triton cloud panel

EDGE WRAPPED ACOUSTIC CEILING PANEL



TECHNICAL DATA SHEET BPIR - CLASS 1



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Edge Wrapped Acoustic Ceiling Panel - aw, NRC 1.00

Technical Data Sheet - BPIR Class 1

Triton Cloud™ are NZ made high sound absorbing ceiling panels with wrapped edges for a crisp tailored

Panels are rigid and designed as free floating or direct fix elements to control reverberation. Available in a range of standard and custom sizes, shapes and decorative



Application

Triton $\mathsf{Cloud}^{\mathsf{TM}}$ panels are ideal for ceilings in open plan office, classrooms, meeting rooms, halls, cafes and bars where control of noise is required.

Composition

Made in NZ from non-combustible glass wool acoustic core with Sonatex[™] acoustic laminate to 5 sides, tissue backed.

Features & Benefits

- · Attractive clean panelised look with finished edges.
- High sound absorption, αw , NRC 1.00, for noise control.
- Fire Group 1-S*/2-S/3 rating. (*subject to specific installation detail, refer to full Installation Manual)
- Wide range of standard and custom sizes, depths, shapes and decorative finishes for design freedom.
- Large modules available up to 1200 mm x 3000 mm.
- · Wide range of mechanical fixing solutions to direct fix or suspend panels, including steel reinforced perimeters.
- Dimensionally stable, rigid finish, no sag in hot conditions.
- · Light weight for seismic design advantage.
- Easy to work on site using standard tools.
- GreenTag Certified / Level A.
- ISO 9001 registered quality management program.
- Packaging take back and reuse scheme (NZ only).
- Made in NZ, short lead times including replacement parts.





Sizes	600 x 600 mm	600 x 1200 mm	600 x 2400 mm	1200 x 1200 mm	1200 x 2400 mm	1200 x 3000 mm
25 mm	TC25.0606	TC25.0612	TC25.0624	TC25.1212		
50 mm	TC50.0606	TC50.0612	TC50.0624	TC50.1212	TC50.1224	TC50.1230
75 mm	TC75.0606	TC75.0612	TC75.0624	TC75.1212	TC75.1224	
100 mm	TC100.0606	TC100.0612	TC100.0624	TC100.1212	TC100.1224	

Standard panels in wood prints, black, grey and colour Sonatex laminate finishes

Sizes	600 x 600 mm	600 x 1200 mm	600 x 2400 mm	1000 x 1200 mm	1000 x 2400 mm	1000 x 3000 mm
25 mm	TC25.0606	TC25.0612	TC25.0624	TC25.1012		
50 mm	TC50.0606	TC50.0612	TC50.0624	TC50.1012	TC50.1024	TC50.1030
75 mm	TC75.0606	TC75.0612	TC75.0624	Max width 950	Max width 950	
100 mm	TC100.0606	TC100.0612	TC100.0624	Max width 900	Max width 900	



Custom Panels:

Asona offers its customers world class in-house design and manufacturing capabilities to produce Triton Cloud panels in a wide range of custom shapes, sizes and finishes.

Bespoke square, rectangle, triangle, trapezoid, hexagon and oval shapes are available as well as custom perimeter panels to fit the building structure for a neat tailored look.

Triton Cloud panels can also be tailored to modify the panel acoustic performance. Eg: Low frequency absorption, or sound reflection. Please consult with Asona technical support to discuss your project needs prior to selection and specification.



Rectangles and Square shapes



Custom knotched panel to fit to building elements



Hexagons and round shapes



Custom perimeter panels



Triton Cloud Panel Mounting Solutions:

Triton Cloud ™ panels may be direct fixed or suspended on a subframe or hangers. Asona offers a range of factory mounted or site applied mounting solutions to deliver the look and performance desired. Please select the system that works best for your project, consult Asona technical support for assistance.

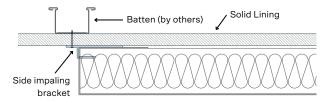
Panel Mounting System	SIB	SR	SFP	FFX
Direct fix to solid lining	Х	x	X	x
Fix to suspended framing	Х	Х	Х	X
Suspend on hanger wire		X	x	
Cost	\$	\$\$\$	\$\$	\$

Refer to Asona Triton Cloud Installation Manual for full details.

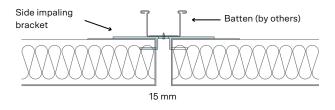
#SIB Side Impaling Brackets are supplied separately and site installed. The prongs impale into the side of the panel to allow for direct fixing to solid linings or to a suspended frame. Typically 4-14 pcs per panel subject to panel size. Bracket may be visible, maintain 15mm minimum spacing between panels to allow for screws. Installer must use a panel lifter to support the weight of the panel during installation.

Detail: Side impaling bracket direct fix



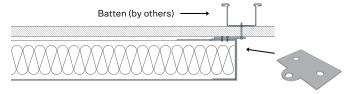


Detail: Side impaling bracket direct fix to batten

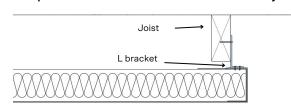


#SR Steel Reinforced panels are available to order with factory applied SR concealed steel frame designed to provide a hard fixing point for brackets, battens, Z bar or hangers. SR framed panels have superior rigidity and can span up to 2.4m between fixings.

Detail: SR panel with back fixing tab fixed through lining.

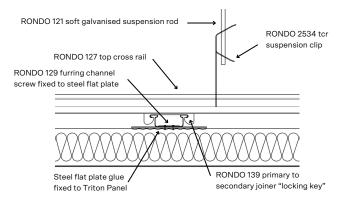


Detail: SR panel with L bracket screw fixed to frame and joist/purlin

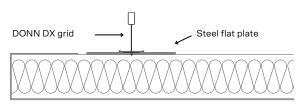


#SFP Barbed Steel flat plates are available to order. Plates are factory bonded to the rear of the panel and provide a hard fix point for suspension and seismic bracing. Allow 4 to 8 plates per panel (subject to size). Ideal for 'rafted' panel layouts. (Rondo KEY-LOCK® furring channel system as shown, supplied by Asona).

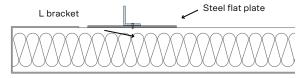
Detail: Barbed Steel Flat Plate for Rondo Keylock® system



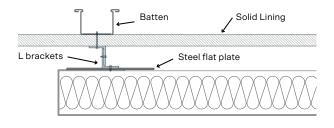
Detail: Barbed Steel Flat Plate for Rondo DONN DX® grid.



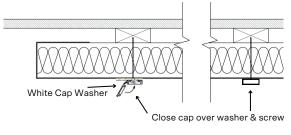
Detail: Barbed Steel Flat Plate for L hanger bracket.



Detail: Barbed Steel Flat Plate for "L to L" direct fix.



#FFX face fix panels direct to battens with a white cap washer and screw.



Note: Please select the required panel size and code then add mounting #SIB, SR, SFP, FFX, or code to denote which fixing method is required. Eg: TC50.1224.SIB. Then add colour selection from Sonatex colour charts *We do not recommend glue only fixing unless used in conjunction with mechanical support.

Technical Specifications

Sound absorption rating. E200 mount with cavity

NRC 0.95-1.00, 25, 50, 75, 100 mm thick panels, ASTM C423, ISO 354 αp practical absorption data

	125Hz	250Hz	500Hz	1000Hz	2000Hz	4000Hz
TC25 ap	0.55	0.85	1.00	0.95	1.00	1.00
TC50 ap	0.70	1.00	1.00	1.00	1.00	0.95
TC75 αp	0.90	1.00	1.00	1.00	1.00	0.95
TC100 αp	1.00	1.00	1.00	1.00	1.00	1.00

Sound absorption rating. 'A' mount direct to concrete

NRC 0.75-1.00, 25, 50, 75, 100 mm thick panels, ASTM C423, ISO 354 αp practical absorption data

	125Hz	250Hz	500Hz	1000Hz	2000Hz	4000Hz
TC25 ap	0.05	0.30	0.70	1.00	1.00	0.90
TC50 ap	0.25	0.85	1.00	1.00	0.95	0.85
TC75 αp	0.60	1.00	1.00	1.00	1.00	1.00
TC100 αp	0.90	1.00	1.00	1.00	1.00	1.00

Thickness: 25, 50, 75, 100mm.

Width: 600, 900, 1000, 1200mm subject to finish selection. Length: 600, 900, 1000, 1200, 2000, 2400, 2700, 3000 mm.

Note: Thickness and finish will influence the maximum size, please consult with Asona Ltd prior to specification.

Environmental Impact:

Global GreenTag Certified, Level A, Contains 74% minimum recycled content, low VOC, soiled panels can be resurfaced with new acoustic facing to extend product life and reduce waste.

Laminate Finishes:

Panels are available in standard Sonatexwhite, black, grey, wood prints, RAL colours and fabric finishes. Refer to online Sonatex finishes charts for colour and pattern selections. Other colours and fabrics to order.

Light Reflectance Value:

85% per BS8493:2008, White, others subject to colour.

Limitations:

- For interior use only, and not in direct contact with water.
- Maximum humidity/temperature 99% R/H at 45°C.
- Back loading No overlay loads, M&E services and point loads to be independently supported.
- Digitally printed images on fabric must be a single image per panel. Due to pattern creep in the printing process pattern alignment cannot be assured. Position panels >20mm apart.

Maintenance:

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

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 Triton Cloud 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 Triton Cloud has a Fire Material Group Number 1-S for Sonatex and selected fabric finishes and installation method, 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). Other fabrics & installation method 2-S, 2 and 3. Please consult Asona.

Recycling and Disposal:

Re-laminate with new Sonatex decorative finish to extend product life, may be used as thermal insulation on disposal.



3 x thicknesses create a 3D effect, #SIB side impaling fixing, 15mm negative



Custom fabric finish suspended on adjustable hangers

Thermal Resistance:

R 1.47 m²°C/W (50 mm panel) R 2.2 m²°C/W (75 mm panel) R 3.0 m²°C/W (100 mm panel)

Tolerances:

Width & Length +/- 2 mm

Warrantv:

15 year limited warranty against manufacturing defects, extendable to 30 years when registered for Asona's Renew and Reuse program.

Weight:

TC25= 2.7 kg/m²

TC50= 5.2 kg/m²

 $TC75 = 7.5 \text{ kg/m}^2 (*5.1 \text{kg/m}^2)$

 $TC100 = 6.8 \text{ kg/m}^{2*}$

* SR only, 48 kg/m3 core. Panels over 1200 x 1200 mm.

Installation:

Installation shall not commence until the building is water tight and dry. Light/mechanical fittings shall be independently supported. Installation shall be in accordance with the selected fixing system and industry standards. Refer full Triton Cloud Installation Manual.

Specification:

Acoustical ceiling system shall be Asona Triton Cloudpanel as manufactured and supplied by Asona ltd, Tel: 09 525 6575 info@asona.co.nz, Panels shall be (direct fixed to structure) (fixed to suspended sub frame) (free hanging on wire). Selected panel shall be item # $(_)$, size $(_) \times (_) \times (_)$ mm, finish shall be (Sonatex)(Fabric—), colour (_), mounting system shall be (SIB) (SR) (SFP) (FFX) Panel shape shall be (rectangle) (trapezoid) (triangle) (hexagon) (circle). Fire Group (1-S)(2)(2-S)(3), aaw, NRC (0.75)(0.95)(1.00).

Contractor shall register the ceiling with Asona Renew and Reuse product stewardship program on practical completion.

(Asona ceiling Masterspec 5172AA specification available).

