

Rigitone[™] Matrix 12mm Square

Rigitone Matrix 12mm Square perforated plasterboard is a superior acoustic solution that delivers a modern monolithic design with an edge-to-edge perforation layout, unique installation method, and enhanced indoor air quality due to its Activ'Air technology. High levels of acoustic absorption are achieved through a combination of perforation patterns and a highly effective black acoustic fabric backing which also prevents dust from the ceiling entering the room and masks the ceiling framework. The availability of seamless access panels, ensures easy access to the ceiling cavity while maintaining pattern continuity. Rigitone Matrix 12mm Square provides a pattern of 12mm square perforations at 25mm centres, providing a 23% open area.

Recommended Use

- Non-fire rated ceiling and wall applications.
- Commercial construction.
- Applications where a high level of acoustic performance is required such as theatres, restaurants, shopping centres and hotel foyers.

Rigitone Matrix 12mm Square Specifications						
Feature	Description					
Thickness	12.5mm					
Mass	8.5kg/m ²					
Perforated Pattern	Matrix 12mm Square					
Open Area	23%					
Acoustic Fabric	Black					
Widths	1200mm					
Lengths	2000mm					
Edge Profiles	Rigitone Edge					
Fire Hazard	Group No = 1					
Properties [∆]	SMOGRARC ≤100m²/s²					
Combustibility	Plasterboard may be used wherever a non- combustible material is required.					

^AIn accordance with AS ISO 9705 and AS 5637.1

 $^{\diamond}In$ accordance with NCC2022 Vol 1 Clause C2D10(6)(a) and NCC2019 Amdt1 Vol Clause C1.9(e)(i).



Product Features



Acoustics

Absorbs sound into ceiling to prevent reverberation.



Aesthetics

Acoustic performance with design freedom



Activ'Air Technology

Uses Activ'Air technology for cleaner air



Rigitone Edge

Rigitone Edge profile



International Alliance

Delivered through the International Alliance Program

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



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. Spray painting is NOT permitted as paint will impair the acoustic tissue thus degrading the acoustic properties. Waterbased paints are required for boards that contain Activ'Air technology. Repainting will not impact the performance of Activ'Air.

Full installation and finishing details can be found in the Red Book 3: Commercial and Multi-Residential Installation Guide – Class 2-9 Buildings.



NRC Value Summary Matrix 12mm Square 14.8% open area

Matrix 12mm Square 14.8% open area			Sound Absorption Coefficient						
Plenum	Plenum	αw	NRC	Octave Band Centre Frequencies (Hz)					
(Air Cavity)	Insulation			125	250	500	1000	2000	4000
	Empty	0.60	0.65	0.20	0.35	0.70	0.85	0.65	0.50
65mm	50mm glasswool (14kg/m³)	0.75	0.75	0.35	0.60	0.85	0.85	0.70	0.60
	Empty	0.65(L)	0.70	0.50	0.80	0.85	0.65	0.60	0.55
200mm	50mm glasswool (14kg/m³)	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/m³)	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 250 Hz.



Manufacturing Tolerances

Nominal Thickness	12.5mm +/- 0.3mm
Nominal Widths	1200mm +/- 3mm
Nominal Lengths	2000mm +/- 3mm
Squareness	90° +/- 1.5mm at
**Cubicat to recorde	1200mm (short end)

**Subject to reasonable manufacturing variance.

Product Manufacture

Rigitone Matrix 12mm Square is manufactured for CSR Gyprock by worldwide plasterboard specialist Saint-Gobain.

Access Panels

Rigitone Access Panels are designed to match the perforation patterns of the individual boards with minimal visible interruption of the pattern. **Refer to TABLE 1.** Access Panels for Matrix 8mm Round, Matrix 12mm Square and Astral include a perforated panel infill to match the sheet pattern when the cut-out is located between rows of perforations. Rigitone Galaxy Access Panels require a cut-out piece to be attached, sourced from the fixed sheet to ensure the pattern continues undisturbed. A minimum plenum depth of 140mm is required to insert the Access Panel from the finished side.

Panel Description Edge Matching Access Panel		Matching Pattern		
Description		Spacer		
RIGITONE ASTRAL 12-	SE	RIGITONE HATCH ASTRAL	RIGITONE PATTERN	
20/66 1188X1980		12-20/66 510x510	SPACER 2 PACK 12-20/6	
RIGITONE ASTRAL 12- 20/66 1188X1980	CE		NA	
RIGITONE MATRIX 12-25	SE	RIGITONE HATCH MATRIX	RIGITONE PATTERN	
12MM SQ 1200X2000		12-25Q 500x500	SPACER 2 PACK 12/25	
RIGITONE MATRIX 12-25 12MM SQ 1.2X2	CE		NA	
RIGITONE GALAXY 8-15-20	SE	RIGITONE HATCH GALAXY	RIGITONE PATTERN	
1200X1960		500x500 FRAME	SPACER 2 PACK 8-15-20	
RIGITONE GALAXY 8-15-20 1200X1960	CE		NA	
RIGITONE MATRIX 8/18	SE	RIGITONE HATCH MATRIX	RIGITONE PATTERN	
8MM RND 1188X1998		RND 8/18 500x500	SPACER 2 PACK 8/18	
RIGITONE MATRIX 8/18 R 8MM 1188X1998	CE		NA	
RIGITONE MATRIX 12MM	SE	RIGITONE HATCH GALAXY	RIGITONE PATTERN	
RND 1200X2000		500x500 FRAME	SPACER 2 PACK 12/25	
RIGITONE MATRIX 15MM RND 1200X1980	SE	1	RIGITONE PATTERN SPACER 2 PACK 15/30	

Storage

Protect plasterboard from weather and moisture. Avoid products sagging by storing horizontally, supported on a level platform or full-width support members spaced at max. 600mm centres.

Healthy and Safety

For further information refer to the Safety Data Sheet for this product which is available from <u>www.gyprock.com.au</u> or contact:

CSR Gyprock Triniti 3, 39 Delhi Rd, North Ryde NSW 2113 Australia Phone: **131 744** New Zealand Phone: **0800 277 123**

Resources

For further information on this product please visit <u>www.gyprock.com.au</u> or refer to the Red Book. For technical support, contact:



PHONE: 1800 621 117

Installing to Standards

Installing to Standards AS/NZS2589: Gypsum linings – Application and Finishing outlines the procedures for jointing and finishing of Gyprock plasterboard in conjunction with additional details contained in Gyprock Technical Literature.



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