LONGBOARD®
INSPIRING ARCHITECTURE

Tongue & Groove Planks
Textured Cladding

BEVEL

Installation Guidelines

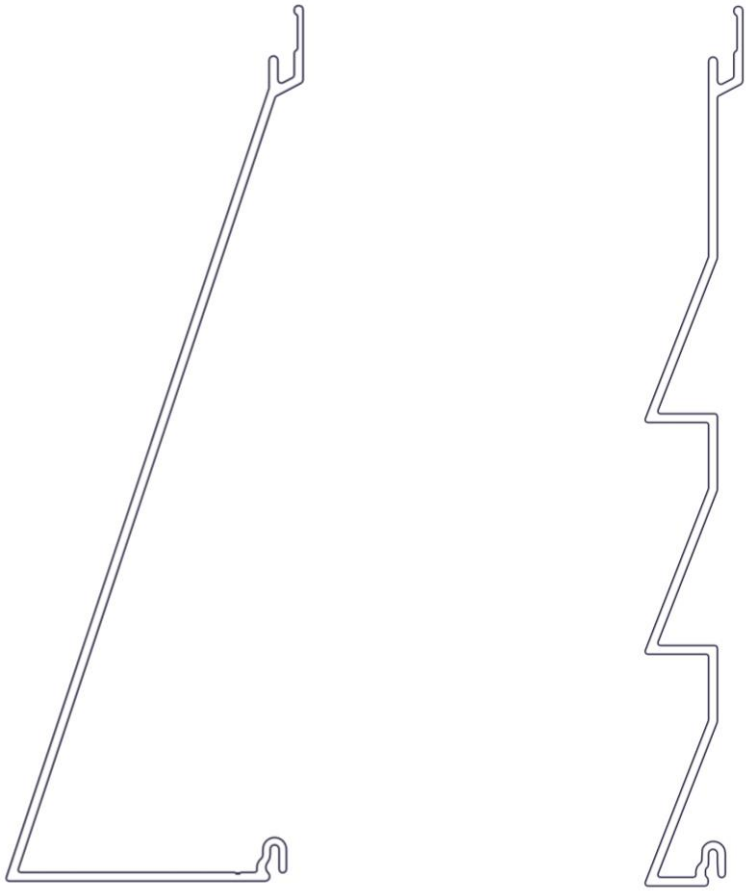
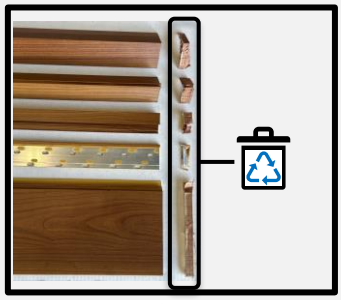


Table of Contents

CRITICAL DETAILS

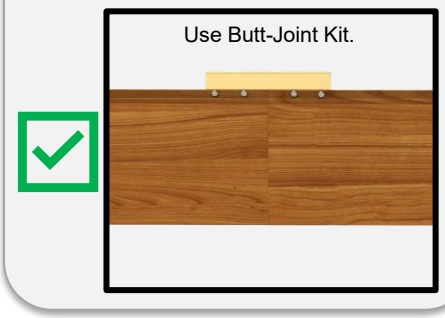
CUT TAPED/DRILLED ENDS

CUT taped/drilled ends.



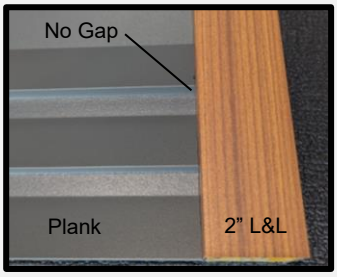
BUTT- JOINTS

Use Butt-Joint Kit to avoid gaps.

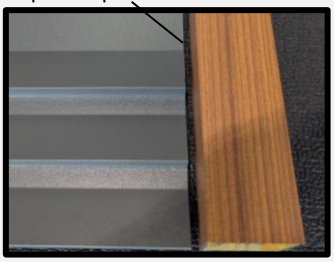


THERMAL MOVEMENT

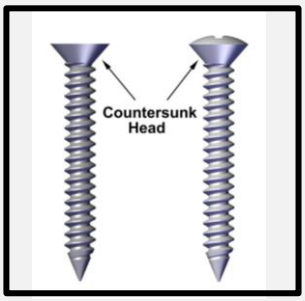
Confirm allowance for thermal expansion & contraction at perimeter components.



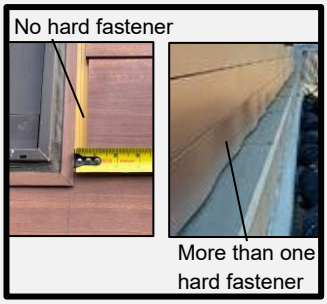
Gap for expansion & contraction.

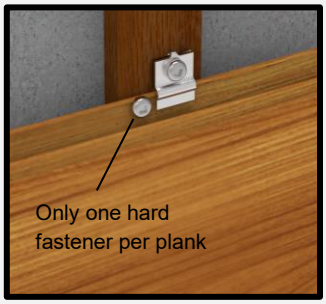


FASTENERS



HARD FASTENING

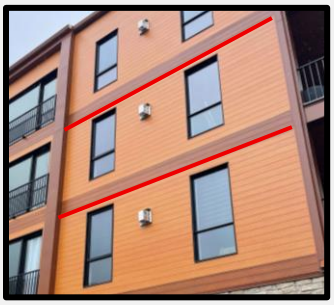




COMPRESSION JOINTS

No Comp. Joints at Floor level

Comp. Joints at Floor level



Material Specifications

Finishes

- Longboard Products are available in a wide range of powder coated finishes.
- Custom solid colors are available upon request.
- 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. It is recommended to create an onsite mock-up to produce a suitable pattern.
- Woodgrains NOT available for the Triple Bevel Plank
- Longboard Products are not recommended for use on marine applications in direct contact with salt water.

Longboard extruded products are produced 1” (25mm) oversized, as one end is drilled for the coating process, and both ends have 1/2" (12mm) of masking tape (woodgrains only) which must be cut off for best results. Longboard Cladding is to be installed outboard of a weather resistant barrier, including all flashings, following code, and building requirements.

Material Ordering & Delivery

• Packaging:	Planks are sold in box quantities: 6” Single Bevel Planks: 48 SQ FT/Box (4/24’s, 96 LF) w. 45pcs Quick-Screen Clips incl. 6” Triple Bevel Planks: 96 SQ FT/Box (8/24’s, 192 LF) w. 90pcs Quick-Screen Clips incl. Trim Components are sold individually by the 12’ (3.7m) length.
• Shipping:	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.
• QC:	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.

Storage & Handling

Be sure to store the material flat, keep it dry, safe & secure and remain in unopened cartons until ready to be installed. **See Appendix for proper handling and care instructions.**

Cleaning Recommendations

- Initial and periodic cleaning for best looking product
- Basic methods use a combination of moderate water pressure, soft sponge/brush and a mild detergent (Safe for your hands, safe for the product)

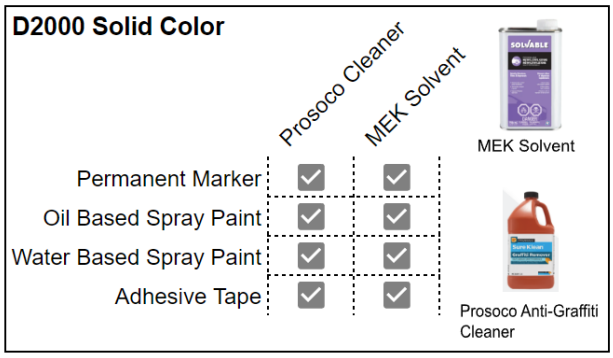
⚠ NEVER use aggressive acid or alkaline cleaners on Longboard finishes. Do not use cleaners containing Trisodium Phosphate, Phosphoric Acid, Hydrochloric Acid, Hydrofluoric Acid, Fluorides, or any other compound that is known to react with metal.

See Cleaning Guide for full requirements & cleaning schedule:
longboardproducts/resources/care-maintenance.com

Warranty
Upon substantial completion of the project, register for warranty online here: longboardproducts.com/warranty

Graffiti Removal

Standard Woodgrain
Use Standard soap & water only



Note: Cleaning the surface with a cleanser that is not diluted as per instructions may result in damage to the coating.

Components

Components (Typical)

Textured Wall planks are used in conjunction with T&G components. For all LB components go to longboardproducts.com.

Bevel Planks

Size	12′ *	24′ *	Perf *	24′
6 " Single	6SB.145	6SB.289	-	-
6 " Triple	6TB.145	6TB.289	-	-

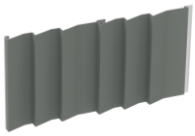
Accessories

Product	Qty	SKU
Quick Screen Clips	1750, box	CLIP.N1750
Quick Screen Clips	100, bag	CLIP.N100
1/16" U-SHIM	250, bag	SHIM.1001
Butt- Joint Fastening Kit (6")	20 kits, bag	TGBJKIT
Touch Up Pens *Reach out to confirm color with account manager.*	N/A	TUP

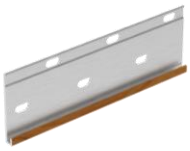
Bevel Planks

Single Bevel:
Available in all finishes

Triple Bevel:
Available in solid colors only



Butt-Joint Fastening Kit



Traditional Starter Strip
SKU: 2SS.145

Traditional 3" V Groove Corner
SKU: 3VCP.289

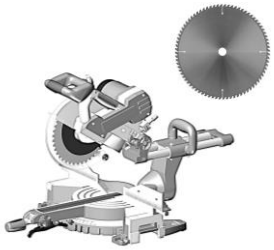
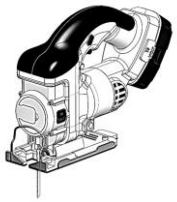
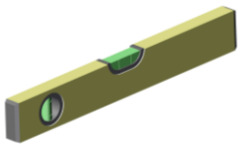
Traditional 3" Smooth Corner
SKU: 3SCP.289

2" Link & Lock Batten
SKU: 2X2LL.289

Tools/Cutting/Fastening

Tools

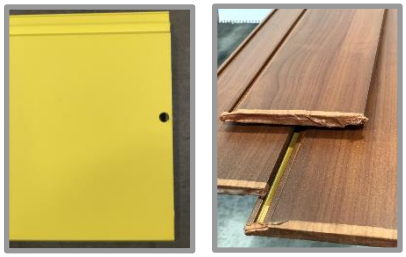
Commonly used tools for Cladding install.

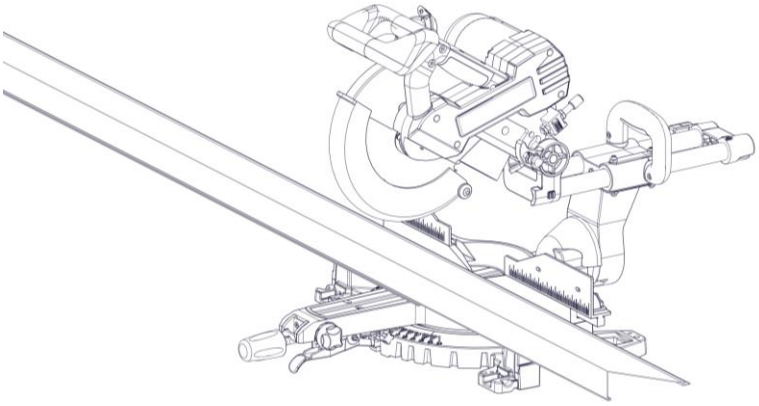
			
Table Saw with Carbide Metal Blade Non-ferrous 60-80T (for cutting aluminum)	Miter Saw with Carbide Metal Blade Non-ferrous 60-80T (for cutting aluminum)	Cordless Drill with clutch	Jig Saw (for protrusions)
			 *Length, thread and point to suit substrate
Rubber Mallet (or Hammer)	Level	Hole Saw (for lighting fixtures)	#10 Pan Head Screws (Supplied by others)

Cutting

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

Cut planks using a Miter Saw and Table Saw, always allowing for expansion & contraction. Trim the taped/drilled ends of all stock length material by at least **1/2“ (12mm) each end** and discard.





DO NOT Install Planks or Trims without trimming the ends.

Fastening

Always consult the project engineer, architect or authority having jurisdiction to understand the project specific fastening requirements.

Typical spacing:
-using **#10 Fasteners** (Supplied by others)

Trim components including Starter Strip

- **16” (406mm) O.C.**

Planks
Standard wind loads

- **32” (813mm) O.C.**

Higher wind loads

- **16” (406mm) O.C.**

See **Appendix for fastening specs: Fastening to Structure Bevel -Table 3**

Framing/Furring requirements

Always consult the local building authority and follow local building code requirements. Confirm the substrate to be suitable for attachment purposes.

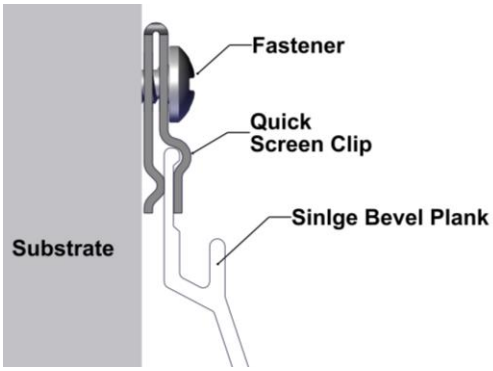
See **Appendix for framing/furring/sheathing specs: Table 3**

Fastener types

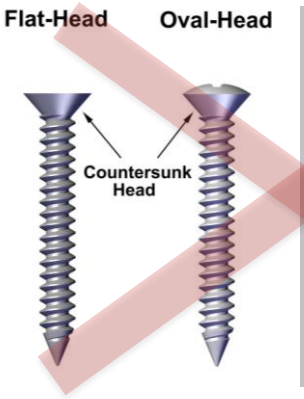
RECOMMENDED

*Length, thread and point to suit substrate

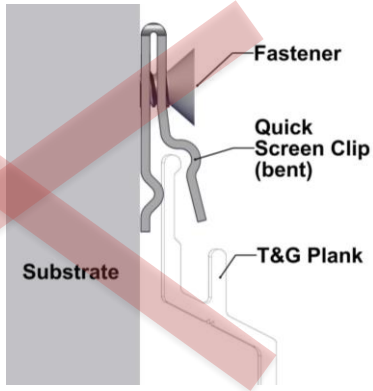
CORRECT

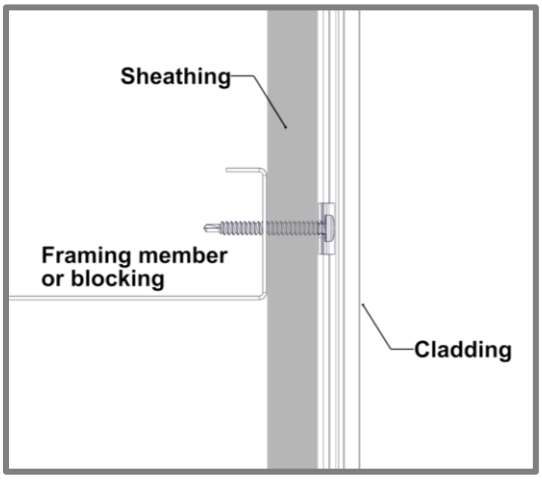


DO NOT USE



INCORRECT

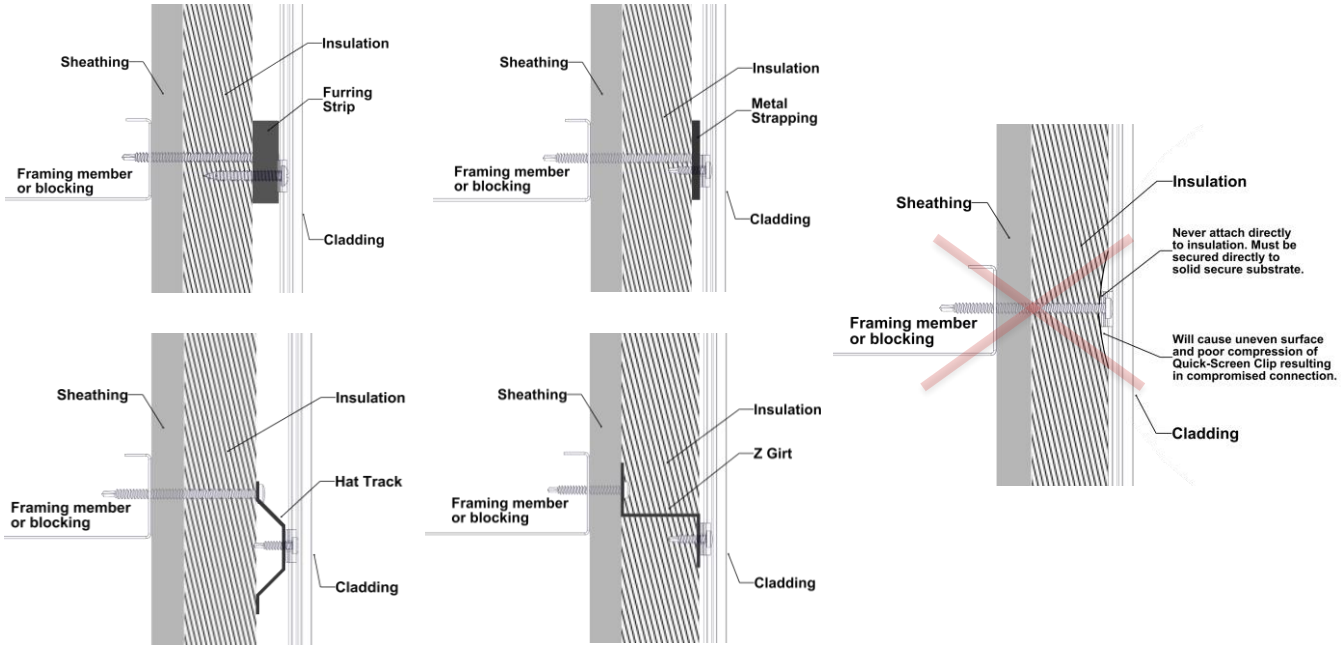




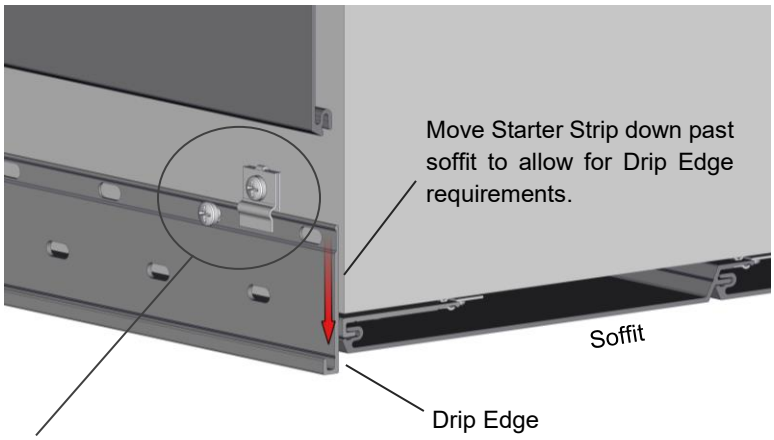
Fastening to Structure
(see Table 3 for specs)

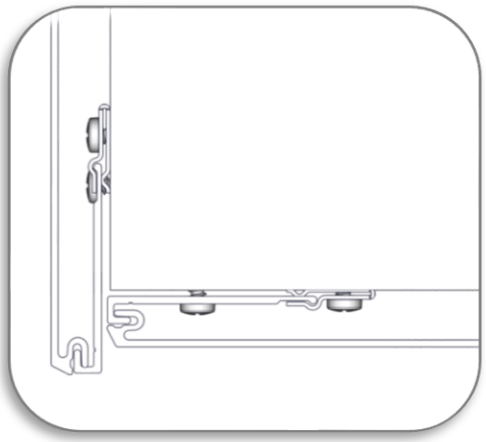
Fastening options onto exterior insulation or existing materials

*Never direct to insulation. Must be secured directly to solid secure substrate.



Fastening option for Drip Edge condition



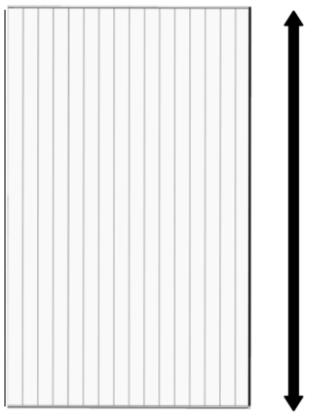


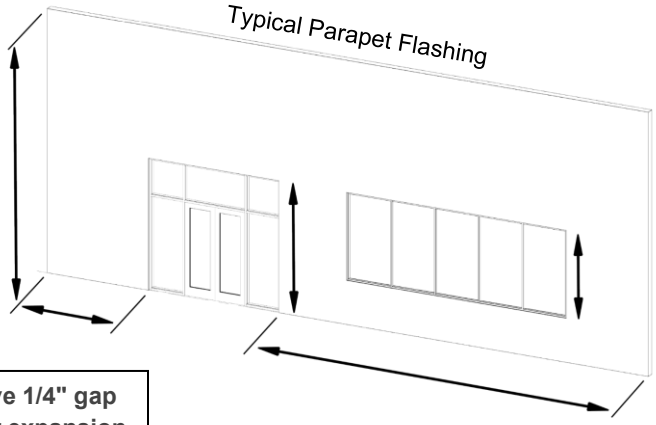
Note: For Drip Edge condition, Starter Strip requires two anchors at each fastener location (One with Quick Screen Clip and one at top-point sotted hole)

Perimeter and field area limitations

- Measure and layout your wall area to consider plank & component alignment with fixtures, penetrations, and adjacent walls, for desired appearance. Consider using butt-joints along runs to minimize waste.
  Apply the same methodology for horizontal Bevel Plank installations.

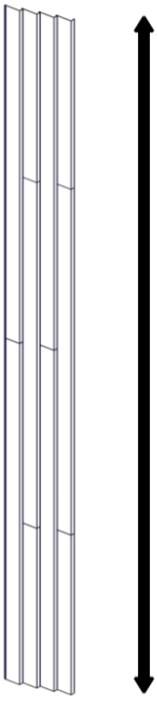
Seamless runs up to 24’ length planks (no butt-joints).





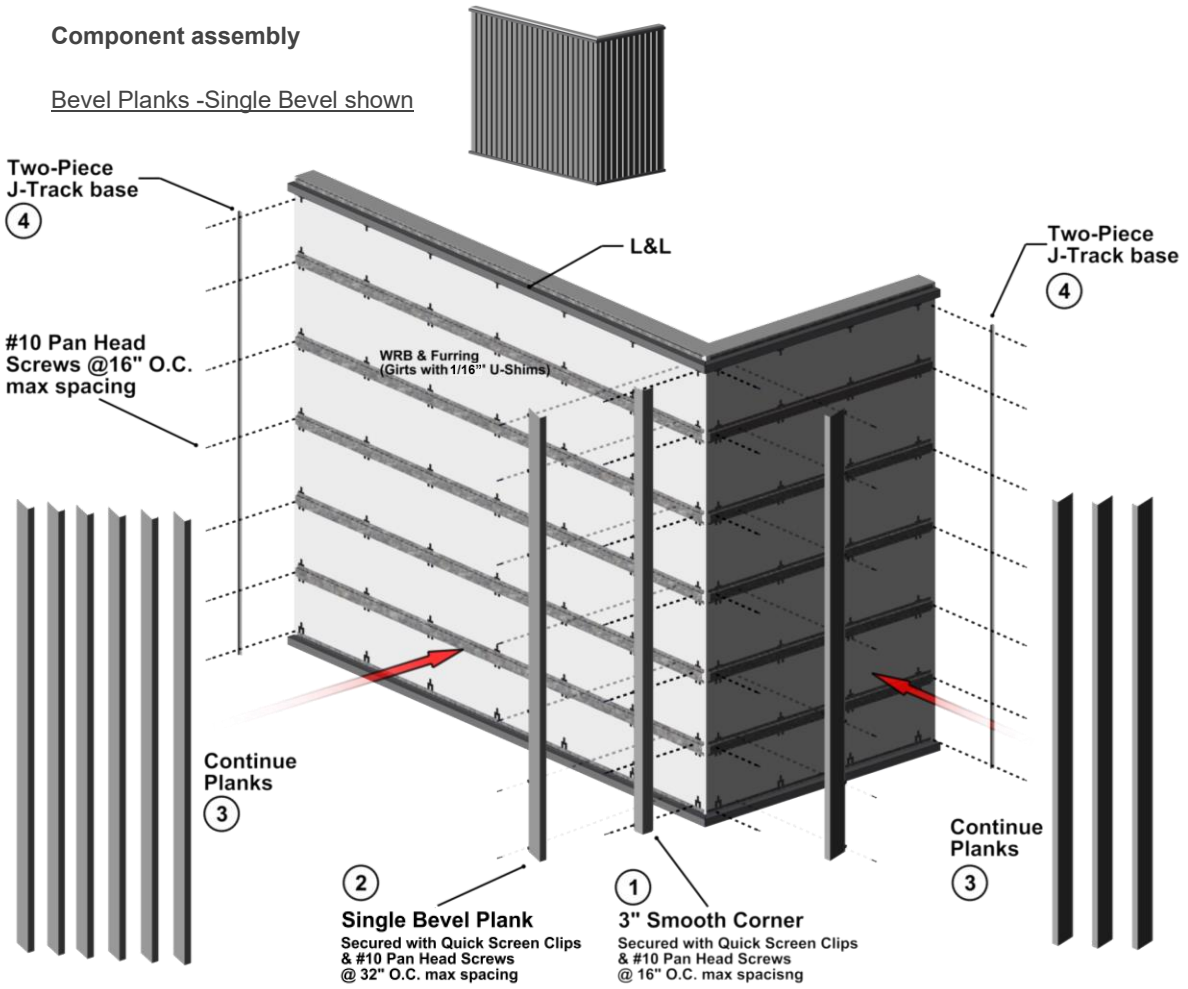
Note: Make sure to leave 1/4" gap at end of plank runs for expansion and contraction.

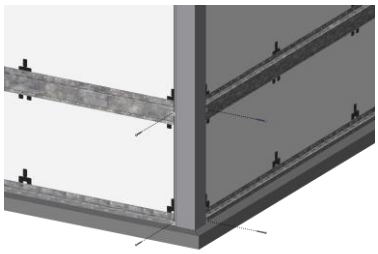
Runs up to 40’ length with staggered butt-joints.

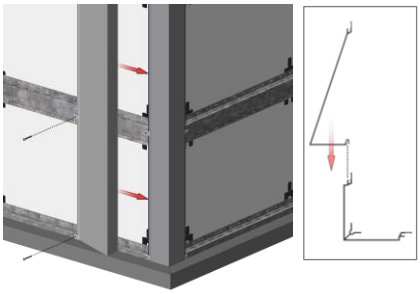


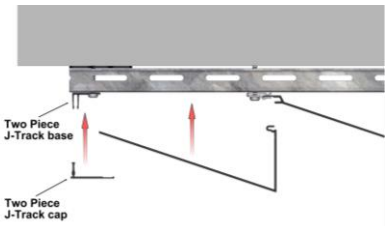
Component assembly

Bevel Planks -Single Bevel shown









Step 1

Install 3" Smooth Corner with Quick Screen Clips & #10 Pan Head Screws @16" O.C. max spacing. Hard fasten only one point preferably near the center of each plank.

Alternative starting option is to use Starter strip at the edge of the wall(s) fastening #10 Pan Head Screws every 16" O.C. max spacing.

Step 2 & 3

Place the planks fully engaging the tongue. Fasten with Quick Screen Clips & #10 Pan Head Screws @32" O.C. max spacing. Hard fasten only one point preferably near the center of each plank. It is good practice to check your installation every 2-3 rows for level/plumb & flat or straight for best results. Ensure there is sufficient room for expansion & contraction of each Plank.

Confirm cut off Taped/Drilled plank ends (1/2" each end).

Step 4

Before the last Plank, install Two Piece J-Track base fastening 16" O.C. typ.

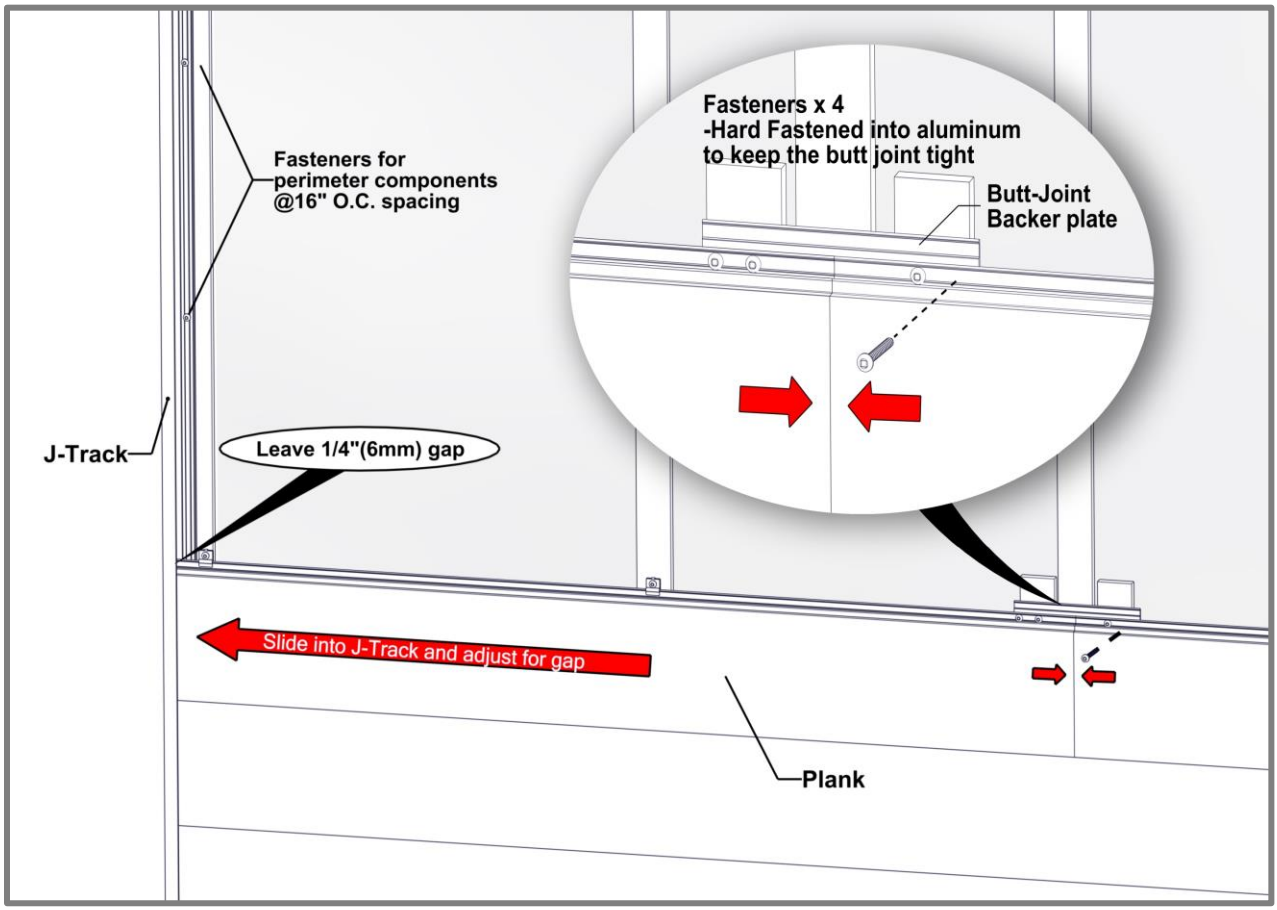
When terminating, confirm the trim component caps will cover the last Plank and adjust accordingly to suit the profile.

When all Planks are installed, finish off the trims with caps from two-piece sets.

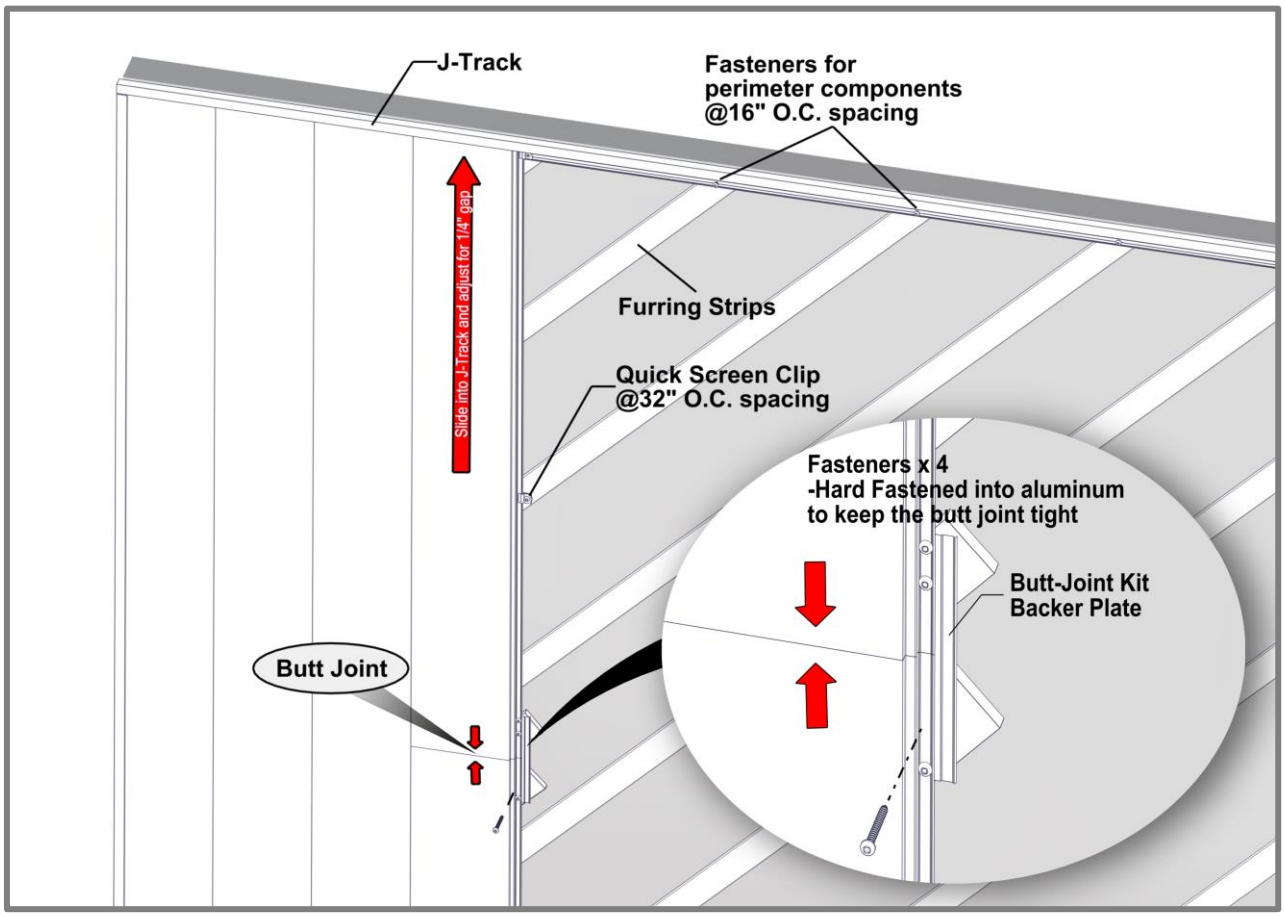
Details

Single Butt-Joints

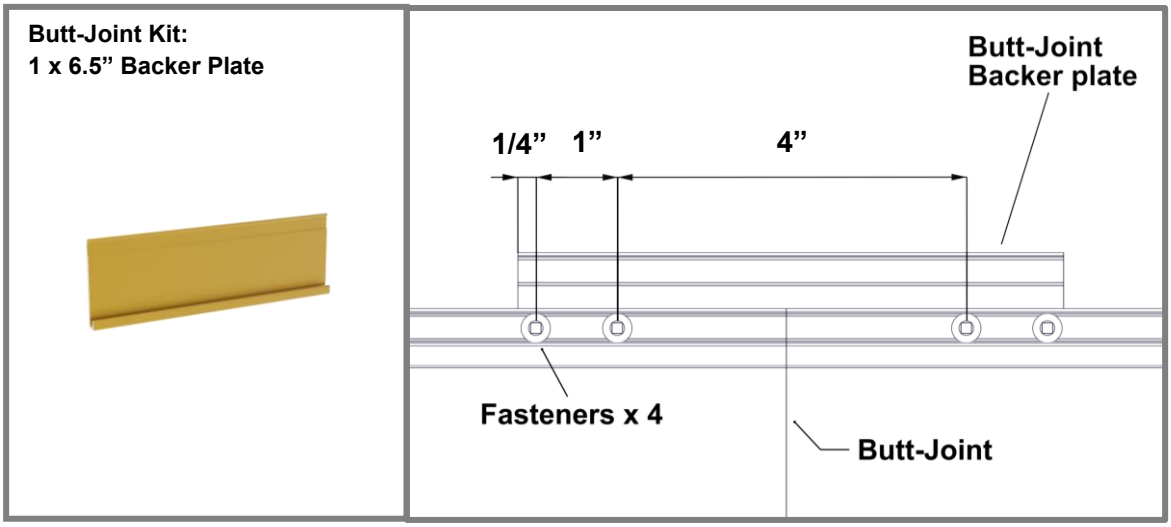
- Consider using butt-joints along runs to minimize waste.
- When installing staggered butt-joints, use the Butt-Joint Fastening Kit to ensure joints do not open up **(See Detail A & B)**.
  Fasteners should be placed at the uppermost location of the plank flange, to not interfere with the next plank engaging the tongue and groove properly. At the butt-joint, fasteners should be anchored into the Butt-Joint backer plate.
  (See Detail C)
- Rivets can be used for single butt-joints, however clearance of the rivets and room for movement is required.
- On exposed cuts such as butt-joints, trim ends or similar, use touch-up paint pens (purchased separately) to finish the ends of the two (2) planks at the butt-joint.
- DO NOT hard-fasten a plank to a component trim, as this will restrict its ability to expand & contract into the component.
- If no butt joints along the length, it is good practice to hard-fasten each plank directly through the flange near the center, to keep the planks from migrating.
- DO NOT hard-fasten more than one (1) location per plank.
- Hard fasten at the butt-joint or the center of each plank run.



Detail A -Horizontal Cladding



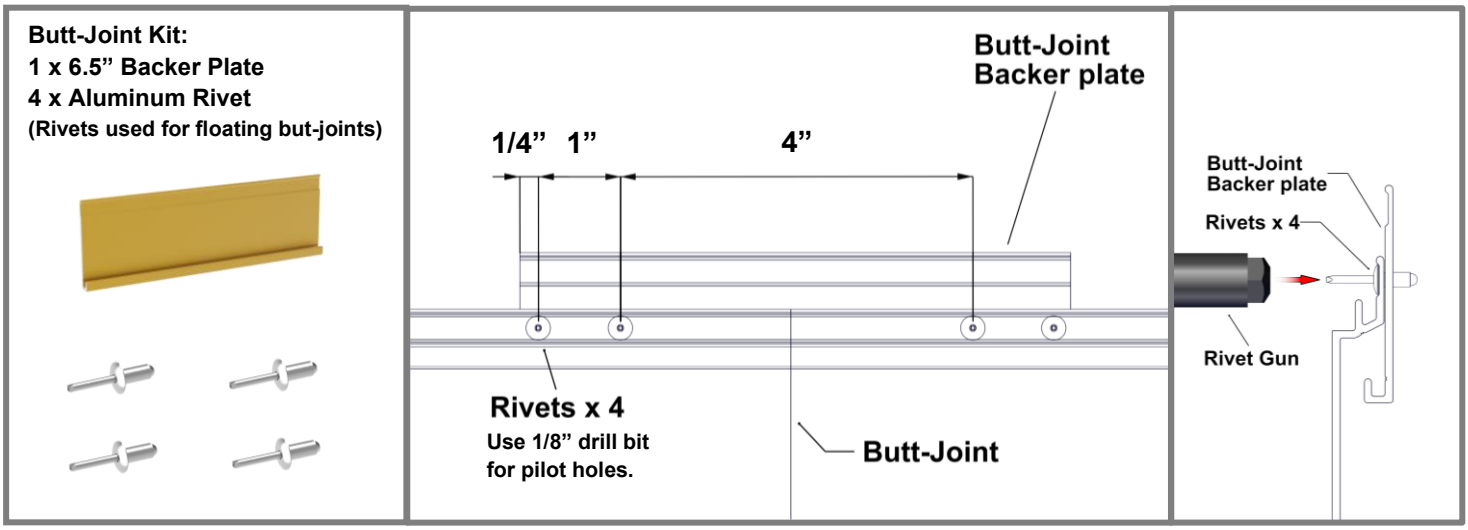
Detail B -Vertical Cladding



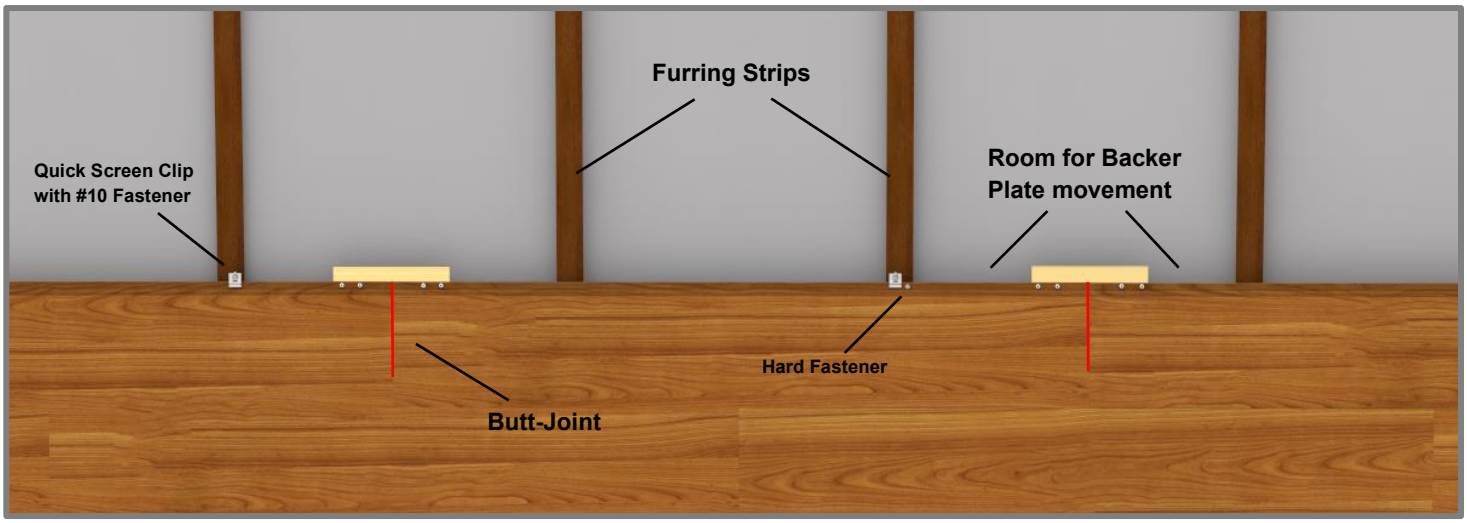
Detail C -Backer Plate (Hard Fastened)

Multiple Floating Butt-Joints

- When installing staggered multiple floating butt-joints, use the Butt-Joint Fastening Kit to ensure joints do not open up. Rivets should be placed at the center of the plank flange, to not interfere with the next plank engaging the tongue and groove properly. **(See Detail D)**
- MUST HAVE furring strips or girts to allow room for movement.
- Recommended to be installed between furring strips or framing members to avoid contact which would restrict movement. **(See Detail E)**
- On exposed cuts such as butt-joints, trim ends or similar, use touch-up paint pens (purchased separately) to finish the ends of the two (2) planks at the butt-joint.
- DO NOT hard-fasten a plank to a component trim, as this will restrict its ability to expand & contract into the component.
- DO NOT hard-fasten more than one (1) location per multiple plank run.
- Hard fasten near the center of the multiple plank run.



Detail D -Floating Butt-Joint



Detail E -Butt-Joint Movement

Appendix

Expansion and Contraction Tables

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	MIN/MAX POST CONSTRUCTION TEMP. °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	MIN/MAX POST CONSTRUCTION TEMP. °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

TABLE 3

LONGBOARD
INSPIRING ARCHITECTURE

v.1.0

ANCHOR TABLE - WIND LOAD

BEVEL PLANKS	PSF (Factored / Ultimate)										
	20	30	40	50	60	70	80	90	100	110	120
12"											
16"								on CMU			
24"											
32"											

Plank Profiles: Single Bevel (6"), Triple Bevel (6")

TRIM COMPONENTS*	PSF (Factored / Ultimate)										
	20	30	40	50	60	70	80	90	100	110	120
	16"										
Soffit direct to truss	24"										

*Starter Strip requires Two (2) installation anchors at each fastener location: 1 Quick-Screen Clip + 1 Mid-Point slotted hole

Calculations are using L/180 deflection limits

SUBSTRATE TYPE	SUBSTRATE REQUIREMENTS	ANCHOR DESCRIPTION	MIN. EMBEDMENT	MIN. EDGE DISTANCE
WOOD	Min. specific gravity = 0.55 wood	#10 Pan Head Screw	1-1/2"	1/2"
PLYWOOD	Min. 5/8" C/D Grade Plywood		1/4" past plywood structure	1"
STEEL	Min. 18 ga., min. 33 ksi.	#10 Tek Screw (grade 5)	3 threads penetration past metal structure	3/4"
ALUMINUM	Min. 1/8" thick, min. 6063-T5			
CONCRETE**	Min. 3000 psi	3/16" ITW Tapcon	1"	1-7/8"
MASONRY - CMU**	Grout-filled block per ASTM C-90, min. 2000 psi		1"	2"

**For Concrete and Masonry/CMU; Furring Strips are recommended, where possible

GENERAL NOTES:

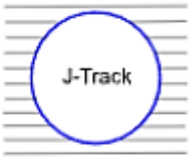
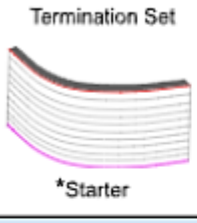
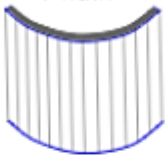
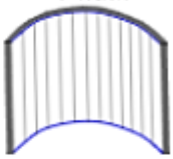
1. Adequacy of the structural stud framing (wood and/or metal) and concrete/masonry as a main wind force resiting system capable of withstanding and transferring applied product loads to the foundation is the responsibility of the engineer or architect of record for the project of installation.
2. Substrate shall be designed and anchored to properly transfer all loads to the structure buck design and installation is the responsibility of the engineer or architect of record for the project of installation.
3. The installation details described herein are generic and may not reflect actual conditions for a specific site. If site conditions cause installation to deviate from the requirements detailed herein, a licensed engineer or architect shall prepare site specific documents for use with this document.

INSTALLATION NOTES:

1. One (1) installation anchor is required at each Quick-Screen Clip location. Minimum of two (2) anchors per plank.
2. Spacing is from clip/fastener center to center.
3. The number of installation anchors per the table is the minimum number of anchors to be used for product installation.
4. Install individual installation anchors within a tolerance of +/- 1/2" of the specified spacings. Tolerances are not cumulative from one installation anchor to the next.
5. If fastening to every second stud, the attachment stud shall be staggered between adjacent runs of cladding.
6. Minimum embedment and edge distance exclude wall finishes, including but not limited to wood furrings, stucco, foam, brick veneer, sheathing and siding.
7. Installation anchors and associated hardware must be made of corrosion resistant material or have a corrosion resistant coating. Common fastener types can be equal or better to a & b listed below:
   a. Zinc plated fasteners for moderate climate zones
   b. 316 Stainless Steel fasteners for coastal climate zones
8. For CMU grout filled block, do not install installation anchors into mortar joints. Edge distance is measured from free edge of block or edge of mortar joint into face shell of block.
9. Installation anchors shall be installed in accordance with anchor manufacturer's installation instructions, and anchors shall not be used in substrates with strengths less than the minimum strength specified by the anchor manufacturer.

LONGBOARD®
INSPIRING ARCHITECTURE

Radius Table

APPLICATION	A -Circular	B -Curved walls	C -Convex	D -Concave
DIAGRAMS				
TRIMS	**Minimum Radius**			
Non-Tempered Precision J-Track (5/8")	**1.5' (0.46m)**	N/A	**1.5' (0.46m)**	**2' (0.61m)**
Precision J-Track (5/8")	15' (4.57m)	N/A	N/A	N/A
Precision Two-Piece J-Track w. J-base (5/8")	15' (4.57m)	N/A	8' (2.44m)	8' (2.44m)
Precision Termination Set (5/8")	N/A	12' (4.57m)	N/A	N/A
Non-Tempered Craftsman J-Track (7/8")	**6' (1.83m)**	N/A	**6' (1.83m)**	**6' (1.83m)**
Craftsman J-Track (7/8")	38' (11.6m)	N/A	20' (6.1m)	20' (6.1m)
Craftsman Two-Piece J-Track w. J-Base (7/8")	20' (6.1m)	N/A	8' (2.44m)	8' (2.44m)
Craftsman Termination Set (7/8")	N/A	12' (4.57m)	N/A	N/A
Non-Tempered Traditional J-Track (1-3/8")	38' (11.6m)	N/A	20' (6.1m)	20' (6.1m)
Traditional J-Track (1-3/8")	Not recommended	Not recommended	Not recommended	Not recommended
Traditional Two-Piece J-Track w. J-base (1-3/8")	38' (11.6m)	N/A	8' (2.44m)	8' (2.44m)
Traditional Termination Set (1-3/8")	N/A	12' (4.57m)	N/A	N/A
PLANKS	**Minimum Radius**			
2 1/2" V-Groove	N/A	12' (4.57m)	**1.5' (0.46m)**	**2' (0.61m)**
2 1/2" V-Groove Perforated	N/A	12' (4.57m)	**1.5' (0.46m)**	**2' (0.61m)**
4" V-Groove	N/A	12' (4.57m)	3' (0.91m)	6' (1.83m)
6" V-Groove	N/A	12' (4.57m)	3' (0.91m)	6' (1.83m)
6" Channel	N/A	12' (4.57m)	3' (0.91m)	6' (1.83m)
6" Smooth Plank	N/A	12' (4.57m)	3' (0.91m)	6' (1.83m)
6" V-Groove Perforated	N/A	12' (4.57m)	3' (0.91m)	6' (1.83m)
6" Smooth Plank Perforated	N/A	12' (4.57m)	3' (0.91m)	6' (1.83m)
4" Castellation	N/A	12' (4.57m)	3' (0.91m)	6' (1.83m)
8" Castellation	N/A	12' (4.57m)		
6" Triple Bevel	N/A	19' (5.8m)	3' (0.91m)	6' (1.83m)
8" V-Groove	N/A	12' (4.57m)		

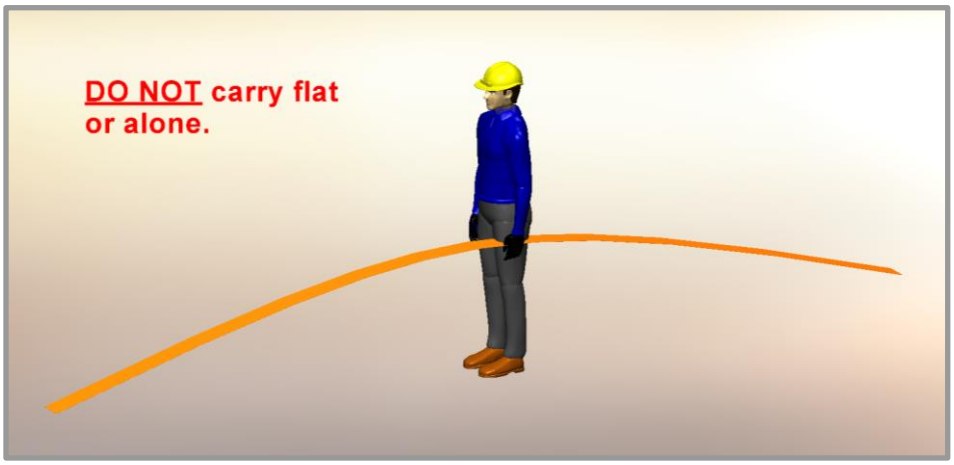
Note 1: When considering tight radii bends, use Non-Tempered Trim components for the minimum radius.

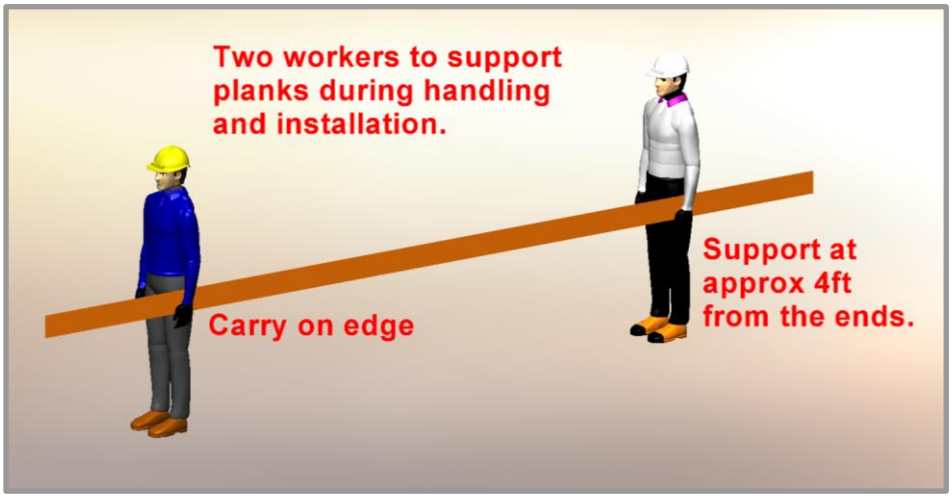
Note 2: When bending and securing components, bend against solid secure object and take care not to over bend.

*Note 3: Starter Strip meets or exceeds the performance of all the listed application and limitations.

Proper Handling of Longboard Products

To help avoid injury and product damage, Longboard products require proper handling to and from storage areas during installation. When carrying or installing any products it is recommended that they be moved or carried by at least two people with each support point approximately 4ft from the ends. **Carrying products without proper support can cause excessive bending which may damage the appearance or finish of the product.** Any short cut lengths should also be carried on edge while supporting the material. See below for details.





Delivery, Storage & Handling

- 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. Longboard is not responsible for the installation of blemished or damaged material.
- Be sure to store the material flat, keep it dry, safe & secure and remain in unopened cartons until ready to be installed.
- Always wear appropriate PPE when handling products.

BLANK
PAGE

Longboard Architectural Products Inc.
© Longboard Architectural Products Inc. All rights reserved.

Longboard® is a registered trademark of Longboard Architectural Products Inc.

Longboard
1777 Clearbrook Road
Abbotsford, BC V2T 8X8
Canada
longboardproducts.com

Every effort has been made to ensure that the information in these installation guidelines are accurate. Longboard is not responsible for printing or clerical errors.

For more information, contact client care at info@longboardproducts.com or call toll free 1-800-604-0343.