

1.0. GENERAL

1.1. Product Description

Longboard® Link & Lock Siding is an extruded aluminum open joint rainscreen siding system, designed to be installed horizontally or vertically, as fins/louvers or battens. Available in standard lengths of 24' (7.3m) and widths of 4" (101.6mm), 6" (152.4mm) & 8" (203mm). End Caps with a matching finish are used to close off the ends. Longboard Link & Lock Siding can be installed directly outboard of a UV barrier or wall finish & building envelope, attached to metal or wood furring strips, or post structure etc.

1.2. Installation Considerations

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

Battens (flat on wall) = 1-5/8" (41.3mm)

Fins/Louvers (on edge) = 4" (101.6mm), 6" (152.4mm) or 8" (203.2mm)

(See Appendix to access profile drawings)

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

Longboard Link & Lock Siding is to be installed outboard of a weather resistive barrier, including all flashings, following code and building requirements.

1.3. Cutting

A house of

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

Use standard wood-cutting tools such as a Miter Saw with a carbide blade (60-80 tooth) for non-ferrous metals (aluminum).

Trim the taped/punched ends of all stock length material by 1/2" (12mm) each end and discard (see 1.5.).

1.4. Fastening

Longboard Link & Lock consists of two (2) matching L-shaped extrusions, snapped together to make a complete set. The back "L" is mechanically fastened to the substrate, using #12 (preferred) or #10 (min.) sharp-point (for wood substrates) or self-drilling (for metal substrates) zinc-plated or other corrosion resistant screws (not included) every 5'4" (1.63m) o.c. (typical) up to 6' (1.83m) o.c. (max.). Fastener types such as Pan Head, Hex Head or Truss Head are recommended.

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

Layout and predrill* the back "L" at all fastener locations: a single hole at or near the center length of each section & double drilled/slotted holes at each location either side of center. Refer to the fastener installation guide diagram for hole dimensions and details.

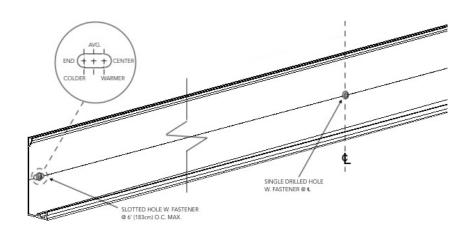
*See table 1 & 2 to calculate the thermal movement for your project, to ensure adequate allowances have been made.

Eastener hole and size Option Fatherer Size Specifications (9.2344) For # 12 Fasherer Notes 3.4 Set allows for 1/4" fall assumation with #12 fasherer Notes 1.2.5) Set allows for 1/4" fall assumation with #12 fasherer Notes 1.2.5) Set allows for 3/15" fall assumation with #10 fasherer Notes 1.2.5) Set allows for 3/15" fall assumation with #10 fasherer Notes 1.2.5) Set allows for 3/15" fall assumation with #10 fasherer Notes 1.2.5) Set allows for 3/15" fall assumation with #10 fasherer Notes 1.2.5) Upper or lower locations dependant on installation conditions [11.28mm] July For Size Notes 1.2.4.5) Fostener Stot (for incer exponsion) Notes (1.2.4.5) Fostener Stot (for incer exponsion) Notes (1.2.4.5) Fostener Stot (for incer exponsion) Notes (1.2.4.5)

Link & Lock - Fastener Installation Guide

Fasten the center location at the single drilled hole to prevent migration of the material over time. Fasten at the slotted locations to allow for expansion & contraction at each side of center. At the time of installation, consider the current temperature as it relates to the expected annual high and low

Option #2
Flat "Batten" Mounting



Notes

1: Fastener location in stot is dependant on temperature at time of installation in combination with regional temperature extremens

2: Fastener Selection determined by installation location, on center spacing, substrate and site conditions.

3: Center hard fasten botten to assure even expansion and contraction in both directions

4: Spec with #12 and #10, full thread pan head fasteners. (Strength, size and material to be determined by installation conditions)

5: Slots to be doul drilled and connected by tipping drill bit at 45 degree angle between adjoining holes

range, to place the fasteners at the slotted holes at either the:

- + center of the slot (at average annual)
- + toward end of plank (colder than average annual)
- + toward center of plank (warmer than average annual)

Example: winter typically experiences lows of -20°C (-4°F), summer typically experiences highs of +30°C (86°F) and it is +5°C (41°F) at the time of installation: Place fasteners at the center of the slotted holes.

Ensure all fasteners are anchored into solid-secure framing, blocking or furring strips. Snap the second "L" onto the first using a rubber mallet/hammer & block to protect the finish, then press end-caps in place at each end. Consider your application sequence of end caps before installing adjacent Link & Lock members, as they may limit the space needed to insert caps. All pieces are friction fit: If preferred, place a single small pea-sized spot of a structural grade silicone (not included) inside the connecting surface to prevent slippage (front "L") or ease of removal (end caps).

1.4.1. Expansion & Contraction

In most climate zones, Link & Lock Siding will expand & contract 1/4" (6mm) over 24' (7.3m) measured over a 30°C (54°F) temperature range*.

*See table 1 & 2 to calculate the thermal movement for your project.

Fins/Louvers/Battens should be installed with staggered butt-joints, leaving a 1/4" (6mm)(min.) gap between the ends of each set, every 24' (7.3m) or less (see Detail A). Alternatively, staggered lap-joints are an option for a continuous appearance (see Detail B) 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 **3. System Installation** for layout details and table 1 & 2 for expansion & contraction calculations per foot/meter of material.

Detail A: BUTT-JOINTS

END CAPS (2)

1/4" (6mm)
(typ.)

Detail B: LAP JOINTS

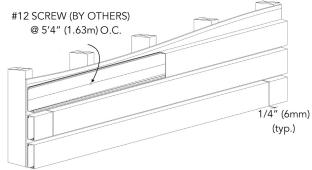


TABLE 1 & 2: MATERIAL THERMAL MOVEMENT RELATING TO AMBIENT TEMPERATURE

	°C	-50	-40	-30	-20	-10	0	10	20	30	40	50
	°F	-58	-40	-22	-4	14	32	50	68	86	104	122
°C	°F	EXPANSION OR CONTRACTION (INCH/FOOT)										
-50	-58	0.000	-0.003	-0.005	-0.008	-0.011	-0.014	-0.016	-0.019	-0.022	-0.024	-0.027
-40	-40	0.003	0.000	-0.003	-0.005	-0.008	-0.011	-0.014	-0.016	-0.019	-0.022	-0.024
-30	-22	0.005	0.003	0.000	-0.003	-0.005	-0.008	-0.011	-0.014	-0.016	-0.019	-0.022
-20	-4	0.008	0.005	0.003	0.000	-0.003	-0.005	-0.008	-0.011	-0.014	-0.016	-0.019
-10	14	0.011	0.008	0.005	0.003	0.000	-0.003	-0.005	-0.008	-0.011	-0.014	-0.016
0	32	0.014	0.011	0.008	0.005	0.003	0.000	-0.003	-0.005	-0.008	-0.011	-0.014
10	50	0.016	0.014	0.011	0.008	0.005	0.003	0.000	-0.003	-0.005	-0.008	-0.011
20	68	0.019	0.016	0.014	0.011	0.008	0.005	0.003	0.000	-0.003	-0.005	-0.008
30	86	0.022	0.019	0.016	0.014	0.011	0.008	0.005	0.003	0.000	-0.003	-0.005
40	104	0.024	0.022	0.019	0.016	0.014	0.011	0.008	0.005	0.003	0.000	-0.003
50	122	0.027	0.024	0.022	0.019	0.016	0.014	0.011	0.008	0.005	0.003	0.000

ABLE 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
ا نه	°C	°F	EXPANSION OR CONTRACTION (MM/METER)										
TEMP.	-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
CONSTRUCTION	-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
POST	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
IAX	30	86	1.840	1.610	1.380	1.150	0.920	0.690	0.460	0.230	0.000	-0.230	-0.460
MIN/MAX	40	104	2.070	1.840	1.610	1.380	1.150	0.920	0.690	0.460	0.230	0.000	-0.230
Σ	50	122	2.300	2.070	1.840	1.610	1.380	1.150	0.920	0.690	0.460	0.230	0.000

1.5. Surface Finish

The Longboard Link & Lock Siding system is available in a range of Woodgrain, Solid & Specialty Finishes with custom* solid colors available upon request. *Additional lead times apply.

Longboard Woodgrains have a repeat pattern, shipped in sets. Install these as they come out of the box, as an A&B pattern staggering each set approx. 1-2' (305-610mm) from the previous set to achieve a random pattern aesthetic.

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





1.6. Material Ordering & Delivery

Link & Lock Siding is sold by the set (pair), end caps are sold by the box: 20 caps/bx. Lead time is 3-4 weeks* (*subject to change), delivered on 24' (7.3m) long skids weighing up to 2000 lbs. A mechanical lift with forks is required on site to receive the order.

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

1.7. Storage & Handling

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

2.0. FRAMING REQUIREMENTS

2.1. General

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

2.2. Load Capacity

The Longboard Link & Lock Siding system weighs approx. 1.3 up to 1.9 lbs/LF*.

*see profile drawings for individual item weights.

2.3.1. Wood-Framing

Traditional stud wall framed at 16" (406mm) o.c. with or without solid secure blocking running perpendicular to the Link & Lock Siding orientation (for vertical siding applications), exterior wall sheathing, weather resistive barrier (wrb), wall finish or UV barrier. If furring strips are used, it is recommended to install at 16" (406mm) o.c. for material support and fasten at 5'4" (1.63m) o.c.

2.3.2. Metal Framing

16ga. (minimum) galvanized steel framing at 16" (406mm) O.C., exterior wall sheathing, wrb, wall finish or UV barrier. If furring strips are used, it is recommended to install at 16" (406mm) o.c. for material support and fasten at 5'4" (1.63m) o.c.

2.3.3. CMU/Concrete

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

2.3.4. Posts & Other Structures

Solid, secure structure of material designed to support loading (see 2.2.), spaced at 6' (1.83m) o.c. max.

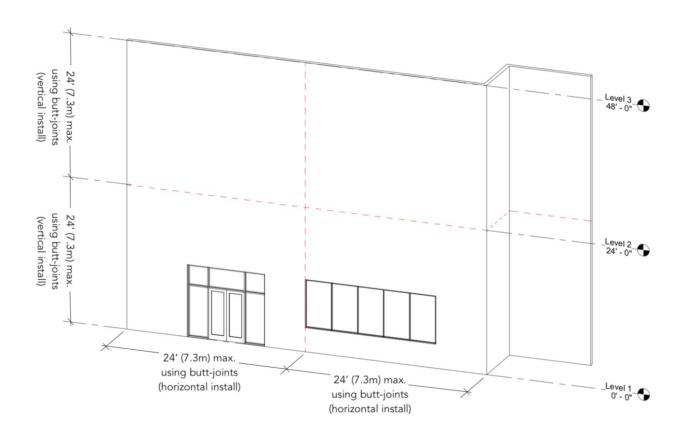
2.4. Framing Layout

Provide solid secure framing and/or blocking at 16" (406mm) o.c. for material support and fasten at 5'4" (1.63m) o.c.

3.0. SYSTEM INSTALLATION

3.1. Layout

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

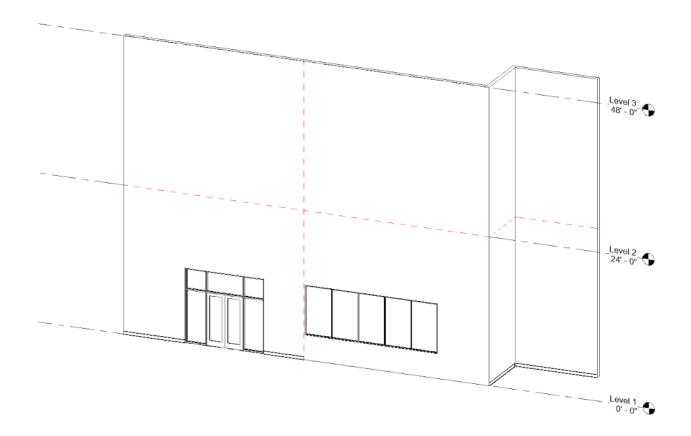


3.2. BATTEN - BUTT-JOINT (see 3.3. for fin & lap joint technique)

3.2.A.1. BACK "L"

Create zones, taking into account which length is installed first for best appearance and alignment etc. Install back "L" along the bottom of the first zone(s).

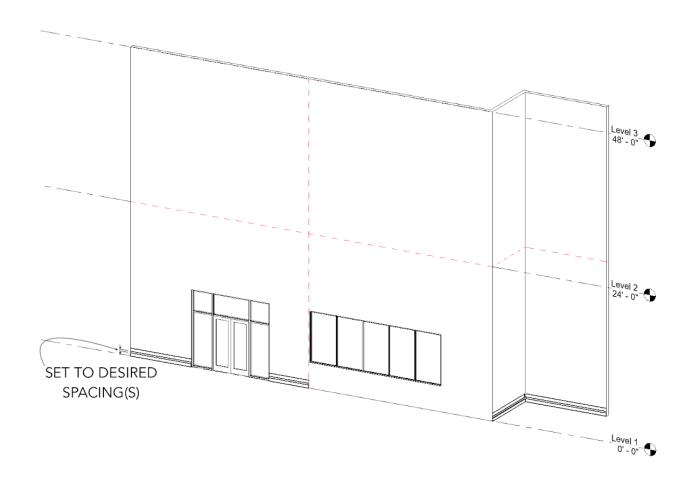
Install end caps (see: 3.4.3.) where access will be restricted upon installation.



3.2.A.②. FRONT "L"

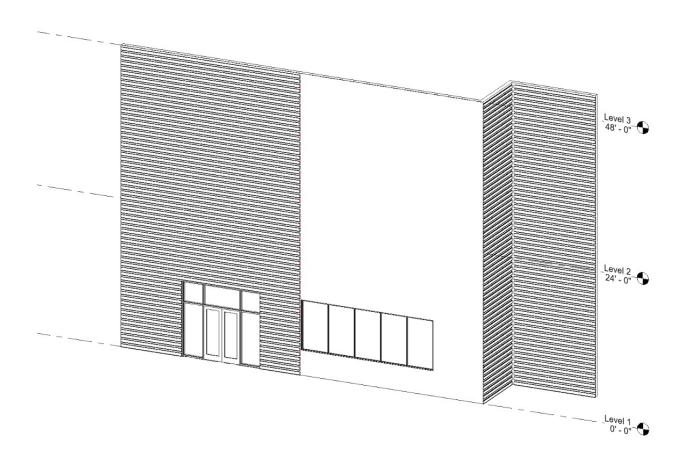
Snap the front "L" onto the back "L" of the first row, then repeat steps 1 & 2 for each row until completion. Spacing between battens is set to desired dimensions.

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



3.2.A.③. END CAPS

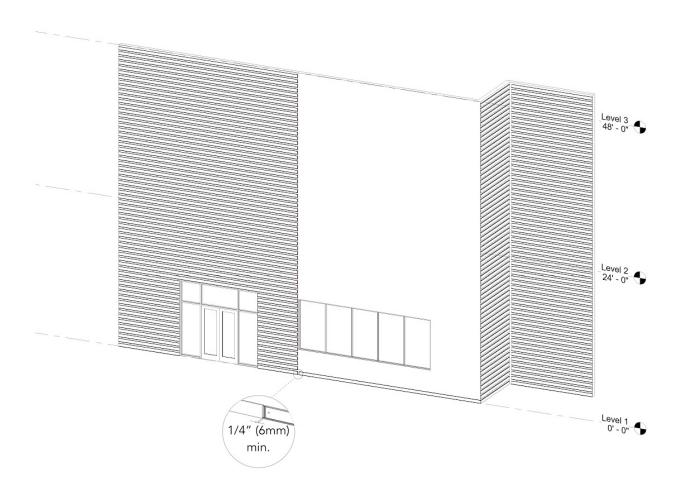
Upon completion of the installed area(s), install end caps at open ends (see: 3.4.③.).



3.2.B.①. BACK "L"

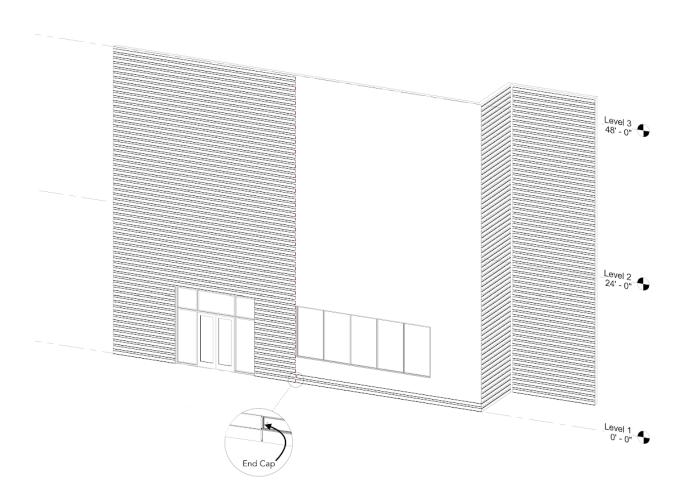
Begin installation of the next zone(s), allowing 1/4" (6mm) min. (including end cap thicknesses) between zones (see 1.4.1. Expansion & Contraction).

△ Install end caps (see: 3.4.③.) in places where access will be restricted upon installation.



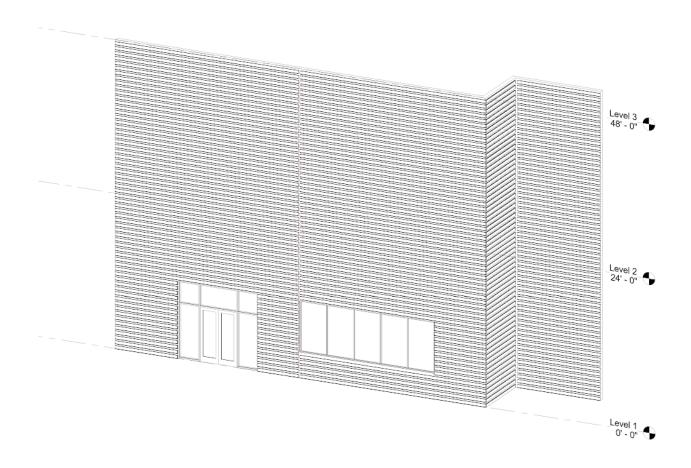
3.2.B.②. FRONT "L"

Snap the front "L" onto the back "L" of the first row using a hammer & block/rubber mallet, then repeat steps 1 & 2 for each row until completion.



3.2.B.③. END CAPS

Upon completion of installed area(s), install end caps at open ends (see: 3.4.3.).

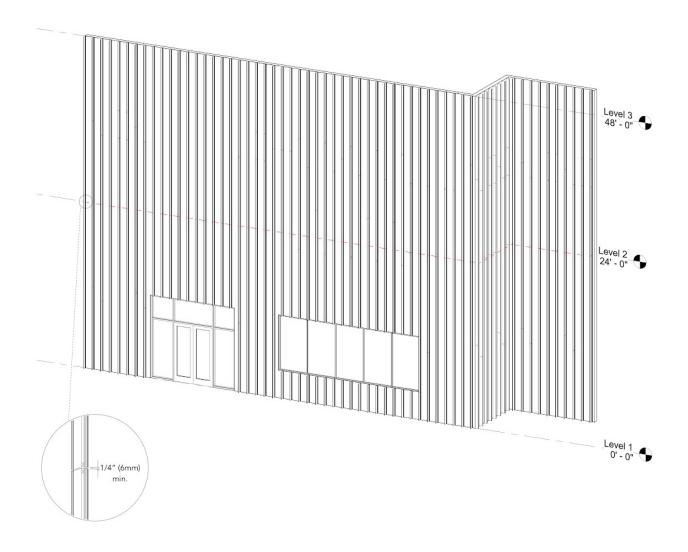


3.3. FIN - LAP JOINT (see 3.2. for batten & butt-joint technique)

3.3.1). BACK "L"

Install the back "L" throughout (see 1.4. Fastening), leaving 1/4" (6mm)(min.) gaps at each joint (see 1.4.1. Expansion & Contraction).

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

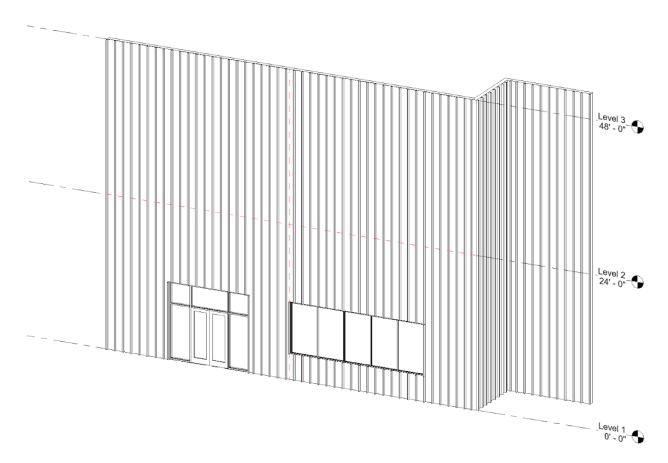


3.3.2. FRONT "L"

Install the front "L" onto the base "L", spanning all joints by 2' (610mm) min. leaving 1/4" (6mm) gaps at each joint (see 1.4.1. Expansion & Contraction).

3.3.3. End Caps

Upon completion of installed area(s), install end caps at open ends (see: 3.4.3.).



3.4.3. END CAPS



4.0. Cleaning Recommendations

*see Cleaning Guide for full requirements longboardproducts.com

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

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

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

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

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

5.0. WARRANTY

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

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

APPENDIX

INSTRUCTION STEP #	IMAGE	DESCRIPTION	TYPICAL USE	SECTION DETAIL (scan or click)
1) 2		4" LINK & LOCK, 24' (7.3m) LENGTHS, WOODGRAIN, SOLID, SPECIALTY, CUSTOM SOLID	HORIZONTAL OR VERTICAL FIN/LOUVER/BATTEN	
1 2		6" LINK & LOCK, 24' (7.3m) LENGTHS, WOODGRAIN, SOLID, SPECIALTY, CUSTOM SOLID	HORIZONTAL OR VERTICAL FIN/LOUVER/BATTEN	
1 2		8" LINK & LOCK, 24' (7.3m) LENGTHS, WOODGRAIN, SOLID, SPECIALTY, CUSTOM SOLID	HORIZONTAL OR VERTICAL FIN/LOUVER/BATTEN	
3		4" END CAP, WOODGRAIN, SOLID, SPECIALTY, CUSTOM SOLID	FINISHED CAP AT ENDS OF EACH BATTEN/FIN/LOUVER	
3		6" END CAP, WOODGRAIN, SOLID, SPECIALTY, CUSTOM SOLID	FINISHED CAP AT ENDS OF EACH BATTEN/FIN/LOUVER	
3		8" END CAP, WOODGRAIN, SOLID, SPECIALTY, CUSTOM SOLID	FINISHED CAP AT ENDS OF EACH BATTEN/FIN/LOUVER	

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