LONGBOARD®
INSPIRING ARCHITECTURE

Endura Linear Ceilings

Installation Guidelines

Table of Contents

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.
- 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.

Expansion & Contraction
Planks & components expand & contract 1/4" (6mm) over 24' (7.3m) in all directions, measured over a 30℃ (54℉) temperature range. Due to this range of movement, the following expansion components should be installed perpendicular to planks every:

- 24' (7.3m) max[1]   Perpendicular to Planks: Traditional Flat Reveal, U-Reveal Set

     [1]Note: 40' (12.2m) max if using staggered butt-joints.

Other options (Perpendicular to Planks only)
- 12' (3.7m)   -Craftsman U-Reveal Set
- 6' 8" (2m)   -Precision Flat Reveal

When using expansion components, each plank must terminate into a minimum of one (1) component to allow for expansion & contraction.
See: Appendix for tables of expansion/contraction calculations per foot/meter of material.

Material Ordering & Delivery

●	Packaging:	Planks are sold in box quantities: 6" Planks: 96 SQ FT/Box (8/24's) w. 90pcs Quick-Screen Clips included 4" V-Groove: 96 SQ FT/Box (12/24's) w. 135 Quick-Screen Clips included 2 1/2" V-Groove: 20 SQ FT/Box (8/12's, 96 LF) w. 45 Quick-Screen Clips included Components are sold individually by the 12' (3.7m) length.
●	Shipping:	Most Popular Finishes - ready to ship within 1 week Additional Finishes - ready to ship within 14 weeks 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
⚠️ Registration is required for the warranty to be in effect.

Graffiti Removal

Standard Woodgrain	
Use Standard soap & water only	

D2000 Solid Color

	Prosoco Cleaner	MEK Solvent
Permanent Marker	✓	✓
Oil Based Spray Paint	✓	✓
Water Based Spray Paint	✓	✓
Adhesive Tape	✓	✓

MEK Solvent

Prosoco Anti-Graffiti Cleaner

SPECIAL ORDER - EXT. LEAD TIMES CONTACT LB

Anti-Graffiti High Gloss Woodgrain

	MEK Solvent
Permanent Marker	✓
Oil Based Spray Paint	✓
Water Based Spray Paint	✓
Adhesive Tape	✓

MEK Solvent

Components (Typical)

Endura Linear Ceiling system consists of many components used in conjunction with each other to create a seamless look. For all LB components go to longboardproducts.com.

V-Groove Planks   * 48 sq. ft. box quantities   ‡ 96 sq. ft. box quantities

Size	12' *	24' ‡	12' Perf *	24' Perf ‡
2½"	3V.145	-	3VP.145	-
4"	4V.145	4V.289	-	-
6"	6V.145	6V.289	6VP.145	6VP.289

Smooth Planks

Size	12' *	24' ‡	12' Perf *	24' Perf ‡
6"	6PSP.145	6PSP.289	6PSPP.145	6PSPP.289

Channel Planks

Size	12' *	24' ‡
6"	6CH.145	6CH.289

Accessories

Product	Qty	SKU
Quick Screen Clips	1750, box	CLIP.N1750
Quick Screen Clips	100, bag	CLIP.N100
Touch Up Pens Reach out to confirm color with account manager.	N/A	TUP

Trim Components

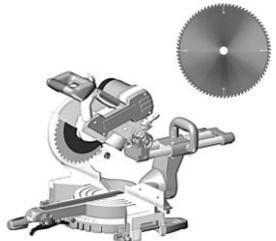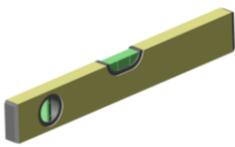| Type	Style	Product	Dimensions	SKU
Starter	Precision	Starter J-Track	(5/8") - 12'	1SJT.145
Starter	Traditional	Starter Strip	(1-7/8") - 12'	2SS.145
Starter	Traditional	Back-to-Back Starter Strip	(1-1/4")	2BTBSS.145
J-Track	Precision	Two Piece J-Track	(5/8") - 12'	1X1JT.145
J-Track	Precision	J-Track	(5/8") - 12'	1JT.145
J-Track	Craftsman	J-Track	(7/8") - 12'	1JT23.145
J-Track	Craftsman	Two Piece J-Track	(7/8") - 12'	JT23S.145
J-Track	Traditional	Two Piece J-Track	(1-3/8") - 12'	1X2JT.145
Corner	Precision	Outside Corner	(3/16") - 12'	05OC.145
Corner	Craftsman	Inside Corner	(3/4") - 12'	1IC.145
Corner	Craftsman	Outside Corner	(1") - 12'	1OC.145
Corner	Traditional	Corner Set	(2") - 12'	2CORS.145
Corner	Traditional	3" Smooth	(3") - 24'	3SCP.289
Corner	Traditional	3" V-Groove	(3") - 24'	3SVP.289
Reveal	Precision	Flat Reveal	(1/2") - 12'	1FR.145
Reveal	Precision	T&G Flat Reveal	(1/2") - 24'	1TGFR.289
Reveal	Craftsman	U-Reveal Set	(3/4") - 12'	1URS.145
Reveal	Craftsman	T&G U-Reveal	(3/4) - 24'	1TGURK.289
Reveal	Traditional	U-Reveal Set	(1-1/2") - 12'	2URS.145
Reveal	Traditional	Flat Reveal Set	(1-1/2") - 12'	2FRS.145
Reveal	Traditional	T&G U-Reveal	(1 1/2") - 24'	2TGURK.289
Reveal	Traditional	Offset Flat Reveal Set, J-Track Base	(2") - 12'	2OFFJ.145
Reveal	Traditional	Offset Flat Reveal Set, Termination Base	(2") - 12'	2OFFT.145
Termination	Precision	Termination Set	(5/8") - 12'	1TS.145
Termination	Craftsman	Termination Set	(7/8") - 12'	TS23S.145
Termination	Traditional	Termination Set	(1-3/8") - 12'	2TS.145
Compression Joints	Traditional	Compression Joint	(1-3/8") - 24'	2CJ.289

V-Groove Planks

Channel Planks

Smooth Planks

Perforated Planks

Precision Starter J-Track

Traditional Starter Strip

Traditional Back-to-Back Starter Strip

Precision Two-Piece J-Track

Precision J-Track

Craftsman J-Track

Craftsman Two Piece J-Track

Traditional Two Piece J-Track

Precision Outside Corner

Craftsman Inside Corner

Craftsman Outside Corner

Traditional Corner Set

Traditional 3" Smooth Corner

Traditional 3" V Groove Corner

Precision Flat Reveal

Precision T&G Flat Reveal

Craftsman U-Reveal Set

Craftsman T&G U-Reveal

Traditional U-Reveal Set

Traditional Flat Reveal Set

Traditional T&G U-Reveal

Traditional Offset Flat Reveal Set, J-Track Base

Traditional Offset Flat Reveal Set, Termination Base

Precision Termination Set

Craftsman Termination Set

Traditional Termination Set

Traditional Compression Joint

Tools
Commonly used tools for 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)
Rubber Mallet (or Hammer)	Level	Hole Saw (for lighting fixtures)	*Length, thread and point to suit substrate #8 Pan Head Screws

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.
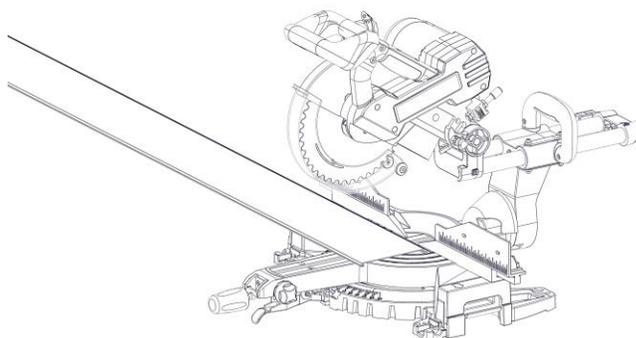
Planks with Soundtex®
*During mechanical-thermal processing (e.g. grinding, cutting), irritant (fibre) dusts and traces of irritant volatile components may possibly be released.
In these cases, vacuum equipment should be present or at least proper ventilation should be implemented.

Recommended PPE:
- Respiratory protection: the use of a respirator is recommended
- Hand protection: wearing of protective gloves is recommended
- Eye protection: wearing of safety glasses is recommended
- Skin protection: avoidance of intense skin contact is recommended

*Ref. TSIS -page 2, #8

Fastening

Fasteners must be corrosion resistant and comply with all local building codes.

⚠️ All fasteners should be suitable for exterior use and be compatible with the substrate type. **Fasteners should be anchored into a solid secure framing member, blocking, furring, or strapping. For any applications when the framing member is not available, install furring strips or metal strapping to securely fasten planks.**

Perimeter components should be hard fastened every **16" (406mm) O.C.** directly through the flange using #8 pan-head screws (supplied by others). These components should be fastened within **8" (203mm)** of the end for secure fastening.

Planks & starter components are secured using Longboard **Quick-Screen Clips** fastened to the substrate using #8 pan-head screws (supplied by others).

- Typically, every **32" (813mm) O.C.**

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

Fastener types
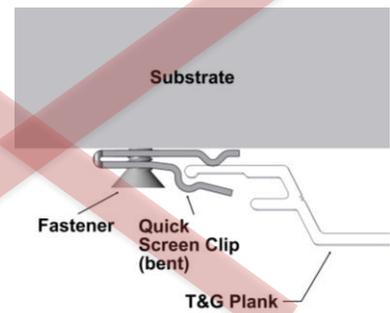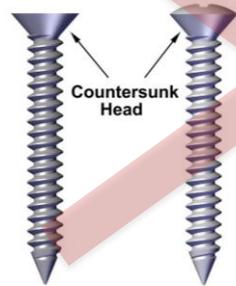
RECOMMENDED **CORRECT**

Pan-Head Truss-Head
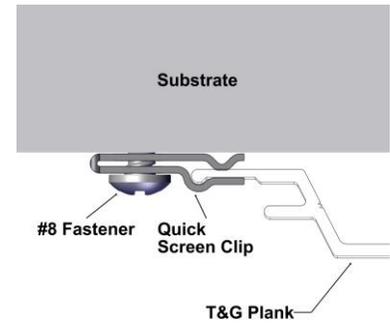
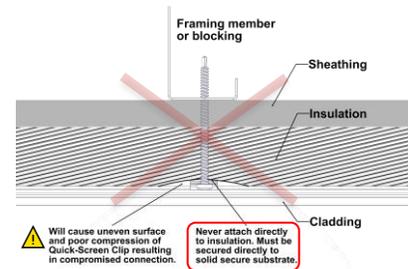

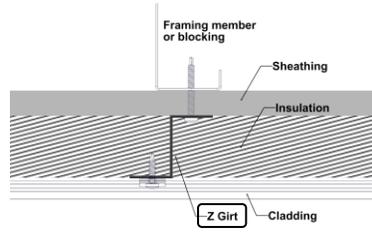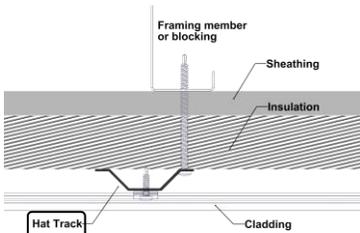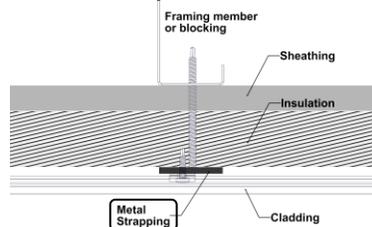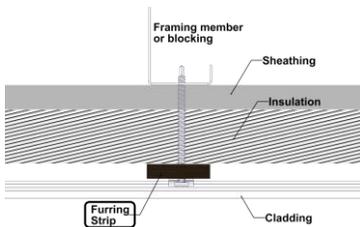*Length, thread and point to suit substrate

DO NOT USE **INCORRECT**

Flat-Head Oval-Head

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

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

Wood Framing
- Size: 2x4 minimum

Metal Framing
- Gauge: 20 ga. minimum

Furring recommendations

Wood Furring
Attached back to wood or metal framing/blocking.
- Size: 3/8" minimum

Metal Furring/Strapping
Attached back to wood or metal framing/blocking.
- Size: 20 ga. minimum

Concrete/CMU
Wood or metal furring is recommended over concrete and CMU.
Wood Furring:
- Size: 2x2 minimum
- Type: Pressure treated lumber

Metal Furring:
- Size: 20 ga. minimum
- Type: Hat channel, Stud, or Z-Girt.

Acoustical Performance

| Metal Linear Ceilings Closed Joint Systems	NRC	SAA	Backer
6" V-Groove Plank	0.15	0.12	-
6" V-Groove Plank with Insulation	0.10	0.11	Fiberglass 1" thickness @ 3lbs/ft^3
6" Perforated Plank with 1" Insulation	0.70	0.70	Fiberglass 1" thickness @ 3lbs/ft^3
6" Perforated Plank with 2" Insulation	0.95	0.96	Fiberglass 2" thickness @ 3lbs/ft^3
6" Perforated Plank with Soundtex®	0.75	0.75	Soundtex Scrim
2-1/2" Perforated Planks with Insulation	0.70	0.72	Fiberglass 1" thickness @ 3lbs/ft^3
2-1/2" Perforated Planks	0.05	0.03	-

The test reported in this document conformed explicitly with ASTM C423-17 "Standard Test Method for Sound Absorption and Sound Absorption Coefficients by the Reverberation Room Method."

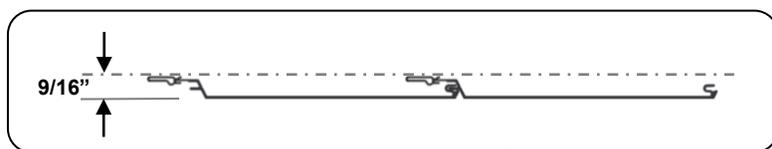### Perimeter and field area limitations & venting

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

- Longboard system typical dimensions:

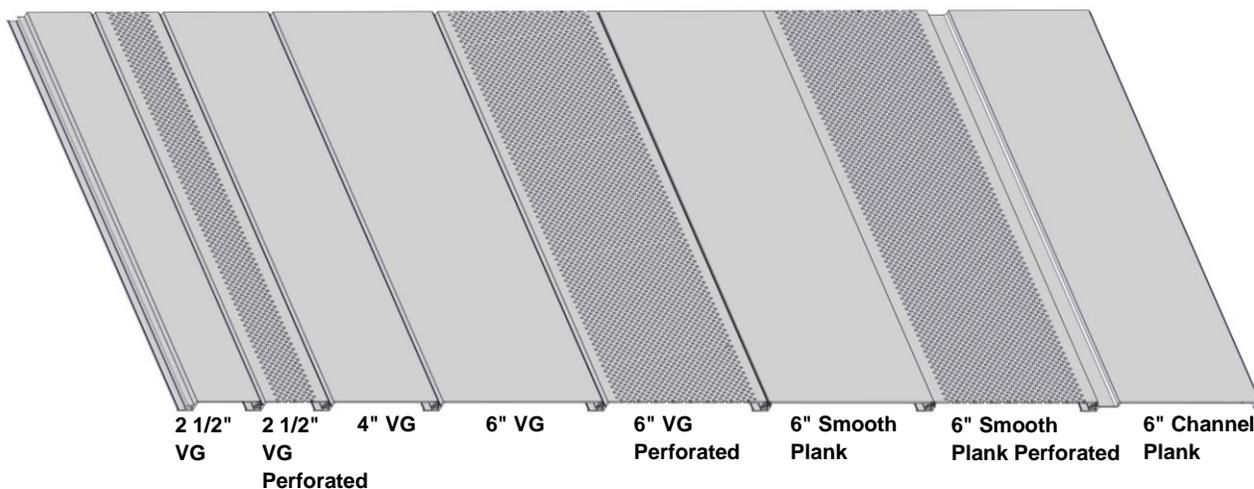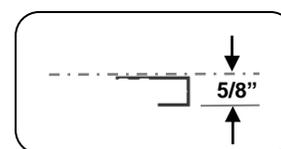|	
Planks width	- 2 1/2" (64mm), 4" (102mm), 6" (152mm)
Perforated Planks width	- 2 1/2" (64mm), 6" (152mm)
Planks and Quick-Screen Clips depth	- 9/16" (15mm)
Trim Components depth	- 5/8" (16mm)
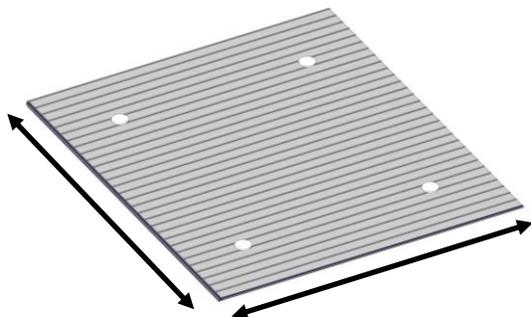
Perforated Planks	NFA (open area)	Hole size(mm)	Lengths
2 1/2" V-Groove	18%	3.18	12'
6" V-Groove	21%	3	12'/24'
6" Smooth Plank	21%	3	12;/24'

Planks

Trims

9/16"

5/8"

| 2 1/2" VG | 2 1/2" VG Perforated | 4" VG | 6" VG | 6" VG Perforated | 6" Smooth Plank | 6" Smooth Plank Perforated | 6" Channel Plank |

Component layout

**Ceiling Parallel
Application**
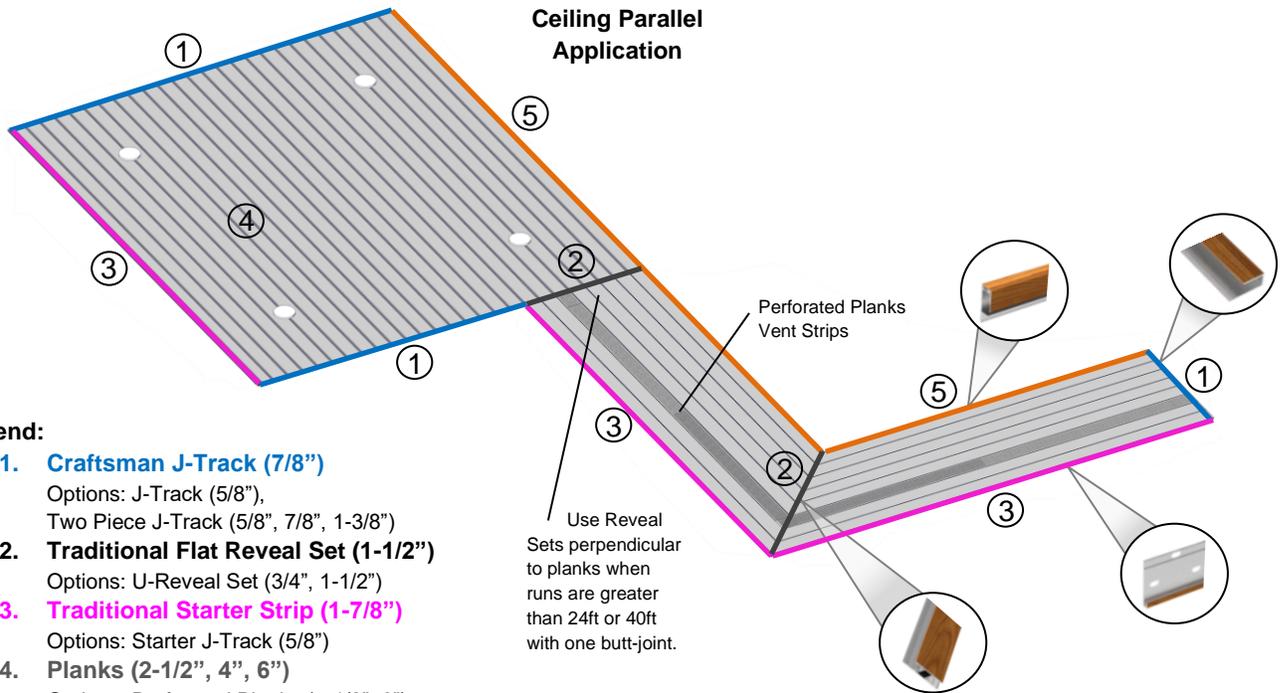
Perforated Planks
Vent Strips

Use Reveal
Sets perpendicular
to planks when
runs are greater
than 24ft or 40ft
with one butt-joint.
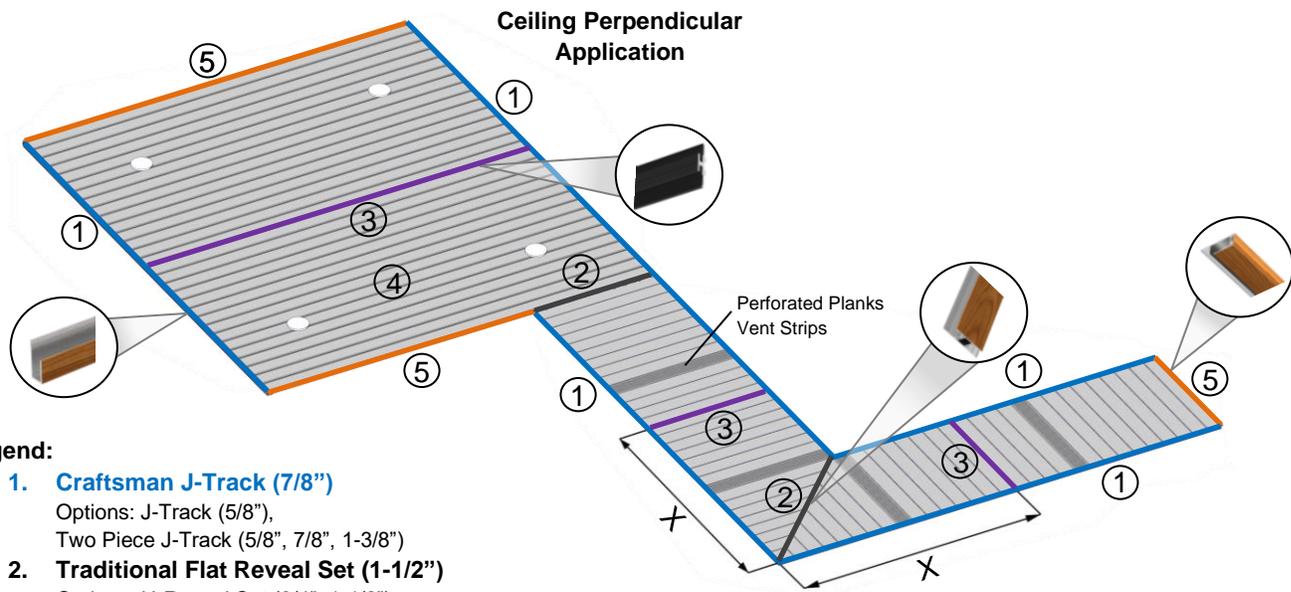
Legend:
1. **Craftsman J-Track (7/8")**
   Options: J-Track (5/8"),
   Two Piece J-Track (5/8", 7/8", 1-3/8")
2. **Traditional Flat Reveal Set (1-1/2")**
   Options: U-Reveal Set (3/4", 1-1/2")
3. **Traditional Starter Strip (1-7/8")**
   Options: Starter J-Track (5/8")
4. **Planks (2-1/2", 4", 6")**
   Options: Perforated Planks (2-1/2", 6")
5. **Craftsman Termination Set (7/8")**
   Options: Termination Set (5/8", 1-3/8")

**Ceiling Perpendicular
Application**

Perforated Planks
Vent Strips

Legend:
1. **Craftsman J-Track (7/8")**
   Options: J-Track (5/8"),
   Two Piece J-Track (5/8", 7/8", 1-3/8")
2. **Traditional Flat Reveal Set (1-1/2")**
   Options: U-Reveal Set (3/4", 1-1/2")
3. **Traditional Back-to-Back Starter Strip (1-1/4")**
   Options: Starter Strip at soffit edge
4. **Planks (2-1/2", 4", 6")**
   Options: Perforated Planks (2-1/2", 6")
5. **Craftsman Termination Set (7/8")**
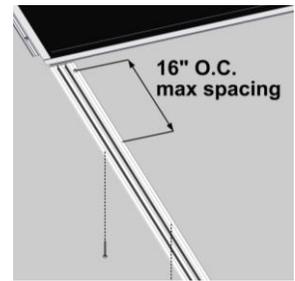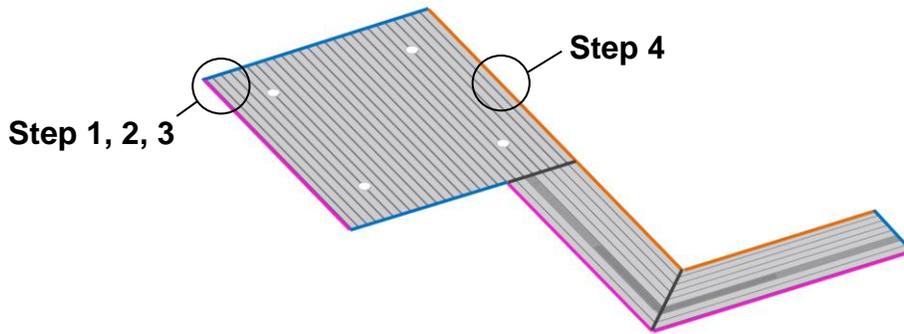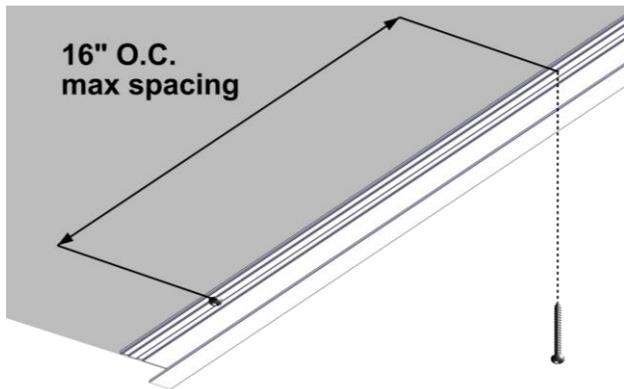   Options: Termination Set (5/8", 1-3/8")

Install Steps – Parallel to the wall

Step 4

Step 1, 2, 3

16" O.C. max spacing

Flat Reveal
(Only if required for long runs)
**Install the Flat Reveal Set base at the desired plank lengths.**

16" O.C. max spacing

Step 1 - J-Track

Install J-Track or Two-Piece J-Track perpendicular to Planks (e.g.: sides of ceiling areas), or around penetrations or cutouts. Fasten every 16" O.C. with #8 Pan Head Screws. Trims can be mitered for a clean corner look.

32" O.C. max spacing
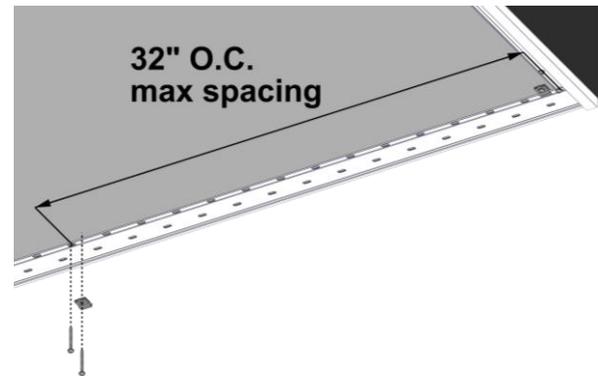
Step 2 - Starter Strip

Install the Starter Strip along the edge of the ceiling(s), fastening every 32" O.C. max with Quick Screen Clips & #8 Pan Head Screws. Notch the Starter J-Track to suit the trim component if required.

32" O.C. max spacing

Adjust for 1/4" gap
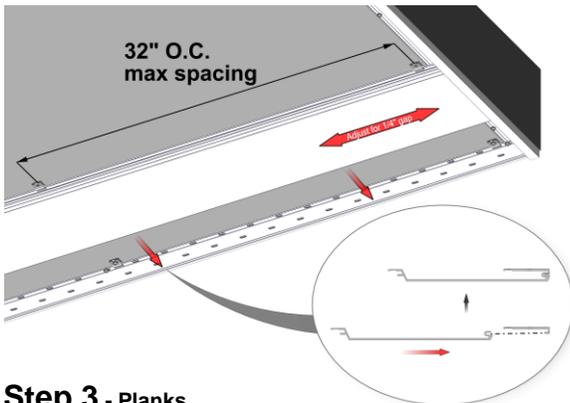
Step 3 - Planks

Place the planks onto the tongue of the Starter Strip, fully engaging tongue. Fasten with Quick Screen Clips & #8 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 and flat or straight, for best results. Ensure there is sufficient room for expansion & contraction, also confirming component caps will cover.

Step 4 - Termination

Before the last Plank, install Termination Set base fastening 16" O.C. typ.
Confirm the trim component caps will cover the last Plank and adjust accordingly. Where terminating cut planks, provide a positive stop approximately every 16" (406mm). Finish off the trims with caps from two-piece sets.

Install Steps – Perpendicular to the wall
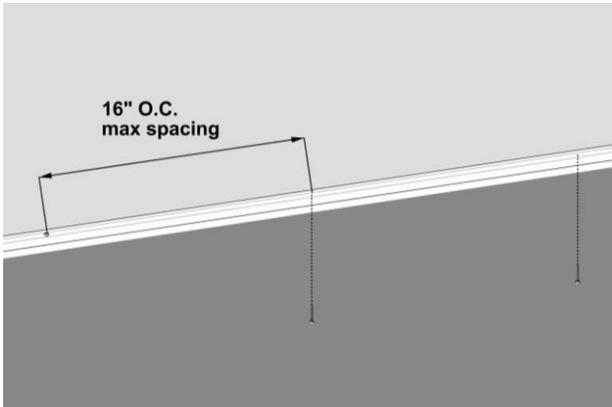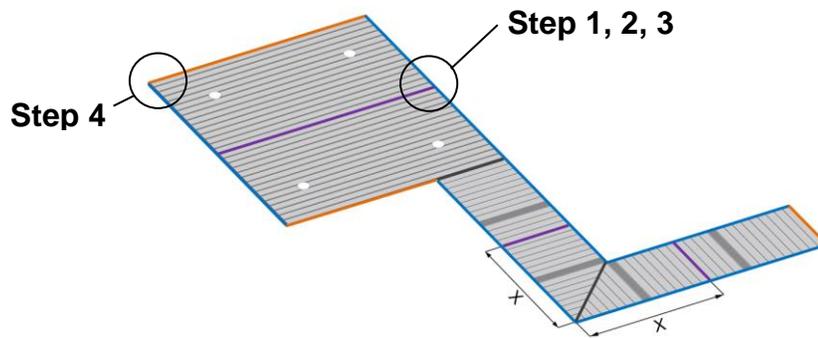
Step 1, 2, 3

Step 4

16" O.C.
max spacing

Step 1 - J-Track

Install J-Track or Two-Piece J-Track perpendicular to Planks (e.g.: sides of ceiling areas), or around penetrations or cutouts. Fasten every 16" O.C. with #8 Pan Head Screws. Trims can be mitered for a clean corner look.
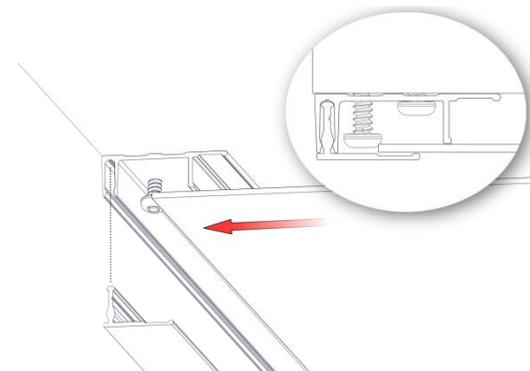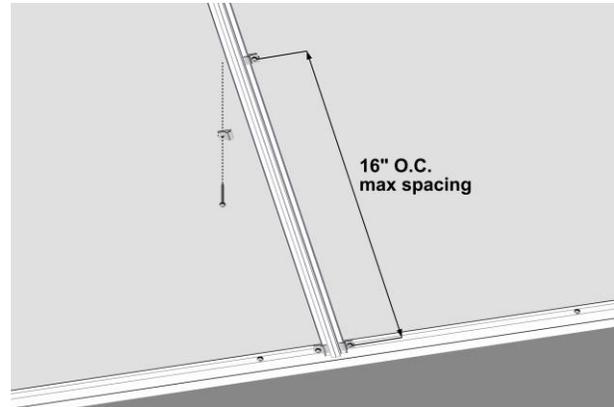

16" O.C.
max spacing

Step 2 - Back-to-Back Starter

Install the Back-to-Back Starter at the center of areas to achieve equal width ends. Fasten both sides every 16" O.C. max with Quick Screen Clips & #8 Pan Head Screws. Alternatively, use Starter Strip at the edge of the ceiling(s).

Step 3 - Planks

Place the planks onto the tongue of the Back-to-Back Starter, fully engaging tongue. Fasten with Quick Screen Clips & #8 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 and flat or straight, for best results. Ensure there is sufficient room for expansion & contraction, also confirming component caps will cover.
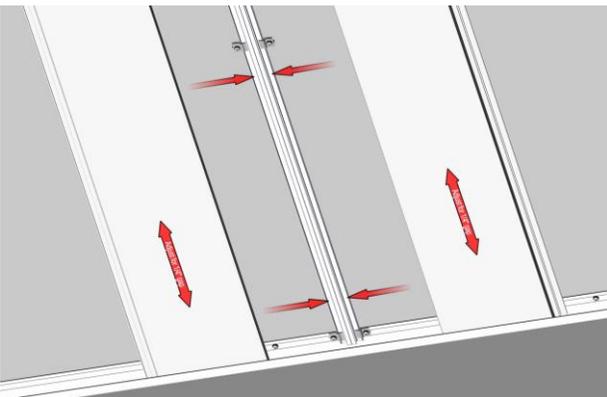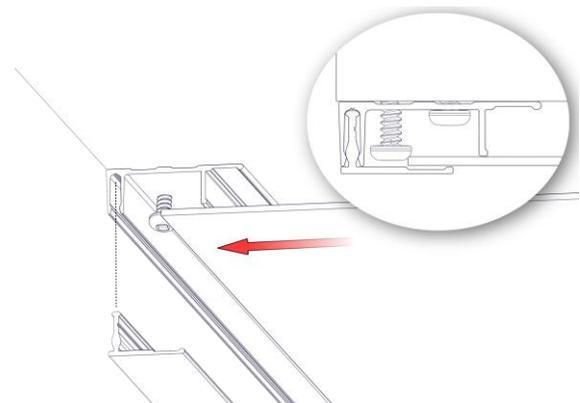

Step 4 - Termination

Before the last Plank, install Termination Set base fastening 16" O.C. typ.

Confirm the trim component caps will cover the last Plank and adjust accordingly to the suit the profile. Where terminating cut planks, provide a positive stop approximately every 16" (406mm).

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

Finishing Steps - Once planks are installed, finish off the perimeter trims with caps from two-piece sets.

Component Caps
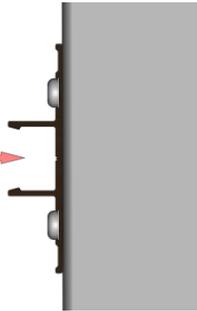
Location: Installed onto the base of the two-piece sets.
Details: If required, use a rubber mallet or hammer and block to protect the finish during this process.

U-Reveal Set Cap

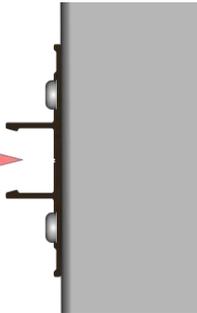Trim sizes:
3/4", 1-1/2"

Two-Piece J-Track Cap

Trim sizes:
5/8", 7/8", 1-3/8"

Flat-Reveal Set Cap

Trim sizes:
3/4", 1-1/2"

Termination Set Cap

Trim sizes:
5/8", 7/8", 1-3/8"

Details

Butt-Joints

- ⚠ When installing staggered butt-joints, hard-fasten the two planks at the butt-joint to ensure joints do not open up **(See Detail A)**. 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 4" length of Starter Strip.
- 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 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.
- 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.
- Fasten only:

Situation	Location
No butt-joints:	-Center of planks
Butt-joints:	-At the joints
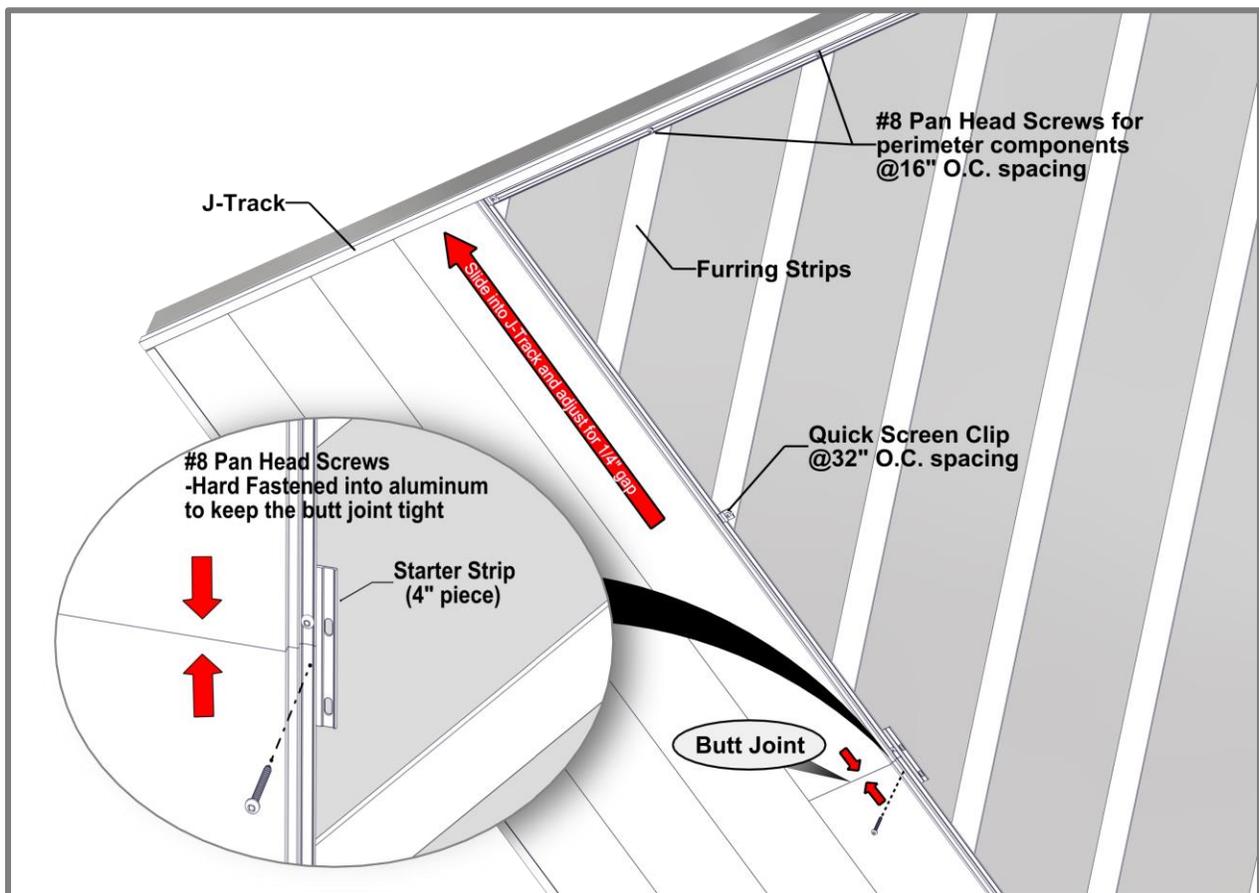
Detail A

Radius Guide for Trims & Planks

Trim Description	Min. Bending Radius	Ref.
Precision J-Track (5/8")	15' (4.57m)	A
Non-Tempered Precision J-Track (5/8")	1.5' (0.46m)	B
Two-Piece J-Track (5/8")	15' (4.57m)	A
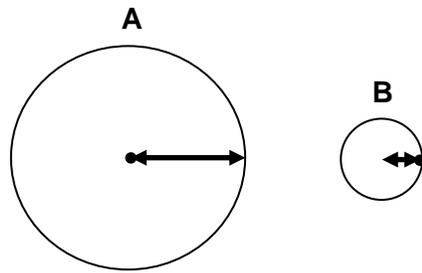
Plank Description	Min. Bending Radius		
	C (Concave/Convex)	D (Convex)	E (Concave)
4" V-Groove	12' (4.57m)	3' (0.91m)	6' (1.83m)
6" V-Groove	12' (4.57m)	3' (0.91m)	6' (1.83m)
6" Channel	12' (4.57m)	3' (0.91m)	6' (1.83m)

A   B

D (Convex)   **E (Concave)**
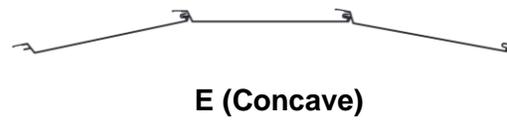
When bending & securing components, bend against solid secure object and take care not to over bend.

Appendix

Expansion and Contraction Tables

TABLE 1 - IMPERIAL

AVERAGE TEMPERATURE AT TIME OF CUTTING & INSTALLATION

°C	°F	-50	-40	-30	-20	-10	0	10	20	30	40	50
		-58	-40	-22	-4	14	32	50	68	86	104	122

MIN/MAX POST CONSTRUCTION TEMP. — EXPANSION OR CONTRACTION (INCH/FOOT)

°C	°F											
-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	°F	-50	-40	-30	-20	-10	0	10	20	30	40	50
		-58	-40	-22	-4	14	32	50	68	86	104	122

MIN/MAX POST CONSTRUCTION TEMP. — EXPANSION OR CONTRACTION (MM/METER)

°C	°F											
-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

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.
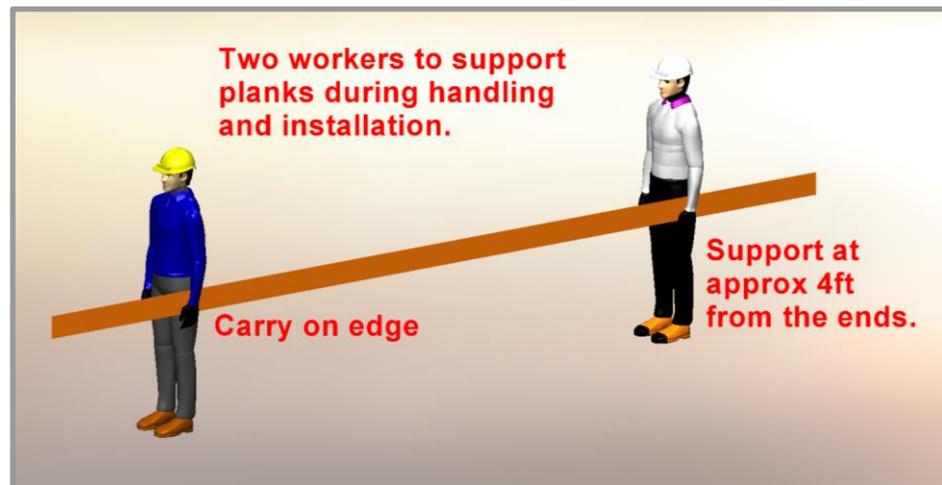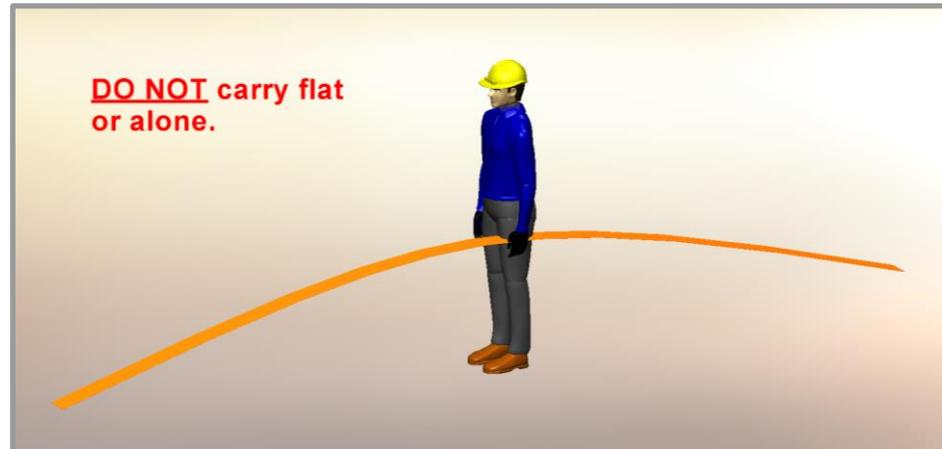
⚠️ **Delivery, Storage & Handling** ⚠️

- 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.

Longboard Architectural Products Inc.

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.