knauf danoline™ solopanel

CONTINUOUS PERFORATED ACOUSTIC CEILING & WALL LINING

TECHNICAL DATA SHEET BPIR - CLASS 1

Acoustic Ceiling and Wall Solutions

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Continuous Perforated Acoustic Ceiling & Wall Lining

Technical Data Sheet - BPIR Class 1

Solopanel™ is a continuous to-the-edge perforated acoustic ceiling system designed for a seamless monolithic aesthetic. Panels are manufactured from press punched perforated plasterboard with discrete machined UFF rebated edges 4 sides. Solopanel™ incorporates Cleaneo™ air purification technology for control of VOC's. SlimSet 50™ and SlimSet 60™ Access Hatches available where maintenance for plenum services is required.

Application
Solopanel™ is an ideal perforated lining to control noise reverberation in office, meeting rooms, libraries, hotels, malls, halls, receptions, retail, civic buildings and galleries.

Composition
Panels manufactured from paper faced high grade reinforced gypsum with machined UFF edge and sound absorption felt fixed on the back.

Features & Benefits

- Continuous perforations with UFF edge for a seamless monolithic look.
- Good sound absorption for control of reverberation.
- Fire Group 1-S.
- Wide range of perforation patterns.
- Ideal for large volume areas.
- Durable long lasting acoustic finish.
- Surface may be repainted without loss of acoustics for long term maintenance.
- Suitable for ceiling and wall lining.
- Cleaneo™ air purification technology for control of VOC's.
- Standard 600 x 600 mm and 500 x 500mm SlimSet™ integrated access hatches.

Technical Specifications:

Practical Sound Absorption Coefficients:
òW ; Class C; ISO 354 E-200. NRC per ASTM C423

	Hz	125	250	500	1000	2000	4000	NRC
G8/18	αp	0.45	0.60	0.70	0.60	0.55	0.60	0.60
G12/25	αp	0.45	0.65	0.75	0.65	0.60	0.60	0.65
G15/30	αp	0.45	0.65	0.75	0.65	0.60	0.60	0.65
G12/20/66	αp	0.45	0.65	0.80	0.65	0.50	0.60	0.65

G8/18
Circles Ø8mm, c/c 18mm

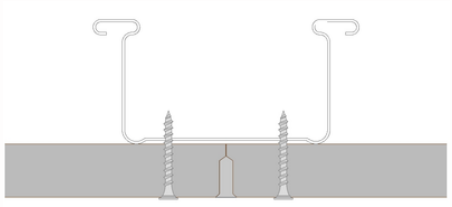
G12/25
Circles Ø12mm, c/c 25mm

G15/30
Circles Ø15mm, c/c 30mm

G12/20/66
Circles Ø8 & Ø12mm, c/c 50mm

UFF edge
no visible joints

fill with Uniflott compound for seamless joins



	Sizes	Open Area	Availability
G8/18	1188 x 1998 x 12.5mm	15.5%	Stock item *
G12/25	1200 x 2000 x 12.5mm	18.1%	Indent only
G15/30	1200 x 1980 x 12.5mm	19.6%	Indent only
G12/20/66	1188 x 1980 x 12.5mm	19.6%	Indent only

* Current stock subject to prior sale, lead times may apply, consult Asona for availability.

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asona

Technical Specifications

Colour:
Plain paper face, requires painting on site.

Environmental:
The gypsum boards are made from following gypsum types: naturally occurring gypsum, gypsum produced from by-products at local power plants during desulphurisation, pre-consumer recycled gypsum waste produced through production processes and post-consumer recycled gypsum. Low embodied energy, product and packaging can be recycled in NZ. Low VOC.

Light Reflectance:
73% DIN 5036 pt 3, White.

Limitations:
- Not for use in external applications, wet areas, in contact with moisture or in extreme humidity or temperature conditions.
- Not for use with negative air return plenums.
- Maximum humidity/temperature 90% R/H at 30°C.
- Back loading - maximum uniform weight of un-supported insulation shall not exceed 2.5 kg/m², point loads e.g. lighting, grills, speakers etc, 1.5kg per piece. Greater loads shall be independently supported.
- Do not spray paint as this will reduce acoustic performance.

Maintenance:
Clean with vacuum, soft brush or damp cloth once painted.

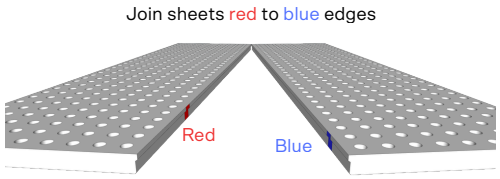
NZ Building Act:
This product is not subject to a warning or ban under Section 26.

NZ Building Code Compliance:
- B2 Durability – Clause B2.3.1 (b) (i): Knauf Solopanel with only normal maintenance will have a minimum durability of at least 15 years when installed in accordance with; manufacturer's installation requirements and AS/NZS 2785:2020.
- C3 Fire – Clause C/AS2 4.12.1: Knauf Solopanel has a Fire Material Group Number 1-S (A2-s1) by NZBC Building Product Specification Parts 8.5.3.1 a), based on classification from BS EN 13501-1:2018

Warranty:
15 year limited warranty against manufacturing defects.

Weight:
Perforated: 7.8—8.8 kg/m²

Installation:



Shall not commence until the building is water tight and dry.
Suspension - use Rondo #127 TCR top cross rail at 900 mm centres, rigid hangers at 900mm centres, use Rondo #155 48mm furring channel with Rondo #159 Interchange Clip at nominal 330mm c/c. Spacing may vary slightly to suit screw fixing between perforation pattern. (Note - direct fix clips to purlins are not permitted). For walls install on metal battens or studs at nominal 330mm centres.

Panels - Install sheets so they all face in the same direction, red marks on the edge on one sheet to blue mark on the edge of adjacent sheet. Screw fix panels with 25mm bugle head screws at 300mm c/c in field of panel and 200mm c/c at panel short ends. Ensure screws are centred between holes and recessed slightly to allow for plastering over, taking care not to break the paper surface. Check joints in both directions are flush and level to within 0.5mm, adjust screw head tightness to alter level if required.

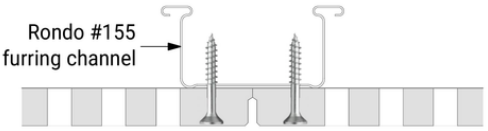
Joint finishing - Ensure installed panels are to above joint options. Clean the joint of loose dust, seal any broken edges with sealer paint. To avoid filler in the perforation holes a masking tape can be used. Use a sensitive type and test beforehand that it does not damage the surface of the paper when removed. First fill must be with Knauf Uniflott setting compound making sure there are no air bubbles below compound, wipe down with a finger to smooth, leaving slight depression. Allow to set and dry then apply a standard industry finishing compound for 2nd or final coat over joints and screw heads. Sand to a flat and even finish.
Install expansion joints at 12m maximum.

Perimeters - can be treated similarly for square stop, or use a casing bead for a negative edge. Detail may be subject to seismic design detail requirements. To create a plain border strip, mask off at specified dimension and fill perforation holes with Uniflott or industry bedding compound. Scrape flush before fully set to allow for 2nd coat finish compound. Sand to a flat and even finish.

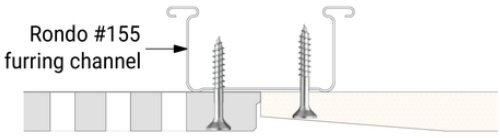
Finishing - Use a critical light to check surface for any irregularities prior to painting, make good as required. Paint a sealer and top coats with a fine nap roller. Do not spray paint.

Joint Options:

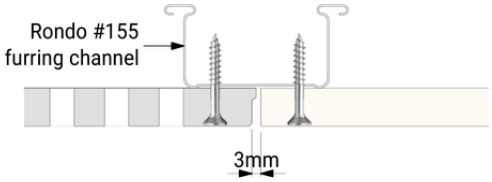
UFF edge to UFF edge



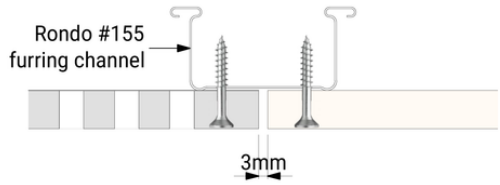
UFF edge to plasterboard tapered edge



UFF edge to plasterboard square edge



Cut edge to plasterboard square edge



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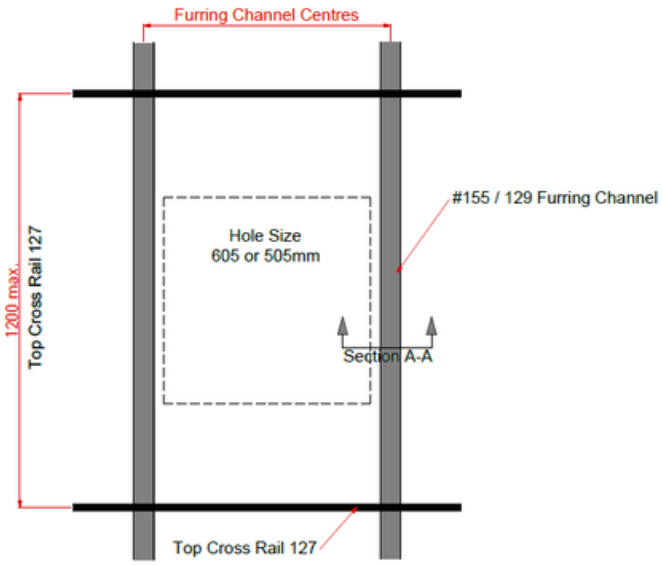
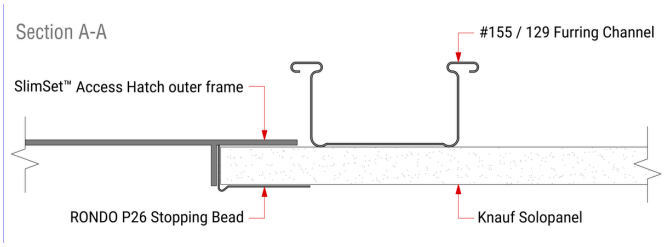
SlimSet™ Access Hatch Installation

Rondo Key-Lock® suspension layout

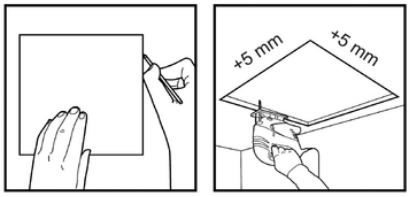


Furring Channel Centres

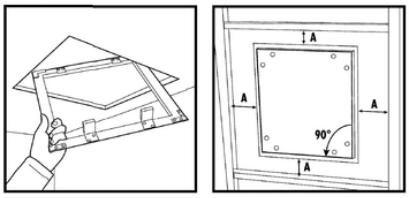
Furring Channel Type	Access Hatch Sizes	
	SlimSet™ 60	SlimSet™ 50
#155	715mm	615mm
#129	705mm	605mm



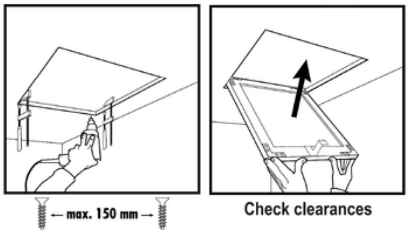
Hatch cut-out and installation



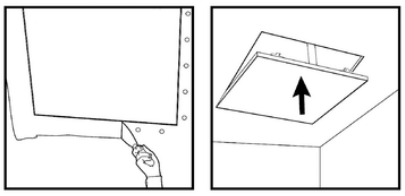
Locate position of hatch between suspension framing. Cut hole 5mm larger than hatch size, ie 605mm or 505mm. For a tidy edge use a Rondo P26 stopping bead (or similar).



Ensure the back of the Solopanel is debris free. Remove the lid from the hatch and feed the outer frame diagonally through the opening, ensuring the hatch is orientated in the right direction for the lid to open.



Temporarily clamp the frame and screw fix through the Solopanel to the external flange on all four sides, Screws max at 150mm centres. Remove the clamps.



Plaster around the exterior of the frame. If suitable, use the hole cut-out piece for the lid. Attach and plaster if required. Reinstall the lid into the outer frame.

Specification:

Acoustic lining shall be Knuaf-Danoline Solopanel™ perforated plasterboard with Cleano™ technology, supplied by Asona Ltd, Tel: 09 525 6575, info@asona.co.nz. Perforation type (G8/18 - 1188x1998mm), (G12/25 - 1200x2000mm), (G15/30 - 1200x1980mm), (G12/20/66-1188x1980mm) with UFF edge 4 sides, black acoustic fleece backer, sound absorption, NRC (0.60)(0.65). Screw fix panels to Rondo KEY-LOCK #155 48mm wide furring, spaced at 330mm c/c, with 25mm bugle head screws at 300mm c/c in field of panel and 200mm c/c at panel ends. #127 TCR at max 900mm c/c with rigid hangers at 900mm c/c. Expansion joints at 12m maximum. Install SlimSet™ (60) (50) Access Hatch. Fill joins with Uniflott and finish compounds. Paint with fine nap roller. Contractor shall register the ceiling with Asona on practical completion.
(Asona ceiling Masterspec 5113AP specification available).

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