

# Asona Defender 50™ - NRC 0.85



## Abuse Resistant Acoustical Ceiling and Wall Panel

### Technical Data sheet

ASONA

#### Description.

Asona 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.

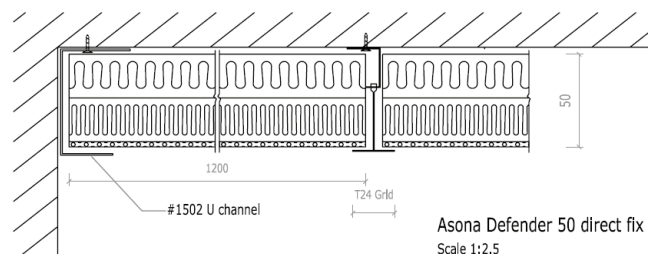
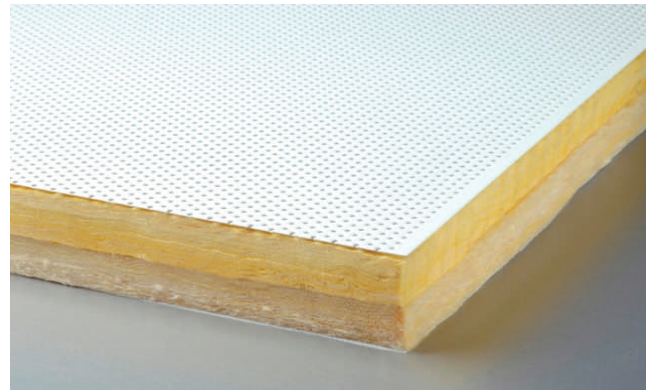
Defender 50™ is ideal for detention facilities, prisons, sport halls, school halls as a durable direct fix or suspended ceiling, bulk head or wall lining.

#### Composition.

Manufactured from powder coated perforated steel facer with Sonatex 250 interlayer laminated to high density 130 kg/m<sup>3</sup> glass fibre absorber with 48 kg/m<sup>3</sup> bio-soluble glass fibre backer.

#### Benefits.

- High sound absorption for effective control of reverberation, ISO 11654 class A,  $\alpha_W$  0.90, NRC 0.85
- Durable impact and abuse resistant construction
- Puncture resistant steel facer
- Non combustible
- Dimensionally stable in high humidity
- Easy to clean powder coated finish



### Technical Specifications

Item #	Size (nominal) *	Edge
MC95034A	50 x 600 x 1200 mm	Square
MC95044A	50 x 1200 x 1200 mm	Square
MC95046A	50 x 1200 x 2400 mm	Square

\* Custom sizes available to order, contact Asona Ltd

Practical Sound Absorption Ratings:						
Direct 'A' mount $\alpha_W$ 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
$\alpha_p$ A50	0.45	0.80	0.85	0.90	0.90	0.80
$\alpha_p$ E200	0.60	0.70	0.75	0.90	0.95	0.80

#### Accessibility:

Wall and direct fix ceiling panels non accessible, suspended ceiling panels with hold down clips offer limited access.

#### Back loading:

Max. 2 kg/m<sup>2</sup>, point loads shall be independently supported.

#### Colour:

White, other powder coated finishes to order

#### Fire Reaction:

AS1530 pt 3.  
Smoke developed 3, spread of flame 0.

#### Humidity:

Non hydroscopic, dimensionally stable, resists fungi and stains  
Max 95% R/H at 45°C.

#### Light reflectance:

ASTM C1477 LR-1, >75%

#### Maintenance:

Clean with vacuum, soft brush or damp soapy cloth.

#### NZ Building Code:

Clause B2—durability, 5 years

#### Service Panels:

Available with protective plastic film covering to help keep panels cleaning during the construction phase.

#### Thermal Resistance:

R 1.4 m<sup>2</sup>°C/W

#### Weight:

9.5 kg/m<sup>2</sup>

#### Installation:

Shall not commence until the building is water tight and dry. Screw fix #1502 perimeter channel at 300 mm o.c. Main tee at 1200 mm centres fixed to structure with solid hangers at 600 mm o.c. For secure areas pop rivet panels to T bar suspension at 300mm o.c. For suspended ceilings use 4 x hold down clips per 1200 x 1200 panel. For walls mount panels over solid backer, use top hat cover batten at 1200 mm centres and 50 mm C channel to ends.

#### Specification:

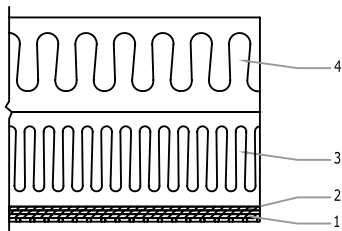
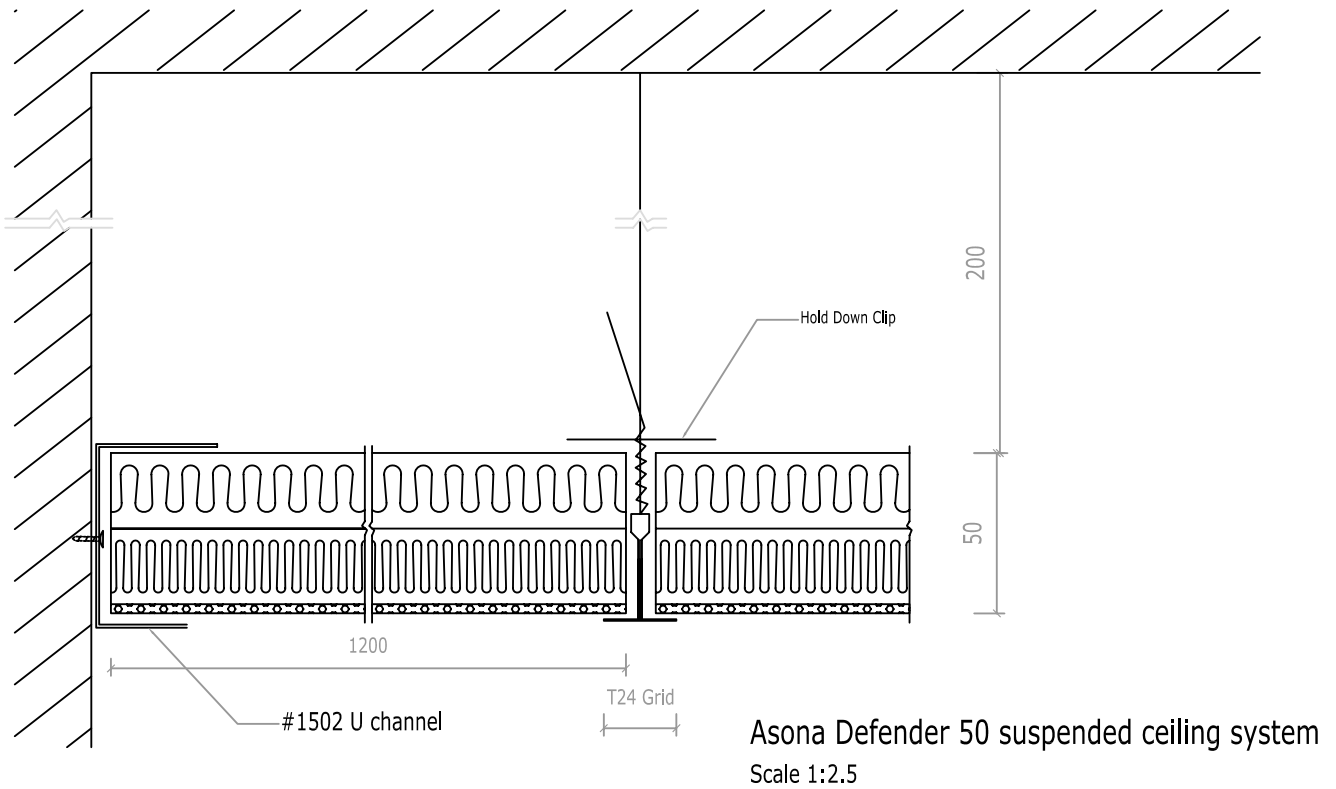
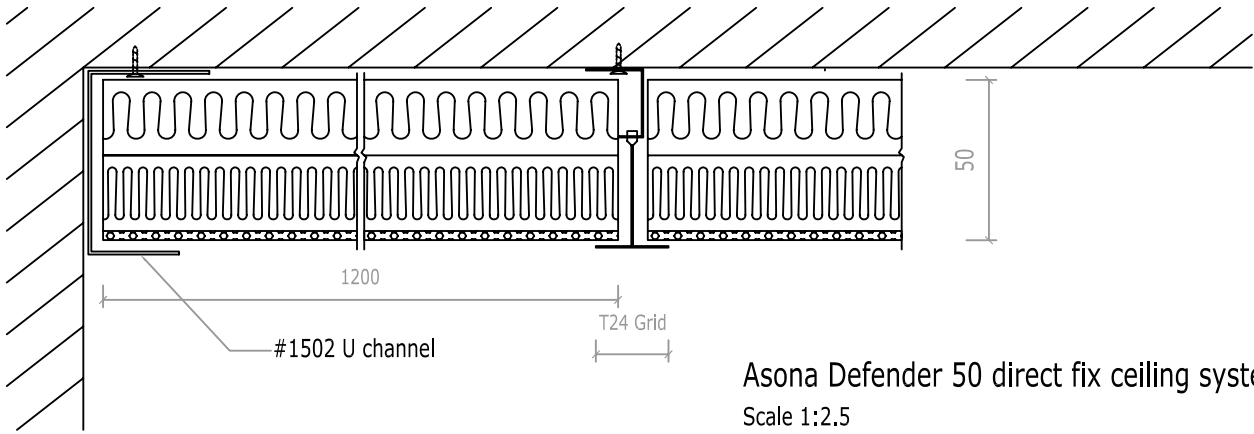
Acoustical treatment shall be Asona Defender 50 composite acoustical panel manufactured by Asona Ltd Tel: 09 525 6575 Fax: 09 525 6579, # ( ) , module ( ) x ( )mm, 50 mm thick, sound absorption class A,  $\alpha_W$  0.90, NRC 0.85, thermal insulation R1.4, powder coated perforated steel facer, colour white, with (T24 two way exposed suspension system) (direct fix) Perimeter trim #1502 U channel

#### Asona Ltd

P.O Box 96-241 Balmoral,  
Auckland, New Zealand  
Sales Tel: 021 50 57 40  
Email: info@asona.co.nz  
Web: www.asona.co.nz

Factory:  
5B Monier Place  
Mt Wellington  
Auckland, New Zealand  
Tel: (09) 525 6575  
Fax: (09) 525 6579

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All dimensions are nominal. We reserve the right to change specifications .  
Ref. Defender 50—0703



1. Perforated steel facer (powder coated white)
2. Sonatex composite interlayer
3. 130 kg/m<sup>3</sup> glass fibre absorber
4. 48 kg/m<sup>3</sup> glass fibre absorber backer.

Scale 1:2

DEFENDER 50 Abuse resistant acoustical panel

