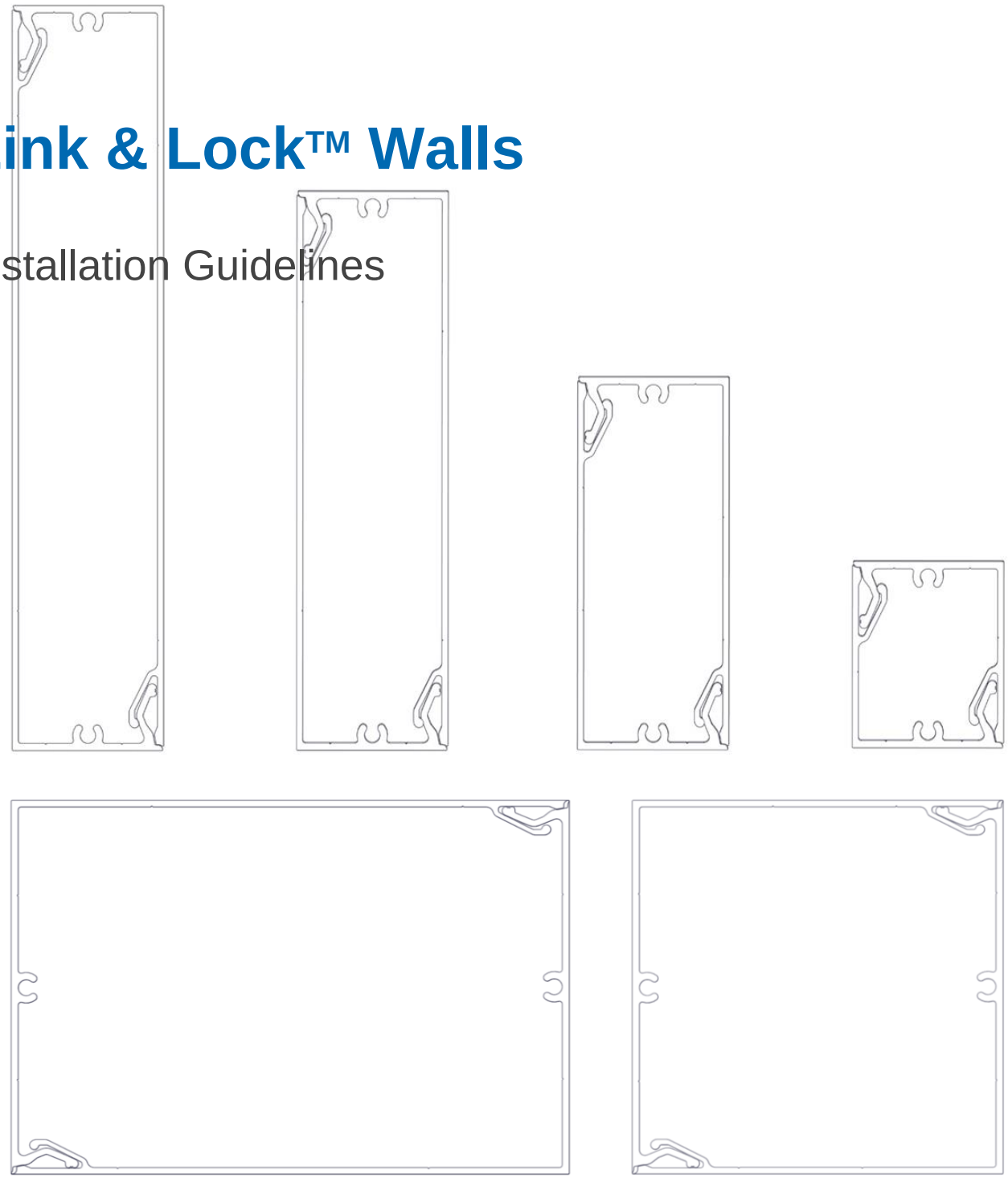
LONGBOARD®
INSPIRING ARCHITECTURE

# Link & Lock™ Walls

## Installation Guidelines



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## Material Specifications

### Finishes

- Longboard Products are available in a wide range of powder coated finishes
- Custom solid colors are available upon request

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

Although interior applications likely will not experience a large degree of temperature change, it is good practice to follow the standard attachment procedure described in this guide. See **Appendix for Tables 1 & 2, expansion/contraction calculations per foot/meter of material.**

### Material Ordering & Delivery

| | |
|---|---|
| • Packaging: | Link & Lock is sold by the set (pair) and in widths of 2”, 4”, 6”, 8”<br>End caps are sold by the box: 20 caps/bx<br>End Mounts are sold by the box: 20 mounts/bx |
| • Ship/Receiving: | Most Popular Finishes -ready to ship within 1 week<br>Additional Finishes -ready to ship within 14 weeks<br>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

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

## Components

### Components (Typical)

The Link & Lock™ system consists of two (2) matching L-shaped extrusions, snapped together to make a complete set. For all LB components go to longboardproducts.com.

## Link & Lock™ Battens

| Size | 12′ | 24′ | End Caps (20/box) | End Mounts (20/box) |
|---|---|---|---|---|
| **2″** | 2X2LL.145 | 2X2LL.289 | 2LLEC.2 | 2LLEM.2 |
| **4″** | 2X4LL.145 | 2X4LL.289 | 2LLEC.4 | 2LLEM.4 |
| **6″** | 2X6LL.145 | 2X6LL.289 | 2LLEC.6 | 2LLEM.6 |
| **8″** | 2X8LL.145 | 2X8LL.289 | 2LLEC.8 | 2LLEM.8 |
| **Link & Lock™ HD Battens** | | | | |
| **4"** | 2X4LLHD.145 | 2X4LLHD.289 | 2LLHDEC.4 | 2LLHDEM.4 |
| **6"** | 2X6LLHD.145 | 2X6LLHD.289 | 2LLHDEC.6 | 2LLHDEM.6 |
| **8"** | 2X8LLHD.145 | 2X8LLHD.289 | 2LLHDEC.8 | 2LLHDEM.8 |
| **Link & Lock™ Box Battens** | | | | |
| **4 x 4"** | 4X4LL.145 | 4X4LL.289 | 4LLEC.4 | - |
| **4 x 6"** | 4X6LL.145 | 4X6LL.289 | 4LLEC.6 | - |

Link & Lock™ Batten

Link & Lock™ HD Batten

4 x 4"

4 x 6"

Link & Lock ™ Box Battens

| Mounting Accessories | Qty | SKU |
|---|---|---|
| **Link & Lock Mounting Clip** | 48, bag | LLMC.N48 |
| **Link & Lock™ Isolation Washer** | 48, bag | LLIW.N48 |
| **Dewalt® 1/2″ Pilot Point Drill Bit** | 1 | DRILLBT.05 |

L&L Mounting Clip

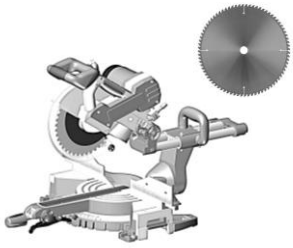
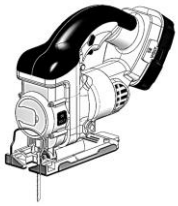
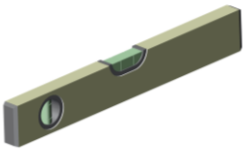
Isolation Washer

1/2" Pilot Point

## Tools/Cutting/Fastening

### Tools

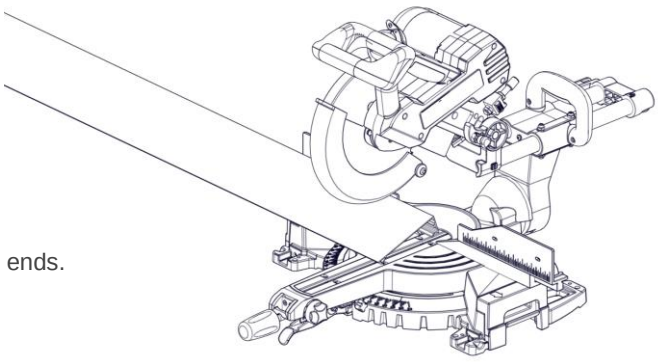
Commonly used tools for Link & Lock install.

| | | | |
|---|---|---|---|
|  |  |  |  |
| 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) | Quick Grip Bar Clamp |

### Cutting

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

Cut battens 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 Link & Lock without trimming the ends.

## Fastening

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

**Typical Spacing:**

- **6 - 8’ O.C.**

-using **Mounting Clips** and **Isolation Washers**
-See **Appendix Tables 3-8** for project specific spacing.

Mounting Clips and Isolation Washers are included in the order for 6’ spacings. Add more to the order if required for shorter spacings.

**Fasteners:**
See fastener sizes below (By others)

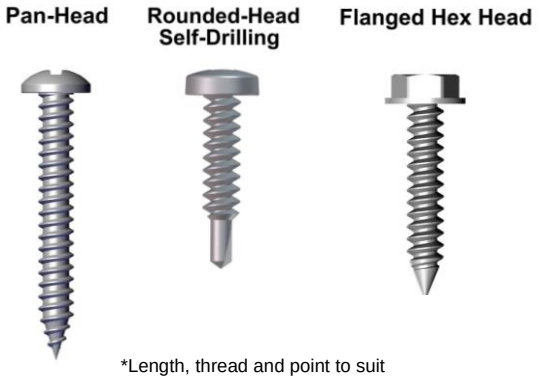
Layout and predrill the back “L” at all fastener locations.
Refer to **Preparation drilling for Install** for hole dimensions and further details.

⚠ See **Appendix for fastener specs: Allowable Span - Tables 3-8**

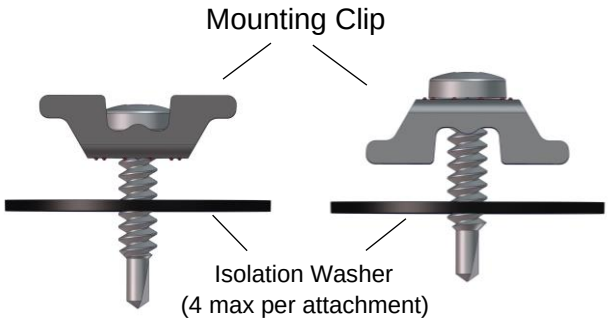
| Fastener Types/Sizes for L&L | | |
|---|---|---|
| **L&L** | **Pan Head** | **Hex Head** |
| 2” | #12 | #12 |
| 4” | #12 | #12 |
| 6” | #12 | #12 |
| 8” | #12 | #12 |
| 4”x4” | #12 | #12 |
| 4”x6” | #12 | #12 |
| 4” HD | #14 | #14 |
| 6” HD | #14 | #14 |
| 8” HD | #14 | #14 |

**Fastener types**

**RECOMMENDED**

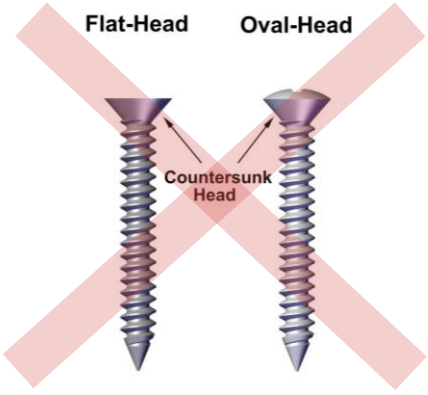



*Length, thread and point to suit substrate and material surface.

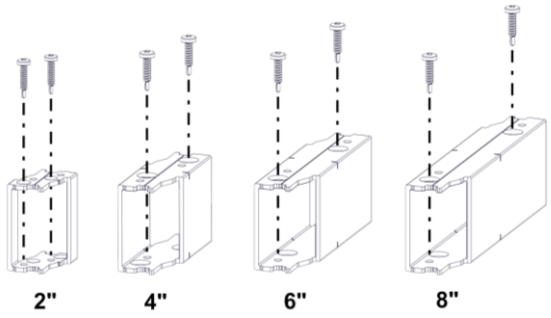



Batten (flat orientation) Fin orientation

**DO NOT USE**



| Fastener Types/Sizes for End Mounts | | |
|---|---|---|
| **End Mount** | **Pan Head** | **Hex Head** |
| 2” | #10 | |
| 4” | #12 | #12 |
| 6” | #12 | #12 |
| 8” | #12 | #12 |
| 4” HD | #14 | #14 |
| 6” HD | #14 | #14 |
| 8” HD | #14 | #14 |




**Framing/Furring requirements**
Always consult your local building authority and follow local building code requirements.
See Typical dimensions for sizes and weights of the L&L system.

See **Appendix for framing/furring/sheathing specs: Tables 3-8**

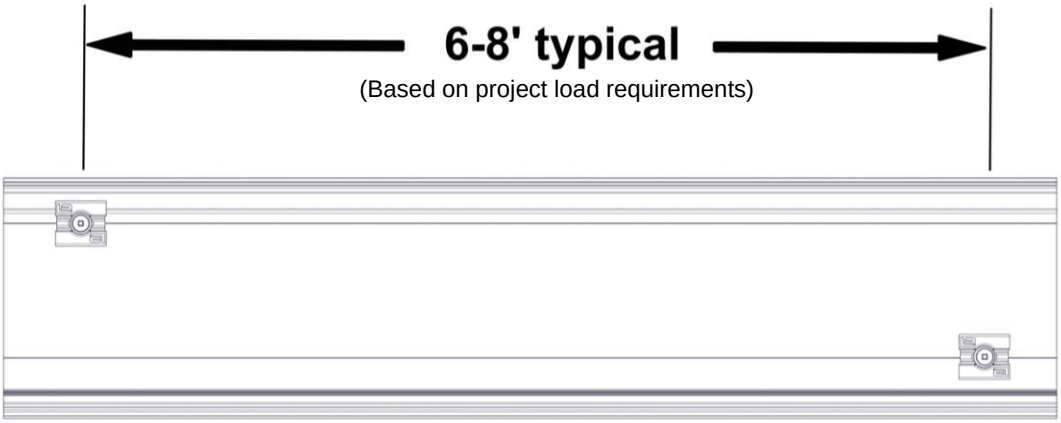
**Install details**

Typical dimensions

- Longboard Link & Lock system typical dimensions:

| L&L | Width | Depth | Length | Weight(lbs/LF) *per set |
|---|---|---|---|---|
| **2”** | 2” (50.8mm) | 1 5/8” (41.3mm) | 12’/24’ | 0.93 |
| **4”** | 4” (101.6mm) | 1 5/8” (41.3mm) | 12’24’ | 1.3 |
| **6”** | 6” (152.4mm) | 1 5/8” (41.3mm) | 12’/24’ | 1.6 |
| **8”** | 8” (203mm) | 1 5/8” (41.3mm) | 12’/24’ | 1.9 |
| **4”x4”** | 4” (101.6mm) | 4” (101.6mm) | 12’/24’ | 1.8 |
| **4”x6”** | 6” (152.4mm) | 4” (101.6mm) | 12’/24’ | 2.1 |
| **4” HD** | 4” (101.6mm) | 2” (50.8mm) | 12’/24’ | 1.7 |
| **6” HD** | 6” (152.4mm) | 2” (50.8mm) | 12’/24’ | 2.4 |
| **8” HD** | 8” (203mm) | 2” (50.8mm) | 12’/24’ | 3 |

- It is good practice to leave a 1/4” (6mm) gap between every component joint or 24’ (7.3m) to allow for expansion & contraction. Consider the joints where components meet each other to dictate which component is installed first (eg: right angle butt joints, mitered joints etc.).
- Mounting Clips and Isolation Washers allow for movement of the battens, to expand & contract during thermal changes.
- Fasten Mounting Clips every 6-8’ typical (based on project wind load requirements), alternating from top to bottom for battens using die lines for guides.



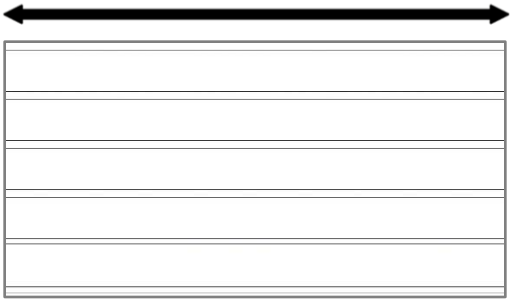

Attachment points using
Mounting Clips

**System layout and Install steps**

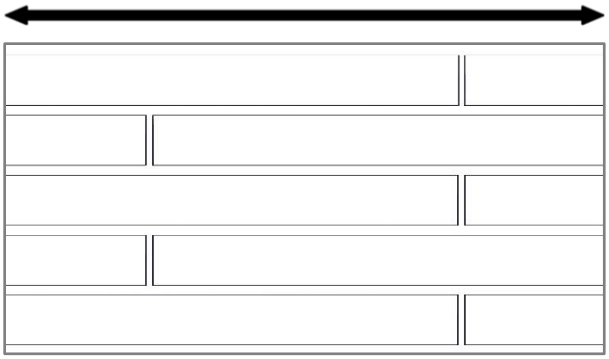
Perimeter and field area limitations

Measure and layout your wall area to consider Link & Lock alignment with fixtures, penetrations, and adjacent walls, for desired appearance. The same methodology applies for vertical installations.

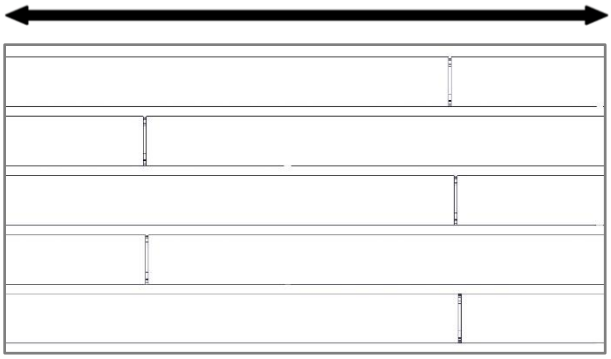
Seamless runs up to 24’ length battens (no butt-joints)

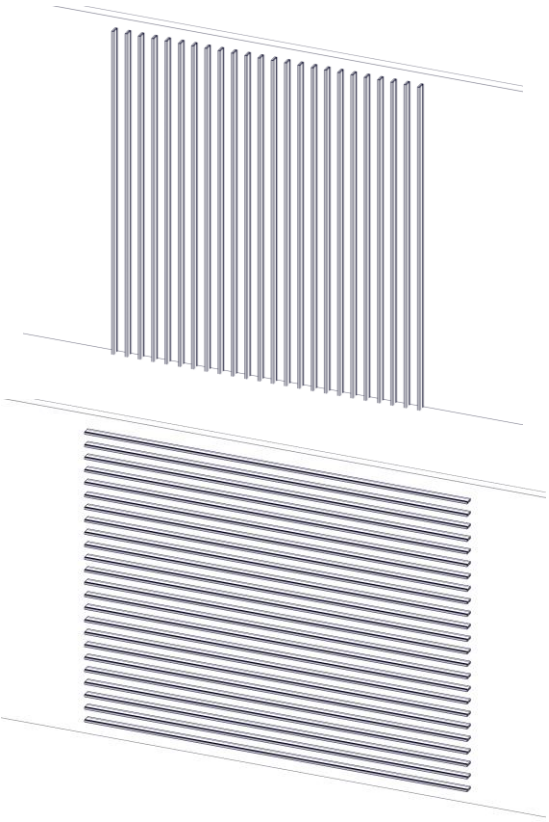


Runs with staggered butt-joints



Runs with staggered lap-joints.





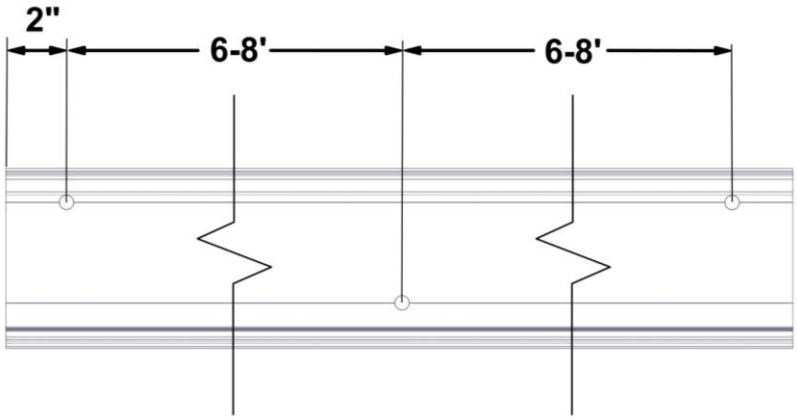
Link & Lock can cantilever half the allowable attachment span up to a **maximum of 3’** for all sizes and orientation. See Appendix for allowable attachment span: **Tables 3-8**

Preparation drilling for Install

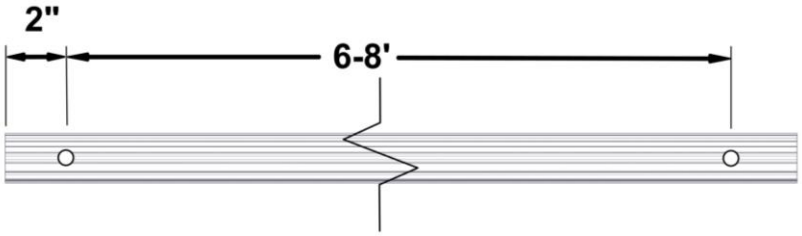
To prepare Link & Lock for install, layout and predrill the back “L” with 1/2" holes every 6-8’ O.C. typical, with the first hole 2” in from the end to allow space for the End Cap.
For the Batten orientation, alternate the holes from top to bottom using the Dielines for guides.
For Fin orientation, use Pilot Point Drill Bit (see below) as recommended for ease of drilling.
Note: To hard fasten 1 location per length, omit the drilled hole at that location and use for hard fastening.

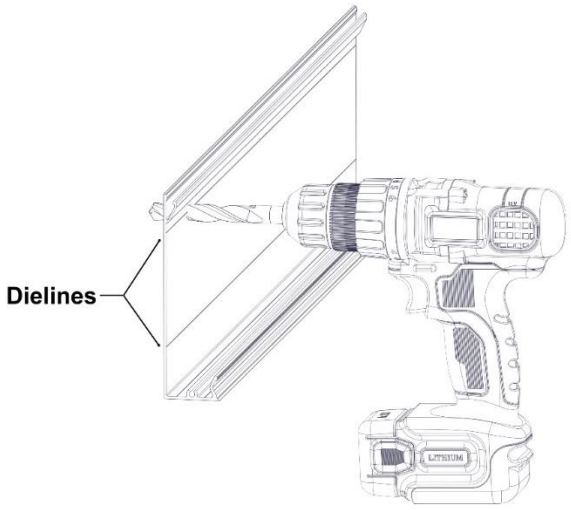
See **Appendix for project specific fastener spacing:**
**Allowable Span - Tables 3-8**

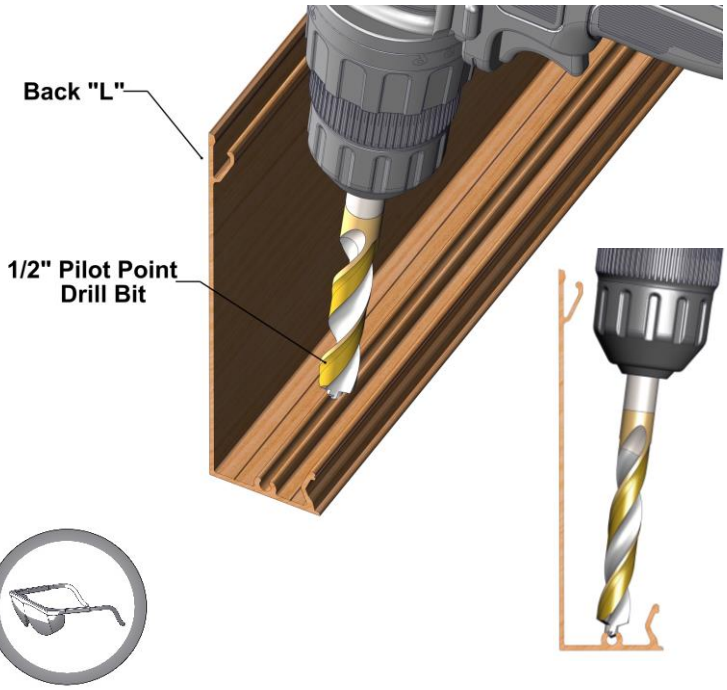
Batten orientation




Fin orientation

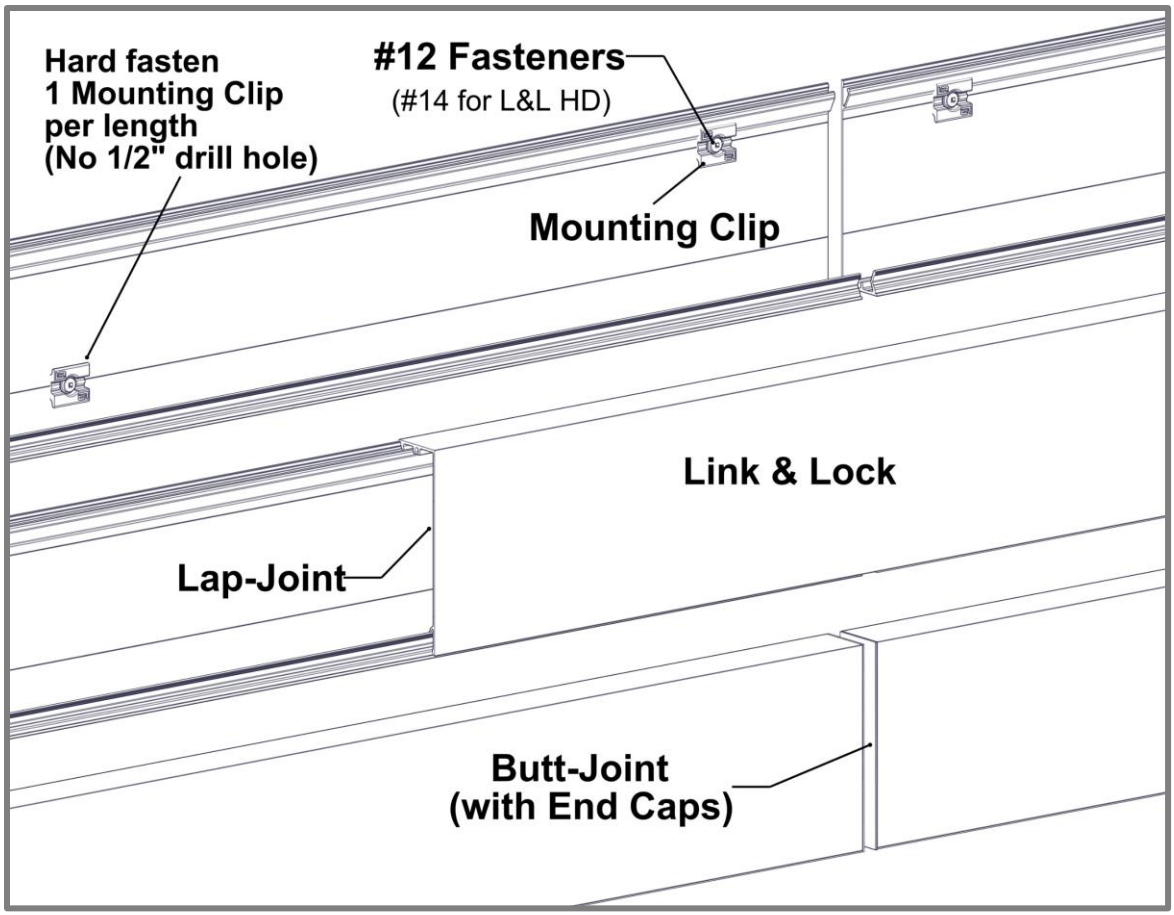


Butt-Joints & Lap Joints

- ⚠ BUTT-JOINTS. When installing butt-joints, ensure to leave a 1/4” (6mm) min. gap. every 24’ (7.3m) min. (**See Detail A)**. Fasteners should be anchored into a solid secure framing member, blocking, furring strip, or backer plate, etc.
- ⚠ LAP-JOINTS. When installing lap-joints, ensure to leave a 1/4” (6mm) min. gap. every 24’ (7.3m) min. (**See Detail A)**. Fasteners should be anchored into a solid secure framing member, blocking, furring strip, or backer plate, etc.
- If needed, use touch-up paint pens (purchased separately) to finish the ends at the butt-joint or lap-joint.
- It is good practice to hard-fasten each back “L” at one point per length typically near the center, to keep the battens from migrating.
- DO NOT hard-fasten more than one (1) location per batten.

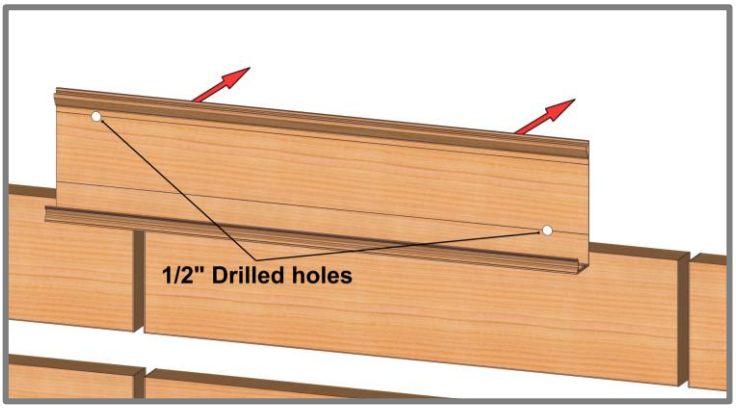



**Detail A**

Install Batten orientation

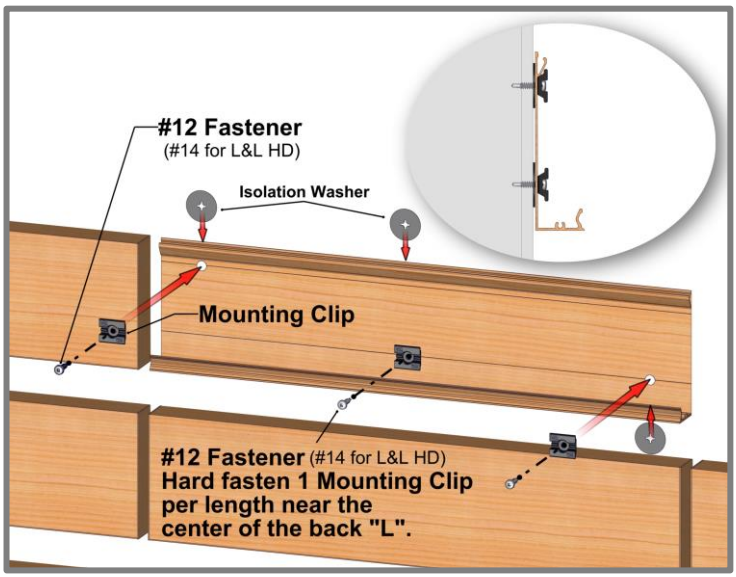
Step 1
Place predrilled Link & Lock back “L” into position (Drilling page 11). It is good practice to check your installation every 2-3 rows for level/plumb and flat/straight, for best results.

⚠ **Cut off Taped/Drilled L&L ends (1/2" each end).**

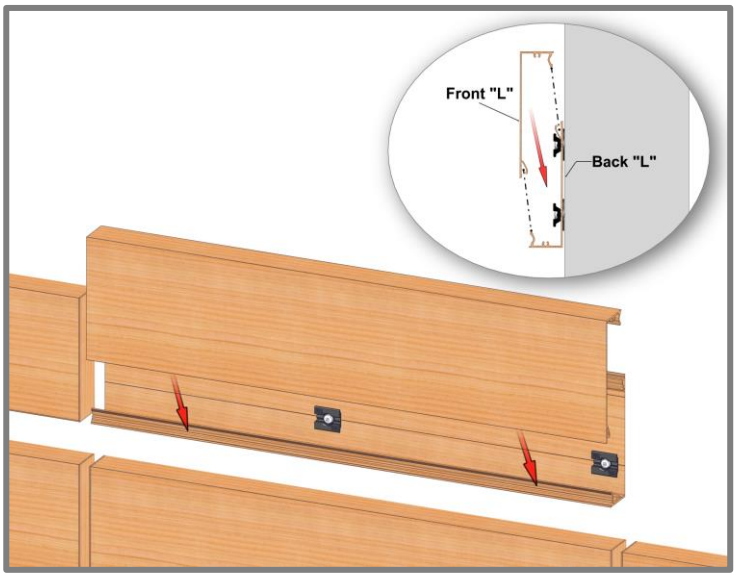



Step 2
Install back “L” using #12 Fasteners (#14 for L&L HD), Mounting Clips and Isolation Washers every 6-8’ O.C. typical. Isolation Washers are installed between the L&L and the substrate (4 max per attachment).

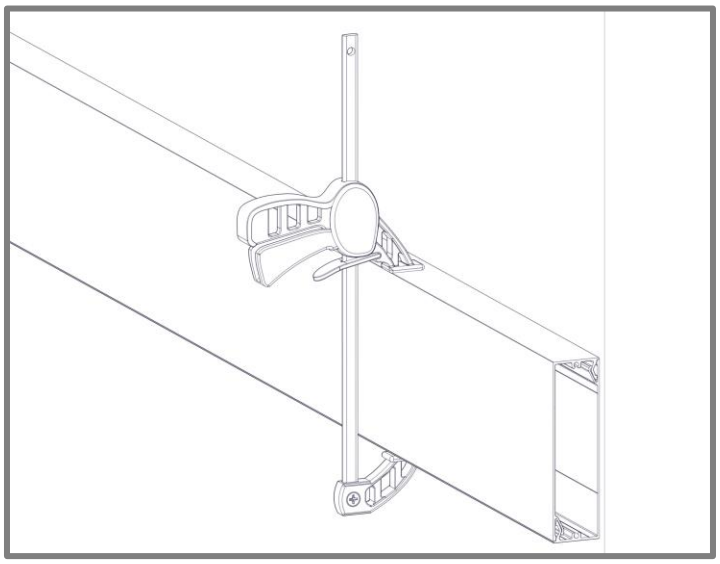
Note: Be sure to fasten in the center of the 1/2” holes to allow for movement each way. Hard fasten near the center of each length to prevent migration of the material over time.




Step 3
Install front “L” and snap it into place, aligning it with ends and joints.
If necessary, use a rubber mallet or hammer and block to protect the finish.



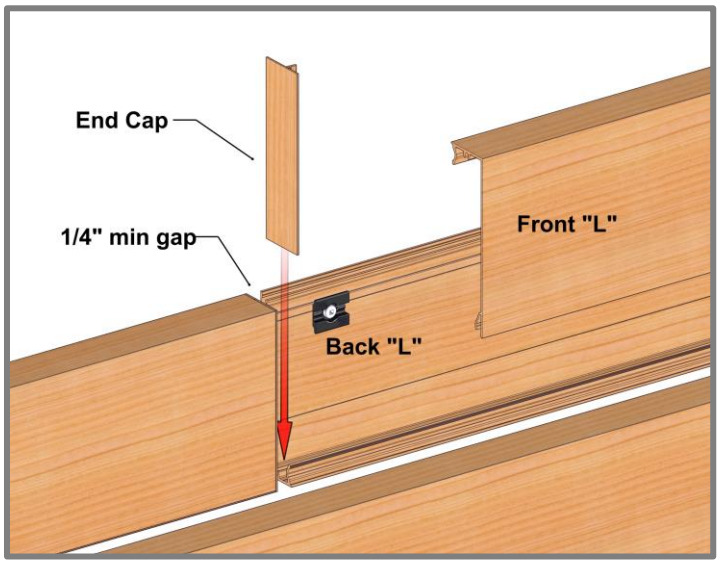
Step 3.1
Use clamps with rubber pads as common practice to securely snap the front “L” onto the back “L”.

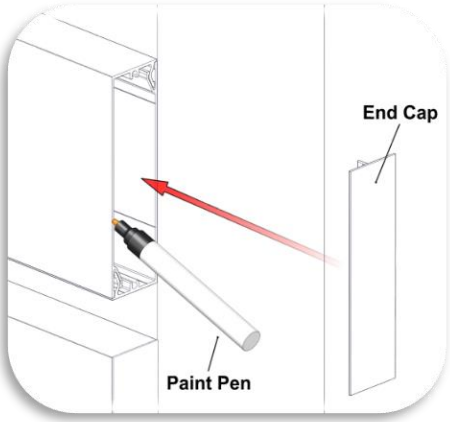


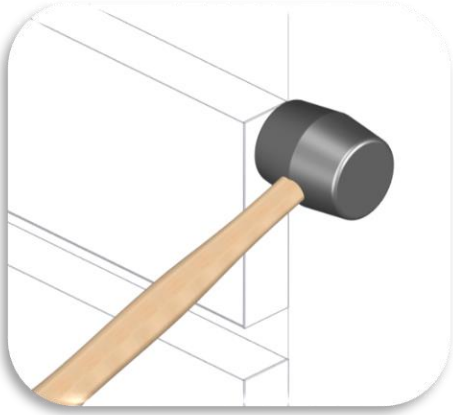
Step 4
Install End Caps, which are friction fit, by pressing them into place using the palm of your hand. If necessary, use a rubber mallet to snap them into place. See below images.
Use paint pens to coat Link & Lock cut ends that may show slightly beyond the End Caps.

Consider your application sequence of the End Caps before installing adjacent Link & Lock members, as they may limit the space needed to insert the caps. In this situation you may need to install the caps first then the front “L” as seen in the image to the right.

⚠TIP: Use shim to hold/secure cap while snapping in the front “L”.



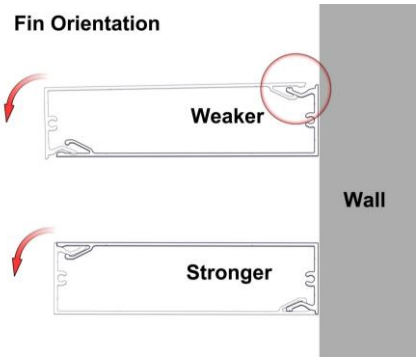



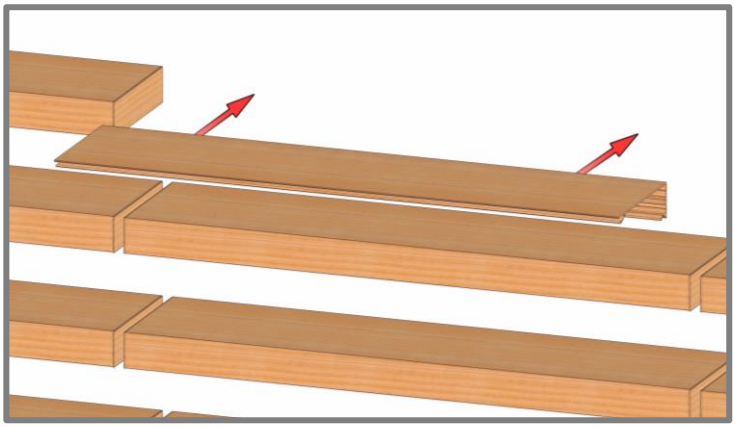



Install Fin orientation

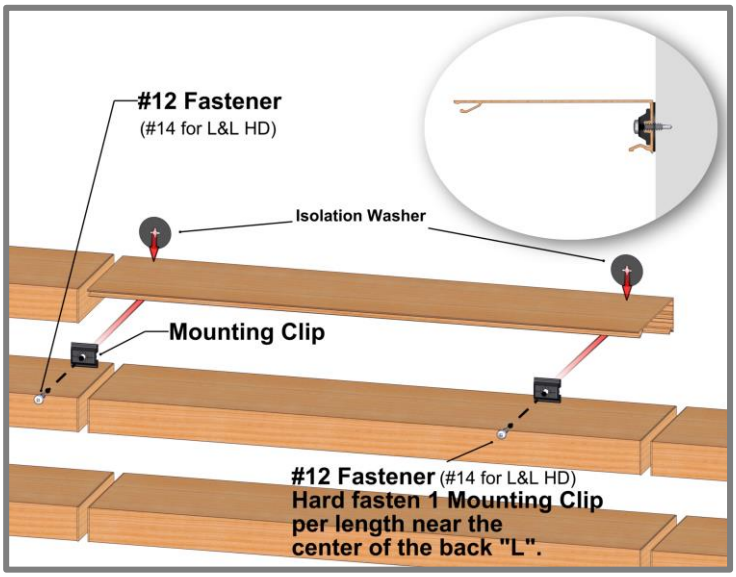
Step 1
Place predrilled Link & Lock back “L” into position (Drilling page 11). It is good practice to check your installation every 2-3 rows for level/plumb and flat/straight, for best results.

**Cut off Taped/Drilled L&L ends (1/2" each end).**



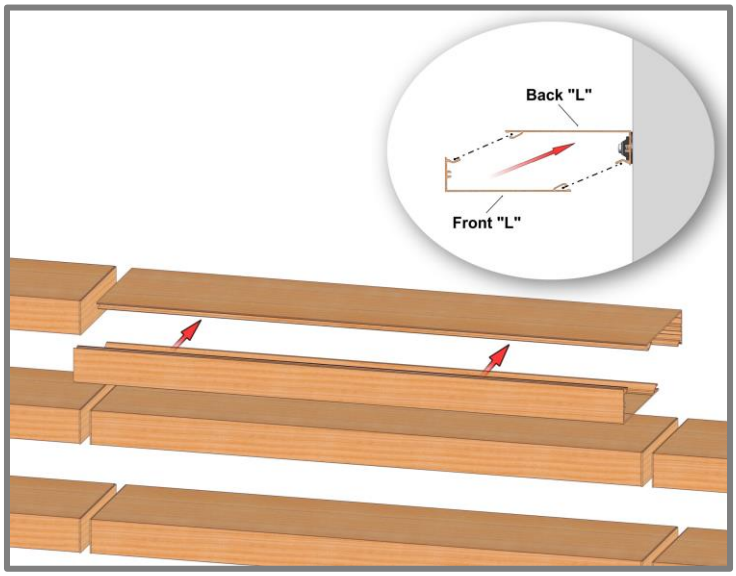



Step 2
Install back “L” using #12 Fasteners (#14 for L&L HD) and Mounting Clips and Isolation Washers every 6-8’ O.C. typical. Isolation Washers are installed between the L&L and the substrate (4 max per attachment).




Note: Be sure to fasten in the center of the 1/2" holes to allow for movement each way. Hard fasten near the center of each length to prevent migration of the material over time.

Step 3
Install front “L” and snap it into place, aligning it with ends and joints.
If necessary, use a rubber mallet or hammer and block to protect the finish.



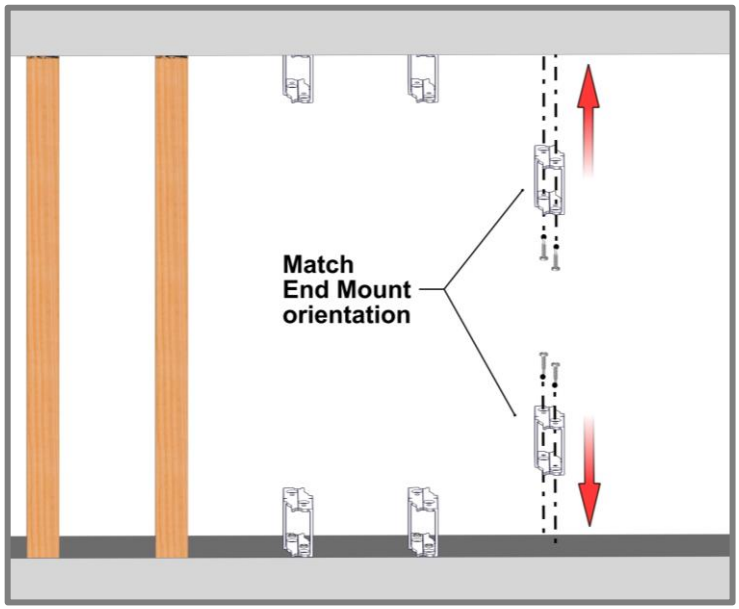

Step 4
Refer to Page 14 for End Cap install and considerations.

Install End to End orientation

Note: Use Tables 3-8 in Appendix for Allowable Span.

Step 1

Place End Mounts into position at the top and bottom of the install. It is good practice to check your installation every 2-3 rows for level/plumb and flat/straight, for best results.

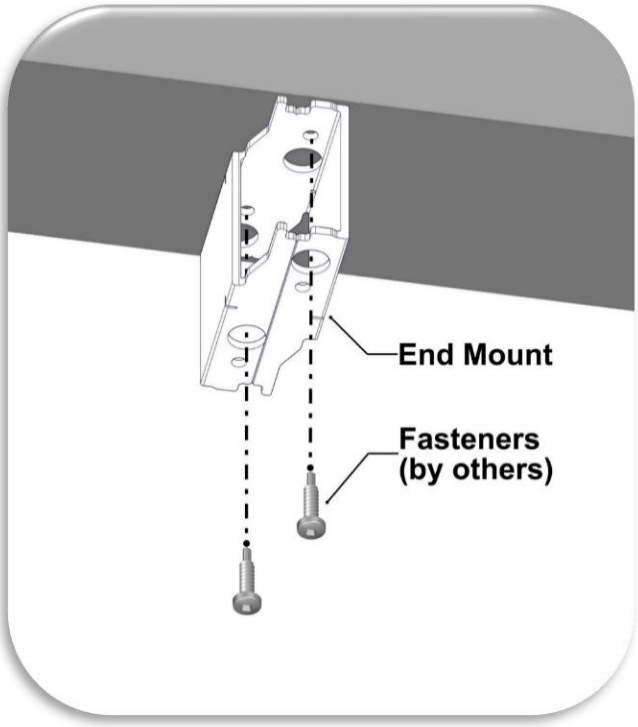


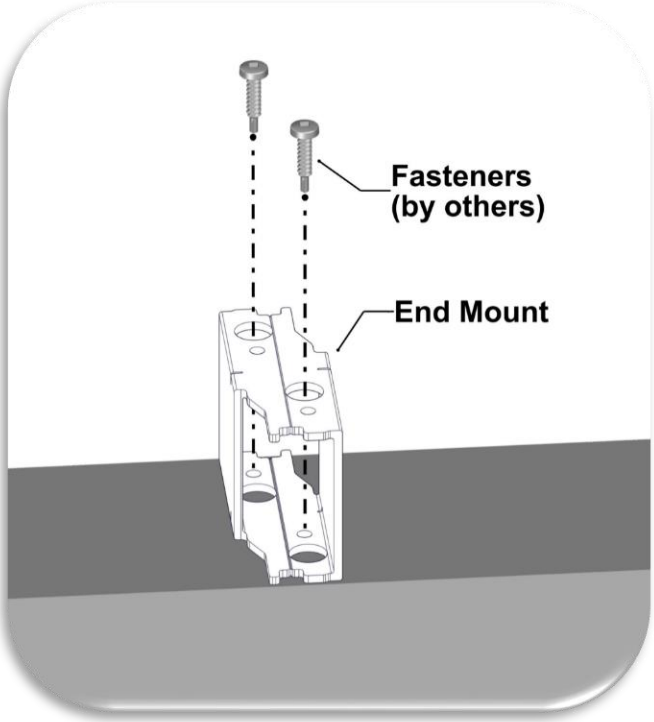

| Fastener Types for End Mounts | | |
|---|---|---|
| **End Mount** | **Pan Head** | **Hex Head** |
| 2” | #10 | |
| 4” | #12 | #12 |
| 6” | #12 | #12 |
| 8” | #12 | #12 |
| 4” HD | #14 | #14 |
| 6” HD | #14 | #14 |
| 8” HD | #14 | #14 |

Step 2

Install the End Mounts using Fasteners (by others). Make sure to match the orientation of the End Mounts so the Link & Lock set matches on the top and the bottom. See above for **Fastener Types and sizing for End Mounts.**

⚠ TIP: Check the position of the End Mounts once installed to allow a plumb and straight look.



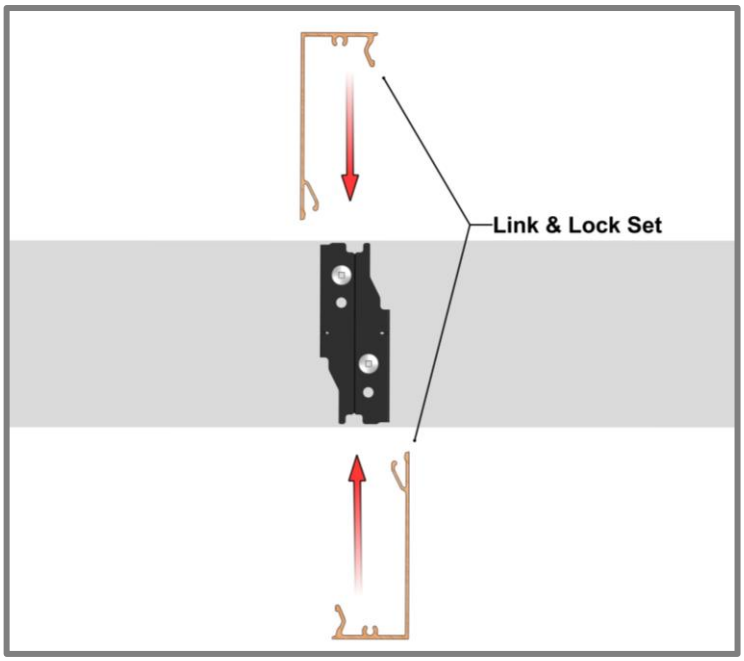
Step 3

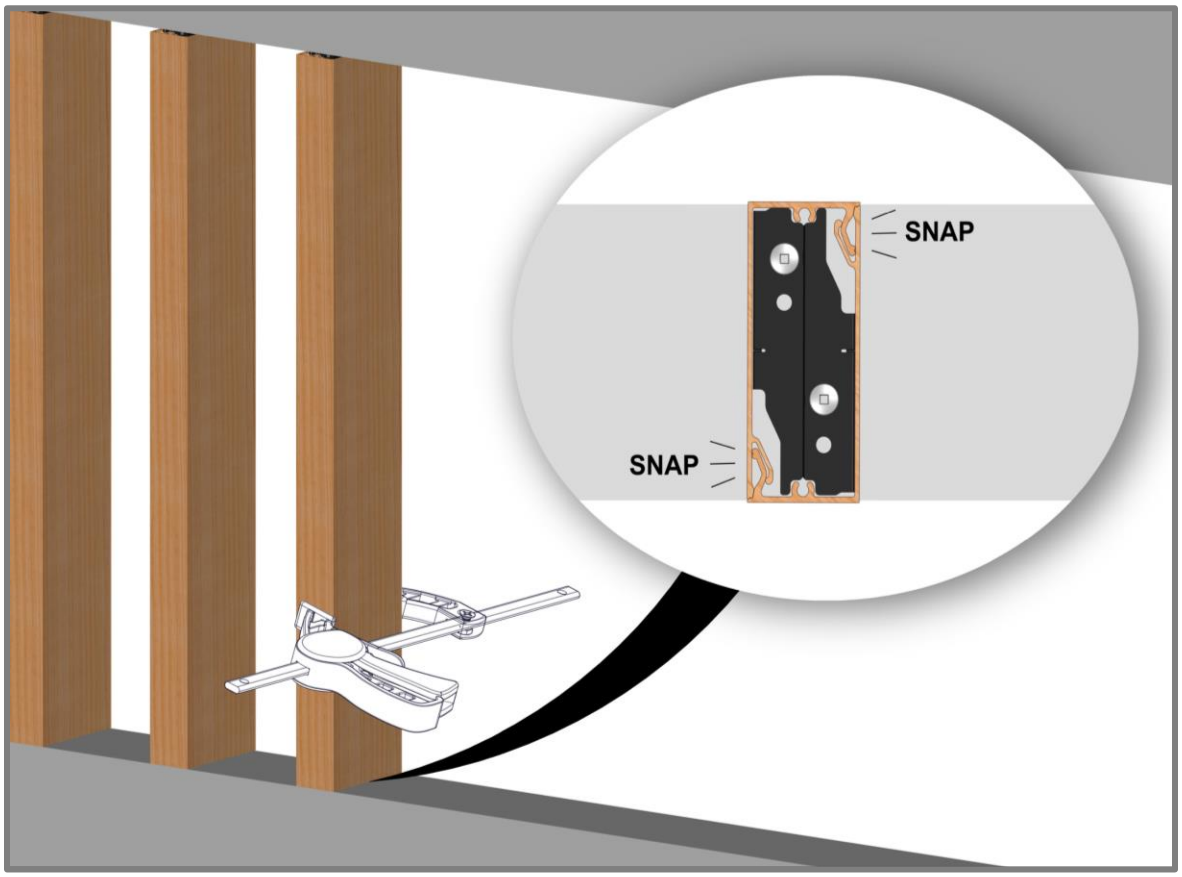
Measure, cut and install Link & Lock Set and snap it into place onto the End Mounts. Use clamps with rubber pads as common practice to securely snap the front “L” onto the back “L”.

If necessary, use a rubber mallet or hammer and block to protect the finish.

⚠TIP: When measuring the Link & Lock, make sure to leave a gap (~1/4”) for expansion and building movement.


⚠ **Cut off Taped/Drilled L&L ends (1/2" each end).**



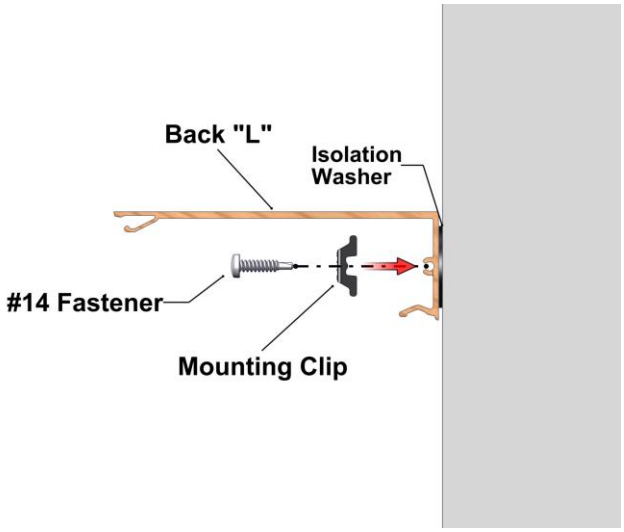



# Link & Lock HD

- Used for greater spans compared to standard Link & Lock
- Available sizes: 4”, 6” & 8” (2” depth)
- Uses standard Mounting Clip, Isolation Washer and attachment methods
- Use #14 Fasteners

Refer to System Layout and Install steps section for typical install details.

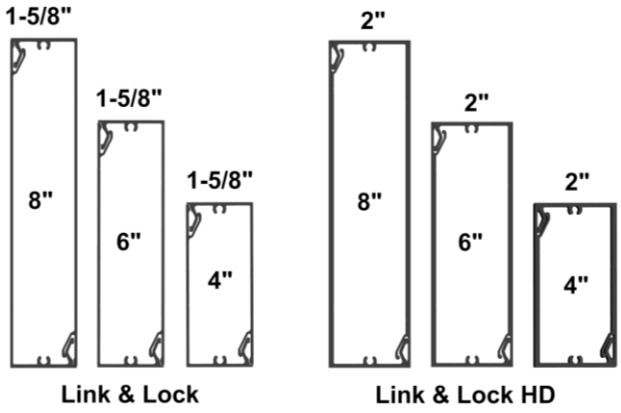
To Compare allowable spans:
See **Appendix for allowable spans for project specific load.**
**Allowable Span – Tables 4-6**




**6” L&L**
6’ span max
@30PSF

**6” L&L HD**
12’ span max
@30PSF

**Profile Comparison**

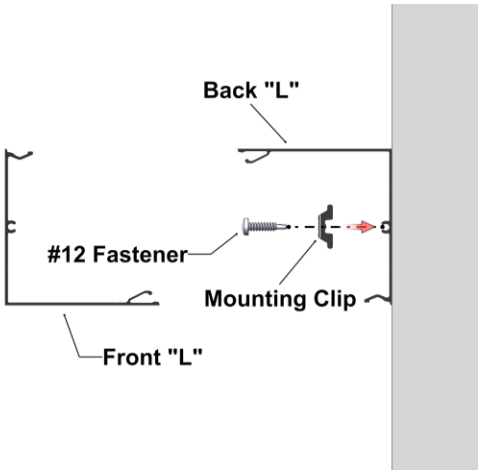


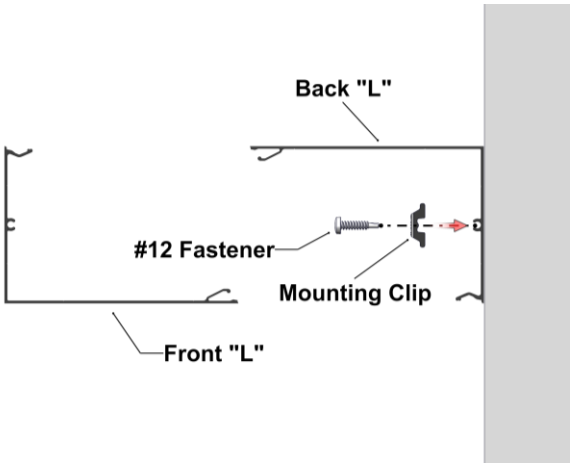
## 4x4 & 4x6 Link & Lock

- Available sizes: 4”x4” & 4”x6”
- Uses standard Mounting Clip and attachment methods with #12 Fasteners

Refer to System Layout and Install steps section for typical install details.

See **Appendix for allowable spans for project specific load.**
**Allowable Span – Tables 7 & 8**



# 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

v1.1

### FASTENER SPACING - LOAD TABLE

| 2" LINK & LOCK™ Standard | | PSF (Factored / Ultimate) | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 20 | 30 | 40 | 50 | 60 | 70 | 80 | 90 | 100 | 110 | 120 |
| ALLOWABLE SPAN (FT)* | 4' | | | | | | | | | | | |
| | 6' | | | | | | | | | | | |
| | 8' | | | | | | | | | | | |
| | 10' | | | | | | | | | | | |

*CANTILEVERS are not to exceed half (1/2) the allowable span to a maximum of 3'

*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 | #12 Pan Head Wood Screw | 1-1/2" | 1" |
| STEEL | Min. 18 ga., Min. Fy=33 ksi. | #12 Self-Drilling or Self-Tapping Screw (Grade 5) | 3 threads penetration past metal structure | 1/2" |
| ALUMINUM | Min. 1/8", Min. 6063-T5 | | | |
| CONCRETE | Min. 3000 psi | 3/16" ITW Tapcon | 1-1/2" | 1-3/4" |
| HOLLOW/GROUT-FILLED CMU | Conforms to ASTM C-90, with Min. compressive strength of 2000 psi | | 1" | 2" |

GENERAL NOTES:

1. This product has been designed and manufactured to comply with the current Florida Building Code (FBC), **INCLUDING** HVHZ and has been evaluated according to the following:
   - Section 1709.8
   - ASTM E8-16
2. Adequacy of the structural concrete/masonry and 2X framing as a main wind force resisting 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.
3. Substrate shall be designed and anchored to properly transfer all loads to the structure. Buck design and installation is the responsibilty of the engineer or architect of record for the project of installation.
4. 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.
5. Link & Lock is not designed to be a life-safety item. Designs of this nature are the responsibility of the engineer or architect of record.

INSTALLATION NOTES:

1. One (1) installation anchor is required at each location. Minimum of two (2) anchors per batten.
2. Spacing is from 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. Minimum embedment and edge distance exclude wall finishes, including but not limited to stucco, foam, brick veneer, sheathing and siding.
6. 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
7. For hollow block and grout filled CMU 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.
8. 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.
9. When using end mounts, span distance is measured center to center of each end mount.

**TABLE 4**

LONGBOARD®
INSPIRING ARCHITECTURE

v.1.1

## FASTENER SPACING - LOAD TABLE

**4" LINK & LOCK™**

Standard | Standard w. Stiffener | HD

ALLOWABLE SPAN (FT)*

| | PSF (Factored / Ultimate) | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 20 | 30 | 40 | 50 | 60 | 70 | 80 | 90 | 100 | 110 | 120 |
| 2' | | | | | | | | | | | |
| 4' | | | | | | | Standard w. Stiffener | | | | |
| 6' | | | | | Standard w. Stiffener | | | HD | | | |
| 8' | | | Standard w. Stiffener | | | HD | | | | | |
| 10' | Standard w. Stiffener | | | HD | | | | | | | |
| 12' | Standard w. Stiffener | | HD | | | | | | | | |

*CANTILEVERS are not to exceed half (1/2) the allowable span to a maximum of 3'

*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 | #12 Pan Head Wood Screw | 1-1/2" | 1" |
| STEEL | Min. 18 ga., Min. Fy=33 ksi. | #12 Self-Drilling or Self-Tapping Screw (Grade 5) | 3 threads penetration past metal structure | 1/2" |
| ALUMINUM | Min. 1/8", Min. 6063-T5 | | | |
| CONCRETE | Min. 3000 psi | 3/16" ITW Tapcon | 1-1/2" | 1-3/4" |
| HOLLOW/GROUT-FILLED CMU | Conforms to ASTM C-90, with Min. compressive strength of 2000 psi | | 1" | 2" |

GENERAL NOTES:

1. This product has been designed and manufactured to comply with the current Florida Building Code (FBC), **INCLUDING** HVHZ and has been evaluated according to the following:
   - Section 1709.8
   - ASTM E8-16
2. Adequacy of the structural concrete/masonry and 2X framing as a main wind force resisting 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.
3. 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.
4. 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.
5. Link & Lock is not designed to be a life-safety item. Designs of this nature are the responsibility of the engineer or architect of record.

INSTALLATION NOTES:

1. One (1) installation anchor is required at each location. Minimum of two (2) anchors per batten.
2. Spacing is from 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. Minimum embedment and edge distance exclude wall finishes, including but not limited to stucco, foam, brick veneer, sheathing and siding.
6. 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
7. For hollow block and grout filled CMU 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.
8. 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.
9. When using end mounts, span distance is measured center to center of each end mount.

## TABLE 5

LONGBOARD®
INSPIRING ARCHITECTURE

v1.1

### FASTENER SPACING - LOAD TABLE

**6" LINK & LOCK™**

Standard | Standard w. Stiffener | HD

| ALLOWABLE SPAN (FT)* | PSF (Factored / Ultimate) | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 20 | 30 | 40 | 50 | 60 | 70 | 80 | 90 | 100 | 110 | 120 |
| 2' | | | | | | | | | | | |
| 4' | | | | | | | | | | | Standard w. Stiffener |
| 6' | | | | Standard w. Stiffener | | HD | | | | | |
| 8' | Standard w. Stiffener | | | HD | | | | | | | |
| 10' | Standard w. Stiffener | | HD | | | | | | | | |
| 12' | HD | | | | | | | | | | |

*CANTILEVERS are not to exceed half (1/2) the allowable span to a maximum of 3'

*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 | #12 Pan Head Wood Screw | 1-1/2" | 1" |
| STEEL | Min. 18 ga., Min. Fy=33 ksi. | #12 Self-Drilling or Self-Tapping Screw (Grade 5) | 3 threads penetration past metal structure | 1/2" |
| ALUMINUM | Min. 1/8", Min. 6063-T5 | | | |
| CONCRETE | Min. 3000 psi | 3/16" ITW Tapcon | 1-1/2" | 1-3/4" |
| HOLLOW/GROUT-FILLED CMU | Conforms to ASTM C-90, with Min. compressive strength of 2000 psi | | 1" | 2" |

GENERAL NOTES:

1. This product has been designed and manufactured to comply with the current Florida Building Code (FBC), **INCLUDING** HVHZ and has been evaluated according to the following:
   - Section 1709.8
   - ASTM E8-16
2. Adequacy of the structural concrete/masonry and 2X framing as a main wind force resisting 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.
3. Substrate shall be designed and anchored to properly transfer all loads to the structure. Buck design and installation is the responsibilty of the engineer or architect of record for the project of installation.
4. 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.
5. Link & Lock is not designed to be a life-safety item. Designs of this nature are the responsibility of the engineer or architect of record.

INSTALLATION NOTES:

1. One (1) installation anchor is required at each location. Minimum of two (2) anchors per batten.
2. Spacing is from 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. Minimum embedment and edge distance exclude wall finishes, including but not limited to stucco, foam, brick veneer, sheathing and siding.
6. 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
7. For hollow block and grout filled CMU 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.
8. 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.
9. When using end mounts, span distance is measured center to center of each end mount.

## TABLE 6

LONGBOARD®
INSPIRING ARCHITECTURE

v1.1

### FASTENER SPACING - LOAD TABLE

**8" LINK & LOCK™**

Standard | Standard w. Stiffener | HD

| ALLOWABLE SPAN (FT)* | PSF (Factored / Ultimate) 20 | 30 | 40 | 50 | 60 | 70 | 80 | 90 | 100 | 110 | 120 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2' | | | | | | | | | | | |
| 4' | | | | | Standard w. Stiffener | | | | | | HD |
| 6' | | | Standard w. Stiffener | HD | | | | | | | |
| 8' | Standard w. Stiffener | HD | | | | | | | | | |
| 10' | HD | | | | | | | | | | |

*CANTILEVERS are not to exceed half (1/2) the allowable span to a maximum of 3'

*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 | #12 Pan Head Wood Screw | 1-1/2" | 1" |
| STEEL | Min. 18 ga., Min. Fy=33 ksi. | #12 Self-Drilling or Self-Tapping Screw (Grade 5) | 3 threads penetration past metal structure | 1/2" |
| ALUMINUM | Min. 1/8", Min. 6063-T5 | | | |
| CONCRETE | Min. 3000 psi | 3/16" ITW Tapcon | 1-1/2" | 1-3/4" |
| HOLLOW/GROUT-FILLED CMU | Conforms to ASTM C-90, with Min. compressive strength of 2000 psi | | 1" | 2" |

GENERAL NOTES:

1. This product has been designed and manufactured to comply with the current Florida Building Code (FBC), **INCLUDING** HVHZ and has been evaluated according to the following:
   - Section 1709.8
   - ASTM E8-16
2. Adequacy of the structural concrete/masonry and 2X framing as a main wind force resisting 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.
3. Substrate shall be designed and anchored to properly transfer all loads to the structure. Buck design and installation is the responsibilty of the engineer or architect of record for the project of installation.
4. 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.
5. Link & Lock is not designed to be a life-safety item. Designs of this nature are the responsibility of the engineer or architect of record.

INSTALLATION NOTES:

1. One (1) installation anchor is required at each location. Minimum of two (2) anchors per batten.
2. Spacing is from 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. Minimum embedment and edge distance exclude wall finishes, including but not limited to stucco, foam, brick veneer, sheathing and siding.
6. 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
7. For hollow block and grout filled CMU 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.
8. 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.
9. When using end mounts, span distance is measured center to center of each end mount.

**TABLE 7**

LONGBOARD®
INSPIRING ARCHITECTURE

v.1.2

## FASTENER SPACING - LOAD TABLE

| 4X4 LINK & LOCK™ | | PSF (Factored / Ultimate) | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Standard | | 20 | 30 | 40 | 50 | 60 | 70 | 80 | 90 | 100 | 110 | 120 |
| ALLOWABLE SPAN (FT)* | 8' | | | | | | | | | | | |
| | 10' | | | | | | | | | | | |
| | 12' | | | | | | | | | | | |

*CANTILEVERS are not to exceed 3'

*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 | #12 Pan Head or Flanged Hex Head Wood Screw | 1-1/2" | 1" |
| STEEL | Min. 18 ga., Min. Fy=36 ksi. | #12 Self-Drilling or Self-Tapping Screw Pan Head or Flanged Hex Head Wood Screw (Grade 5) | 3 threads penetration past metal structure | 1/2" |
| ALUMINUM | Min. 1/8", Min. 6063-T5 | | | |
| CONCRETE | Min. 3000 psi | 3/16" ITW Tapcon | 1-1/2" | 1-3/4" |
| HOLLOW/GROUT-FILLED CMU | Conforms to ASTM C-90, with Min. compressive strength of 2000 psi | | 1" | 2" |

GENERAL NOTES:

1. Adequacy of the structural concrete/masonry and 2X framing as a main wind force resisting 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 responsibilty 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.
4. Link & Lock is not designed to be a life-safety item. Designs of this nature are the responsibility of the engineer or architect of record.

INSTALLATION NOTES:

1. One (1) installation anchor is required at each location. Minimum of two (2) anchors per batten.
2. Spacing is from 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. Minimum embedment and edge distance exclude wall finishes, including but not limited to stucco, foam, brick veneer, sheathing and siding.
6. 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
7. For hollow block and grout filled CMU 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.
8. 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.

**TABLE 8**

LONGBOARD®
INSPIRING ARCHITECTURE

v.1.2

## FASTENER SPACING - LOAD TABLE

| 4X6 LINK & LOCK™ Standard | | PSF (Factored / Ultimate) | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 20 | 30 | 40 | 50 | 60 | 70 | 80 | 90 | 100 | 110 | 120 |
| ALLOWABLE SPAN (FT)* | 8' | | | | | | | | | | | |
| | 10' | | | | | | | | | | | |
| | 12' | | | | | | | | | | | |

*CANTILEVERS are not to exceed 3'

*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 | #12 Pan Head or Flanged Hex Head Wood Screw | 1-1/2" | 1" |
| STEEL | Min. 18 ga., Min. Fy=36 ksi. | #12 Self-Drilling or Self-Tapping Screw Pan Head or Flanged Hex Head Wood Screw (Grade 5) | 3 threads penetration past metal structure | 1/2" |
| ALUMINUM | Min. 1/8", Min. 6063-T5 | | | |
| CONCRETE | Min. 3000 psi | 3/16" ITW Tapcon | 1-1/2" | 1-3/4" |
| HOLLOW/GROUT-FILLED CMU | Conforms to ASTM C-90, with Min. compressive strength of 2000 psi | | 1" | 2" |

GENERAL NOTES:

1. Adequacy of the structural concrete/masonry and 2X framing as a main wind force resisting 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 responsibilty 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.
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INSTALLATION NOTES:

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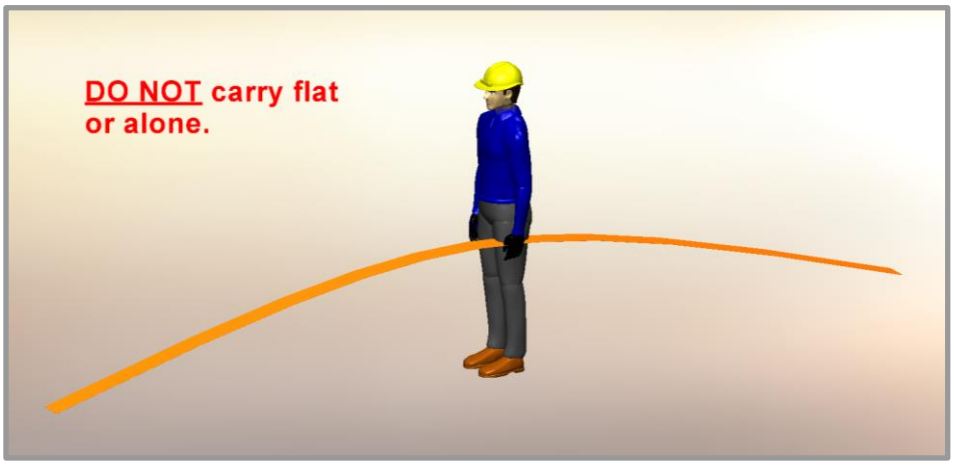
## Sound Absorption (NRC & SAA)

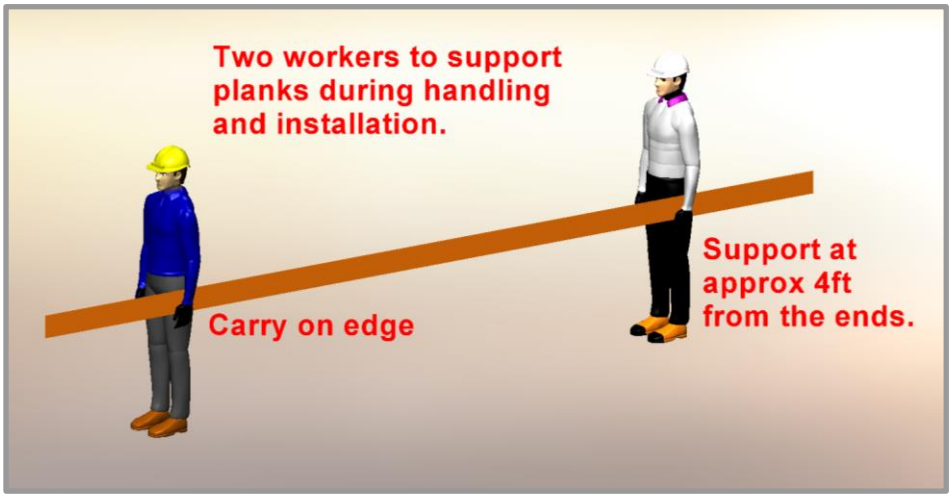
| L&L Walls -Open Joint Systems | Backer (Insulation) | NRC | SAA |
|---|---|---|---|
| **PROVIDED BY LONGBOARD** | | | |
| 6" Link & Lock Baffles | No Backer | 0.10 | 0.12 |
| **LONGBOARD BAFFLES WITH BACKER PROVIDED BY OTHERS** | | | |
| 6" Link & Lock Baffles @ 6" O.C. | Fiberglass 1" thickness @ 3lbs/ft3 | 0.80 | 0.81 |

*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."*

# 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.

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Every effort has been made to ensure that the information in these installation guidelines is 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.