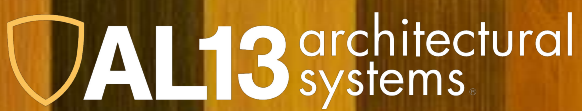
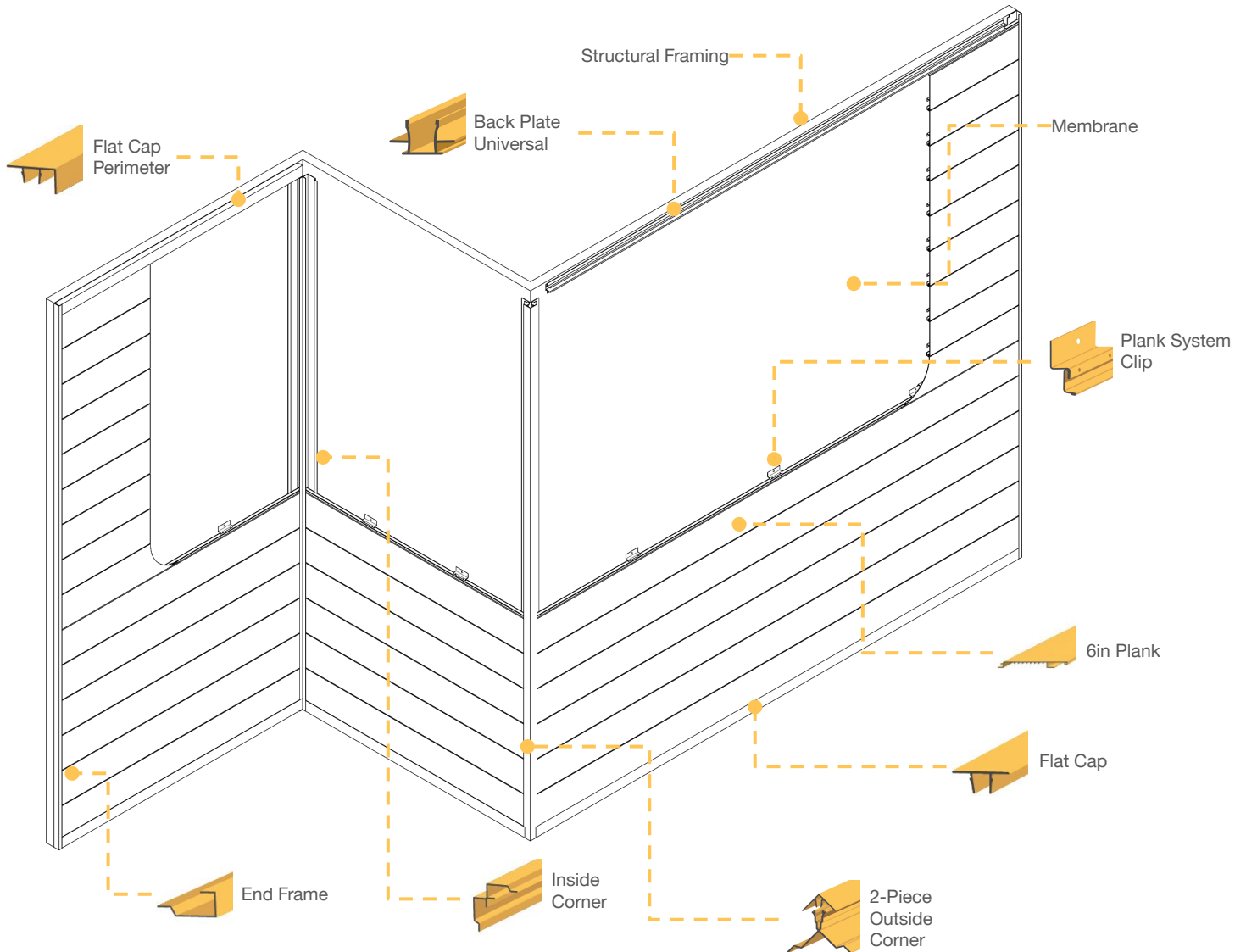


Installation Guide





AL13 Plank System



The backplates and various caps use an interference fit and require an impact to engage the two components.

! **Note:** Ensure that the substrate is solid enough or supported enough to sustain this impact.

01

Installation Guidelines 1

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. Please refer to the AL13® Material Safety Data Sheets for more info.

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 planks, extrusions and other component packaging are in good condition, free of any defects, and verify that the materials match the order / 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 2

Product Legend









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

Component	Size / piece	Material
 6" Plank	12' length	AAMA 2604 coated aluminum extrusion
 4" Plank	12' length	AAMA 2604 coated aluminum extrusion
 2" Plank Perforated Vent Strip	12' length	AAMA 2604 coated aluminum extrusion
 End Frame	12' length	AAMA 2604 coated aluminum extrusion
 Inside Corner	12' length	AAMA 2604 coated aluminum extrusion
 Outside Corner	12' length	AAMA 2604 coated aluminum extrusion
 Flat Cap	12' length	AAMA 2604 coated aluminum extrusion
 Flat Cap: Perimeter	12' length	AAMA 2604 coated aluminum extrusion
 Reveal Cap	12' length	AAMA 2604 coated aluminum extrusion
 Reveal Cap: Perimeter	12' length	AAMA 2604 coated aluminum extrusion

01

Installation Guidelines 3







Product Legend

Component	Size / piece	Material
 Two Piece Outside Corner	12' length	<i>Outside Corner Cap:</i> AAMA 2605 coated aluminum extrusion <i>Backplate:</i> PVDF coated aluminum extrusion
 Back Plate: Universal	8' length	Black powder coated aluminum extrusion
 System Clip: Compressible	100/package	Glass-filled polyamide
 System Clip: Plank / Joint Clip	100/package	Galvanized Steel
 Joint screws	100/package 1/2in long	Used to fasten two adjoining planks with System Clip: Plank
 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
 Metal Fastener	500/package 3/4in long	Steel substrate: #10-16 x 3/4" self-drilling, self-tapping screws with corrosion resistant coating

01

Installation Guidelines 4

Product Legend

Install Kit Components	Size / piece	Material
 80T Non-ferrous Saw Blade	10" - each	Carbide tip / high-speed steel
 60T Non-ferrous Saw Blade	6-1/4" - each	Carbide tip / high-speed steel
 Gloves	pair	Rubber / lycra
 SLED: Flat	each	Plastic and rubber
 SLED: Reveal	each	Plastic and rubber
 SLED: Corner	each	Plastic and rubber

01

Installation Guidelines 5

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

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

01

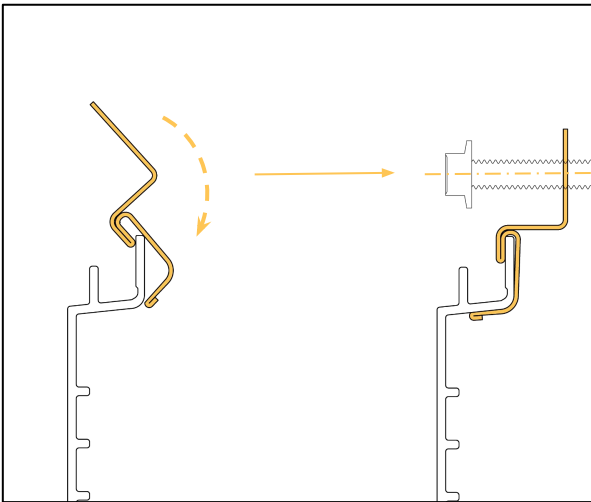


Installation Guidelines 6

Plank System Clip

The Plank System Clip provides an interface between the plank and the substrate and is secured to the wall using an AL13®-approved fastener appropriate for the substrate (see section on supported substrates for further information). Familiarize yourself with installing the Plank System Clip correctly to achieve the correct fit.

Correct Installation



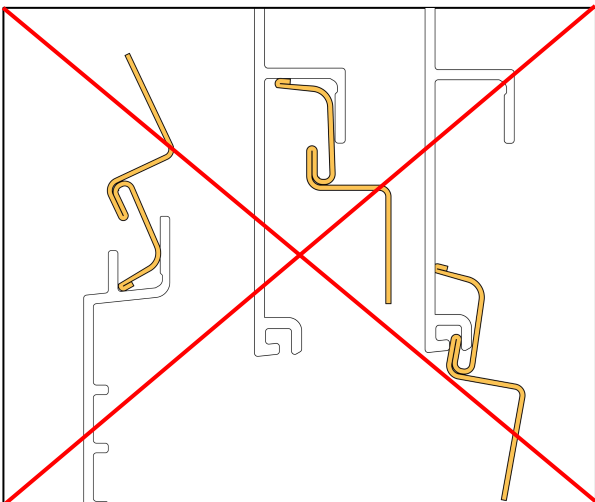
Install the Plank System Clip correctly as shown by engaging the inner top flange of the plank. Gently rotate the Plank System Clip to secure it in place.

Put the appropriate fastener through the mounting hole to mount and secure the clip.



Note: The clip can be moved easily along the length of the plank after it has been engaged.

Incorrect Installation



Note: The Plank System Clip only engages in one position correctly.

If the Plank System Clip is inserted incorrectly, it will not securely attach the plank on to the substrate. Installation of the subsequent planks can not be done correctly.

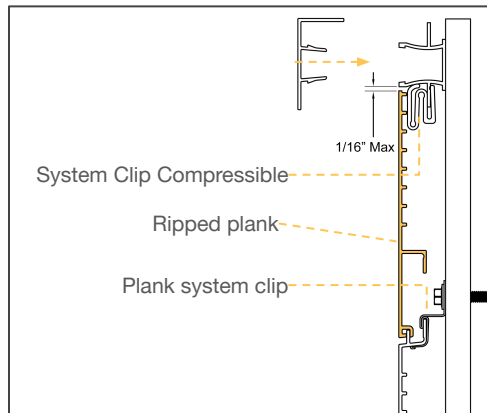
01



Installation Guidelines 7

Terminating the Plank Wall

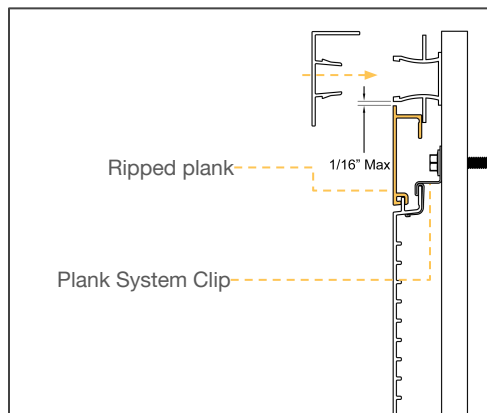
The Plank Wall is terminated towards the tongue side of the plank with a full width or a ripped section of plank. Below are guidelines typical for terminating the wall. Contact AL13® if you have further questions about terminating the wall.



RIPPING THE PLANK

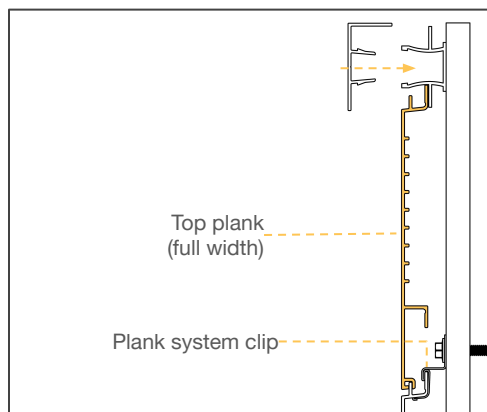
In most situations, the remaining width at the top of the wall requires the plank to be “ripped” to the correct width. In this case, leave a gap of 1/16” max from the back plate.

A System Clip Compressible can be attached to the back plate to support the ripped plank as shown.



RIPPING A NARROW STRIP

In situations that require a narrow strip of plank for the top of the wall, it may be necessary to snip the upper flange of the Plank system clip to ensure a flush fit.



FULL PLANK WIDTH

In rare situations, the remaining width at the top of the wall can be covered by a full plank width and no ripping is necessary.



Note: The end plank does not require a Plank System Clip.

01

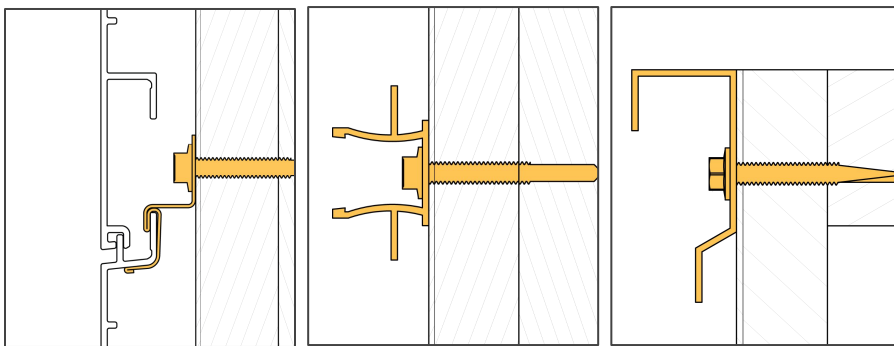


Installation Guidelines 8

Supported Substrates

Wood Frame with OSB/Plywood Sheathing

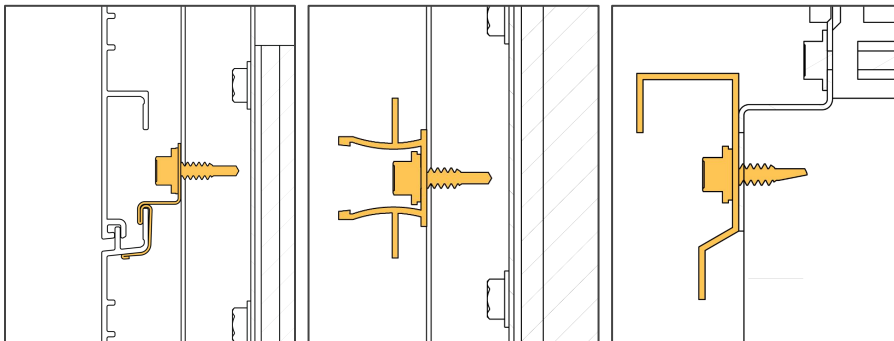
For installation on wood substrates, plywood, and OSB, AL13® Wood Fasteners must be used. For sheathed wood frame, AL13® installs directly on building wrap. The mechanical fasteners anchor into building sheathing and studs where available.



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

Girt/Furring Bar Installation

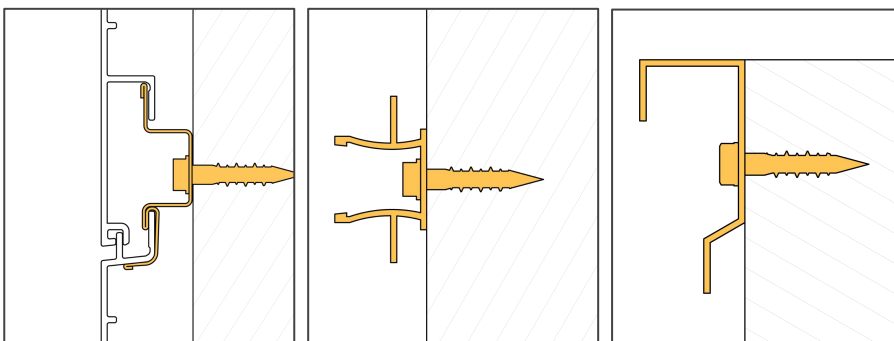
For installation on girt or furring bars, use metal fasteners.



Metal Fastener
#10-16 x 3/4"

Concrete Installation

For installation on concrete, use concrete fasteners/anchors.



Concrete Fastener
#11 x 1 1/4"

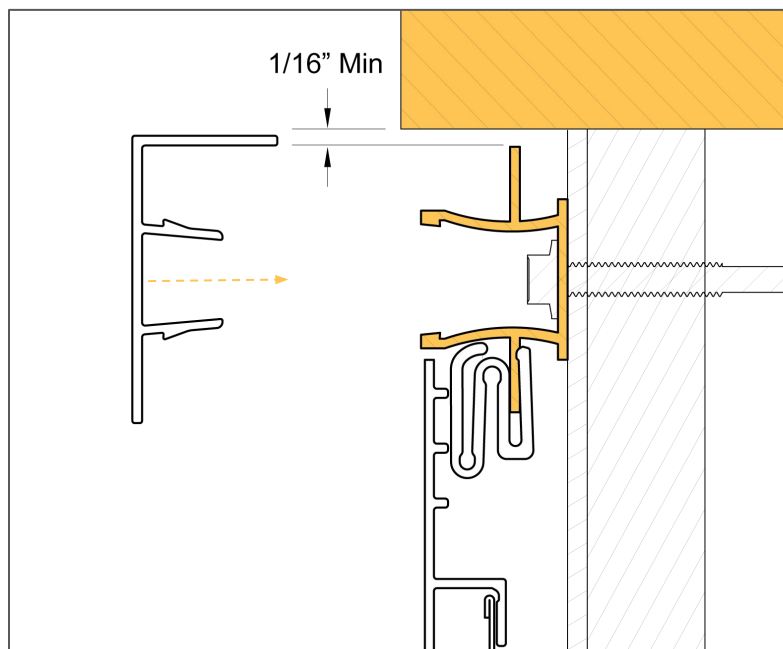
01



Installation Guidelines 9

Installation near Windows, Doors, and other Bump-Outs

When installing around a perimeter terminated with a Back Plate Universal, leave a minimum gap of 1/16" from the edge of the Back Plate to the perimeter border. This allows sufficient space for a top cap to be installed.



Leave a minimum of 1/16" gap between the edge of a perimeter (e.g., windows, doors, bump-outs) and the Back Plate Universal.

01

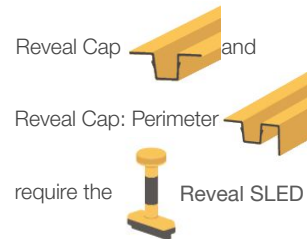
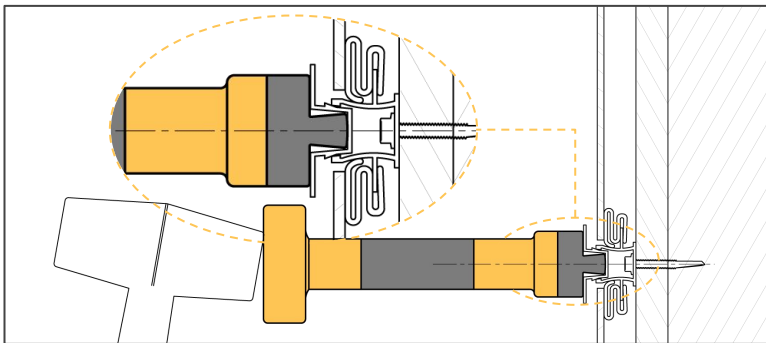
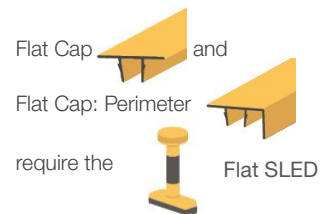
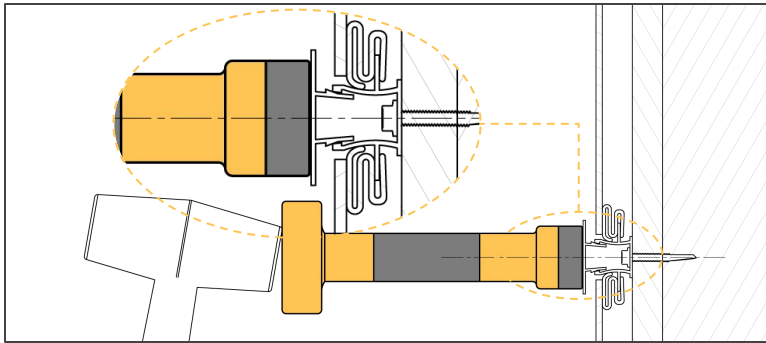


Installation Guidelines 10

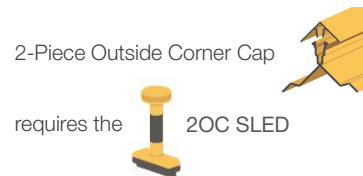
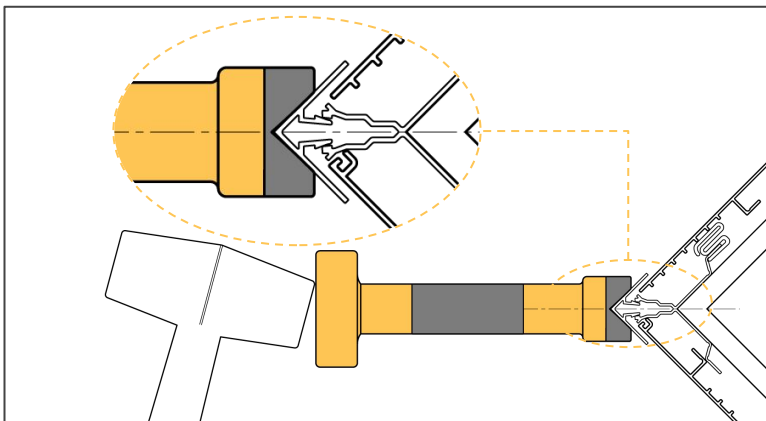
Installing the Top Caps

Panels are fastened by the frame tabs on the top caps around the entire perimeter. No traditional mechanical fasteners are required in the panel itself.

Ensure that the correct Snap-Lock Engagement Device (SLED) is used for the appropriate cap. Use a rubber mallet together with the appropriate SLED to install the top caps.



A protrusion at the bottom of the SLED fits inside the reveal of the cap to ensure proper installation.



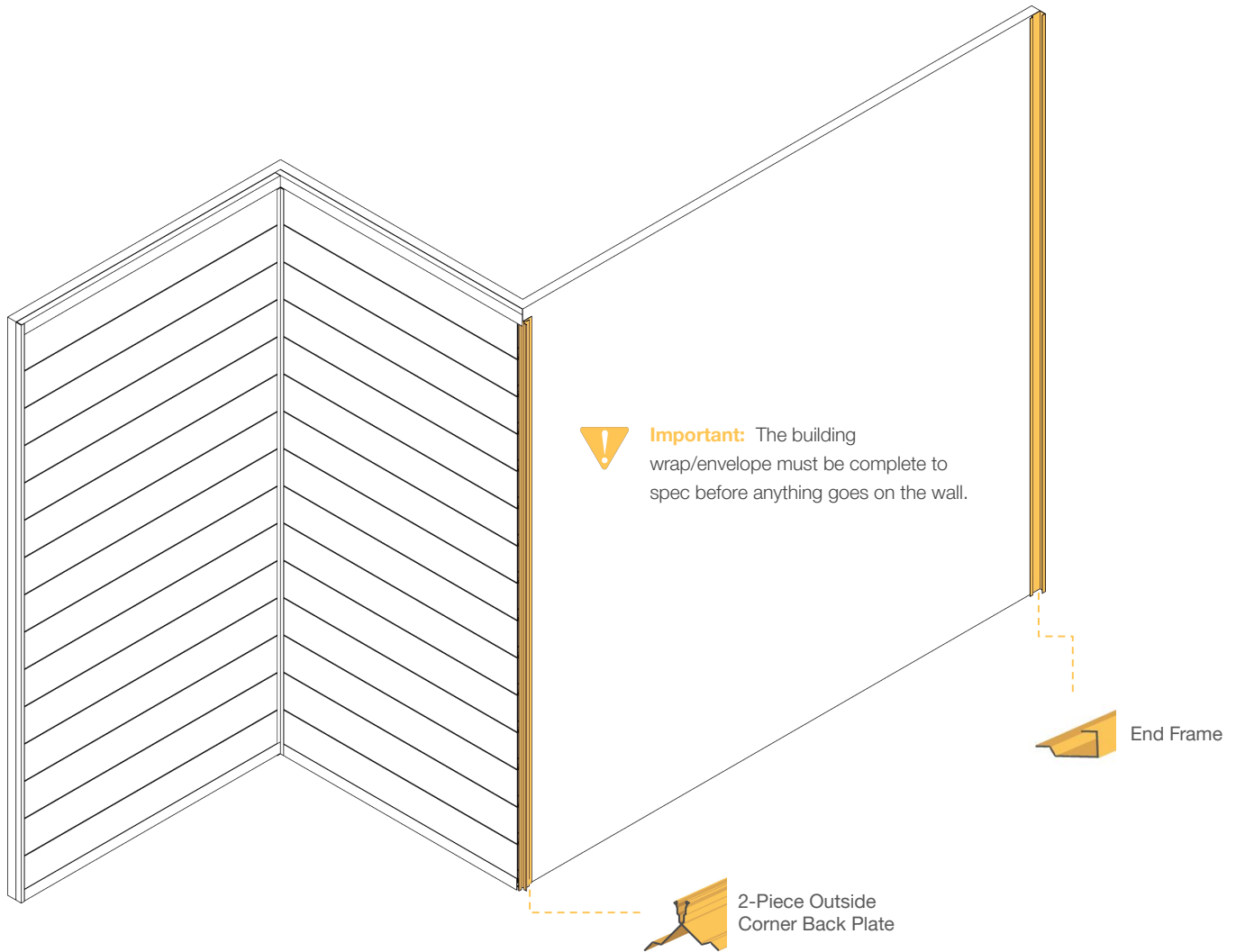
A cutout at the bottom of the SLED captures the geometry of the Outside Corner cap to ensure proper installation.

02



Plank Install 01

Fasten vertical perimeter extrusions



The vertical perimeter extrusions are normally the first extrusions to be fixed to the wall. Layout end frame extrusions according to the desired location. Ensure frames are level and plumb before fastening.

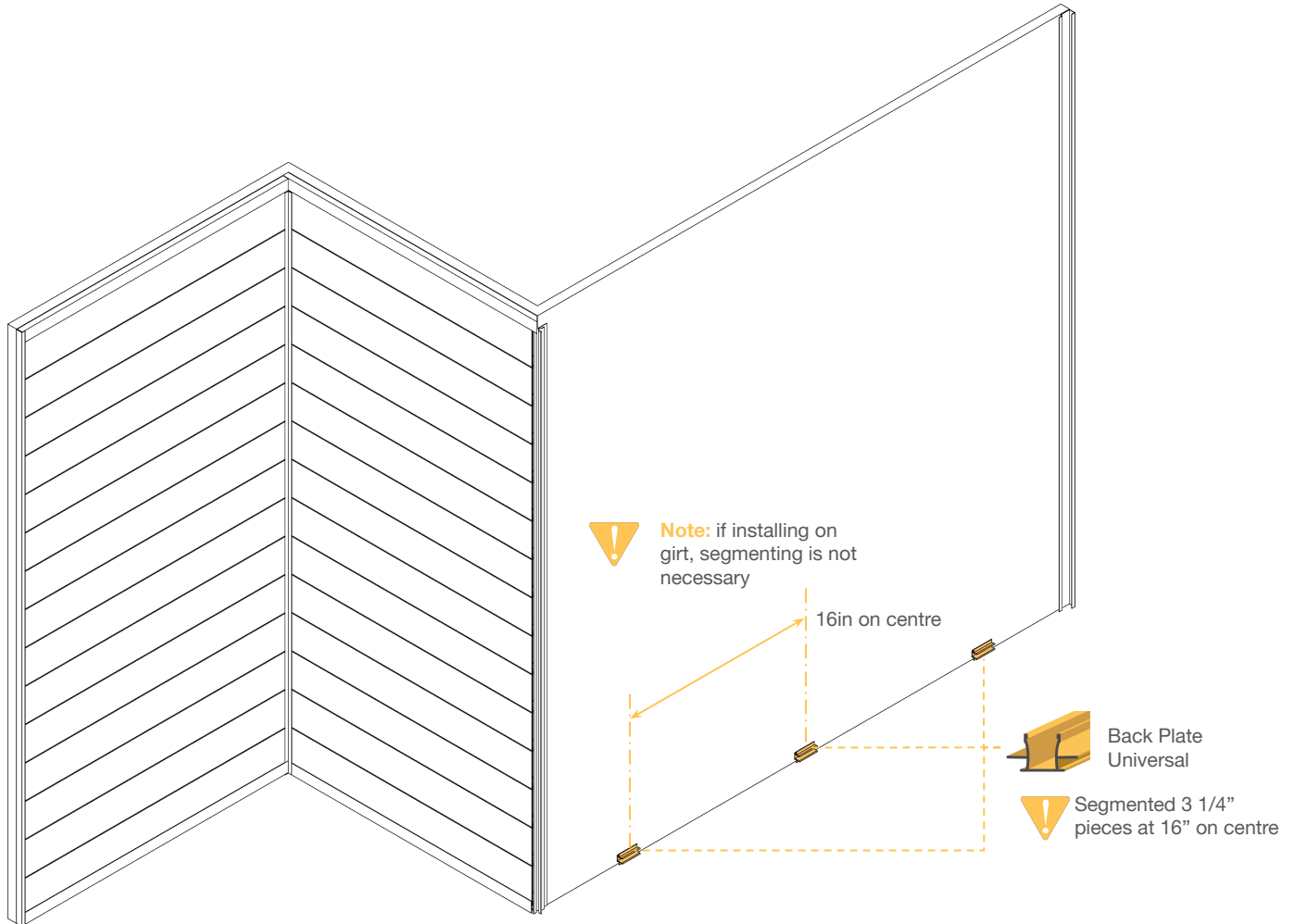
Workflow is always from the bottom up. Place the first fastener near the bottom of the vertical extrusion. Once the piece has been leveled, add a second near the top fixing it in place and add subsequent fasteners.

02



Plank Install 02

Fasten horizontal baseline extrusions



Segment the Back Plate Universal by cutting to lengths of 3 1/4" and install every 16" on centre to serve as the baseline. This will establish the horizontal datum and will be a reference to subsequent extrusions.

It is important that it is mounted level.

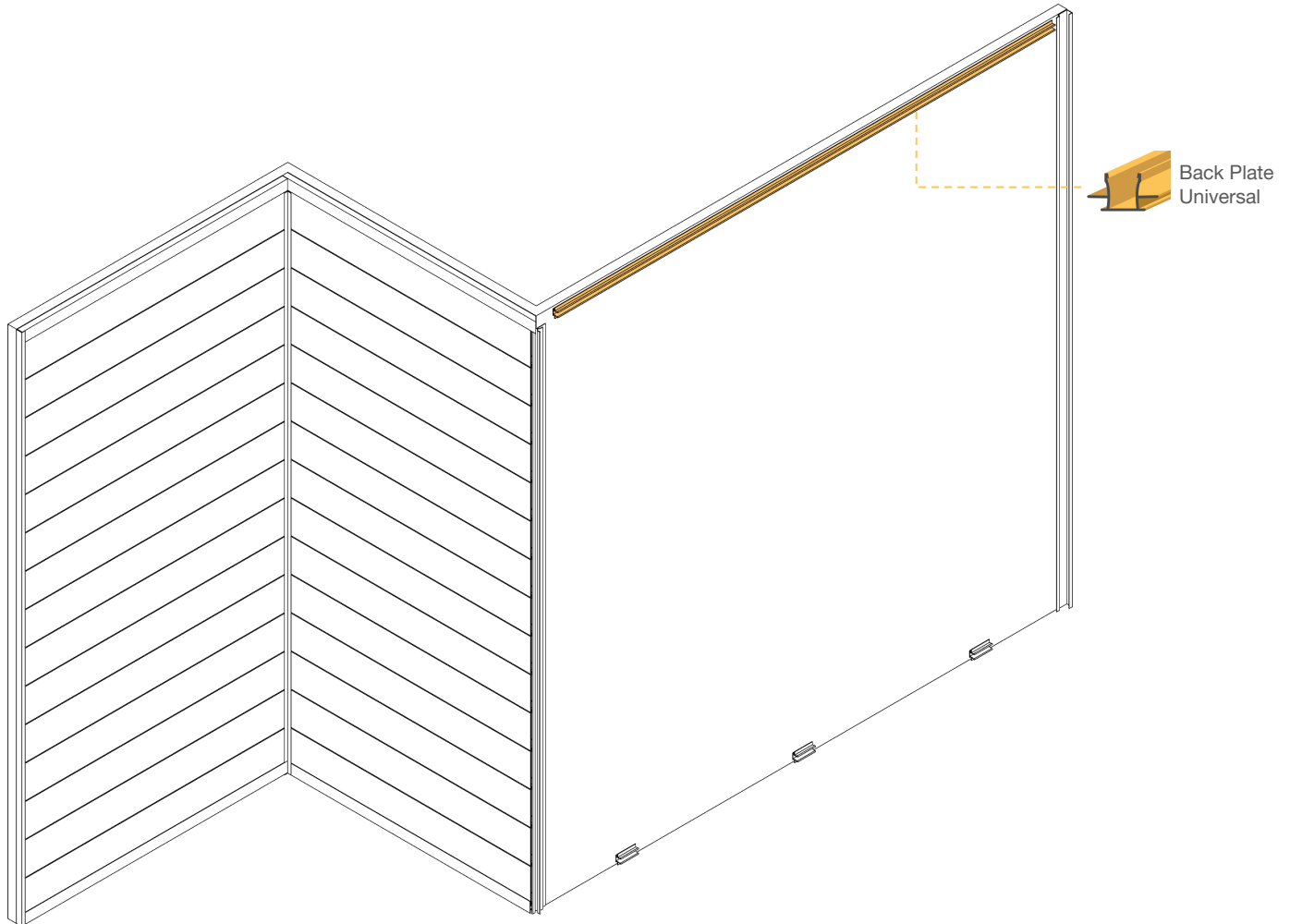
Note: In some installations, more than a full length of a top cap may be required. In this case, ensure that the seam is supported adequately by a back plate.

02



Plank Install 03

Fasten horizontal upper extrusions.



The final perimeter extrusion to be attached is the upper horizontal back plate.

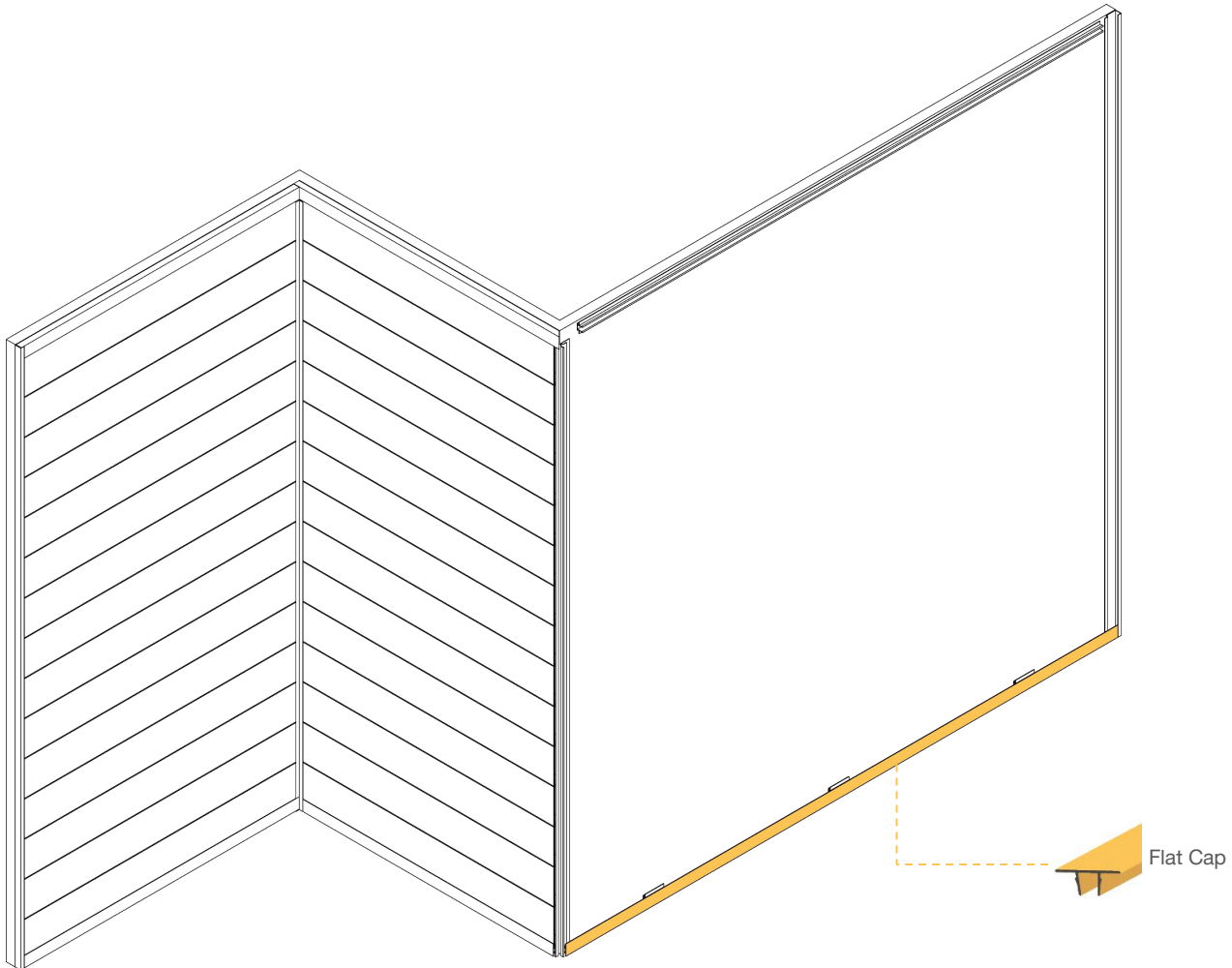
Leave a gap of 1/16" from the top edge to the edge of the back plate to ensure fit of a top cap. See Installation Guideline section for details (p11).

02



Plank Install 04

Engage baseline flat cap.



The flat cap needs to be cut to size and engaged using an AL13® SLED before the first row of plank is installed. A properly fit cap should tuck under both verticals, leaving approximately a 1/16" gap on either side to allow for thermal contraction and expansion. If a butt joint is required due to the length of the flat cap exceeding 12', the butt joint must occur on a shared back plate segment.

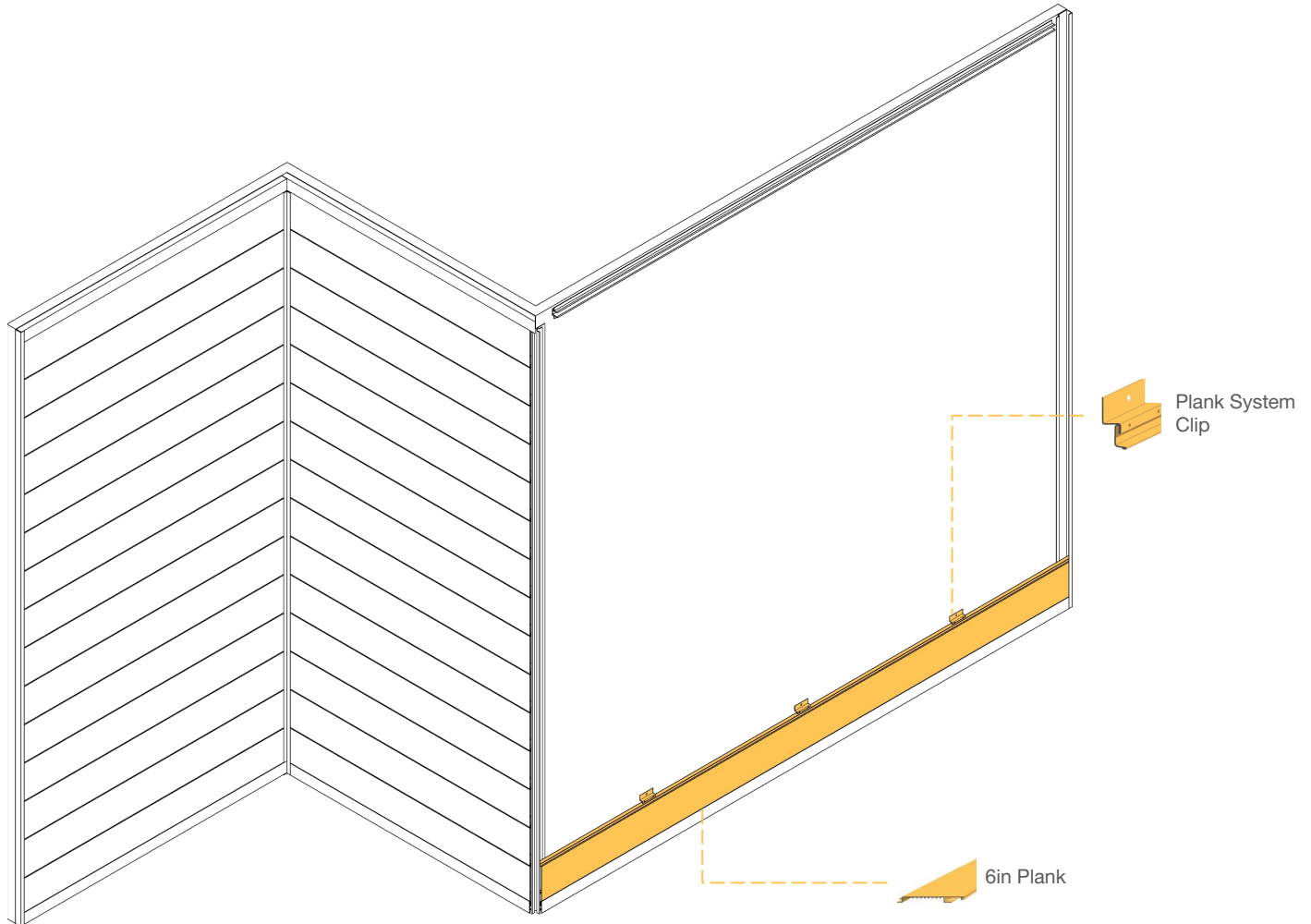
Engage the flat cap only where the back plate is present. Impacting the flat cap in the voids, i.e., between the back plates, will cause deformation of the flat cap.

02



Plank Install 05

Installing the planks.



A properly-cut plank should have a $\frac{1}{8}$ " gap from the frame components on either side to allow for thermal expansion.

It is essential the first row of plank be tucked behind the vertical tab of the frame components so that the fastening tongue is pointed upwards and the groove is pointing downwards.

Once the plank has been fitted and leveled to an even plane, it will be secured by attaching an AL13® Plank System Clip to the upwards pointing tongue. Make sure the clip is fully inserted before adding fastener to the through-hole.

A clip and fastener are to be attached to each plank once every 32" **max**.

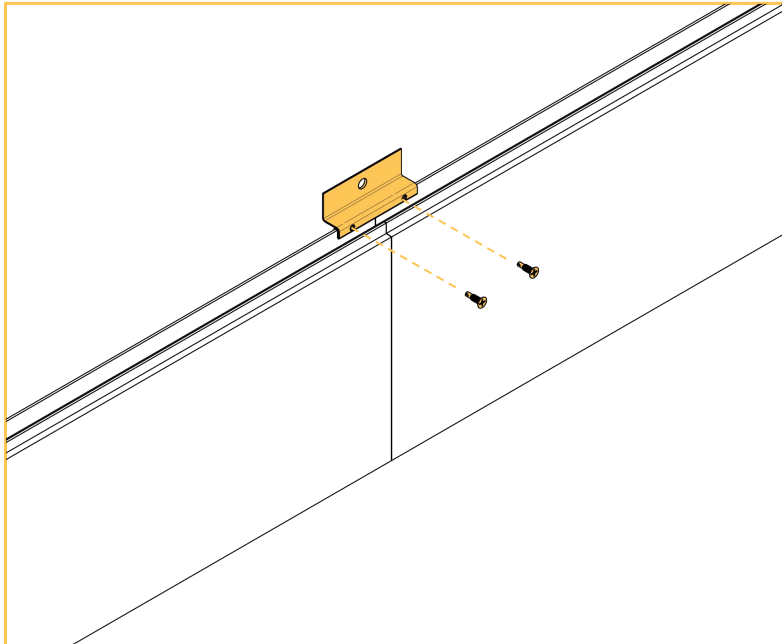
If the plank length is less than 32", a minimum of one system clip is required per plank.

02



Plank Install 06

Joint Clip



Important: When creating a butt joint, the joint ends must be prepared correctly. Remove burrs and ensure the ends are square.

The maximum consecutive run of planks will be 24' without a vertical brake (e.g., end frame, flat cap, or reveal cap). If the required length exceeds 12', joining two planks together will be required. A Plank Joint Clip is to be used at the seam of the butt joint to ensure a precision fit.

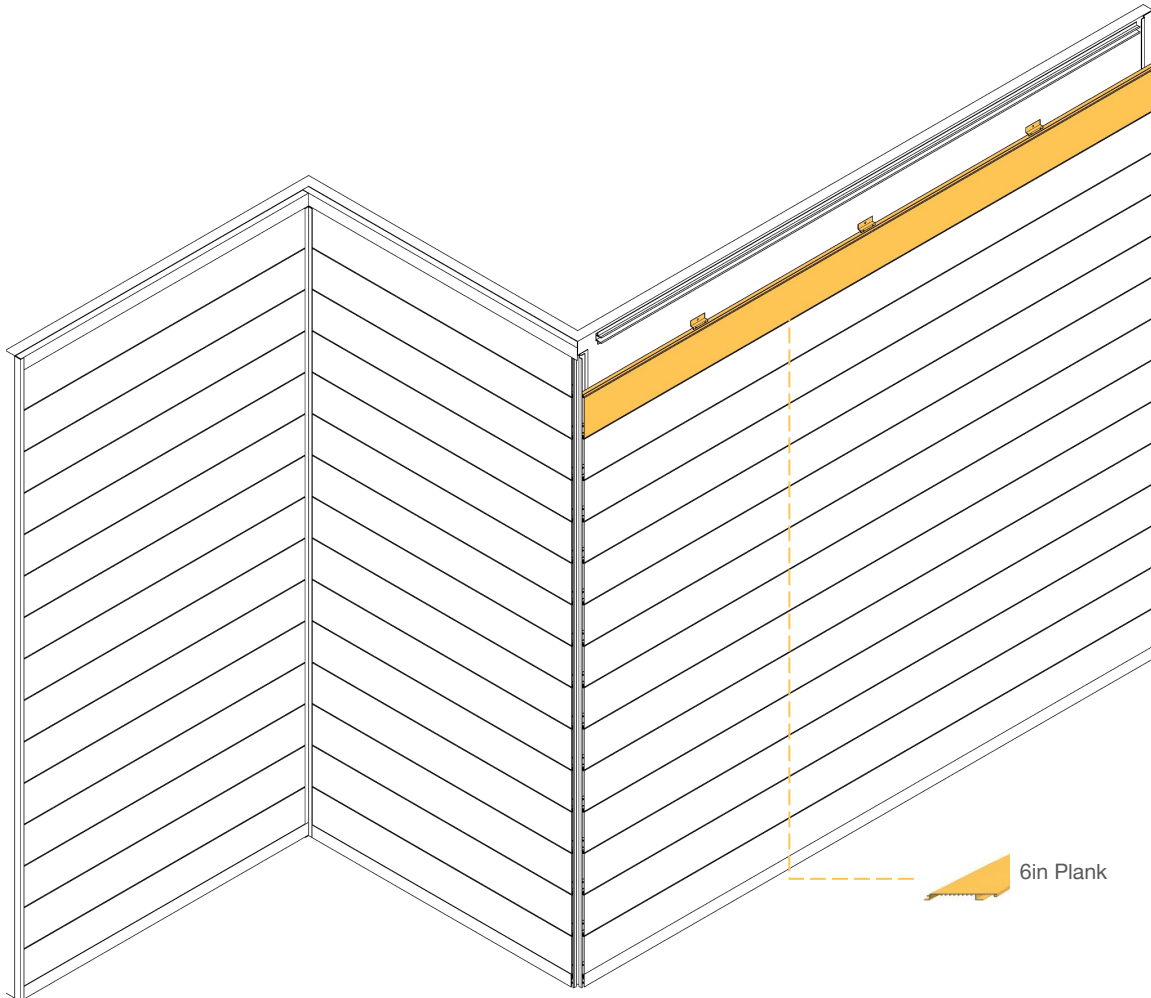
For situations that require a staggered pattern, ensure that the joints do not intersect.

02



Plank Install 06

Install the final row of plank.



The second-last row of plank is the last row that requires Plank System Clips to be installed.

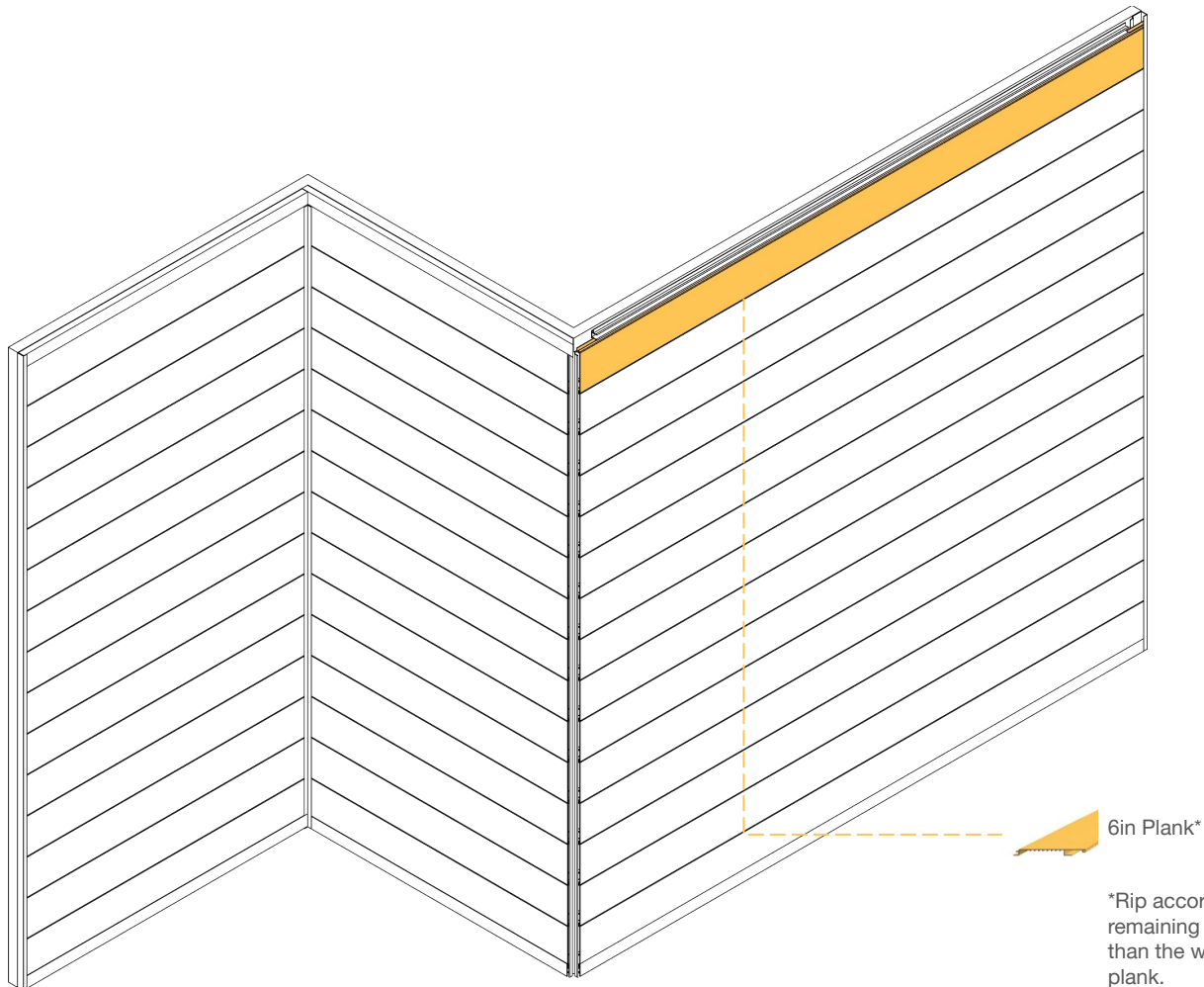
The top or final row of plank does not require Plank System Clips since it will be supported by a top cap.

02



Plank Install 07

Determine the final plank width required to terminate at the top of the wall.



The final or top row to be installed may require the plank to be ripped to width by a table saw to its appropriate dimension. Due to this, the top row's installation may vary from the regular installation.

If it is required to rip the plank down to a narrower width, the tongue side of the plank is to be removed. In this case, the top row of plank is secured by engaging the perimeter flat cap on to the perimeter back plate.

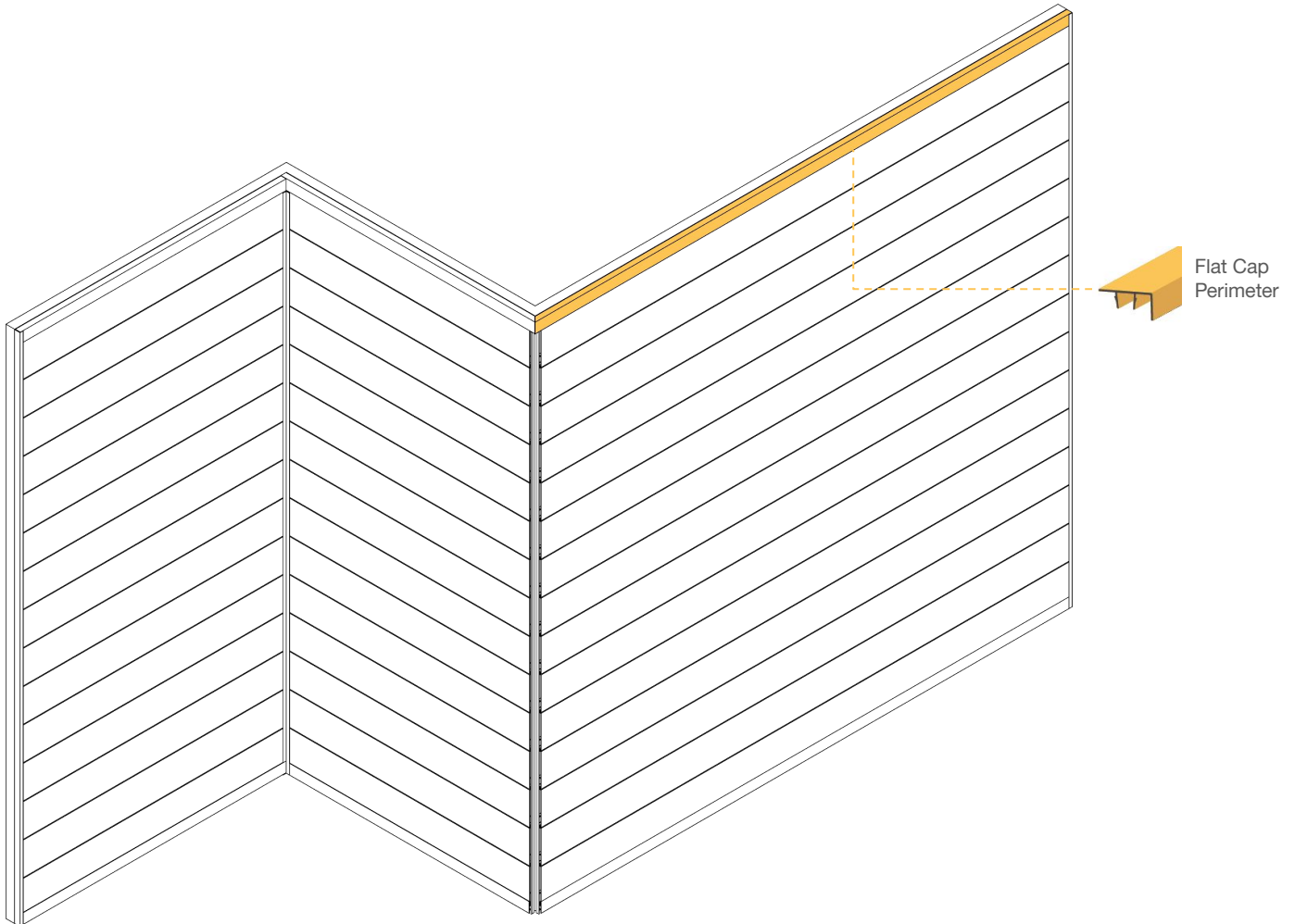
See the Installation Guidelines section for details (p.9).

02



Plank Install 08

Install the top cap for the final row of plank.



To secure the final row, a perimeter flat cap must be cut to length to fit behind the vertical frame extrusions. A proper fit should allow for a $\frac{1}{8}$ " gap on either side to allow for thermal expansion and contraction.

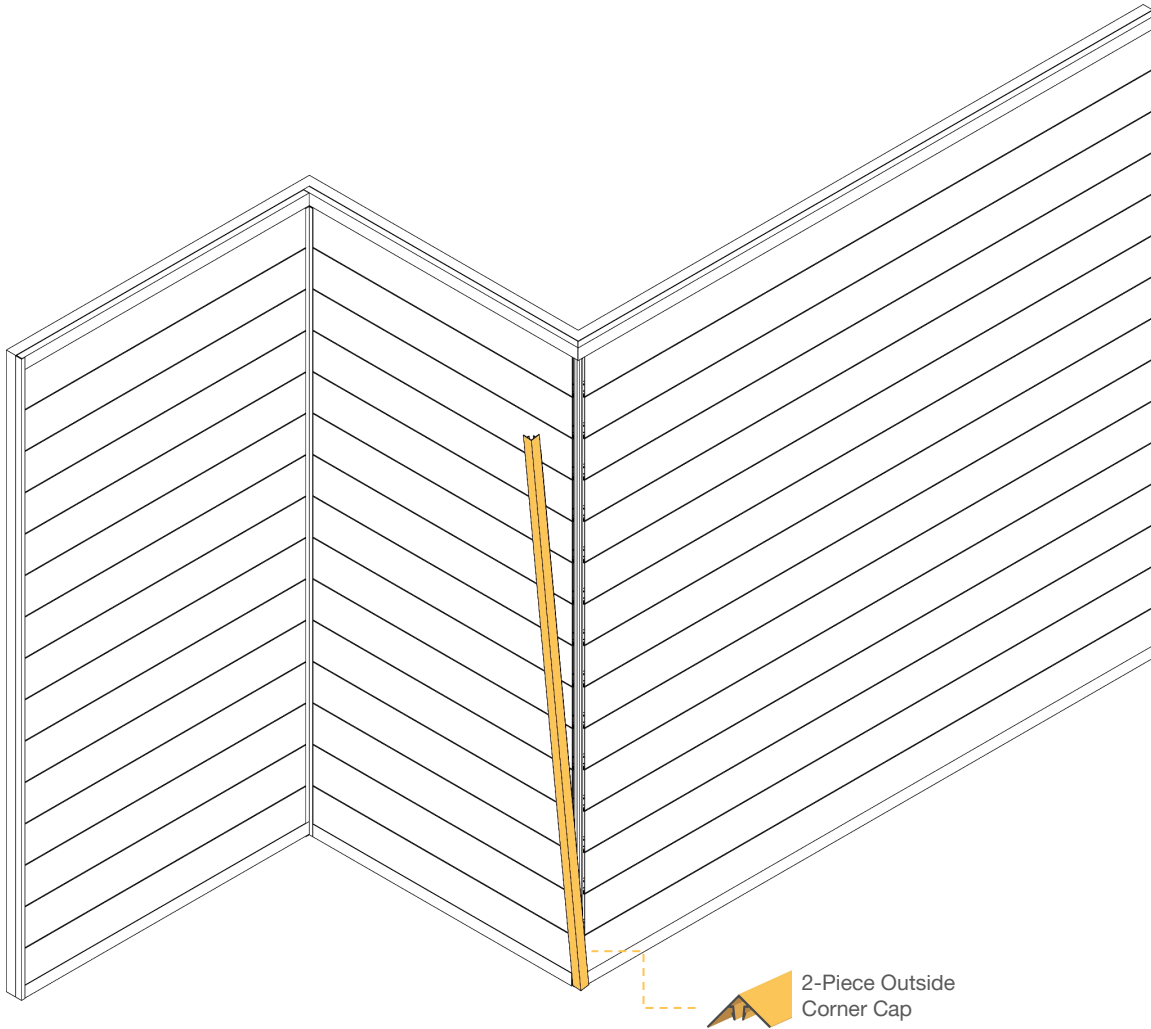
The perimeter flat cap should be hammered in place using an AL13® SLED with a rubber mallet.

02



Plank Install 09

Install Outside Corner Cap



To complete the wall assembly, install the outside corner cap.



Important: Install the outside corner cap with the 2OC SLED. See previous section for details.

02



Plank Install 10

Wall installation is complete.

