

# Au.diGroove<sup>TM</sup> data sheet

## Product Description

A premium acoustic lining system that offers a host of options both in appearance and performance. Installed in plank form, this product provides an attractive grooved look with seamless jointing. Suitable for high performance acoustic applications or purely as a decorative lining.

## Product Features

- Best possible combination of acoustics & aesthetics
- Seamless jointing with tongue and groove design
- Wide variety of surface finishes available
- Range of acoustic performance options
- Various profiles for maximum design and acoustic flexibility
- Easy to handle, transport, store and install
- Short acquisition lead times
- Demountable, reusable

## Application

Walls and ceilings

## Variations

- Extensive range of surface finishes
- Manufactured from standard, moisture resistant or fire rated core.
- Choice of plank lengths
- Wide variety of appearances and acoustic performance combinations

## Material Sizes

- Planks are standard width of 128mm
- Standard lengths are 2400mm, 2700mm, 3000mm and 3600mm\*

*\*Not all finish / length combinations are available.*

## Jointing Options

- Au.diClip tongue and groove connection providing seamless finish
- Various trims available (refer installation guide)

## Finish Options

- Inlux Veneer
- Inlux Image
- Inlux Laminate
- Inlux Colour

## Substrates

MDF: Fire Rated / Moisture Resistant / Blackcore / Blackcore Fire Rated

## Fire Rating

For Group Number fire ratings please contact Atkar

## Warranty

Au.diGroove is warranted for fifteen (15) years. Refer to Warranty document for terms

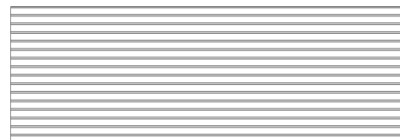
## Maintenance

Remove marks and dust with a damp cloth and dry thoroughly. A mild cleaning agent can be used for stubborn marks. Do not use abrasive cleaning chemicals or strong solvents. By observing these basic guidelines, Au.diGroove will maintain its premium appearance.

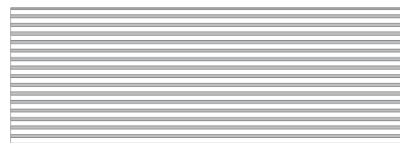
## Panel Options

Illustrated below are scaled versions of standard width plank showing the varying visual effects provided by the different product types.

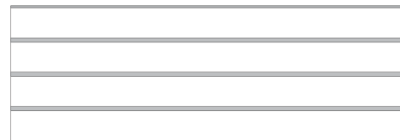
AG10-280



AG11-380



AG36-432



## Acoustic Performance

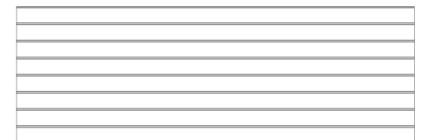
Au.diGroove provides an ideal combination of outstanding acoustic control and visual appeal. Its unique low profile yet efficient design makes it one of the most innovative and effective sound control products available.

NRC Value up to 0.9

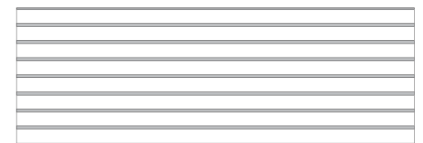
## Open Area Guide

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

AG18-216



AG19-316



AG20-416



# Au.diGroove installation guide

## Sorting

On receipt of a delivery, Au.diGroove planks need to be unpacked and allowed to acclimatise for 3-4 days in the installation area prior to installation. All planks should be equally exposed to the ambient conditions during this period. Natural timber faced planks should be then sorted into respective grain and colour batches to minimise the variation inherent to natural timber.

## On-Site Machining

Planks can be cut to length on site with standard wood working tools. Angles, curves or service penetrations should be cut with a jig-saw. To avoid splintering or face marking on painted planks, tape up the area to be machined and cut through the tape. Refer to recommended safe working practices before starting any cutting or machining of product.

Important: Adhesive tape should never be applied to planks finished in Inlux Image or Laminate, as this could result in defects to the finish.

## Access Panels

Access panels and other ceiling penetrations can be easily integrated into Au.diGroove. These processes should be carried out on-site during the installation of the planks. Service penetrations can be cut into the planks once they're installed. Alternatively a 2 or 3 plank width space can be left and a custom machined solid matching insert installed for services to be mounted to.

Standard access panel sizes: 450 x 450mm, 600 x 600mm. Custom sizes available on request.

## Curved Surfaces

Due to their narrow design Au.diGroove planks can be used for curved ceilings or walls with a radius of no less than 10m without any additional machining or effort. Radii less than this are possible through further fabrication of the planks. Consult Atkar technical staff for further information.

## Alignment

When cutting planks to size on site, consideration needs to be given to the location of the rear perforations (partly visible inside grooves) so that once installed they align, correctly.

## Layout Options

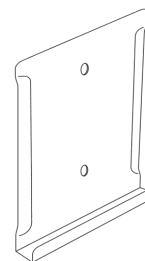
Au.diGroove planks can be installed in either a 'straight' or 'offset' configuration as illustrated to create different aesthetic effects. However the design of the planks allows them to be installed in other configurations if special patterns are required.

If planks are to be butted together, a minimum 3mm expressed joint is required where any two (2) planks abut to allow for any possible expansion and contraction. 'Offset' joints allow for slight material expansion without the joint becoming visible.

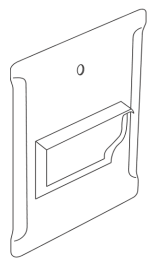
Alternatively, joints can be treated using various moulds and extrusions (refer Installation guide).

## Au.diClip

The Au.diGroove Installation system only requires two simple components as shown here. All standard plank deliveries include these fixing components supplied in sufficient quantities to complete installation.

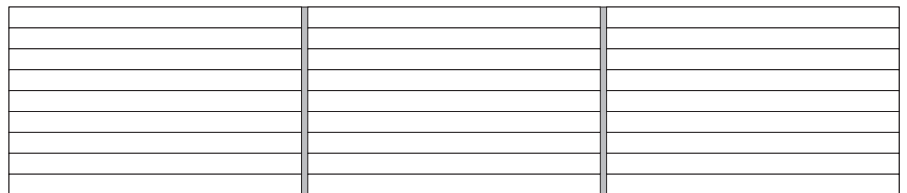


**Starter Clip** - Direct fixing to timber or metal battens for wall and ceiling installations (first row only)

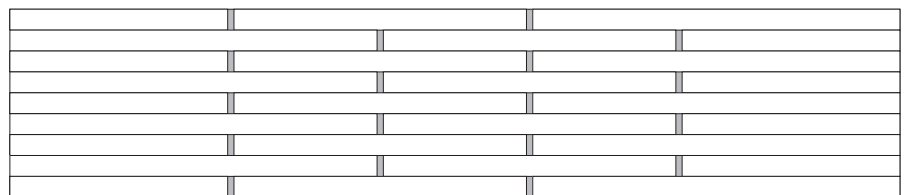


**Mounting Clip** - Direct fixing to timber or metal battens for wall and ceiling installations

### 'Straight' Configuration



### 'Offset' Configuration



# Au.diGroove installation guide

## Joint Details

For standard straight joints Atkar's APJ180 mill finished aluminium panels joiner can be installed. Using a standard slotting cutter, planks can be grooved to the correct depth to receive the APJ180 section. By sliding the APJ180 section into the grooves and pushing it hard up into the spine of the extrusion, planks will lock into place to provide a clean attractive vertical joint. The APJ180 extrusion is available from Atkar in 5000mm lengths.

## Air Gap

You must leave a minimum 90mm air gap between the panel and wall/ceiling to ensure optimal acoustic performance.

Figure 1: APJ180

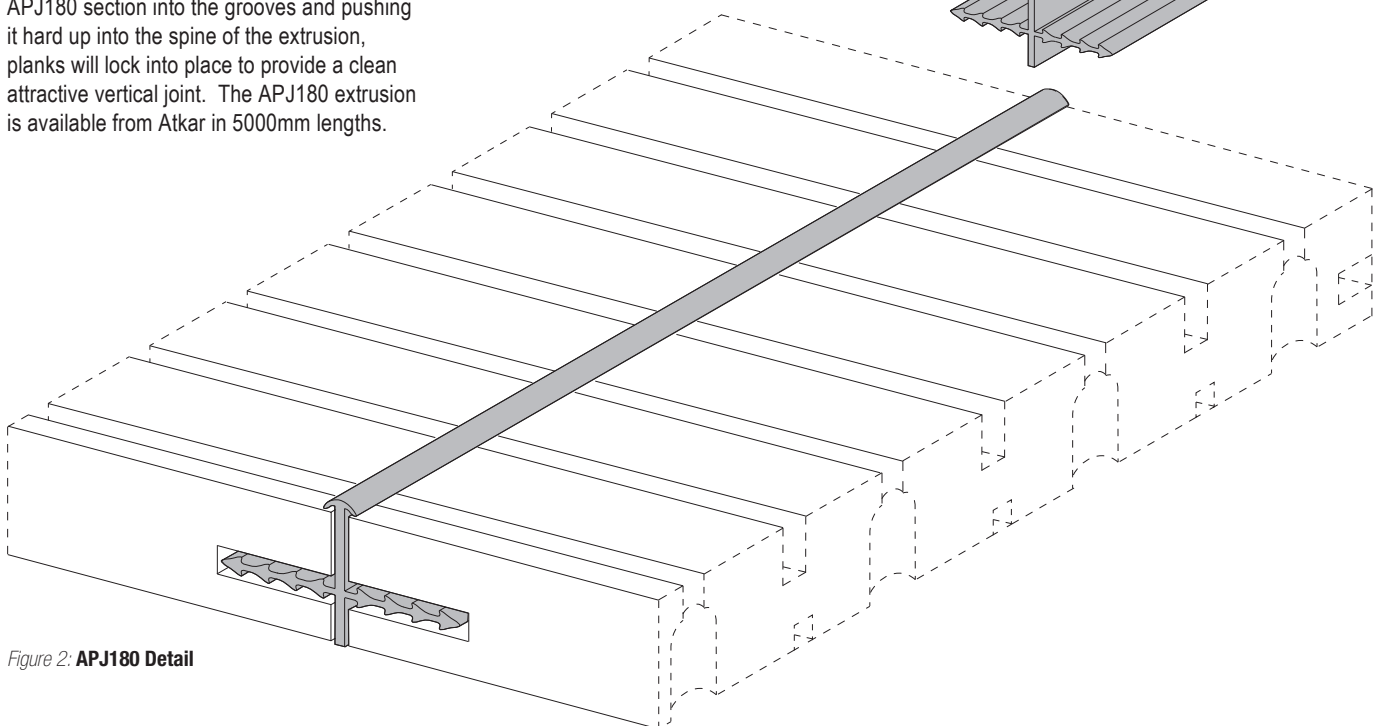
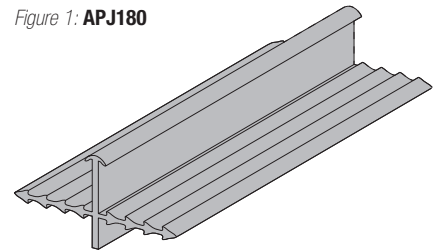
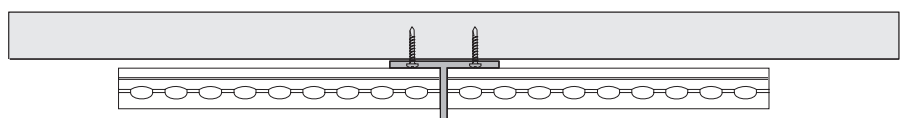


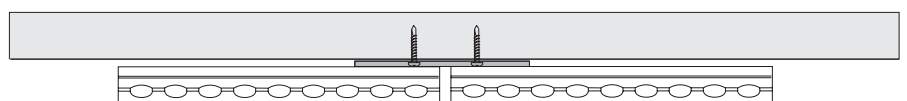
Figure 2: APJ180 Detail

Alternatively a T section extrusion or a fat backing strip can be utilised to treat straight joints.

T Section Joint Detail



Backing Strip Joint Detail



# Au.diGroove installation guide

## Corner Details

Corner joints can be finished using Atkar's proprietary ACM905 aluminium joint extrusion. This section has been custom designed to provide a neat 5 x 5mm corner detail for Au.diGroove. The appropriate cutter can be obtained from Atkar\* to machine the Au.diGroove planks to the precise configuration to receive the ACM905 section. Extrusion will slide smoothly into planks if machined correctly and can be glued into place if necessary. The ACM905 extrusion is available from Atkar in 5000mm lengths. Alternatively planks can be simply butted into a timber mould or capped with a right angle cover mould.

\*Contact Atkar Technical Staff for details.

Figure 3: ACM905

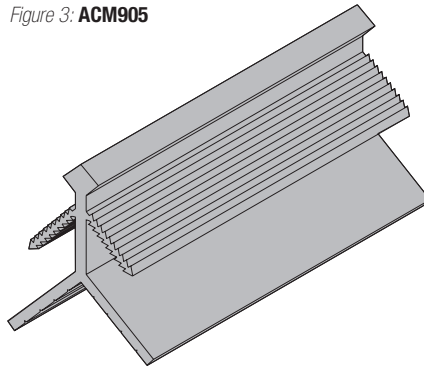


Figure 2: ACM905 Section

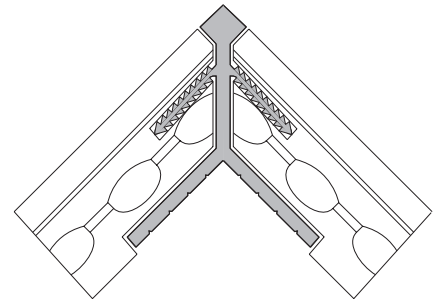
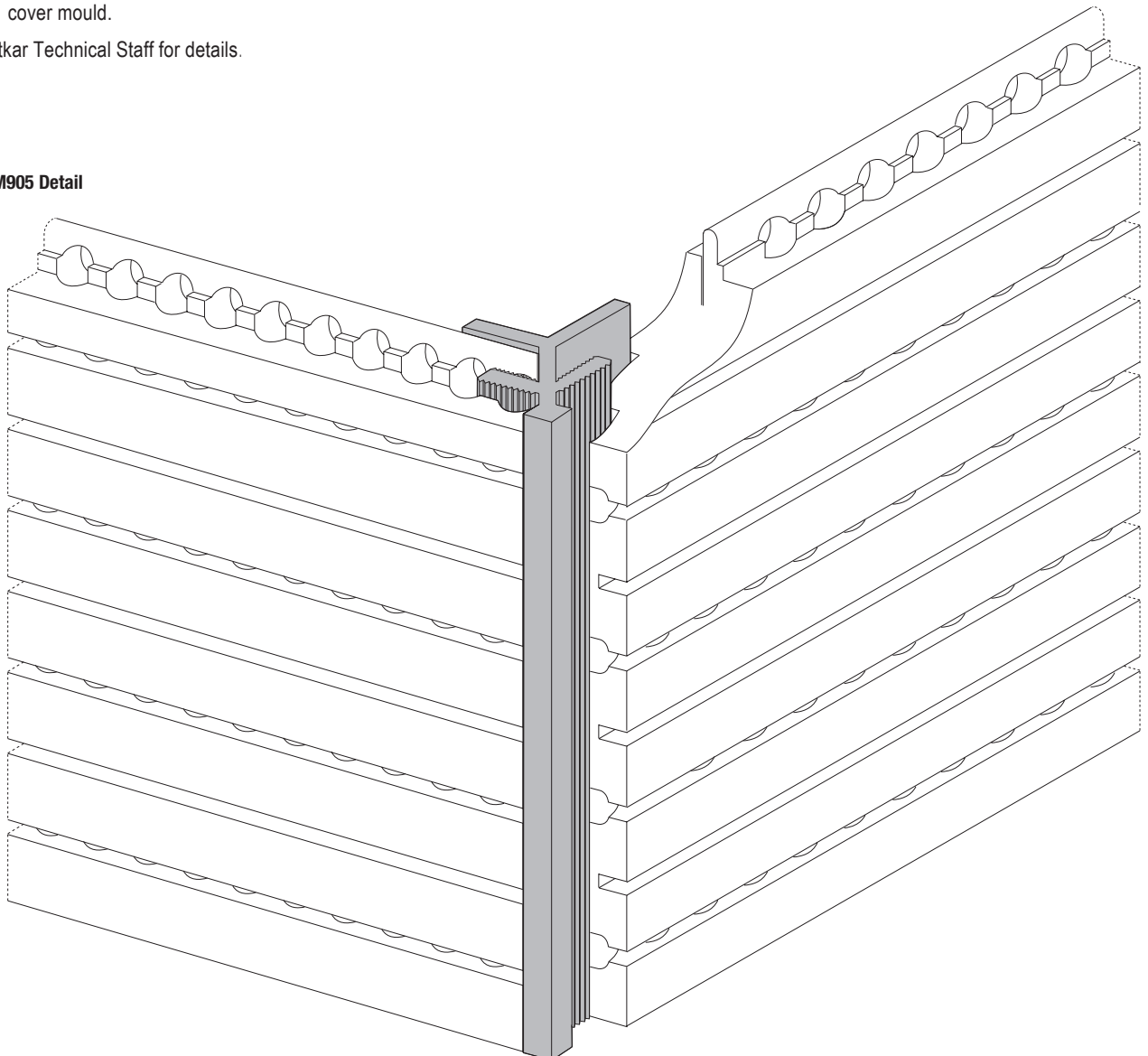


Figure 5: ACM905 Detail





# Au.diGroove installation guide

## Ceiling Installation – Au.diClip

1. Unpack crate and allow Au.diGroove planks to acclimatise to site conditions for 3-4 days as stated on page 2.
2. Determine starting point and plank configuration bearing in mind joint locations and alignment, and any walls or coffer. It is advisable to set out planks from the longest straight wall available.
3. Set out timber battens or furring channels to run at 90° to the intended Au.diGroove plank direction (see figure 6). These should be installed at no greater than 600mm centres.
4. Determine wall detail method and fix perimeter channel or wall angle onto wall(s) (see figures 7 and 8). Fix Starter Clip onto all battens or furring channels where they abut the wall.
5. Slide first plank onto Starter Clip then slide Mounting Clip into groove on plank and fix in place. Work your way along plank fixing clips to each batten or furring channel until plank is securely fixed in place. A clip is required on every batten.
6. The next plank will slide into tongue and groove joint. Planks should fit precisely together using hand pressure only. If joint does not marry perfectly, check if there is any obstruction in the groove. Fix next clip into groove on leading edge of plank as above and fix in place. Repeat this procedure until desired ceiling area is covered.
7. Leaving the recommended 3mm minimum expressed joint, install any abutting planks in the same manner as set out in steps 3-7. Planks can be cut on site as necessary to fit around walls or any ceiling penetrations if required.

Figure 6: Mounting Detail

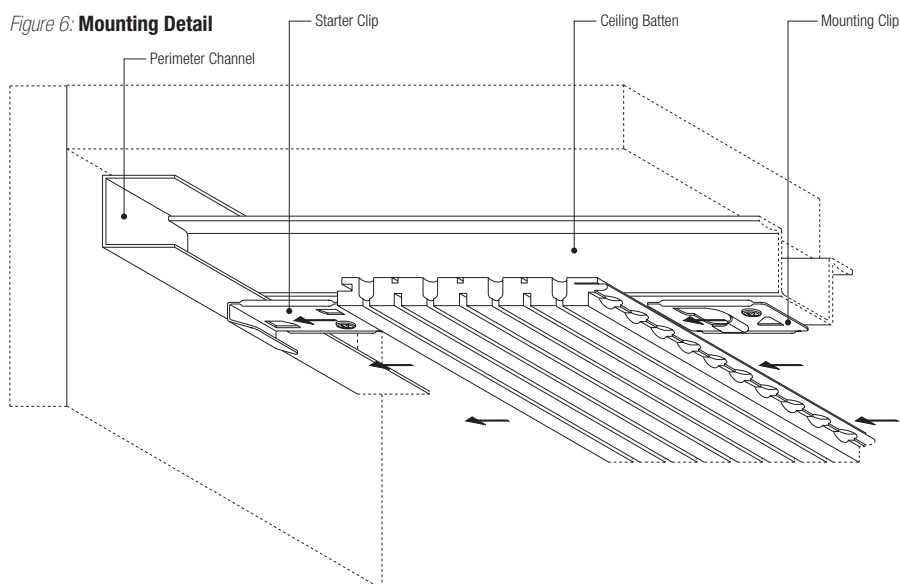


Figure 7: Shadowline Detail

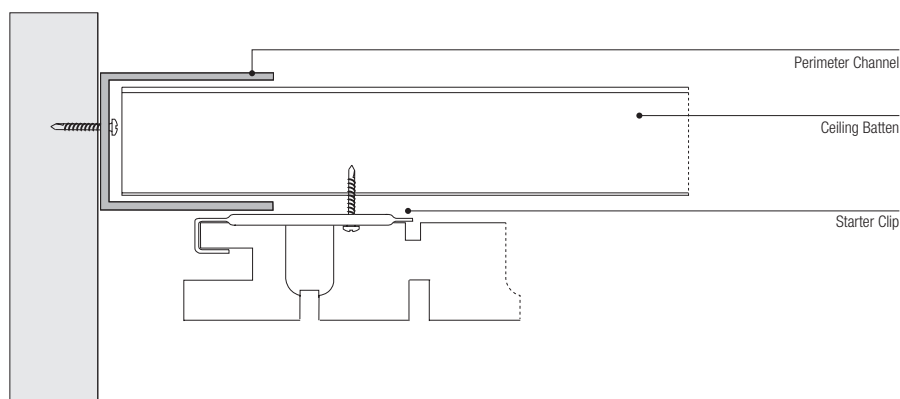
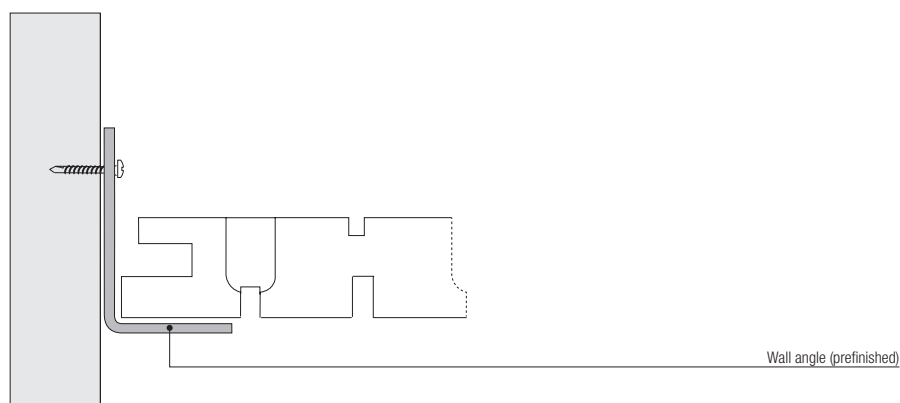


Figure 8: Flush Detail



# Au.diGroove installation guide

## Ceiling Installation – Direct Fix

1. Unpack crate and allow Au.diGroove planks to acclimatise to site conditions for 3-4 days as stated on page 2.
2. Determine starting point and plank configuration bearing in mind joint locations and alignment, and any walls or coffers. It is advisable to set out planks from the longest straight wall available.
3. Set out timber battens to run at 90° to the Au.diGroove planks (see figure 9). These should be installed at no greater than 600mm centres.
4. Determine wall detail method and fix perimeter channel or wall angle onto wall(s) (see figures 2 and 3). Fix Starter Clip onto all timber battens where they abut the wall.
5. Slide first plank onto starter clip then fasten planks up to battens with a compressed air staple gun (see figure 4). Using 32mm staples angle the gun correctly and staple through the tongue on the planks. Note: It is very important that care is taken to correctly set the air pressure of the gun to prevent staples penetrating too deeply through the tongue or protruding out into the groove.
6. The next plank will slide into tongue and groove joint. Planks should fit precisely together using hand pressure only. If joint does not marry perfectly, check if there is any obstruction in the groove. Nail plank through tongue as above and repeat this procedure until desired ceiling area is covered.
7. Leaving the recommended 3mm minimum expressed joint, install any abutting planks in the same manner as set out in steps 3-7. Planks can be cut on site as necessary to fit around walls or any ceiling penetrations if required.

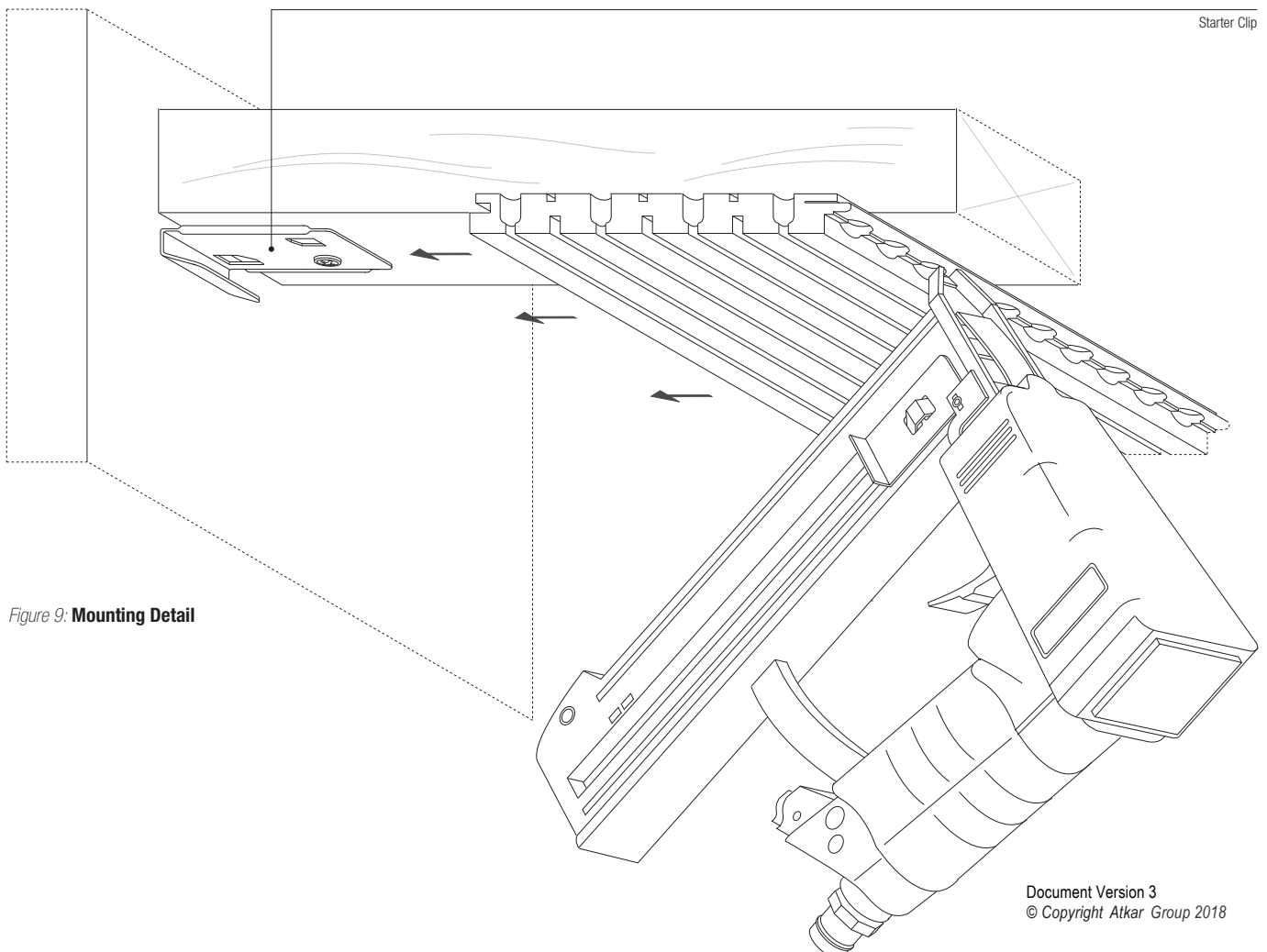


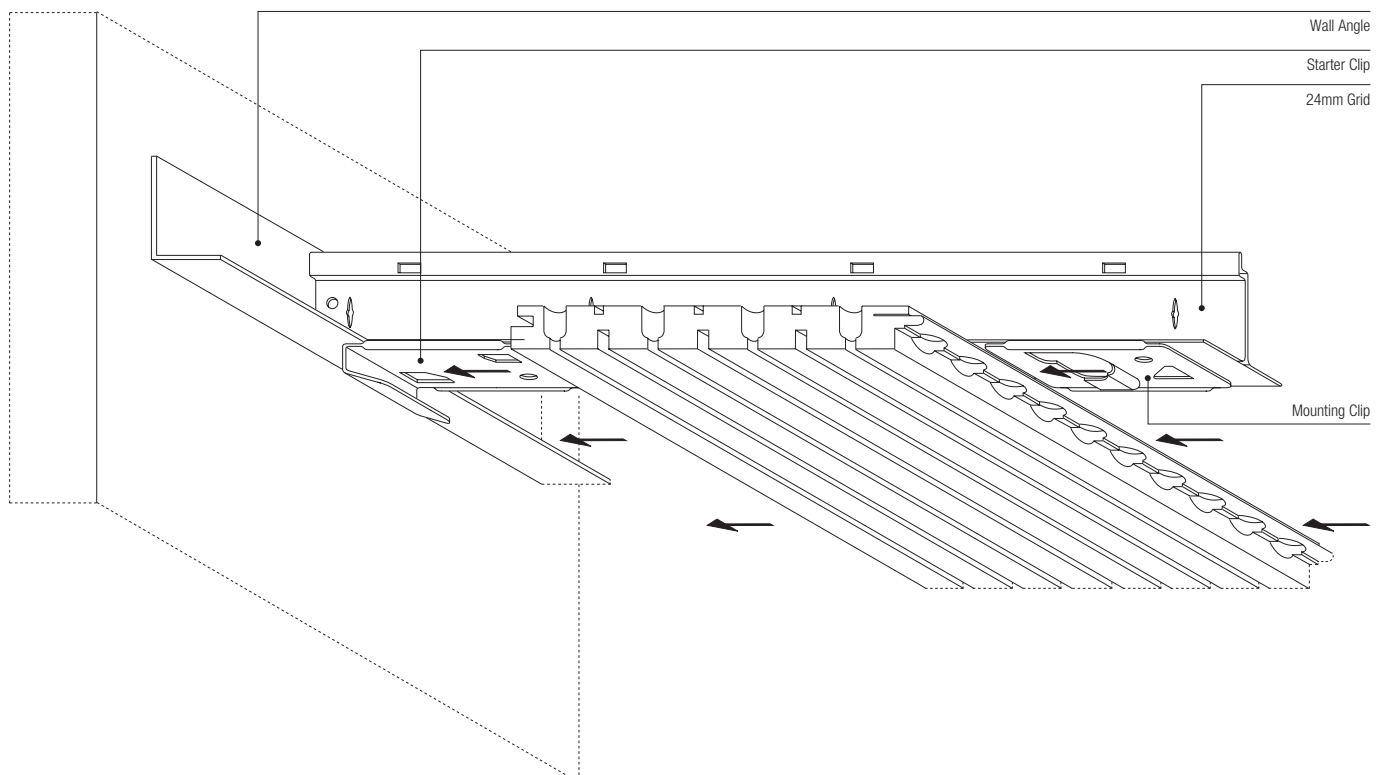
Figure 9: Mounting Detail

# Au.diGroove installation guide

## Ceiling Installation – Au.diClip Fix

1. Unpack crate and allow Au.diGroove planks to acclimatise to site conditions for 3-4 days as stated on page 2.
2. Determine starting point and plank configuration bearing in mind joint locations and alignment, and any walls or coffer. It is advisable to set out planks from the longest straight wall available.
3. Install a standard 24mm exposed grid suspension system ensuring it has sufficient weight carrying capacity. Grid should be set out so the main tees run at 90° to the intended Au.diGroove plank direction. (see figure 10). These should be installed at 600mm centres.
4. At main tee and wall angle junction, twist on Starter Clip. A clip should be fitted to every main tee.
5. Slide first plank into starter clips. Twist Mounting Clip onto main tees and slide along into slot on leading edge of plank.
6. The next plank will slide into tongue and groove joint. Planks should fit precisely together using hand pressure only. If joint does not marry perfectly, check if there are any obstructions in the groove.
7. Twist the next Mounting Clip onto t-bar and slide into place as above. Repeat this procedure until desired ceiling area is covered.
8. It is recommended that every second clip be riveted to the main tee.
9. Leaving the recommended 3mm minimum expressed joint between butt ends, install any abutting planks in the same manner as set out in steps 3-7. Planks can be cut on site as necessary to fit around walls or any ceiling penetrations if required.

Figure 10: Mounting Detail



# Au.diGroove installation guide

## Wall Installation – Clip Fix

1. Unpack crate and allow Au.diGroove planks to acclimatise to site conditions for 3-4 days as stated on page 2.
2. Determine starting point and plank configuration, bearing in mind joint locations and alignment, and any corners or windows. Fix timber or steel battens to wall structure at maximum 600mm centres.
3. Use spirit level or laser level to establish a level starting line at lowest point of intended installation area.
4. Fit angle or mould to batten to support planks (see figures 12 & 13), then fix Starter Clip onto battens. A clip should be fixed to every batten. Sit first plank onto starter clips.
5. Slide Mounting Clip down into slot on top edge of plank and fix it back to batten. A clip is required on every batten.
6. The next plank will connect over first plank by means of the tongue and groove joints. Planks should fit precisely together using hand pressure only. If joint does not marry perfectly, check if there are any obstructions in the groove. Fix the next Mounting Clip into slot on top edge of planks as above and fix in place. Repeat this procedure until desired wall height is reached.
7. Continue to check the level and straightness of the planks as you work up the wall.
8. Leaving the recommended 3mm minimum expressed joint on butt ends, install any adjacent planks in the same manner as set-out in steps 3-7. Planks can be cut on site as necessary to fit around windows and doors or to finish off a wall.

Figure 11: Mounting Detail

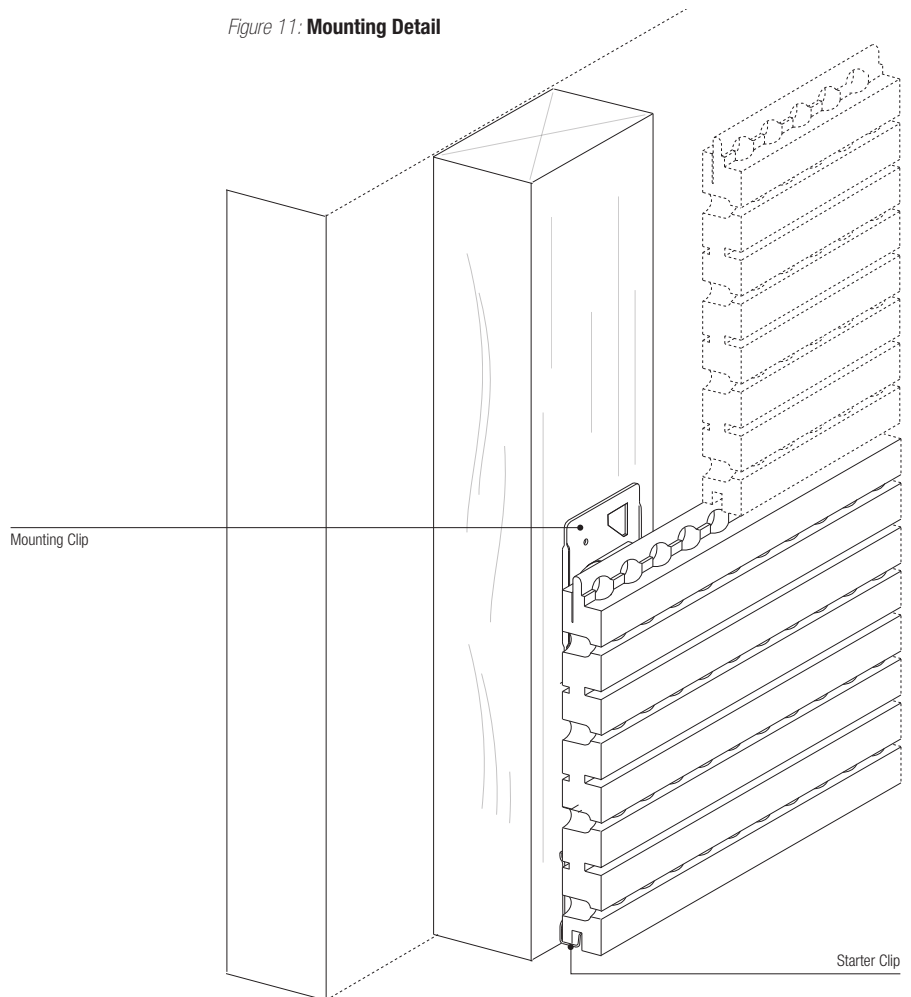


Figure 12:  
Angle Detail

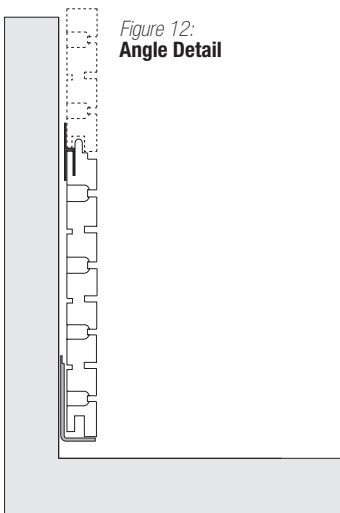
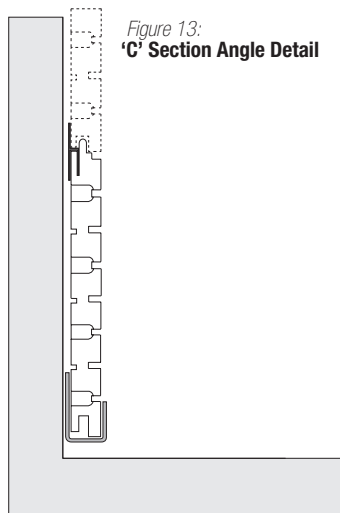
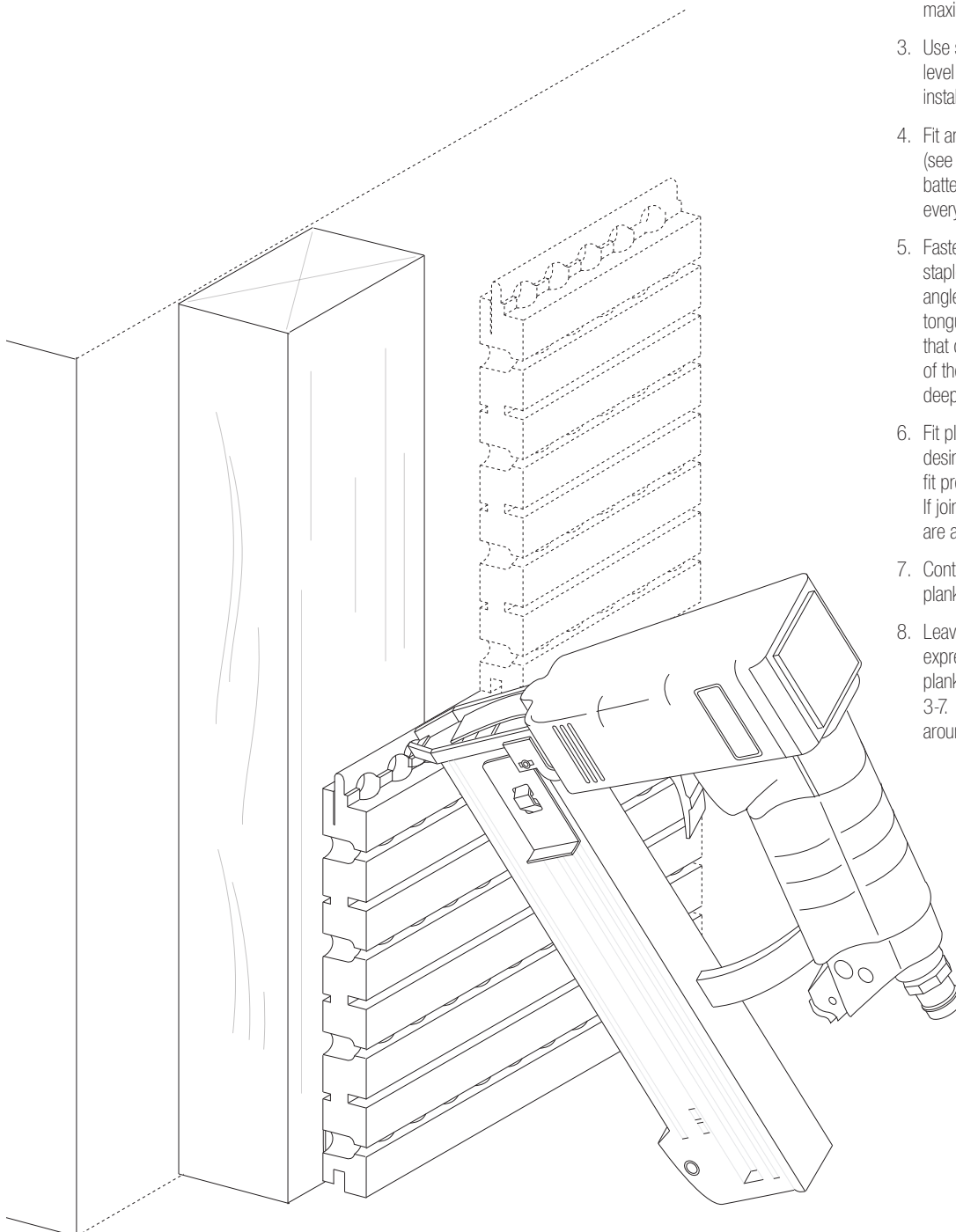


Figure 13:  
'C' Section Angle Detail



# Au.diGroove installation guide

Figure 14: Mounting Detail



## Wall Installation – Direct Fix

1. Unpack crate and allow Au.diGroove planks to acclimatise to site conditions for 3-4 days as stated on page 2.
2. Determine starting point bearing in mind joint locations and alignment, and any corners or windows. Fix timber battens to wall structure at maximum 600mm centres.
3. Use spirit level or laser level to establish a level starting line at lowest point of intended installation area.
4. Fit angle or mould to batten to support planks, (see figures 12 & 13) then fix Starter Clip onto battens. A clip should be fixed to every batten. Sit first plank onto Starter Clips.
5. Fasten planks back to batten with a compressed air staple gun (see figure 10). Using 32mm staples angle the gun correctly and staple through the tongue on the planks. Note: It is very important that care is taken to correctly set the air pressure of the gun to prevent staples penetrating too deeply or protruding into the groove.
6. Fit planks together nailing into each batten until desired wall height is reached. Planks should fit precisely together using hand pressure only. If joint does not marry perfectly, check if there are any obstructions in the groove.
7. Continue to check the level and straightness of the planks as you work up the wall.
8. Leaving the recommended 3mm minimum expressed joint on butt ends, install any adjacent planks in the same manner as set-out in steps 3-7. Planks can be cut on site as necessary to fit around windows and doors or to finish off a wall.