

Diffusion™

Flat Sound Reflecting Ceiling Panel

Technical Data Sheet—BPIR Class 1



asona

Description.

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:

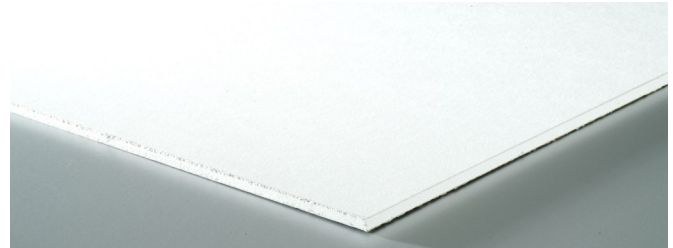
Clean with vacuum, soft brush or damp cloth. Re-surfacing of soiled panels available, consult Asona.

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 3.4(a): Asona Diffusion has a Fire Material Group Number 1-S by NZBC verification method C/VM2 Appendix A, tested in accordance with ISO 5660 or ISO 9705. [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.

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 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 stewardship program on practical completion. (Asona ceiling Masterspec 5311AS specification available).

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*All dimensions are nominal. We reserve the right to change specifications.
Ref. Diffusion-23.12

