

Echostop®

TECHNICAL DATA

Advantages

- Sound absorptive
- Reduce reverberation
- Perforations to suit design requirements
- Decorative
- Simple installation

Description

Echostop® is perforated plasterboard designed to create a decorative finish whilst providing a high level of sound absorption to the space. Echostop® perforated plasterboard is suitable for full ceiling installation or feature panels on internal walls or ceilings. Created for sound absorption treatment, Echostop® is available in 3 stylish designs with either square or round perforations to suit multiple design applications.



DECORATIVE



ACOUSTIC

Photo courtesy of The Royal Children's Hospital (RCH)

Board Specification:

Feature	Description
Thickness	12.5mm
Patterns	3mm Square Hole Perforated (50 x 50 hole, 8 patterns/sheet) 6mm Round Hole Perforated (33 x 33 hole, 8 patterns/sheet) 12mm Square Hole Perforated (20 x 20 hole, 8 patterns/sheet)
Edge Profiles	Recessed edge
Sheet Size (width x length)	1200x2400mm [Please refer to Size & Availability Chart for more sizes] Product availability: Certain products and sizes may only be available on order or in pack lots.
Paper Colour	Buff liner paper face/Acoustic fabric backing
Open Area	7.84% (3mm), 8.55% (6mm), 16.0% (12mm)
Mass	10.0kg/m ² nominal
Fire Hazard Properties	Group 1 – in accordance with BCA Specification C1.10a Fire Hazard Properties – Floors, Walls and Ceilings.
Combustibility	Non Combustible material as defined in BCA Deem-to-Satisfy Provisions C1.12
VOC	Less than 0.5mg/m ³ TVOC
GECA	N/A

PERFORMANCE DETAILS



Acoustic

• 3mm Square Hole Echostop® Perforated Plasterboard



Sound Absorption Coefficients – 1/3 Octave Band Sound Absorption Coefficient α_w at Frequency (Hz) 3mm Square Hole Pattern

Hz	100	125	160	200	250	315	400	500	630	800	1000	1250	1600	2000	2500	3150	4000	5000
Test 1	0.42	0.34	0.72	0.72	0.81	0.92	0.96	0.86	0.73	0.67	0.54	0.45	0.39	0.34	0.32	0.32	0.28	0.31
Test 2	0.55	0.42	0.87	0.81	0.90	0.95	0.94	0.84	0.67	0.59	0.50	0.43	0.37	0.35	0.32	0.32	0.29	0.34

Test Details

Test	Plenum	Insulation	NRC	α_w
1	50mm plenum	70mm glasswool insulation, 13kg/m ³	0.65	0.40
2	100mm plenum	70mm glasswool insulation, 13kg/m ³	0.65	0.40

Test References: 1. - RMIT 121/08-242/PD | 2. - RMIT 121/08-247/PD

• 6mm Round Hole Echostop® Perforated Plasterboard



Sound Absorption Coefficients – 1/3 Octave Band Sound Absorption Coefficient α_w at Frequency (Hz) 6mm Round Hole Pattern

Hz	100	125	160	200	250	315	400	500	630	800	1000	1250	1600	2000	2500	3150	4000	5000
Test 1	0.27	0.35	0.66	0.51	0.87	0.86	0.94	0.88	0.72	0.68	0.51	0.35	0.35	0.33	0.30	0.27	0.26	0.26
Test 2	0.52	0.43	0.84	0.83	0.94	1.02	1.05	0.88	0.72	0.62	0.52	0.43	0.39	0.31	0.31	0.29	0.28	0.32

Test Details

Test	Plenum	Insulation	NRC	α_w
1	50mm plenum	70mm glasswool insulation, 14kg/m ³	0.65	0.40
2	100mm plenum	70mm glasswool insulation, 14kg/m ³	0.65	0.40

Test References: 1. - RMIT 121/08-242/PD | 2. - RMIT 121/08-247/PD

• 12mm Square Hole Echostop® Perforated Plasterboard



Sound Absorption Coefficients – 1/3 Octave Band Sound Absorption Coefficient α_w at Frequency (Hz) 3mm Square Hole Pattern

Hz	100	125	160	200	250	315	400	500	630	800	1000	1250	1600	2000	2500	3150	4000	5000
Test 1	0.34	0.32	0.54	0.63	0.84	1.00	1.11	1.04	0.91	0.85	0.74	0.62	0.55	0.50	0.47	0.49	0.45	0.49
Test 2	0.42	0.40	0.69	0.74	0.94	1.07	1.13	0.98	0.83	0.75	0.67	0.57	0.53	0.50	0.47	0.45	0.44	0.50

Test Details

Test	Plenum	Insulation	NRC	α_w
1	50mm plenum	70mm glasswool insulation, 14kg/m ³	0.80	0.60
2	100mm plenum	70mm glasswool insulation, 14kg/m ³	0.75	0.55

Test Reference: 1. - RMIT 121/08-243/PD | 2. - RMIT 121/08-248/PD



Decorative

- Available in 3 stylish designs with either square or round perforations to suit multiple design applications.
- Suitable for internal wall and ceiling applications.

Installation

Installation of Echostop® must be followed using the “Layout Guide and Installation details” which is available at www.boral.com.au/echostop, or call TecASSIST® 1800 811 222.

Sustainability

Boral Plasterboard products are manufactured from a combination of gypsum, and paper liner made from 100% reclaimed and recycled paper waste.

Lightweight plasterboard construction offers the benefits of low embodied energy, non-toxic materials, enhanced indoor air quality, and ease of thermal and acoustic upgrading.



Waste management

Waste collection services are available to divert acceptable plasterboard waste away from landfill for recycling or re-processing for other uses.

For information on waste collection services available, please contact your local Boral Plasterboard office.

Internal Sound Levels

Echostop®, when used in the design for reverberation control, can assist in achieving the required speech intelligibility criterion.

Volatile Organic Compounds (VOC) and Formaldehyde Minimisation

Boral plasterboard products, compounds and adhesive have been independently tested to confirm compliance with Green Star specification limits for VOCs and are formaldehyde free.

References

Refer www.boral.com.au/echostop for Material Safety Data Sheet, Volatile Organic Compound Emission details and other additional information.



For more information or sales enquiries:

0800 45 4000
www.forman.co.nz

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