polyfon mesh™

OPEN CELL ACOUSTIC CEILING PANEL

TECHNICAL DATA SHEET   BPIR - CLASS 1

Acoustic Ceiling and Wall Solutions

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Open Cell Acoustic Ceiling Panel

Technical Data Sheet - BPIR Class 1

Polyfon Mesh™ is a perforated open cell ceiling panel designed to provide a contemporary industrial aesthetic when using standard two way exposed ceiling grid. Panels may be mixed and matched with other ceiling panel types for design effect or acoustic control. Available in diamond, square and hexagonal.

Application
Polyfon Mesh™ is ideal for office fitouts, retail, hospitality, showrooms.

Composition
Made in NZ, Polyfon Mesh™ is made from a composite of compressed polyester and a fire resistant glass mat facing.

Features & Benefits
- Provides a bold industrial look. Ideal for retro fit or new.
- Available in 40 x 71 mm Diamond, 50 x 50 Square and 40 x 40 Hexagonal perforations.
- Option of White or Black core with matching surface finish or contrasting surface finish, eg RAL7030 grey.
- Fire Group 1-S. NRC 0.30.
- Very light weight for seismic.
- Designed to lay into standard Rondo Donn DX grid systems and mix with other ceiling panel types for design effect.
- 10mm thickness for 600 x 1200mm panels and other optional sizes.
- 10mm or 20mm thickness for 600 x 600mm panels.
- Permits visibility into plenum spaces for security.
- Ideal for passive heat/cooling systems using thermal mass.
- Dimensionally stable and allows good ventilation.
- Manufactured in NZ, short lead times.
- Packaging take back and reuse scheme available (NZ only).

Item #	Size (nominal)*
PM.0606.D4071	10 or 20 x 600 x 600
PM.0612.D4071	10 x 600 x 1200
PM.0606.SQ5075	10 or 20 x 600 x 600
PM.0612.SQ5075	10 x 600 x 1200
PM.0606.H4040	10 or 20 x 600 x 600
PM.0612.H4040	10 x 600 x 1200

Technical Specifications:
Accessibility:
All panels are demountable and accessible.

Back loading:
All loads shall be independently supported.

Core Colours:
White, Black.

Environmental Impact:
Polyester, no chemical binders or pesticides, tested low VOC's per ASTM D51106(TVOC 0.004 mg/m²/hr, Aldehydes <0.01 ppm, Formaldehyde 0.004 mg), low embodied energy, low transport km's vs imports.

Laminate Finishes:
Polyfon Mesh™ is available in standard white, black and a range of Sonatex™ RAL colours and prints. Refer to online Sonatex finishes charts.

Limitations:
- For interior use only, and not in direct contact with water.
- Not for use with negative air return plenums.
- Maximum humidity/temperature 99% R/H at 45°C.
- Back loading — No overlay loads, M&E services and point loads to be independently supported.

Maintenance:
Clean with vacuum, soft brush or melamine foam 'magic' cleaner.

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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; manufactur-er's installation requirements and AS/NZS 2785:2020.

•C3 Fire – Clause C/AS2 3.4(a): Asona Polyfon Meshhas 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)

Open Area:

48-51%, subject to selected perforation and panel size.

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

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

Sound Absorption Rating:

αW 0.3; Class D; NRC 0.30 per ASTM C423
ISO 354 E-200.

Optional acoustic backer available to order where high NRC or CAC performance is required.

Eg: laminated to Triton Duo 60 CAC 44, NRC 0.95.

Thermal Resistance:

R 0.45m²°C/W.

Warranty:

15 year limited warranty against manufacturing defects.
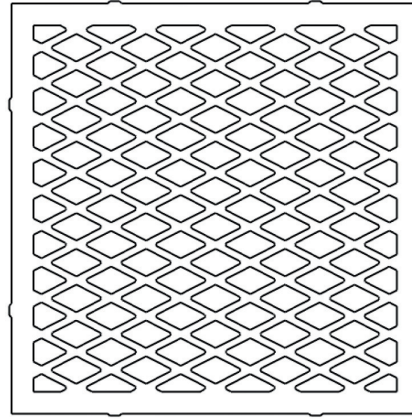
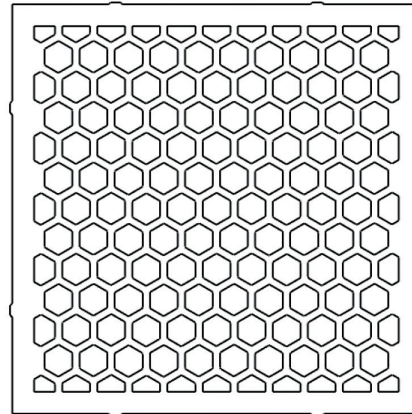**Weight:**

0.8—1.5 kg/m².

Installation:

Shall not commence until the building is watertight and dry. This product is designed to be mounted into a two-way ex-posed grid system and installed to manufacturer's and AS/NZS 2785:2020 Standard's requirements. Panels are not to support any weight and equipment shall be independently supported. Seismic design may require a suitably qualified engineer. Care shall be taken when handling tiles to avoid damage.
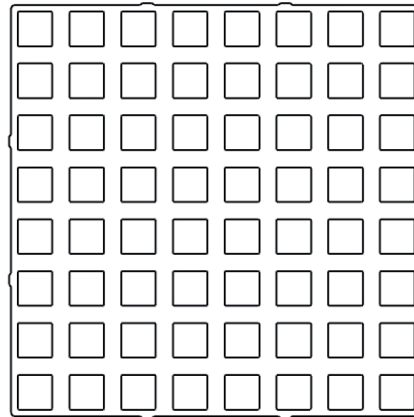
Specification:

Open Cell Ceiling system shall be Asona Polyfon Mesh™ sound absorbing ceiling panel as manufactured by Asona Ltd Tel: 09 525 6575, info@asona.co.nz, Perforation (D4071 Diamond) (H404 hexagonal) (SQ5075 square), size (_) x (_) mm, (10) (20) mm thick, fire Group 1-S, NRC 0.30, core colour shall be: (white) (black), finish shall be Sonatex acoustic laminate in standard (white) (black) (grey RAL7030)(other). Optional acoustic backer panel shall be (Triton_) (Triton Duo_). Panels shall be installed on Rondo Donn DX® two way 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).

#D4071,
40 x 71 mm, Diamond Mesh Perforation
Panel sizes:
600 x 600 mm
600 x 1200 mm
Optional:
300 x 1200 mm
500 x 1500 mm

#H4040
40 x 40 mm, Hexagonal Mesh Perforation
Panel sizes:
600 x 600 mm
600 x 1200 mm
Optional:
300 x 1200 mm

#SQ5075
50 x 50 mm, Square Mesh Perforation
Panel sizes:
600 x 600 mm
600 x 1200 mm
Optional:
300 x 1200 mm

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