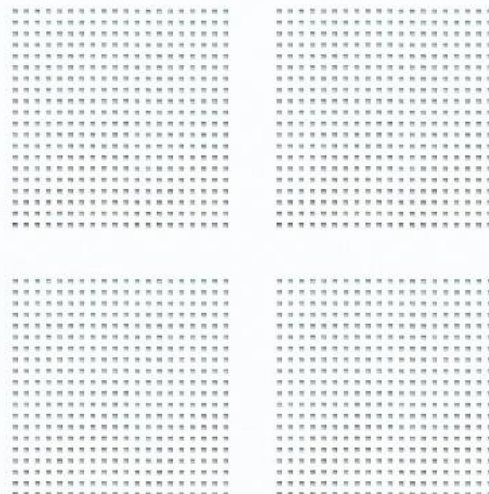# Gyptone™ 12mm Square

Gyptone 12mm Square perforated plasterboard is a superior acoustic solution that delivers a grid-format geometric effect and enhanced indoor air quality due to its Activ'Air technology. A flexible option provides greater levels of design freedom. 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. All four edges of Gyptone perforated plasterboards are recessed to make flush jointing quicker and easier without the need for butt joints between full panels. The availability of seamless access panels, ensures easy access to the ceiling cavity while maintaining pattern continuity. Gyptone 12mm Square features eight large square groupings per sheet, each with 400 x 12mm square perforations at 25mm centres, providing a 16% 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.

Gyptone 12mm Square Specifications		
Feature	**Description**	
Thickness	Standard 12.5mm	Flexible 6.5mm
Mass	8kg/m^2	6.5kg/m^2
Perforated Pattern	12mm Square	
Open Area	16%	
Acoustic Fabric	Black	
Widths	1200mm	
Lengths	2400mm	
Edge Profiles	Recessed Edge	
Thermal Resistance	0.07 m^2 K/W	
Fire Hazard Properties[Δ]	Group No = 1 SMOGRARC ≤100m^2/s^2	
Combustibility[◊]	Plasterboard may be used wherever a non-combustible material is required.	

[Δ]In accordance with AS ISO 9705 and AS 5637.1
[◊]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

International Alliance
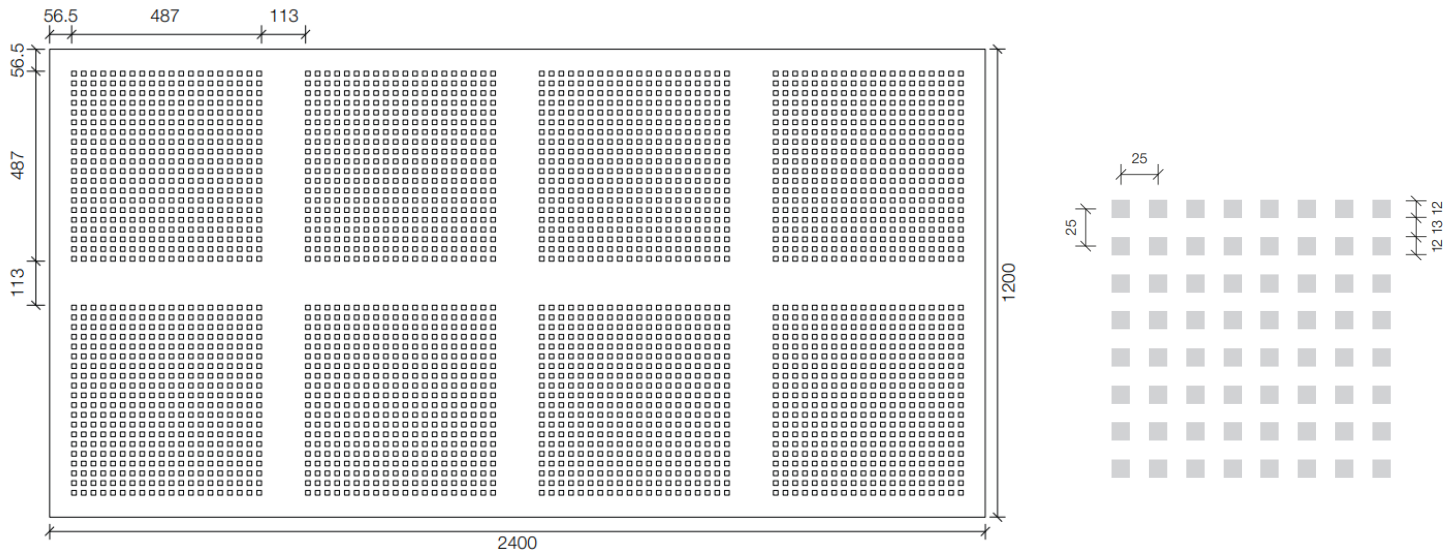Delivered through the International Alliance Program

Gyptone Installation

Gyptone perforated 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/m^3 density.

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

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. Water-based paints are required for boards that contain Activ'Air technology. Repainting will not impact the performance of Activ'Air.

NRC Value Summary

Square 12mm 16% open area				Sound Absorption Coefficient					
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 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 250 Hz.

Manufacturing Tolerances

Nominal Thickness	12.5mm +/- 0.3mm
Nominal Widths	1200mm +/- 3mm
Nominal Lengths	2400mm +/- 3mm
Squareness	90° +/- 1.5mm at 1200mm (short end)

**Subject to reasonable manufacturing tolerance.

Product Manufacture

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

Access Panels

Gyptone Access Panels are integrated into suspended ceilings to allow for inspection, service and maintenance work on the installations in the space above. Gyprock offers an access panel solution for each pattern profile in the Gyptone range that provides easy access and integrates seamlessly into the ceiling. **Refer to TABLE 1.** Gyptone Access Panels are 600mm x 600mm including the frame with a 510mm x 510mm x 12.5mm hatch piece/opening measurement. The frame weight is 0.9kg and the hatch is approximately 3.6kg.

TABLE 1: Matching Access Panels for Gyptone Perforated Plasterboard	
Panel Description	**Matching Access Panel Description**
Gyptone 12mm Hexagon (63)	Gyptone BT Access Panel 12 Hexagon (63)
Gyptone 12mm Square (41)	Gyptone BT Access Panel 12 Square (41)
Gyptone 12mm Square Minigrid (47)	Gyptone BT Access Panel 12 Minigrid (47)
Gyptone Slotted Minigrid (6)	Gyptone BT Access Panel Slotted Minigrid (6)

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.

Health and Safety

For further information refer to the Safety Data Sheet for this product which is available from www.gyprock.com.au 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 www.gyprock.com.au or refer to the Red Book. For technical support, contact:

DESIGNLINK™

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.

INTERNATIONAL ALLIANCE

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.