Au.diPanel Datasheet

atkar acoustics design innovation

Product Description

Au.diPanel is the Atkar range of perforated interior wall and ceiling panels. Au.diPanel can be tailored for specific aesthetic or acoustic performance requirements, thanks to a wide selection of perforation options and decorative surface finishes.

The achievement of an optimal acoustic effect is ensured by the Sonus Acoustic Backing (SAB), a smart sound absorption material.

Features and Benefits

- Optimal Acoustic absorption (up to NRC 0.8)
- Sonus Acoustic Backing (SAB) black colour (white and grey on request)
- Large selection of perforation patterns
- Concealed Fixing Systems for an uninterrupted appearance
- Wide range of pre-finished timber grain and decorative surfaces, including laminates and timber veneers
- Plywood substrate option for high impact resistance
- Fire Retardant and Moisture Retardant options to fit specific building construction requirements
- Custom panels made to order: Size, Margins, Edge profiling
- Au.diPanel Graphic can realise graphic images
- Design Assistance Service available to support interior designers.

Up to
Group 1 Fire Rating

Up to
NRC value 0.8

Applications

Walls and Ceilings.

Warranty & Maintenance

Au.diPanel is warranted for 15 years. Refer to Atkar warranty and maintenance documents for terms.

Fire Rating

Au.diPanel has been tested to AS ISO 9705:2003 and complies with the AS 5637.1:2015, on Reaction to Fire of Internal Wall and Ceiling Linings. The range includes options up to Group 1 fire rating.

Please consult Atkar to discuss the reaction to fire requirements of your project.

Substrates

- MDF standard and Fire Retardant
- MDF Blackcore and FR MDF Blackcore
- MDF Moisture Resistant
- Plywood
- OSB

Finish Options

Au.diPanel can be finished with the wide range of **Inluxe Finishes**:

- InLuxe Colour
- InLuxe Veneer
- InLuxe Laminate
- Inluxe Image
- Raw

Alternatively, panels can be manufactured with custom colours, custom veneers, and tinted finishes. Consult Atkar or refer to the following link for further information.

atkar.com.au/product/au-dipanel/

Material Sizes

Au.diPanel is available in a range of thickness up to 18mm for MDF and up to 24mm for Plywood. For different thickness consult Atkar.

Substrate	12mm	16mm	18mm	Up to 24mm
STD MDF	•	•	•	
FR MDF	•	•	•	
MR MDF	•	•	•	
Blackcore MDF and FR MDF	•	•	•	
PLYWOOD	•	•	•	•
OSB	•			

Au.diPanel Datasheet

acoustics design innovation

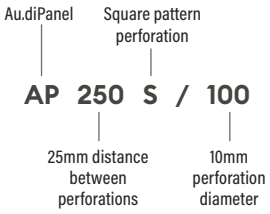
Panels Margin

Standard perimeter margin between the edge and perforations centre is 25mm. Other margin sizes can be achieved.

Perforation Patterns

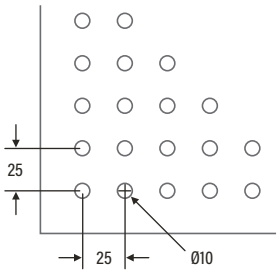
Standard perforation patterns can be type “S” (square) or “D” (diamond) and the minimum Perforation Diameter is 4.5mm.

As an example, the pattern code AP250S-100 is associated to a panel with Square pattern, 25mm distance between perforations and 10mm perforation diameter.



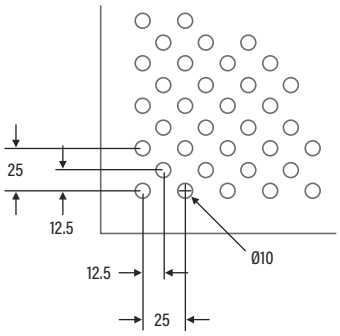
Au.diPanel_AP250S/100

Square Pattern



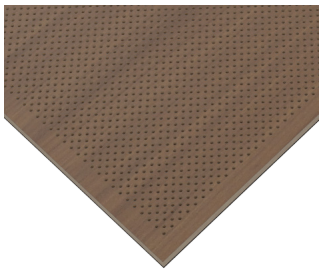
Au.diPanel_AP250D/100

Diamond Pattern

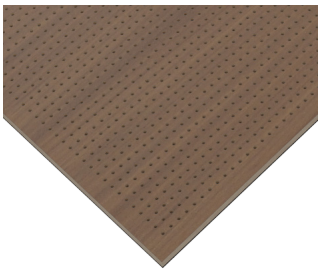


Standard Perforation Patterns

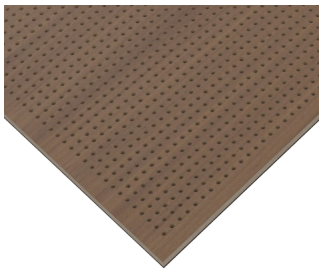
AP125D/45



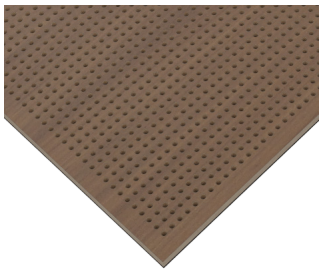
AP125S/45



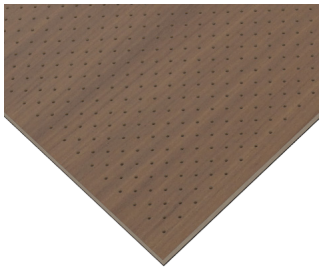
AP125S/60



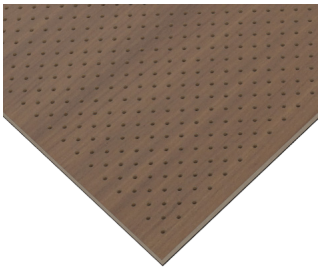
AP125S/70



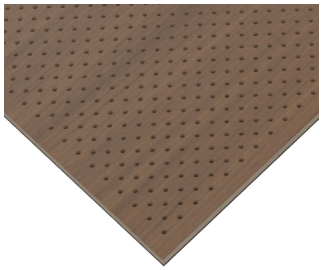
AP250D/45



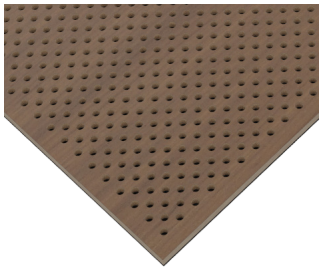
AP250D/60



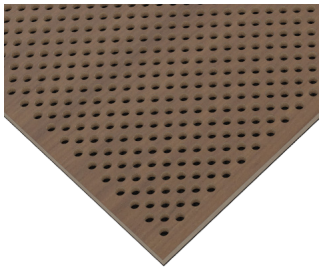
AP250D/70



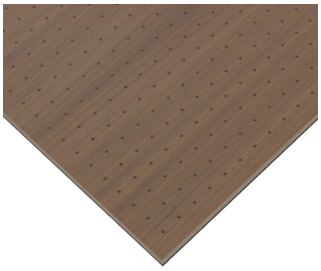
AP250D/100



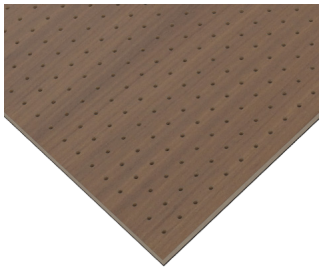
AP250D/120



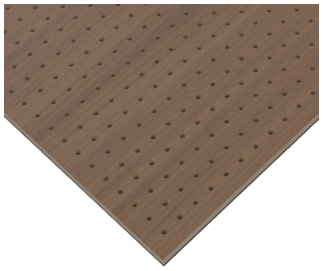
AP250S/45



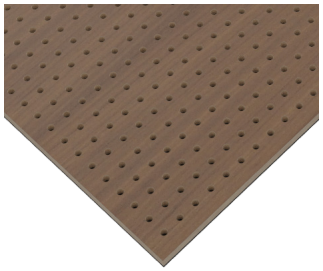
AP250S/60



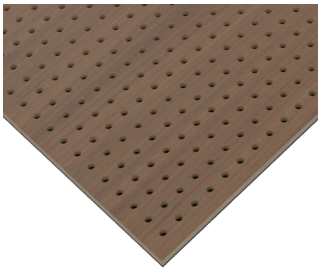
AP250S/70



AP250S/90



AP250S/100



All samples shown here are InLuxe Veneer Spotted Gum.
For the full range of colour options go to:

atkar.com.au/product/au-dipanel/

Custom perforations available on request.
Want a custom design photograph or artwork perforated?
Check out Au.diPanel Graphic here:
atkar.com.au/feature-products/au-dipanel-graphic/

Au.diPanel Datasheet

atkar acoustics design innovation

Acoustic Performance

The diversity of perforation options allows to achieve different open areas (up to 34.5%) and are associated to a range of acoustic performance measured by the Noise Reduction Coefficient Index (NRC). Au.diPanel can reach an NRC value of up to 0.8.

For optimal acoustic absorption, a minimum 90mm air cavity between the panel and the wall/ ceiling is recommended.

Open Area Guide

Perforation diameter code (size mm)	Product code*					
	AP125S/ (insert perforation diameter code)	AP125D/ (insert perforation diameter code)	AP250S/ (insert perforation diameter code)	AP250D/ (insert perforation diameter code)	AP500S/ (insert perforation diameter code)	AP1000S/ (insert perforation diameter code)
45 (=4.5mm)	9.7%	19.2%	2.4%	4.8%		
60 (=6mm)	17.2%		4.3%	8.6%		
70 (=7mm)	23.4%		5.9%	11.7%		
90 (=9mm)			9.8%	19.4%		
100 (=10mm)			12%	23.9%		
120 (=12mm)			17.5%	34.5%		
300 (=30mm)					26.5%	
570 (=57mm)						22.4%

* Always insert the perforation diameter code when referring to the product

Design Assistance

Atkar can support you with Shop Drawings and CAD modelling. Chat to Atkar to discuss your project specifications.

Access Panels

Concealed frame and easy to operate access panels can be provided with a standard size of 600x600mm.

Custom sizes are available on request. Consult Atkar for further information.

Fixing Guide

The following table provides a fixing guide for general applications.

Consideration should be given to reduced framing centres for higher impact area (corridors, crowded spaces) or curved surfaces.

Substrate	Thickness (mm)	Maximum Framing Centres (mm)	Fastener Centres Perimeter (mm)	Fastener Centres Intermediate (mm)
MDF	12 - 18	600	200	300
FR MDF	12 - 18	600	200	300
Plywood	12 - 24	600	300	400

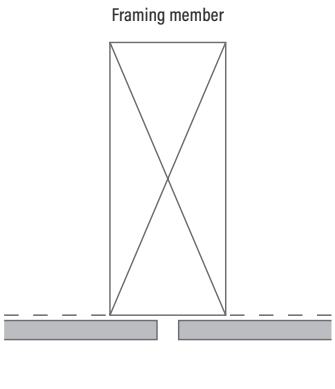
Joints Options

Expressed Joint – can be matched or contrasted to the panel finish: black backing strips are supplied as standard or backing strips with other finishes available on request. Standard gap between two panels is 10mm (minimum recommended gap is 6mm).

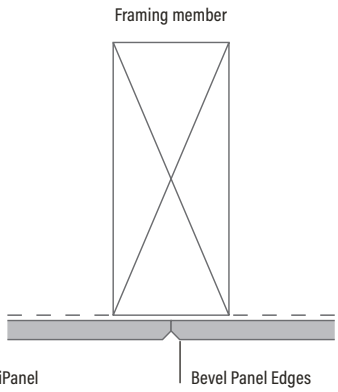
Vee/Butt Joint – recommended only for small area as it may create difficulties with the panel or perforation alignment. AE07 (round) or AE95 (bevel) profiles should be used to compensate any minor variations in the structure or panel alignment. Expansion factors must be considered. Consult Atkar for further information.

***Vee / Butt Jointing may create difficulties with panel and perforation alignment**

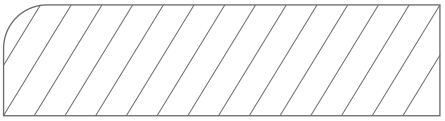
Expressed Joint detail



Vee*/Butt Joint detail

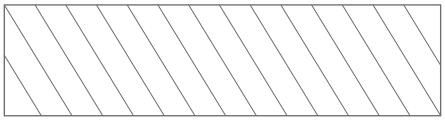


Edge Profiles



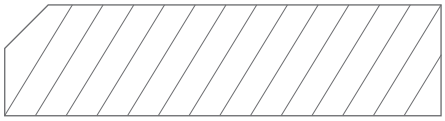
Round Edge - AE 07

Can be used with 10mm Expressed Joint or with Butt Joint



Square Edge - AE 90

To be used with 10mm Expressed Joint



Bevel Edge - AE 95

Can be used with 10mm Expressed Joint or with Vee/Butt Joint

Fixing Systems

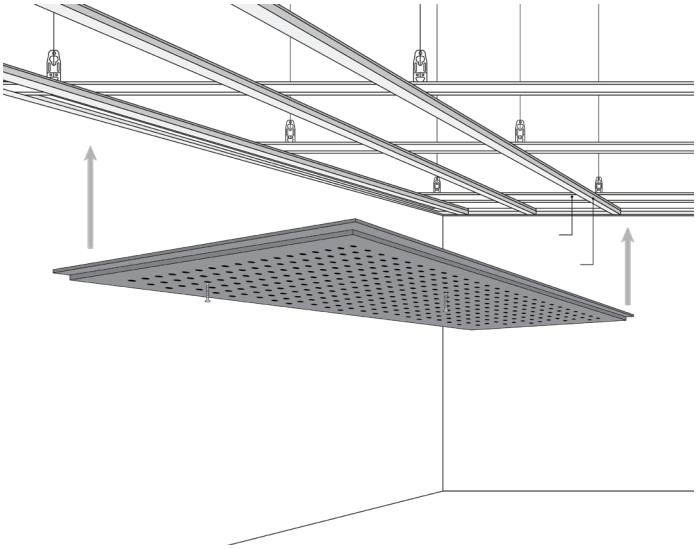
A selection of ***Fixing Systems*** are available based on the application, the specified joint and the aesthetic requirements:

This range includes options ranging from simple face-fixing through to the patented and demountable Au.diMount options.

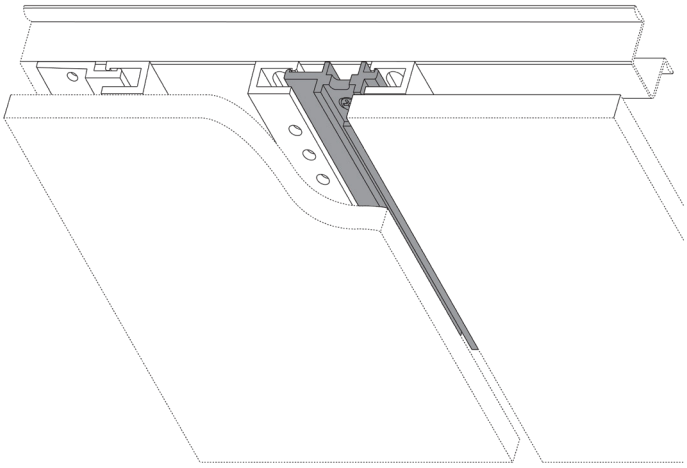
A selection is shown below or please speak to Atkar for a custom solution.

Ceiling	Au.diMount PS3 System	Au.diMount CX4 System	Direct Fix
Wall	Au.diMount XJ1 System for Expressed Joint	Au.diMount BJ2 System for Butt/Vee joint	Direct Fix

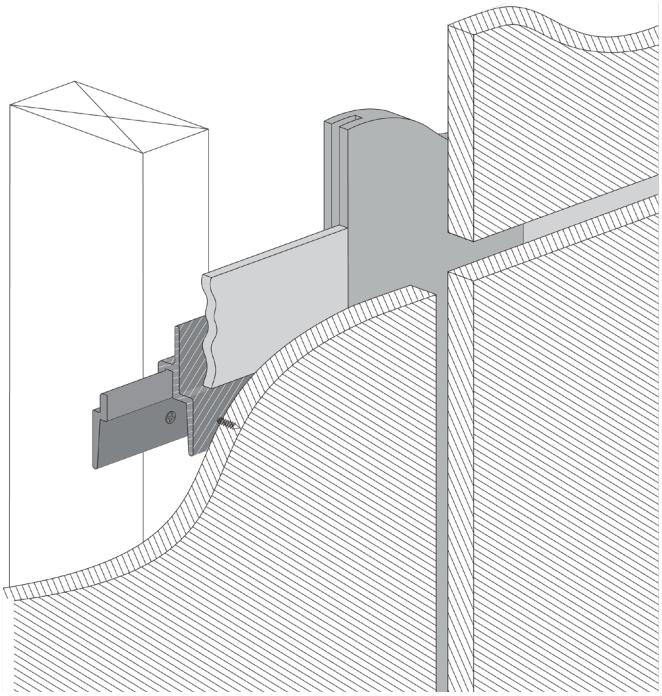
PS3 System



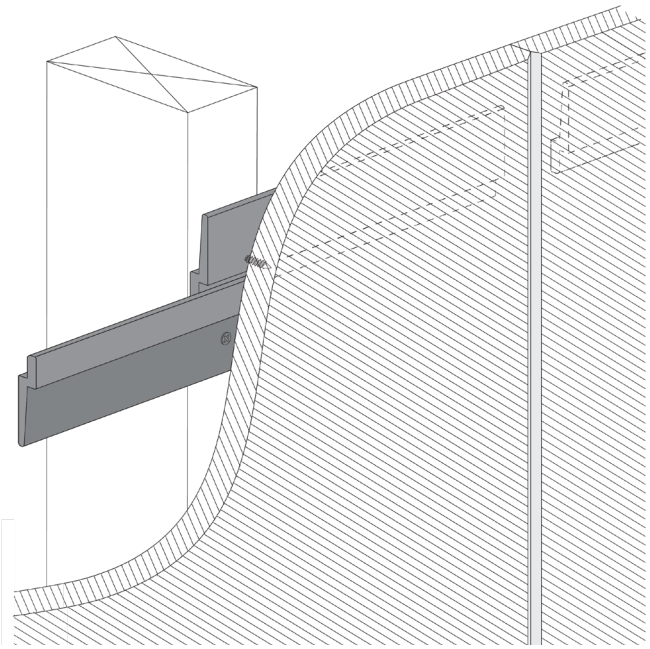
CX4 System



XJ1 System



BJ2 System



Refer to the following link for further information on the installation procedures.

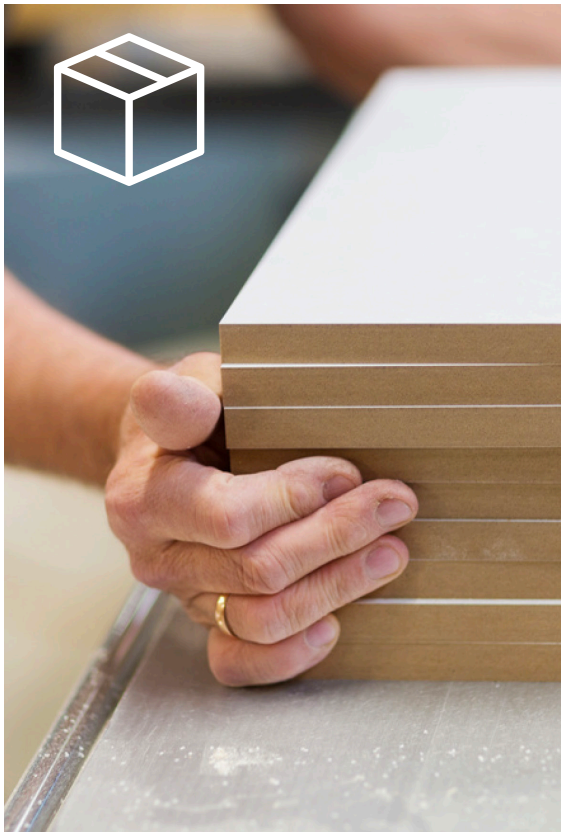
atkar.com.au/architectural/technical-fixing-sheets/

Onsite storage, handling and installation instructions

atkar acoustics design innovation

Receiving Products

Once you have received your order, it is important to allow the panels to acclimatise for at least 48 hours in its original packaging prior to installation. Only remove the packaging on the day of installation and store the panels according to the below instructions.



Storage

The storage area should be protected from the elements including sun, rain, and wind to avoid staining and fading. The panels should be kept at a stable room temperature and humidity and should not be exposed to the weather while awaiting installation.

Protect panels from any moisture including rain or accidental water. MDF and other wood-based products expand on taking up moisture and shrink on losing it. These panels are manufactured to very close dimensional tolerances. Careful storage is therefore very important for subsequent use of panels.

All packs should be evenly supported at each end and at intervals in between to maintain sheets in a flat condition. Spacing of supports should not exceed 600mm to avoid sagging.

Store clear of the ground and place panels so that they will not be exposed to any mechanical damage

Handling

Handle the product carefully to avoid damages during transport. The most vulnerable parts of board during handling operations are edges, corners, finished surface and bottom sheets in a stack.

It is essential to avoid any contamination of the surface likely to cause permanent damage.

Surfaced boards should always be lifted from the pack to avoid damage. Do not slide panels or rest the good side of the panel against the floor.

Once opening the packaging, cover the panels with cardboard, cloth or shrink wrap until they are installed. If panels must be repacked, replicate as closely as possible the original pack to maintain straightness and quality

Installation in a controlled environment

Atkar acoustic and decorative panels are for internal use only and **must be stored, installed, and maintained only in a stable environment**, avoiding very humid areas and extremely dry areas.

Open the package and fit the panels in the final stage of building works when windows and external doors are in place already. This allows the rooms to have a controlled temperature and humidity, preventing moisture from entering the panels.