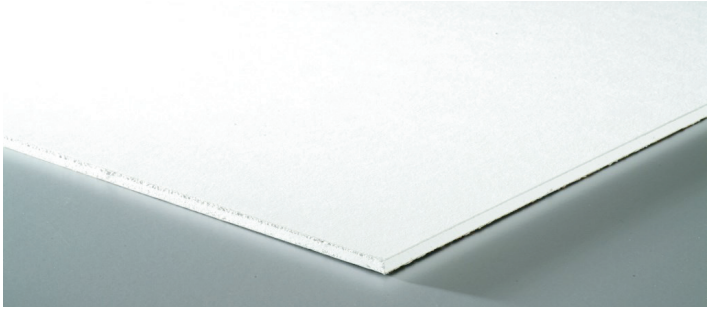
diffusion™

FLAT SOUND REFLECTING CEILING PANEL

TECHNICAL DATA SHEET BPIR - CLASS 1

Acoustic Ceiling and Wall Solutions

diffusion™



Flat Sound Reflecting Ceiling Panel

Technical Data Sheet - BPIR Class 1

Diffusion™ is a made in NZ laminated plasterboard ceiling panel designed to reflect sound and to compliment Triton™ high sound absorbing ceiling panels. Laminated with the same Sonatex™ finish, Diffusion™ panels can be mixed and matched with Triton™ absorber panels to enhance speech clarity, intelligibility and the tonal qualities of played music.

Application
Diffusion™ is ideal for use in music rooms as well as traditional didactic style teaching spaces, lecture theatres where it is desired for the teachers voice to be projected to the back of the room.

Composition
Manufactured from plasterboard laminated with fire resistant Sonatex™ glass mat facing. Made in NZ.

Features & Benefits

- Provides early sound reflections for balanced room acoustics, speech clarity, tone of non-amplified music.
- Fire Group 1-S.
- Broad range of Sonatex™ and Sonaris™ perforated acoustic laminate finishes for design freedom.
- 8 kg m² mass helps attenuate transmitted noise.
- Durable, resists damage from knocks and bumps.
- Can support weight of lights and air grills up to 1 kg.
- Made in NZ for short lead times and replacement parts.
- Packaging take back & reuse scheme available (NZ only).
- Product stewardship renew and reuse program.
- Low VOC material.
- Dimensionally stable, easy to cut and trim.

Technical Specifications:

Item #	Size (nominal)	Edge
DI12.0606	12 x 600 x 600 mm	A / Square
DI12.0612	12 x 600 x 1200 mm	A / Square

Accessibility:
All panels are removable and accessible.

Environmental Impact:
Low VOC material, product and packaging can be reused/recycled.

Laminate Finishes:
Panels are available in standard Sonatex™ white, black, grey and a range of wood prints, RAL colours and Sonaris™ perforated laminate finishes. Refer to online Sonatex™ and Sonaris™ finishes charts for colour and pattern selections.

Light Reflectance Value:
83% per BS8493:2008, White.

Limitations:

- For interior use only, and not in direct contact with water.
- Maximum humidity/temperature 99% R/H at 45°C.
- Back loading— max. distributed load 3 kg/m², support point loads over 1 kg.

Maintenance:
Clean with vacuum, soft brush or damp cloth. Re-surfacing of soiled panels available, consult Asona.

Packaging Take Back Scheme: (NZ only)
Flat pack cartons on site and return to Asona for reuse.

NZ Building Act
This product is not subject to a warning or ban under Section 26.

NZ Building Code Compliance:

- B2 Durability – Clause B2.3.1 (c) (i): Asona ceiling tiles with only normal maintenance will have a minimum durability of at least 5 years when installed in accordance with; manufacturer's installation requirements and AS/NZS 2785:2020.
- C3 Fire – Clause C/AS2 4.12.1: Asona Diffusion has a Fire Material Group Number 1-S by NZBC Building Product Specification Parts 8.5.4 or 8.5.5, tested in accordance with ISO 9705 or ISO 5660. [NCC BCA C1.10 clause 4, spec A2.4 clause 4. Group 1]

Renew & Reuse Stewardship Program:
Soiled or damaged panels can be resurfaced with new Sonatex laminates for reuse in the ceiling. Helps extend life cycle and reduce construction waste. Register on practical completion.

Thermal Resistance: R 0.1 m²°C/W

Tolerances: Panel size +/- 1.5 mm

Warranty:
15 year limited warranty against manufacturing defects, extendable to 30 years when registered for Asona's Renew and Reuse program and installed in Rondo Donn DX® exposed grid systems supplied by Asona.

Weight:
5.67 kg per 1194 x 594 mm panel, 8 kg/m²

Installation:
Shall not commence until the building is watertight and dry. This product is designed to be mounted into a Rondo Donn DX® two-way exposed grid system and installed to manufacturer's and AS/NZS 2785:2020 Standard's requirements. Seismic design may require a suitably qualified engineer. Care shall be taken when handling tiles to avoid damage.

Specification:
Ceiling shall be Diffusion™ sound reflecting plasterboard ceiling panels with Sonatex glass mat facing as manufactured by Asona Ltd, Auckland NZ Tel: +64(0)9 525 6575 info@asona.co.nz. Selected panel shall be item # (_), size 12 x 600 x (_)mm, square edge with Sonatex decorative laminate finish (white) (colour #_) (wood print) (Sonaris™ # _), NRC 0.10, Fire Group 1-S. Suspension shall be Rondo Donn DX® exposed grid. Contractor shall flat pack packaging and return to Asona for reuse and register the ceiling with Asona Renew and Reuse product steward-ship program on practical completion.
(Asona ceiling Masterspec 5311AS specification available).

NEW ZEALAND MADE

ISO 9001:2015 Registered Firm No. NZ1014
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*All dimensions are nominal. We reserve the right to change specifications.
Ref. Diffusion-26.08

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Sonatex™ - Acoustic Laminate Shades and Prints and LPL Finishes

Sonatex White to Black *

High NRC finish

A180 Standard White

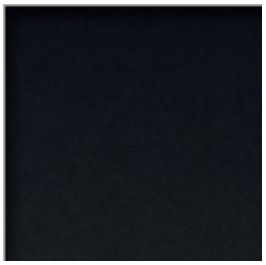
Hygiene Facing (not for Sonaris)

RAL 9002 White Grey

RAL 7040 Light Cool Grey

RAL 7030 Mid Warm Grey

RAL 7045 Mid Cool Grey



RAL 9011 Black

Colour options available *

Sonatex Wood Prints *

High NRC finish

(Roto gravure print on Sonatex, not to scale)

Wood print RAL 1013

Wood print RAL 1001 (TON 1127)

Wood print RAL 8019

Low Pressure Laminates

Woodlook *

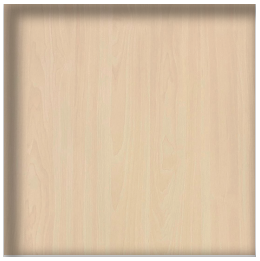
Reduced NRC performance unless perforated

LPL Kopenhagen

LPL Bleached Maple

LPL Tasmanian Oak

LPL Walnut



LPL Blond Maple

Contact Asona for samples:
Email: info@asona.co.nz
Phone: +64 (0) 9 525 6575

* Asona Sonatex is colour matched to the RAL Classic K7 range colours standard. The colour accuracy of this swatch card is dependent on your viewing screen and/or printer used. Digital print designs and custom colours are available to order, minimum quantity and lead times apply.

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Ref. Finishes-25.11

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