

triton defender 50TM

ABUSE RESISTANT ACOUSTICAL CEILING AND WALL PANEL



TECHNICAL DATA SHEET BPIR - CLASS 1



triton defender 50™

Abuse Resistant Acoustical Ceiling and Wall Panel - NRC 0.85

Technical Data Sheet - BPIR Class 1

Triton Defender 50™ is a made in NZ durable abuse resistant, high sound absorbing perforated steel faced composite ceiling and wall panel. Defender 50™ is designed to control reverberation and reduce back ground noise levels in abuse prone areas.

Application

Defender 50™ is ideal for detention facilities, prisons, sport halls, school halls as a durable direct fix or suspended ceiling, bulk head or wall lining.

Composition

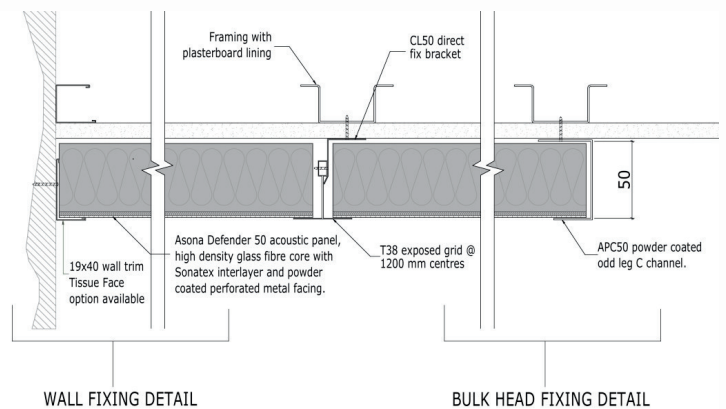
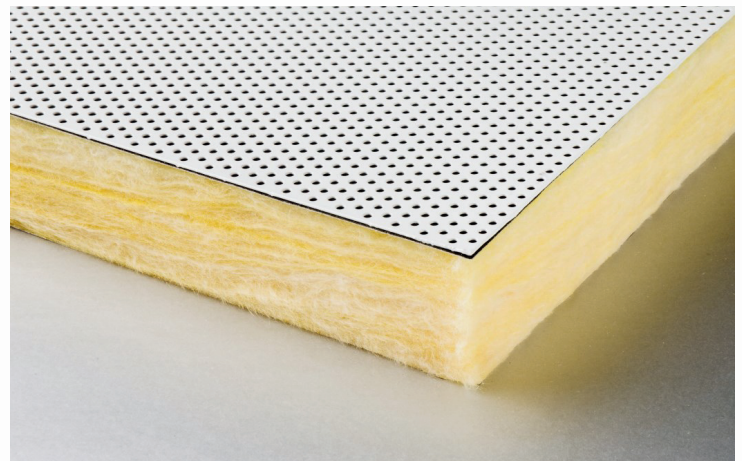
Manufactured from powder coated perforated steel facer with Sonatex interlayer laminated to high density 50mm, 96 kg/m² glass fibre absorber.

Features & Benefits

- Durable, impact and abuse resistant acoustic panel with puncture resistant perforated steel facing.
- High sound absorption for effective control of reverberation, ISO 11654 class A, α_w 0.90, NRC 0.85.
- Fire Group 1-S.
- Made in NZ, short lead times including replacement parts.
- Product stewardship Renew and Reuse program.
- Dimensionally stable in high humidity.
- Easy to clean powder coated finish.



Manukau Police Station—Hard Interview Room



Technical Specifications:

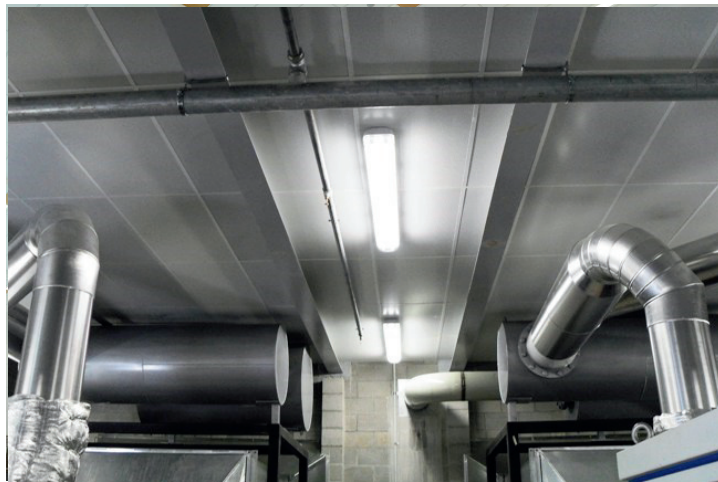
Item #	Size (nominal)*	Edge
DE50.0606	50 x 600 x 600 mm	Square
DE50.0612	50 x 600 x 1200 mm	Square
DE50.0624	50 x 600 x 2400 mm	Square
DE50.1212	50 x 1200 x 1200 mm	Square

*Custom sizes available to order, contact Asona

Practical Sound Absorption Ratings:

Direct 'A' mount α_w 0.90; Class A; NRC 0.85 per ASTM C423 ISO 354 A-50 Test T0601-4, E-200 Test T0601-3

Hz	125	250	500	1000	2000	4000
α_p A50	0.45	0.80	0.85	0.90	0.90	0.80
α_p E200	0.60	0.70	0.75	0.90	0.95	0.80



Waikato Hospital Equipment Room

Accessibility

Wall and direct fix ceiling panels are non-accessible.

Colour:

White powder coated steel over black faced absorber.

Light Reflectance Value:

>75% White

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 max. 2kg/m², point loads to be independently supported.

Maintenance:

Clean with vacuum, soft brush or damp soapy cloth, clean away residual soap and dry after cleaning.

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 Triton Defender 50 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)

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.

Service Panel Protection:

Panels are available with removable protective foil covering to help keep panels clean during installation.

Thermal Resistance:

R 1.4 m²C/W

Warranty:

15 year limited warranty against manufacturing defects.

Perforation code

P136

Open Area
22.7%

ACTUAL SIZE

60 Degree Stagger

32.075
Holes per Sq. Metre

Weight:

6.7 kg per 1194 x 594 mm panel, 9.5 kg/m²

Installation:

Shall not commence until the building is watertight and dry. This product is designed to be direct fixed or mounted into a two-way exposed grid system and installed to manufacturer’s and AS/NZS 2785:2020 Standard’s requirements.

Direct fix under solid lining: For ceiling or wall mounting screw fix UA1502 aluminium perimeter channel at 300 mm o.c. Install panel and use UA1280 aluminium top hat to hold down and cover panel joins.

Suspended: Install Rondo Donn DX1W 38mm wide face main tee at 1200 mm centres fixed to structure with solid hangers at 600 mm o.c. For secure areas pop rivet the perforated face to the T bar suspension at 300mm o.c. Seismic design may require a suitably qualified engineer. Care shall be taken when handling tiles to avoid damage.

Specification:

Acoustical treatment shall be Triton Defender 50 abuse resistant composite acoustical panel manufactured by Asona Ltd Tel: 09 525 6575, info@asona.co.nz, Selected panel shall be item # (), size 50 x () x ()mm, square edge sound absorption class A, α_w 0.90, NRC 0.85, thermal insulation R1.4, powder coated perforated steel facing over black faced 50 mm absorber, Perf P136, colour white, Fire Group 1-S. Direct fix application shall use UA1280 top hat to panel joins and UA1502 to perimeter.

Suspended applications shall use Rondo Donn DX1W 38mm wide faced two way exposed grid system with solid hanger and 19 x 40 mm wall trim, grid colour white. Pop rivet panels to the suspension systems at 300mm o.c. Contractor shall register the ceiling with Asona Renew and Reuse product stewardship program on practical completion. (Asona ceiling Masterspec 5311AS specification available).

