


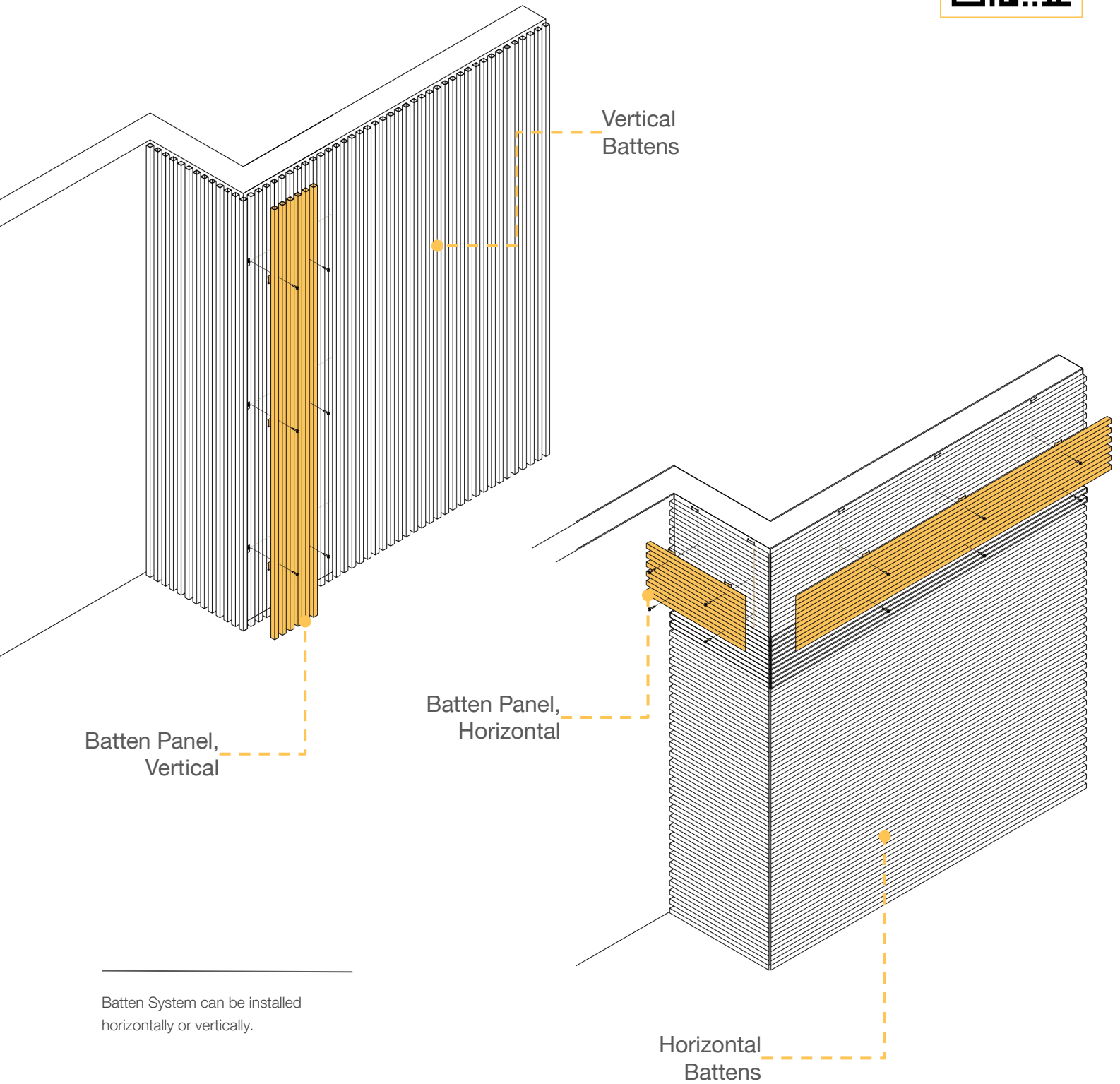
A close-up, low-angle photograph of a wall made of horizontal wooden slats. The slats are light-colored wood, possibly oak or birch, and are arranged in a way that creates a strong sense of perspective, converging towards the right side of the frame. The lighting is soft, highlighting the natural grain of the wood. The background is a plain, light-colored wall.

Installation
Guide
Batten System

 **AL13** architectural
systems



AL13 Batten System: Wall



Batten System can be installed horizontally or vertically.

01

Installation Guidelines

IMPORTANT: Failure to follow the guidelines herein will void the AL13® warranty

Please read and understand the entirety of this guide. Any questions or inconsistencies should be directed to your sales representative or info@al13.com.

Guidelines may vary depending on project particulars and conditions. Contact AL13® with questions regarding variance from this guide. Standard carpentry skills are required for optimum results.

Good health and safety practices must be followed when installing AL13® Plank System.

Key steps for a successful installation

- 01 Understand the various elements of the system
- 02 Plan the installation, work schedule, and material usage
- 03 Ensure everyone working has read the installation guidelines
- 04 Execute work in the sequence set forth in the installation guidelines
- 05 Protection should be worn: gloves, ear protection, steel-toe boots, safety glasses and hard hat
- 06 Protect the product by storing the material in a dry and clean environment
- 07 Ensure proper fit of the system
- 08 Clean any debris on the wall

Pre-installation: Receiving materials

When materials arrive on site, ensure that all battens, brackets, and other component packaging are in good condition, free of any defects. Verify that the materials match the order and/or shop drawings.

- > Shipping or packaging issues should be noted on the waybill and then reported to the distributor
- > Should any products be damaged, the receiving party is responsible for filling a freight claim to the shipping company within 24 hours of receiving product.
- > Defective materials should be reported to the distributor from which the product was dispatched.

01

Installation Guidelines

Inventory

Once material is verified to be in good condition, take inventory of units according to the packing slip. Make sure all materials - plank, extrusions, and fasteners - and quantities are present.

The distributor should be notified immediately if the order has any missing or incomplete components. Failure to do so may void re-fulfillment.

Tools

The AL13® Batten System is made to be installed with general tools. A recommended tool list is as follows:

- > Sawhorses/work table
- > Circular saw (handheld with guide)
- > Mitre saw
- > Cordless electric impact driver with
- > appropriate bits
- > AL13® saw blades
- > Jigsaw
- > Level/plumb line or laser level if available
- > Chalk line
- > Cordless electric drill
- > Drill bit set


01



Installation Guidelines

Product Legend

The following are the various components of the system. Please refer to the following to verify the correct component.

Component: 1" Battens	Size / piece	Material
 1" x 1" Batten	12' length	AAMA 2604 coated aluminum extrusion
 1" x 2" Batten	12' length	AAMA 2604 coated aluminum extrusion
 1" x 4" Batten	12' length	AAMA 2604 coated aluminum extrusion
 1" x 5" Batten	12' length	AAMA 2604 coated aluminum extrusion

Component: 2" Battens	Size / piece	Material
 2" x 2" Batten	12' length	AAMA 2604 coated aluminum extrusion
 2" x 4" Batten	12' length	AAMA 2604 coated aluminum extrusion
 2" x 6" Batten	12' length	AAMA 2604 coated aluminum extrusion


01



Installation Guidelines

Product Legend

The brackets below correspond with the appropriate battens. Ceiling and Wall brackets are available.

Component: Brackets for 1" Battens	Size / piece	Material
 Bracket, Ceiling 1" Gap	12" length	Galvanized steel Powder coated black
 Bracket, Wall 9/16" Gap	12.5" length	Galvanized steel Powder coated black
 Bracket, Wall 1" Gap	12" length	Galvanized steel Powder coated black
 Corner Bracket 1" or 2" Battens		Galvanized steel Powder coated black





Component: Brackets for 2" Battens	Size / piece	Material
 Bracket, Ceiling 2" Gap	12.5" length	Galvanized steel Powder coated black
 Bracket, Wall 2" Gap	12" length	Galvanized steel Powder coated black
 Bracket, Wall 4" Gap	12" length	Galvanized steel Powder coated black
 Bracket, Wall 6" Gap	12" length	Galvanized steel Powder coated black
 Corner Bracket 1" or 2" Battens		Galvanized steel Powder coated black




B10



Installation Guidelines

Product Legend

Component: 1" Plugs	Size/Piece	Material
 1" x 1" End Plug	200pc/bag	LDPE
 1" x 2" End Plug	200pc/bag	LDPE
 1" x 4" End Plug	200pc/bag	LDPE
 1" x 5" End Plug	200pc/bag	LDPE

Component: 2" End Plug	Size/Piece	Material
 2" x 2" End Plug	100pc/bag	LDPE
 2" x 4" End Plug	100pc/bag	LDPE
 2" x 6" End Plug	100pc/bag	LDPE

Note: icon images are for visual representation only. The actual product will vary.

01



Installation Guidelines

Product Legend

Component: Brackets



Batten Screws/
Metal Fastener

Size / piece

100/package
3/4in long

Material

#10-16 x 3/4"
self-drilling,
self-tapping screws
with corrosion
resistant coating with
EPDM washers



Wood Fastener

500/package
1-1/2in long

Wood Substrate:
#12-14 x 1 1/2" mini
drill-point fasteners
with EPDM washers
and corrosion-
resistant coating



Concrete Fastener

100/package
1-1/4in long

Concrete walls: #11
x 1 1/4" concrete
screw anchor with
corrosion-resistant
coating

Install Kit Components



80T
Non-ferrous
Saw Blade

Size / piece

10" - each

Material

Carbide tip /
high-speed steel



60T
Non-ferrous
Saw Blade

6-1/4" - each

Carbide tip /
high-speed steel



Gloves

pair

Rubber / lycra

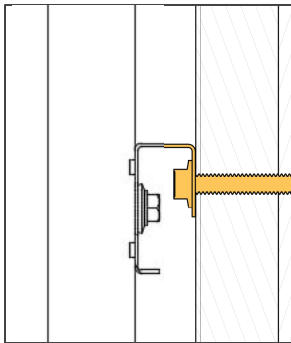
01

Installation Guidelines

Supported Substrates

Wood Frame with OSB/Plywood Sheathing

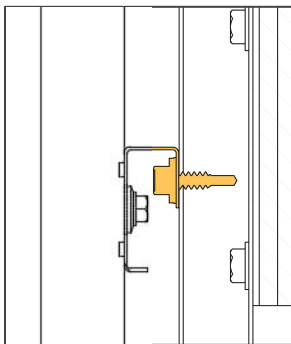
For installation on wood substrates, plywood, and OSB, AL13® Wood Fasteners may be used. For sheathed wood frame, AL13® installs directly on building wrap. The mechanical fasteners anchor into building sheathing and studs where available.



Wood Fastener
#12-14 x 1 1/2"

Girt/Furring Bar Installation

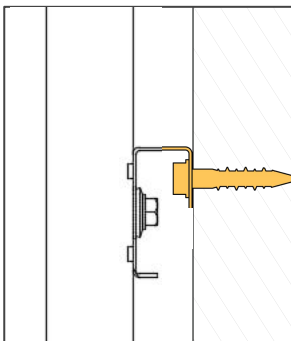
For installation on girt or furring bars, use metal fasteners.



Metal Fastener
#10-16 x 3/4"

Concrete Installation

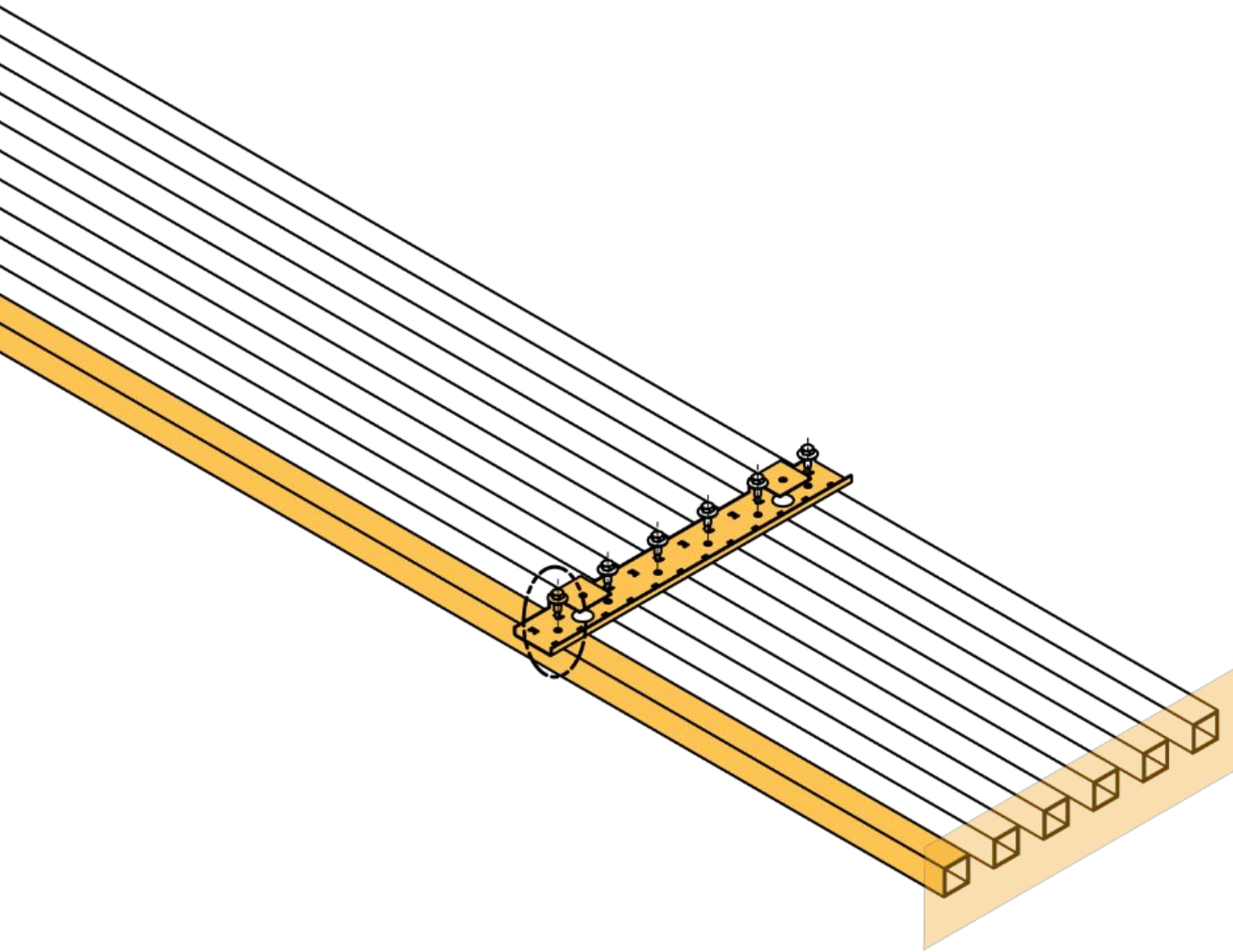
For installation on concrete, use concrete fasteners/anchors.



Concrete Fastener
#11 x 1 1/4"

02

Batten Panel Assembly



02



Batten Panel Assembly

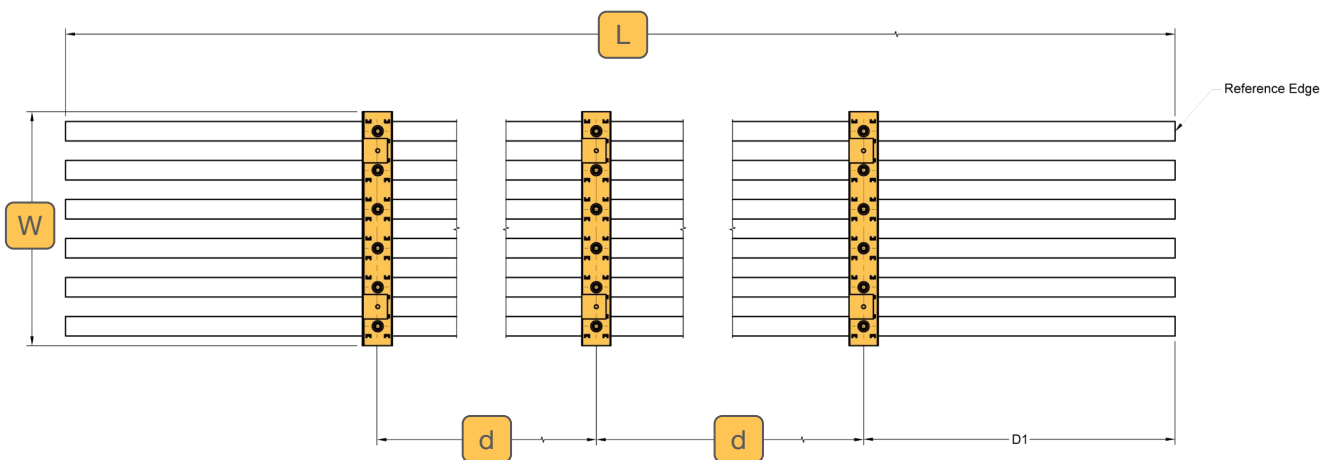
Batten Panels

Batten panels are required to be pre-assembled prior to installation on a wall. These batten panels must be measured and cut to size according to the desired layout configuration.

The width of a batten panel is defined by the width of a bracket. In a simple rectangular configuration, a minimum of 2 brackets is required for a Batten Panel length of up to 8ft, and a minimum of 3 brackets for lengths between 8ft and 12ft.

Some install scenarios may have a unique substrate requirement (e.g., mounting locations are pre-determined such as girt, or a drop-ceiling sub frame). In this case, the brackets and their respective locations need to match the mounting substrate. Ensure your brackets and their relative positions adequately match the substrate framing.

Batten Panel Length (L)	Min # of Brackets	Recommended Max Bracket Spacing (d)
Up to 8 ft	2	6 ft OC
8 to 12 ft	3	4ft OC



02



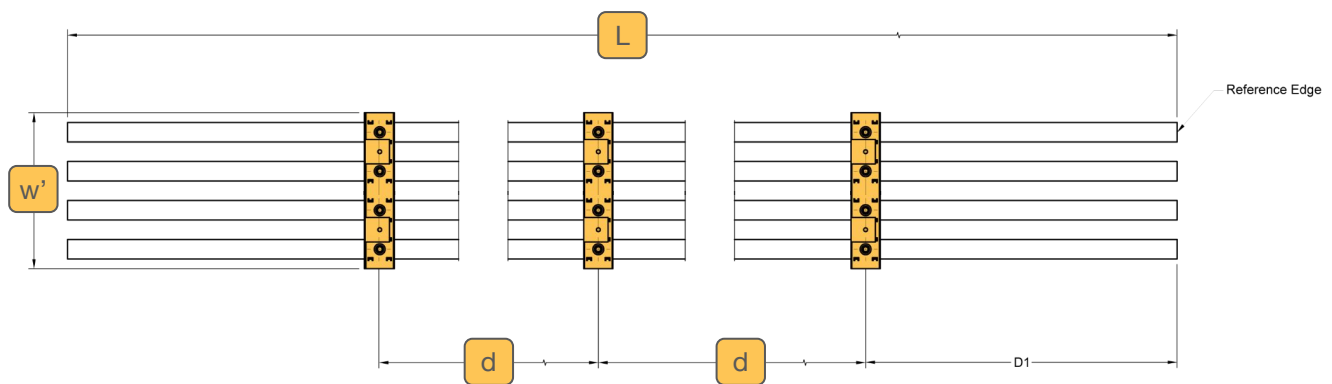
Batten Panel Assembly

Batten Panels - Planning an End Panel

In most cases, the overall width of the installation area is not a whole multiple of a panel width, e.g., a 12.5ft wide wall will require a fraction of a standard batten panel to act as an end panel.

Measure the width of the installation area and divide by the bracket width. Determine how wide the last panel needs to be, factoring in any inside/outside corner requirements.

Cut the bracket accordingly. If the end panel width is more than half of the standard width, it is best to trim both sides of the bracket to maintain two mounting tabs (on to the substrate). If the end panel width is less than half the standard width, having one mounting tab is acceptable.



02



Batten Panel Assembly

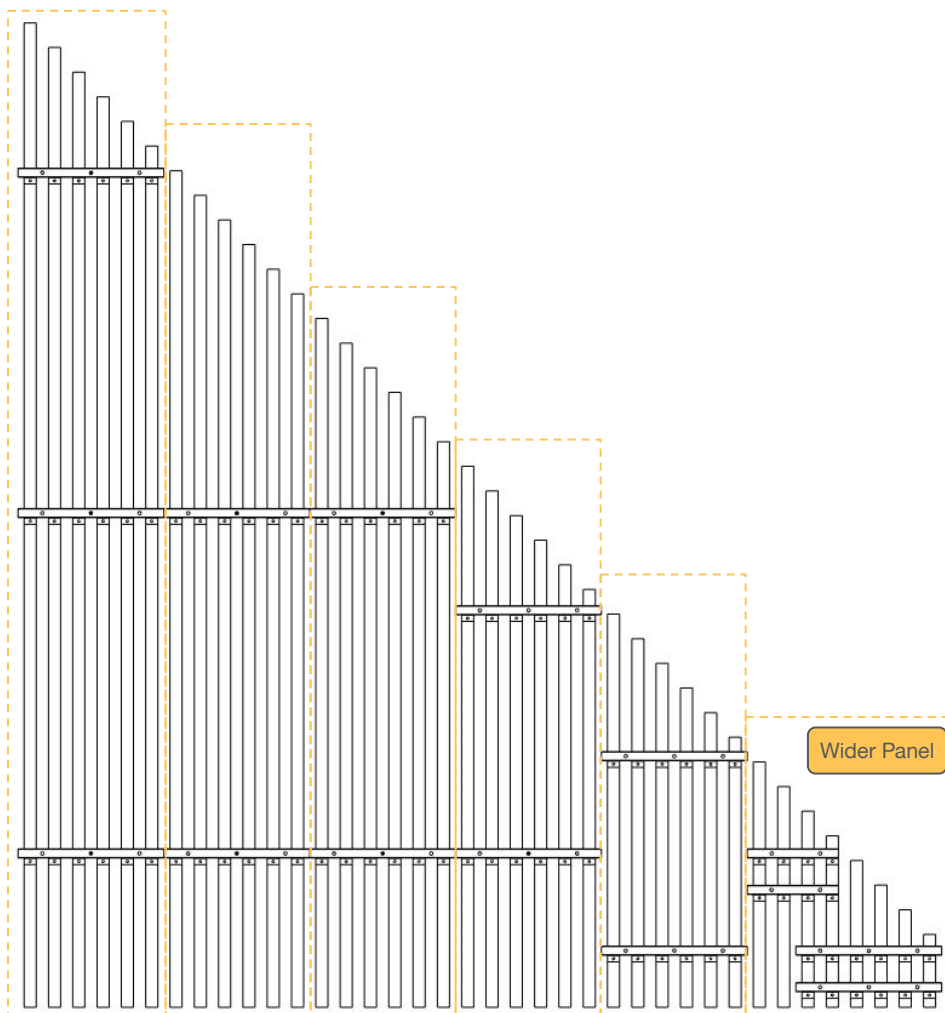
Batten Panels - Planning a Non-rectangular Installation

The AL13 Batten System can be adapted to suit an installation that requires geometry outside of rectangular shapes.

In the case below, the battens are installed in a 45° triangular shape as shown. Determine the length of the brackets and cut the ends square. Plan out the batten panels that form the required area.

At the narrowest end, you may find that assembling a panel wider than the standard configuration (i.e., wider than a bracket) is a more practical approach. In this case, the brackets can overlap on a batten, and doubling up may be necessary to prevent battens from sagging.

Reach out to info@al13.com for specific help for your installation needs.



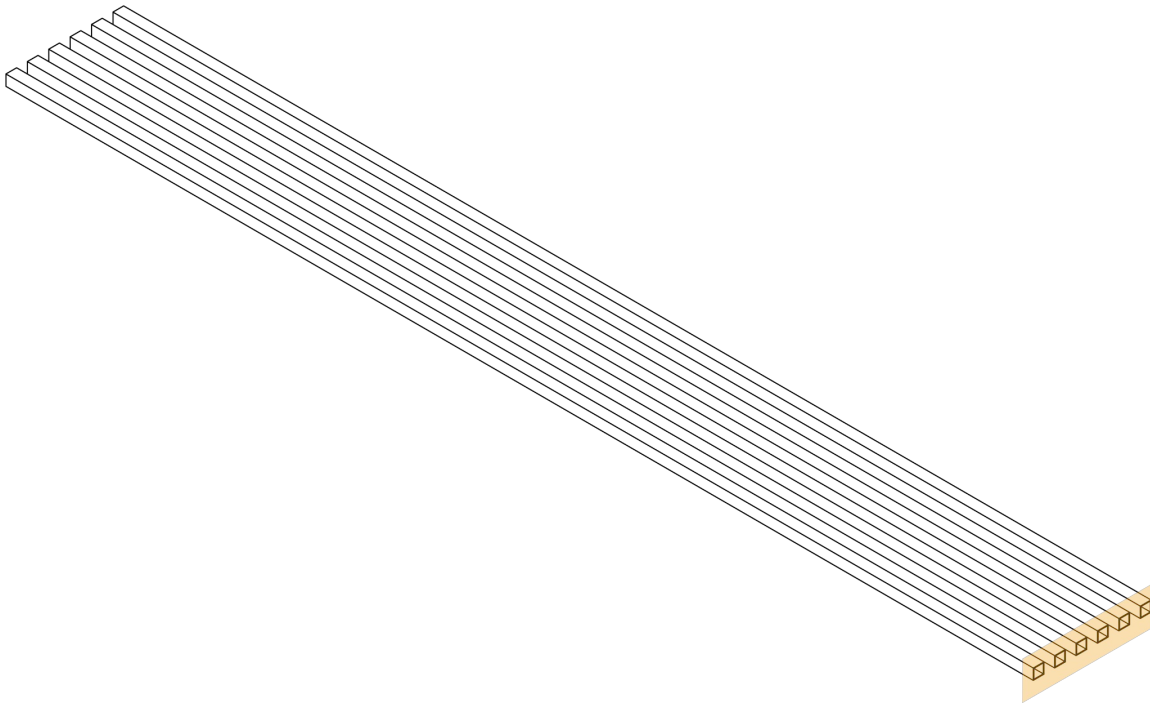
02

Batten Panel Assembly

AL13 Batten System



Preparing the Battens



Set up a clean surface onto which the panel can be assembled. Ensure that the surface is free from any debris that could damage the finish on the surface of the battens.

Align the battens such that the spacing is roughly 1/2in.

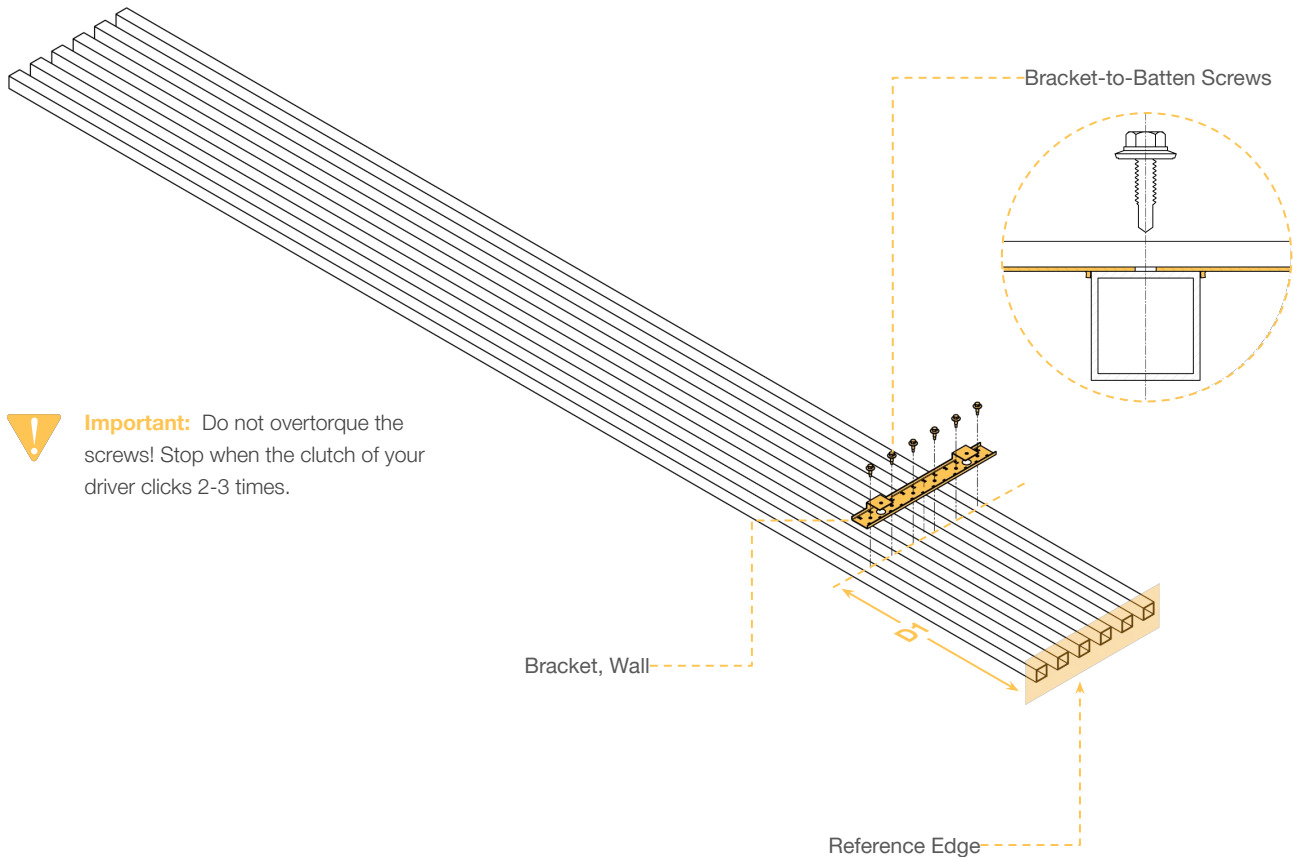
Square up the ends to ensure the panel does not come out diagonal after assembly.

02



Batten Panel Assembly

Installing the First Bracket



Important: Do not overtorque the screws! Stop when the clutch of your driver clicks 2-3 times.

Install the first bracket.

The bracket comes with tab features that ensure the spacing between the battens. The flange that mounts against the battens should be flush across the whole panel.

Use a square to ensure the bracket is perpendicular to the battens.

Note the direction that the mounting tabs are facing - keep this consistent when assembling a panel and across panels.

Do not over-torque the screws.

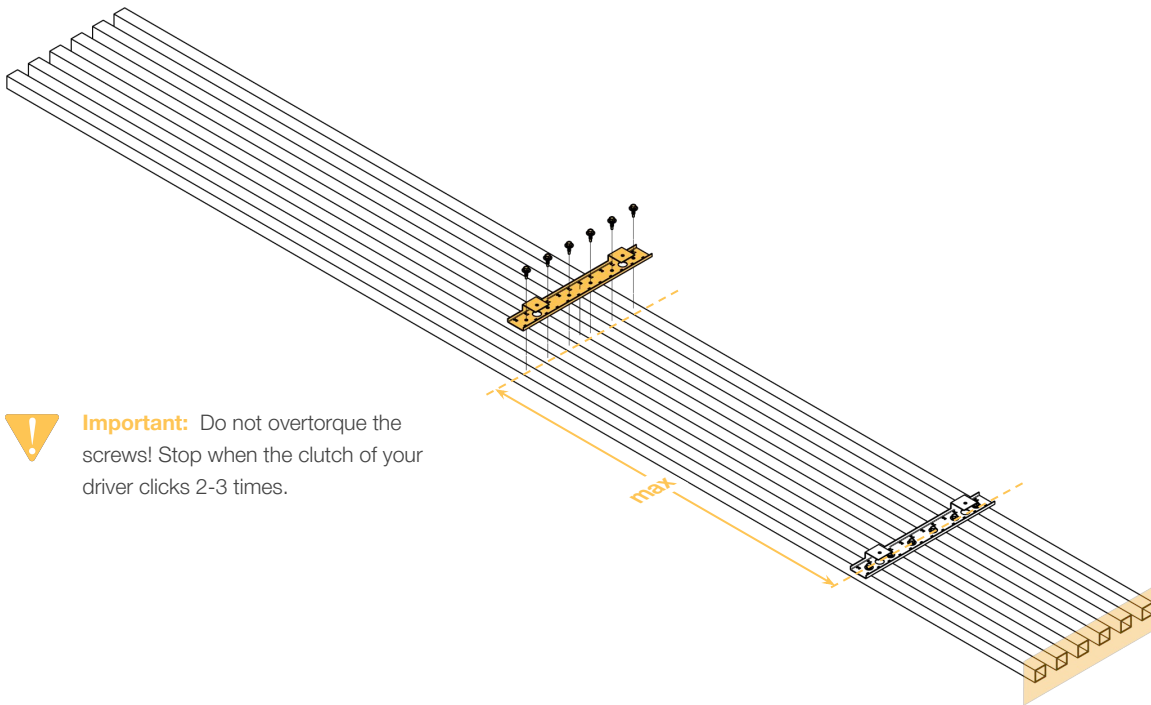
PRO TIP: To keep the battens from shifting up and down while setting your first bracket, we suggest using a 'fence'.

02



Batten Panel Assembly

Installing the Middle Brackets



Important: Do not overtorque the screws! Stop when the clutch of your driver clicks 2-3 times.

Install the middle bracket(s).

The bracket comes with tab features that ensure the spacing between the battens. The flange that mounts against the battens should be flush across the whole panel.

Use a square to ensure the bracket is perpendicular to the battens.

Make sure the mounting tabs of the middle bracket(s) are facing in the same direction as the first bracket.

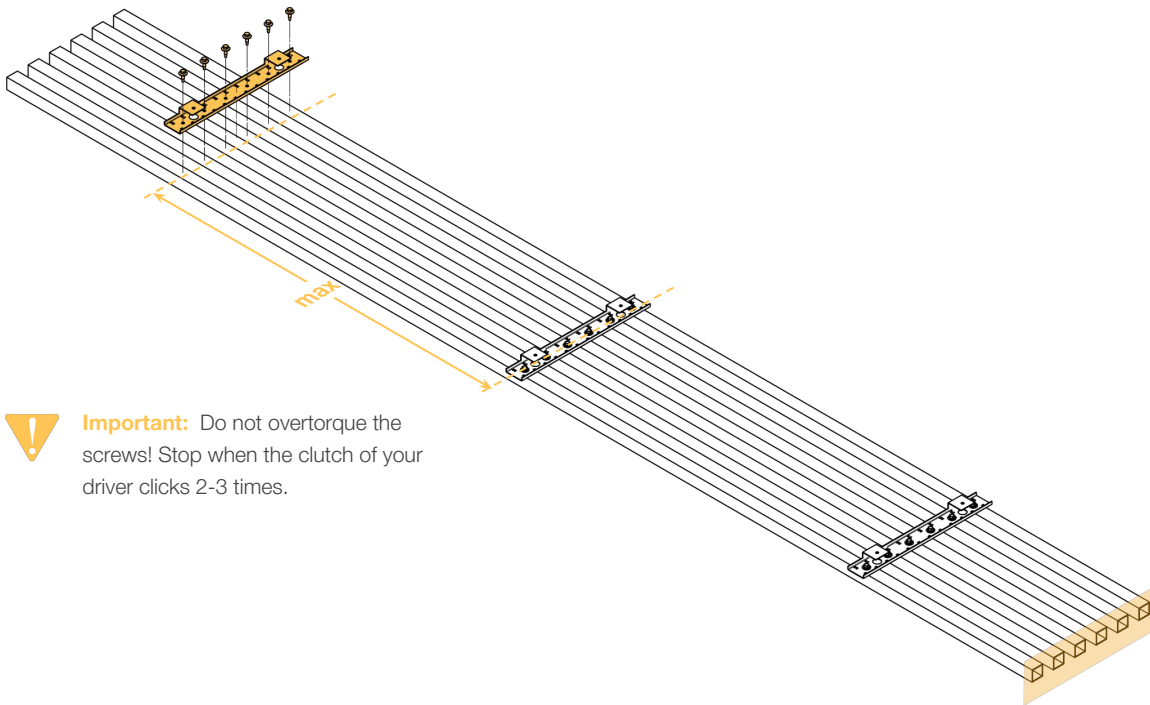
Do not over-torque the screws.

02



Batten Panel Assembly

Installing the End Bracket



Important: Do not overtorque the screws! Stop when the clutch of your driver clicks 2-3 times.

Install the final bracket.

The bracket comes with tab features that ensure the spacing between the battens. The flange that mounts against the battens should be flush across the whole panel.

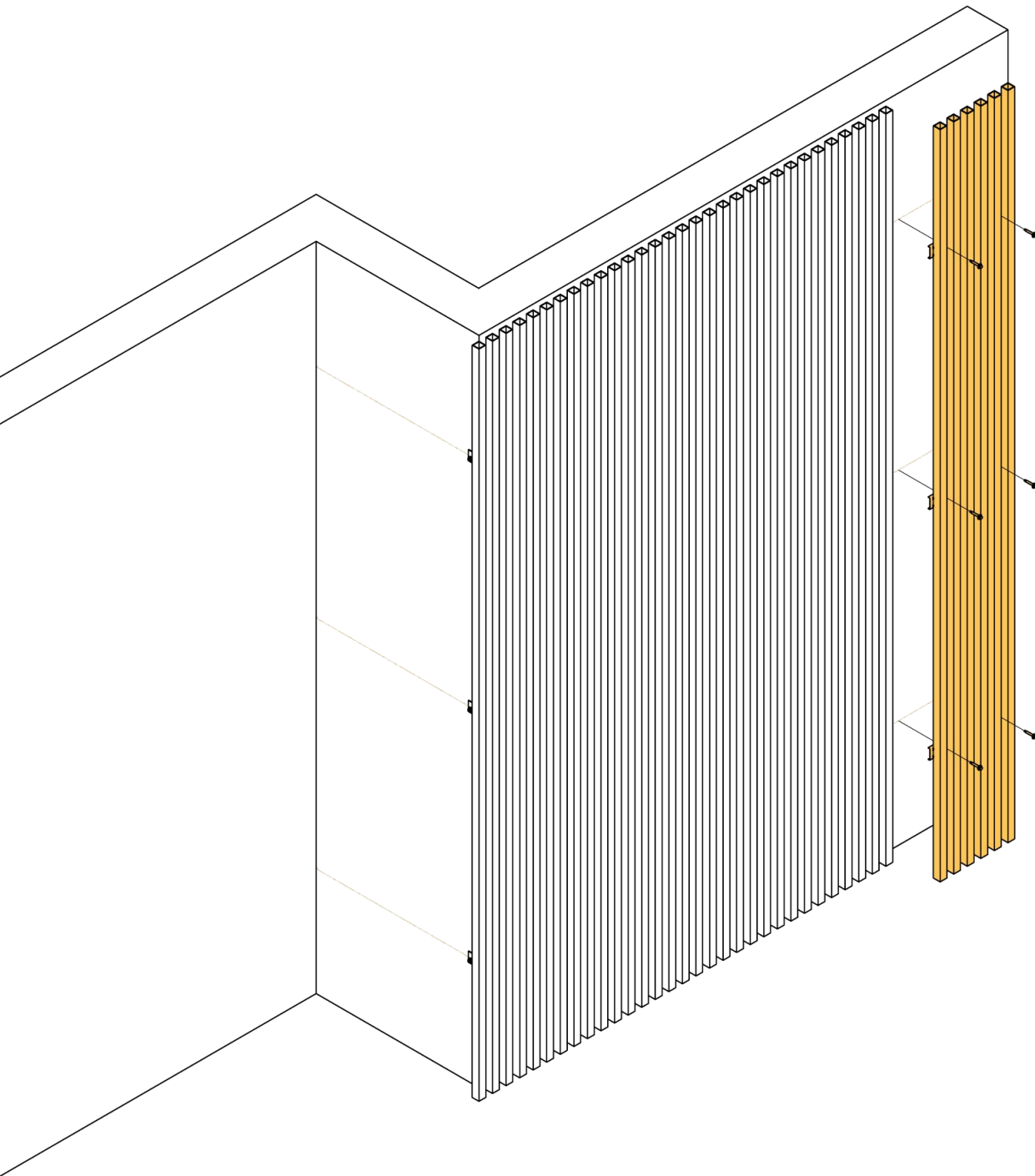
Use a square to ensure the bracket is perpendicular to the battens.

Make sure the mounting tabs of the middle bracket(s) are facing in the same direction as the first bracket.

Do not over-torque the screws.

03

Batten Panel Installation Vertical Battens

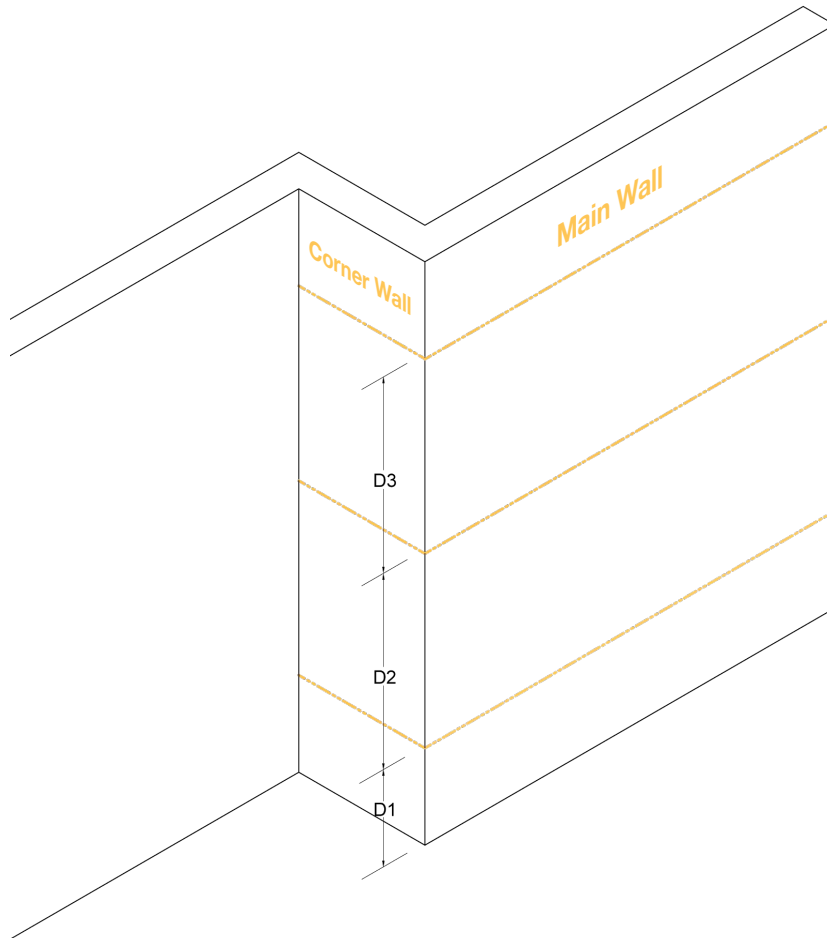


03



Wall Assembly

Planning the Wall



Important: The appropriate backing material must be completed to specifications before the batten system is installed on the wall.



Pro Tip: Plan ahead. Best practice is to pre-measure the width of wall so that the correct number of standard battens panels and end panel are prepared.

Make sure the appropriate backing material as specified by the architect/developer is installed prior to mounting the panels.

Locate the centre line along which the brackets are to be installed. These dimensions should correspond with the same dimensions when assembling a batten panel.

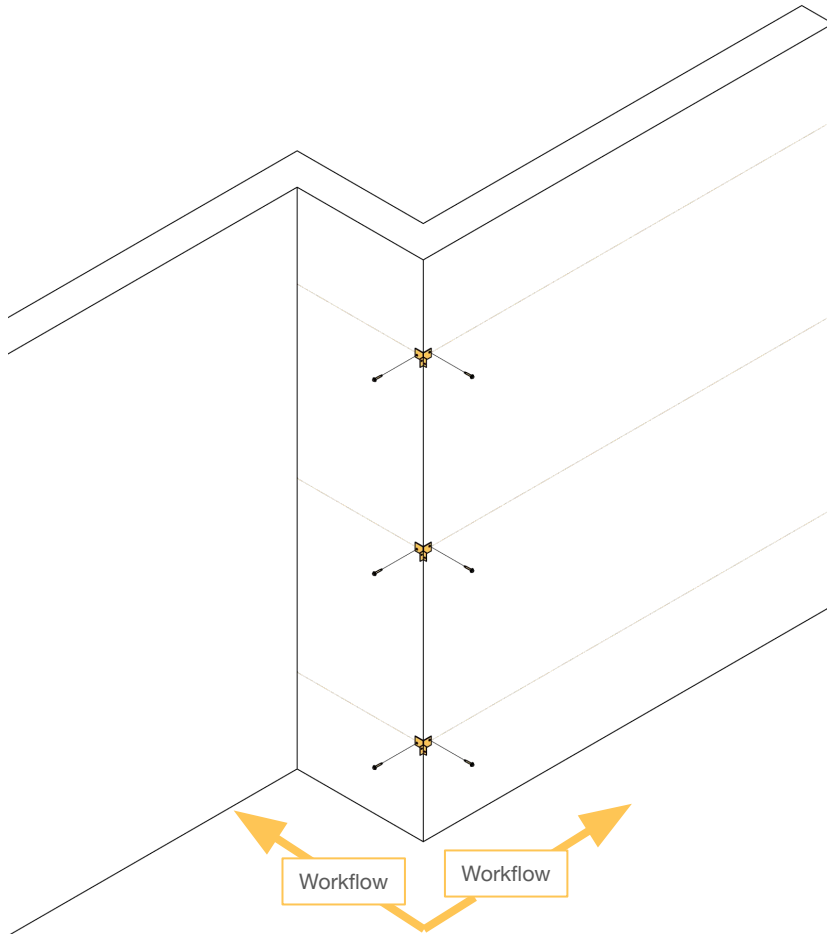
In this particular example, we will use three brackets per panel for both the Main Wall and the Corner Wall.

03



Wall Assembly

Installing the Corner Batten Brackets



Important: Ensure the corner brackets align as they are mounted onto the wall.

Note: Skip this step if the installation is only along one plane (no corners).

Start the installation with the corner brackets. The workflow will start from the corner batten which will act as a reference from which the battens are installed.

Align the corner brackets roughly with the reference centre lines as shown. Put the lowest corner bracket into position and drive the appropriate fastener for the substrate through the mounting holes.

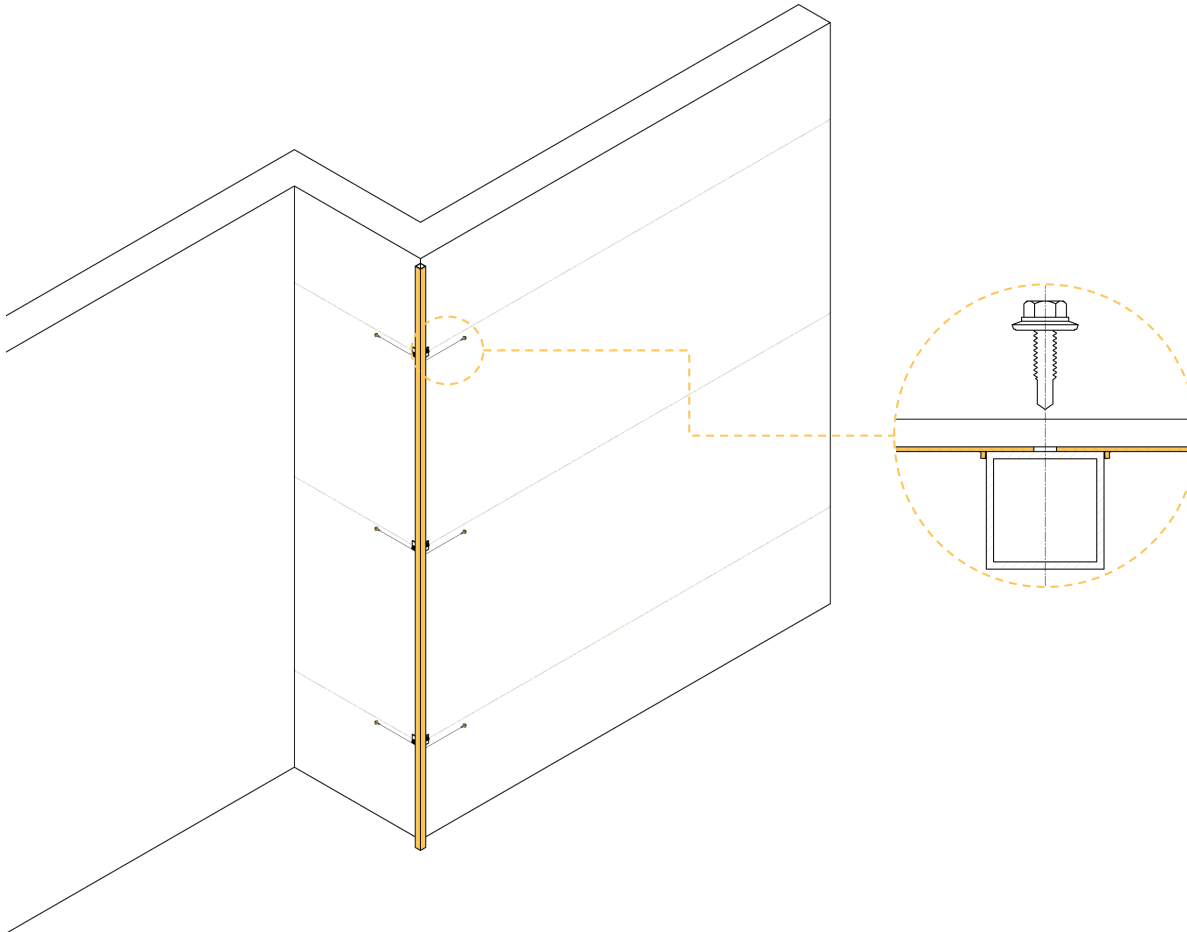
Repeat the same process for the other corner brackets. Ensure that the corner brackets do align as they are mounted onto the wall.

03



Wall Assembly

Installing the Corner Batten



Position the corner batten in the brackets as shown.

Starting with the lowest corner bracket, drive the screws provided through to the batten on the appropriate faces to secure the batten.

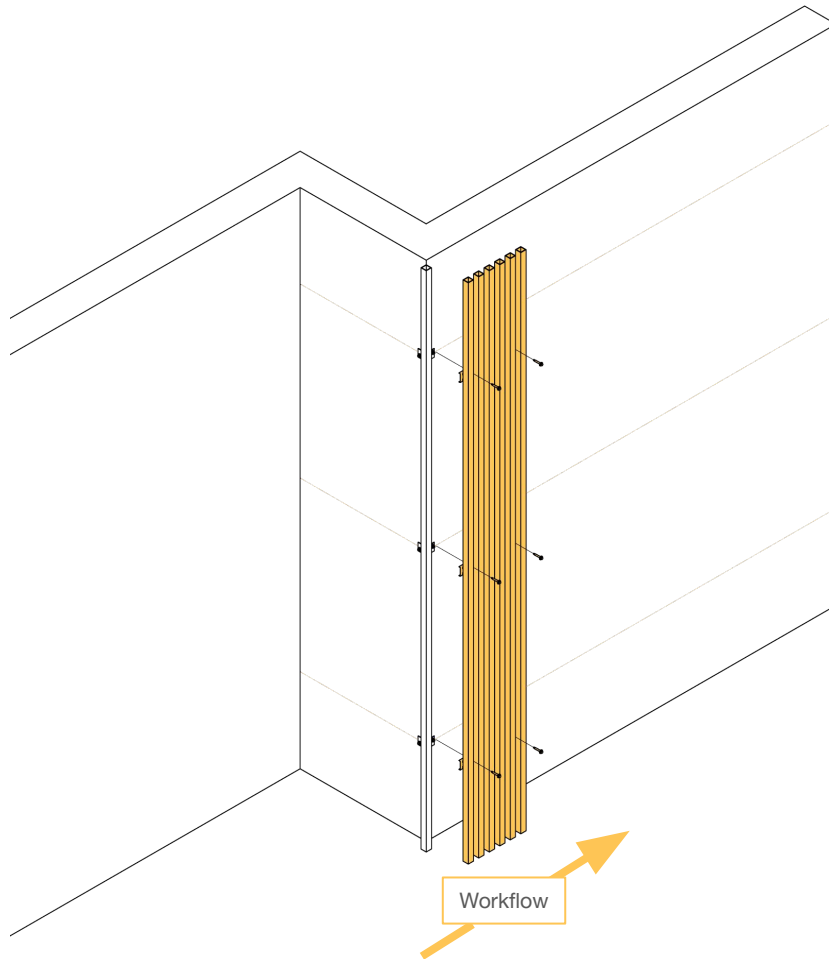
Ensure that the corner bracket is plumb as this is the reference batten that the other battens align to.

03



Wall Assembly

Installing the First Batten Panel



Install the starting panel. In this case, we will install from the corner batten towards the opposite side of the wall.

Position the batten panel such that its gap from the corner batten is consistent. Mount a fastener through a mounting tab on the lowest bracket. Check that the battens are vertical and adjust as necessary. Install another fastener through the other mounting tab(s) on the same bracket

Mount the middle bracket with fasteners similar to the previous step. Check the position of the batten panel.

Mount the topmost bracket to complete the installation of the first batten panel.

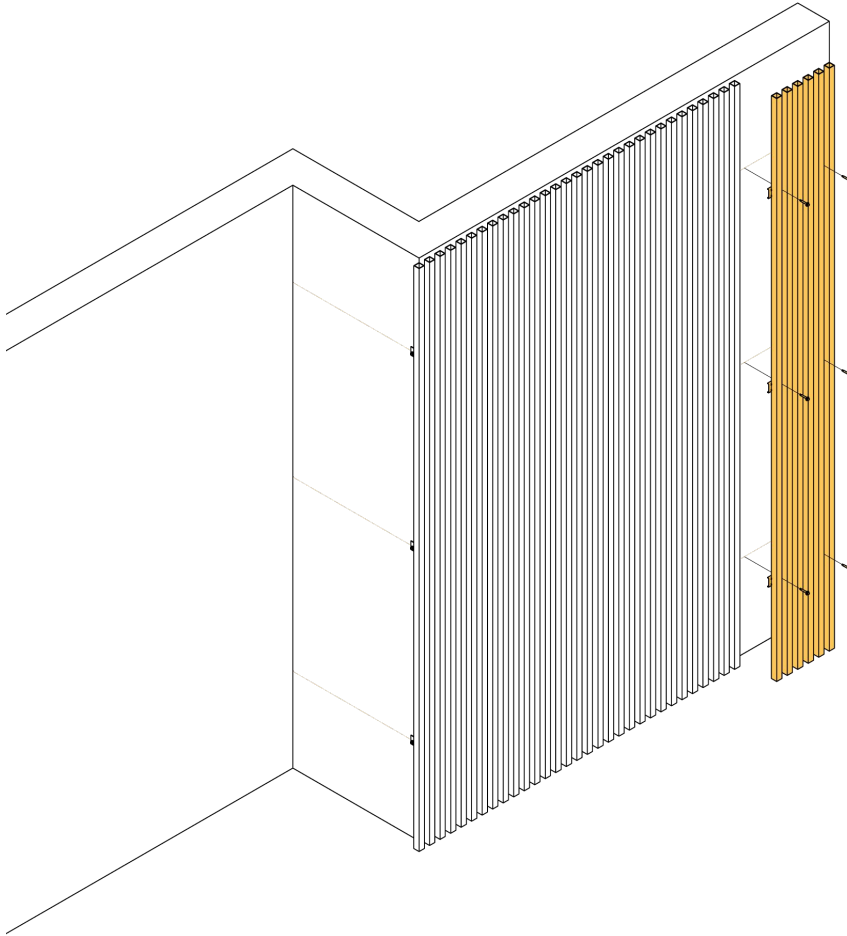
Note: If the installation is along a plane (no corners), then start with this panel. Use a plumb line or a laser level to ensure the battens remain plumb.

03



Wall Assembly

Installing the Middle Panels



Install the adjacent panels using the same steps as the previous page.

The panels are self-spacing when the brackets are butt-joined when installed on the wall. Position an adjacent batten panel such that the brackets are butted up to each other.

Ensure the battens are plumb as the panels are installed.

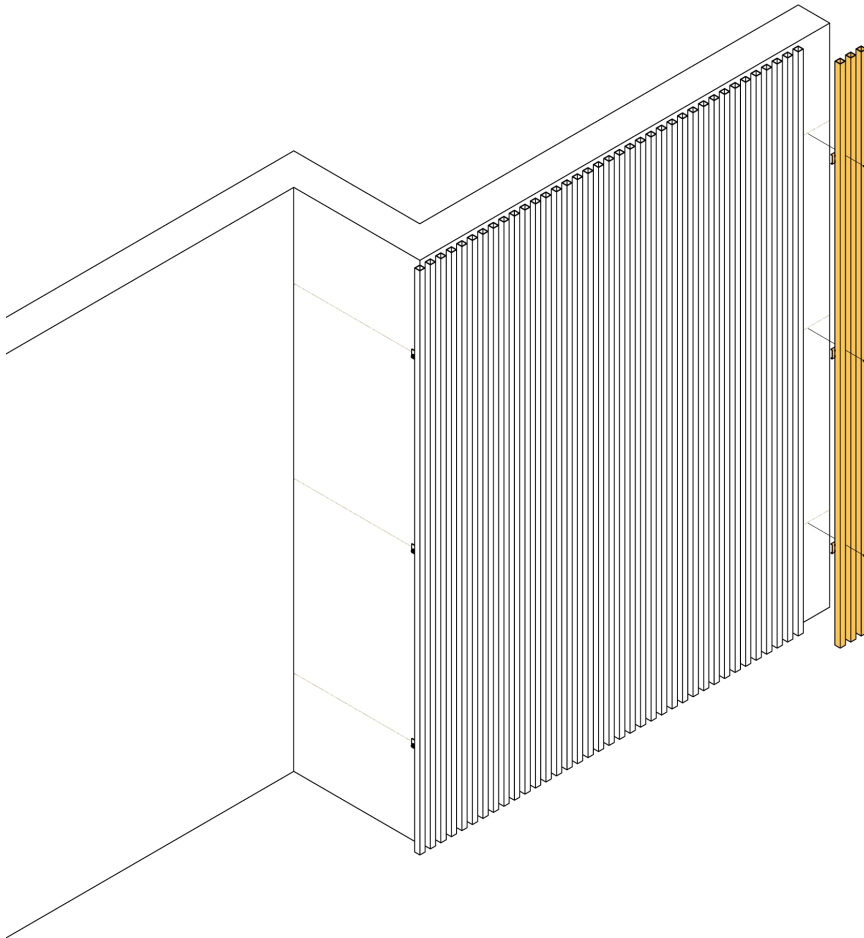
Repeat the same steps with the remainder of the panels until the end section is reached.

03



Wall Assembly

Installing the End Panel



Pro Tip: When trimming the brackets for a narrower end section, ensure that there is adequate support for the end-most batten.

It is also highly recommended that the now exposed ends of the end bracket be coated with black rust-protective primer/paint or paint prior to assembling the end batten panel.

In some instances, the width of the batten panel divides exactly into the width of the wall.

In other cases, the final section would need to be covered by a width narrower than the standard panel.

To prepare a narrower panel, measure the distance between the bracket of the previous batten panel and the end wall. Determine the number of battens that would fit this width and trim brackets appropriately.

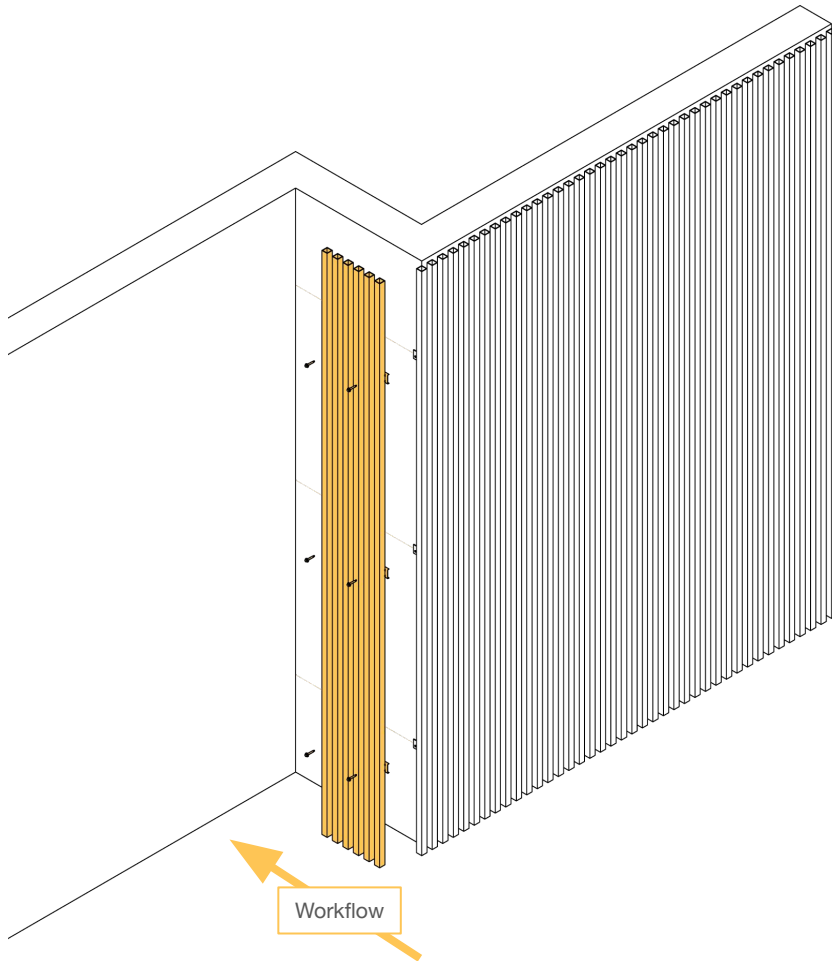
Assemble the end panel and install. This step completes this face of the wall.

03



Wall Assembly

Installing the Corner Wall



Start on the corner wall using the corner batten as reference, with the workflow towards the opposing side.

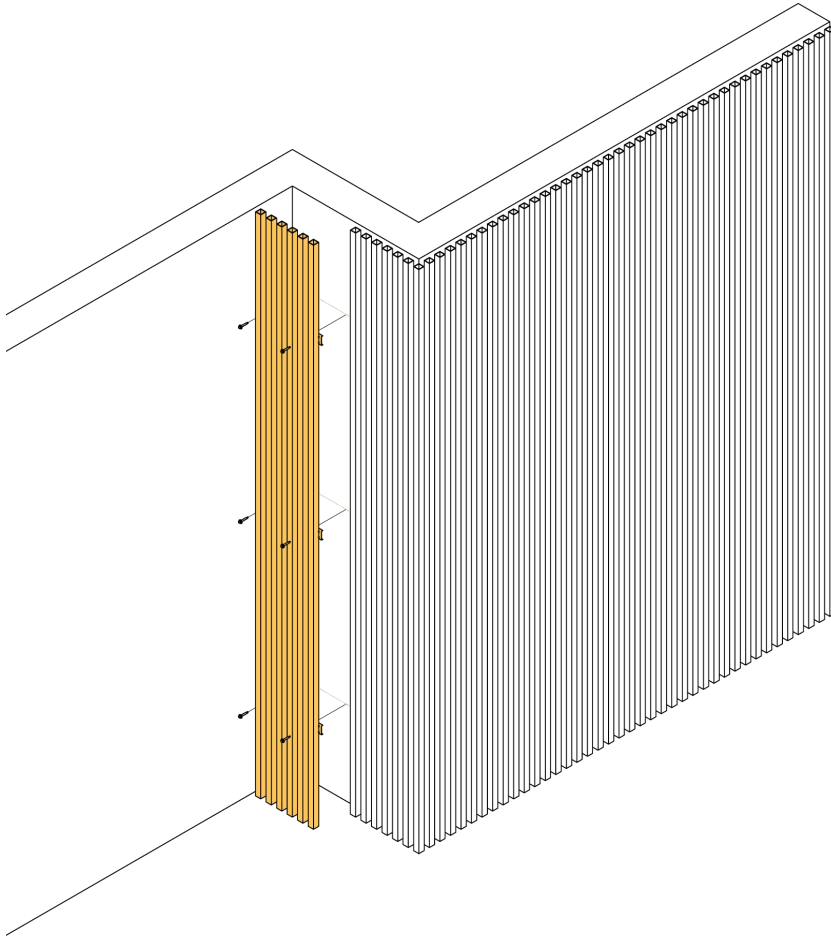
Mount the first batten panel similar to the previous steps, ensuring that the spacing between the batten panel and corner batten is consistent and that the panel is plumb.

03



Wall Assembly

Installing the End Panel



In some instances, the width of the batten panel divides exactly into the width of the wall.

In other cases, the final section would need to be covered by a width narrower than the standard panel.

Prepare an end panel similar to the previous steps and install.

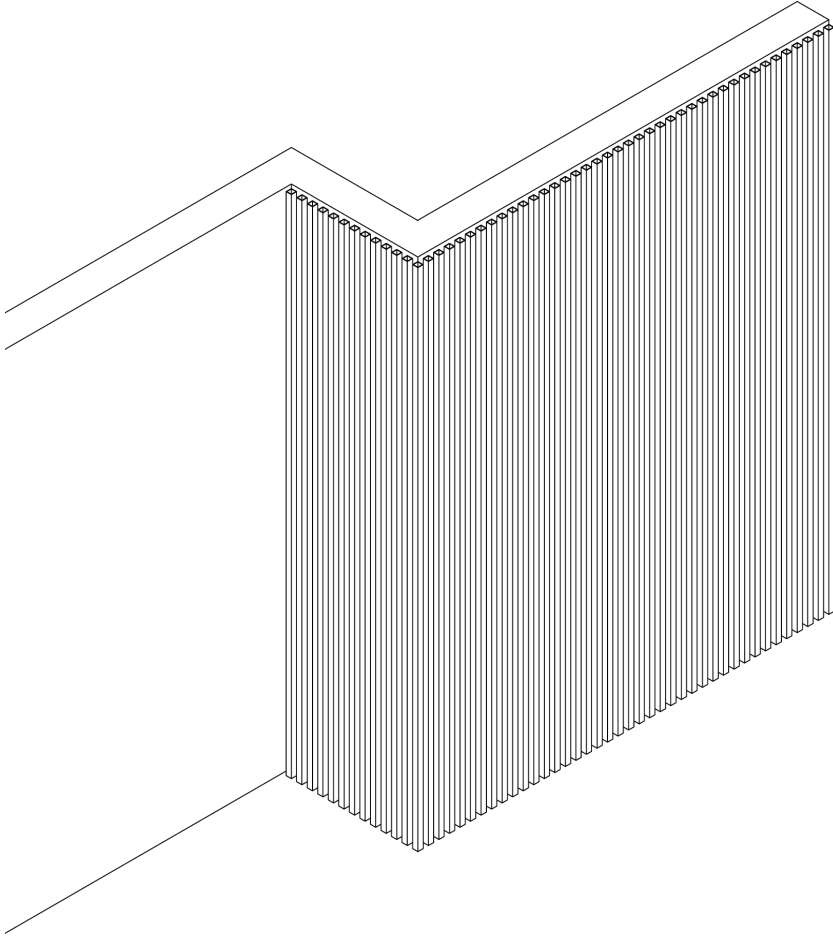
03

Wall Assembly

AL13 Batten System



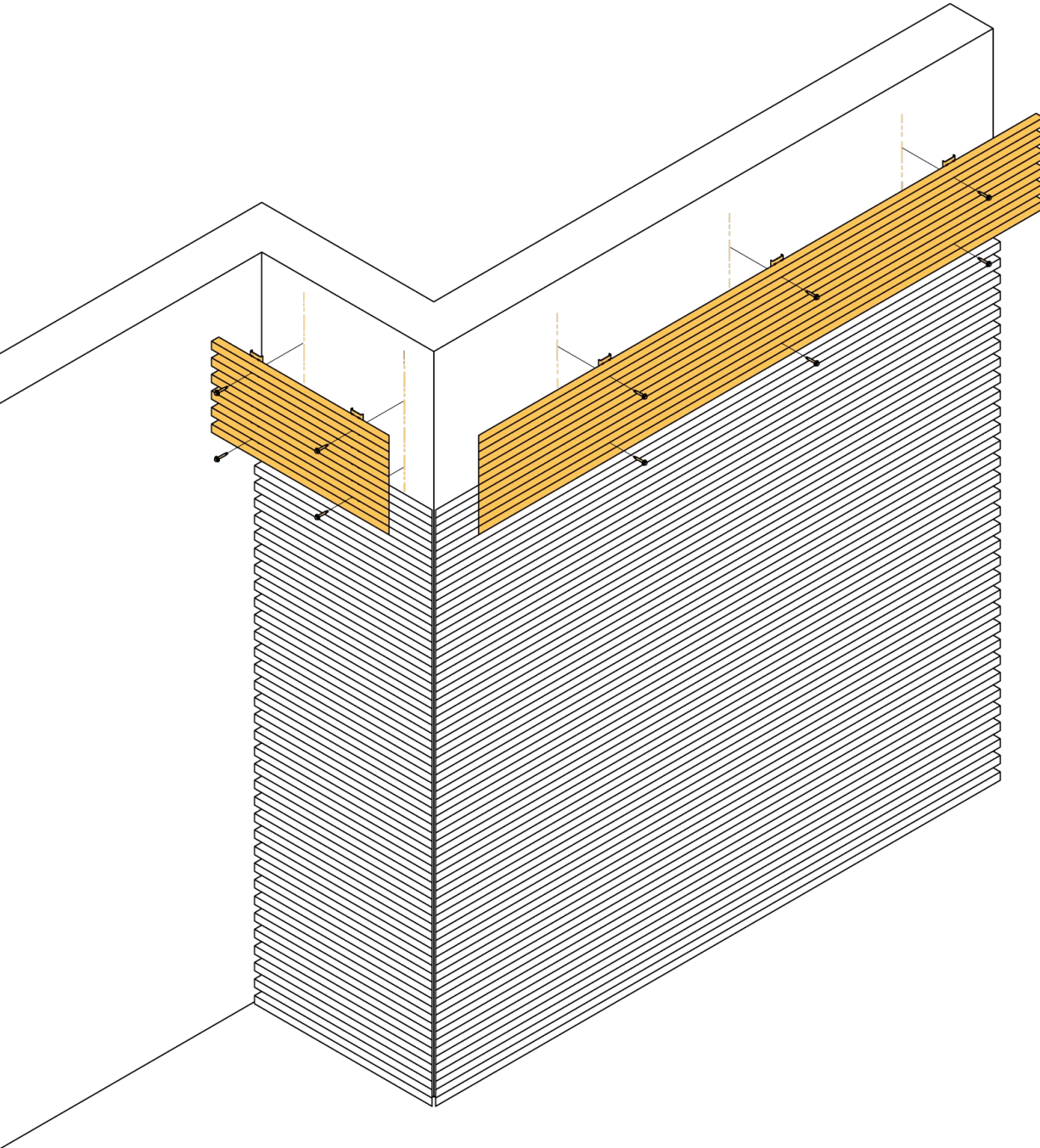
Completed Wall



The vertical batten wall installation is now complete.

04

Batten Panel Installation Horizontal Battens

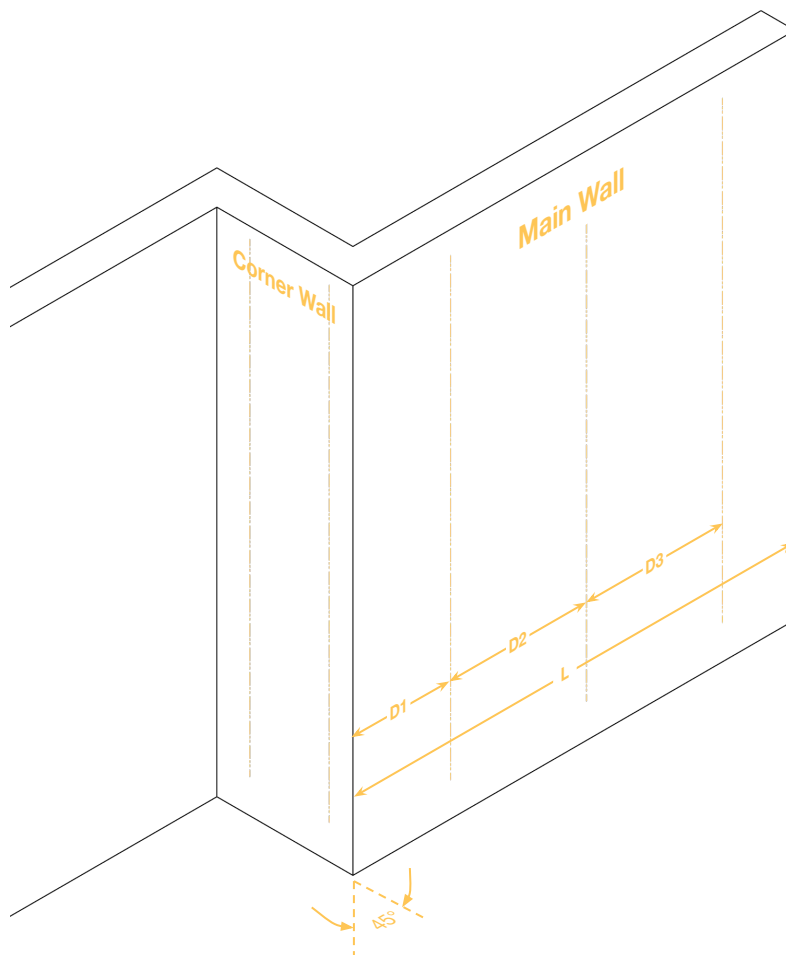


04



Wall Assembly

Planning the Wall



Make sure the appropriate backing material as specified by the architect/developer is installed prior to mounting the panels.

Locate the centre lines along which the brackets are to be installed. These dimensions (e.g., D1, D2, D3, and L) should correspond with the same dimensions when assembling a batten panel.

In this particular example, the outside corner is treated with a 45° mitre and a small gap. Consider the additional material required for the cut length of the battens.

The panels will use three brackets for the main wall, and two brackets per panel for the corner wall.

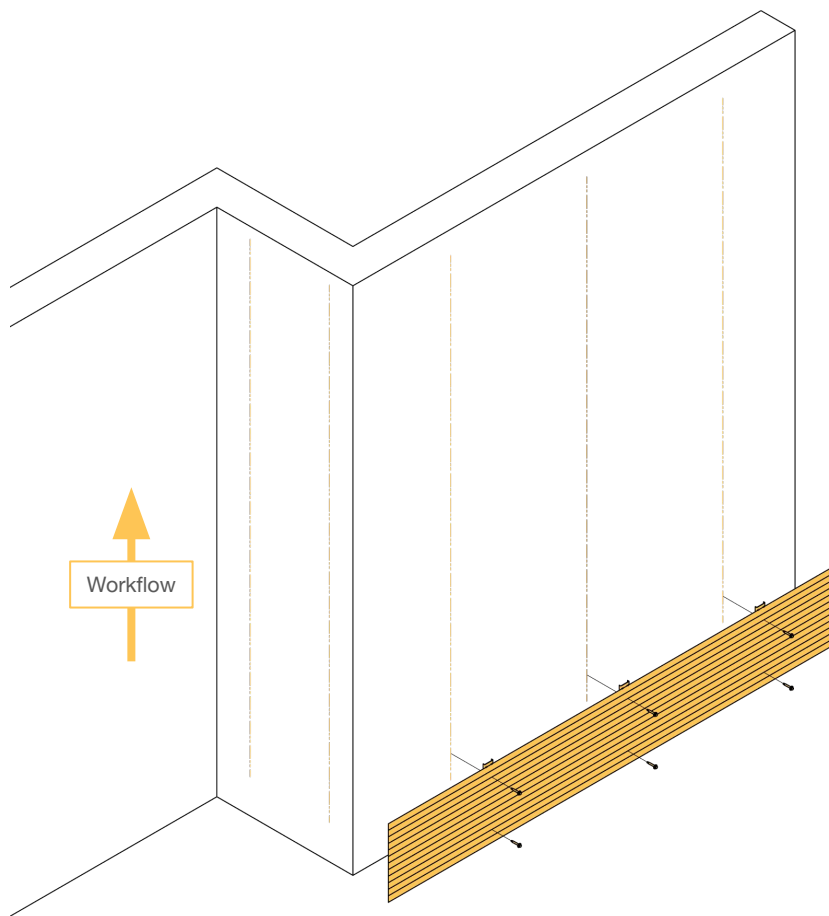
Note: If the installation is along a plane (no corner wall), then measure the cut length appropriately without accounting for a 45° mitre.

04



Wall Assembly

Installing the Lowest Batten Panels



Install the starting panel. In this case, we will install from the bottom up.

Position the batten panel such that its gap from the corner batten is consistent. Mount a fastener through a mounting tab on the bracket closest to the corner. Level the battens and install another fastener through the other mounting tab on the same bracket.

Check the level of the batten panel as you mount the middle bracket with fasteners similar to the previous step. Ensure the batten panel stays level while mounting the screws.

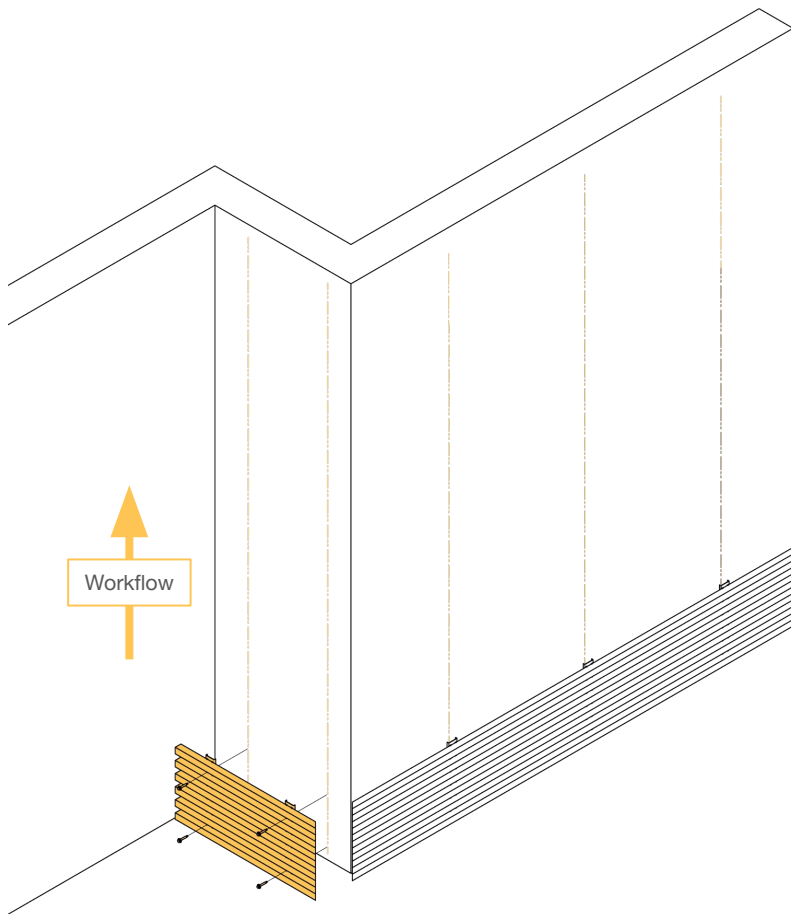
Mount the rightmost bracket to complete the installation of the first batten panel along the main wall.

04



Wall Assembly

Installing the Lowest Batten Panels



The lowest batten panel on the corner wall can be installed after the lowest batten panel on the main wall. Follow the same steps as the previous step.

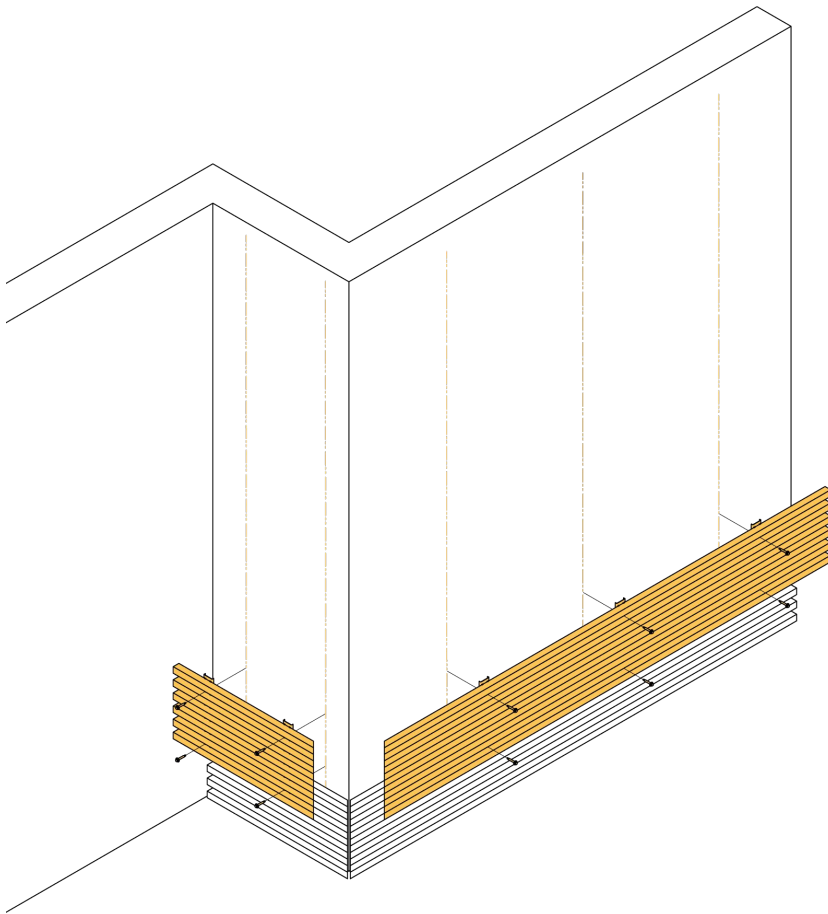
The design intent of this example is to have the battens continue around the corner. In this case, ensure that the battens align and meet at the corner as intended.

04



Wall Assembly

Installing the Next Panel



Install the adjacent panels using the same steps as the previous pages. Position an adjacent batten panel such that the brackets are butted up to each other to provide the correct spacing between the batten panels.

Ensure the batten panels stay level and that the battens meet at the corner (as intended) as the panels are installed.

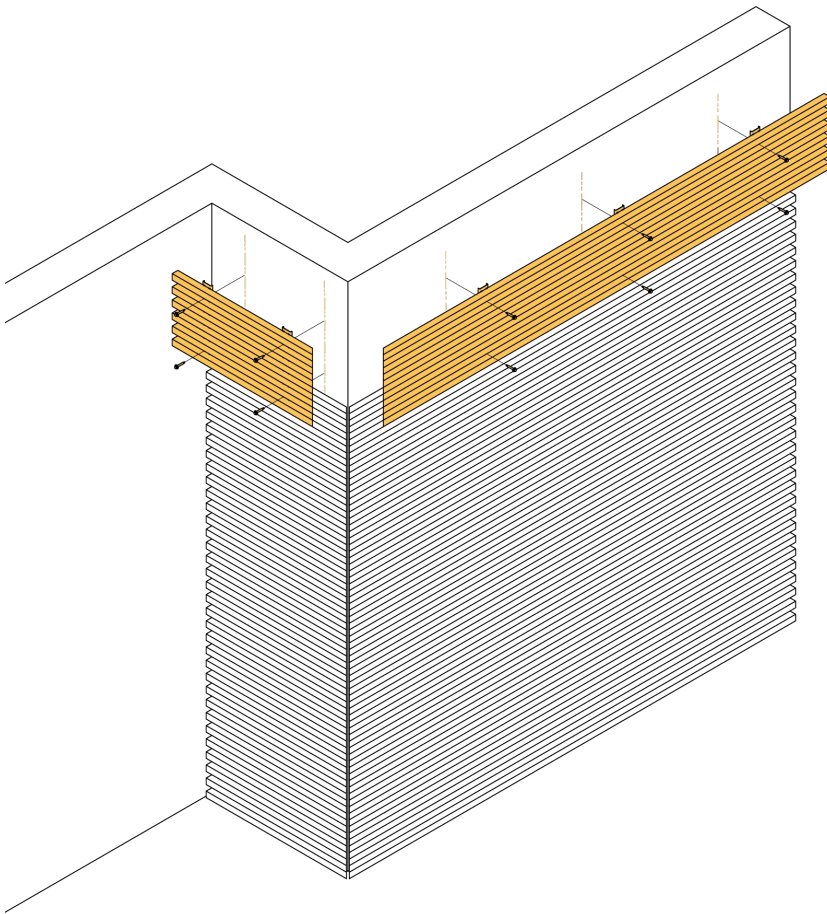
04

Wall Assembly

AL13 Batten System



Installing the Next Panels



Repeat the same steps with the remainder of the panels until the end section is reached.

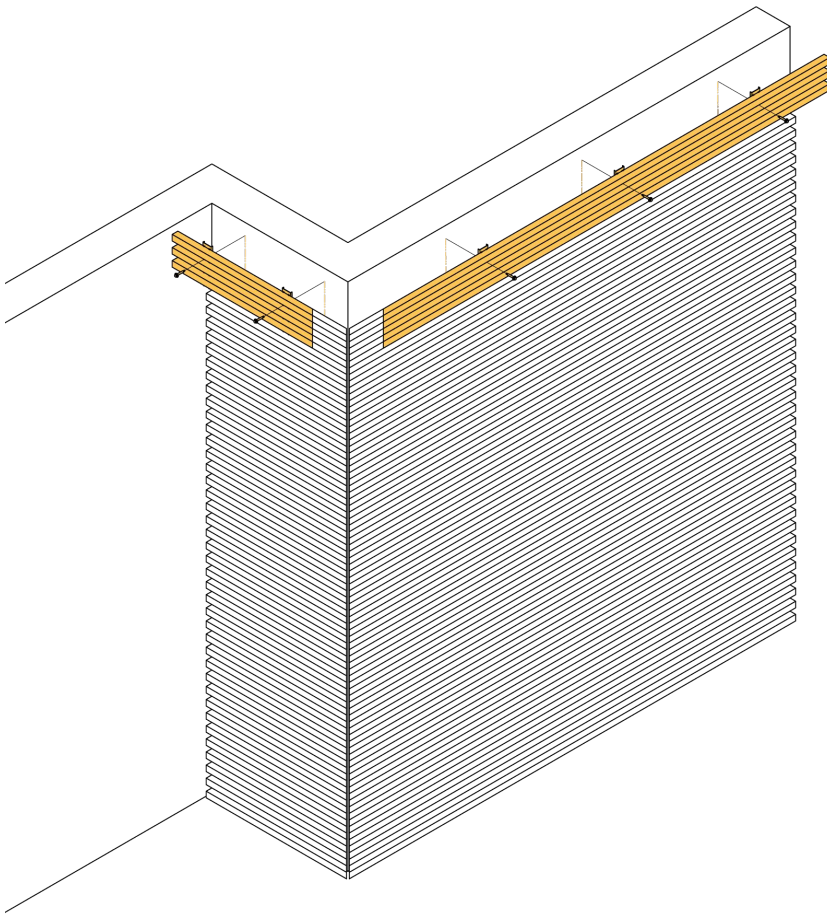
04

Wall Assembly

AL13 Batten System



Installing the Top Panels



In some instances, the width of the batten panel divides exactly into the width of the wall.

In other cases, the final section would need to be covered by a width narrower than the standard panel.

To prepare a narrower panel, measure the distance between the bracket of the previous batten panel and the ceiling. Determine the number of battens that would fit this width and trim brackets appropriately.

Assemble the end panels for both the main wall and corner wall and install.

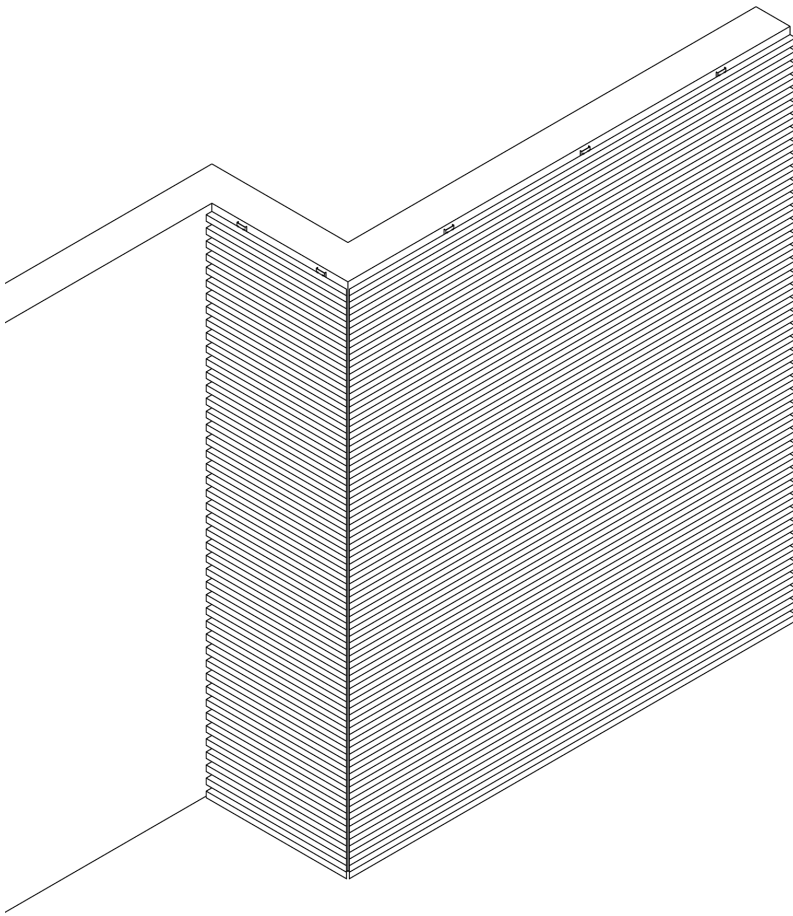
04

Wall Assembly

AL13 Batten System



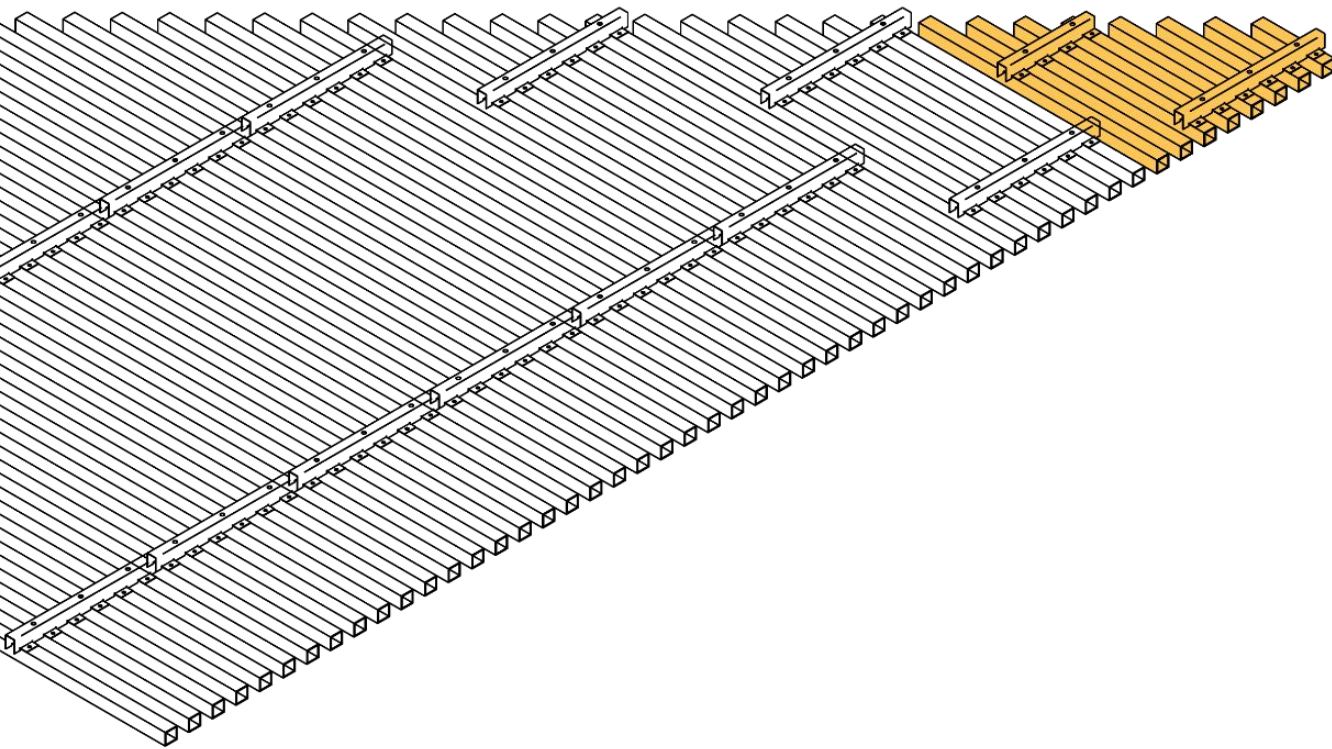
Completed Wall



This wall with horizontal battens is now complete.

05

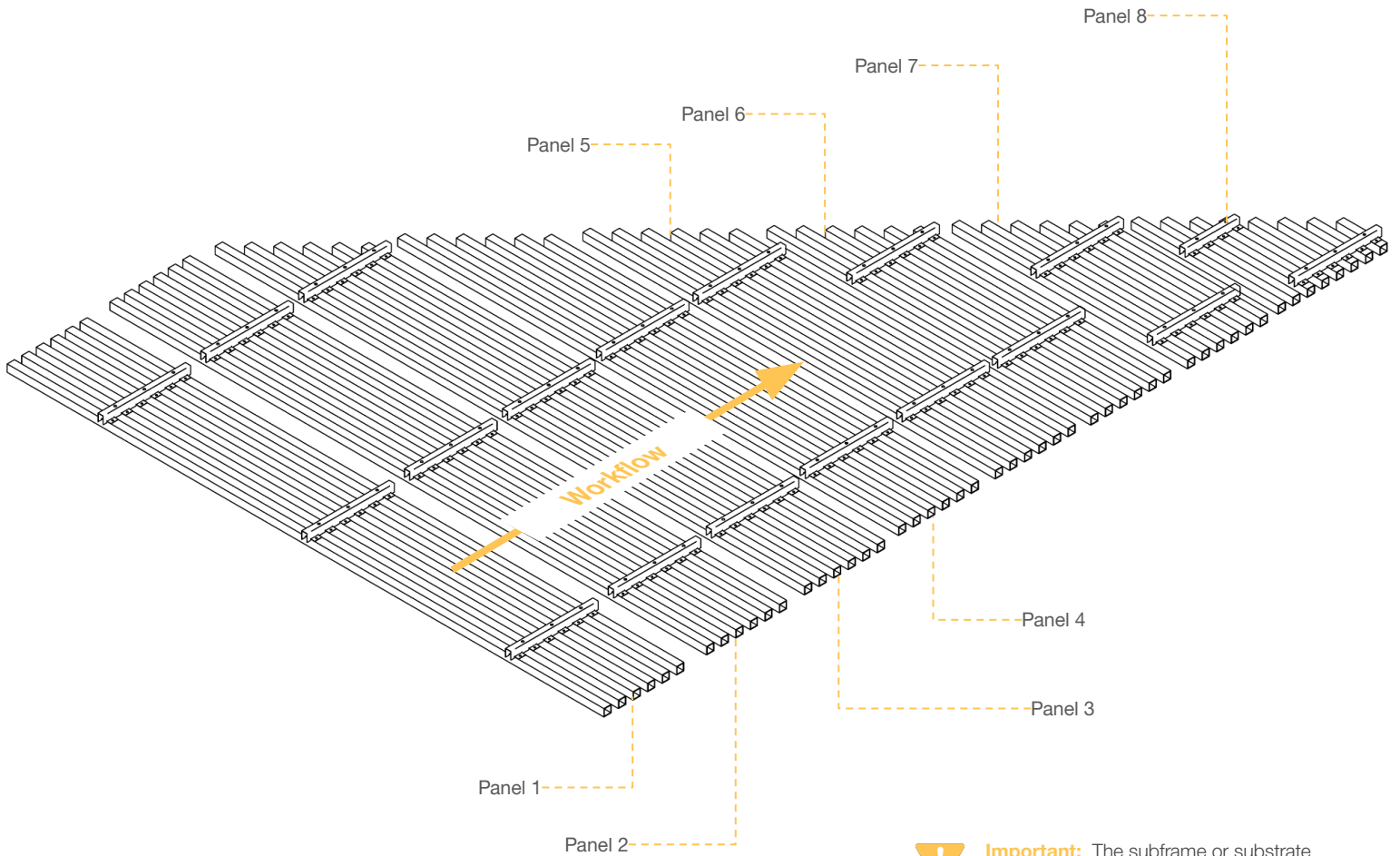
Batten Panel Installation Non-Rectangular Geometry



05

Non-Rectangular Geometry

Planning the Installation



Important: The subframe or substrate must be complete to specifications before installation of the batten panels.

It is possible to use the Batten System on installations that have non-rectangular geometry, provided the battens remain planar.

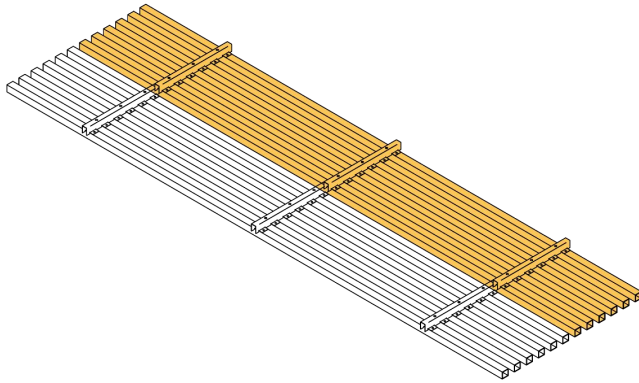
Make sure the appropriate backing material as specified by the architect/developer is installed prior to mounting the batten panels.

Plan the wall installation and prepare the batten panels as appropriate as outlined in section 02.

05

Non-Rectangular Geometry

Batten Panel 1 and 2



In this particular example, the first two batten panels are rectangular battens with 3 brackets.

Install the first batten panel. Make sure that the correct substrate fasteners are used.

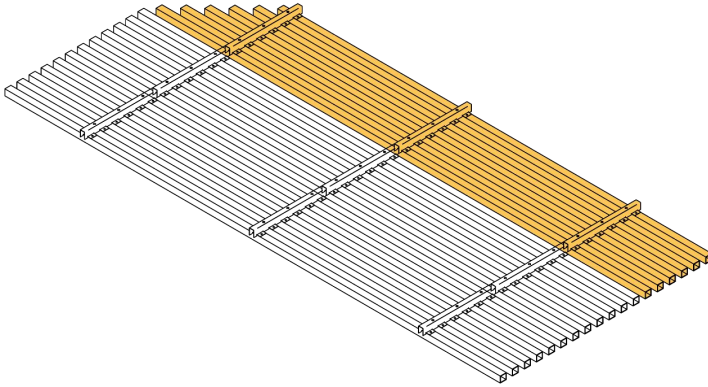
Install the second standard batten panel.

Ensure the ends are aligned with your reference edge. In this case, it could be the square edge of the install area, or it could also be the triangular edge.

05

Non-Rectangular Geometry

Batten Panel 3



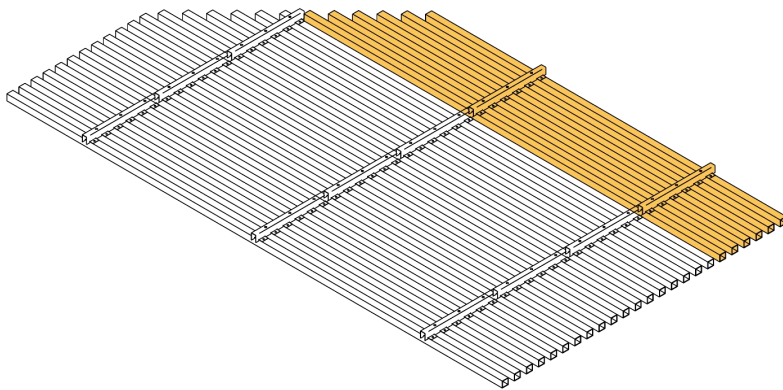
The third batten panel is the first panel with the triangular cut out in this example.

Use your chosen reference edge to align the third batten panel the first two rectangular panels.

05

Non-Rectangular Geometry

Batten Panel 4



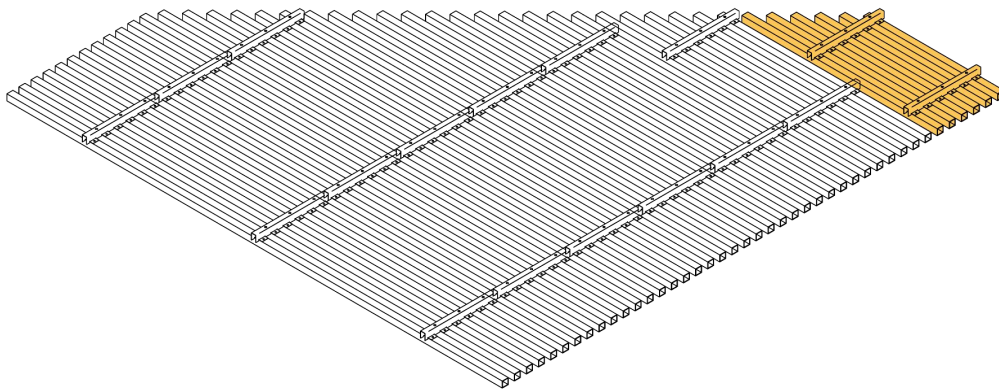
This fourth batten panel continues with the triangular cutout feature.

Use the same edge of the batten panels as reference to align this panel.

05

Non-Rectangular Geometry

Batten Panels 5, 6, and 7



Batten Panels 5 and 6 are installed following the same reference edge as the previous panels.

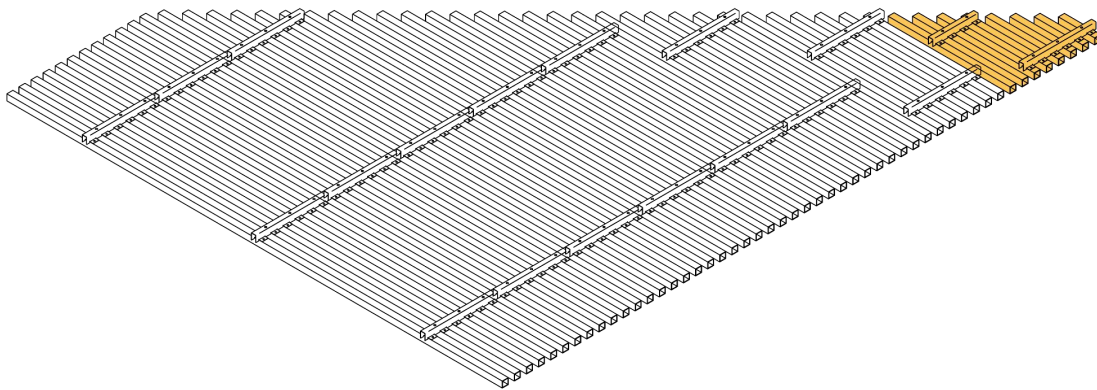
Batten panel 7 continues with the triangular cutout feature.

In this example, it is assumed that the brackets for this batten panel can still be installed onto the same substrate or subframe geometry (e.g., drop ceiling subframe).

05

Non-Rectangular Geometry

Final Batten



The last batten panel was assembled to be wider than a standard panel to avoid having such a small end panel with very short pieces.

In this case, extra brackets are used to support the shorter battens.

The installation is complete.