Au.diGroove Datasheet

atkar acoustics design innovation

Product Description

Au.diGroove is a premium acoustic lining system that combines excellent acoustic performance with an attractive grooved look and with the easiness of installation achieved through its tongue and groove plank form. The range is equally suitable for applications requiring high acoustic performance, as it is for purely decorative purposes.

Features and Benefits

- Exceptional acoustic performance (NRC up to 0.9)
- Sonus Acoustic Backing (SAB) black colour (white and grey on request)
- Attractive seamless finish
- Wide range of patterns/finishing options
- Flexibility: planks can be cut to size on site
- High productivity in installation with the Au.diClip tongue and groove system
- Practical to handle, transport and store thanks to the plank form
- Lead time optimisation
- Fire Retardant MDF and Moisture Retardant MDF to fit specific building construction requirements
- Suitable for curved surfaces with minimum radius of 10m (consult Atkar for a different radius requirement).

Up to
Group 1 Fire Rating

Up to
NRC value 0.8

Applications

Walls and Ceilings.

Warranty & Maintenance

Au.diGroove is backed by a 15 year warranty. Refer to Atkar warranty and maintenance documents for terms.

Fire Rating

Au.diGroove has been tested according to the AS ISO 9705:2003 and complies with the AS 5637.1:2015, on Reaction to Fire of Internal Wall and Ceiling Lining. 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 (FR MDF)
- MDF Blackcore
- MDF Moisture Resistant

Finish Options

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

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

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

atkar.com.au/architectural/3d-visualiser

Material Sizes

Planks are supplied in standard sizes:

- Thickness: 16mm
- Width: 128mm
- Length: 2400mm, 2700mm, 3000mm and 3600mm.

Planks can be cut to size on site where required, using normal wood working tools.

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Standard Slat Profiles

AG10/280

AG11/380

AG18/216

AG19/316

AG20/416

AG36/432

All samples shown here are InLuxe Veneer Spotted Gum. For the full range of colour options go to: atkar.com.au/product/au-digroove/

Acoustic Performance

Au.diGroove has a unique design and efficient profile to make it one of the most effective sound control system available, with the ability to provide NRC values up to 0.9.

An air gap of at least 90mm between plank and ceiling/wall should be left to maximise the absorption acoustic effect.

Open Area Guide

Pattern Code	Open Area %
AG10 - 280	7.7%
AG11 - 380	11.5%
AG18 - 216	7.8%
AG19 - 316	11.5%
AG20 - 416	15.2%
AG36 - 432	7.6%

Design Assistance

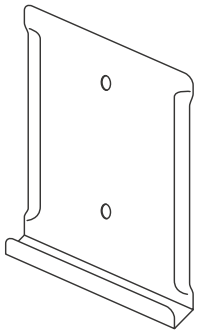
Atkar can support you with Shop Drawings and CAD modelling. Chat to Atkar to discuss your project specifications.

Fixing Guide

Two AudiClip are used for Au.diGroove installation.

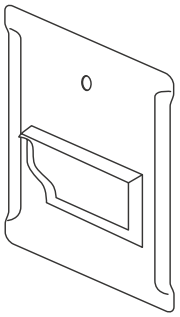
Starter Clip

Direct fixing to timber or metal battens for wall and ceiling installations (first row only).



Mounting Clip

Direct fixing to timber or metal battens for wall and ceiling installations.



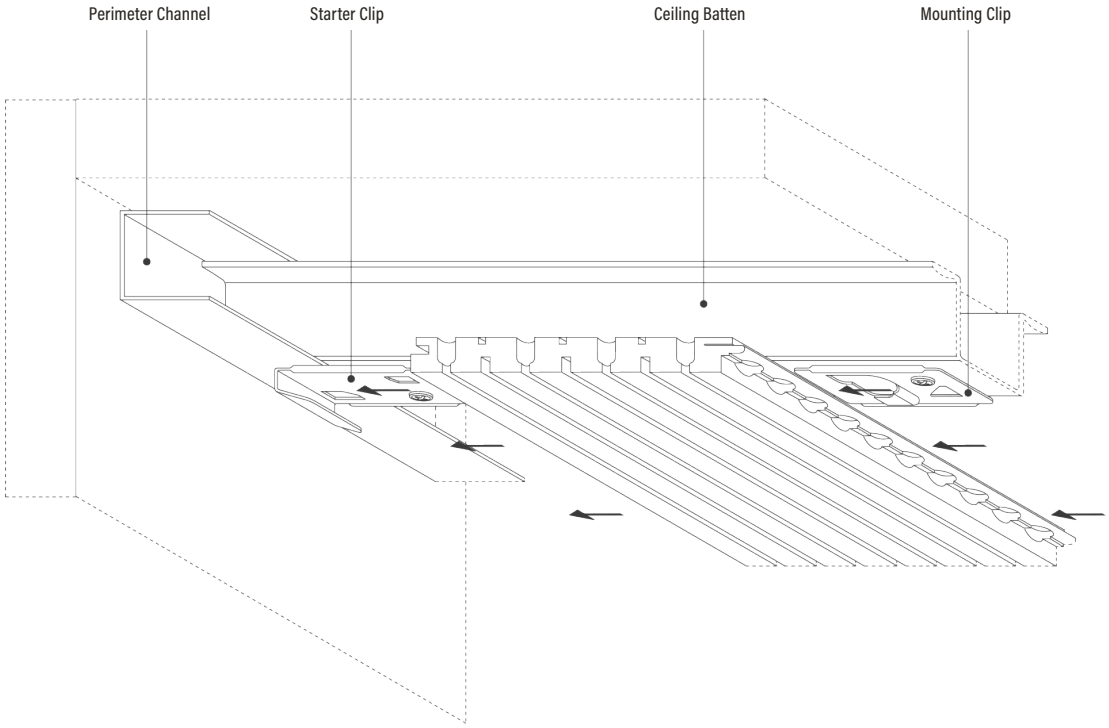


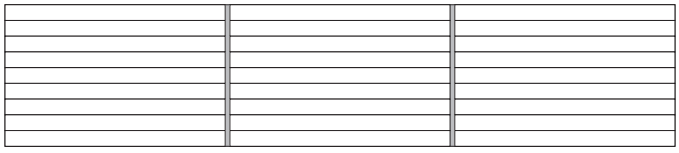
Figure 1. **Mounting detail**

Planks Layout

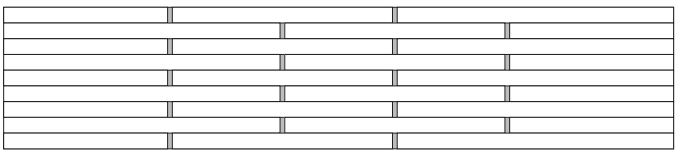
Au.diGroove can be installed in either a “straight” or “offset” configuration. Other configuration can be achieved with special patterns.

Consult Atkar for more information.

‘Straight’ Configuration



‘Offset” Configuration



Onsite Machining

Planks can be cut to length on-site with standard wood working tools. Use a jigsaw to cut angles, curves or service penetrations.

To avoid splintering or face marking, tape up the area to be machined and cut through the tape. Adhesive should never be applied to Inluxe Image or Laminate finish planks, as it could result in damaging the finish.

Alignment

When cutting planks, consideration should be given to the rear perforation (partly visible inside groove), so they align correctly once planks are installed.

Installation Procedure – Wall

1. Determine starting point and plank configuration bearing in mind joint locations and alignment as well as any corners or windows.
2. Fix timber or steel battens to wall structure at maximum 600mm centres. Use spirit or laser level to establish a starting line at lowest point of intended installation area.
3. Expansion joints must be used at the perimeter.
   - 3.1 Where an abutting wall is located, if there aren't fixing points for the Starter Clips, then install a Wall Angle profile onto batten to support planks (Fig.2).
4. Fix Starter Clip onto battens with appropriate screws ensuring that one Clip is mounted on every batten. Then sit first plank on Starter Clip.

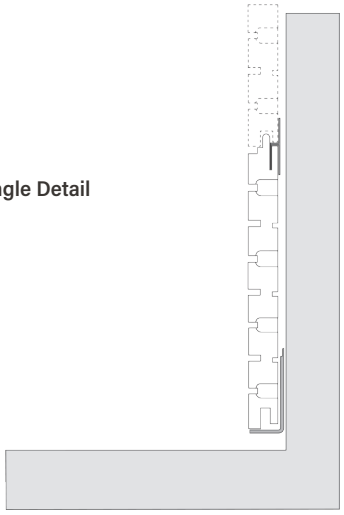


Figure 2. **Angle Detail**

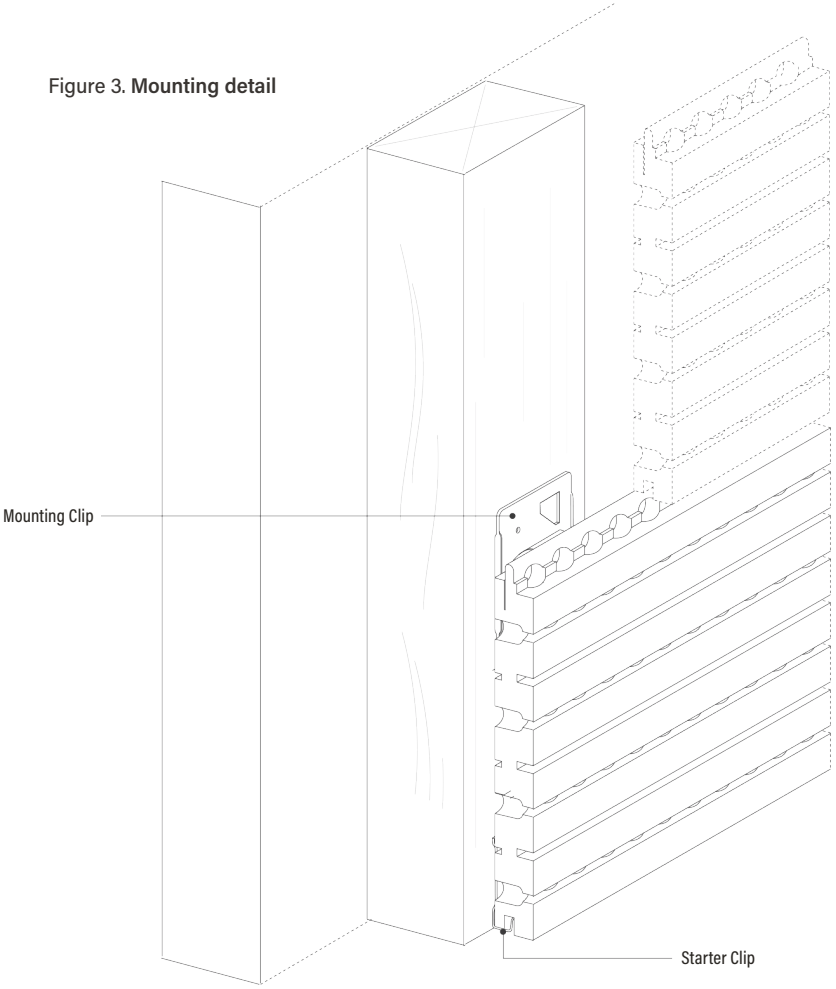


Figure 3. **Mounting detail**

5. Slide Mounting Clip into slot on top edge of the plank. Then fix it to batten. A Mounting Clip is required for every batten (Fig. 3).
6. Connect next plank sliding the slot into the tongue of the adjacent plank previously installed. Planks should accurately fit together using hand pressure only. If joint does not couple perfectly, check, and remove any obstruction in the groove.
7. Repeat Steps 5-6 until desired wall area is covered, checking level and straightness of plans as wall is built up.
8. Use a Starter Clip (not a Mounting Clip) on the top edge, where wall meets a ceiling.

Note: a minimum 3mm expressed joint is required on the short edge of the plank when abutting to panels or extrusion to allow for natural material expansion/contraction.

Installation Procedure – Ceiling

Determine starting point and plank configuration bearing in mind joint locations and alignment as well as any walls or coffers. It is recommended to set out planks from the longest straight wall available.

Follow the steps below to install the planks in a Furring Channels or Timber Battens configuration.

1. Set out furring channels or timber battens to run perpendicular (900) to plank direction (Figure 1). Maximum frame centre must be 600mm.
2. Determine wall detail method (Shadowline or Flush) and fix perimeter channel or wall angle to wall accordingly.
3. Expansion joints must be used at the perimeter.

Figure 4. **Shadowline Detail**

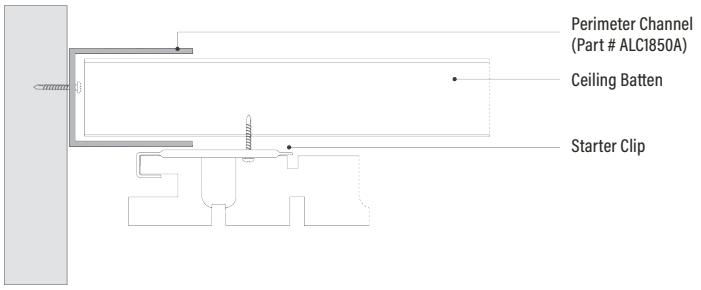
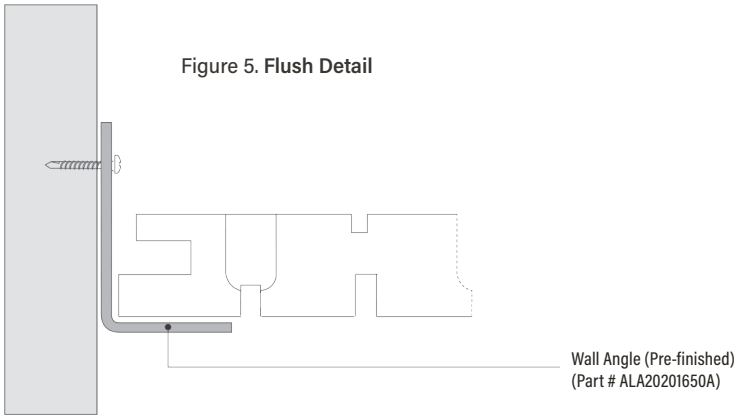
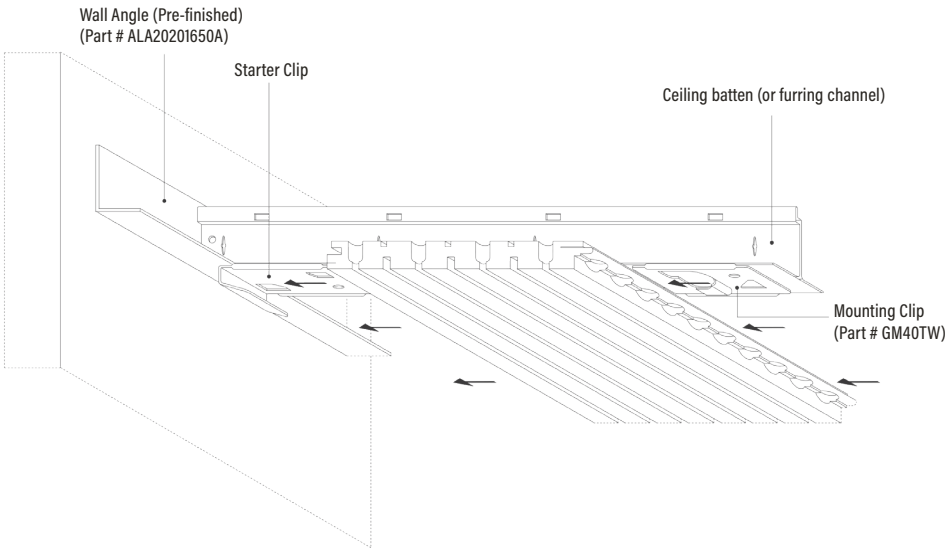


Figure 5. **Flush Detail**



4. Fix a Starter Clip to any furring channel or timber batten, using appropriate screws, where the abutting wall is located.
5. Slide first plank into Starter Clips.
6. On the opposite side of the plank, slide and firmly fix in place Mounting Clip into groove (Figure 6).
7. Install a Mounting Clip for every furring channel or batten, until first plank is fully in place.
8. Insert next plank into tongue and groove joint. Plank should accurately fit together using hand pressure only. If joint does not couple perfectly, check and remove any obstruction in the groove.
9. Once plank is in place, install a Mounting Clip in the groove on the leading edge of the plank. Ensure that a Mounting Clip is installed per each batten or furring channel
10. Repeat Steps 8-9 until desired ceiling area is covered.

Figure 6. **Mounting detail**



Note: a minimum 3mm expressed joint is required on the short edge of the plank when abutting to panels or extrusion to allow for natural material expansion/contraction.

Demounting Instructions

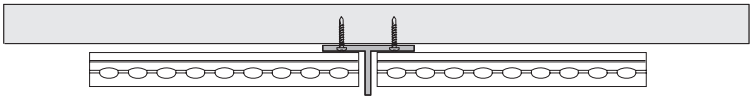
It is not recommended that panels are demounted and re-installed by unqualified personnel. Any lack of system knowledge could lead to a system failure.

To demount a plank, slide it back and down so as the tongue disengage from the slot of the adjacent plank.

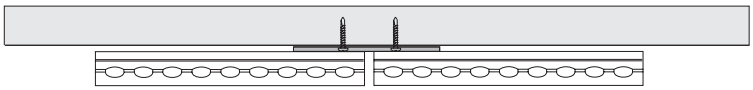
Straight Joint Detail

A straight joint can be treated with a T shape extrusion or with a Flat Backing Strip.

T Section Joint Detail (Part # ALT20201650A)



Backing Strip Joint Detail (Part # FBBS-70)

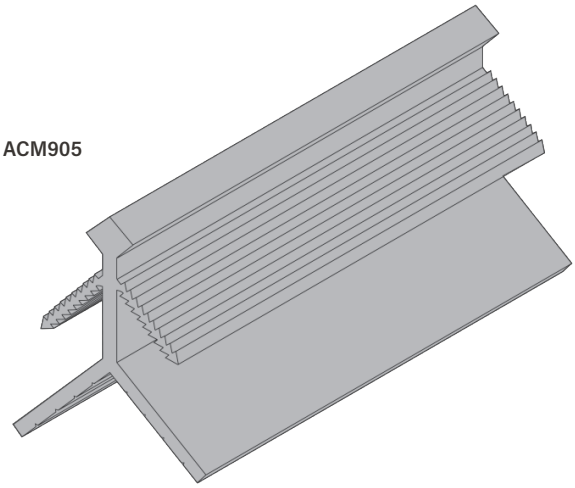


Corner Detail

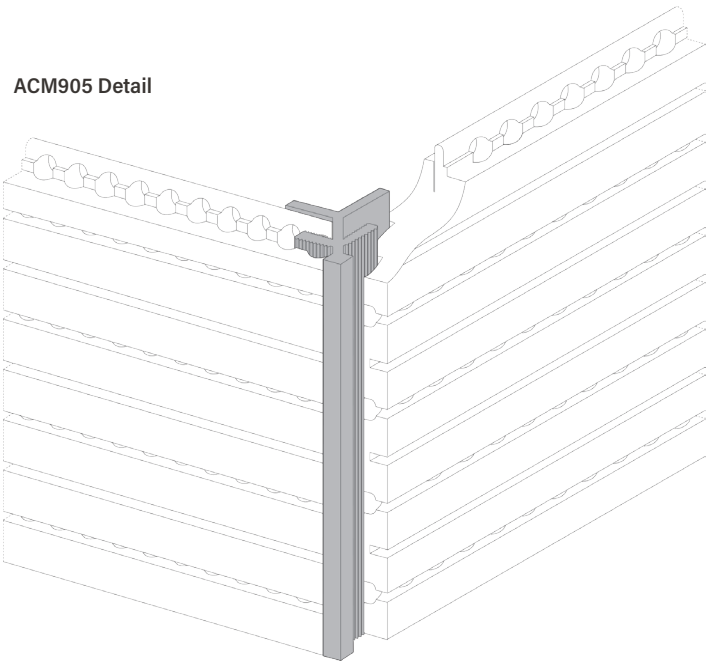
Corner details can be finished using the Atkar ACM905 aluminium extrusion that provides a neat 5x5mm corner detail to Au.diGroove.

The ACM905 is available in 5000mm length and the appropriate cutter, to machine the planks and prepare the mounting of the ACM905, can be requested to Atkar.

ACM905



ACM905 Detail



Alternatively, planks can be simply butted into a timber mould or capped with a right-angle cover mould.

Onsite storage, handling and installation instructions

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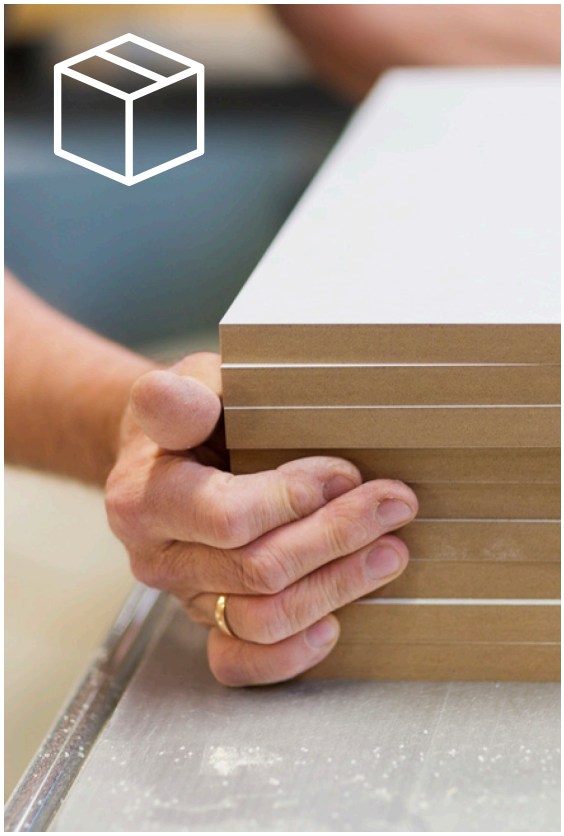
Receiving Products

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.