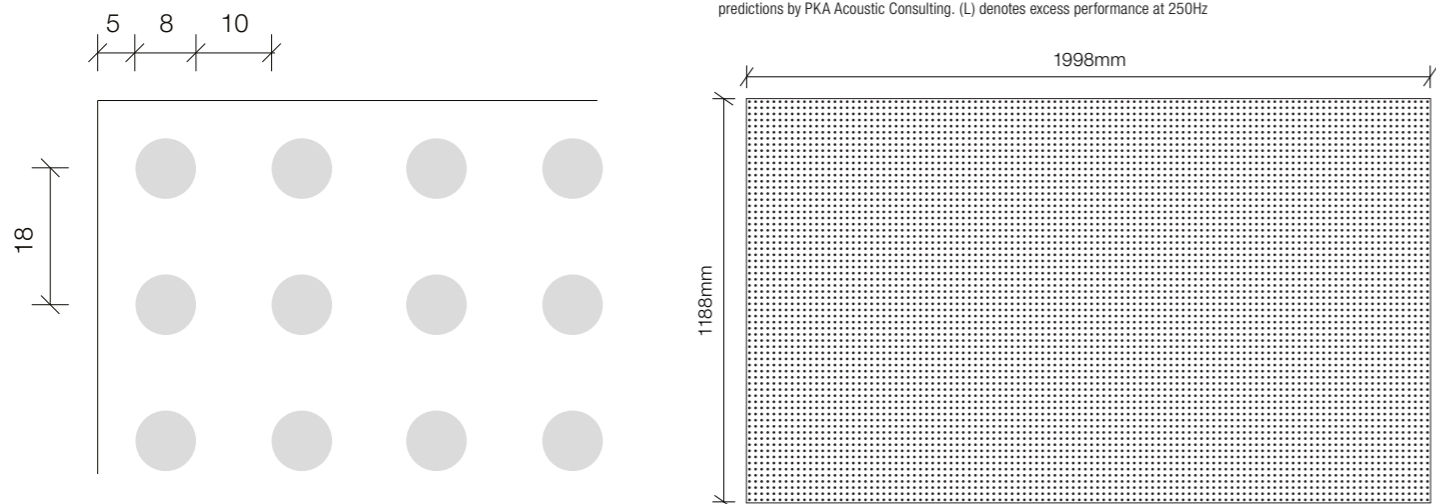


A pattern of 8mm round perforations spaced at 18mm centres, providing a 15.5% open area. Supplied with a black acoustic fabric backing.

A 500mm x 500mm matching access panel is also available.

Matrix 8mm Round 15.5% open area				Sound Absorption Coefficient α_p					
Plenum (Air Cavity)	Plenum Insulation	α_w	NRC	Octave Band Centre Frequencies (Hz)					
				125	250	500	1000	2000	4000
65mm	Empty	0.60	0.60	0.20	0.30	0.65	0.80	0.60	0.50
	50mm glasswool (14kg/m ³)	0.70	0.70	0.35	0.55	0.70	0.80	0.65	0.55
200mm	Empty	0.60(L)	0.65	0.55	0.70	0.75	0.65	0.55	0.50
	50mm glasswool (14kg/m ³)	0.75(L)	0.75	0.70	0.80	0.75	0.75	0.70	0.70
600mm	Empty	0.65(L)	0.65	0.60	0.70	0.65	0.60	0.60	0.55
	50mm glasswool (14kg/m ³)	0.75	0.75	0.70	0.75	0.70	0.70	0.75	0.75

Bold values are test report data conducted at the CSIRO Melbourne laboratories. Non-bold values are acoustic predictions by PKA Acoustic Consulting. (L) denotes excess performance at 250Hz



Rigitone Matrix

12mm Square (12/25 Q)

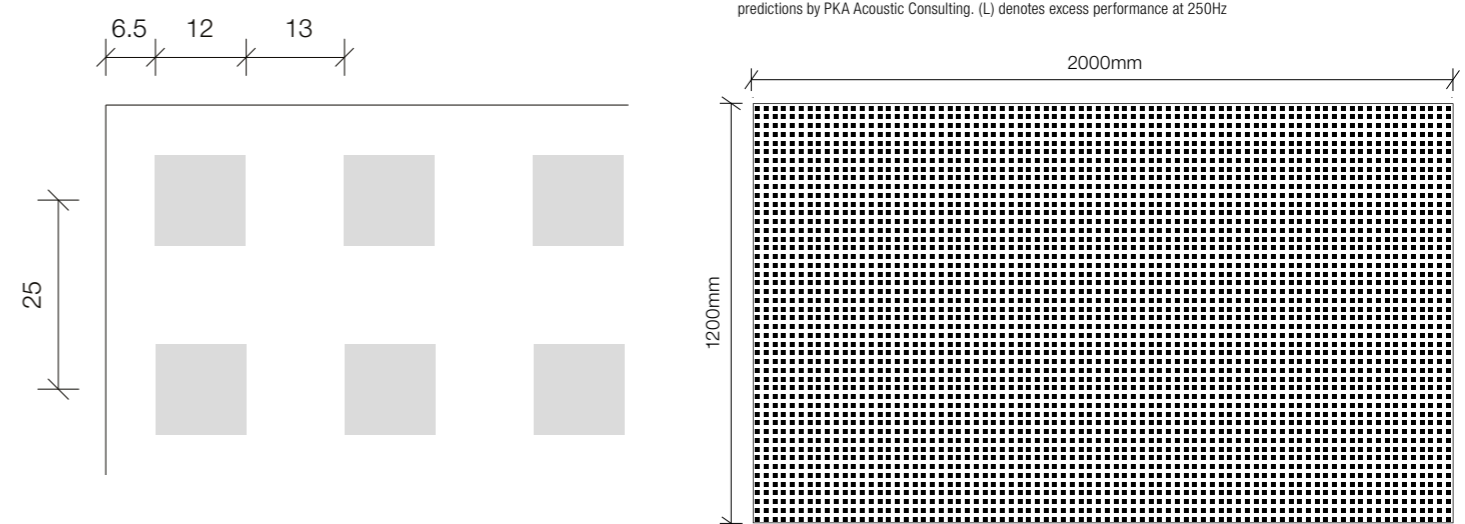


A pattern of 12mm square perforations spaced at 25mm centres, providing a 23% open area. Supplied with a black acoustic fabric backing.

A 500mm x 500mm matching access panel is also available.

Matrix 12mm Square 23% open area				Sound Absorption Coefficient α_p					
Plenum (Air Cavity)	Plenum Insulation	α_w	NRC	Octave Band Centre Frequencies (Hz)					
				125	250	500	1000	2000	4000
65mm	Empty	0.60	0.65	0.20	0.35	0.70	0.85	0.65	0.50
	50mm glasswool (14kg/m ³)	0.75	0.75	0.35	0.60	0.85	0.85	0.70	0.60
200mm	Empty	0.65(L)	0.70	0.50	0.80	0.85	0.65	0.60	0.55
	50mm glasswool (14kg/m ³)	0.85(L)	0.90	0.70	0.90	0.90	0.90	0.80	0.75
600mm	Empty	0.65(L)	0.70	0.65	0.70	0.65	0.70	0.65	0.55
	50mm glasswool (14kg/m ³)	0.90	0.85	0.70	0.70	0.85	0.95	0.90	0.95

Bold values are test report data conducted at the CSIRO Melbourne laboratories. Non-bold values are acoustic predictions by PKA Acoustic Consulting. (L) denotes excess performance at 250Hz





Rigitone Astral (12-20/66)

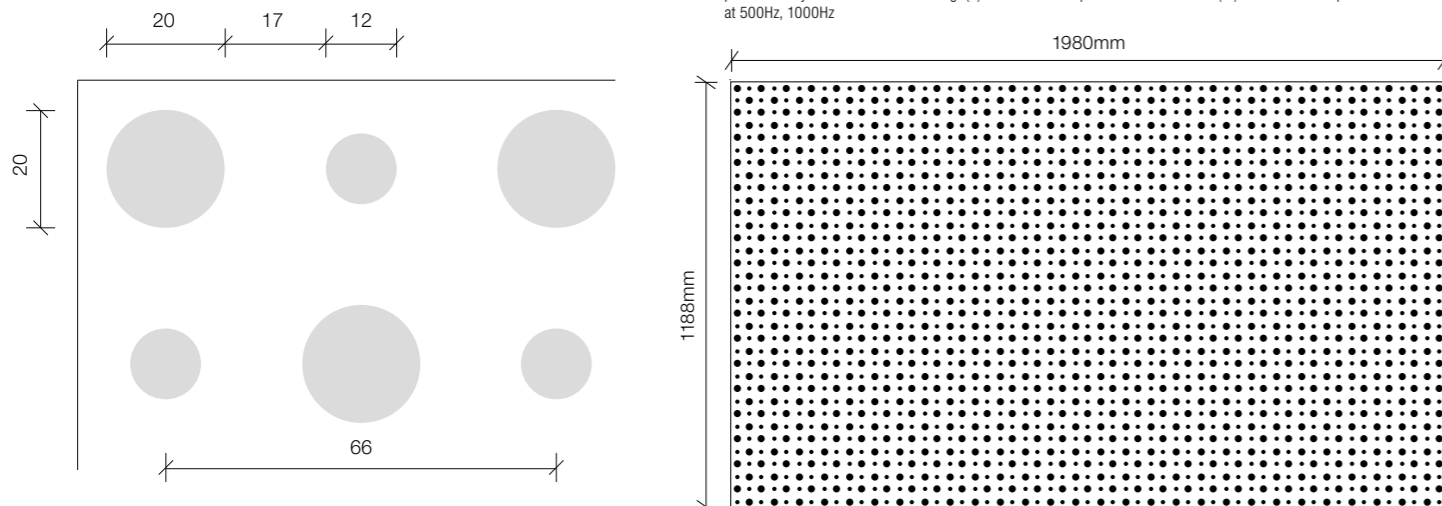


A regularly staggered pattern consisting of 12mm and 20mm round perforations spaced at 33mm centres, providing a 19.6% open area. Supplied with a black acoustic fabric backing.

A 510mm x 510mm matching access panel is also available.

Astral 19.6% open area				Sound Absorption Coefficient α_p					
Plenum (Air Cavity)	Plenum Insulation	α_w	NRC	Octave Band Centre Frequencies (Hz)					
				125	250	500	1000	2000	4000
65mm	Empty	0.50	0.55	0.20	0.35	0.55	0.80	0.55	0.30
	50mm glasswool (14kg/m ³)	0.60	0.65	0.35	0.50	0.70	0.80	0.60	0.45
200mm	Empty	0.55(LM)	0.65	0.50	0.75	0.80	0.60	0.50	0.45
	50mm glasswool (14kg/m ³)	0.80(L)	0.85	0.70	0.85	0.85	0.85	0.70	0.70
600mm	Empty	0.65	0.65	0.60	0.65	0.65	0.65	0.60	0.50
	50mm glasswool (14kg/m ³)	0.80	0.80	0.70	0.70	0.80	0.85	0.75	0.75

Bold values are test report data conducted at the CSIRO Melbourne laboratories. Non-bold values are acoustic predictions by PKA Acoustic Consulting. (L) denotes excess performance at 250Hz (M) denotes excess performance at 500Hz, 1000Hz



Rigitone Galaxy (8-15-20 Super)



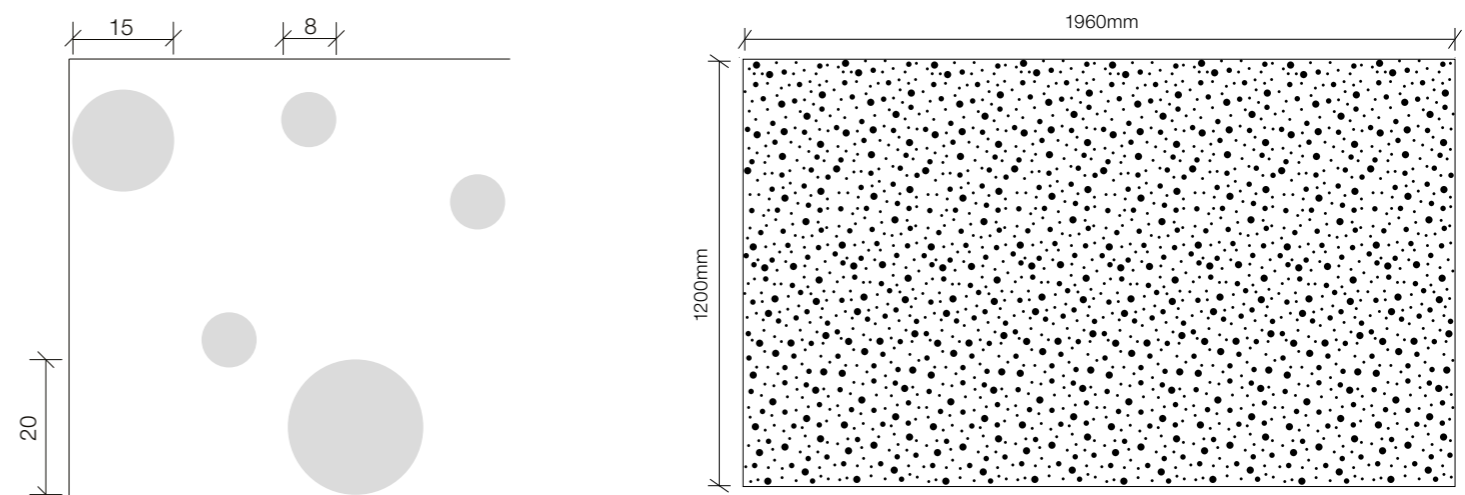
An irregular scattered pattern consisting of 8mm, 15mm and 20mm round perforations, providing a 10% open area. Supplied with a black acoustic fabric backing.

A 500mm x 500mm matching access panel is also available.

Please note a cut piece of Galaxy board is required for the Galaxy access panel, which is supplied frame only.

Galaxy 10% open area				Sound Absorption Coefficient α_p					
Plenum (Air Cavity)	Plenum Insulation	α_w	NRC	Octave Band Centre Frequencies (Hz)					
				125	250	500	1000	2000	4000
65mm	Empty	0.50	0.55	0.20	0.35	0.70	0.75	0.45	0.35
	50mm glasswool (14kg/m ³)	0.50(L)	0.60	0.35	0.55	0.70	0.75	0.45	0.35
200mm	Empty	0.45(L)	0.55	0.55	0.60	0.65	0.55	0.40	0.30
	50mm glasswool (14kg/m ³)	0.55(L)	0.60	0.60	0.65	0.60	0.60	0.45	0.45
600mm	Empty	0.60	0.60	0.60	0.60	0.60	0.60	0.50	0.50
	50mm glasswool (14kg/m ³)	0.65	0.65	0.60	0.60	0.65	0.70	0.55	0.55

Bold values are test report data conducted at the CSIRO Melbourne laboratories. Non-bold values are acoustic predictions by PKA Acoustic Consulting. (L) denotes excess performance at 250Hz





Rigitone Matrix 10mm Round (10-23)

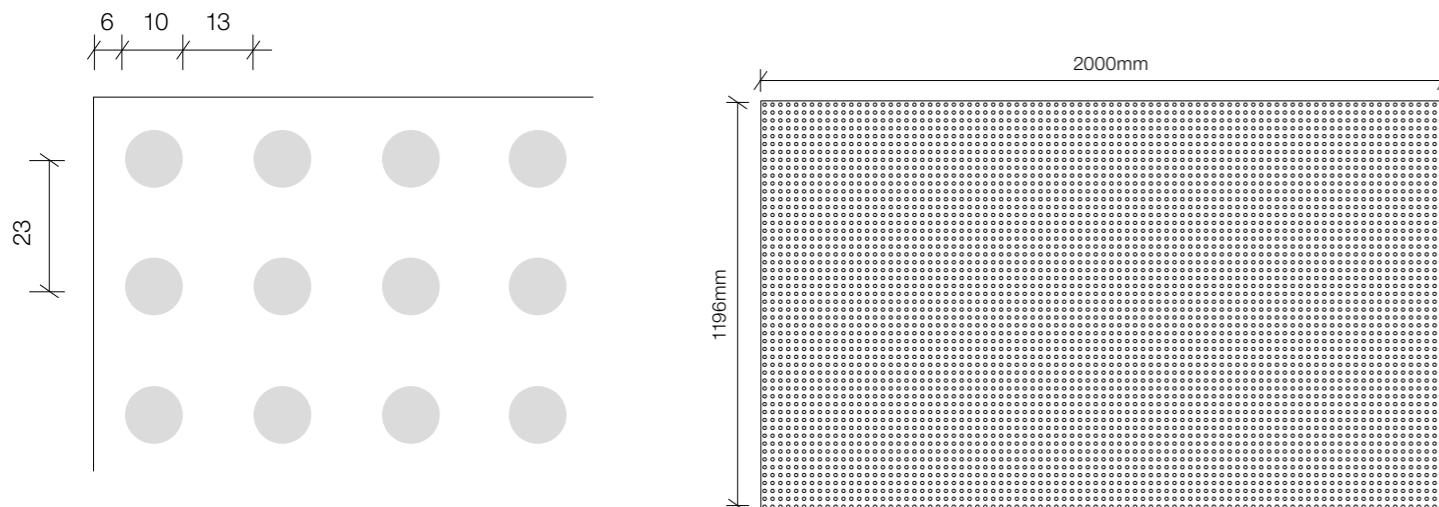


A pattern of 10mm round perforations spaced at 23mm centres, providing a 14.8% open area. Supplied with a black acoustic fabric backing.

Access panels are available in a range of sizes.

Matrix 10mm Round 14.8% Open Area				Sound Absorption Coefficient α_p					
Plenum (Air Cavity)	Plenum Insulation	α_w	NRC	Octave Band Centre Frequencies (Hz)					
				125	250	500	1000	2000	4000
65mm	Empty	0.50	0.60	0.15	0.30	0.65	0.85	0.55	0.30
	50mm glasswool (14kg/m ³)	0.60	0.65	0.35	0.55	0.75	0.70	0.60	0.45
200mm	Empty	0.50(LM)	0.65	0.35	0.70	0.85	0.60	0.50	0.35
	50mm glasswool (14kg/m ³)	0.65(LM)	0.85	0.60	0.95	0.90	0.80	0.65	0.45
600mm	Empty	0.55(L)	0.65	0.50	0.70	0.75	0.65	0.55	0.40
	50mm glasswool (14kg/m ³)	0.70(L)	0.85	0.65	0.90	0.90	0.85	0.70	0.55

Values are acoustic predictions by PKA Acoustic Consulting. (L) denotes excess performance at 250Hz. (M) denotes excess performance at 500Hz, 1000Hz



Rigitone Matrix 12mm Round (12-25)

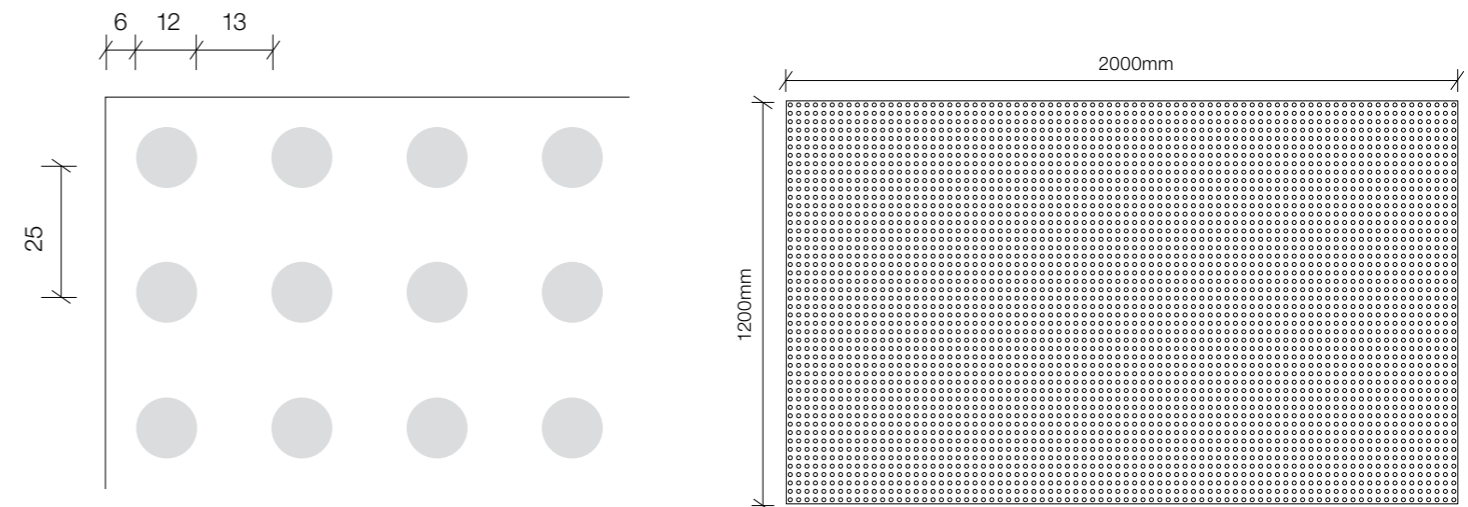


A pattern of 12mm round perforations spaced at 25mm centres, providing a 18.1% open area. Supplied with a black acoustic fabric backing.

Access panels are available in a range of sizes.

Matrix 12mm Round 18.1% Open Area				Sound Absorption Coefficient α_p					
Plenum (Air Cavity)	Plenum Insulation	α_w	NRC	Octave Band Centre Frequencies (Hz)					
				125	250	500	1000	2000	4000
65mm	Empty	0.55	0.60	0.15	0.30	0.65	0.80	0.60	0.45
	50mm glasswool (14kg/m ³)	0.70	0.70	0.30	0.55	0.80	0.75	0.65	0.55
200mm	Empty	0.60(LM)	0.70	0.35	0.75	0.90	0.65	0.55	0.45
	50mm glasswool (14kg/m ³)	0.70(LM)	0.85	0.55	0.95	0.95	0.85	0.70	0.55
600mm	Empty	0.65(L)	0.70	0.50	0.75	0.80	0.70	0.60	0.50
	50mm glasswool (14kg/m ³)	0.80(L)	0.90	0.60	0.90	0.95	0.90	0.75	0.65

Values are acoustic predictions by PKA Acoustic Consulting. (L) denotes excess performance at 250Hz. (M) denotes excess performance at 500Hz, 1000Hz





Gyptone Square 12mm Flexible



Gyptone Square 12mm (41)



Standard and Flexible options

Eight large square groupings per sheet, each with 400 x 12mm square perforations at 25mm centres, providing a 16% open area. Supplied with a black acoustic fabric backing.

A 510mm x 510mm matching access panel is also available for flat format installations.

Square 12mm 16% open area		Sound Absorption Coefficient α_p							
Plenum (Air Cavity)	Plenum Insulation	α_w	NRC	Octave Band Centre Frequencies (Hz)					
				125	250	500	1000	2000	4000
65mm	Empty	0.55	0.55	0.20	0.35	0.55	0.75	0.60	0.40
	50mm glasswool (14kg/m ³)	0.70	0.70	0.40	0.65	0.80	0.70	0.65	0.55
200mm	Empty	0.60(L)	0.65	0.60	0.70	0.75	0.55	0.55	0.55
	50mm glasswool (14kg/m ³)	0.70	0.70	0.65	0.70	0.70	0.65	0.65	0.60
600mm	Empty	0.65(L)	0.65	0.65	0.70	0.65	0.60	0.60	0.65
	50mm glasswool (14kg/m ³)	0.70	0.70	0.70	0.65	0.70	0.70	0.70	0.70

Bold values are test report data conducted at the Auckland University acoustic laboratory that apply to the non-flexible options only. All other values are acoustic predictions by PKA Acoustic Consulting. (L) denotes excess performance at 250Hz

Gyptone Square 12mm Minigrid (47)

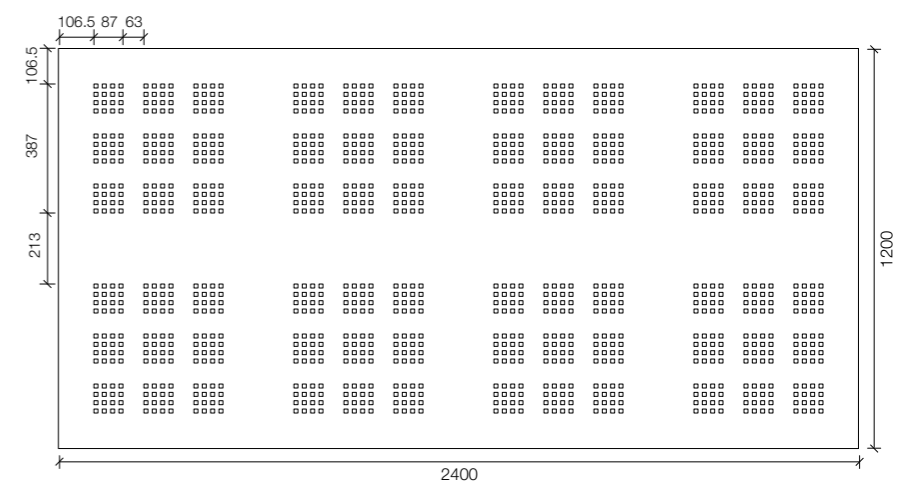
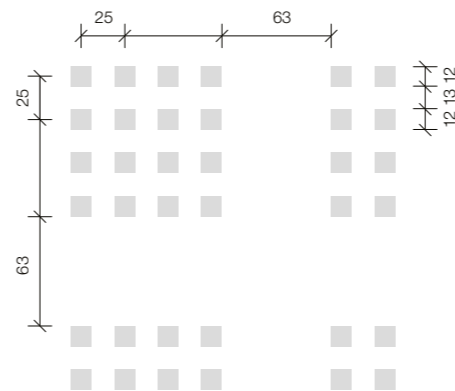
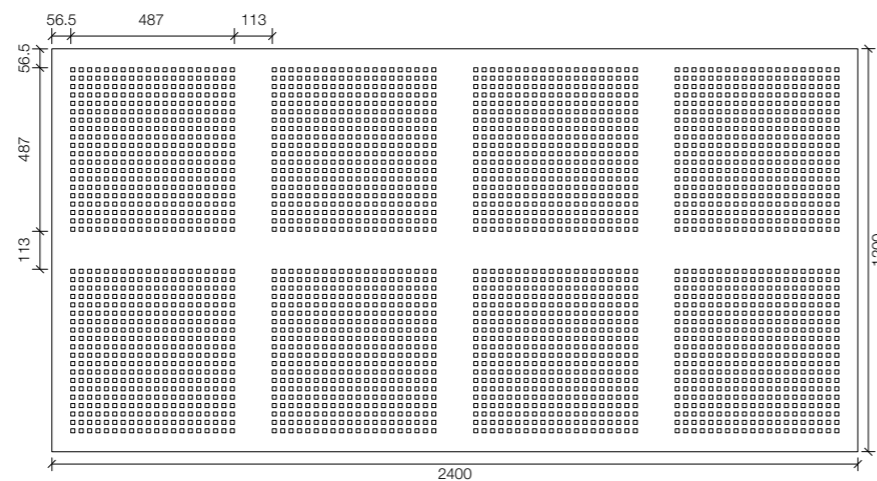
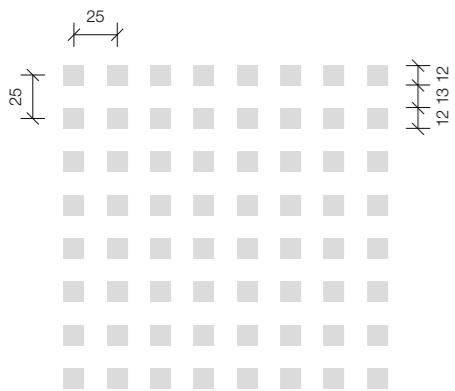


Eight large square groupings per sheet, each with nine mini grids of 16 x 12mm square perforations at 25mm centres. This subtle pattern provides an open area of 6% and is supplied with a black acoustic fabric backing.

A 510mm x 510mm matching access panel is also available.

Square 12mm Minigrid 6% open area		Sound Absorption Coefficient α_p							
Plenum (Air Cavity)	Plenum Insulation	α_w	NRC	Octave Band Centre Frequencies (Hz)					
				125	250	500	1000	2000	4000
65mm	Empty	0.35	0.35	0.20	0.25	0.35	0.45	0.35	0.20
	50mm glasswool (14kg/m ³)	0.35(L)	0.40	0.35	0.45	0.50	0.40	0.30	0.25
200mm	Empty	0.35(L)	0.40	0.50	0.50	0.45	0.35	0.30	0.25
	50mm glasswool (14kg/m ³)	0.40(L)	0.40	0.55	0.50	0.45	0.40	0.30	0.30
600mm	Empty	0.40(L)	0.40	0.55	0.50	0.35	0.40	0.35	0.35
	50mm glasswool (14kg/m ³)	0.45	0.45	0.60	0.45	0.45	0.45	0.35	0.40

Bold values are test report data conducted at the Auckland University acoustic laboratory that apply to the non-flexible options only. All other values are acoustic predictions by PKA Acoustic Consulting. (L) denotes excess performance at 250Hz





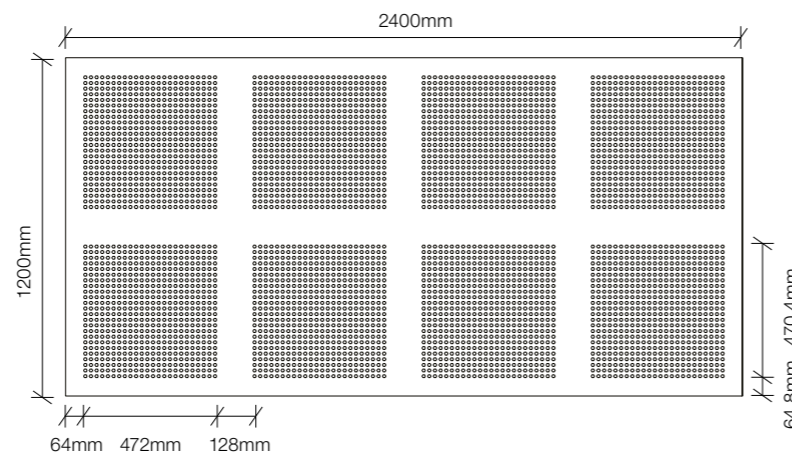
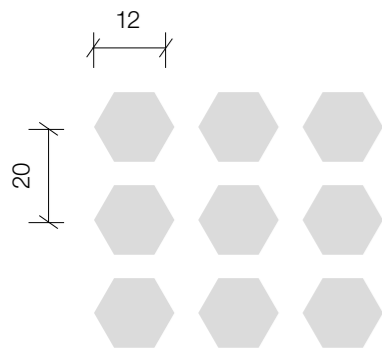
Gyptone Hexagon 12mm (63)

Eight large square groupings per sheet, each with 576 x 12mm hexagonal perforations at 20mm centres, providing a 15% open area. Supplied with a black acoustic fabric backing.

A 510mm x 510mm matching access panel is also available for flat format installations.

Hexagon 12mm 15% Open Area		Sound Absorption Coefficient α_p							
Plenum (Air Cavity)	Plenum Insulation	α_w	NRC	Octave Band Centre Frequencies (Hz)					
				125	250	500	1000	2000	4000
65mm	Empty	0.60	0.55	0.15	0.35	0.60	0.65	0.60	0.50
	50mm glasswool (14kg/m ³)	0.65	0.65	0.35	0.55	0.70	0.65	0.60	0.50
200mm	Empty	0.60	0.60	0.35	0.60	0.70	0.60	0.50	0.50
	50mm glasswool (14kg/m ³)	0.65	0.65	0.40	0.65	0.70	0.65	0.60	0.55
600mm	Empty	0.60	0.60	0.40	0.60	0.70	0.60	0.55	0.50
	50mm glasswool (14kg/m ³)	0.70	0.70	0.50	0.70	0.70	0.65	0.65	0.60

Values are acoustic predictions by PKA Acoustic Consulting. (L) denotes excess performance at 250Hz. (M) denotes excess performance at 500Hz, 1000Hz



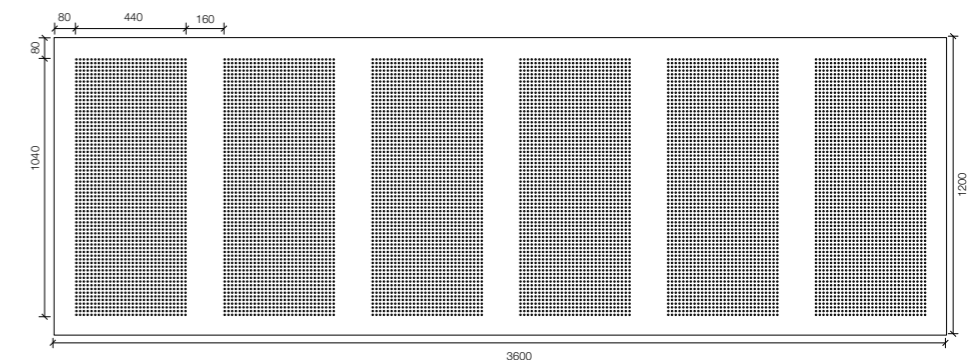
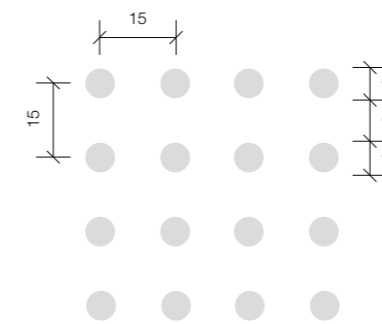
Standard 6mm Round

Six large rectangular groupings per sheet, each with 2,100 x 6mm diameter perforations at 15mm centres to provide an open area of 8.3%. This board is supplied with no acoustic fabric backing.

Standard 6mm Round is suitable for any room where moderate acoustic control and a simple design is required.

Standard 6mm Round 8.3% open area		Absorption Coefficient α_p							
Plenum (Air Cavity)	Plenum Insulation	α_w	NRC	Octave Band Centre Frequencies (Hz)					
				125	250	500	1000	2000	4000
65mm	Empty	0.15	0.10	0.05	0.10	0.10	0.15	0.10	0.10
	50mm glasswool (14kg/m ³)	0.30	0.35	0.15	0.25	0.40	0.50	0.30	0.15
200mm	Empty	0.15	0.15	0.10	0.10	0.15	0.15	0.10	0.10
	50mm glasswool (14kg/m ³)	0.25(L,M)	0.40	0.40	0.45	0.60	0.40	0.20	0.15
600mm	Empty	0.15	0.15	0.20	0.15	0.15	0.10	0.10	0.10
	50mm glasswool (14kg/m ³)	0.30(L,M)	0.45	0.50	0.50	0.60	0.40	0.25	0.15

These acoustic predictions are for standard 6mm Round perforated plasterboard without acoustic fabric. Installers may use a third party acoustic fabric to provide far higher levels of acoustic performance if required. (L) denotes excess performance at 250Hz (M) denotes excess performance at 500Hz, 1000Hz





NRC Value Summary – Extended Range, available by special order* (Full details on following pages)

	Sheet Size (mm)	Sheet Thickness (mm)	Open Area %	Acoustic Fabric	Plenum (Air Cavity)					
					65mm		200mm		600mm	
					Empty	Batts**	Empty	Batts**	Empty	Batts**
Extended Gyprock Rigitone range – available by special order*										
Matrix 10mm Round	1196 x 2000	12.5	14.80%	Black	0.60	0.65	0.65	0.85	0.65	0.85
Matrix 8mm Square	1188 x 1998	12.5	19.80%	Black	0.60	0.70	0.65	0.80	0.70	0.80
Extended Gyprock Gyptone range – available by special order*										
Hexagon 12mm Longboard	900 x 2700	12.5	17.60%	White	0.60	0.70	0.65	0.70	0.65	0.70
Slotted Longboard	900 x 2700	12.5	18.00%	White	0.55	0.65	0.65	0.65	0.60	0.60
Square 12mm Grid	1200 x 2400	12.5	10.00%	Black	0.50	0.60	0.55	0.65	0.55	0.65
Square 12mm Longboard	900 x 2700	12.5	18.00%	White	0.55	0.65	0.60	0.70	0.60	0.70

* Lead time and minimum quantities apply, please consult your account manager for details.

Values are acoustic predictions by PKA Acoustic Consulting.

Values are for ceilings only. For wall values please contact DesignLINK.

**Batts denotes that 50mm Bradford glasswool batts (14kg/m3) were included in the cavity.

Rigitone Matrix 15mm Round (15-30)

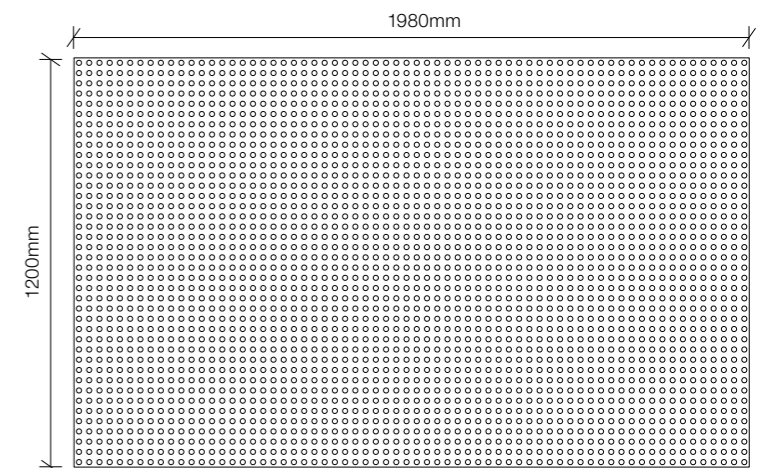
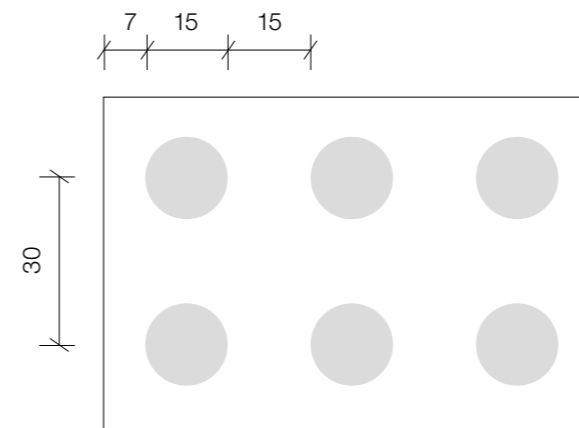


A pattern of 15mm round perforations spaced at 30mm centres, providing a 19.6% open area. Supplied with a black acoustic fabric backing.

Access panels are available in a range of sizes.

Matrix 15mm Round 19.6% Open Area				Sound Absorption Coefficient α_p					
Plenum (Air Cavity)	Plenum Insulation	α_w	NRC	Octave Band Centre Frequencies (Hz)					
				125	250	500	1000	2000	4000
65mm	Empty	0.50	0.55	0.20	0.30	0.60	0.80	0.50	0.30
	50mm glasswool (14kg/m ³)	0.70	0.70	0.35	0.55	0.85	0.75	0.65	0.55
200mm	Empty	0.50(L,M)	0.65	0.35	0.70	0.85	0.60	0.50	0.35
	50mm glasswool (14kg/m ³)	0.70(L,M)	0.90	0.60	0.95	1.00	0.85	0.70	0.55
600mm	Empty	0.55(L)	0.65	0.50	0.70	0.75	0.65	0.55	0.40
	50mm glasswool (14kg/m ³)	0.80(L)	0.90	0.65	0.90	1.00	0.90	0.75	0.65

Values are acoustic predictions by PKA Acoustic Consulting. (L) denotes excess performance at 250Hz, (M) denotes excess performance at 500Hz, 1000Hz





Gyptone Slotted Minigrid Flexible

Rigitone Matrix 8mm Square (8-18)

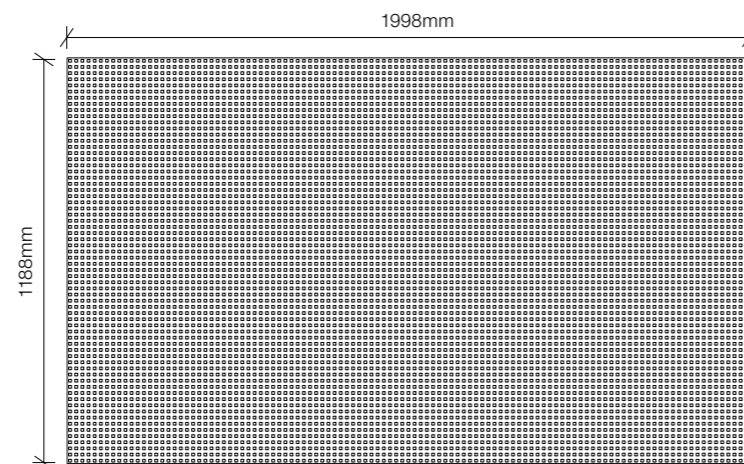
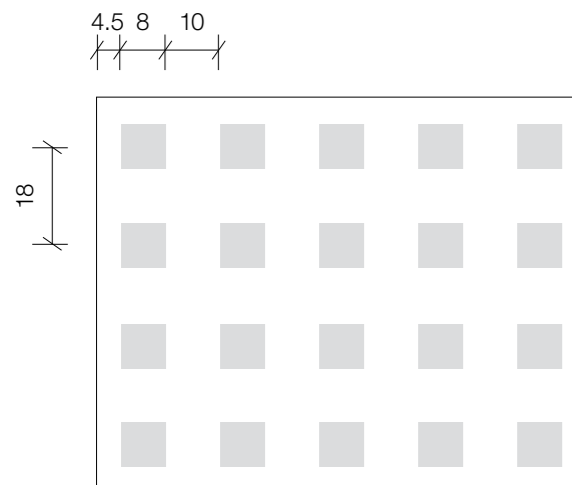


A pattern of 8mm square perforations spaced at 18mm centres, providing a 19.8% open area. Supplied with a black acoustic fabric backing.

Access panels are available in a range of sizes.

Matrix 8mm Square 19.8% Open Area		Sound Absorption Coefficient α_p							
Plenum (Air Cavity)	Plenum Insulation	α_w	NRC	Octave Band Centre Frequencies (Hz)					
				125	250	500	1000	2000	4000
65mm	Empty	0.60	0.60	0.15	0.30	0.65	0.85	0.65	0.50
	50mm glasswool (14kg/m ³)	0.75	0.70	0.30	0.55	0.80	0.80	0.70	0.60
200mm	Empty	0.60(LM)	0.65	0.40	0.65	0.80	0.60	0.55	0.50
	50mm glasswool (14kg/m ³)	0.80	0.80	0.40	0.70	0.85	0.80	0.80	0.70
600mm	Empty	0.65(L)	0.70	0.45	0.70	0.75	0.65	0.60	0.55
	50mm glasswool (14kg/m ³)	0.80	0.80	0.50	0.80	0.80	0.80	0.75	0.70

Values are acoustic predictions by PKA Acoustic Consulting. (L) denotes excess performance at 250Hz. (M) denotes excess performance at 500Hz, 1000Hz



Gyptone Slotted Minigrid (6)



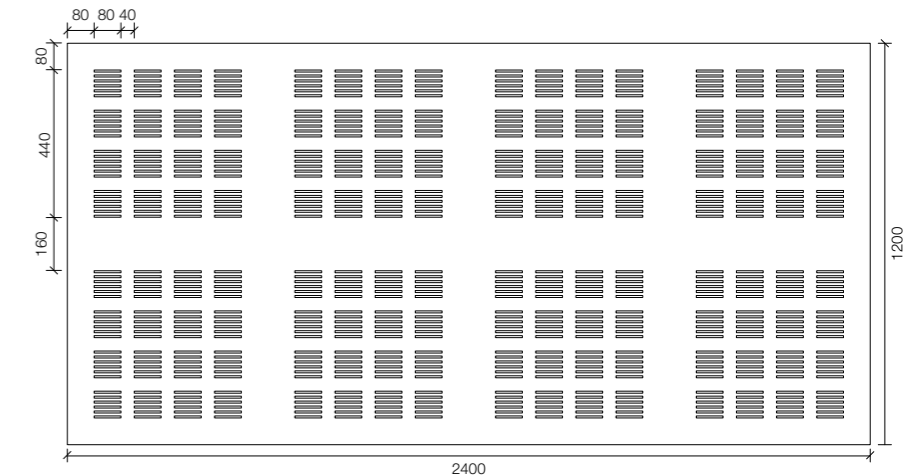
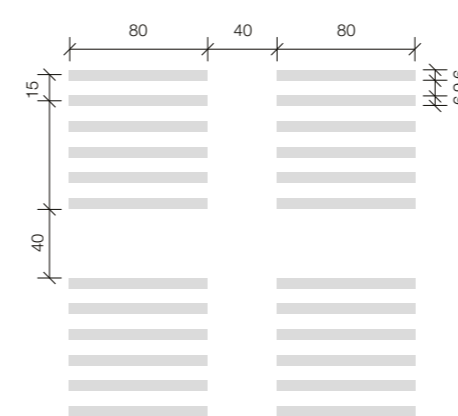
Standard and Flexible options

Eight large square groupings per sheet, each with 16 mini grids of six 6mm x 80mm slot perforations. This contemporary design provides 13% open area and is supplied with a black acoustic fabric backing.

A 510mm x 510mm matching access panel is also available for flat format installations.

Slotted Minigrid 13% open area		Sound Absorption Coefficient α_p							
Plenum (Air Cavity)	Plenum Insulation	α_w	NRC	Octave Band Centre Frequencies (Hz)					
				125	250	500	1000	2000	4000
65mm	Empty	0.45	0.45	0.15	0.25	0.45	0.55	0.45	0.30
	50mm glasswool (14kg/m ³)	0.55(L)	0.60	0.45	0.60	0.70	0.60	0.50	0.40
200mm	Empty	0.50(L)	0.60	0.40	0.65	0.70	0.55	0.45	0.35
	50mm glasswool (14kg/m ³)	0.55(L)	0.60	0.60	0.65	0.60	0.55	0.50	0.40
600mm	Empty	0.50(L)	0.55	0.65	0.60	0.55	0.50	0.45	0.40
	50mm glasswool (14kg/m ³)	0.60	0.60	0.65	0.55	0.60	0.60	0.55	0.45

Bold values are test report data conducted at the Auckland University acoustic laboratory that apply to the non-flexible options only. All other values are acoustic predictions by PKA Acoustic Consulting. (L) denotes excess performance at 250Hz





Gyptone Hexagon 12mm Longboard (65)



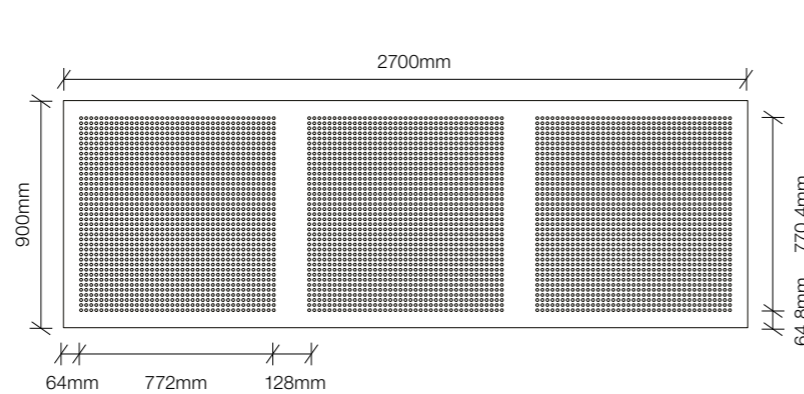
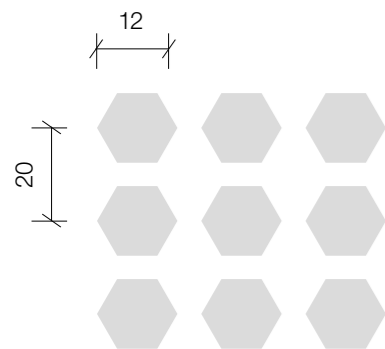
3 large square groupings per sheet, each with 1521 x 12mm hexagonal perforations at 20mm centres, providing a 17.6% open area. Supplied with a white acoustic fabric backing.

The Longboard provides a bigger perforation area than the standard board which makes it ideal for creating a strong visual impact on projects with a higher distance from floor to ceiling, as well as better sound absorption.

A 510mm x 510mm matching access panel is also available for flat format installations.

Hexagon 12mm Longboard 17.6% Open Area				Sound Absorption Coefficient α_p					
Plenum (Air Cavity)	Plenum Insulation	α_w	NRC	Octave Band Centre Frequencies (Hz)					
				125	250	500	1000	2000	4000
65mm	Empty	0.65	0.60	0.15	0.40	0.65	0.70	0.65	0.55
	50mm glasswool (14kg/m ³)	0.70	0.70	0.35	0.60	0.75	0.70	0.65	0.55
200mm	Empty	0.65	0.65	0.35	0.65	0.75	0.65	0.60	0.55
	50mm glasswool (14kg/m ³)	0.70	0.70	0.45	0.65	0.75	0.70	0.65	0.60
600mm	Empty	0.65	0.65	0.40	0.65	0.75	0.65	0.60	0.60
	50mm glasswool (14kg/m ³)	0.75	0.70	0.55	0.70	0.75	0.70	0.70	0.65

Values are acoustic predictions by PKA Acoustic Consulting. (L) denotes excess performance at 250Hz. (M) denotes excess performance at 500Hz, 1000Hz



Gyptone Slotted Longboard (L5)

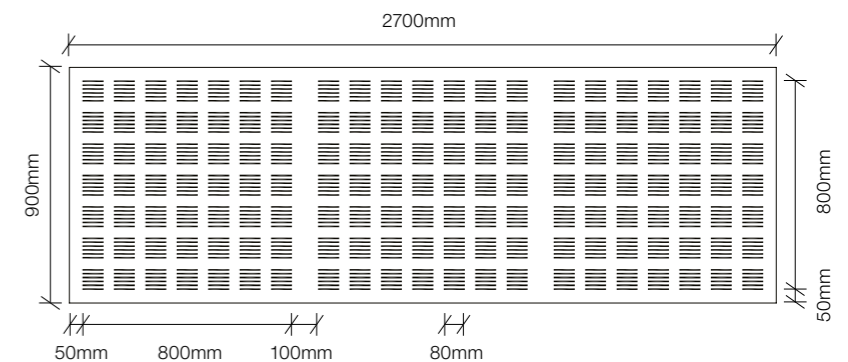
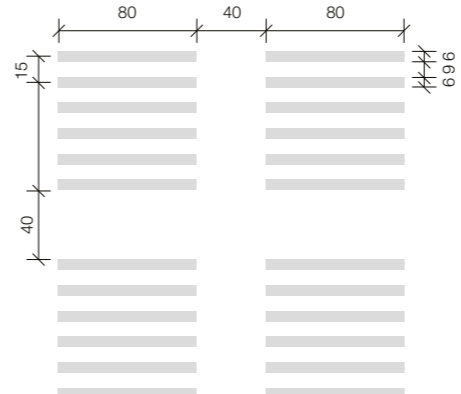


3 large square groupings per sheet, each with 49 mini grids of six 6mm x 80mm slot perforations. This contemporary design provides 18% open area and is supplied with a white acoustic fabric backing. The Longboard provides a bigger perforation area than the standard board which makes it ideal for creating a strong visual impact on projects with a higher distance from floor to ceiling, as well as better sound absorption.

A 510mm x 510mm matching access panel is also available for flat format installations.

Slotted Longboard 18% Open Area				Sound Absorption Coefficient α_p					
Plenum (Air Cavity)	Plenum Insulation	α_w	NRC	Octave Band Centre Frequencies (Hz)					
				125	250	500	1000	2000	4000
65mm	Empty	0.55	0.55	0.20	0.35	0.55	0.65	0.55	0.45
	50mm glasswool (14kg/m ³)	0.65	0.65	0.45	0.55	0.70	0.65	0.60	0.55
200mm	Empty	0.60(L)	0.65	0.50	0.65	0.70	0.60	0.55	0.50
	50mm glasswool (14kg/m ³)	0.65	0.65	0.60	0.65	0.65	0.60	0.60	0.55
600mm	Empty	0.60	0.60	0.65	0.60	0.60	0.60	0.55	0.50
	50mm glasswool (14kg/m ³)	0.65	0.60	0.65	0.55	0.65	0.65	0.60	0.60

Values are acoustic predictions by PKA Acoustic Consulting. (L) denotes excess performance at 250Hz. (M) denotes excess performance at 500Hz, 1000Hz





Gyptone Square 12mm Grid (42)

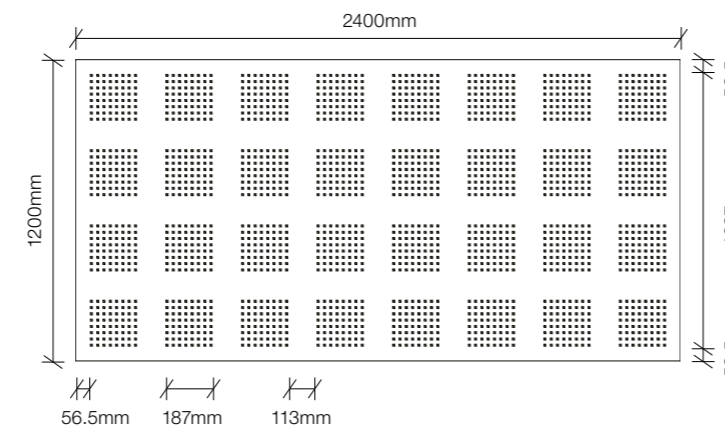
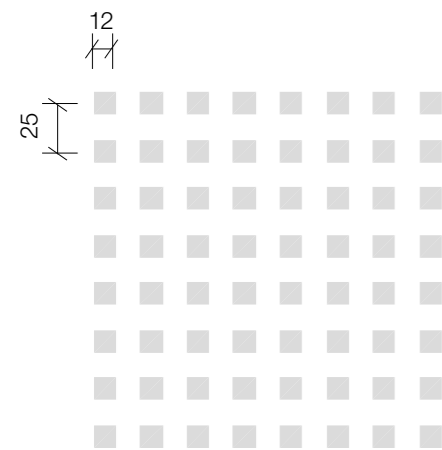


32 small square groupings per sheet, each with 64 x 12mm square perforations at 25mm centres, providing a 10% open area. Supplied with a black acoustic fabric backing.

A 510mm x 510mm matching access panel is also available for flat format installations.

Square 12mm Grid 10% Open Area				Sound Absorption Coefficient α_p					
Plenum (Air Cavity)	Plenum Insulation	α_w	NRC	Octave Band Centre Frequencies (Hz)					
				125	250	500	1000	2000	4000
65mm	Empty	0.50	0.50	0.20	0.30	0.55	0.70	0.50	0.35
	50mm glasswool (14kg/m ³)	0.60	0.60	0.40	0.55	0.70	0.60	0.55	0.45
200mm	Empty	0.50(L)	0.55	0.35	0.60	0.65	0.50	0.45	0.35
	50mm glasswool (14kg/m ³)	0.60(L)	0.65	0.50	0.65	0.70	0.65	0.60	0.45
600mm	Empty	0.55(L)	0.55	0.45	0.60	0.55	0.55	0.50	0.45
	50mm glasswool (14kg/m ³)	0.70	0.65	0.55	0.55	0.70	0.70	0.65	0.55

Values are acoustic predictions by PKA Acoustic Consulting. (L) denotes excess performance at 250Hz. (M) denotes excess performance at 500Hz, 1000Hz



Gyptone Square 12mm Longboard (43)



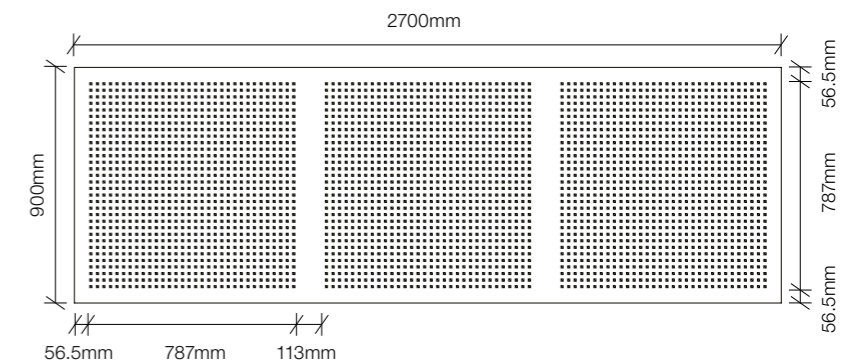
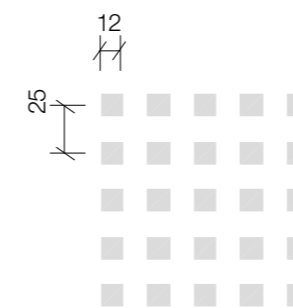
3 large square groupings per sheet, each with 1,024 x 12mm square perforations at 25mm centres, providing a 18% open area. Supplied with a white acoustic fabric backing.

The Longboard provides a bigger perforation area than the standard board which makes it ideal for creating a strong visual impact on projects with a higher distance from floor to ceiling, as well as better sound absorption.

A 510mm x 510mm matching access panel is also available for flat format installations.

Square 12mm Longboard 18% Open Area				Sound Absorption Coefficient α_p					
Plenum (Air Cavity)	Plenum Insulation	α_w	NRC	Octave Band Centre Frequencies (Hz)					
				125	250	500	1000	2000	4000
65mm	Empty	0.55	0.55	0.20	0.30	0.60	0.75	0.55	0.40
	50mm glasswool (14kg/m ³)	0.65	0.65	0.40	0.55	0.75	0.65	0.60	0.50
200mm	Empty	0.55(L)	0.60	0.45	0.65	0.65	0.50	0.50	0.45
	50mm glasswool (14kg/m ³)	0.65(L)	0.70	0.60	0.70	0.70	0.65	0.65	0.55
600mm	Empty	0.60(L)	0.60	0.55	0.65	0.60	0.55	0.55	0.55
	50mm glasswool (14kg/m ³)	0.70	0.70	0.65	0.60	0.70	0.70	0.70	0.65

Values are acoustic predictions by PKA Acoustic Consulting. (L) denotes excess performance at 250Hz. (M) denotes excess performance at 500Hz, 1000Hz



Installation

Rigitone™ accessories

The unique, seamless finish of Gyprock Rigitone is made possible by the use of a specialised primer, filler and installation tools.

While all four edges of the standard range of Rigitone boards are pre-primed and sanded, Rigitone Primer is used to prepare cut edges for jointing.

Pattern spacers are available to ensure boards with square edges are fixed with the exact gap required for jointing. Boards with the chamfered edge are designed to be butted directly next to each other, and so do not require a pattern spacer.

Rigitone joints are achieved using the Rigitone Filler sausage, dispensed with the Accessory Kit.

The Rigitone Accessory Kit includes the tools required to achieve the Rigitone system joint. From the barrel gun with proprietary nozzles that dispenses the filler accurately, to the screw head filler template and cleaning brush, this kit is an all-in-one installation solution.

Gyprock Perforated Filler is available as a dry-mix alternative to the Rigitone Filler sausage. The setting compound is mixed to a creamy consistency before it is applied using the Dry-Mix Filler Application Kit. The Dry-Mix Filler Application kit contains all the tools required to fill and finish Rigitone plasterboard sheet joints, including a Dry-Mix Filler Application gun that is specially designed for dispensing dry-mix filler.

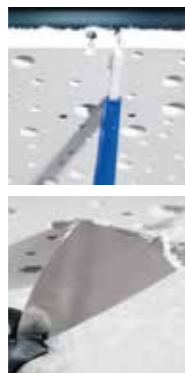


Rigitone Primer

Rigitone Filler

Rigitone Pattern Spacer

Perforated Filler



Rigitone Filler Accessory Kit



Dry-Mix Filler Application Kit

Full installation details can be found in **Red Book 3: Commercial & Multi- Residential Installation Guide – Class 2-9 Buildings**, available for download from gyprock.com.au under the **Resources** tab.

Rigitone™ installation

Rigitone is specially designed to be screw fixed to suspended ceilings. Its unique installation method allows the product's perforated pattern to continue uninterrupted where sheets meet.

Unlike the traditional three coat plasterboard jointing systems, Rigitone boards are jointed by directing a specialised compound into a gap between the sheets. The filling method is made possible by the unique Rigitone Filler Accessory Kit, combined with the Rigitone Filler compound. While all four edges of the standard range of Rigitone boards are pre-primed, Rigitone Primer is used to prepare cut edges for jointing.

Gyptone™ and Standard installation

Gyptone and Standard 6mm Round perforated plasterboard products are screw fixed to suspended concealed grid, or direct fixed to framing. The joints are finished with a three coat jointing system and sanded smooth prior to decoration. The sheets are installed with the long edges at right angles to the direction of the framing with maximum 600mm centres. Gyptone Flexible, unlike regular flexible plasterboard, is installed in one layer only and can be curved to a radius of 2.2m. Insulation is limited to 50mm thick and 14kg/m³ density.

Painting

After the joints are completed, the surface of the plasterboard is painted in accordance with the paint manufacturer's specifications using a paint roller, taking care to paint the surface only, and not the voids.

Long nap and heavily loaded paint rollers should be avoided for this reason. Water-based paints are required for boards that contain Activ'Air technology. Repainting will not impact the performance of Activ'Air.

Warranties

Gyprock products are designed to achieve optimal performance when part of a CSR integrated system.

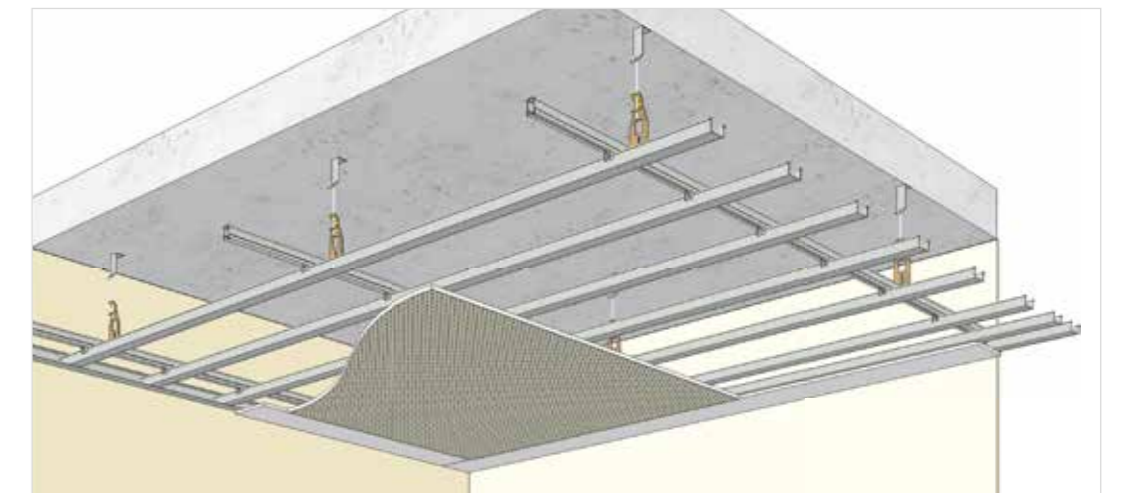
CSR Building Products Limited warrants its Australian made Gyprock products to remain free of defects in material and manufacture for the usual lifetime of the product (25 years).

CSR warrants its International Alliance Gyprock products to remain free of defects in material and manufacture for 7 years.

For details on our product warranty, please visit www.gyprock.com.au, or contact us on 1300 306 556.



INTERNATIONAL ALLIANCE



DesignLINK™ Service

DesignLINK is a team of engineers and building design professionals working to support Gyprock and Cemintel product and system specification in projects across Australia. With impressive knowledge of the building industry, DesignLINK partners with clients to value-engineer, simplify system specifications and workshop complex design issues, delivering building performance while easing the way for builder and contractor.

Based at Gyprock's Research and Development Centre in Wetherill Park, New South Wales, the DesignLINK team is a driving force in Gyprock's innovation agenda, representing customer experience and bringing problem solving skills to the table. The Wetherill Park site houses Gyprock's NATA accredited laboratory and several test rigs, as well as being a manufacturing site for Gyprock and Cemintel products.

What does DesignLINK offer?

The DesignLINK service, offered to architects, engineers and other design professionals, includes phone support for enquiries, assistance with planning major projects, provision of complex testing data and supply of CAD files for increased productivity.

Phone and email support

All enquiries are handled with care. Where possible, we'll provide you with an answer on the spot, otherwise we'll escalate your enquiry to the most qualified team member.

Assistance with major projects

DesignLINK is available to support major projects, delivering performance and simplification. This service is offered in conjunction with your local Account Manager to ensure you receive the very best local knowledge, combined with DesignLINK's technical expertise.

System performance data

Fire, acoustic and thermal performance data is available for a wide variety of systems. Whether you're looking to prove performance or better understand the options available and what differentiates them, the team's thorough understanding of building requirements will have your query solved in no time. Looking for a bespoke solution? Our Acoustic and Thermal Predictors provide opinions based on hundreds of data points, saving time and money, and delivering a fast solution.

Contact the DesignLINK team

Call 1800 621 117 or email DesignLINK@csr.com.au



GYPROCK[®]

For more information about
Gyprock[®] Perforated Plasterboard,
call 1300 306 556 or visit
gyprock.com.au

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CSR Building Products ABN 55 008 631 356

