



Pastorale Acoustic Panels

Acoustek 

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Why Acoustic Treatment?

The grand epiphany of 'the open plan office' and 'open plan restaurant' began its rampant spread over a decade ago, giving birth to new design concepts.

The 'industrial look' soon emerged within offices and restaurants complete with the introduction of polished concrete floors and similar hard surfaces that reflected noise.

Subsequently and despite the designers best intentions the result was:

- Increased reverberate noise levels
- Lack of privacy
- More uncontrolled interactions

Within the office environment the above is associated with:

- Higher stress
- Diminished ability to concentrate
- Diminished productivity

The issue went further, 'Conversation Friendly Restaurants' soon became a rarity giving rise to further studies on how noise affects everyone.

Tests done by Russell Keast (Associate Professor of Food & Sensory Science - Deakin University, Victoria, Australia) proved that:

- Significant levels of background noise reduce a patrons ability to detect flavour.

- Difficulty conversing and ordering also hinders positive experience causing frustration for clients and staff alike.

Restaurant & Bar noise levels have significantly increased and regularly exceed 85dB. Unfortunately 85dB and above noise exposure causes auditory hair cells located on the cochlea of the inner ear to be permanently destroyed, never to be renewed. Premature deafness is the direct and devastating result for all who are continuously exposed - is this tomorrow's litigation??

SIMPLE ACOUSTIC FACT:

Introducing an acoustic screen or barrier between a noise source and an individual will reduce the noise by an average of 8dB, yet the human ear perceives 50% noise reduction.

With a predominance of glass walls and open space, where & how would such a barrier be located without detracting from the original design intention.

Enter the Acoustek range of acoustic products all being designed to combat such noise and also fit within a modern environment, utilising ceilings and whatever walls available.

Our range of products bring greater aesthetics to any location and absorb up to 97% of reverberate noise.



Pastorale Design

The concept informing Pastorale is the suspension of Acoustic panels to reduce the irritation of noise whilst improving aesthetics of any restaurant or workplace.

Each pattern has a subtle 3 dimensional option of raising and not removing each specific pattern, this increases surface area absorption and visual difference.

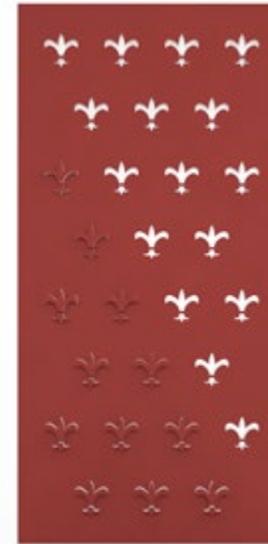
Remove the pattern inserts as preferred from the hanging panel and visual access/ light is allowed to penetrate as needed.

Design your own pattern, Logo or corporate message to be conveyed, along with preferred acoustic functioning, choose your own colour option and resultant bespoke interior achieves the ambience desired.

AUTUMN

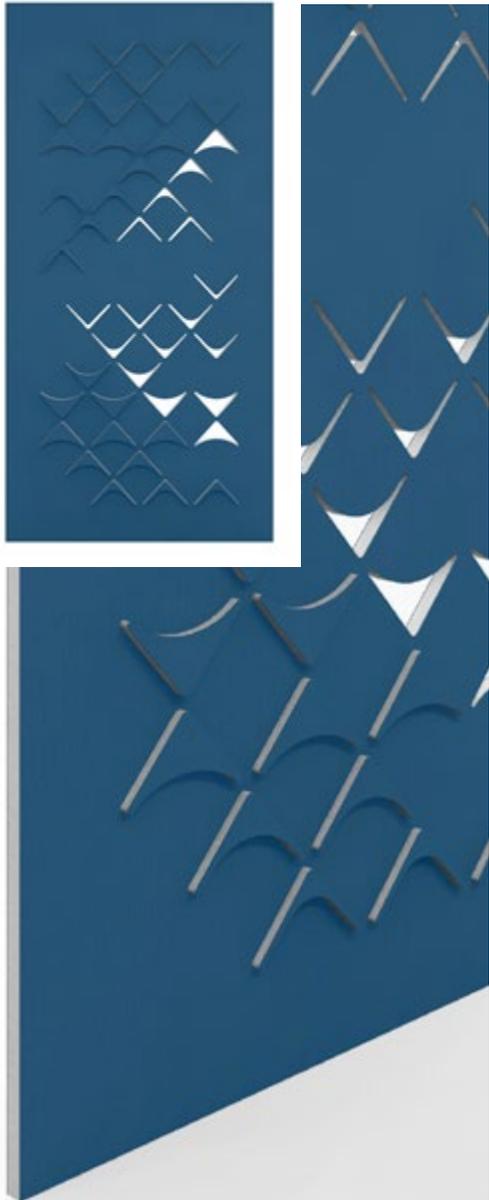


FLEUR DE LIS



Pastorale Design

MIGRATION



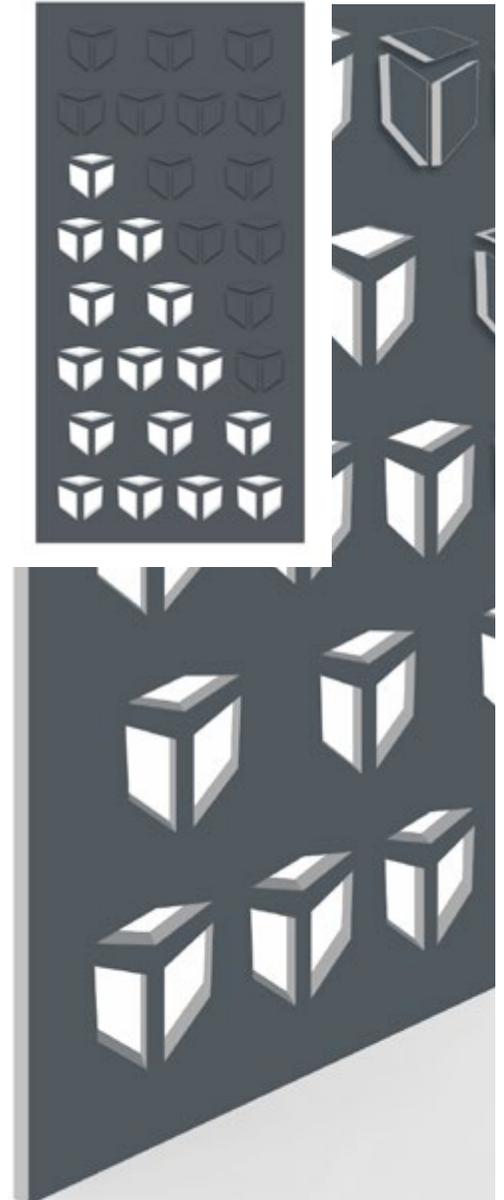
GLASS



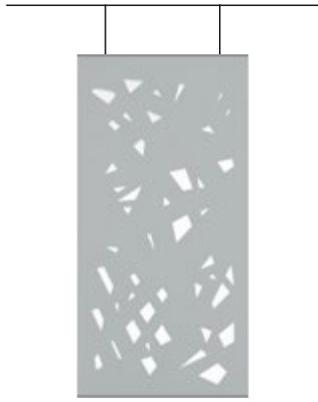
SURVEY



OUT OF THE BOX



Panel Fitting



GRID CEILING SUSPENDED TOP ONLY

Kitset 1:

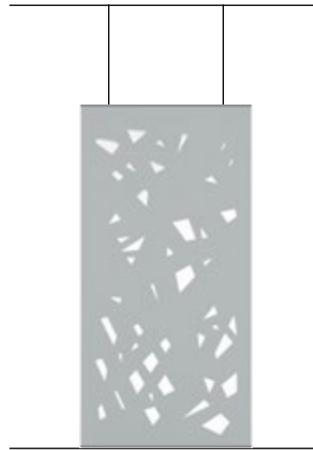
- T-Grid Clips
- Cable Adjusters
- Barrel Fittings
- Suspension Wire
- 1 x 1200mm Extrusion
- 2 x M6x15 set screws & nuts



GRID CEILING SUSPENDED TOP & TENSIONED BASE

Kitset 2:

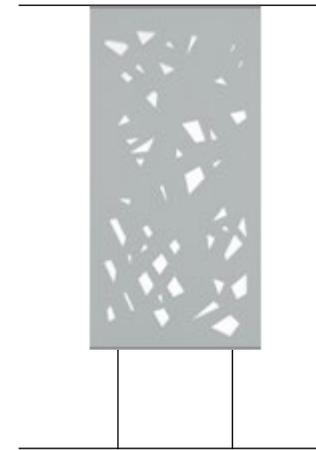
- T-Grid Clips
- Cable Adjusters
- Barrel Fittings
- Suspension Wire
- 2 x 1200mm Extrusions
- 4 x M6x15 set screws & nuts
- 2 x concrete dowels



GRID CEILING SUSPENDED TOP & DIRECT FIX BASE

Kitset 3:

- T-Grid Clips
- Cable Adjusters
- Barrel Fittings
- Suspension Wire
- 2 x 1200mm Extrusions
- 2 x M6x15 set screws & nuts
- 2 x concrete dowels



DIRECT FIX TOP & TENSIONED BASE

Kitset 4:

- Cable Adjusters
- Barrel Fittings
- Suspension Wire
- 2 x 1200mm Extrusions
- 2 x M6x15 set screws & nuts
- 4 x concrete dowels

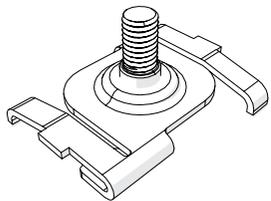


DIRECT FIX TOP ONLY

Kitset 5:

- 1 x 1200mm Extrusion

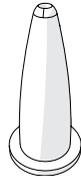
SUSPENSION KIT COMPONENTS



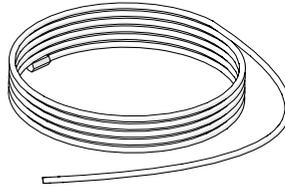
T-Grid Clip



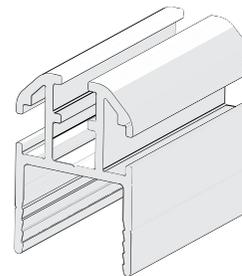
Cable Adjusters



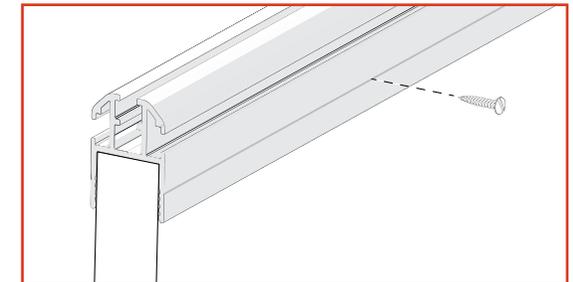
Barrel Fittings



Suspension Wire



Extrusion



Extrusions require 15mm screws into each side at the 'V' groove positioning. Screws to be spaced along each side at 100mm, 500mm, 1000mm (left to right). The same spacing applied to both sides means screws will not foul opposite screws.

Pastorale Sliding System



The Concept

The concept of moveable acoustic panels to create a 'speech privacy area' has many uses from office meetings to a 'conversation friendly restaurant experience'.

The minimal intrusion of an effective acoustic barrier between a noise source and an individual will reduce the noise by an average of 8dB, yet the human ear perceives 50% noise reduction.

The control of reverberate noise in spaces where people work, relax, socialise and learn is of critical importance. 'Reverberant spaces' are not natural environments for humans. Spending time in such spaces can have negative impact on productivity, learning, recuperation, enjoyment, well-being and most importantly - speech confidentiality.



Pastorale Sliding Panel Design

A wheel unit is fixed at the centre point of the top extrusion and the whole panel assembly slid along a track - an inverted U-channel with wheel tracks capturing the wheels.

This allows Pastorale panels to rotate 360° and also stack at the side of a room. 3 - 4 panels pushed against each other would occupy approximately 80mm to 115mm.

Panels can then be pulled into position side by side or as vertical louvres, each being 1200mm wide.



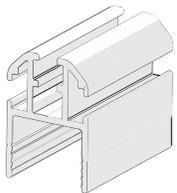
Panel Fitting

The wheel assembly is locked firmly in place onto the panel's track via the M6 locknut provided & must be at the centre point to ensure balance of the panel.

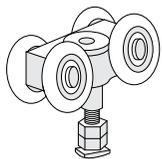
Ceiling track is fixed securely to ceiling or grid, locating screws at approx every 200mm - if fitting to grid please ensure the grid is adequately supported to it's ceiling substrate. The panels can then be lifted and located onto the track.

To prevent the assembly sliding off the track a set screw and nut are securely located to each open end. Care should be taken when operating the panels to prevent undue pressure on the pattern cut-outs and added weight by pulling at the track.

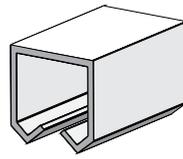
SUSPENSION KIT COMPONENTS



Extrusion

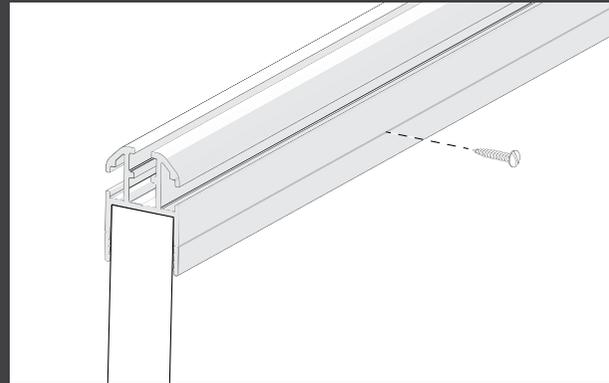


Wheel Unit

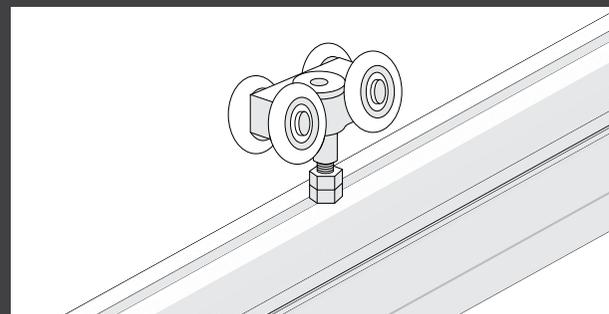
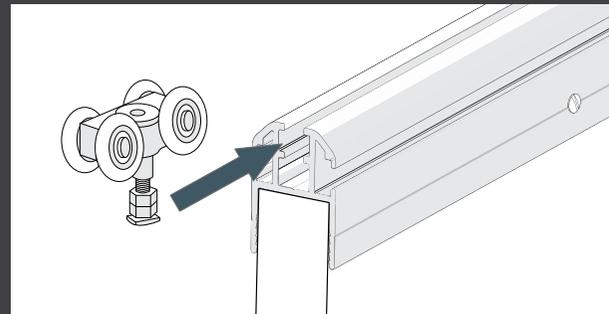


Ceiling Track

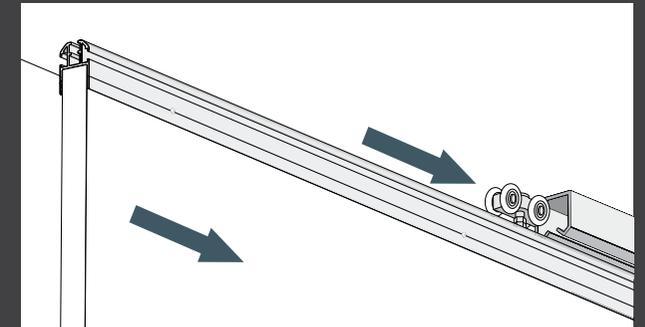
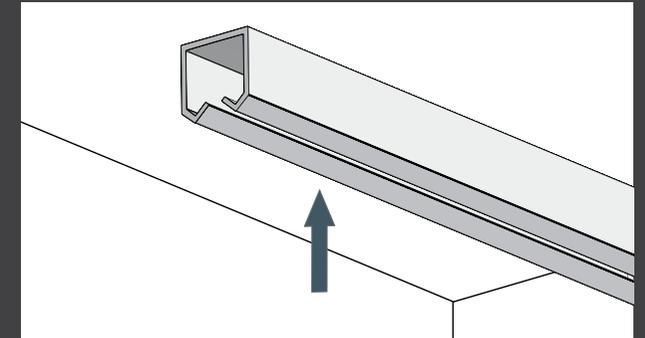
1. Extrusions require 15mm screws into each side at the 'V' groove positioning. Screws to be spaced along each side at 100mm, 500mm, 1000mm (left to right). The same spacing applied to both sides means screws will not foul opposite screws.



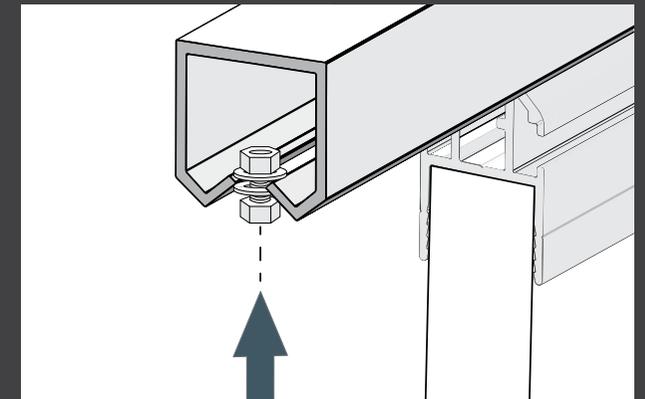
2. Locate the wheel carrier onto the track's centre point and lock in place via M6 locknut.



3. Securing the support track is of utmost importance, panels will have extra weight when being pulled without due care.

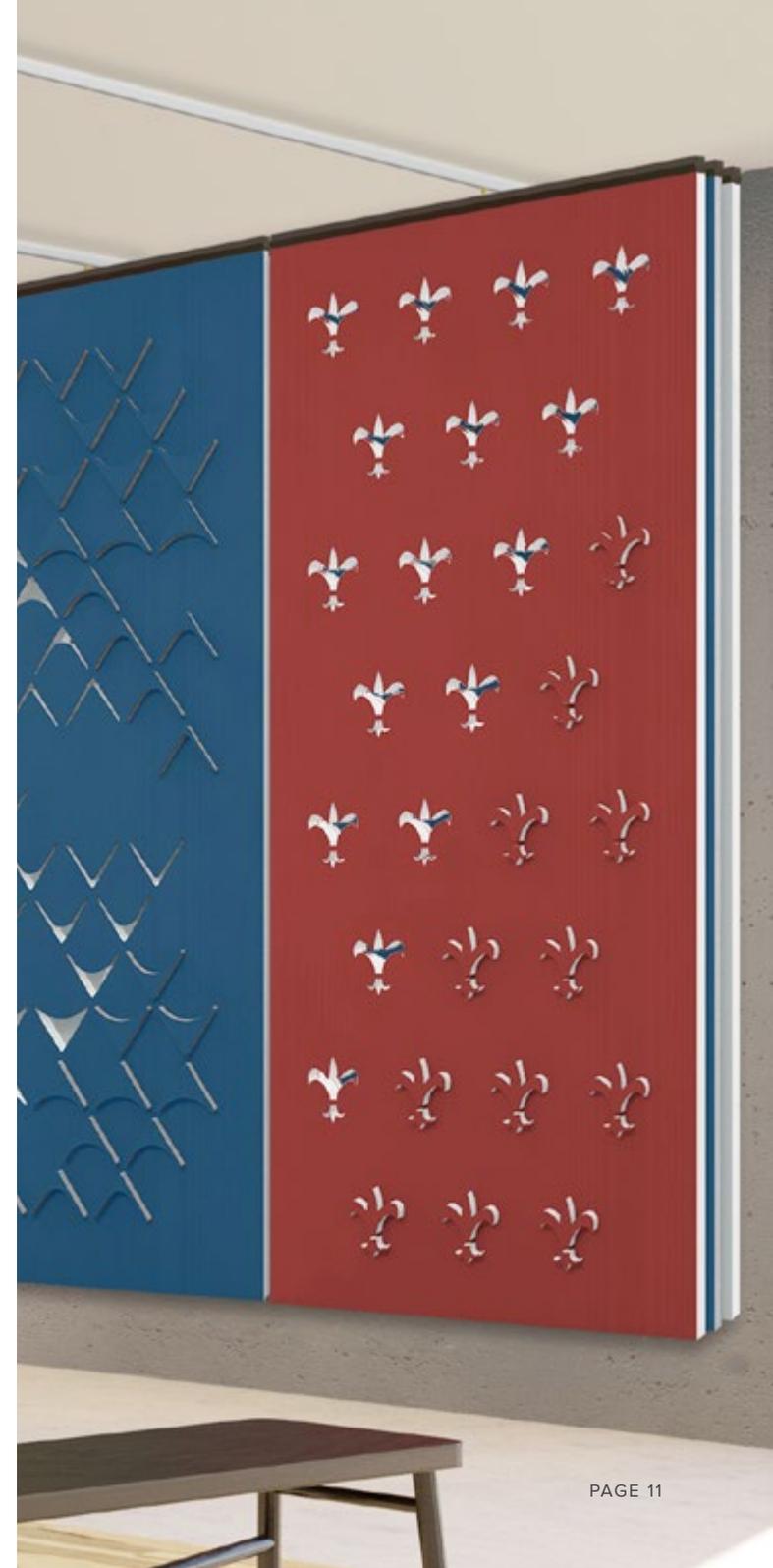


4. Once wheels located onto the track ensure panel hangs evenly balanced, locate set screw & nut firmly onto track ends preventing inadvertent exit of panel.



Product Specifications

Composition:	100% polyester fibre
Panel size:	2400 x 1200 x 24mm
Acoustic Performance:	Pastorale patterns are produced from acoustic sheet with NRC 0.91 = absorbs up to 91% of Reverberate Noise. Suspended as Pastorale the surface area is increased 100% providing even better attenuation.
Product care:	Blot spills immediately, avoid rubbing, vacuum lightly brush.
Physical description and properties:	
Melting point:	250°C
Other properties:	Non-allergenic, low irritant, low flame response, indoor use only
Max service temp:	110°C
Alkalinity:	pH 7.8 (pH 7 is neutral)
Moisture absorption:	Exposure to an atmosphere of 50°C and 95% RH for four days gives moisture absorption of less than 0.2% by volume
Fire resistance:	The following results were obtained when Acoustek product was subjected to early fire hazard testing in accordance with Australian Standards AS 1530.3 Ignitability 0 Spread of Flame 0 Heat Evolved 0 Smoke Developed 0-1
Variations are tested to AS ISO 9705 Corner Burn in accordance with AS 5637.1	
Group 1	SMOGRA not more than 100m ² /s ² x 1000
EU 'BS EN' compliance: A1:2014	#11925-2: 2010 #13501 - 1: 2018 #13823: 2010 +
US standards:	ASTM E84 - 16





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