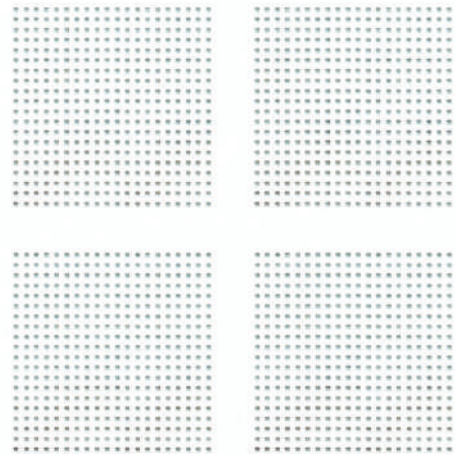




## PROTONE 12MM SQUARE PERFORATED PLASTERBOARD (41)

- Protone 12mm Square is a superior acoustic solution that delivers a grid-format geometric effect 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 white acoustic fabric backing which also prevents dust from the ceiling entering the room and masks the ceiling framework.
- All four edges of Protone 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.
- Protone 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.
- Use where a high level of acoustic performance is required such as theatres, restaurants, shopping centres and hotel foyers.

### SPECIFICATIONS

Feature	Description
Thickness	12.5mm
Mass	8kg/m <sup>2</sup>
Perforated Pattern	12mm Square
Open Area	16%
Acoustic Fabric	White
Widths	1200mm
Lengths	2400mm
Edge Profiles	Recessed Edge
Fire Hazard Properties <sup>Δ</sup>	Group No = 1 SMOGRARC ≤100m <sup>2</sup> /s <sup>2</sup>
Combustibility*	Plasterboard may be used wherever a non-combustible material is required

### 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



Scan For Further Product Information  
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[www.potters.co.nz](http://www.potters.co.nz) 0800POTTERS

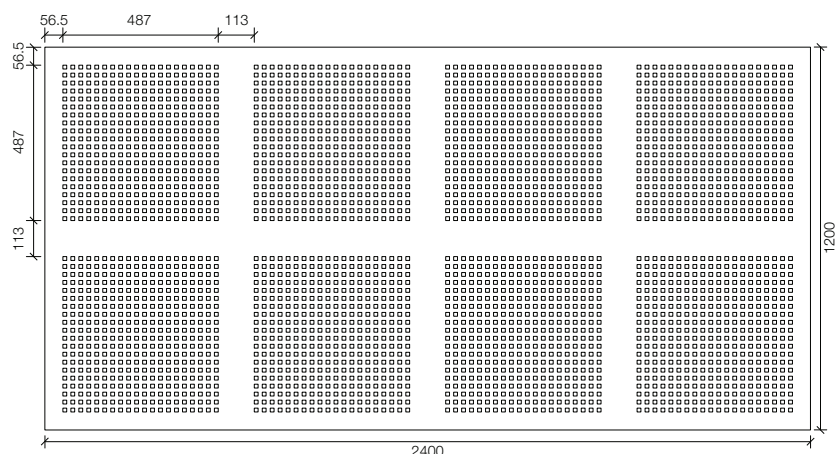


<sup>Δ</sup> In accordance with AS ISO 9705 and AS 5637.1

\* In accordance with NCC2022 Vol 1 Clause C2D10(6)(a) and NCC2019 Amdt1 Vol Clause C1.9(e)(i).

## PROTONE INSTALLATION

- Protone 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.
- Insulation is limited to 50mm thick and 14kg/m<sup>3</sup> density.
- Full installation and finishing details can be found in the Perforated Plasterboard Installation Guide available from [www.potters.co.nz](http://www.potters.co.nz).



## 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 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	αw	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 <sup>3</sup> )	0.70	0.70	0.40	0.65	0.80	0.70	0.65	0.55
200mm	Empty	<b>0.60(L)</b>	<b>0.65</b>	<b>0.60</b>	<b>0.70</b>	<b>0.75</b>	<b>0.55</b>	<b>0.55</b>	<b>0.55</b>
	50mm glasswool (14kg/m <sup>3</sup> )	<b>0.70</b>	<b>0.70</b>	<b>0.65</b>	<b>0.70</b>	<b>0.70</b>	<b>0.65</b>	<b>0.65</b>	<b>0.60</b>
600mm	Empty	0.65(L)	0.65	0.65	0.70	0.65	0.60	0.60	0.65
	50mm glasswool (14kg/m <sup>3</sup> )	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)
- Protone is manufactured for Potter Interior Systems by worldwide plasterboard specialist Saint-Gobain.

## INSTALLING TO STANDARDS

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

## ACCESS PANELS

- Protone Access Panels are integrated into suspended ceilings to allow for inspection, service and maintenance work on the installations in the space above.
- There is an access panel solution for each pattern profile in the Protone range that provides easy access and integrates seamlessly into the ceiling.
- 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 approx 3.6kg.