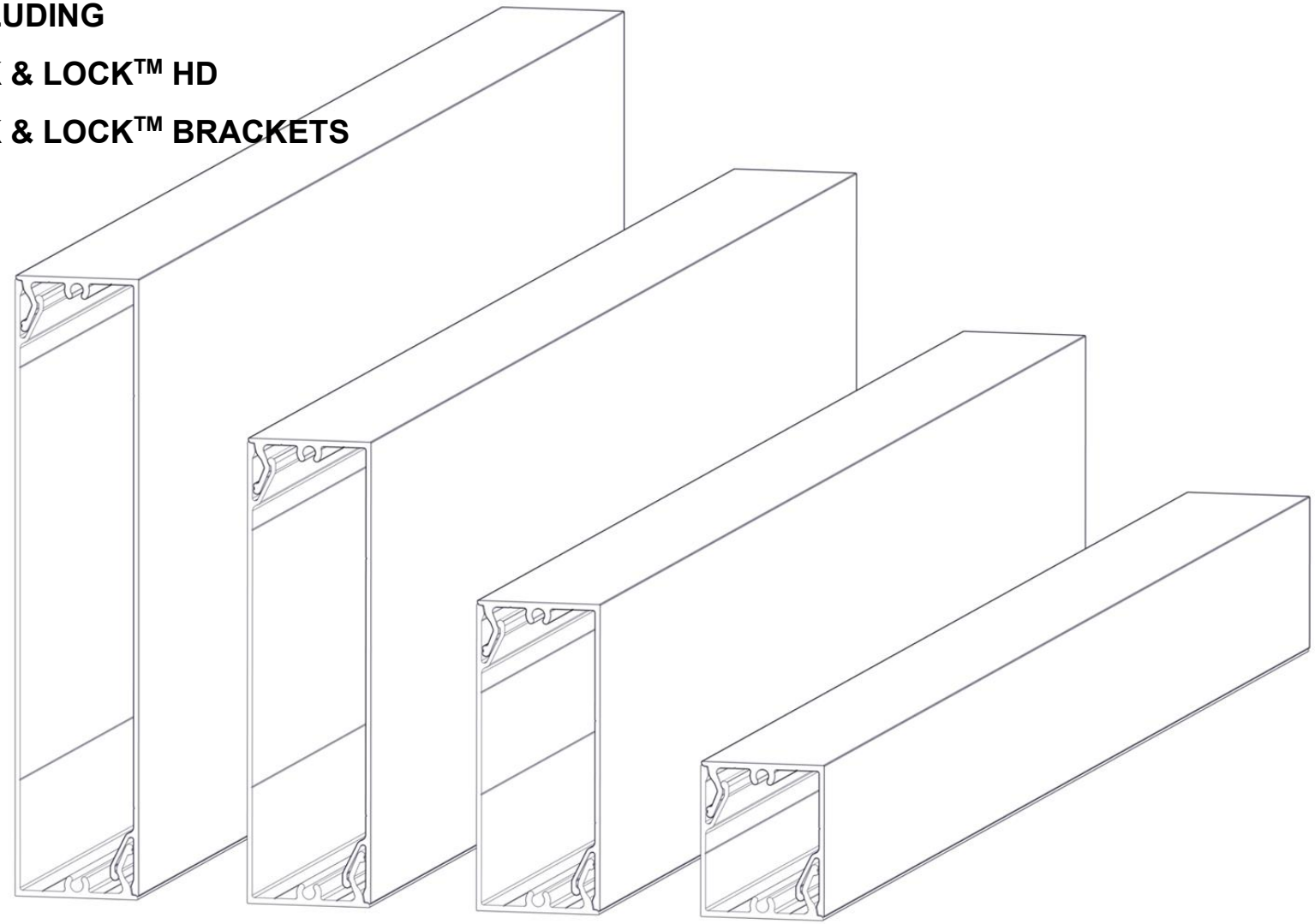
LONGBOARD®
INSPIRING ARCHITECTURE

LINK & LOCK™ INFO SHEETS

INCLUDING

LINK & LOCK™ HD

LINK & LOCK™ BRACKETS

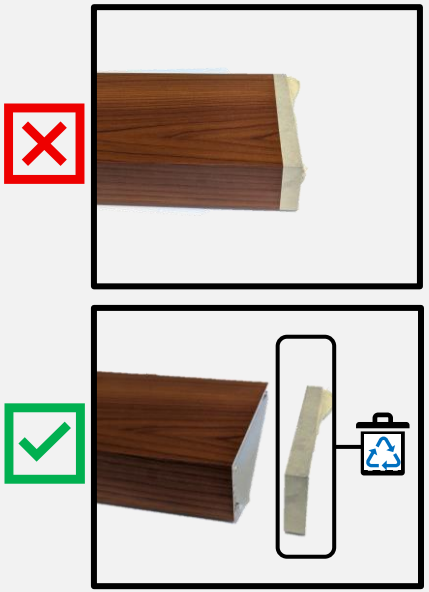


CRITICAL DETAILS

Note 1: We recommend calculating the site specific temperature ranges for thermal expansion & contraction values.

CUT TAPED/DRILLED ENDS

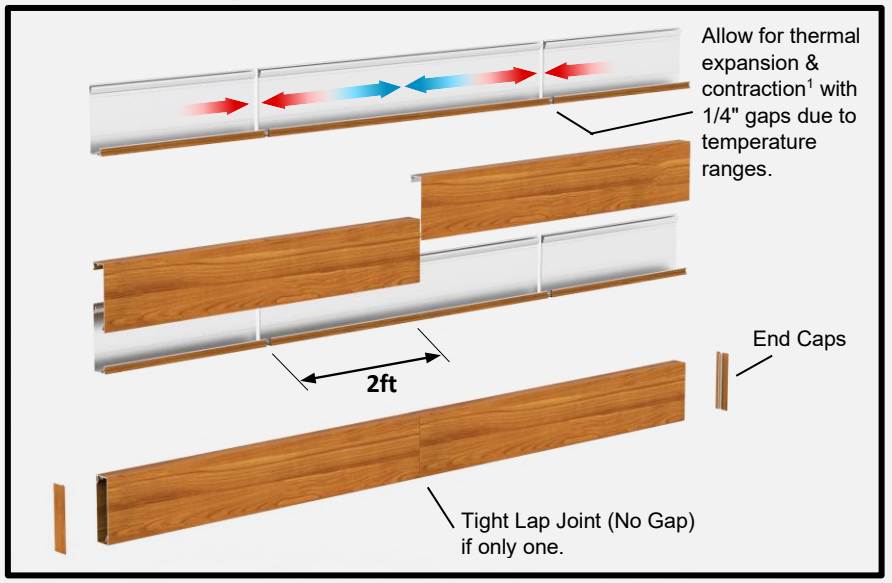
CUT Factory Ends.



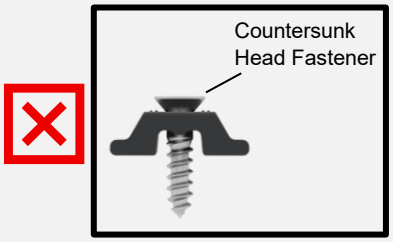
LAP JOINTS & THERMAL MOVEMENT[1]

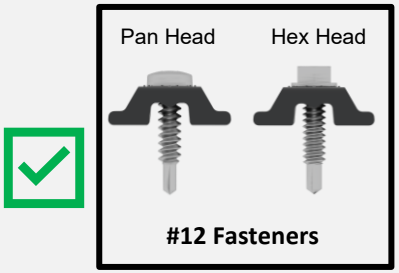
THERMAL CALCULATOR DOWNLOAD[1]

Overlap L&L joints min 2ft.

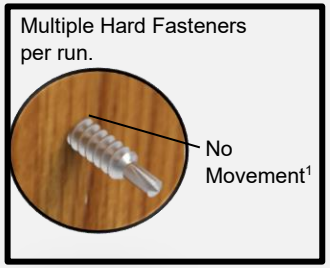


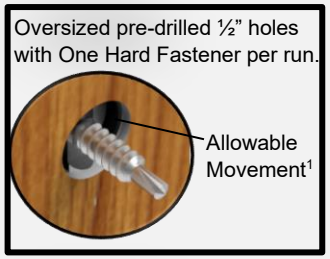
FASTENERS



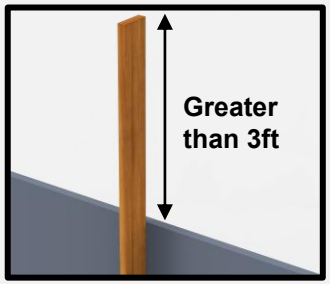


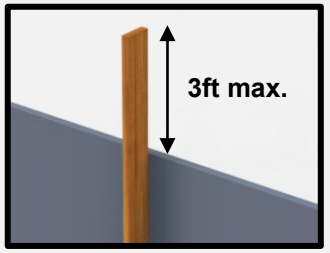
HARD FASTENER





CANTILEVER





L&L Dimensions

Finishes:
Woodgrains, Solid, Specialty
Custom Solid Color Matching - (Additional lead times apply)



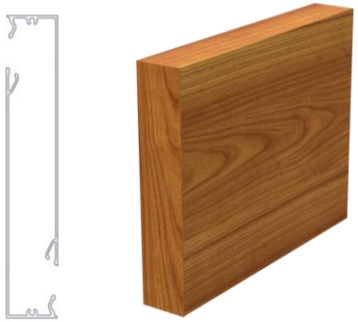
2” Link & Lock



4” Link & Lock



6” Link & Lock



8” Link & Lock

Actual Sizes & Weights

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”	4” (101.6mm)	6” (152.4mm)	12’/24’	2.1

Physical data:

- 6063-T5 Extruded Aluminum
- 100% recyclable
- Warranty on Finish: 15 year (standard)/20 year* (ultra) (*10week lead time); Aluminum: 50 year

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™ Box Battens

4 x 4”	4X4LL.145	4X4LL.289	4LLEC.4	-
4 x 6”	4X6LL.145	4X6LL.289	4LLEC.6	-

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
24’ Link & Lock Internal Stiffener	1	LLSTIFF.289
3M® Double Sided Adhesive Tape - 108’	1, roll	LLTAPE.1296



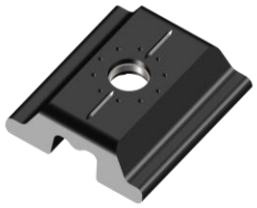
4”x4” Link & Lock



4”x6” Link & Lock

L&L Installation Components

See L&L Install Guide for details



Mounting Clip:

- Nylon with embedded SS washer
- Used on Batten and Fin orientation to secure the back “L” to the substrate
- Included in order with L&L for 6’ O.C. attachment
- Additional Clips purchased separately (48 pcs/box)



End Mount:

- Extruded 6063-T5 Aluminum Alloy, powder coated black
- Used for End-to-End attachment to provide a solid mount for the L&L set to wrap around and snap together
- Available for 2”, 4’, 6” & 8” L&L
- Purchased separately (20 pcs/box)



#12 Fastener (By others):

- Zinc-plated or Stainless Steel
- Used for attaching the back “L” to the substrate
- Use the correct fastener for the required project substrate
- Supplied by others



Isolation Washer:

- PA6 Nylon
- Used to isolate the back “L” from the substrate
- Max. 4x to shim L&L (1/4” total)
- 1/16” thick, 1 1/2” O.D.
- Purchased separately in packages of (48 pcs/box)



1/2" Pilot Point Drill Bit:

- 1/2” Pilot Point Drill Bit
- Used for Drilling out the holes for mounting the L&L to the substrate
- See Install Guide for drilling details



Paint Pen:

- Color choices available
- Used for touch ups at the ends before installing End Caps
- Purchased separately



Double-sided Adhesive Tape:

- 3M VHB Tape
- Used for attaching the Internal Stiffener to the back “L” of the L&L set
- Tape is placed in the center of the Stiffener



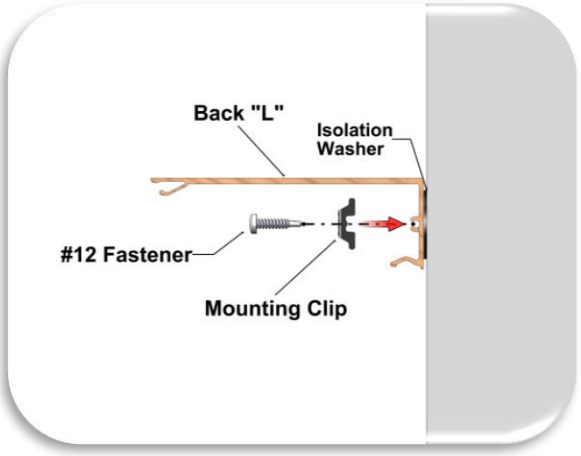
Internal Stiffener:

- Extruded 6063-T5 Aluminum Alloy (comes powder coated black)
- Used for reinforcing the 4”, 6” & 8” L&L to allow for up to 12’ spans between attachment points
- See Testing and Loading page for span allowance

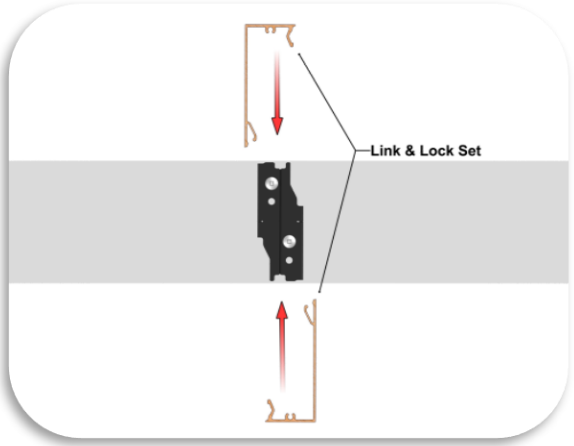
L&L Install Images

See L&L Install Guide for details
BIM & CAD: RVT & DWG files available, see website for details

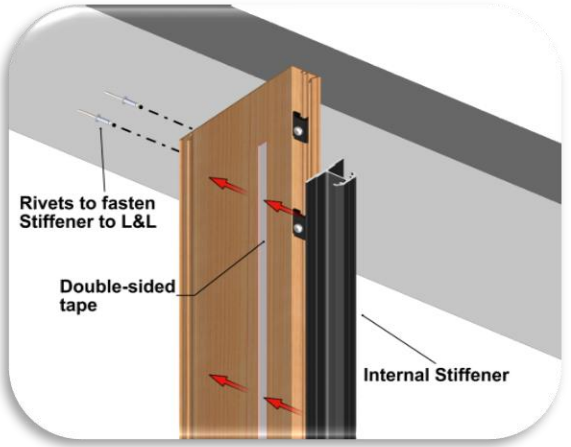
Mounting Clip (Fin orientation)



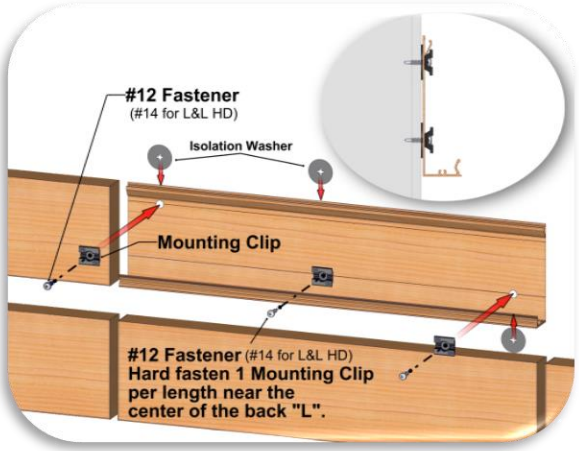
End Mount



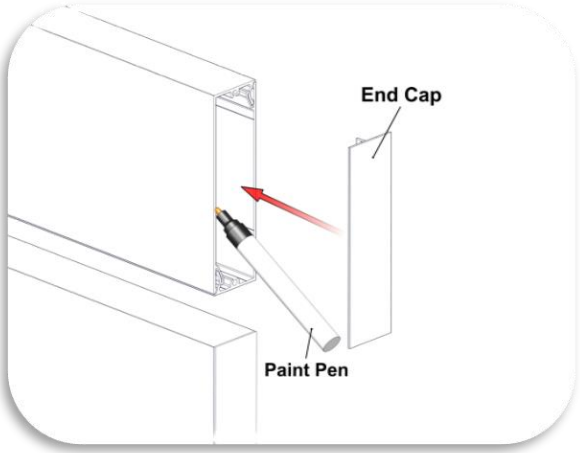
Internal Stiffener (with Double-sided Tape)



Mounting Clip (Batten orientation)



Paint Pen (for cut edges)



Drilling (Fin orientation)



L&L HD Components

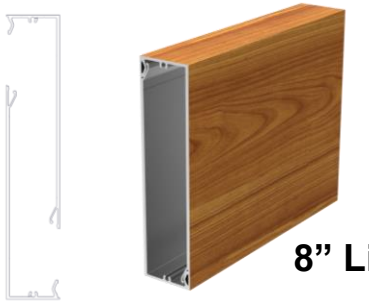
Finishes:
Woodgrains, Solid, Specialty
Custom Solid Color Matching - (Additional lead times apply)



4” Link & Lock HD



6” Link & Lock HD



8” Link & Lock HD



Link & Lock HD End Mount

Actual Sizes & Weights

L&L	Width	Depth	Length	Weight(lbs/LF) *per set
4”	4” (101.6mm)	2” (50.8mm)	12’/24’	1.7
6”	6” (152.4mm)	2” (50.8mm)	12’/24’	2.4
8”	8” (203mm)	2” (50.8mm)	12’/24’	3

Size	12’	24’	End Caps (20/box)	End Mounts (20/box)
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

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

Physical data:

- 6063-T5 Extruded Aluminum
- 100% recyclable
- Warranty on Finish: 15 year (standard)/20 year* (ultra) (*10week lead time); Aluminum: 50 year

BIM & CAD:

- RVT & DWG files to be available



Mounting Clip:

- Nylon with embedded SS washer
- Used on Batten and Fin orientation to secure the back “L” to the substrate
- Included in order with L&L for 6’ O.C. attachment
- Additional Clips purchased separately (48 pcs/box)



1/2" Pilot Point Drill Bit:

- 1/2” Pilot Point Drill Bit
- Used for Drilling out the holes for mounting the L&L to the substrate
- See Install Guide for drilling details



Isolation Washer:

- PA6 Nylon
- Used to isolate the back “L” from the substrate
- Max. 4x to shim L&L (1/4” total)
- 1/16” thick, 1 1/2” O.D.
- Purchased separately in packages of (48 pcs/box)



#14 Fastener
-Eng. & Load Dependent (By others):

- Zinc-plated or Stainless Steel
- Used for attaching the back “L” to the substrate
- Use the correct fastener for the required project substrate
- Supplied by others

L&L Testing Data and Allowable Spans

See L&L Install Guide for details

LONGBOARD®
INSPIRING ARCHITECTURE

v1.1

FASTENER SPACING - LOAD TABLE

2" LINK & LOCK™		PSF (Factored / Ultimate)										
Standard		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.

Testing:
ICC-ESR 4183 Evaluation Report - Division: 05 00 00 – METALS
- Section: 05 50 00 - Metal Fabrications

LARR - Los Angeles Department of Building Safety (LADBS) accepts ICC-ES reports as proof of compliance

Florida Product Code: FL41842

International Building Code (IBC).
International Residential Code (IRC)
California Building Code (CBC)
California Residential Code (CRC)
City of Los Angeles Building Code (LABC), City of Los Angeles Residential Code (LARC)
Florida Building Code – Building
Florida Building Code - Residential

Fire Rating: Class A Non-Combustible by ASTM E136 & ASTM E84

Light Reflectance: 5% (Black) up to 73.2% (Ultra White)

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 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.
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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.

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.

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.

LONGBOARD
INSPIRING ARCHITECTURE

v.1.2

FASTENER SPACING - LOAD TABLE

4X4 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.
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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.

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"

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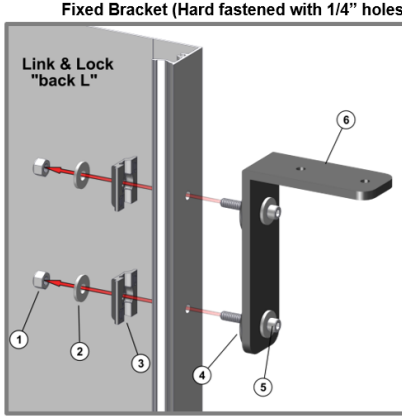
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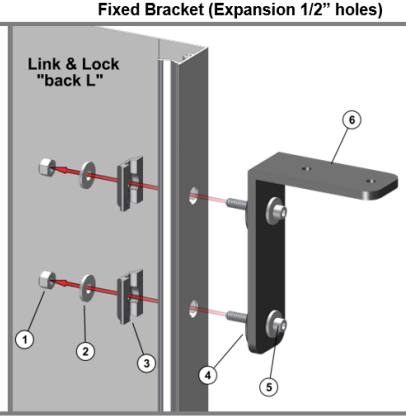
L&L Bracket Components

Single Bracket for horizontal substrate

Fixed Bracket (Hard fastened with 1/4” holes)

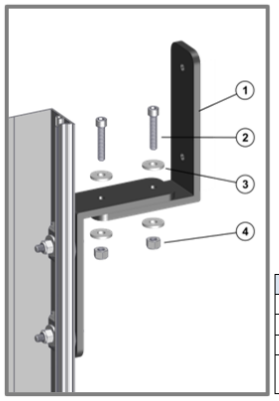


Fixed Bracket (Expansion 1/2” holes)



No.	Description	Material	Qty
1	1/4” -20 Locknut	Stainless Steel Nylon-Insert	2
2	Washer, 1/4" screw size, 0.75” OD	Stainless Steel	4
3	Link & Lock Mounting Clip	Nylon w. Stainless Washer	2
4	Isolation Washer for 1/4” size	Nylon, Black	2
5	1/4" -20 Socket Head Screw, 1-1/2” length	Stainless Steel	2
6	Link & Lock Bracket -90 Center Fixed	6005A Aluminum	1

Dual Bracket for vertical substrate

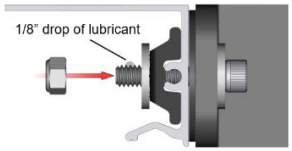




Dual Bracket components are loosely pre-assembled by manufacturer.
Adjust if required.
Once in place add lubricant and tighten to manufacturer's specifications.
See below for lubricant specs.

No.	Description	Material	Qty
1	Link & Lock Dual Bracket -90 Center Fixed	6005A Aluminum	1
2	1/4" -20 Socket Head Screw, 1-1/4” length	Stainless Steel	2
3	Washer, 1/4" screw size, 0.75” OD	Stainless Steel	4
4	1/4" -20 Locknut	Stainless Steel Nylon-Insert	2

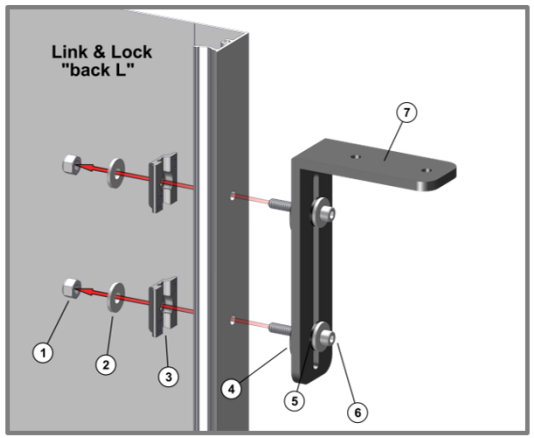
Add 1/8” drop of lubricant to all bolt threads before installing locknut.





For L&L Bracket fastening, use Permatex Anti-Seize 77134.

Sliding Bracket (Use 1/4” holes)



No.	Description	Material	Qty
1	1/4” -20 Locknut	Stainless Steel Nylon-Insert	2
2	Washer, 1/4" screw size, 0.75” OD	Stainless Steel	4
3	Link & Lock Mounting Clip	Nylon w. Stainless Washer	2
4	Isolation Washer for 1/4” screw size	Nylon, Black	2
5	Plastic Washer, 1/4" screw size, 0.734 OD	Nylon, Black	2
6	1/4" -20 Socket Head Screw, 1-1/2” length	Stainless Steel	2
7	Link & Lock Bracket -90 Center Sliding	6005A Aluminum	1

Link & Lock™ Mounting Brackets

Product	Single	Dual
45° LEFT FIXED	LLMBK.45LF	LLDMBK.45LF
45° RIGHT FIXED	LLMBK.45RF	LLDMBK.45RF
90° CENTER FIXED	LLMBK.90F	LLDMBK.90F
45° LEFT SLIDING	LLMBK.45LS	LLDMBK.45LS
45° RIGHT SLIDING	LLMBK.45RS	LLDMBK.45RS
90° CENTER SLIDING	LLMBK.90S	LLDMBK.90S



Link & Lock ™ Mounting Brackets

Note: Use Sliding Bracket only when attachment conditions require large movement. (Ex. Slab deflection in parking garages).

L&L Bracket Orientation Options

Fixed options shown, sliding options are available for slab deflection or building settlement.



Left



Center



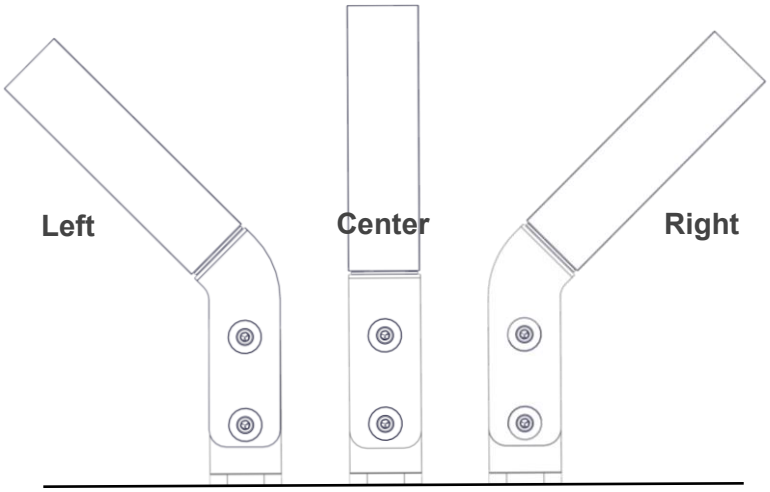
Right



Center Horizontal Batten

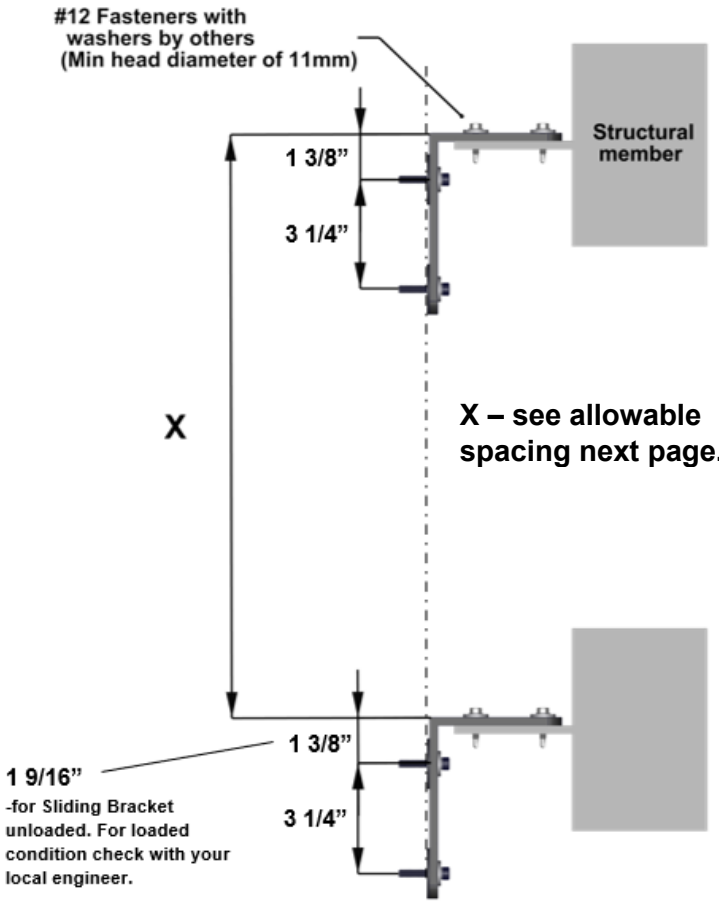


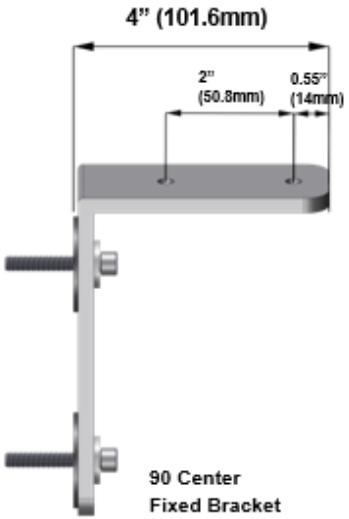
Center Vertical Batten





L&L Bracket Dimensions









Tools for Bracket Install to L&L



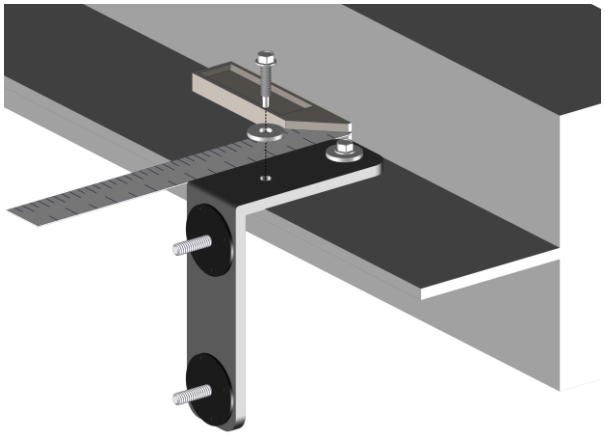
7/16” Nut Driver
Fixed & Sliding
Brackets

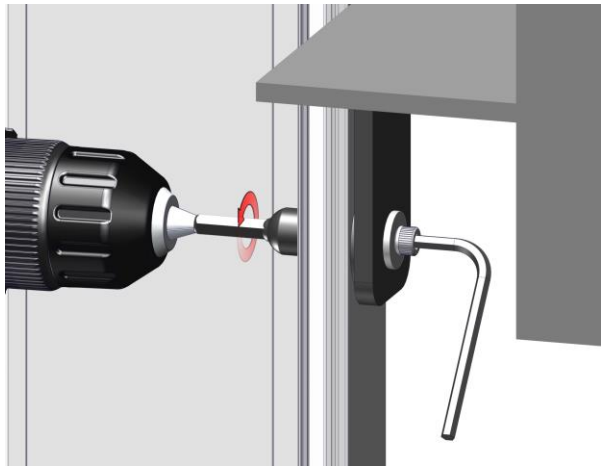


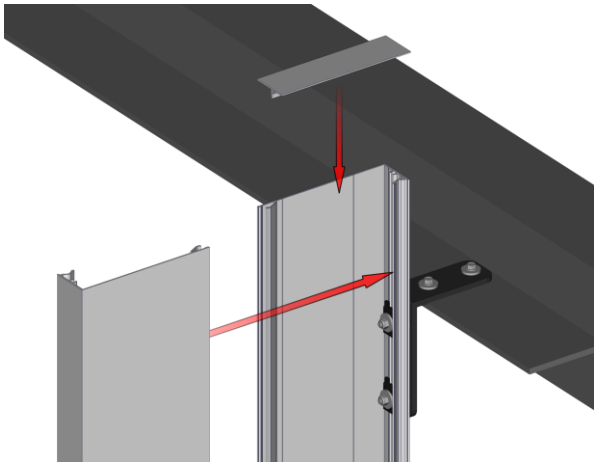
3/16” Allen Key
Fixed & Sliding
Brackets

L&L Bracket Installation, Load Data & Allowable Spacing

See L&L Install Guide for details







LONGBOARD® INSPIRING ARCHITECTURE	LINK & LOCK™ BRACKET MAX. SPACING (FT)									
	WIND LOAD PSF (FACTORED/ULTIMATE)									
LINK & LOCK™ BATTEN	30	40	50	60	70	80	90	100	110	120
1-5/8" x 2"	10'	8'		6'			4'	2'		
1-5/8" x 4"	8'	6'		4'		2'				
1-5/8" x 4" *w. Internal Stiffener*	12'	10'	8'		6'		4'			
1-5/8" x 6"	6'	4'				3'			2'	
1-5/8" x 6" *w. Internal Stiffener*	10'	8'	6'	4'				3'		2'
1-5/8" x 8"	6'	4'	2'							
1-5/8" x 8" *w. Internal Stiffener*	8'	6'	4'			3'			2'	
2" x 4" HD	12'		10'	8'		6'		4'		
2" x 6" HD	10	8'	6'			4'		3'		
2" x 8" HD	8'	6'	4'			3'			2'	

note 1 Factored Wind Load: max. **168 LBS/EA** Bracket

note 2 Factored Dead Load: max. **29 LBS/EA** Fixed Bracket

Recommended torque value for Link & Lock™ to Bracket attachment:

note 3 Fixed Bracket 1/4" -20 Socket Head Screw, **60-72 in/lbs** + prevailing torque of self-locking nut

note 4 Sliding Bracket 1/4" -20 Socket Head Screw, **48-60 in/lbs** + prevailing torque of self-locking nut

April 25, 2024

LONGBOARD®
INSPIRING ARCHITECTURE

Link & Lock™ Cladding

Installation Guidelines

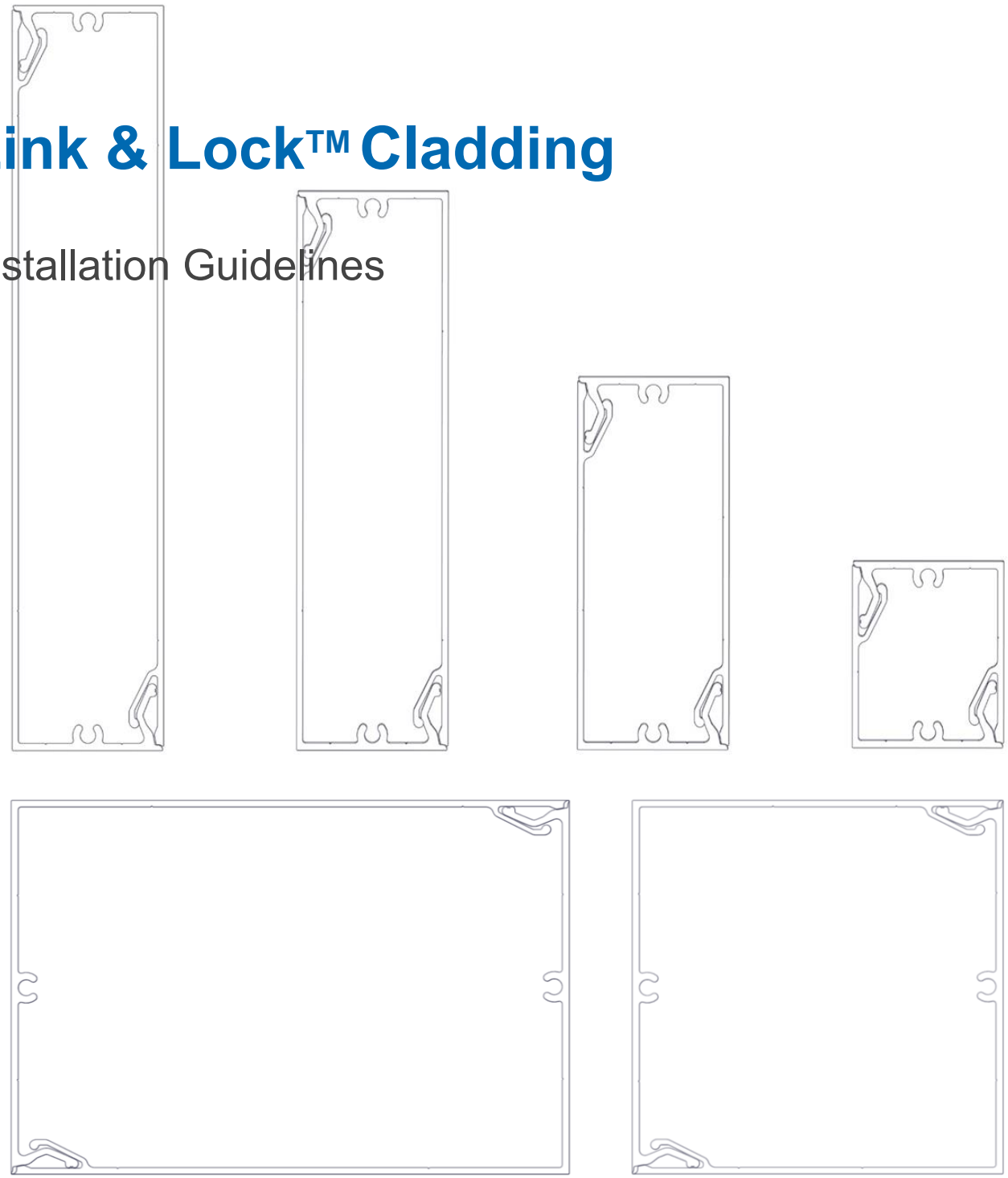


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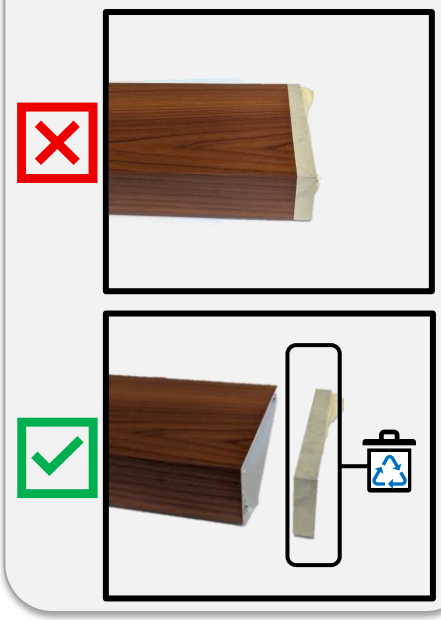
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CRITICAL DETAILS

CUT TAPED/DRILLED ENDS

CUT Factory Ends.



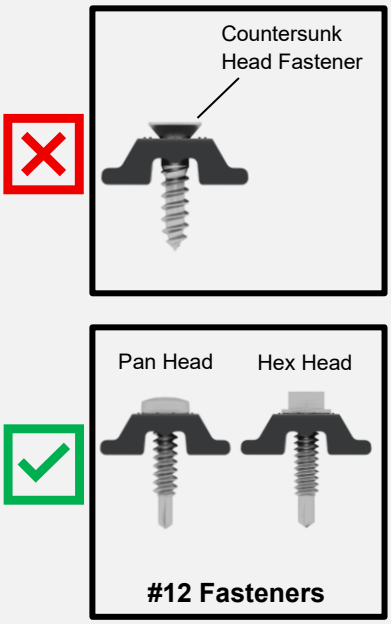
LAP JOINTS & THERMAL MOVEMENT[1]

THERMAL CALCULATOR DOWNLOAD[1]

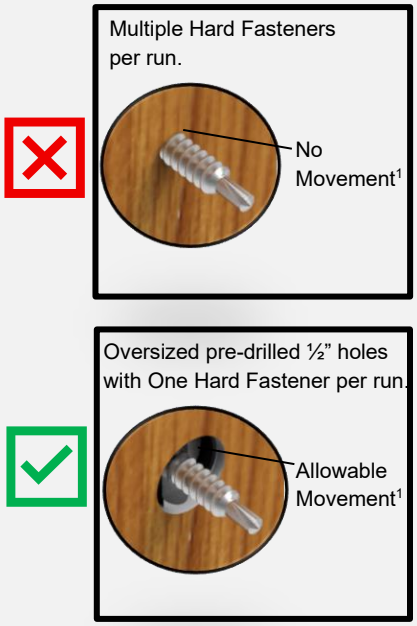
Overlap L&L joints min 2ft.



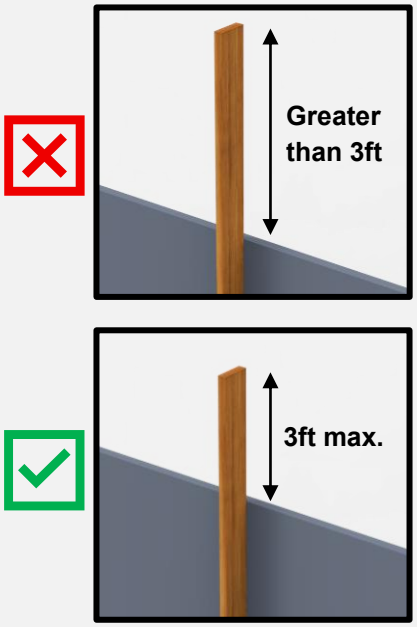
FASTENERS



HARD FASTENER



CANTILEVER



Note 1: We recommend calculating the site specific temperature ranges for thermal expansion & contraction values.

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

Link & Lock components expand & contract 1/4” (6mm) over 24’ (7.3m) along the length, measured over a 30℃ (54℉) temperature range. Due to this range of movement, Link & Lock Fins/Louvers/Battens should be installed with staggered butt-joints, leaving a 1/4” (6mm) min. gap, every 24’ (7.3m) min.
Alternatively, staggered lap-joints are an option for a continuous appearance, however 1/4“ (6mm) gaps should be left at each joint to allow for thermal movement. Be sure to lap joints by 2’ (610mm) minimum over the back “L”.
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” End caps are sold by the box: 20 caps/bx End Mounts are sold by the box: 20 mounts/bx Stiffener is sold in 24’ lengths (includes Double-sided Tape)
• 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
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 (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 ™ 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
24′ Link & Lock Internal Stiffener	1	LLSTIFF.289
3M® Double Sided Adhesive Tape - 108′	1, roll	LLTAPE.1296


L&L Mounting Clip


Isolation Washer


1/2" Pilot Point


Internal Stiffener


Doubled-sided Tape

Link & Lock™ Mounting Brackets

Product	Single	Dual
45° LEFT FIXED	LLMBK.45LF	LLDMBK.45LF
45° RIGHT FIXED	LLMBK.45RF	LLDMBK.45RF
90° CENTER FIXED	LLMBK.90F	LLDMBK.90F
45° LEFT SLIDING	LLMBK.45LS	LLDMBK.45LS
45° RIGHT SLIDING	LLMBK.45RS	LLDMBK.45RS
90° CENTER SLIDING	LLMBK.90S	LLDMBK.90S

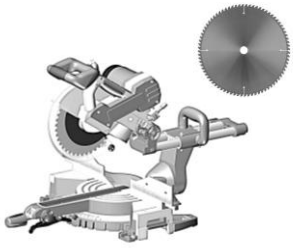
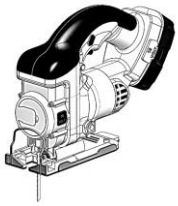
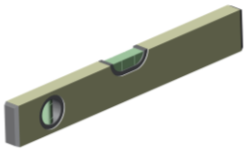


Link & Lock ™ Mounting Brackets

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

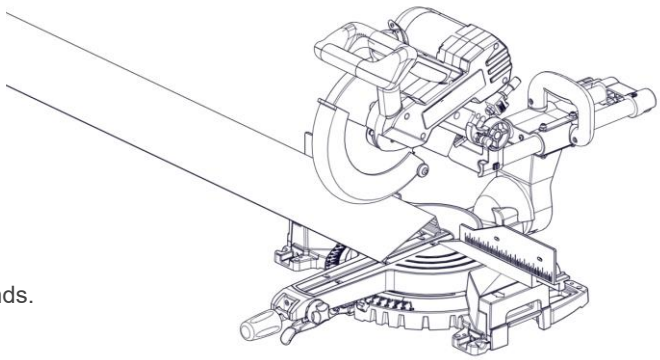
Cutting

⚠ 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 3-9** 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)

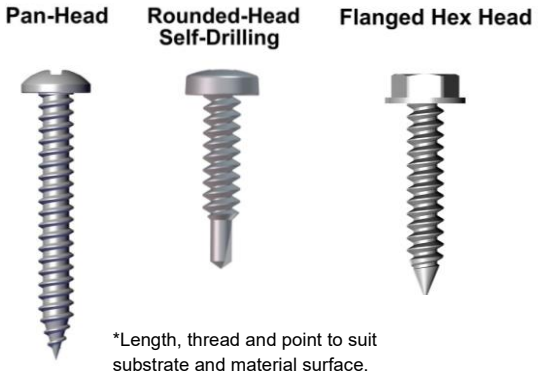
Layout and predrill the back “L” at all fastener locations.
Refer to **Preparation drilling for Install** for hole dimensions and further details.

See **Appendix for fastener specs:**
Allowable Span - Tables 3-9

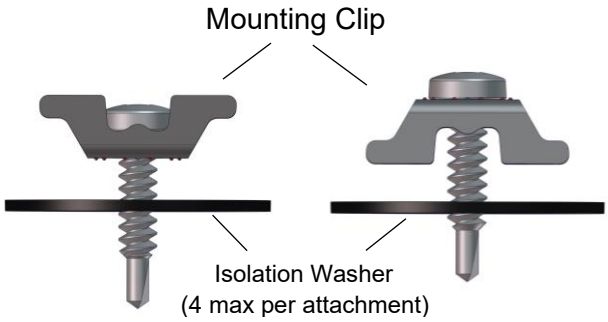
Fastener Types/Sizes for L&L		
L&L	**Pan Head**	**Hex Head**
2”	#12	#12
4”	#12	#12
6”	#12	#12
8”	#12	#12
4”x4”	#12	#12
4”x6”	#12	#12
4” HD	#14	#14
6” HD	#14	#14
8” HD	#14	#14

Fastener types

RECOMMENDED

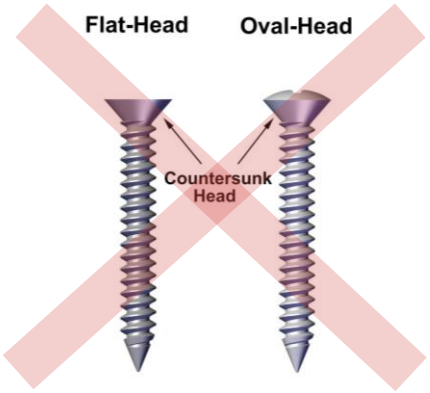


*Length, thread and point to suit substrate and material surface.

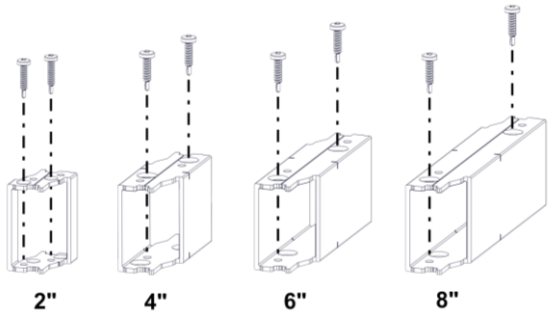


Batten (flat orientation) Fin orientation

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 3-9**

Install details

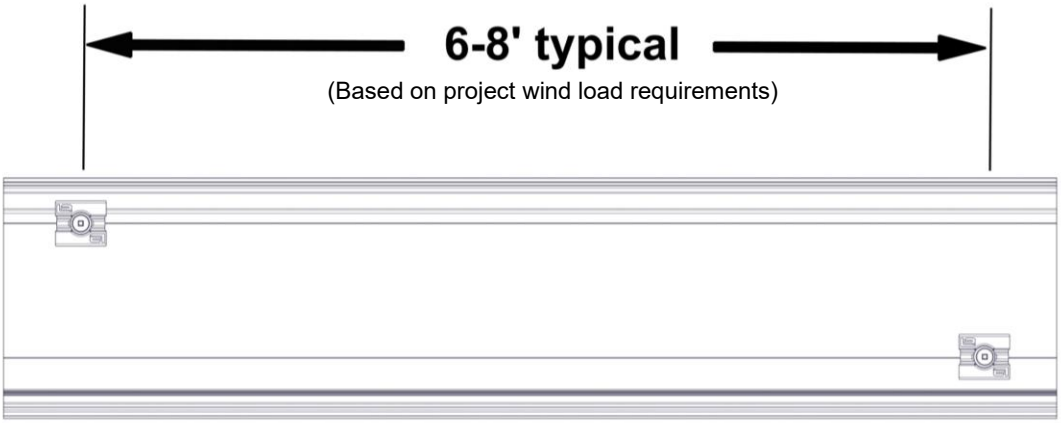
Typical dimensions

- 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

- Longboard Products are not recommended for use on marine applications in direct contact with salt water.
- Link & Lock is an open-joint system which is required to be installed outboard of a weather resistant barrier, including all flashings, following code, and building requirements.

- 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.

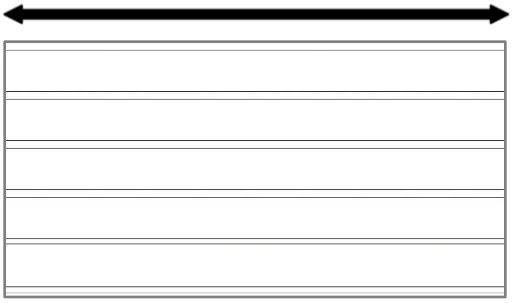


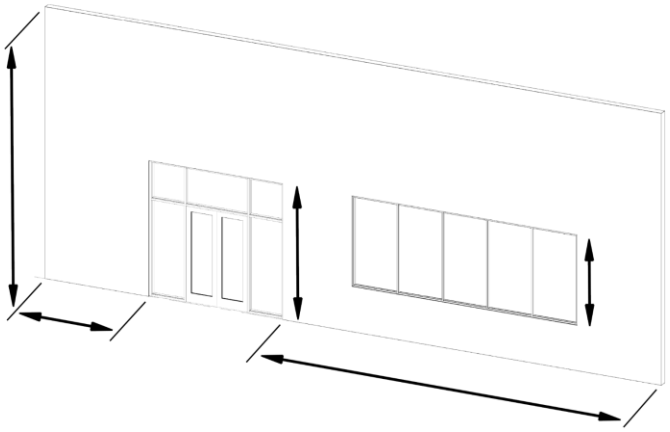
System layout and Install steps

Perimeter and field area limitations

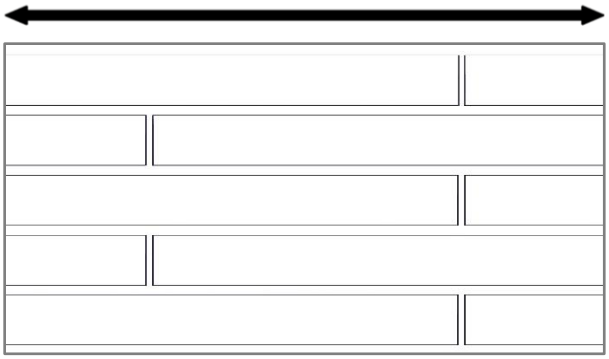
Measure and layout your wall area to consider Link & Lock alignment with fixtures, penetrations, and adjacent walls, for desired appearance. The same methodology applies for vertical installations.

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

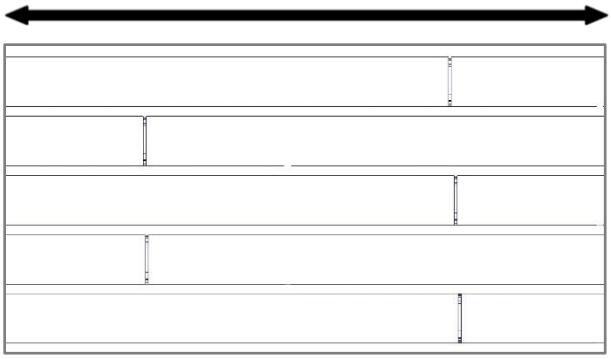


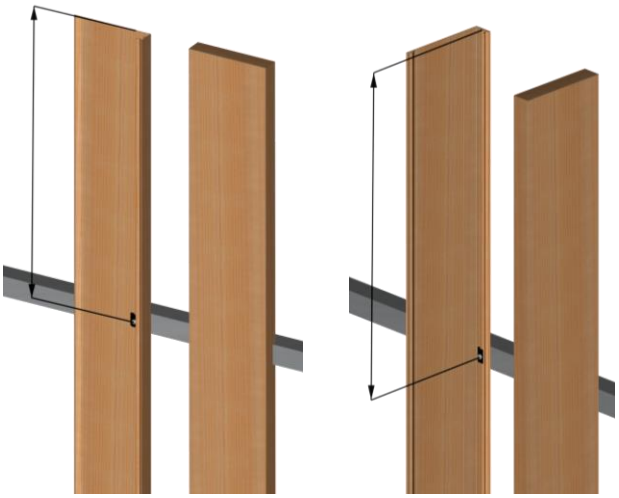


Runs with staggered butt-joints



Runs with staggered lap-joints.





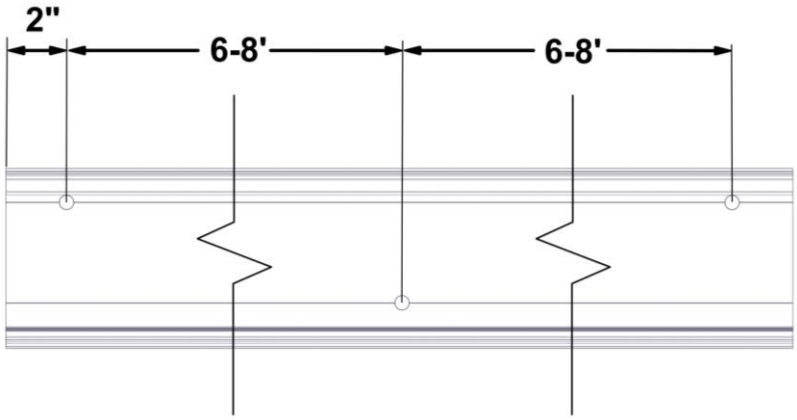
Link & Lock can cantilever half the allowable attachment span up to a **maximum of 3’** for all sizes and orientation. See Appendix for allowable attachment span: **Tables 3-9**

Preparation drilling for Install

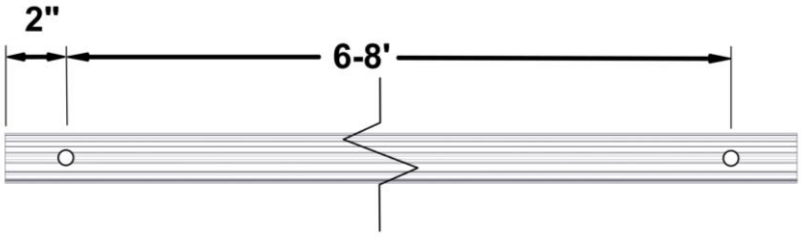
To prepare Link & Lock for install, layout and predrill the back “L” with 1/2" holes every 6-8’ O.C. typical, with the first hole 2” in from the end to allow space for the End Cap.
For the Batten orientation, alternate the holes from top to bottom using the Dielines for guides.
For Fin orientation, use 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.

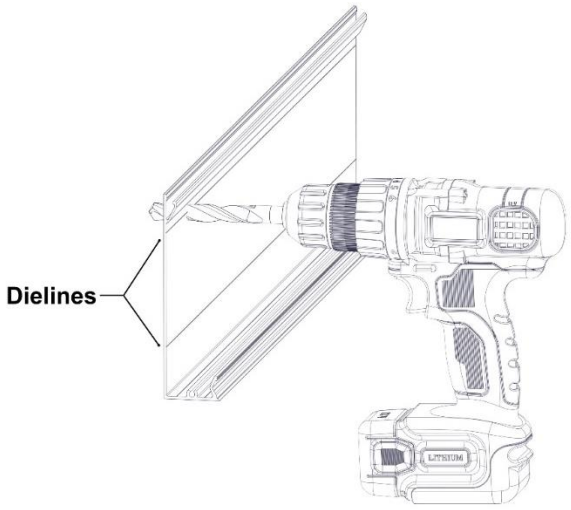
See **Appendix for project specific fastener spacing:**
Allowable Span - Tables 3-9

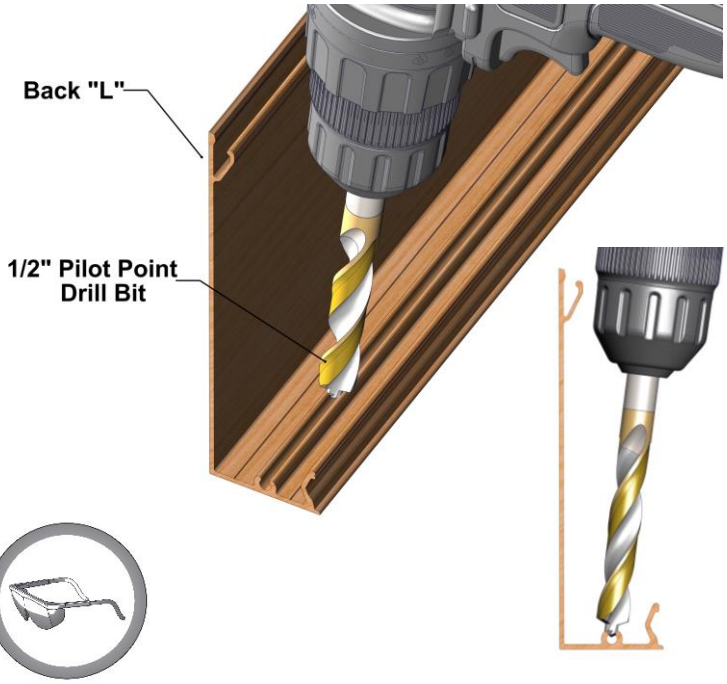
Batten orientation



Fin orientation

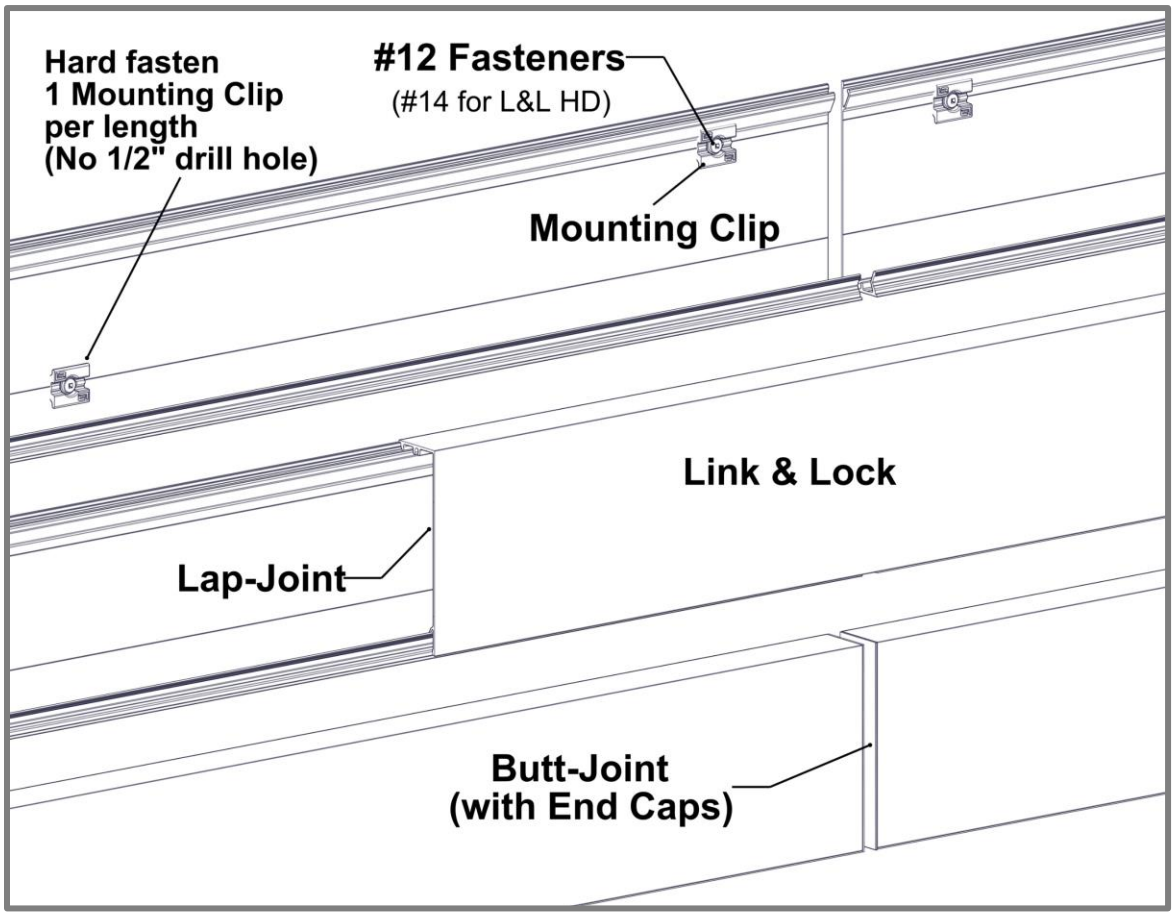






Butt-Joints & Lap Joints

- 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.

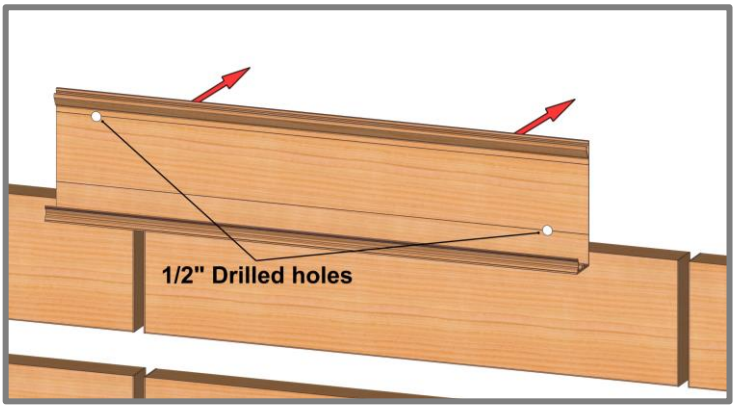


Detail A

Install Batten orientation

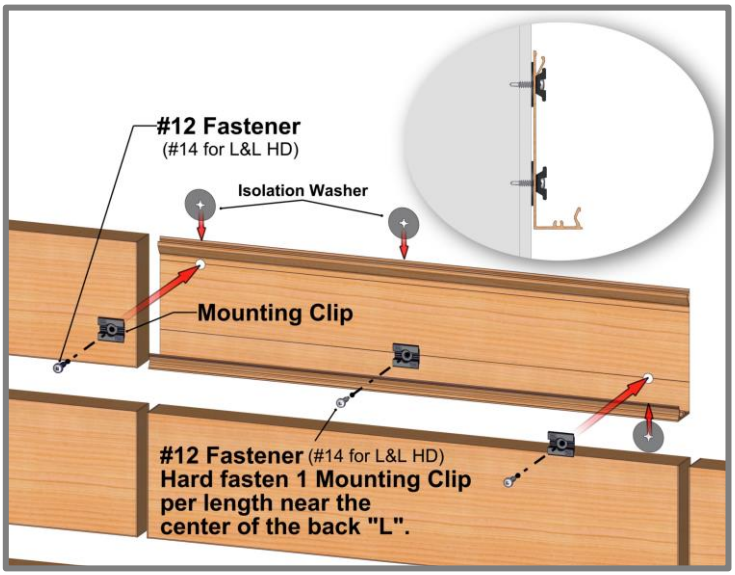
Step 1
Place predrilled Link & Lock back “L” into position (Drilling page). It is good practice to check your installation every 2-3 rows for level/plumb and flat/straight, for best results.

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

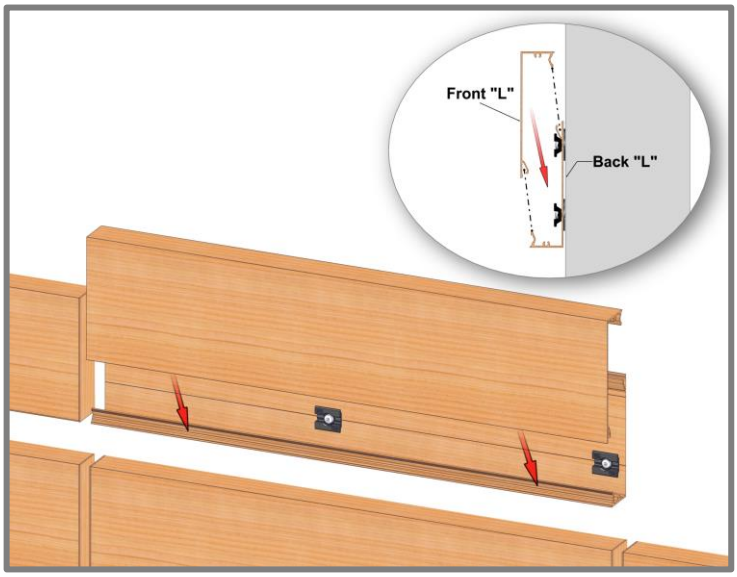


Step 2
Install back “L” using #12 Fasteners (#14 for L&L HD), Mounting Clips and Isolation Washers every 6-8’ O.C. typical. Isolation Washers are installed between the L&L and the substrate (4 max per attachment).

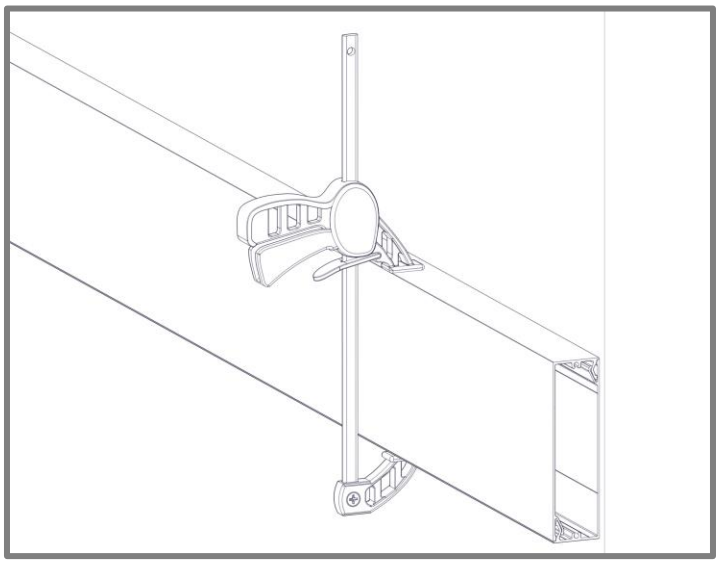
Note: Be sure to fasten in the center of the 1/2” holes to allow for movement each way. Hard fasten near the center of each length to prevent migration of the material over time.



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.



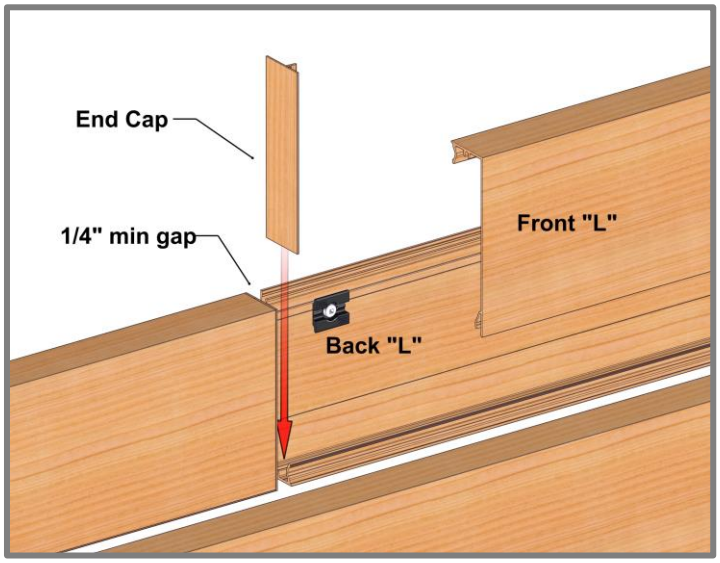
Step 3.1
Use clamps with rubber pads as common practice to securely snap the front “L” onto the back “L”.

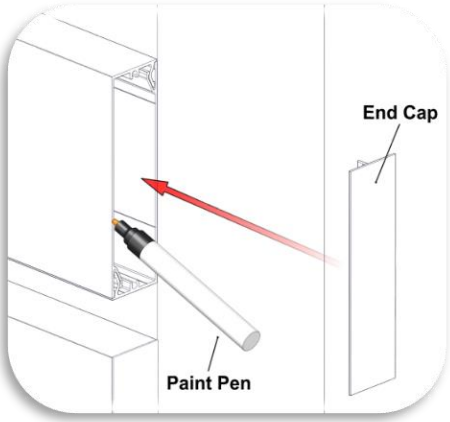


Step 4
Install End Caps, which are friction fit, by pressing them into place using the palm of your hand. If necessary, use a rubber mallet to snap them into place. See below images.
Use paint pens to coat Link & Lock cut ends that may show slightly beyond the End Caps.

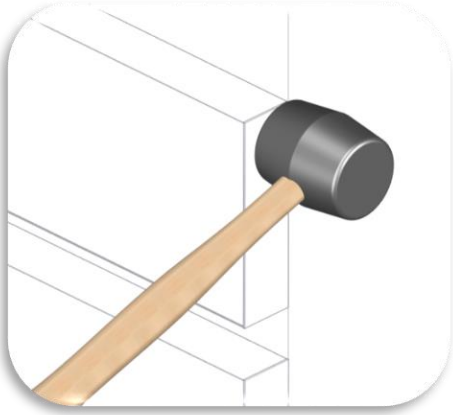
Consider your application sequence of the End Caps before installing adjacent Link & Lock members, as they may limit the space needed to insert the caps. In this situation you may need to install the caps first then the front “L” as seen in the image to the right.

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





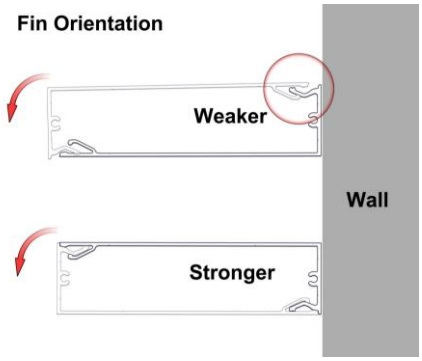


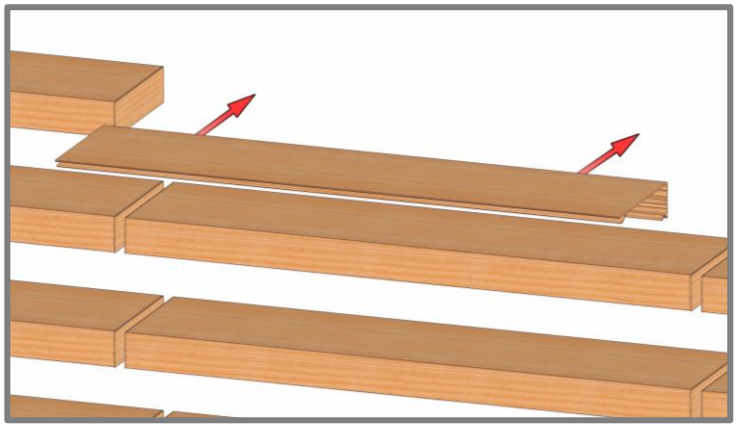


Install Fin orientation

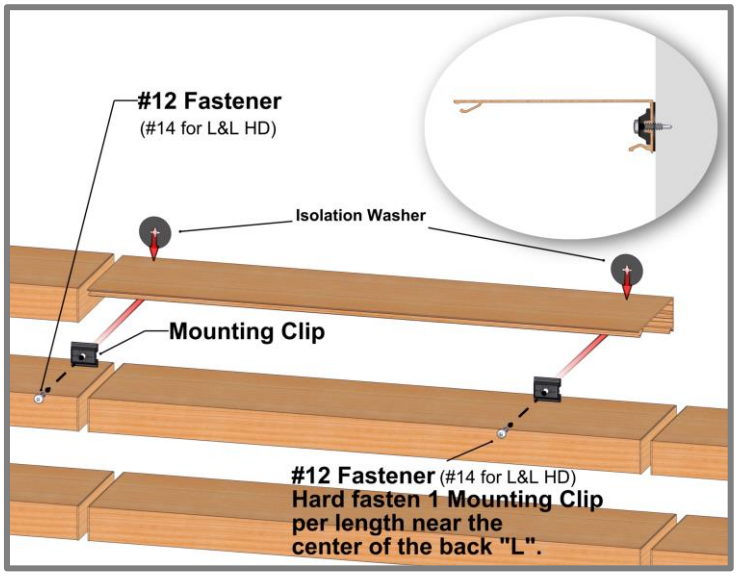
Step 1
Place predrilled Link & Lock back “L” into position (See Drilling page). It is good practice to check your installation every 2-3 rows for level/plumb and flat/straight, for best results.

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



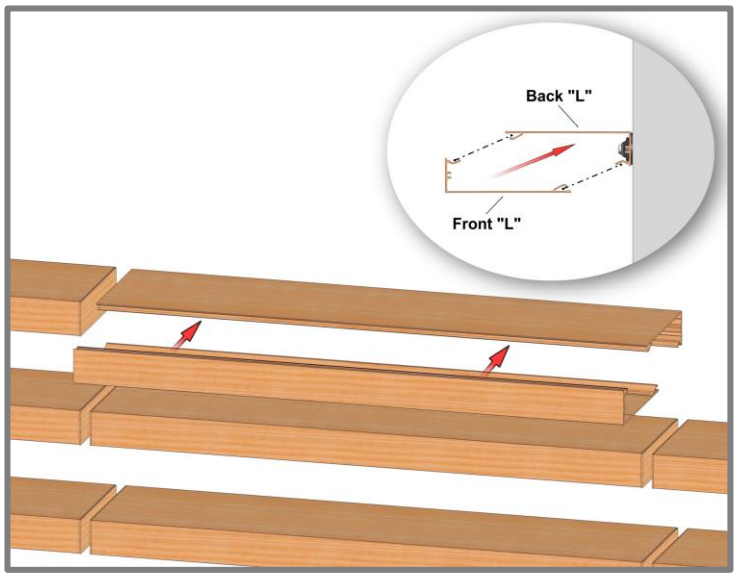


Step 2
Install back “L” using #12 Fasteners (#14 for L&L HD), Mounting Clips and Isolation Washers every 6-8’ O.C. typical. Isolation Washers are installed between the L&L and the substrate (4 max per attachment).



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.



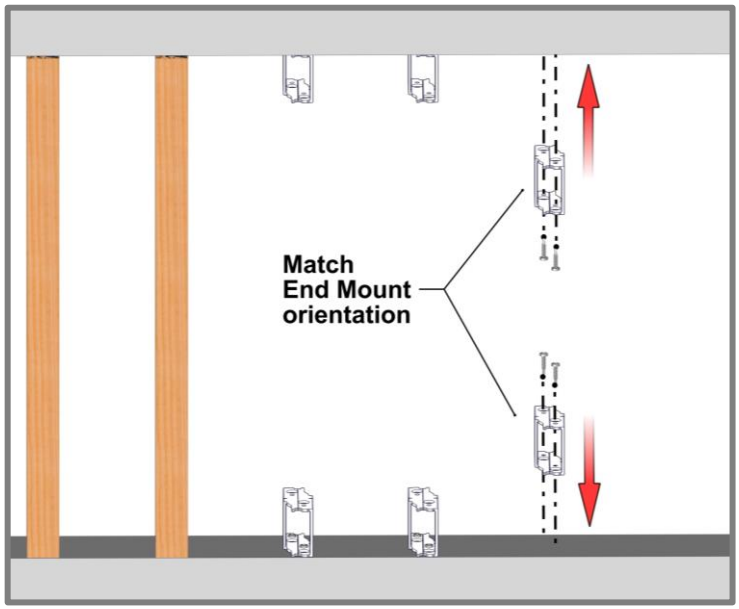
Step 4
Refer to the previous page for End Cap install and considerations.

Install End to End orientation

Note: Use Tables 3-9 in Appendix for Allowable Span for Wind Loading.

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.

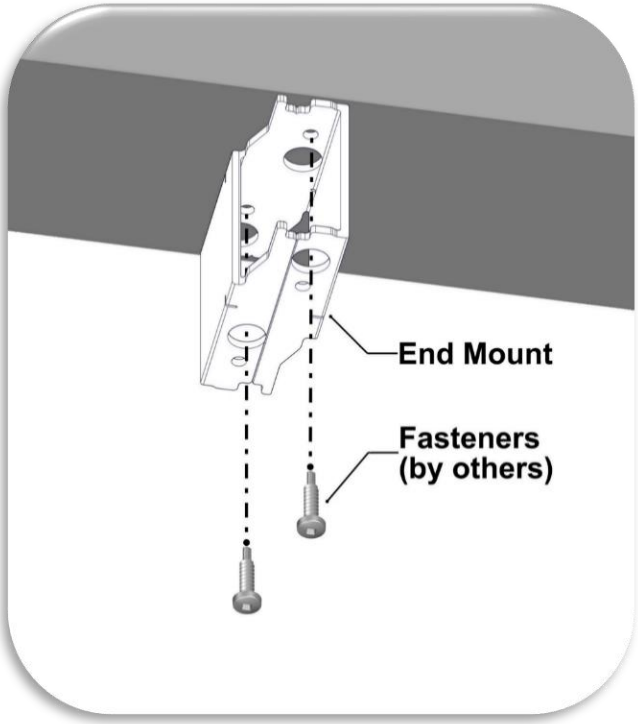


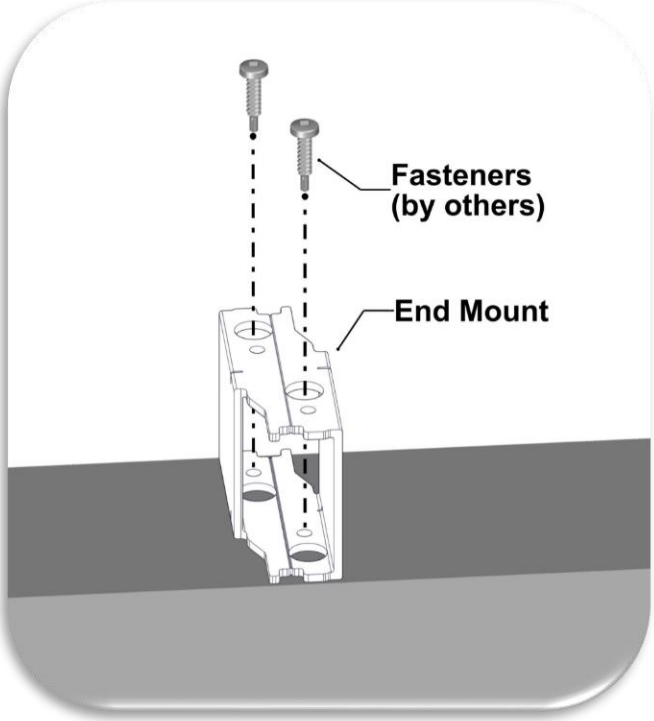
Fastener Types for End Mounts		
End Mount	**Pan Head**	**Hex Head**
2”	#10	
4”	#12	#12
6”	#12	#12
8”	#12	#12
4” HD	#14	#14
6” HD	#14	#14
8” HD	#14	#14

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.



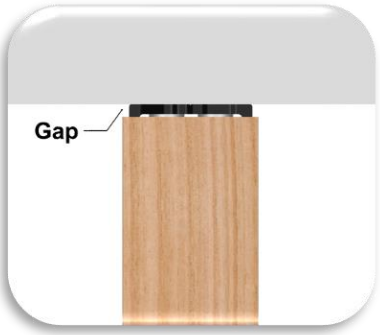


Step 3

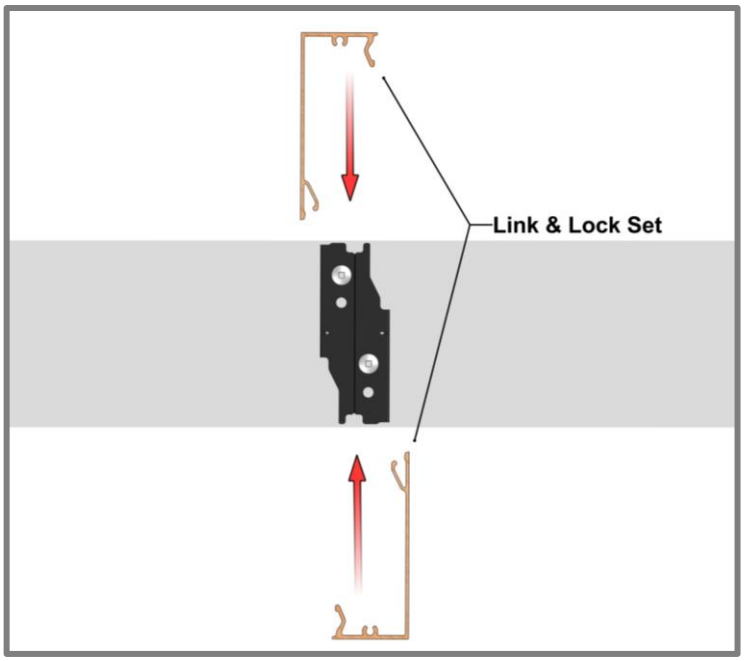
Measure, cut and install Link & Lock Set and snap it into place onto the End Mounts. Use clamps with rubber pads as common practice to securely snap the front “L” onto the back “L”.

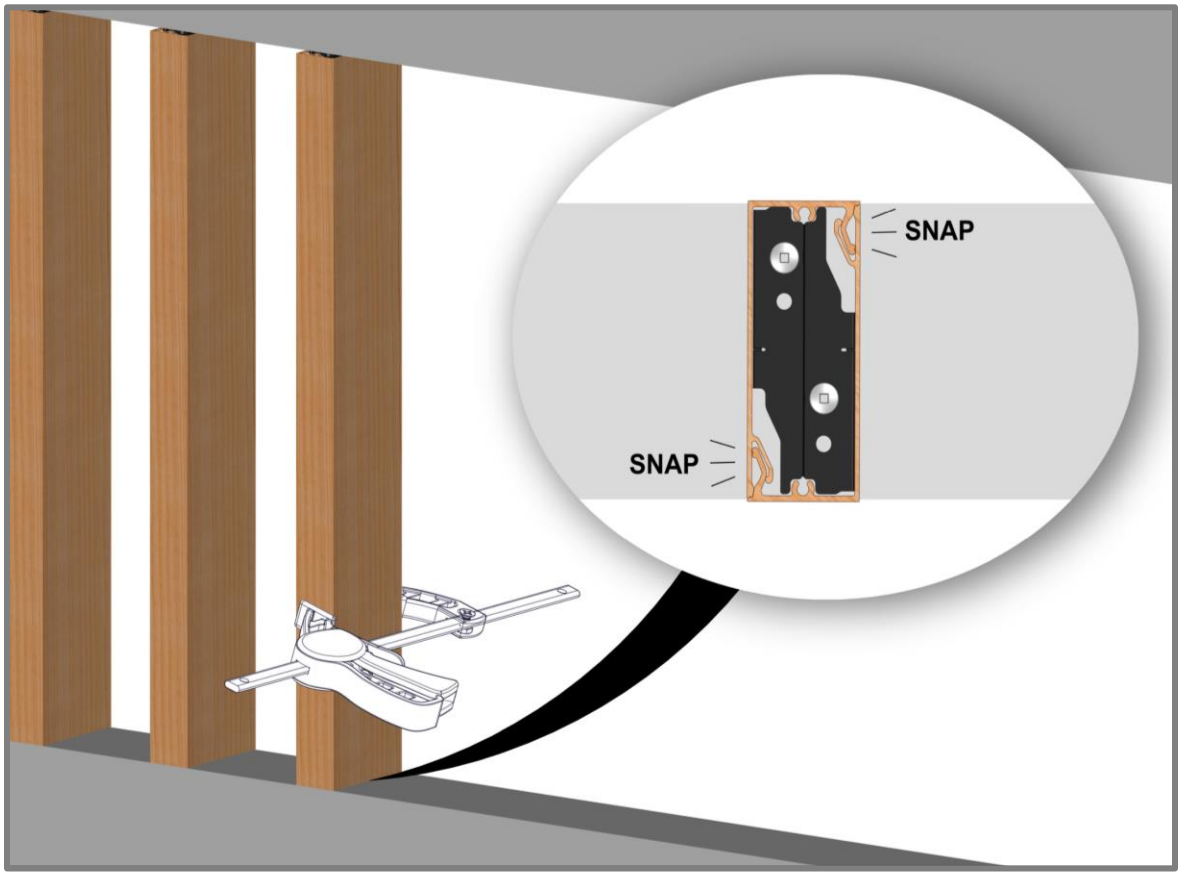
If necessary, use a rubber mallet or hammer and block to protect the finish.

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

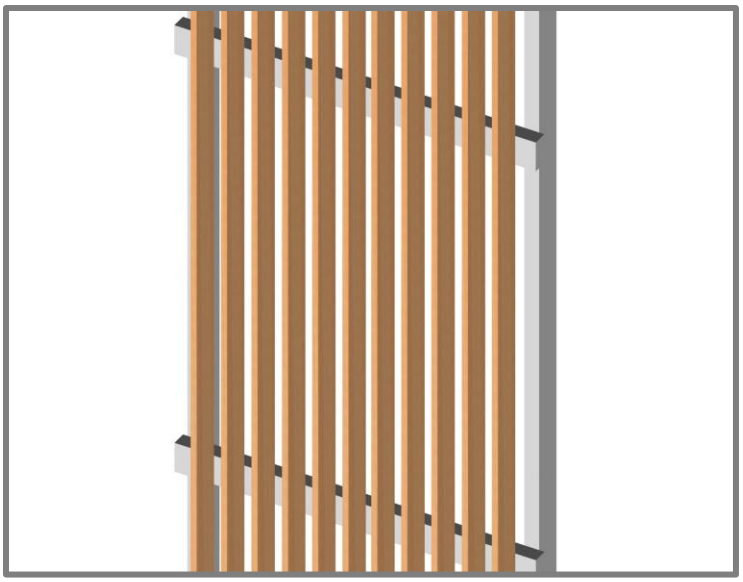


Cut off Taped/Drilled L&L ends (1/2" each end).





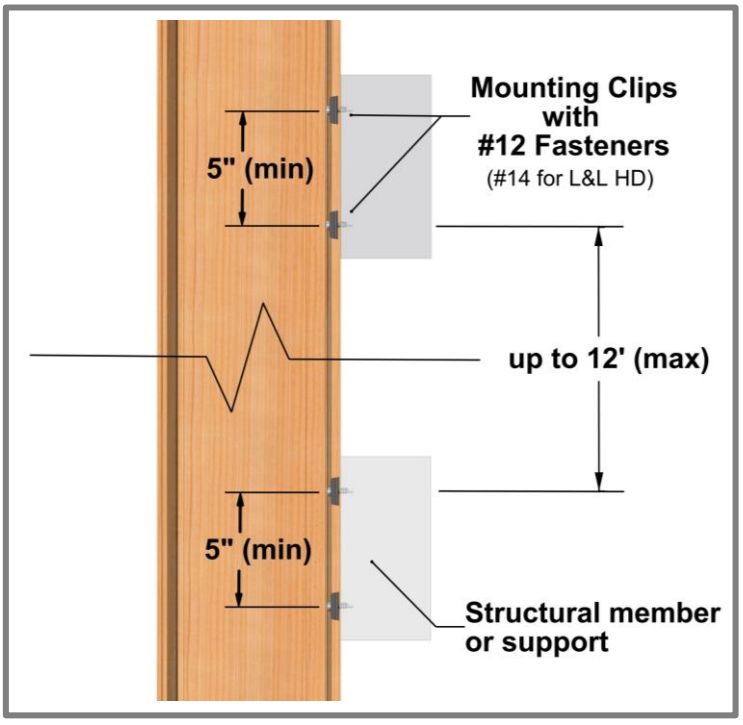
Large spans with Internal Stiffener



Requirements for large spans:

- Two Mounting Clips with #12 fasteners min, (#14 for L&L HD) are used at both ends with a minimum distance apart of 5” O.C.
- An Internal Stiffener is added to reinforce the Link & Lock set for spans up to 12’ max @30psf.
- Stiffener must be one continuous member from attachment to attachment.
- Double-sided Tape is used to place the Stiffener onto the Link & Lock. The tape is placed on the center of the Stiffener and then pressed onto far end of the back “L” as shown on the next page.

See **Appendix for allowable spans for project specific wind load. Allowable Span - Tables 3-6**



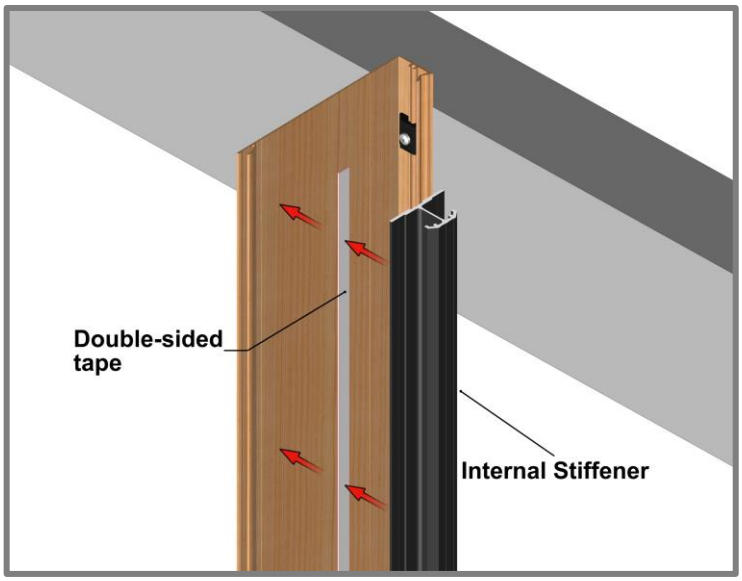
Step 1
Place predrilled Link & Lock back “L” into position (See Drilling page). It is good practice to check your installation every 2-3 rows for level/plumb and flat/straight, for best results.

Step 2
Install back “L” using #12 Fasteners min, (#14 for L&L HD) and Mounting Clips at end attachment points with a minimum distance apart of 5” O.C.

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

Step 3

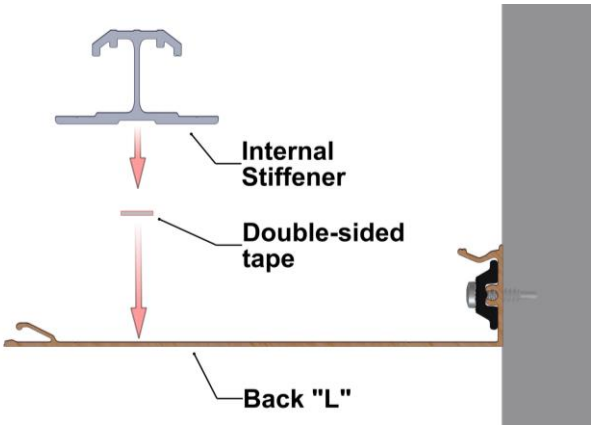
Peel and place the Double-sided tape onto the back of the Stiffener O.C. Peel the second side and install the Stiffener as shown in the image pressing down to adhere to the tape.



Note: Install Stiffener 1” (min) from the end of the L&L to allow space for the End Cap as seen below.



Make sure the Stiffener is located at the end of the back “L” and the tape is in the center of the stiffener.

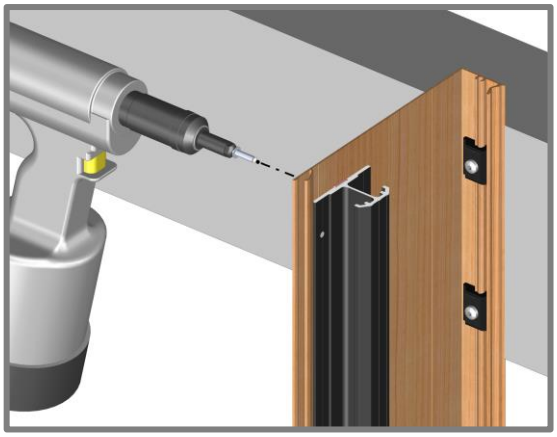


Step 4

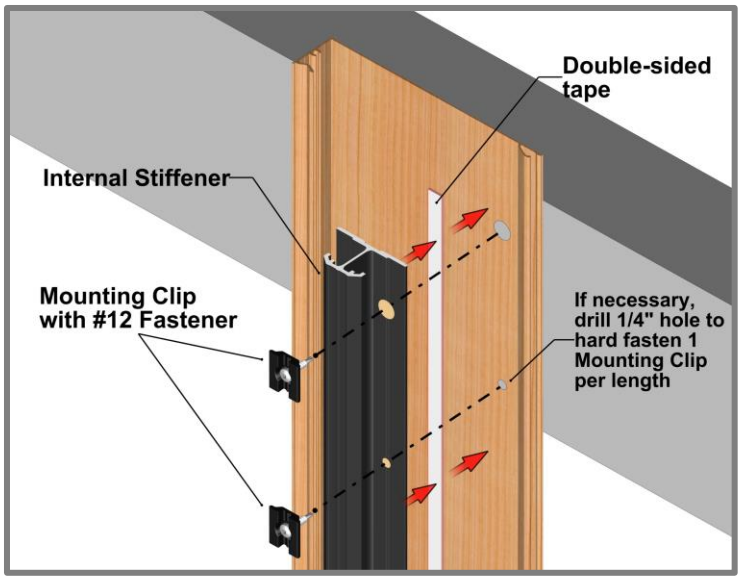
-Fastening Stiffener in Fin orientation

Mechanically fasten the Stiffener to the back “L” using 1/8” Dome Head Rivets (Aluminum). Drill the flange of the Stiffener using a 1/8” Drill bit and fasten two Rivets at the top or one end to mitigate movement of the stiffener over time.





Step 4.1
-Fastening Stiffener Batten orientation
Mechanically fasten the Stiffener to the back “L” using the Mounting Clips and #12 Fasteners.



Step 5
Refer to Front “L” and End Cap install steps and details.
Install Stiffener with space at the end for the End Cap to be installed.

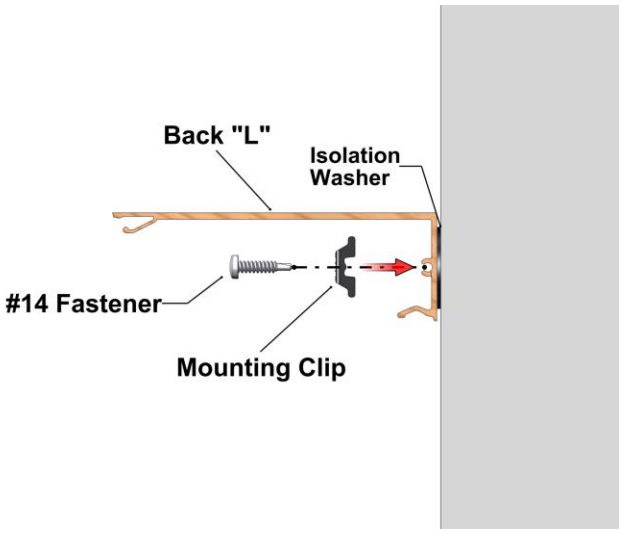


Link & Lock HD

- 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 wind load. Allowable Span – Tables 4-6**

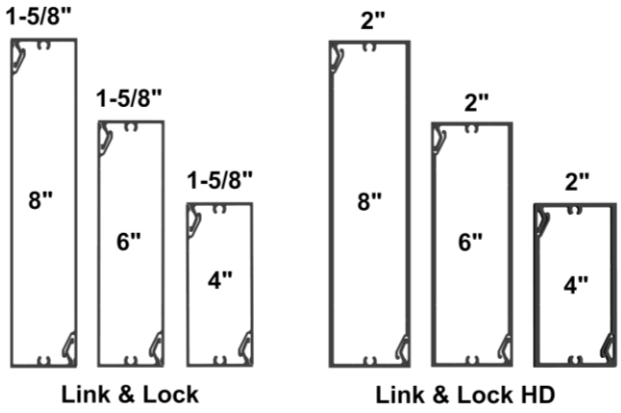




6” L&L
6’ span max
@30PSF

6” L&L HD
12’ span max
@30PSF

Profile Comparison



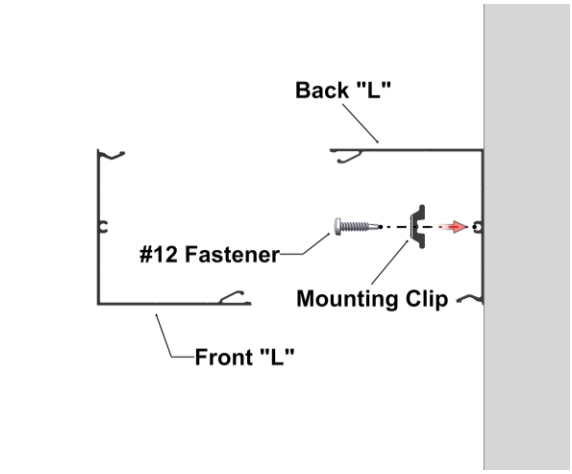
4x4 & 4x6 Link & Lock

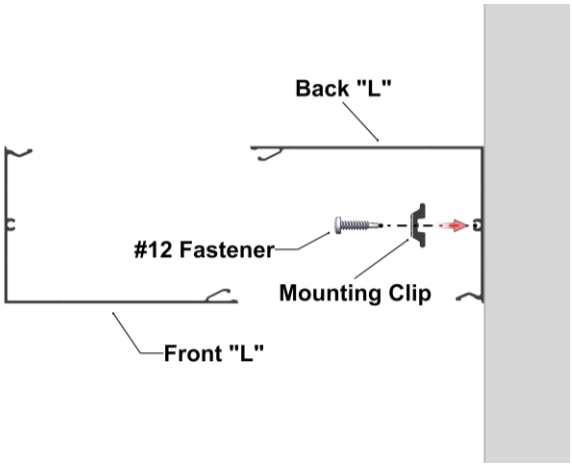
- Available sizes: 4”x4” & 4”x6”
- Uses standard Mounting Clip and attachment methods with #12 Fasteners

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

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





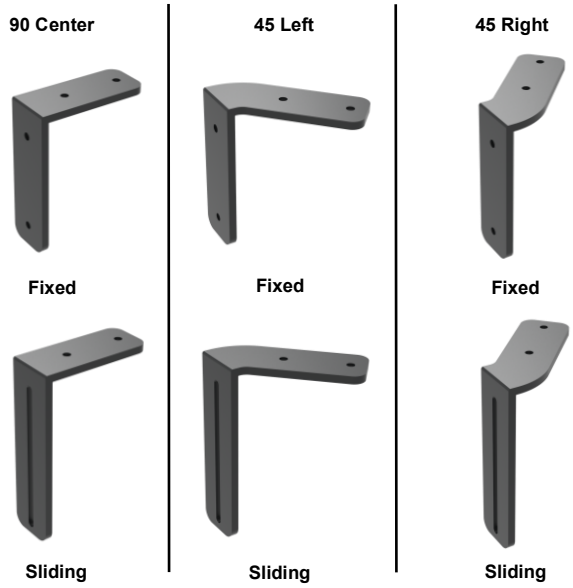


Link & Lock Brackets

- Alternate option for securing L&L cladding
- Attachment from L&L to bracket: use 1/4" Socket Head Screws, washers, locknuts & Mounting Clips included in order
- Attachment to structural element: Min #12 Fasteners (Min head diameter of 11mm) by others
- For expansion & contraction hard fasten only one fixed bracket per L&L run.
- Sliding Brackets are used for floor/slab deflection.

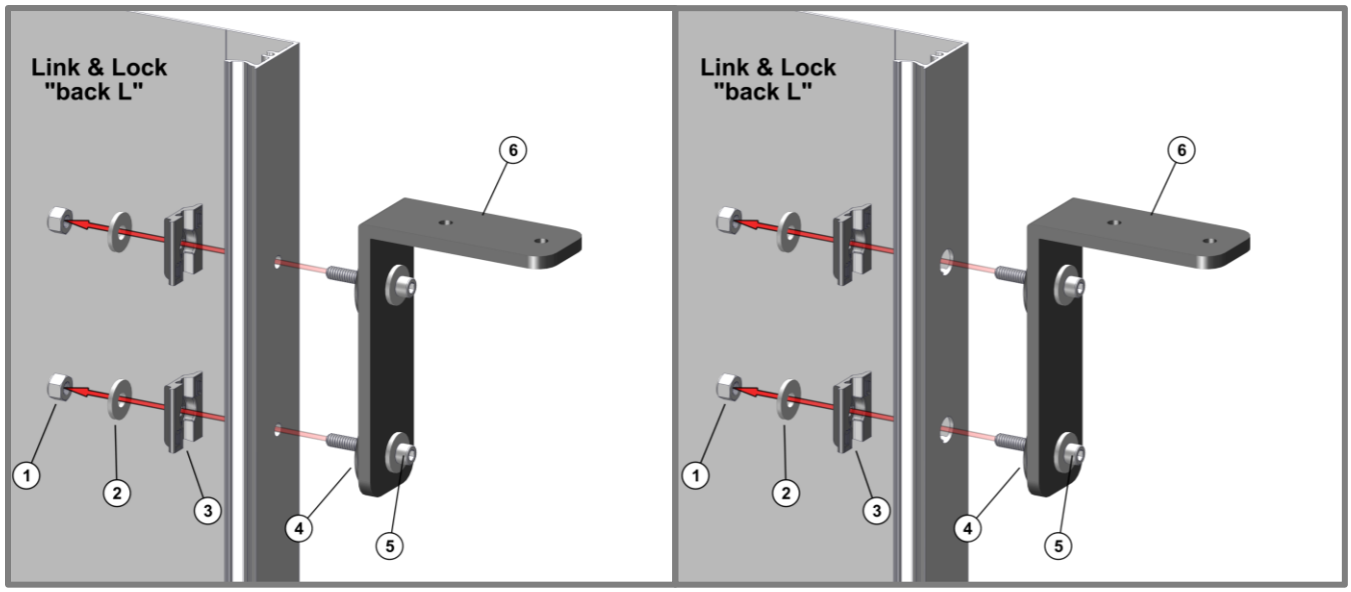
Note: Use lubricant for all bracket attachments. See following pages for details.
See **Appendix for L&L Bracket Max. Spacing. Table 9.**

Link & Lock Bracket Options



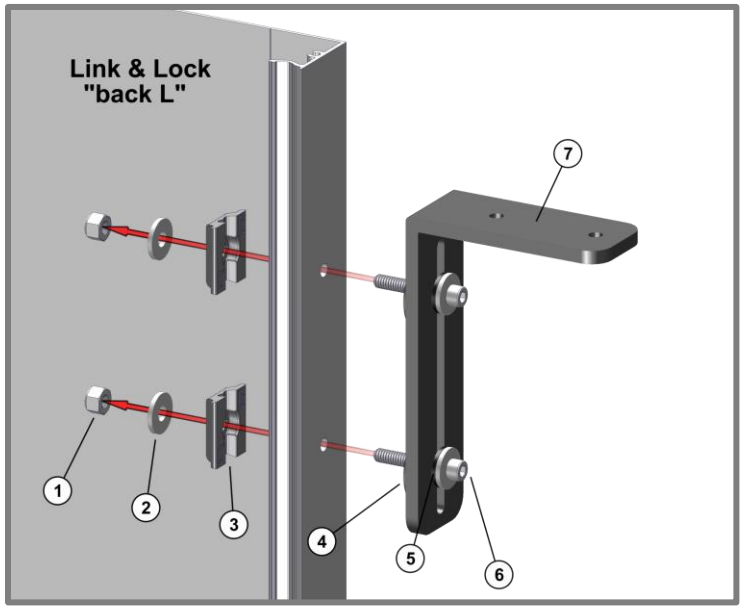
Single Bracket for horizontal substrate

Fixed Bracket (Hard fastened with 1/4” holes) **Fixed Bracket (Expansion 1/2” holes)**



No.	Description	Material	Qty
1	1/4” -20 Locknut	Stainless Steel Nylon-Insert	2
2	Washer, 1/4" screw size, 0.75” OD	Stainless Steel	4
3	Link & Lock Mounting Clip	Nylon w. Stainless Washer	2
4	Isolation Washer for 1/4” size	Nylon, Black	2
5	1/4" -20 Socket Head Screw, 1-1/2” length	Stainless Steel	2
6	Link & Lock Bracket -90 Center Fixed	6005A Aluminum	1

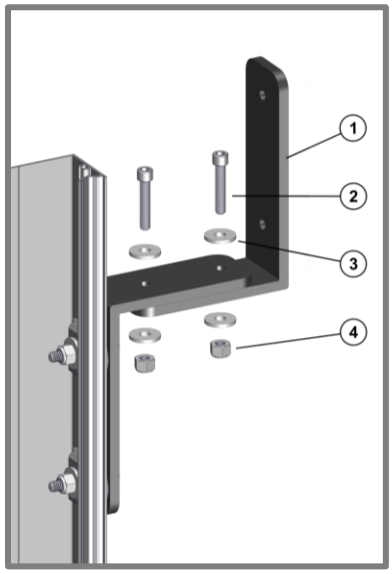
Sliding Bracket (Use 1/4” holes)

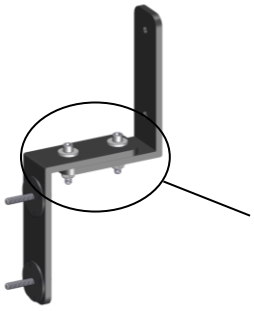


Note: Use Sliding Bracket only when attachment conditions require large movement. (Ex. Slab deflection in parking garages).

No.	Description	Material	Qty
1	1/4” -20 Locknut	Stainless Steel Nylon-Insert	2
2	Washer, 1/4" screw size, 0.75” OD	Stainless Steel	4
3	Link & Lock Mounting Clip	Nylon w. Stainless Washer	2
4	Isolation Washer for 1/4” screw size	Nylon, Black	2
5	Plastic Washer, 1/4" screw size, 0.734 OD	Nylon, Black	2
6	1/4" -20 Socket Head Screw, 1-1/2” length	Stainless Steel	2
7	Link & Lock Bracket -90 Center Sliding	6005A Aluminum	1

Dual Bracket for vertical substrate





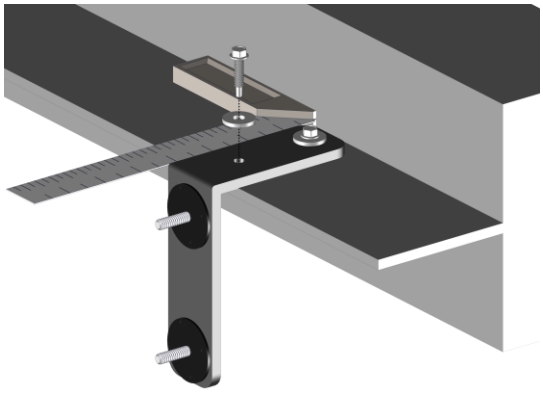
Dual Bracket components are loosely pre-assembled by manufacturer.
Adjust as required.
Once in place add lubricant and tighten to the manufacturer’s specifications.
See following pages for lubricant details.

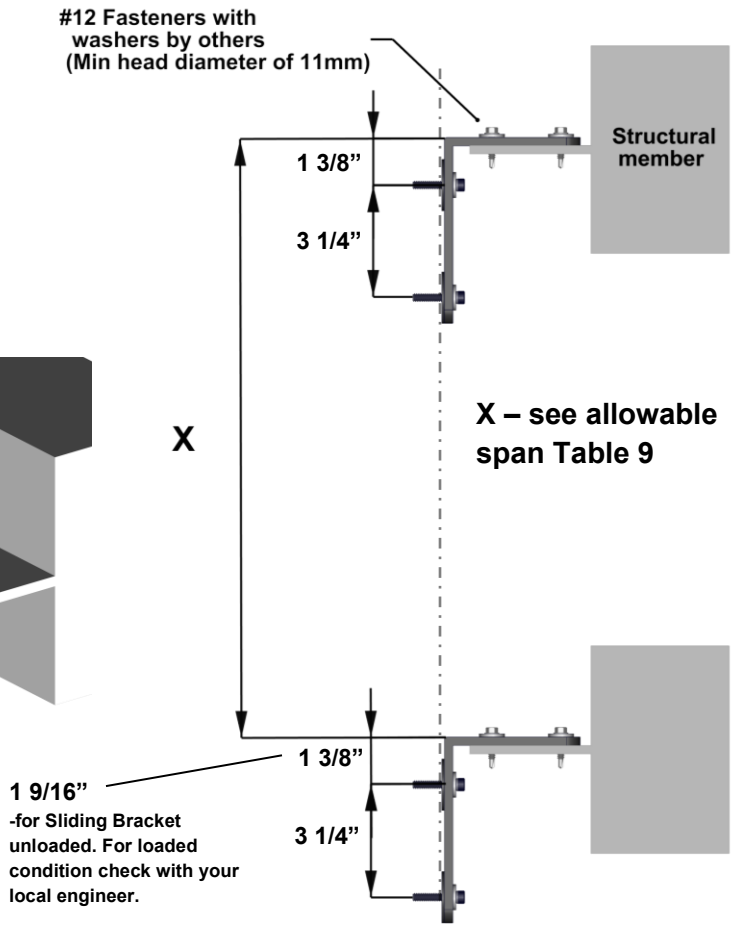
No.	Description	Material	Qty
1	Link & Lock Dual Bracket -90 Center Fixed	6005A Aluminum	1
2	1/4" -20 Socket Head Screw, 1-1/4” length	Stainless Steel	2
3	Washer, 1/4" screw size, 0.75” OD	Stainless Steel	4
4	1/4" -20 Locknut	Stainless Steel Nylon-Insert	2

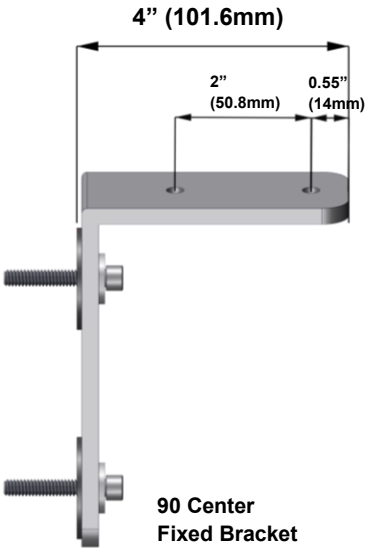
Install steps

Step 1
Layout & install Link & Lock Brackets. It is good practice to check for level/plumb and flat/straight, for best results.

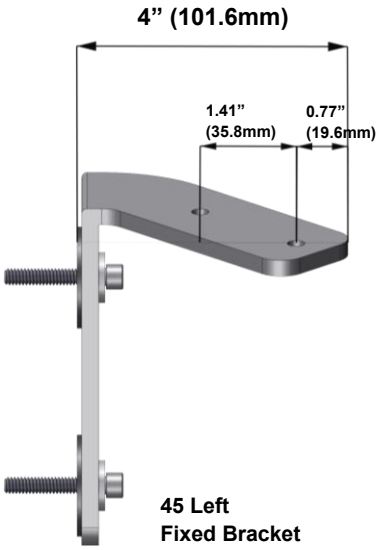
TIP: Install one run of L&L Brackets with the L&L to confirm measurements.



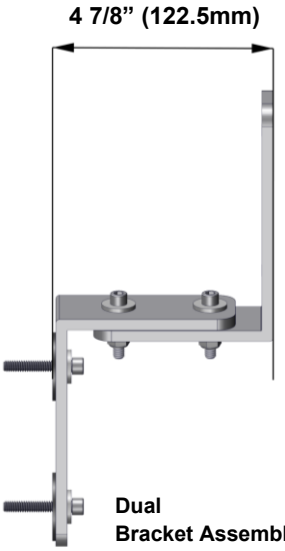




90 Center Fixed Bracket



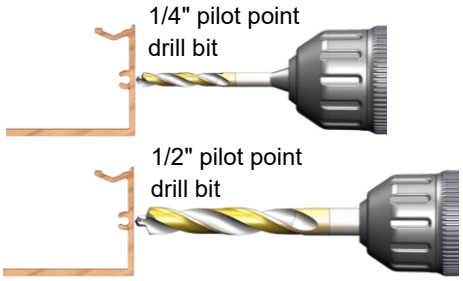
45 Left Fixed Bracket



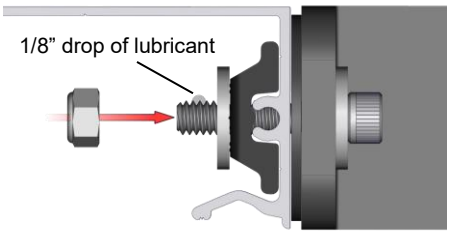
Dual Bracket Assembly

Step 2
Drill out back “L” of the Link & Lock.
For dimensions review drawing details provided by Longboard if required.

- **1/4" holes**
  -for hard fastening one Bracket per run
  -for Sliding Brackets if used
- **1/2" holes** for expansion & contraction on the rest of the Fixed Brackets



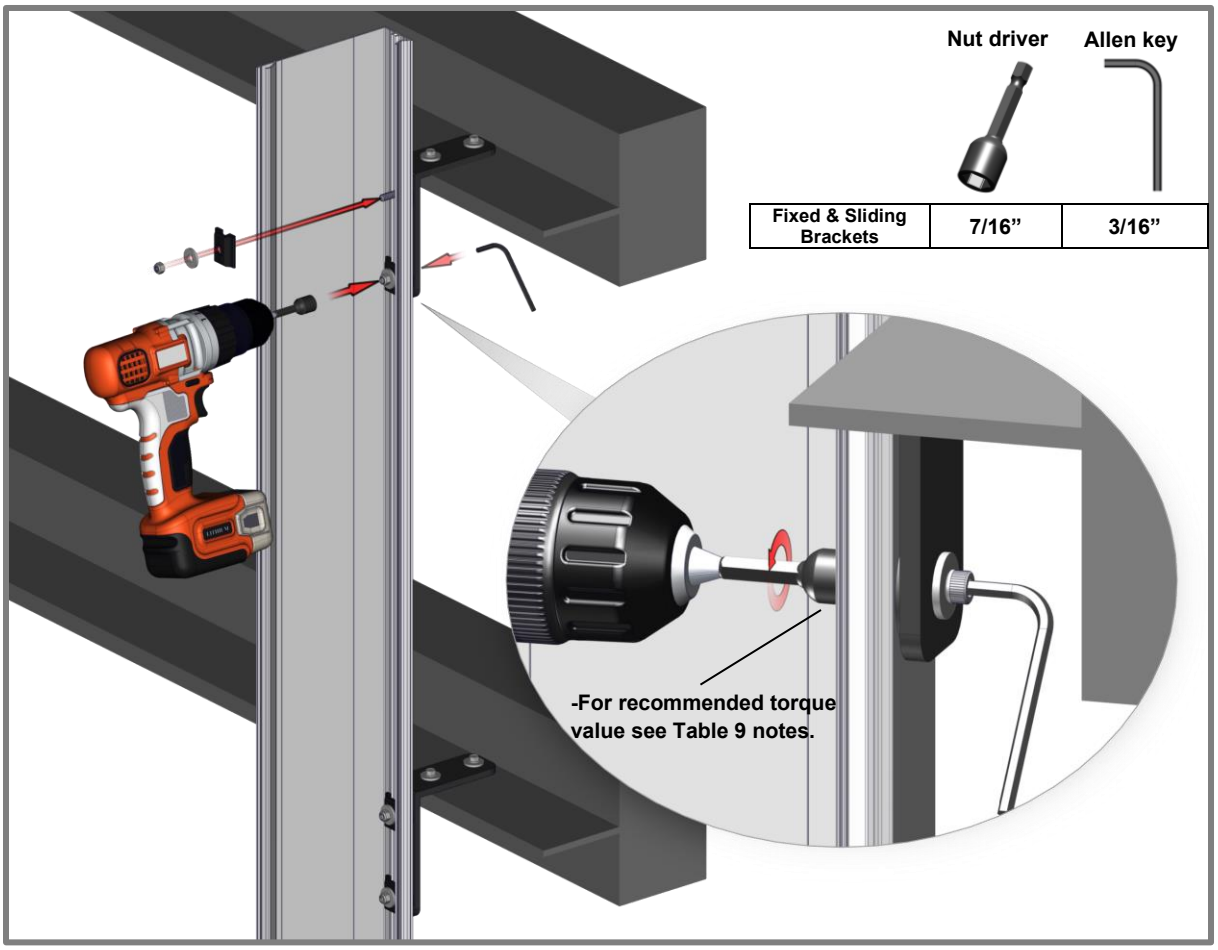
Step 3
Add 1/8” drop of lubricant to bolt threads before installing locknut.





For L&L Bracket fastening, use Permatex Anti-Seize 77134.

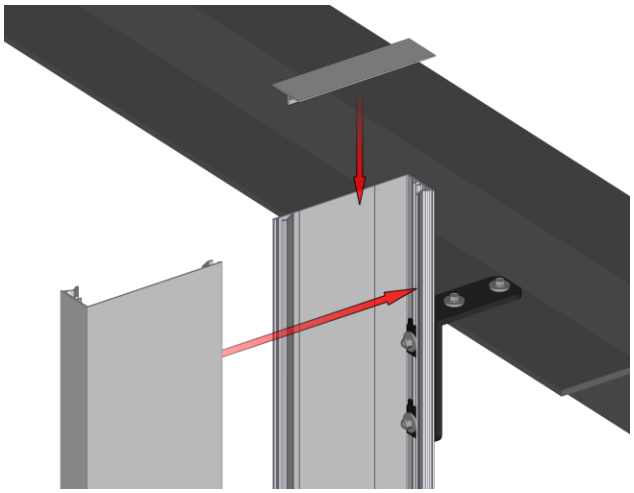
Step 4
Install back “L” onto brackets.



Step 4.1 Install Internal Stiffener if required. See stiffener install steps for details.

Step 5

Install front “L” onto back “L” and End Caps. See L&L install steps for details.

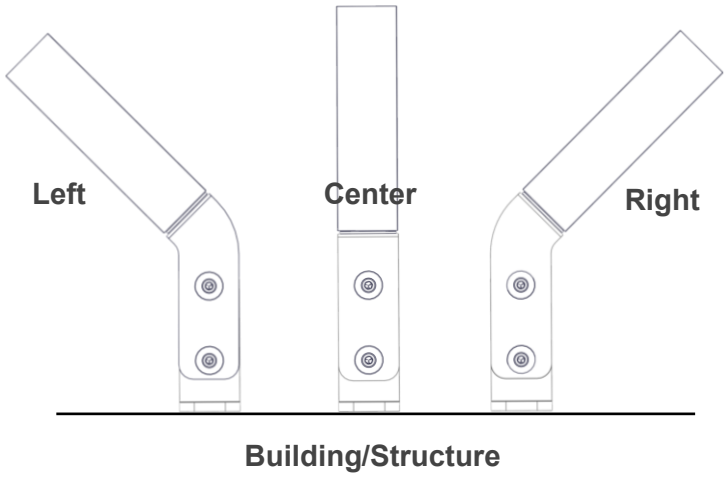


Orientation options

Fixed options shown, sliding options are available for slab deflection or building settlement.









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™		PSF (Factored / Ultimate)										
Standard		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.
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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™		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.
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5. Minimum embedment and edge distance exclude wall finishes, including but not limited to stucco, foam, brick veneer, sheathing and siding.
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   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 9

LONGBOARD® INSPIRING ARCHITECTURE

LINK & LOCK™ BRACKET MAX. SPACING (FT)

LINK & LOCK™ BATTEN	WIND LOAD PSF (FACTORED/ULTIMATE)									
	30	40	50	60	70	80	90	100	110	120
1-5/8" x 2"	10'	8'		6'			4'	2'		
1-5/8" x 4"	8'	6'		4'			2'			
1-5/8" x 4" *w. Internal Stiffener*	12'	10'	8'	6'			4'			
1-5/8" x 6"	6'	4'			3'			2'		
1-5/8" x 6" *w. Internal Stiffener*	10'	8'	6'	4'			3'	2'		
1-5/8" x 8"	6'	4'	2'							
1-5/8" x 8" *w. Internal Stiffener*	8'	6'	4'		3'			2'		
2" x 4" HD	12'	10'	8'	6'			4'			
2" x 6" HD	10	8'	6'	4'			3'			
2" x 8" HD	8'	6'	4'		3'			2'		

Recommended torque value for Link & Lock™ to Bracket attachment:

note 1 Factored Wind Load: max. **168 LBS/EA** Bracket

note 2 Factored Dead Load: max. **29 LBS/EA** Fixed Bracket

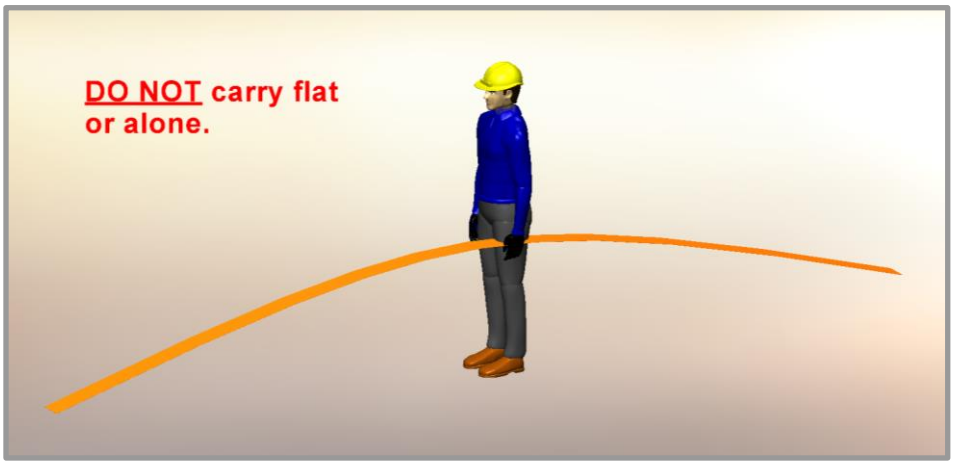
note 3 Fixed Bracket 1/4" -20 Socket Head Screw, **60-72 in/lbs** + prevailing torque of self-locking nut

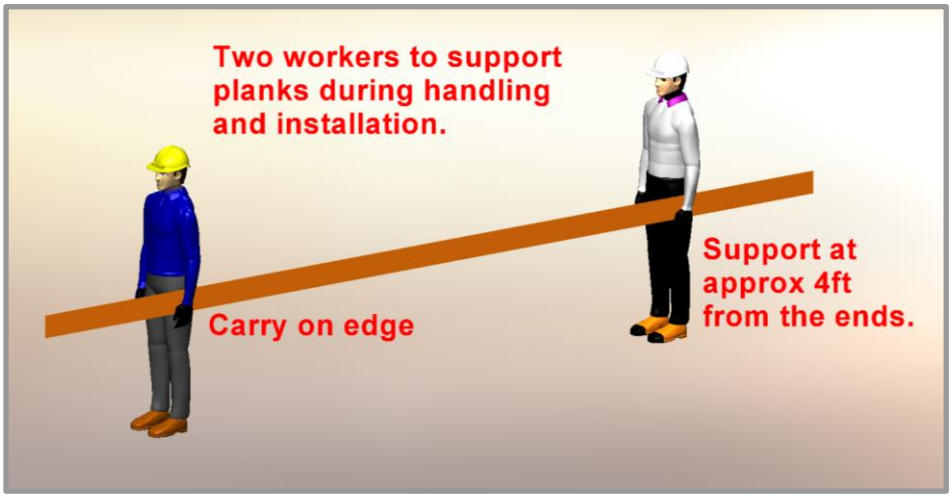
note 4 Sliding Bracket 1/4" -20 Socket Head Screw, **48-60 in/lbs** + prevailing torque of self-locking nut

April 25, 2024

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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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 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.

LONGBOARD®
INSPIRING ARCHITECTURE

EXTERIOR
Order Information

Tongue & Groove Systems

V-Groove Planks

* 48 sq. ft. box quantities ǂ 96 sq. ft. box quantities

Size	12′ *	24′ ǂ	12′ Perf *	24′ Perf ǂ
2½"	3V.145	-	3VP.145	-
4"	4V.145	4V.289	-	-
6"	6V.145	6V.289	6VP.145	6VP.289
6"	6V.145	6V.289	6VP.145	6VP.289
*8"	8V.145	8V.289	-	-

* 8" V Groove, 12ft lengths available in all finishes
* 8" V Groove, 24 ft lengths available in woodgrains only.

Smooth Planks

Size	12′ *	24′ ǂ	12′ Perf *	24′ Perf ǂ
6"	6PSP.145	6PSP.289	6PSPP.145	6PSPP.289

Channel Planks

Size	12′ *	24′ ǂ	12′ Perf *	24′ Perf ǂ
6"	6CH.145	6CH.289	-	-

Bevel Planks

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

Castellation Planks

Size	12′ *	24′ ǂ	12′ Perf *	24′ Perf ǂ
4"	4CA.145	4CA.289	-	-
8"	8CA.145	8CA.289	-	-


V-Groove Planks


Smooth Planks


Channel Planks


Perforated Planks


Bevel Planks


Castellation Planks


Butt Joint Fastening Kit


Quick Screen Clips


U-Shim

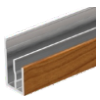

Touch-up Pens

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

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′	JT23.145
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′	3VCP.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


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

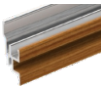

Traditional 3" Smooth Corner


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

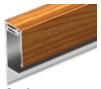

Traditional Flat Reveal Set


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

+1 800 604 0343
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Residential Systems

Lap Siding

48 sq. ft. box quantities

Size	12'
6"	6L.145

Board & Batten

56 sq.ft. box quantities

Size	12'
7"	7BB.145

Accessories

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



Butt Joint Fastening Kit



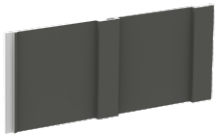
Quick Screen Clips



Touch Up Pens



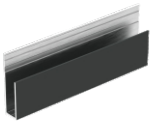
Lap Siding (Double)



Board & Batten (Double)



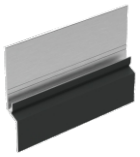
Board & Batten Back to Back Starter



Traditional J Track



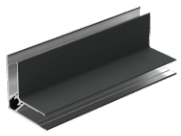
Traditional Two piece J-Track



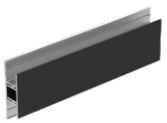
Traditional Compression Joint

Trim Components

Type	Style	Product	Dimensions	SKU
J Track	Traditional	J Track	(1-3/8")-12'	JT35.145
J Track	Traditional	Two Piece J Track	(1-3/8")-12'	JT23S.145
Compression	Traditional	Compression Joint	(1-3/8")-12'	2CJ.289
Corner	Traditional	Corner Set	(1"-2") - 12'	2CORS.145
Reveal	**Traditional**	**Flat Reveal Set**	(1-1/2") - 12'	**2FRS.145**
Reveal	Traditional	Offset Flat Reveal Set	(2") - 12'	2OFFJ.145
Reveal	Traditional	U-Reveal Set	(1-1/2") - 12'	2URS.145
Starter	Traditional	Back to Back Starter	(5.5")-12'	6BTBS.145
Starter	Traditional	Starter Strip	(1-7/8")-12'	2SS.145
Drip Edge	Traditional	Drip Edge	(1-3/8")-12'	2DE.145



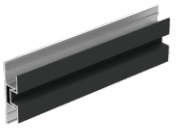
Traditional Corner Set



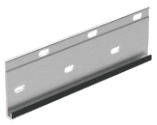
Traditional Flat Reveal Set



Traditional Offset Flat Reveal Set



Traditional U Reveal Set



Traditional Starter Strip



Drip Edge

Link & Lock™ Battens

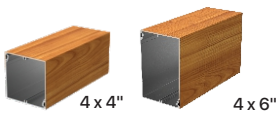
Size	12'	24'	End Caps (20/box)	End Mounts (20/box)
2"	2X2LL.145	2X2LL.289	2LLEC.2	2LLEM.2
4"	2X4LL.145	2X4LL.289	2LLEC.4	2LLEM.4
6"	2X6LL.145	2X6LL.289	2LLEC.6	2LLEM.6
8"	2X8LL.145	2X8LL.289	2LLEC.8	2LLEM.8
Link & Lock™ HD Battens				
4"	2X4LLHD.145	2X4LLHD.289	2LLHDEC.4	2LLHDEM.4
6"	2X6LLHD.145	2X6LLHD.289	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

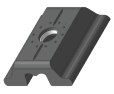


Link & Lock ™ Box Battens

Mounting Accessories	Qty	SKU
Link & Lock Mounting Clip	48, bag	LLMC.N48
Link & Lock™ Isolation Washer	48, bag	FAST.5003.BOX48
Dewalt® 1/2" Pilot Point Drill Bit	1	DRILLBT.05
24' Link & Lock Internal Stiffener	1	LLSTIFF.289
3M® Double Sided Adhesive Tape - 108'	1, roll	LLTAPE.1296

Link & Lock™ Mounting Brackets

Product	Single	Dual
45° LEFT FIXED	LLMBK.45LF	LLDMDK.45LF
45° RIGHT FIXED	LLMBK.45RF	LLDMDK.45RF
90° CENTER FIXED	LLMBK.90F	LLDMDK.90F
45° LEFT SLIDING	LLMBK.45LS	LLDMDK.45LS
45° RIGHT SLIDING	LLMBK.45RS	LLDMDK.45RS
90° CENTER SLIDING	LLMBK.90S	LLDMDK.90S



Mounting Clip



Isolation Washer



Dewalt® Drill Bit



Internal Stiifener



Single / Dual



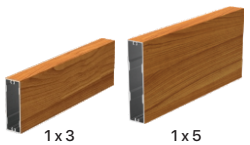
Fixed / Sliding

Link & Lock ™ Mounting Brackets

Privacy Beam System

Size	Product	24'	End Caps (20/box)
1x3"	Privacy Beam	1X3B.289	1BEC.3
1x5"	Privacy Beam	1X5B.289	1BEC.5
2x2"	Single Post	2X2SP.289	2X2PC.2
2x3"	Double Post	2X3DP.289	2X3PC.3

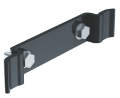
Mounting Accessories	Qty	SKU
Spacer Block	100, box	2X2SB.N100
1" Spacer Bar Stock Length	1	1X2FB.145
1x3" Spacer Bar	100, box	1X2FB.1
1x5" Spacer Bar	100, box	1X2FB.3
3" Mounting Bracket	100, box	3PSMB.1
#10 Black Screws	100, box	PECS.N100



Privacy Beam



Spacer Bar



Mounting Bracket

Scan the QR code to explore our Finishes on our Website

Achieve your Vision.

+1 800 604 0343
longboardproducts.com • info@longboardproducts.com

Finish Options

Achieve your vision.

Whether creating a space that offers the warmth and appearance of Woodgrains, or the modern industrialized look of Naturally Aged Metals, we have a finish option for you.

Require a custom finish or color? Our experienced color-matching team can make it a reality!

Contact us to confirm lead times for orders greater than 15k sq.ft in the Most Popular Finishes category.

Longboard Finish Classification

Type: Woodgrain / Solid / Metallic / Speckle / Naturally Aged Metal
Surface: Smooth / Textured
Sheen: Matte / Satin / Glossy
Performance: AAMA 2604 / AAMA 2605
Finish Warranty: 15 Year / 20 Year

Click / Scan the QR code to check our latest lead times and explore available options!

LONGBOARD®
INSPIRING ARCHITECTURE

Woodgrains

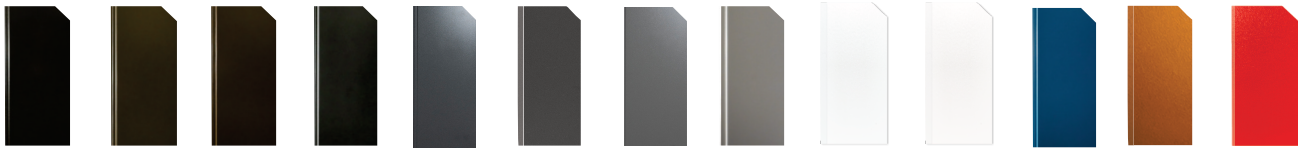
Longboard's woodgrain finishes have a slight texture with matte sheen.



Black Oak | Burnt Cherry | Italian Rosewood | Dark Olive | Light Olive | Dark Walnut | Dark National Walnut | Light National Walnut | Table Walnut | Dark Antique Oak | National Mahogany | Western Cedar | Dark Cherry | Dark Acacia | Dark Bamboo

Dark Knotty Pine | Light Bamboo | Dark Fir | Light Cherry | Light Oak | Light Fir | Southern Yellow Pine | Rock Elm | Birchwood | Blonde Oak | Beechwood | Grey Hemlock | Driftwood | Grey Douglas Fir | White Oak

Solid & Specialty



Onyx Black — *Textured Matte* — Solid
Dark Brown — *Smooth Satin* — Solid
Classic Bronze — *Smooth Satin* — Solid
Moonstone — *Smooth Satin* — Metallic
Imperial Slate — *Textured Matte* — Solid
Slate Grey — *Smooth Satin* — Solid
Shale — *Textured Matte* — Solid
Venus — *Smooth Satin* — Metallic
Ultra White — *Smooth Satin* — Solid
Bone White — *Smooth Satin* — Solid
Medium Blue — *Smooth Satin* — Solid
Copper Penny — *Smooth Satin* — Metallic
Chilli Pepper — *Smooth Satin* — Solid

Speckle



Brownstone — *Textured Matte* — Speckle
Baked Clay — *Textured Matte* — Speckle
Burnt Sienna — *Textured Matte* — Speckle
Biscotti — *Textured Matte* — Speckle
Relic Stone — *Textured Matte* — Speckle
Limestone — *Textured Matte* — Speckle
Bedrock — *Textured Matte* — Speckle
Pebble — *Textured Matte* — Speckle
Alabaster — *Textured Matte* — Speckle
Portland Stone — *Textured Matte* — Speckle

Naturally Aged Metals



Liberty — *Textured Matte* — Naturally Aged Metal
Brooklyn — *Smooth Glossy* — Naturally Aged Metal
Eiffel — *Textured Matte* — Naturally Aged Metal
Empire — *Textured Matte* — Naturally Aged Metal
Golden Gate — *Textured Matte* — Naturally Aged Metal

Print, Screens, and our pictures do not accurately reflect aspects of our finishes – textures, sheen, woodgrain hues, etc. Always order a physical sample before purchase! Our Color Bars swatches and samples will provide an accurate representation.

If a custom finish is required, we will work with our industry leading coating suppliers to develop a custom finish solution. All finishes are rigorously tested for corrosion and weathering resistance to ensure that it will stand up and deliver superior performance in the built environment.

We perform accelerated weathering testing in our onsite laboratory and work closely with coating suppliers to review weathering results of finishes undergoing natural Florida exposure testing. Our disciplined approach to powder coating, quality and process control distinguishes it as industry leading product manufacturer and ensures that its premium products stay looking beautiful for many, many years.

PINNACLE WARRANTY

NATIONAL WARRANTY
(Canada & USA only)

LONGBOARD® INSPIRING ARCHITECTURE

15 Year Non-Prorated Powder Coating Finish - 50 Year Non-Prorated Extruded Aluminum Profiles [Limited Warranty]

Warranty granted to (building owner):

Longboard Architectural Products Inc. ("Longboard," "The Company") products as identified by the Product Codes listed will conform to the standards set out in Clause 1 and Clause 2 of this Warranty, subject to the terms and conditions set out in Clause 3 and 4 of this Warranty.

Product codes:	Product description:
Finish:	

Install contractor	
Project name	
Project address	
Address 2	Install start date
Date of substantial completion	

This Pinnacle Warranty is only valid for applications within Canada and USA. All applications outside of Canada and USA are required to contact Longboard for assistance.

Clause 1

Extruded Aluminum Profile(s) with Powder Coat Finish Longboard expressly warrants that its product line is free from manufacturing defects in material or workmanship.

1.1 When product is applied according to Longboard instructions and properly maintained, such product is guaranteed against the following:
1.2 Buckling: The product itself will be free of any buckling that is not associated with the substrate and/or structure to which the Longboard system is attached. For the purpose of this warranty, buckling shall be defined as warping of the product(s) exceeding one sixteenth of an inch out of plane per linear foot.
1.3 Corrosion: When installed in normal atmospheric conditions according to Longboard instructions and properly maintained, such product is further guaranteed against rusting and corroding. Subject to the limitations set out in Clause 3 and 4.
1.4 What we will do: If, during the fifteen (15) year Limited Warranty Period on the powder coating finish which starts upon the approval and signature of Longboard representative, the Product is defective in material or workmanship, Longboard will, in its sole discretion, either repair or replace the defective portion of the Product.
1.5 What we will do: If, during the fifty (50) year Limited Warranty Period on the extruded aluminum profiles which starts upon the approval and signature of Longboard representative, the Product is defective in material or workmanship, Longboard will, in its sole discretion, either repair or replace the defective portion of the Product.
1.6 After the 15th year, this Limited Warranty on the powder coated finish will expire and shall no longer be applicable.
1.7 After the 50th year, this Limited Warranty on the aluminum extruded profile(s) will expire and shall no longer be applicable.
1.8 Longboard replacement of the defective Product or reimbursement of this Limited Warranty is the exclusive remedy for the Covered Person for any defect in materials or workmanship. The Company will pay for all reasonable costs including material and labor as it relates to the repair and/or replacement of the defective Product.

Clause 2

Product Finish - AAMA 2604 Performance Specification

2.1 During the first fifteen (15) years of this warranty:
2.2 Checking/Cracking: No visible checking or cracking of the product finish on the building.
2.3 Chalking Resistance: No chalking of the product finish on the building in excess of that represented by No.8 rating based on ASTM D4214.
2.4 Color Retention: No color change of the product finish on the building greater that 5 (five) CIE Lab $\triangle E$ units calculated in accordance with ASTM 2244 Section 6.3. Color change shall be measured on the exposed paint surface which has been cleaned of oil, grease, chalk, oxidized film or other contaminants, corresponding values shall be measured on the control panel.
2.5 Gloss Retention: Coated surface will exhibit gloss retention of a minimum of 30% of the original. Gloss retention shall be measured on the exposed paint surface which has been cleaned of oil, grease, chalk, oxidized film or other contaminants, corresponding values shall be measured on the control panel.
2.6 Adhesion: Adhesion of product finish when initially applied to test panels and measured by reference to AAMA 2604-02 Clause 7.4.2 will show no removal of the film.

Clause 3

3.1 Warranty Terms and Conditions:
3.2 The "Warranty Period" for the warranties in Clause 1 shall mean the respective number of years or for as long as the Covered Person commencing on the date of substantial completion named above shall live and own the property on which the material was originally installed.
3.3 This Warranty shall be registered within the first 12 months from date of purchase, and within ninety (90) days of substantial completion to be in effect. If not submitted within the 12-month period after date of purchase order, the warranty will be up to the discretion of Longboard for approval. This warranty is valid for the original owner and one other subsequent owner of the structure where the product(s) have been installed.
3.4 Normal atmospheric conditions exclude corrosive or aggressive atmospheres such as those contaminated with chemical fumes or other corrosive elements. The product finish is not meant for marine use on boats, ships or offshore platforms.
3.5 The product finish warranties as outlined in Clause 2 shall include coverage of the finish as it relates to the impact effects from hail and woodpecker birds.
3.6 Under no circumstance shall Longboard's liability under this limited warranty exceed 2.5 times the total corresponding Longboard material cost (excluding sales tax, labor and installation related costs) as noted on the original purchase invoice and paid by the Buyer for the specific project.

Clause 4

4.1 This warranty will not extend or cover:
4.2 Damages to the coated metal caused by handling, shipping, processing and/or installation; or
4.3 Damages to the coated metal caused by scratching or abrading after installation; or
4.4 Damages to the coated metal as a result of standing water in horizontal installations.
4.5 The warranty will not be applicable to damage or failure, which is caused by acts of God, falling objects, external forces, explosions, fire, riots, civil commotion's, acts of war, or other such similar or dissimilar occurrences beyond The Company's control.
4.6 Customer shall make available to The Company the dates of the installation of the coated metal, the maintenance records including details of washing and cleaning procedures in compliance with the cleaning requirements as stated in the Required Maintenance section of this warranty. Customers shall demonstrate that the failure of the coated metal was due to a breach of the warranty stated herein.
4.7 Claims must be made in writing to Longboard within 30 days of the discovery of a problem and authorization obtained prior to beginning any repair and/or refinishing work. The claimant must provide proof of coverage. Claims can be made by writing to Longboard at the Product Performance Department. After receiving such notice, The Company must be given a reasonable opportunity to inspect and verify the claim.
4.8 Longboard exclusive liability under this warranty, or other- wise, will be limited to refinishing and/or repairing, at The Company's sole discretion, the defective powder coated product. The warranty on any refinished, repaired or replaced coated metal supplied hereunder shall be for the remainder of the warranty period applicable to the originally coated metal. All warranty work will be performed by a company or contractor selected by Longboard. Color variance between refinished and/or repainted product and original shall not be indicative of a defect.
4.9 This warranty represents the entire agreement between parties in relation to its subject matter and supersedes any previous agreement whether written or oral between the parties in relation to its subject matter. The limited warranties state the entire liability of Longboard with respect to the products covered by them. The Company shall have no liability for any incidental or consequential damages. No person is authorized to make any representation or warranty on behalf of Longboard except as expressly set forth above, and any such statement shall not be binding on The Company. Except as expressly set forth above, Longboard makes no warranty of any kind, express or implied, including, without limitation, any implied warranty of merchantability or fitness for a particular purpose. Warranties shall be the duration of the limited warranty, or such shorter duration as provided under applicable local law. These limited warranties give you specific legal rights, and you may also have other rights which vary from area to area.
4.10 Nothing in this warranty shall be construed as a warranty of the workmanship of any installer or as imposing on Longboard any liability for unsatisfactory performance caused by faulty workmanship in installation.
4.11 It's agreed all parties involved that all claims and disputes relating to this agreement that cannot be settled through negotiation will try in good faith to first settle the dispute by mediation administered by the American Arbitration Association (Construction Industry Mediation Procedures) as a prelude to mandatory binding arbitration. Such binding arbitration is to be conducted and administered by the Construction Industry Arbitration Rules of the American Arbitration Association. Both seller and purchaser agree to share equally in the costs of both mediation and arbitration and that such binding arbitration will be the sole and final remedial action.
4.12 Required Maintenance. Depending on the Project Environment, follow the maintenance schedule as outlined in the Longboard Care & Maintenance Guide. Use a soft sponge or cloth, water and mild detergent, non-abrasive soap with the pH range of 5-9 to clean the powder coated area of dirt, grim and other debris. Pressure washing and the use of harsh detergents or chemicals is not recommended. Include in your maintenance records the following: date, time, specific products used, name of maintenance person and their designation, maintenance company name and general condition of the powder coated finish.

I have read and agree to the terms of the Longboard® Product 15 year powder coated surface and 50 year aluminum extruded profile(s) warranty and acknowledge receipt of a copy of the Warranty Certificate.

Name of owner or contractor: Date:

Signature:

Duly authorized on behalf of Longboard:

Name and designation: Date:

Signature:

PINNACLE WARRANTY

NATIONAL WARRANTY
(Canada & USA only)

LONGBOARD® INSPIRING ARCHITECTURE

20 Year Non-Prorated Powder Coating Finish - 50 Year Non-Prorated Extruded Aluminum Profiles [Limited Warranty]

Warranty granted to (building owner):

Longboard Architectural Products Inc. ("Longboard," "The Company") products as identified by the Product Codes listed will conform to the standards set out in Clause 1 and Clause 2 of this Warranty, subject to the terms and conditions set out in Clause 3 and 4 of this Warranty.

Product codes:	Product description:
Finish:	

Install contractor	
Project name	
Project address	
Address 2	Install start date
Date of substantial completion	

This Pinnacle Warranty is only valid for applications within Canada and USA. All applications outside of Canada and USA are required to contact Longboard for assistance.

Clause 1

Extruded Aluminum Profile(s) with Powder Coat Finish Longboard expressly warrants that its product line is free from manufacturing defects in material or workmanship.

1.1 When product is applied according to Longboard instructions and properly maintained, such product is guaranteed against the following:
1.2 Buckling: The product itself will be free of any buckling that is not associated with the substrate and/or structure to which the Longboard system is attached. For the purpose of this warranty, buckling shall be defined as warping of the product(s) exceeding one sixteenth of an inch out of plane per linear foot.
1.3 Corrosion: When installed in normal atmospheric conditions according to Longboard instructions and properly maintained, such product is further guaranteed against rusting and corroding. Subject to the limitations set out in Clause 3 and 4.
1.4 What we will do: If, during the twenty (20) year Limited Warranty Period on the powder coating finish which starts upon the approval and signature of Longboard representative, the Product is defective in material or workmanship, Longboard will, in its sole discretion, either repair or replace the defective portion of the Product.
1.5 What we will do: If, during the fifty (50) year Limited Warranty Period on the extruded aluminum profiles which starts upon the approval and signature of Longboard representative, the Product is defective in material or workmanship, Longboard will, in its sole discretion, either repair or replace the defective portion of the Product.
1.6 After the 20th year, this Limited Warranty on the powder coated finish will expire and shall no longer be applicable.
1.7 After the 50th year, this Limited Warranty on the aluminum extruded profile(s) will expire and shall no longer be applicable.
1.8 Longboard replacement of the defective Product or reimbursement of this Limited Warranty is the exclusive remedy for the Covered Person for any defect in materials or workmanship. The Company will pay for all reasonable costs including material and labor as it relates to the repair and/or replacement of the defective Product.

Clause 2

Product Finish - AAMA 2605 Performance Specification

2.1 During the first twenty (20) years of this warranty:
2.2 Checking/Cracking: No visible checking or cracking of the product finish on the building.
2.3 Chalking Resistance: No chalking of the product finish on the building in excess of that represented by No.8 rating based on ASTM D4214.
2.4 Color Retention: No color change of the product finish on the building greater that 5 (five) CIE Lab $\triangle E$ units calculated in accordance with ASTM 2244 Section 6.3. Color change shall be measured on the exposed paint surface which has been cleaned of oil, grease, chalk, oxidized film or other contaminants, corresponding values shall be measured on the control panel.
2.5 Gloss Retention: Coated surface will exhibit gloss retention of a minimum of 50% of the original. Gloss retention shall be measured on the exposed paint surface which has been cleaned of oil, grease, chalk, oxidized film or other contaminants, corresponding values shall be measured on the control panel.
2.6 Adhesion: Adhesion of product finish when initially applied to test panels and measured by reference to AAMA 2605-02 Clause 7.4.2 will show no removal of the film.

Clause 3

3.1 Warranty Terms and Conditions:
3.2 The "Warranty Period" for the warranties in Clause 1 shall mean the respective number of years or for as long as the Covered Person commencing on the date of substantial completion named above shall live and own the property on which the material was originally installed.
3.3 This Warranty shall be registered within the first 12 months from date of purchase, and within ninety (90) days of substantial completion to be in effect. If not submitted within the 12-month period after date of purchase order, the warranty will be up to the discretion of Longboard for approval. This warranty is valid for the original owner and one other subsequent owner of the structure where the product(s) have been installed.
3.4 Normal atmospheric conditions exclude corrosive or aggressive atmospheres such as those contaminated with chemical fumes or other corrosive elements. The product finish is not meant for marine use on boats, ships or offshore platforms.
3.5 The product finish warranties as outlined in Clause 2 shall include coverage of the finish as it relates to the impact effects from hail and woodpecker birds.
3.6 Under no circumstance shall Longboard's liability under this limited warranty exceed 2.5 times the total corresponding Longboard material cost (excluding sales tax, labor and installation related costs) as noted on the original purchase invoice and paid by the Buyer for the specific project.

Clause 4

4.1 This warranty will not extend or cover:
4.2 Damages to the coated metal caused by handling, shipping, processing and/or installation; or
4.3 Damages to the coated metal caused by scratching or abrading after installation; or
4.4 Damages to the coated metal as a result of standing water in horizontal installations.
4.5 The warranty will not be applicable to damage or failure, which is caused by acts of God, falling objects, external forces, explosions, fire, riots, civil commotion's, acts of war, or other such similar or dissimilar occurrences beyond The Company's control.
4.6 Customer shall make available to The Company the dates of the installation of the coated metal, the maintenance records including details of washing and cleaning procedures in compliance with the cleaning requirements as stated in the Required Maintenance section of this warranty. Customers shall demonstrate that the failure of the coated metal was due to a breach of the warranty stated herein.
4.7 Claims must be made in writing to Longboard within 30 days of the discovery of a problem and authorization obtained prior to beginning any repair and/or refinishing work. The claimant must provide proof of coverage. Claims can be made by writing to Longboard at the Product Performance Department. After receiving such notice, The Company must be given a reasonable opportunity to inspect and verify the claim.
4.8 Longboard exclusive liability under this warranty, or other- wise, will be limited to refinishing and/or repairing, at The Company's sole discretion, the defective powder coated product. The warranty on any refinished, repaired or replaced coated metal supplied hereunder shall be for the remainder of the warranty period applicable to the originally coated metal. All warranty work will be performed by a company or contractor selected by Longboard. Color variance between refinished and/or repainted product and original shall not be indicative of a defect.
4.9 This warranty represents the entire agreement between parties in relation to its subject matter and supersedes any previous agreement whether written or oral between the parties in relation to its subject matter. The limited warranties state the entire liability of Longboard with respect to the products covered by them. The Company shall have no liability for any incidental or consequential damages. No person is authorized to make any representation or warranty on behalf of Longboard except as expressly set forth above, and any such statement shall not be binding on The Company. Except as expressly set forth above, Longboard makes no warranty of any kind, express or implied, including, without limitation, any implied warranty of merchantability or fitness for a particular purpose. Warranties shall be the duration of the limited warranty, or such shorter duration as provided under applicable local law. These limited warranties give you specific legal rights, and you may also have other rights which vary from area to area.
4.10 Nothing in this warranty shall be construed as a warranty of the workmanship of any installer or as imposing on Longboard any liability for unsatisfactory performance caused by faulty workmanship in installation.
4.11 It's agreed all parties involved that all claims and disputes relating to this agreement that cannot be settled through negotiation will try in good faith to first settle the dispute by mediation administered by the American Arbitration Association (Construction Industry Mediation Procedures) as a prelude to mandatory binding arbitration. Such binding arbitration is to be conducted and administered by the Construction Industry Arbitration Rules of the American Arbitration Association. Both seller and purchaser agree to share equally in the costs of both mediation and arbitration and that such binding arbitration will be the sole and final remedial action.
4.12 Required Maintenance. Depending on the Project Environment, follow the maintenance schedule as outlined in the Longboard Care & Maintenance Guide. Use a soft sponge or cloth, water and mild detergent, non-abrasive soap with the pH range of 5-9 to clean the powder coated area of dirt, grim and other debris. Pressure washing and the use of harsh detergents or chemicals is not recommended. Include in your maintenance records the following: date, time, specific products used, name of maintenance person and their designation, maintenance company name and general condition of the powder coated finish.

I have read and agree to the terms of the Longboard® Product 20 year powder coated surface and 50 year aluminum extruded profile(s) warranty and acknowledge receipt of a copy of the Warranty Certificate.

Name of owner or contractor: Date:

Signature:

Duly authorized on behalf of Longboard:

Name and designation: Date:

Signature: