



LONGBOARD®
INSPIRING FACADES

PANELBOARD SYSTEM

INSTALLATION GUIDELINES

1. GENERAL

1.1. Product Description

Longboard® Panelboard is an extruded aluminum closed joint rainscreen panelized siding system, designed to be installed horizontally or vertically. Planks are available in standard lengths of 24' (7.3m) and single width of 6" (152.4mm). Components used for perimeter terminations, corners and panel trims are available in 12' (3.7m) lengths for most, with some in 24' (7.3m) lengths (see appendix for details).

1.2. Installation Considerations

Depth of system (measured from substrate to finished face):

Components = 9/16" (15mm) **total depth of the system*

Planks = 1/2" (12mm)

Longboard Products are not recommended for use on marine applications in direct contact with saltwater.

Longboard Panelboard is to be installed outboard of a weather-resistive barrier, including all flashings, following code and building requirements.

1.3. Cutting

⚠ Always be sure to wear appropriate PPE: eye & hearing protection.

Use standard wood-cutting tools such as a Table Saw & Miter Saw with a carbide blade (60-80 tooth) for non-ferrous metals (aluminum), Jig Saw, Hole-Saw & drill for attachments.

Cut planks to terminate inside components by 1/4" (6mm), to allow for expansion & contraction (see 1.4.1.). Trim the taped/punched ends of all stock length material by 1/2" (12mm) each end and discard (see 1.5.).

1.4. Fastening

Components should be hard-fastened* every 16" (406mm) O.C. directly through the flange.

**#8 pan-head self-drilling screws (not included) are recommended*

Planks are secured using Longboard Quick-Screen Clips (included for standard 32" (813mm) O.C.) fastened to the substrate with screws*.

**#8 pan-head screws (not included) are recommended*

⚠ All fasteners should be suitable for exterior use and be compatible with the substrate type.

See Table 1 to adjust fastener spacings of Planks, to meet specific wind-loads.
See Table 2 for the fastener spacing and location of the Starter.

Quick-Screen Clip Spacing - Wind-Load

Table 1: Maximum Tributary Area and Clip Spacing for Longboard Quick-Screen Clip

Maximum Factored Wind Load ¹ (psf)	6 in. Wide Planks			Maximum Factored Wind Load ¹ (psf)	6 in. Wide Planks		
	Maximum Tributary Area of Clips (in ²)	Maximum Horizontal Spacing (in)	Maximum Vertical Spacing ^{2,3} (in)		Maximum Tributary Area of Clips (in ²)	Maximum Horizontal Spacing (in)	Maximum Vertical Spacing ^{2,3} (in)
Sheathed Wood-Frame Wall w/ 1.5 in. lg. #8 pan head wood screws				Sheathed 18ga, 33ksi Steel Stud Wall w/ #8 Pan Head Self-Drilling Screws			
+/- 20	313	52	6	+/- 20	314	52	6
+/- 30	274	46	6	+/- 30	220	37	6
+/- 40	222	37	6	+/- 40	165	27	6
+/- 50	179	30	6	+/- 50	132	22	6
+/- 60	149	25	6	+/- 60	110	18	6
+/- 70	128	21	6	+/- 70	94	16	6
Sheathed Wood-Frame Wall w/ 2.0 in. lg. #8 pan head wood screws				Sheathed 16ga, 50ksi Steel Stud Wall w/ #8 Pan Head Self-Drilling Screws			
+/- 20	313	52	6	+/- 20	313	52	6
+/- 30	274	46	6	+/- 30	274	46	6
+/- 40	246	41	6	+/- 40	217	36	6
+/- 50	197	33	6	+/- 50	174	29	6
+/- 60	164	27	6	+/- 60	145	24	6
+/- 70	141	23	6	+/- 70	124	21	6

¹ - Wind loads are three second gust basic wind speed based, and assume all height, directionally, exposure, topographic, pressure and gust effect coefficients have been applied.

² - Spacing is from clip center to center

³ - Maximum vertical spacing limited by siding vertical dimension

⁴ - An unfactored dead load of 1.5 psf was assumed for the cladding.

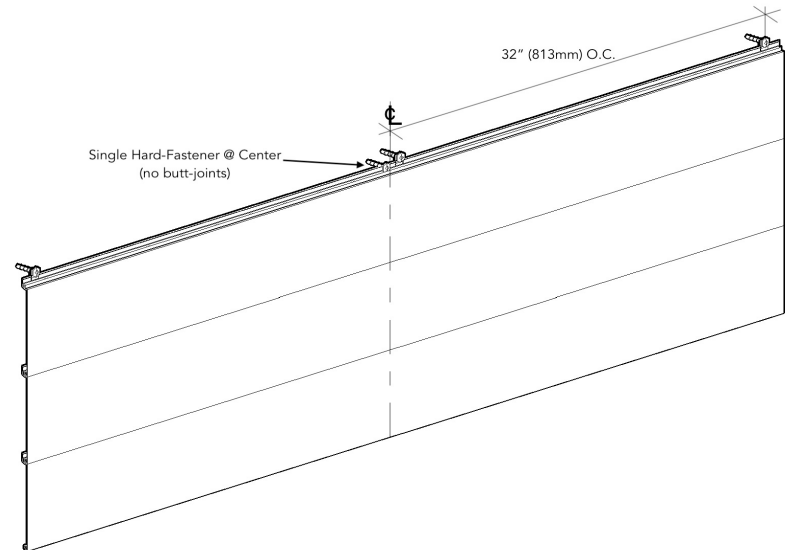
⁵ - If fastening to every second stud, the attachment stud shall be staggered between adjacent runs of siding.

⁶ - The Starter Strip shall be fastened at 16 in. o.c. with #8 self-drilling screws into 18 ga. 33 ksi steel studs or 1.5 in. long #8 wood screws into wood studs (min. S-P-F grade). The Starter Strip shall be fastened at 32 in. o.c. with #8 self-drilling screws into 16 ga. 50 ksi steel studs or 2.0 in. long #8 wood screws into wood studs (min. S-P-F grade).

Table 2: Fastening Requirements Longboard Starter

Backing Wall/ Fastener	Maximum Factored Wind Load ¹ (psf)	Siding Width (in)	Maximum Horizontal Screw Spacing (in)	Screw Location In Strip
Wood Stud w/ #8 - 1.5in lg. screws	+/- 20	6	16	End
	+/- 30		16	End
	+/- 40		16	Middle
	+/- 50		16	Middle
	+/- 60		16	Middle
	+/- 70		16	Middle
Wood Stud w/ #8 - 2.0in lg. screws	+/- 20	6	32	End
	+/- 30		16	End
	+/- 40		16	End
	+/- 50		16	Middle
	+/- 70		16	Middle
18ga 33ksi steel studs w/ #8 screws	+/- 20	6	16	End
	+/- 30		16	Middle
	+/- 40		16	Middle
	+/- 50		16	Middle
	+/- 60		16	Middle
	+/- 70		16	Middle
16ga 50ksi steel studs w/ #8 screws	+/- 20	6	32	End
	+/- 30		16	End
	+/- 40		16	End
	+/- 50		16	Middle
	+/- 60		16	Middle
	+/- 70		16	Middle

Quick-Screen Clips allow for free movement of the planks to expand & contract during thermal changes (see 1.4.1.).



TIP! It is good practice to hard-fasten each plank directly through the flange, near the center of each length to keep the planks from migrating.

⚠ If installing with staggered butt-joints, hard-fasten the two planks at the butt-joint to ensure joints do not open up (see *Detail A&B*). Fasteners should anchor into a solid secure framing member, blocking, furring strip or backer plate* (Starter used as a backer) etc. (*see *Detail B*). Use touch-up paint pens (purchased separately) to coat the ends of the two (2) planks at the butt-joint.

DO NOT hard fasten more than one (1) location per plank:

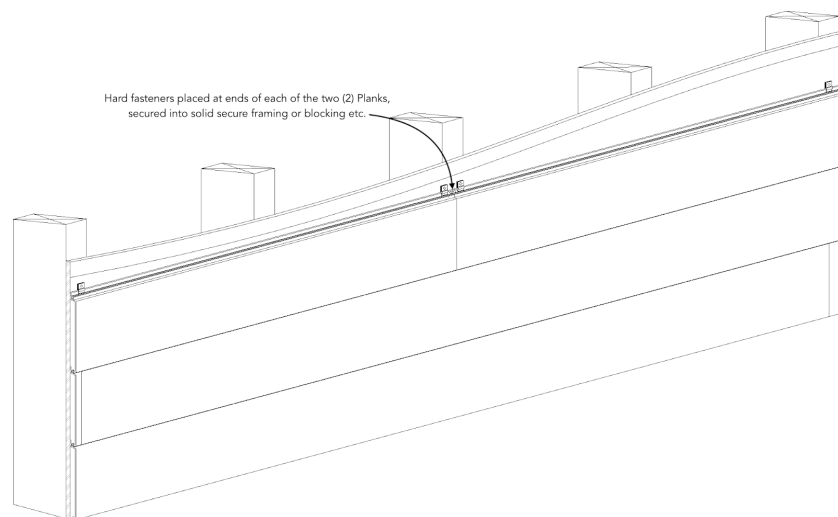
Butt-joints: at the joints

No butt-joints: center of planks

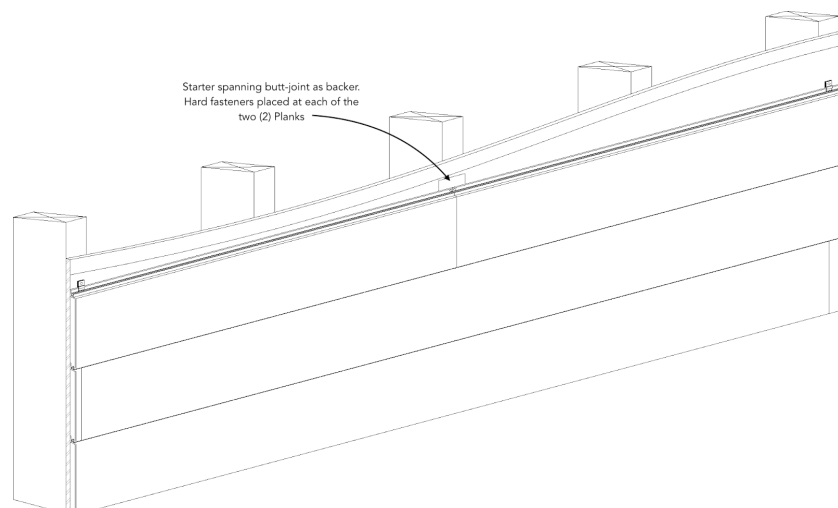
DO NOT install more than one (1) butt-joint between two components.

DO NOT hard fasten a plank to a component trim, as this will restrict its ability to expand & contract into the component.

Detail A



Detail B



1.4.1. Expansion & Contraction

All Planks & Components will expand & contract 1/4" (6mm) over 24' (7.3m) in all directions, measured over a 30°C (54°F) temperature range. Expansion components (U Cap & Base) should be installed at panelized ends, following these rules:

1-½" U-Cap & Base: every 24' (7.3m) or less

¾" U-Cap & Base: every 12' (3.7m) or less

Each plank must terminate into a minimum of one (1) component to allow for expansion & contraction.

See **3. System Installation** for layout details and tables below for expansion/contraction calculations per foot/meter of material.

TABLE 1 - IMPERIAL

		AVERAGE TEMPERATURE AT TIME OF CUTTING & INSTALLATION											
°C		-50	-40	-30	-20	-10	0	10	20	30	40	50	
°F		-58	-40	-22	-4	14	32	50	68	86	104	122	
MIN/MAX POST CONSTRUCTION TEMP.	°C	°F	EXPANSION OR CONTRACTION (INCH/FOOT)										
	-50	-58	0.000	-0.003	-0.005	-0.008	-0.011	-0.014	-0.016	-0.019	-0.022	-0.024	-0.027
	-40	-40	0.003	0.000	-0.003	-0.005	-0.008	-0.011	-0.014	-0.016	-0.019	-0.022	-0.024
	-30	-22	0.005	0.003	0.000	-0.003	-0.005	-0.008	-0.011	-0.014	-0.016	-0.019	-0.022
	-20	-4	0.008	0.005	0.003	0.000	-0.003	-0.005	-0.008	-0.011	-0.014	-0.016	-0.019
	-10	14	0.011	0.008	0.005	0.003	0.000	-0.003	-0.005	-0.008	-0.011	-0.014	-0.016
	0	32	0.014	0.011	0.008	0.005	0.003	0.000	-0.003	-0.005	-0.008	-0.011	-0.014
	10	50	0.016	0.014	0.011	0.008	0.005	0.003	0.000	-0.003	-0.005	-0.008	-0.011
	20	68	0.019	0.016	0.014	0.011	0.008	0.005	0.003	0.000	-0.003	-0.005	-0.008
	30	86	0.022	0.019	0.016	0.014	0.011	0.008	0.005	0.003	0.000	-0.003	-0.005
	40	104	0.024	0.022	0.019	0.016	0.014	0.011	0.008	0.005	0.003	0.000	-0.003
50	122	0.027	0.024	0.022	0.019	0.016	0.014	0.011	0.008	0.005	0.003	0.000	

TABLE 2 - METRIC

		AVERAGE TEMPERATURE AT TIME OF CUTTING & INSTALLATION											
°C		-50	-40	-30	-20	-10	0	10	20	30	40	50	
°F		-58	-40	-22	-4	14	32	50	68	86	104	122	
MIN/MAX POST CONSTRUCTION TEMP.	°C	°F	EXPANSION OR CONTRACTION (MM/METER)										
	-50	-58	0.000	-0.230	-0.460	-0.690	-0.920	-1.150	-1.380	-1.610	-1.840	-2.070	-2.300
	-40	-40	0.230	0.000	-0.230	-0.460	-0.690	-0.920	-1.150	-1.380	-1.610	-1.840	-2.070
	-30	-22	0.460	0.230	0.000	-0.230	-0.460	-0.690	-0.920	-1.150	-1.380	-1.610	-1.840
	-20	-4	0.690	0.460	0.230	0.000	-0.230	-0.460	-0.690	-0.920	-1.150	-1.380	-1.610
	-10	14	0.920	0.690	0.460	0.230	0.000	-0.230	-0.460	-0.690	-0.920	-1.150	-1.380
	0	32	1.150	0.920	0.690	0.460	0.230	0.000	-0.230	-0.460	-0.690	-0.920	-1.150
	10	50	1.380	1.150	0.920	0.690	0.460	0.230	0.000	-0.230	-0.460	-0.690	-0.920
	20	68	1.610	1.380	1.150	0.920	0.690	0.460	0.230	0.000	-0.230	-0.460	-0.690
	30	86	1.840	1.610	1.380	1.150	0.920	0.690	0.460	0.230	0.000	-0.230	-0.460
	40	104	2.070	1.840	1.610	1.380	1.150	0.920	0.690	0.460	0.230	0.000	-0.230
50	122	2.300	2.070	1.840	1.610	1.380	1.150	0.920	0.690	0.460	0.230	0.000	

1.5. Surface Finish

The Longboard Panelboard system is available in a range of Woodgrain, Solid & Specialty Finishes with custom* solid colors available upon request. **Additional lead times apply*
Longboard Woodgrains have a repeat pattern, shipped in sets mated back-to-back in each box. Install these as they come out of the box, as an A&B pattern staggering each plank approx. 1-2' (305-610mm) from the previous plank to achieve a random pattern aesthetic.

All Longboard Products are produced 1" (25mm) oversized, as one end is hole-punched (all finishes) and both ends have 1/2" (12mm) of masking tape (woodgrain finishes only) which must be cut off for best results.



1.6. Material Ordering & Delivery

Planks are sold in box quantities:

96 SQ FT/Box (8/24's) w. 90pcs Quick-Screen Clips included*

*(*for 32" (813mm) o.c. attachment)*

Components are sold individually by the 12' (3.7m) length.

Lead time is 3-4 weeks* *(*subject to change)*, delivered on 24' (7.3m) long skids weighing up to 2000 lbs. A mechanical lift with forks is required on site to receive the order.

⚠ Always inspect the delivery for damage and contact LB ASAP if there are any issues: info@longboardproducts.com or 1-800-604-0343 and include your PO# and any pictures if possible. Mark the delivery receipt as "damaged" and accept the delivery as-is. Longboard is not responsible for the installation of blemished or damaged material.

1.7. Storage & Handling

Be sure to store the material flat, keep it dry, safe & secure and remain in unopened cartons until ready to be installed. Ensure proper care when handling, to avoid damage on site.

2. FRAMING REQUIREMENTS

2.1. General

Always consult the local building authority and follow local building code requirements.

2.2. Load Capacity

The Longboard Panelboard system weighs approx. 1.5lbs/sq.ft. **see section drawings for individual item weights.*

2.3.1. Wood-Framing

Traditional stud wall framed at 16" (406mm) O.C. with or without solid secure blocking running perpendicular to the plank orientation (for vertical plank applications), exterior wall sheathing, weather resistive barrier (wrb). If furring strips are used: install at 16" (406mm) O.C.

2.3.2. Metal Framing

18ga. (minimum)(see 1.4.Table 1) galvanized steel framing at 16" (406mm) O.C. , exterior wall sheathing, wrb. If furring strips are used: install at 16" (406mm) O.C.

2.3.3. CMU/Concrete

Wrb, wood or metal furring strips (see 2.3.1. and 2.3.2. for standard requirements)

2.4. Framing Layout

Provide solid secure framing and/or blocking at 16" (406mm) O.C. for material support and attachment at 32" (813mm) O.C. (standard requirements). Where expansion trims are used; ensure all components land on a stud, blocking or 5/8" (16mm) wood sheathing is used.

3. SYSTEM INSTALLATION

3.1. Layout

Measure and layout your wall area to consider plank & component alignment with fixtures, penetrations and adjacent walls, for the desired appearance.

Planks are 6" (152mm) wide.

Panel trim options and layout dimensions are:

1-½" (38mm) Panelboard U-Channel for up to 24' (7.3m) long panels:

Add 5/8" (15.9mm) to unit measure of 6" (152mm) planks, from outer edge of J-Track to center of 1-½" (38mm) U-Channel, then 1" (25mm) from center to center of 1-½" (38mm) U-Channel thereafter.

Start to Panel = 6"(X) + 5/8" to CL

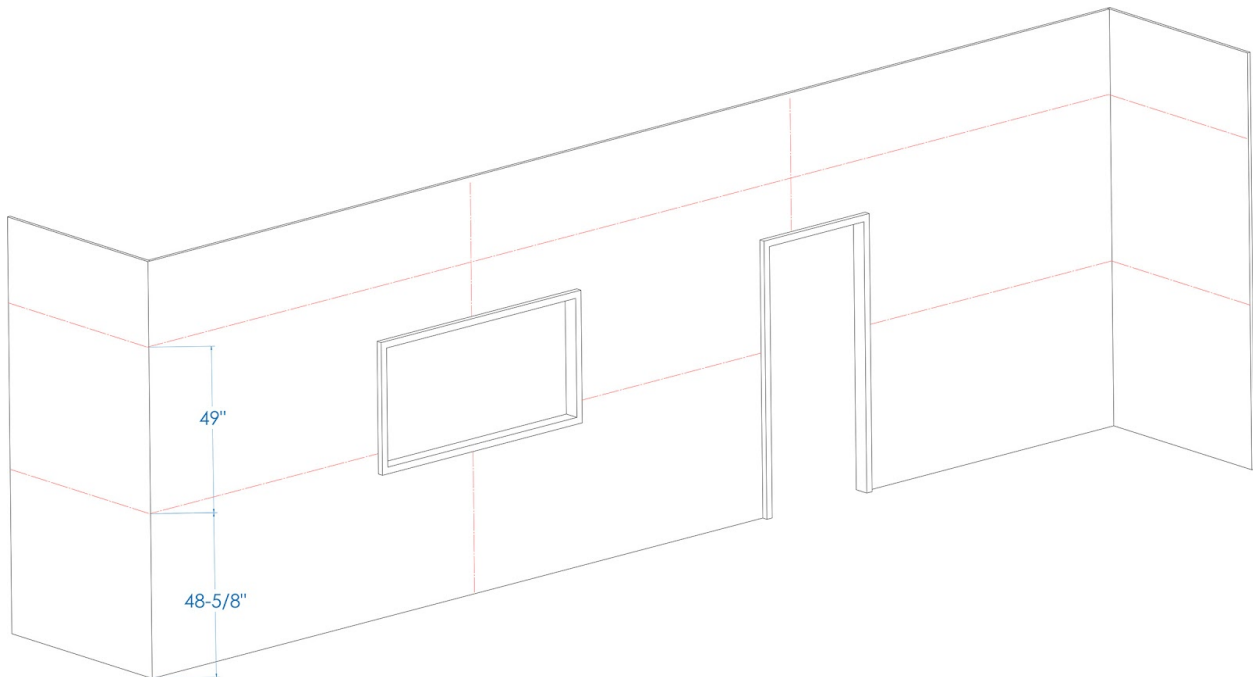
Panel to Panel = 6"(X) + 1" to CL

¾" (19mm) Panelboard U-Channel for up to 12' (3.7m) long panels:

Add ¼" (6mm) to unit measure of 6" (152mm) planks, from outer edge of J-Track to center of ¾" (19mm) U-Channel, then 3/8" (10mm) from center to center of ¾" (19mm) U-Channel thereafter.

Start to Panel = 6"(X) + ¼" to CL

Panel to Panel = 6"(X) + 3/8" to CL



TYPICAL HORIZONTAL PANELS USING 1-½" (38mm) U-CHANNEL & U-CAP SHOWN

3.2. Component Installation

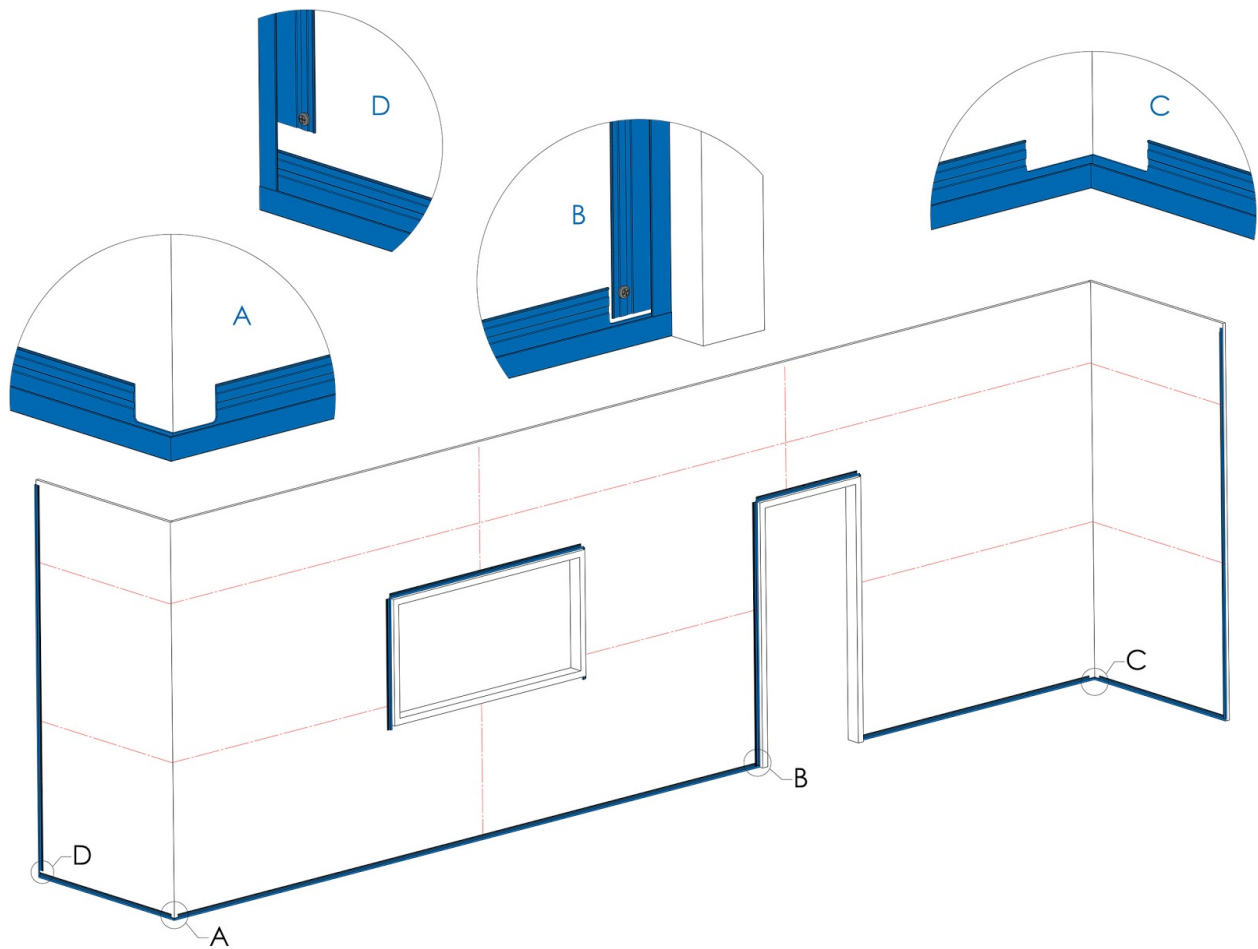
It is good practice to leave a 1/4" (6mm) gap between every 2nd joint or 24' (7.3m) of all components, to allow for expansion & contraction.

**see Appendix for material details or website for full info section drawings*

3.2.①. J-Track

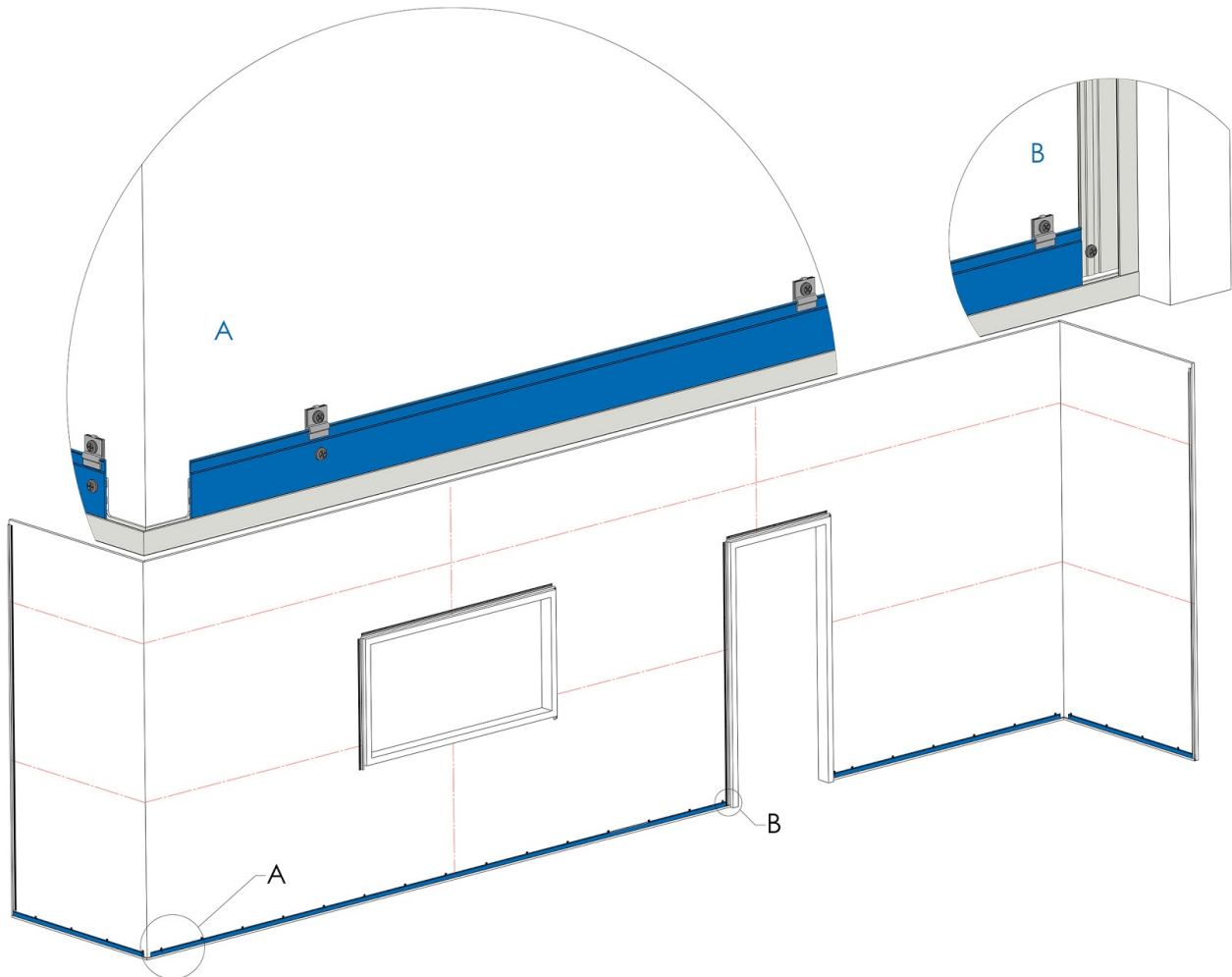
Install J-Track along the bottom edge of the wall area(s), end wall conditions, along the sides and top of doors, windows & other penetrations.

drill weep holes , do not secure where Starter will be installed (see 3.2.②.). Notch J-Track flange at locations of intersecting J-Track and Single Piece Corners



3.2.②. Starter

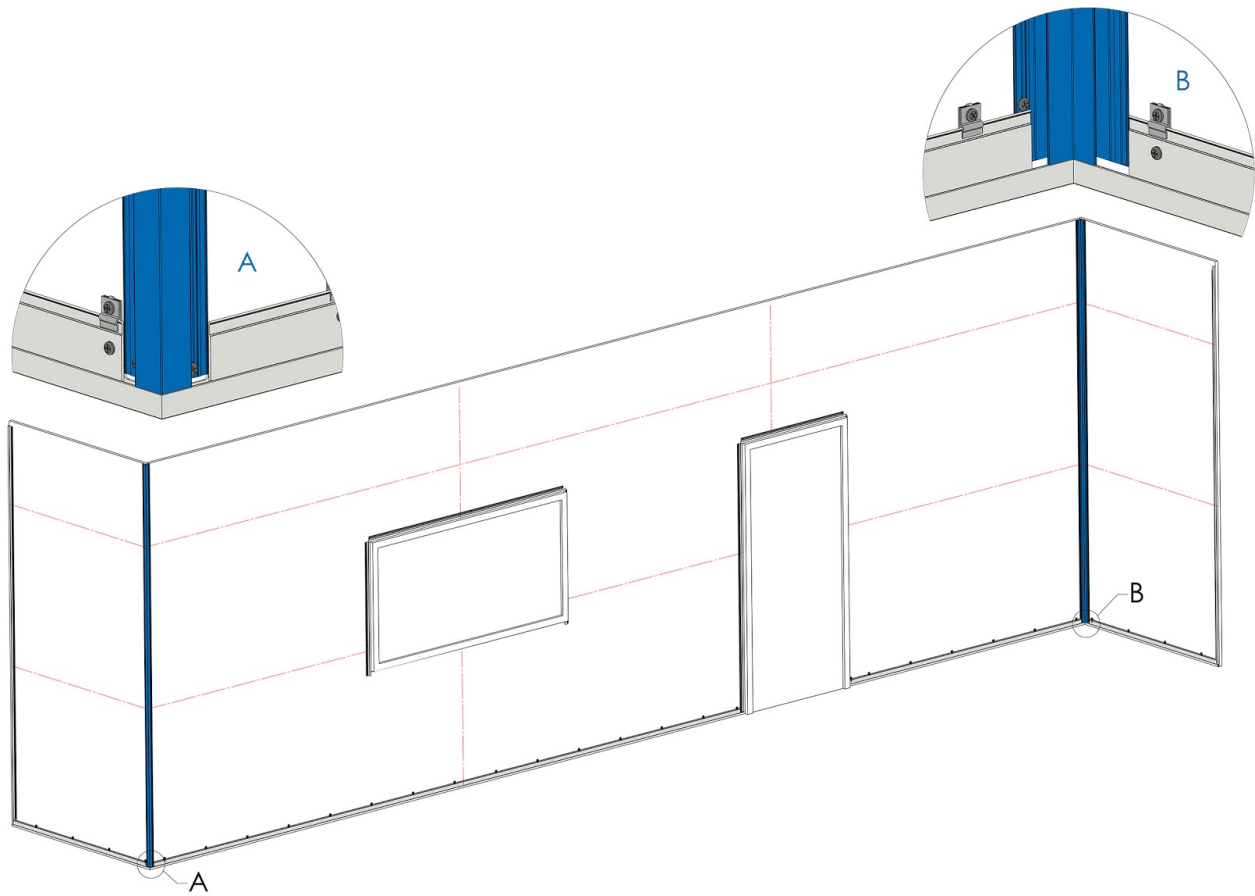
Install Starter along the bottom of the wall (horizontal install) nested inside J-Track. Install using Quick-Screen Clips & hard-fasten through J-Track or two Starters back-to-back (vertical install) at center of panel, for equal width planks at either end.



3.2.③. Corners

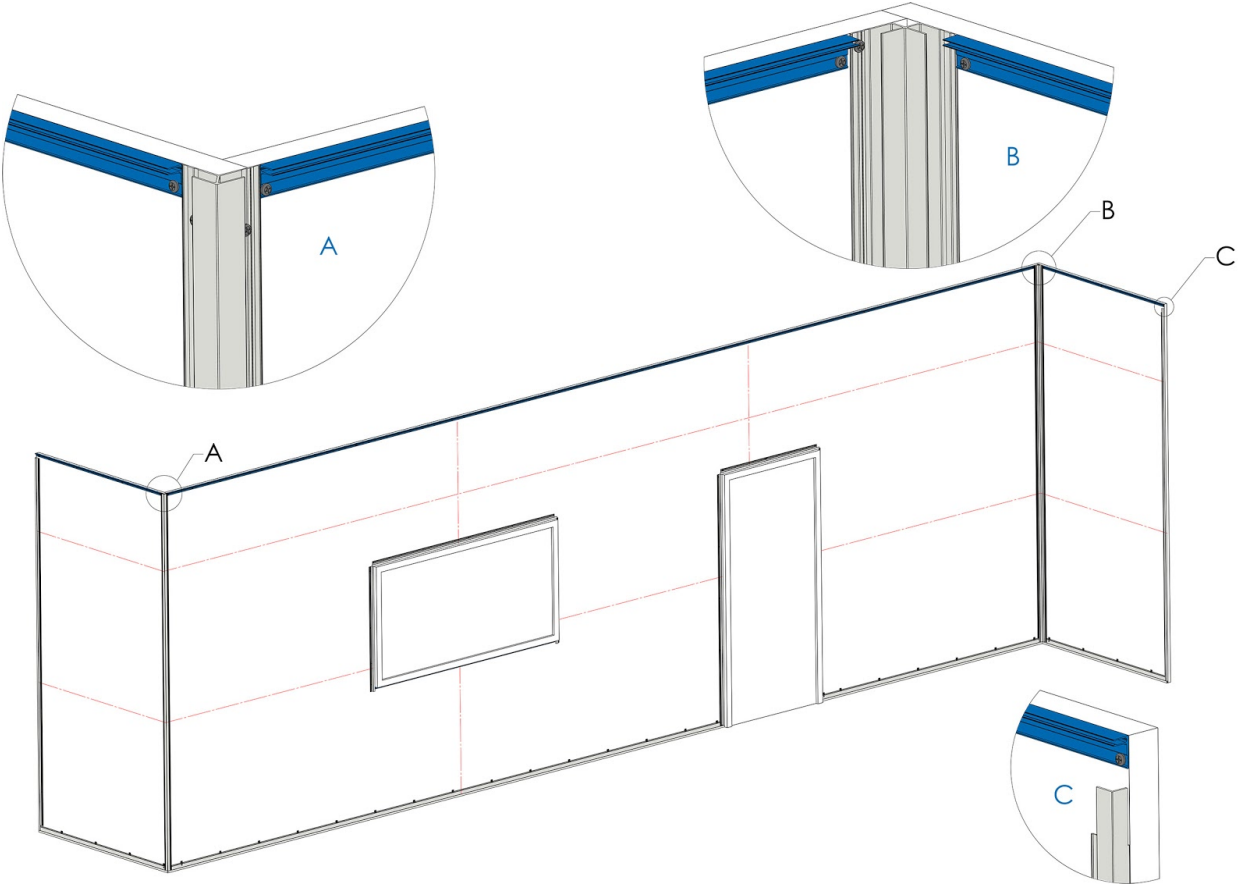
Install Inside & Outside Corners.

**Option of Single Piece or 2pc Reversible Corner (2pc. Recommended for vertical Panelboard installs)*



3.2.④. End Trim Snap-Cap (base)

Install the 2pc End Trim Snap-Cap (base only) along top of walls and underside of windows (horizontal installs) or end wall terminations where parallel to the planks (vertical planks).

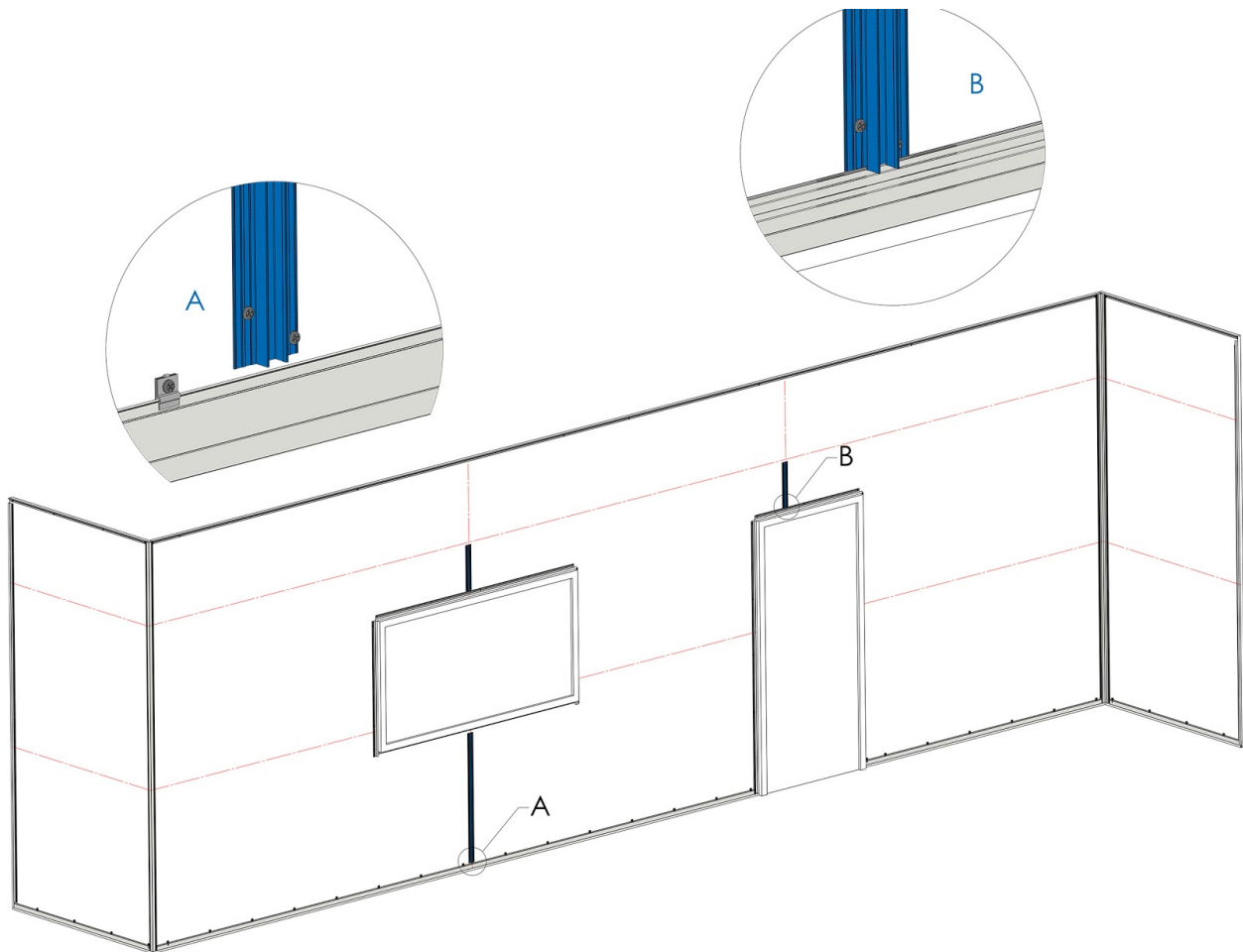


3.2.⑤. Expansion Base

Install Base for U Cap to establish panel lengths, ensuring the Base is landing on framing or blocking etc.

1-½" (38mm) U-Cap & Base for up to 24' (7.3m) long panels

¾" (19mm) U-Cap & Base for up to 12' (3.7m) long panels

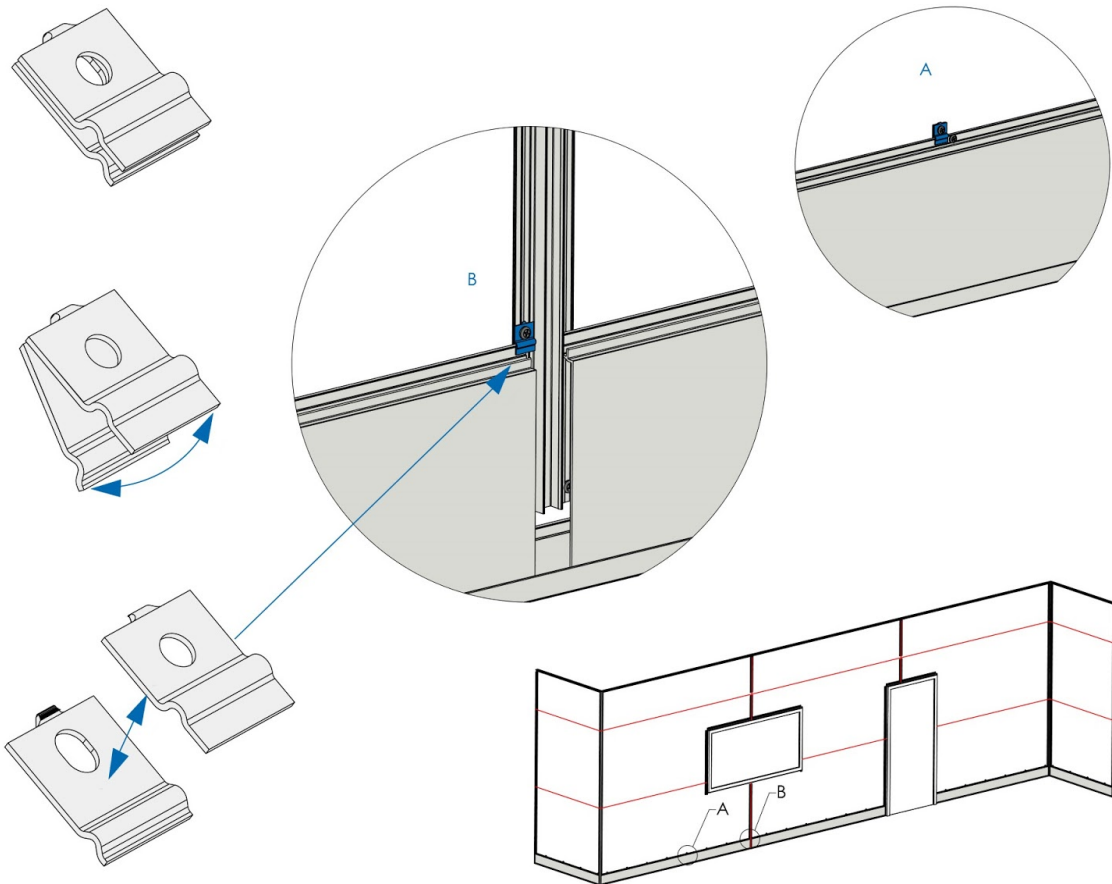
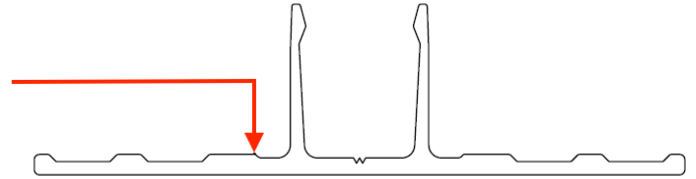


3.2.⑥. Planks

Install the first row of planks, engaging with the tongue of the Starter. Check for a level & flat installation, shim Quick-Screen Clips where needed to correct any substrate inconsistencies. Secure the ends by splitting Quick-Screen Clip in half to attach on BASE flange (see Detail B). Place a single hard-fastener near the center of each plank (see Detail A) to prevent migration. *If installing with butt-joints; hard fasten each plank at the butt-joint end only.

TIP! It is good practice to check your installation every 2-3 rows for level/plumb and flat/straight, for best results.

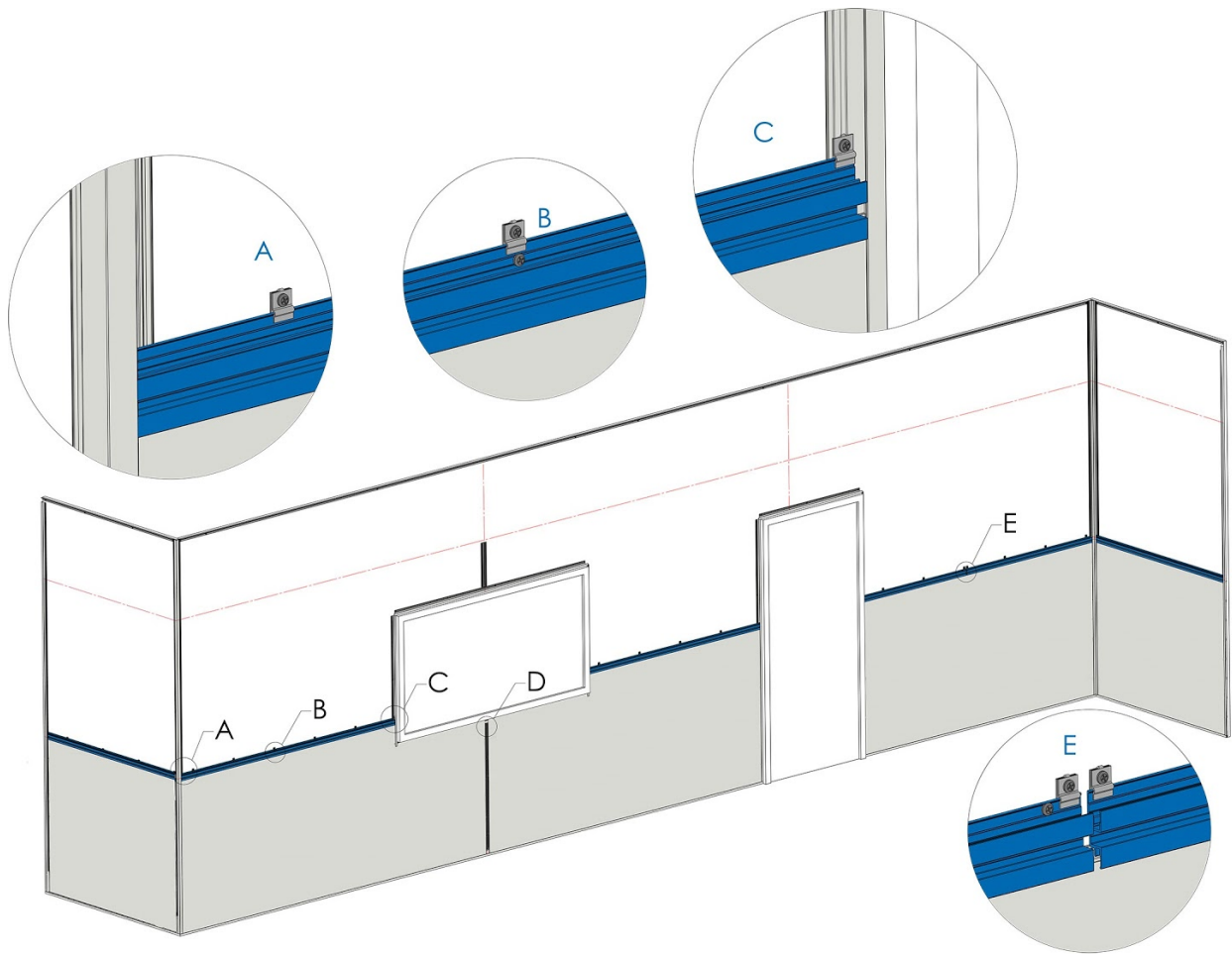
⚠ Install Planks to this point on the expansion Base (shown on $\frac{3}{4}$ " U-Cap & Base only)



3.2.⑦. U CHANNEL

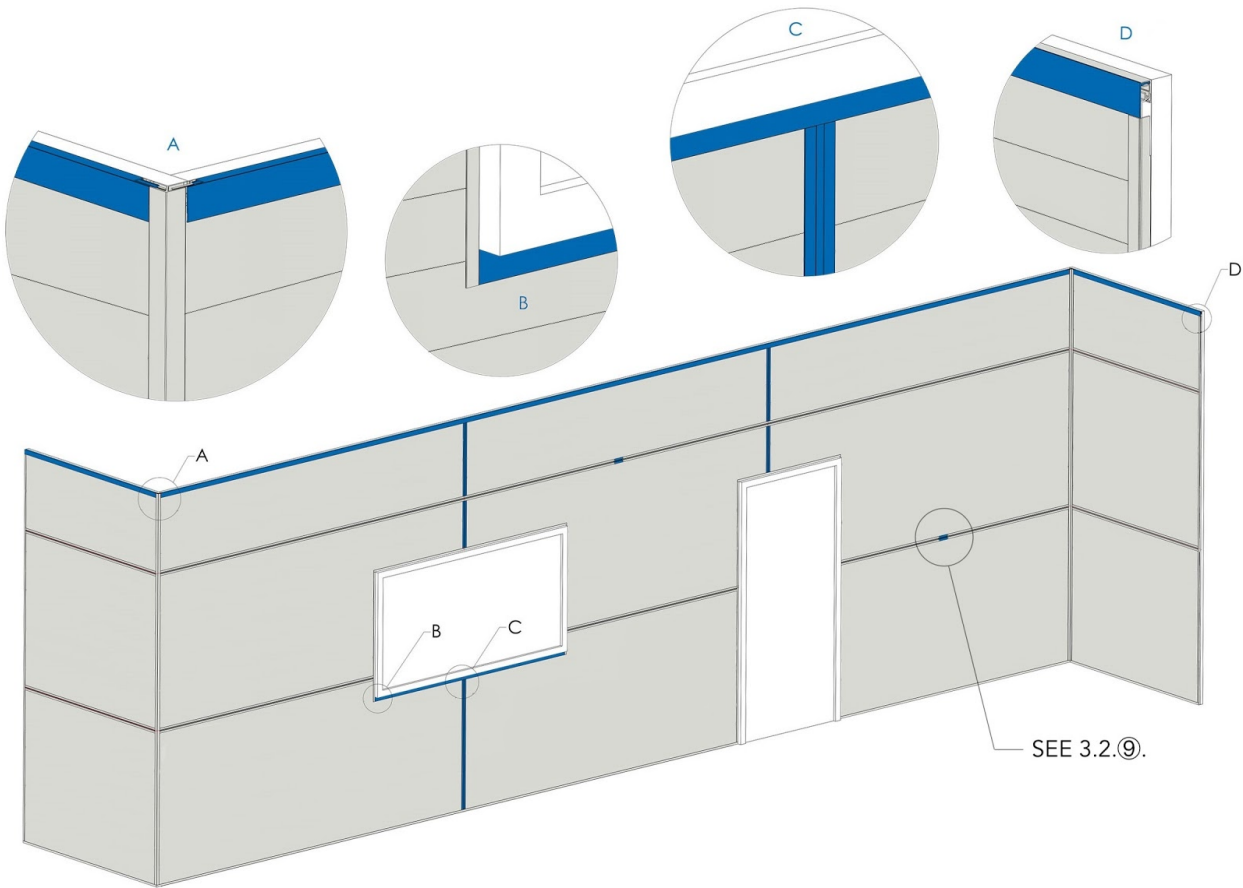
Install U Channel to define the panel size parallel to the planks. Uses tongue & groove to engage with planks above and below. Options are: 1-½" (38mm) or ¾" (19mm)* (*max. 12' long panels). Leave a ¼" (6mm) gap at butt-joints when joining multiple U Channels, to be covered using U Channel End Sleeve (see 3.2.⑨).

Continue with the PLANK installation.



3.2.⑧. Component Caps

Install all caps: U Cap, End Trim Snap-Cap, Finish Cap. Use a rubber mallet, hammer and block etc. to protect the finish during this process.

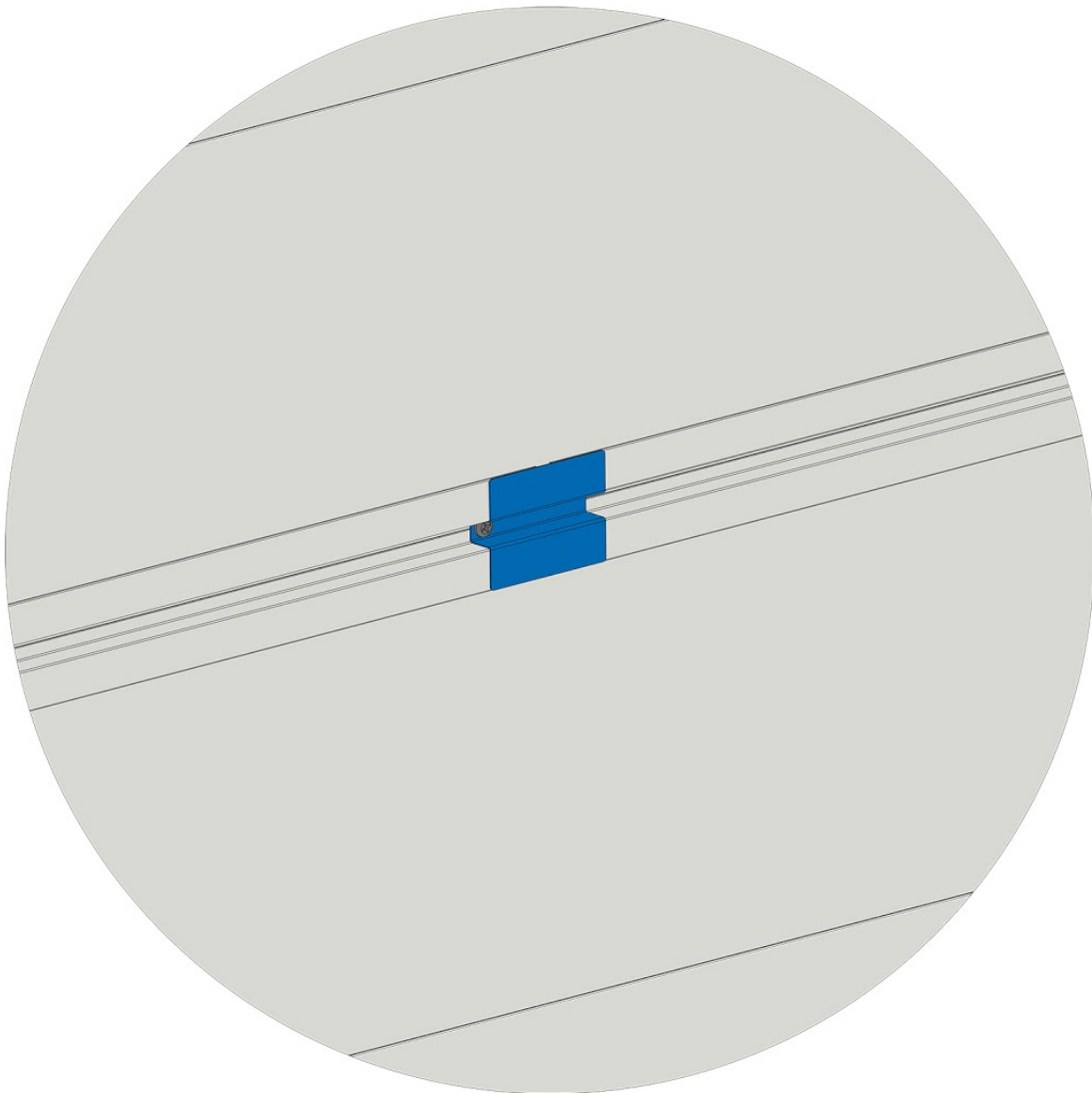


3.2.⑨. U Channel End Sleeve

Install U CHANNEL END SLEEVE to butt-jointed ends of U Channel. Center in place to cover the 1/4" gap and fasten accordingly:

1-1/2" (38mm) U Channel End Sleeve: screw in place to one end of U Channel with the supplied black #6 1/2" Phillips Screw

3/4" (19mm) U Channel End Sleeve: use structural silicone (not included) on end side of the sleeve, to adhere to the end of one U Channel



4. Cleaning Recommendations

**see Cleaning Guide for full requirements*

longboardproducts.com

While Longboard finishes require zero maintenance, we do recommend periodic cleaning to keep the product looking its best. Our finish is tested to withstand corrosion, fading and normal wear, however, neglect and rough conditions could have negative effects on the surface finish. These effects will not negate the structural performance of the product, but prolonged exposure to these conditions may result in permanent markings or surface damage.

Cleaning should be done in mild weather, and never in direct sunlight. Always complete a test patch on an inconspicuous area to ensure your detergent is suitable for the surface.

Your Longboard products should be cleaned immediately after installation. This is to remove any construction soils such as oils or dust. How to complete this initial cleaning depends on the level of dirt and the nature of the soil. See the cleaning guide for our suggestions based on soil level. Basic methods use a combination of moderate water pressure, soft sponge/brush and a mild detergent.

⚠ NEVER use aggressive acid or alkaline cleaners on Longboard finishes. Do not use cleaners containing Trisodium Phosphate, Phosphoric Acid, Hydrochloric Acid, Hydrofluoric Acid, Fluorides or any other compound that is known to react with metal.

Always follow the product instructions for dilution. Cleaning the surface with a cleanser that is not diluted may result in damage to the coating.



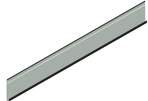

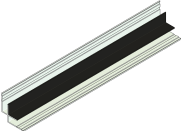



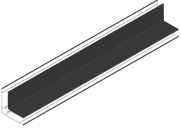

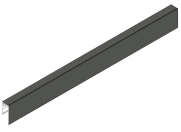

5. WARRANTY

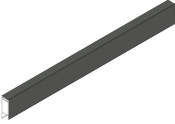














Upon substantial completion of the project, register for warranty online here:

longboardproducts.com/warranty

⚠ Registration is required for the warranty to be in effect.

APPENDIX

INSTRUCTION REF. #	IMAGE	DESCRIPTION	TYPICAL USE	SECTION DETAIL (scan or click)
①		J-TRACK, 12' (3.7m) LENGTHS, WOODGRAIN, SOLID, SPECIALTY, CUSTOM SOLID	PERPENDICULAR TO PLANKS AROUND WINDOWS, DOORS & END CONDITIONS	
②		STARTER, 12' (3.7m) LENGTHS, MILL FINISH (RAW ALUMINUM), WOODGRAIN, SOLID, SPECIALTY, CUSTOM SOLID	PARALLEL TO THE STARTING PLANK	
③		SINGLE PIECE INSIDE CORNER, 12' (3.7m) LENGTHS, WOODGRAIN, SOLID, SPECIALTY, CUSTOM SOLID.	INSIDE CORNER CONDITIONS, PERPENDICULAR TO PLANKS	
③		SINGLE PIECE OUTSIDE CORNER, 12' (3.7m) LENGTHS, WOODGRAIN, SOLID, SPECIALTY, CUSTOM SOLID	OUTSIDE CORNER CONDITIONS, PERPENDICULAR TO PLANKS	
③ ⑧		TWO-PIECE REVERSIBLE CORNER, 12' (3.7m) LENGTHS, WOODGRAIN, SOLID, SPECIALTY, CUSTOM SOLID	OUTSIDE & INSIDE CORNER CONDITIONS, PARALLEL & PERPENDICULAR TO PLANKS	
② ⑧		FINISH CAP/FINISH BASE, 12' (3.7m) LENGTHS, WOODGRAIN, SOLID, SPECIALTY, CUSTOM SOLID	PERPENDICULAR TO PLANKS, USED AS A 2PC J-TRACK OPTION	

INSTRUCTION REF. #	IMAGE	DESCRIPTION	TYPICAL USE	SECTION DETAIL (scan or click)	
④ ⑧		END TRIM SNAP-CAP, 12' (3.7m) LENGTHS, WOODGRAIN, SOLID, SPECIALTY, CUSTOM SOLID	PARALLEL TO PLANKS, USED AS A TERMINATION COMPONENT		
⑤ ⑧		1-1/2" U-CAP & BASE OR 3/4"* U-CAP & BASE (*max. 12' panels), 12' (3.7m) LENGTHS, SOLID, SPECIALTY, CUSTOM SOLID	PANEL TRANSITION COMPONENT, PERPENDICULAR TO PLANKS, CREATES PANEL LENGTHS		
				1-1/2" U-CAP	3/4" U-CAP
② ⑥		QUICK-SCREEN CLIP, 316 STAINLESS STEEL	PLANK & STARTER ATTACHMENT CLIP (USE #8 SCREW, SUPPLIED BY OTHERS)		
⑥		6" PANELBOARD SMOOTH PLANK, 24' (7.3m) LENGTHS, WOODGRAIN, SOLID, SPECIALTY, CUSTOM SOLID	SIDING PLANK		
⑦		1-1/2" PANELBOARD U-CHANNEL OR 3/4" PANELBOARD U-CHANNEL, 24' (7.3m) LENGTHS, SOLID, SPECIALTY, CUSTOM SOLID	PANEL TRANSITION COMPONENT, PARALLEL TO PLANKS, CREATES PANEL WIDTHS		
				1-1/2" U-CHANNEL	3/4" U-CHANNEL
⑨		1-1/2" PANELBOARD U-CHANNEL END SLEEVE OR 3/4" PANELBOARD U-CHANNEL END SLEEVE, SOLID, SPECIALTY, CUSTOM SOLID	USED W. PB U-CHANNEL (⑦) AT BUTT-JOINT ENDS, TO COVER GAP WHICH ALLOWS FOR EXPANSION & CONTRACTION. *INCLUDED W. ⑦		
				1-1/2" U-CH END SLEEVE	3/4" U-CH END SLEEVE

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