Lumabuilt
MADE IN THE USA
AMERICAN PRODUCT
Design Guidelines

FORWARD

- This design guide was created to assist with the material and layout selection when planning for a Mosaic Plank installation. The information in this manual is strictly for illustration purposes and may not be applicable to all building designs or product installations.

- All projects should conform to applicable building codes for that particular area. It is recommended to follow all building regulations and standard industry practices.

- Lumabuilt reserves the right to modify, without notice, any details, recommendations or suggestions contained here-in. Any questions you may have regarding proper installation of the Mosaic Plank system should be directed to your sales representative.

- It is the responsibility of the erector to ensure the correct and safe installation of this product. It is ecommended that Mosaic Planks are installed by a professional erector who is specifically experienced with the installation of aluminum soffits and siding materials and who utilizes the correct practices and techniques to safely and properly handle any equipment and materials required to complete the installation of this product.

- Mosaic Planks have a durable, yet unique wood grain powder coating applied to it which must be handled, cut, and installed in an appropriate manner as to not damage the finish. A properly installed Mosaic Plank project will create an architecturally beautiful “simulated wood” feature which will last for decades and require little maintenance.

- Due to the manufacturing process, your application and installation, all materials may require a fresh square cut at the ends.

- All cut ends of parts are to be colored with a touch up pen, use the color which matches best with your finish. Touch up pens are available in Black Mix, White Mix, Dark and Light.

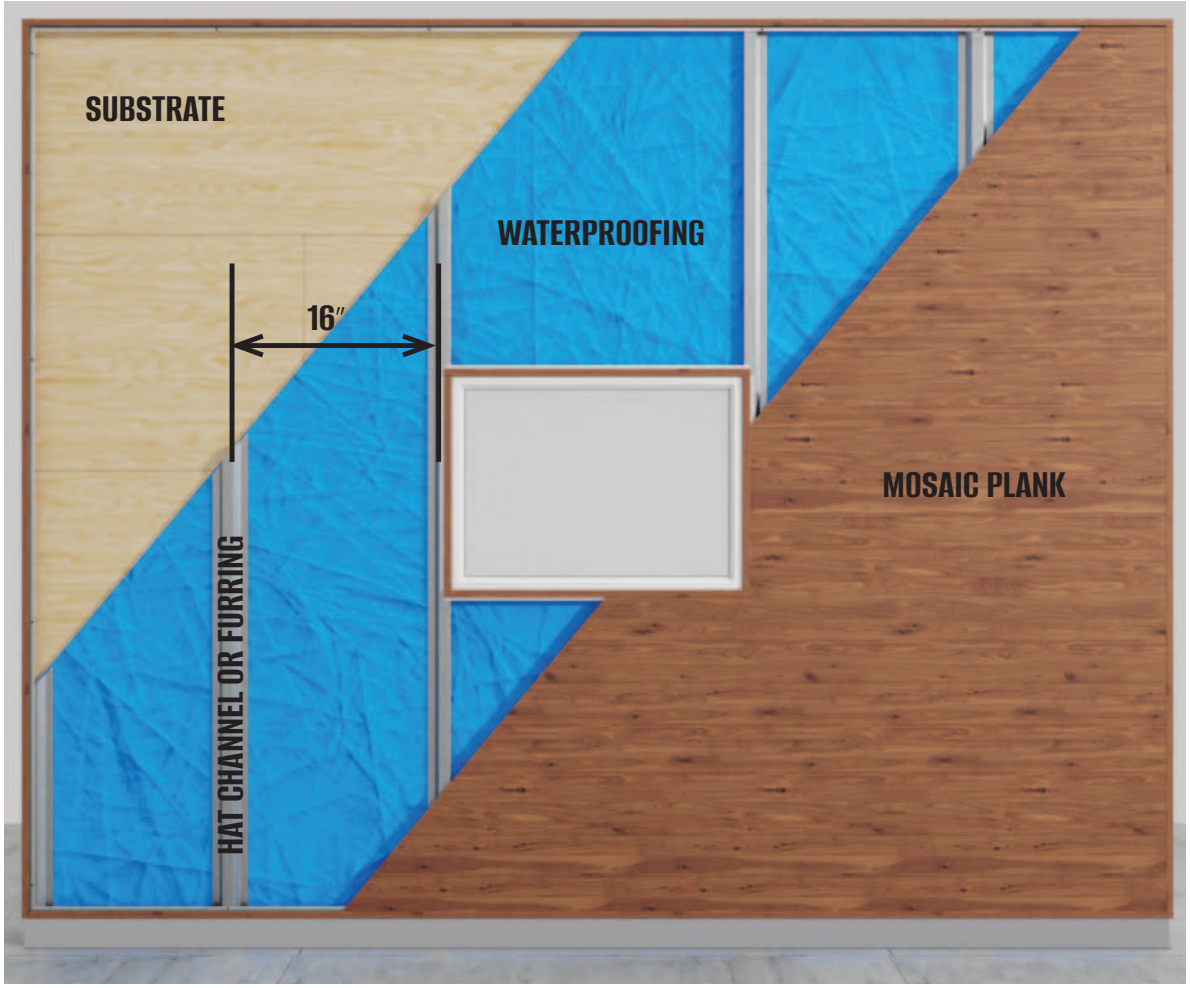
TESTING DATA
ICC CERTIFIED ESR-5329
MIAMI DATE COUNTY PERMITS

DESIGN DETERMINATION

DRY-IN & SUB-FRAMING

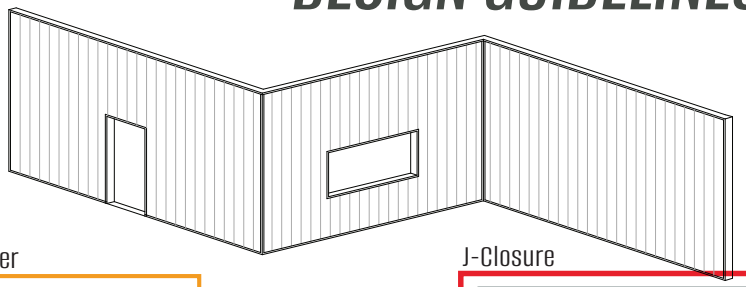
Mosaic Planks should not be installed over cementitious materials, dissimilar metals, or pressure treated materials without adequate barrier protection. All penetrations must be properly waterproofed to prevent moisture penetration since Mosaic Planks are a rain-screen system (reference “Rainscreen principle” documents for further details). Mosaic Planks can be installed over a solid surface, provided it meets the flatness and attachment criteria. Mosaic planks can be installed over open framing or furring (hat channels) to aid in achieving a flat surface.

TYPICAL WALL ASSEMBLY

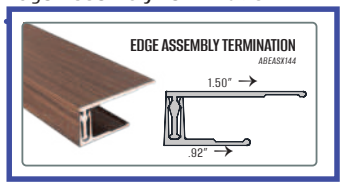


TYPICAL TRIM LOCATIONS (VERTICAL)

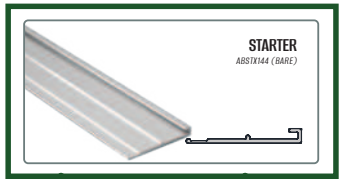
REFER TO STANDARD DETAILS FOR ALL ADDITIONAL OPTIONS



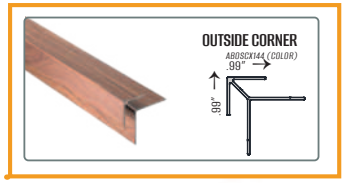
Edge Assembly Termination



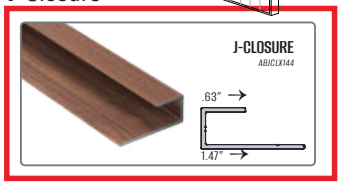
Starter

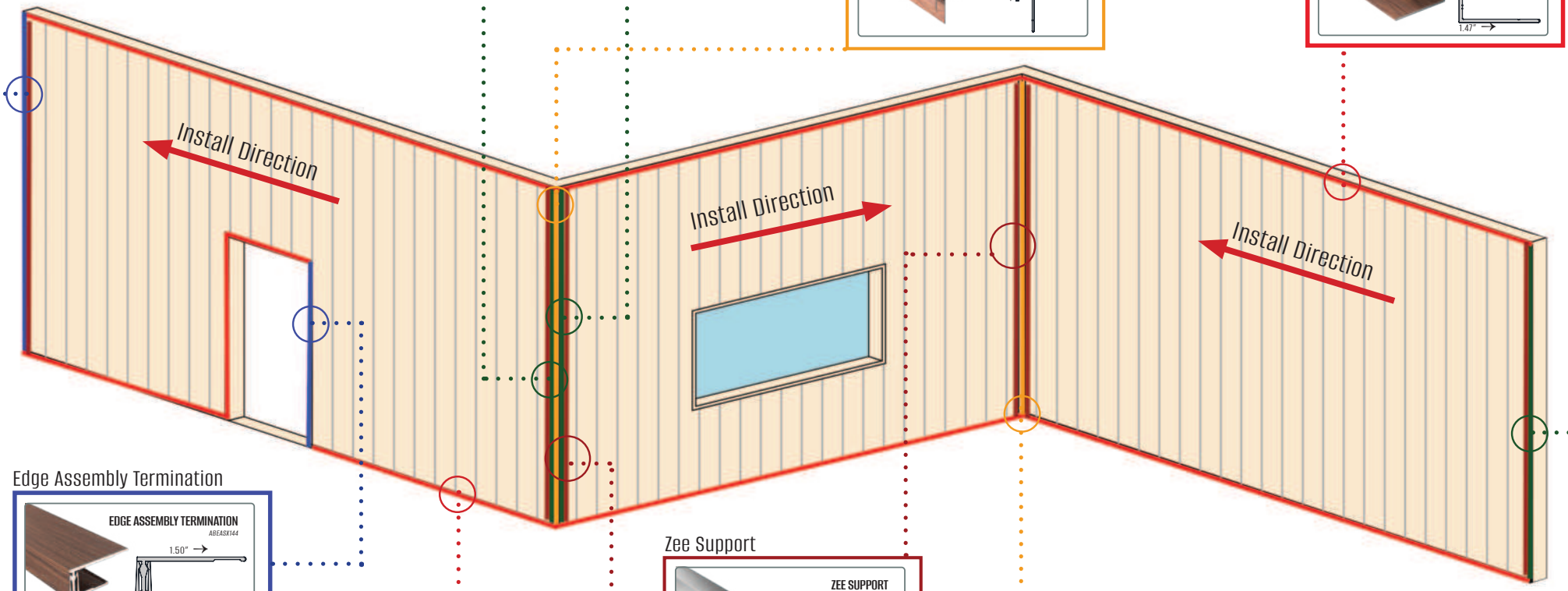


Outside Corner

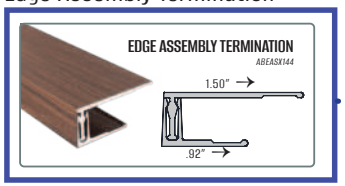


J-Closure

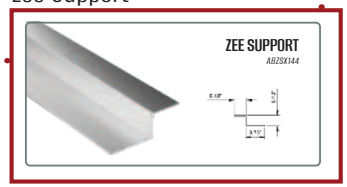




Edge Assembly Termination



Zee Support



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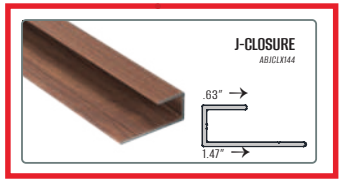
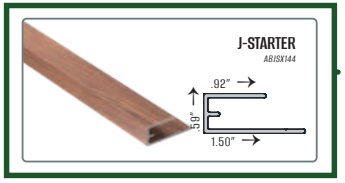


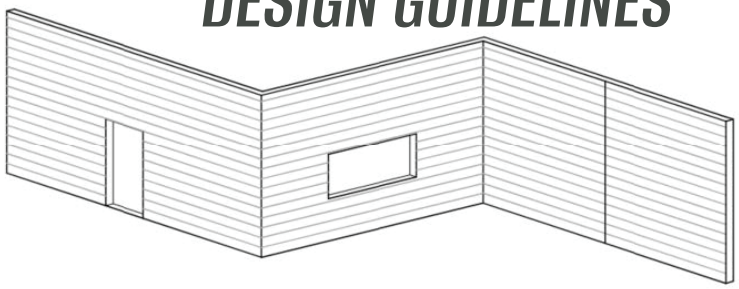
2 Piece Inside/Outside Corner Assembly

J-Starter

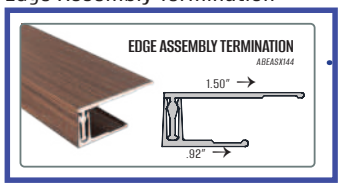


TYPICAL TRIM LOCATIONS (HORIZONTAL)

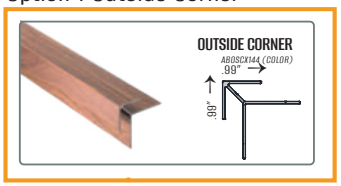
REFER TO STANDARD DETAILS FOR ALL ADDITIONAL OPTIONS



Edge Assembly Termination

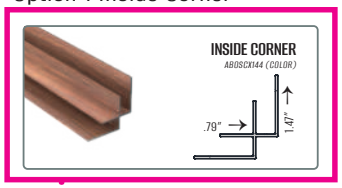


Option 1 Outside Corner



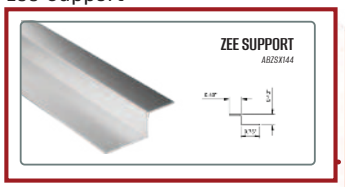
Option 2 Outside Corner Assembly

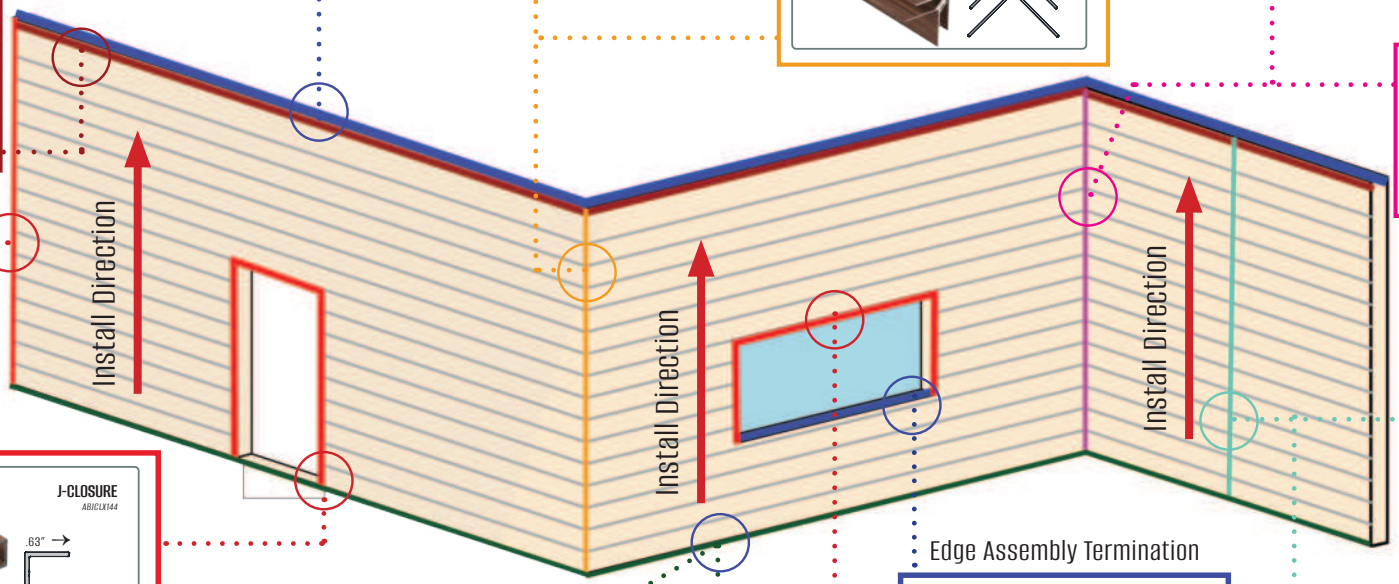
Option 1 Inside Corner



Option 2 Inside Corner Assembly

Zee Support





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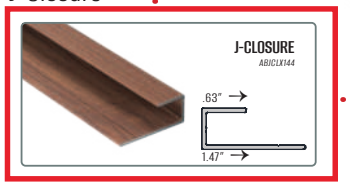
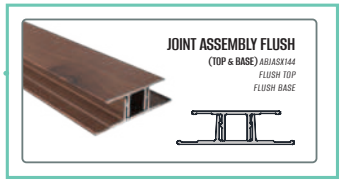
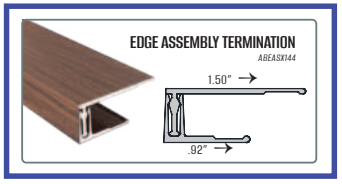


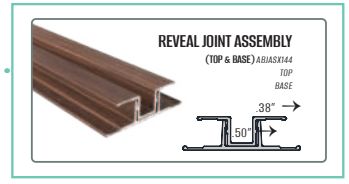
Option 1 Joint Assembly



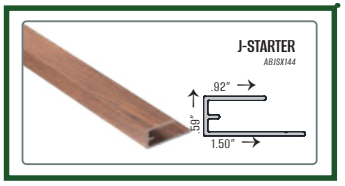
Edge Assembly Termination



Option 2 Reveal Assembly

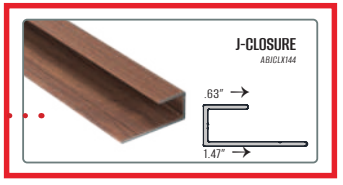


Option 1 J-Starter



Option 2 Starter Strip

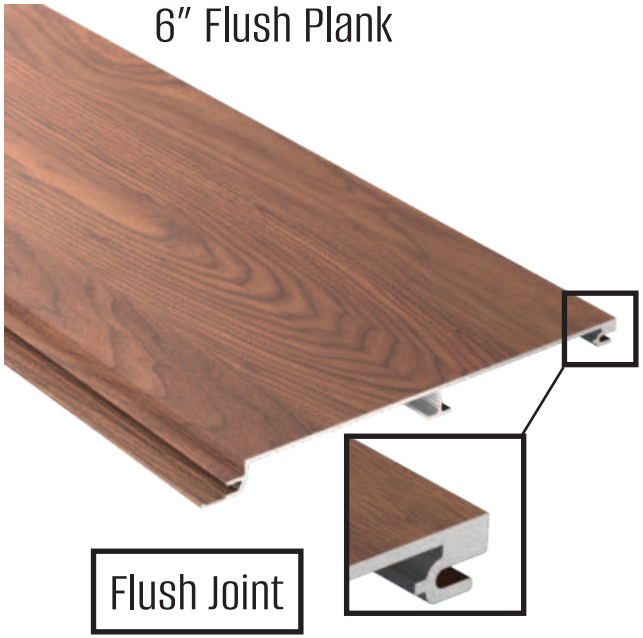
J-Closure



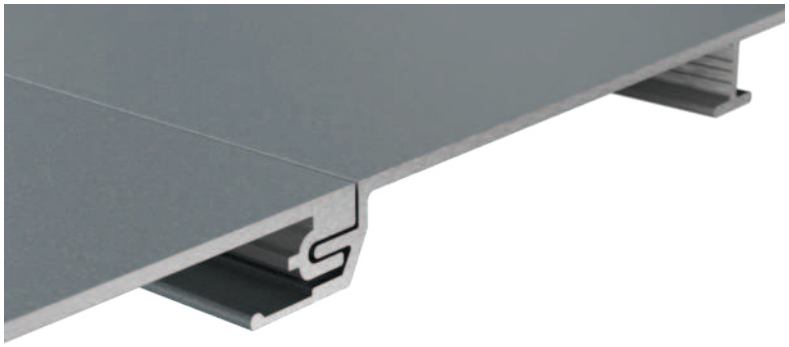
FLUSH PLANK VS V-GROOVE PLANK

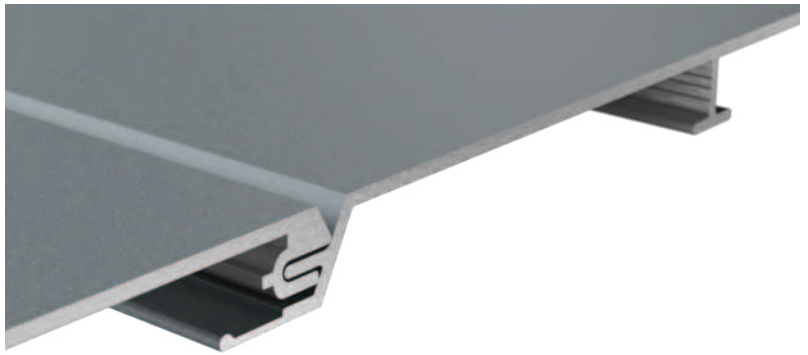
We currently offer our planks in 2 different styles for our 6" Plank size depending on your desired look.

6" Flush Plank



6" V-Groove Plank



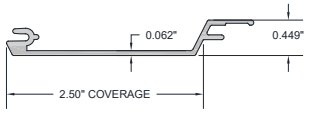


PLANK & TRIM PROFILE IDENTIFIER (PARTS NOT SHOWN TO SCALE)

2.5-INCH V-GROOVE

ABPL25X288

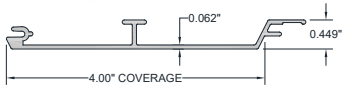
2.5" x 24' Standard Dimension



4-INCH V-GROOVE

ABPL4X288

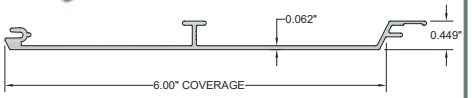
4" x 24' Standard Dimension



6-INCH V-GROOVE

ABPL6X288

6" x 24' Standard Dimension



8-INCH V-GROOVE

ABPL8X288

8" x 24' Standard Dimension

10-INCH V-GROOVE

ABPL10X288

10" x 24' Standard Dimension

6-INCH PANELIZED FLUSH PLANK

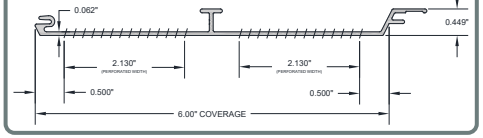
ABPLF6X288

6" x 24' Standard Dimension

6" VENTED PLANK

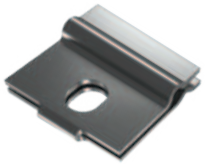
ABPLP6X144TEMPLT

6" x 24' Standard Dimension

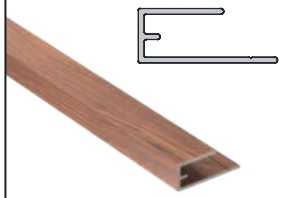


CLIPS

ABCLIPSS

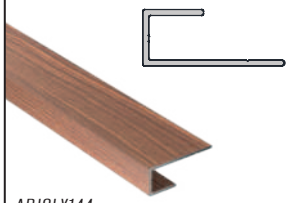


J-STARTER



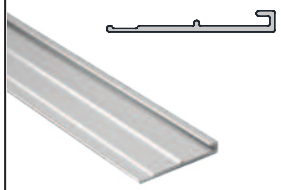
ABJSX144

J-CLOSURE



ABJCLX144

STARTER

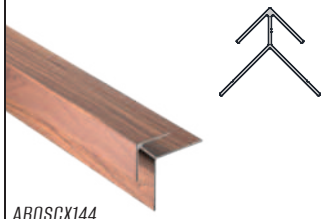


ABSTX144

INSIDE CORNER

ABISCX144

OUTSIDE CORNER



ABOSCX144

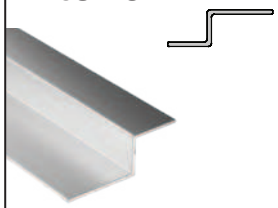
2 PIECE INSIDE/OUTSIDE CORNER ASSEMBLY

ABISOSASX144

EDGE ASSEMBLY TRIM

ABEASX144

ZEE SUPPORT

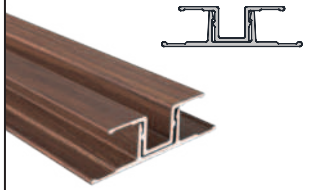


ABZSX144

JOINT ASSEMBLY FLUSH

ABJTX144

REVEAL JOINT ASSEMBLY



ABJASRX144

TRIM APPLICATION

Prior to panel installation it is required to understand the best applications for the trims. Trim components are sold in 12' lengths only, they are intended to be field cut to fit each specific application. Using a square cut or miter cut you can complete the layout appearance you desire. You can use the trim to cover the ends of each plank. Additionally, you can use the trim to create a element of design. The main purpose for the trim components is to provide for the thermal expansion and cover the necessary field cuts to the planks.

STARTER - Used at the starting point of installation, generally this is a bare finish extruded aluminum part designed to hold the non-clip leg of the panel in place. This part will need to be installed prior to planks. This is to be used in a continuous manner.

J- CLOSURE - Is a universal part designed to have the plank slid into its shape. This can be used parallel or perpendicular to the plank. This part is finished to match the planks. Use the J-Closure in conjunction with edge assembly when square cut trim conditions are required.

J-STARTER -Is a universal part designed to have the plank slid into its shape specifically used to replace the need for a stand alone starter and J-closure combination. This can be used parallel or perpendicular to the plank. This part is finished to match the planks. Use the J-Starter in conjunction with edge assembly when mitered trim conditions are required.

EDGE ASSEMBLY TERMINATION - This is two-part trim element to be used at the termination of the planks. The base trim will need to be installed prior to the plank installation. When the planks are completely installed you then can insert in the top part of the assembly. Both parts are finished to match the planks. *Special Instructions: this assembly can be reversed in the installation to accommodate an alternate face dimension width.*

JOINT ASSEMBLY – This is two-part trim element to be used when you need to bring two ends of planks together. This can be at any angle (Directional Transitions, Miters etc.). The base trim will need to be installed prior to the plank installation. When the planks are completely installed you then can insert in the top part of the assembly. Both parts are finished to match the planks.

Special Instructions: this assembly can be reversed in the installation to accommodate an alternate face dimension width.

TRIM PROFILES

JOINT ASSEMBLY REVEAL - This is two-part trim element to be used when you need to bring two ends of planks together. This can be at any angle (directional transitions, miters etc.). The base trim will need to be installed prior to the plank installation. When the planks are completely installed you then can insert in the top part of the assembly. Both parts are finished to match the planks.

OUTSIDE CORNER - This trim is to be used at any application you need to turn a 90-degree corner. This part will need to be installed prior to the planks. This part is finished to match the planks.

INSIDE CORNER - This trim is to be used at any application you need to turn a 90-degree corner. This part will need to be installed prior to the planks. This part is finished to match the planks.

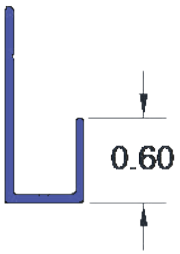
2 PIECE INSIDE /OUTSIDE CORNER ASSEMBLY - This trim is to be used at any application you need to turn a 90-degree corner. This part will need to be installed prior to the planks. This part is finished to match the planks.

ZEE SUPPORT - This concealed trim element is used with a rip cut plank at a termination condition. This part will be installed prior to the planks at the termination trim piece. A piece of VHB tape (3M 4905 or Equivalent - purchased separately) will secure the termination plank to the zee support piece.

Lumabuilt offers a complete trim package for this system. However, at times the design may require a special shape or size trim. We offer the ability to fabricate .050" thick aluminum custom trim shapes and apply the same finish to match the system.

Exposed Face Dimensions on Trim Components

STARTER/EDGE ASSEMBLY TRIMS



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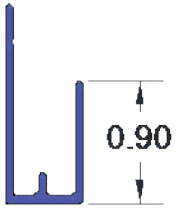

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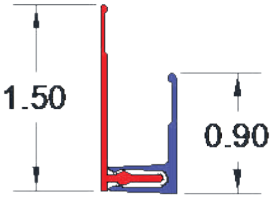
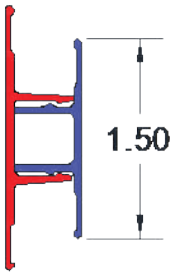
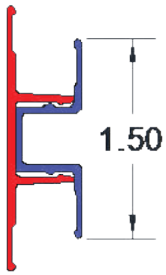


ABETX144
ABEBX144

JOINT TRIMS

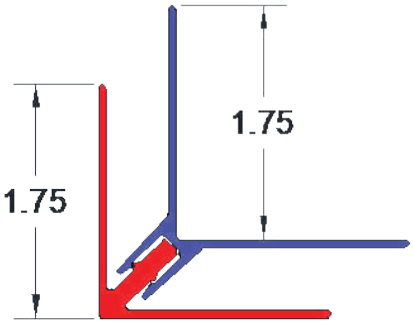


ABJBX144
ABJTX144



ABJBX144
ABJTRX144

CORNER TRIMS



ABOSASX144
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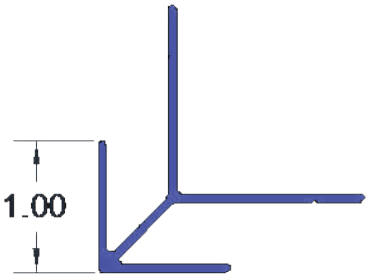

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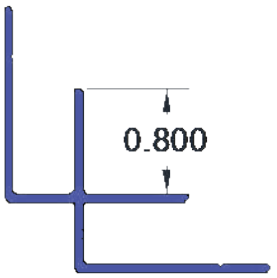
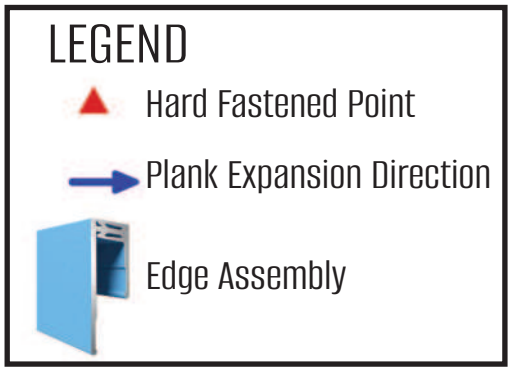


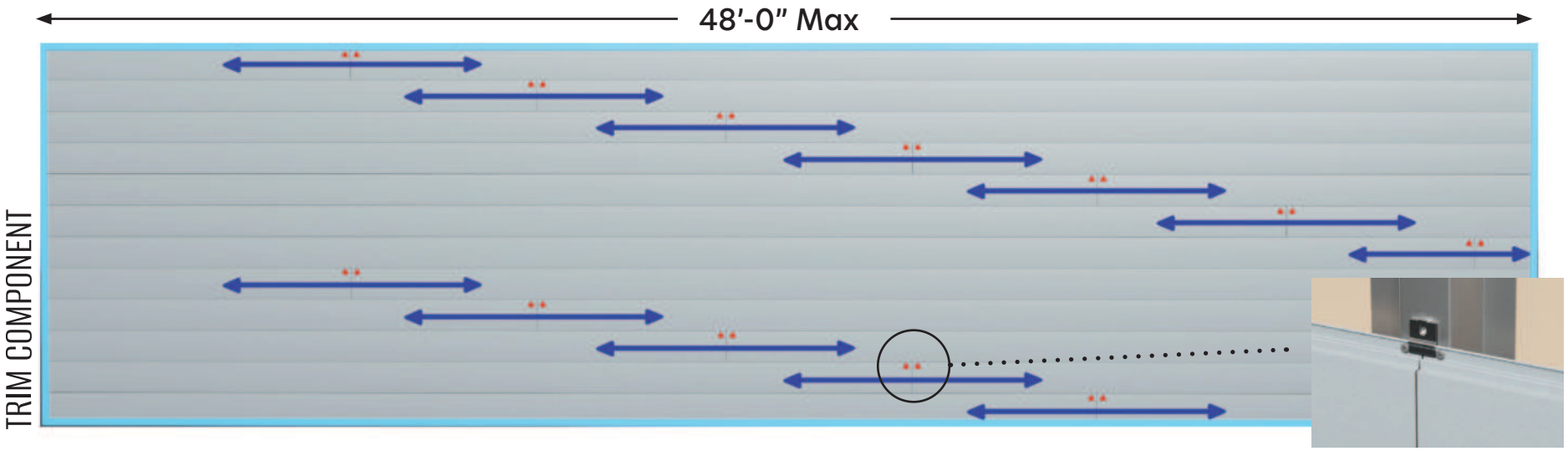
ABISCX144

PLANK LAYOUT EXAMPLE 1

RUNNING BOND LAYOUT 48′-0″ MAXIMUM PLANK LENGTH (1) STAGGERED BUTT JOINT PER RUN

The running bond plank layout will allow for the installer to utilize the most material and minimize scrap material. Lay the first row of planks down and use the cutoff portion of the plank to finish the row (all plank pieces must be at least 12″ long). The two planks in each row will be hard fastened at the butt joint, and the opposite edge of the plank is allowed to expand/contract while remaining hidden behind Trim components. All plank edges must be positioned in the middle of their Trim component, or as prescribed in the expansion/contraction charts in the appendix page 17. The layout illustration below shows the suggested connection points, components, and expansion direction for each plank. The layout may be modified if expansion and contraction requirements for each plank are satisfied. Stagger the end joints as you work your way up the wall, so that your end joints do not match up from row to row. Overlapping plank lengths should overlap each other by a minimum of 6″. Refer to legend key.





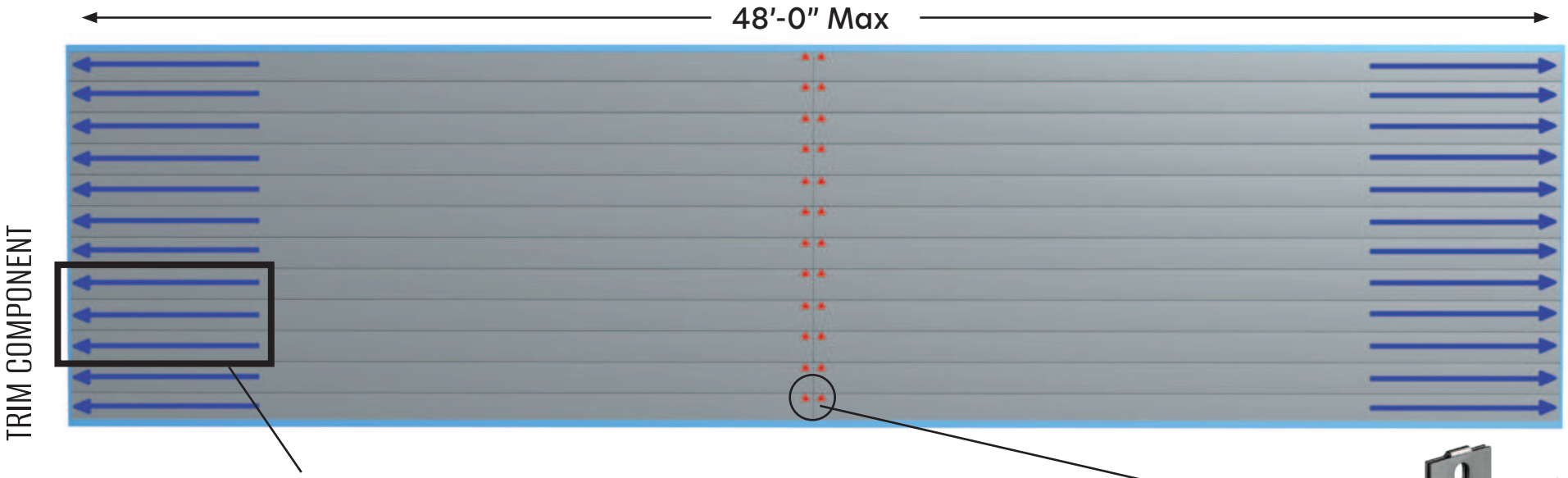
PLANK LAYOUT EXAMPLE 2

ALIGNED JOINT LAYOUT 48'-0" MAXIMUM PLANK LENGTH (1) ALIGNED BUTT JOINT

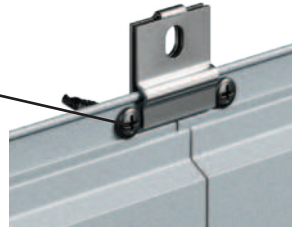
LEGEND

- Hard Fastened Point
- Plank Expansion Direction
- Edge Assembly

The aligned joint plank layout will allow for the installer to show a singular and aligned joint. For this aligned joint layout shown below, there will be one cut length for the planks. The two planks in each row will be hard fastened at the butt joint, and the opposite edge of the plank is allowed to expand/contract while remaining hidden behind Edge Assembly Trim components. All plank edges must be positioned in the middle of the Edge Assembly Trim component, or as prescribed in the expansion/contraction charts in the appendix Page 17. The layout illustration below shows the suggested connection points, components, and expansion direction for each plank. Refer to the legend key for hard fastened points and trim components.



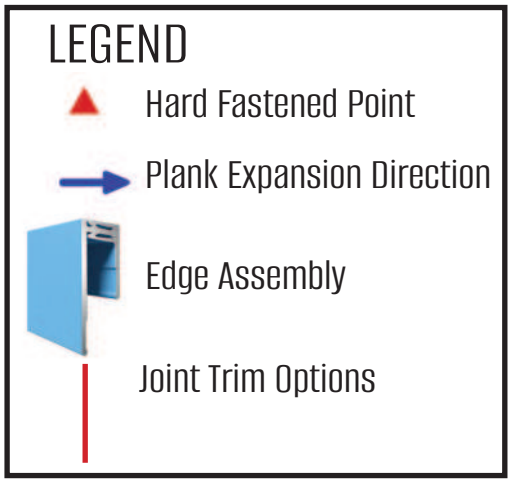
Adjust Plank edge to the midpoint of the Edge Assembly Trim to hide the expansion/contraction behind the trim.



PLANK LAYOUT EXAMPLE 3

RUNNING BOND LAYOUT WITH PLANK RUNS OVER 48′-0″ WITH OR WITHOUT (1) BUTT JOINT PER 48′-0″ PLANK RUN

To overcome plank runs longer than 48′-0″ a Plank Joint Trim may be used to continue an additional 48′-0″ of plank run. Recommended layouts include a Staggered Joint Running Bond as shown on the left OR a plank run with No Butt Joints as shown on the right. The "No Butt Joint" layout will be fastened at the plank's midpoint and the expansion/contraction will be hidden behind the Trim components. All plank edges must be positioned in the middle of the Trim component, or as prescribed in the expansion/ contraction charts in the appendix Page 17. Refer to the legend key for hard fastened points and trim components.

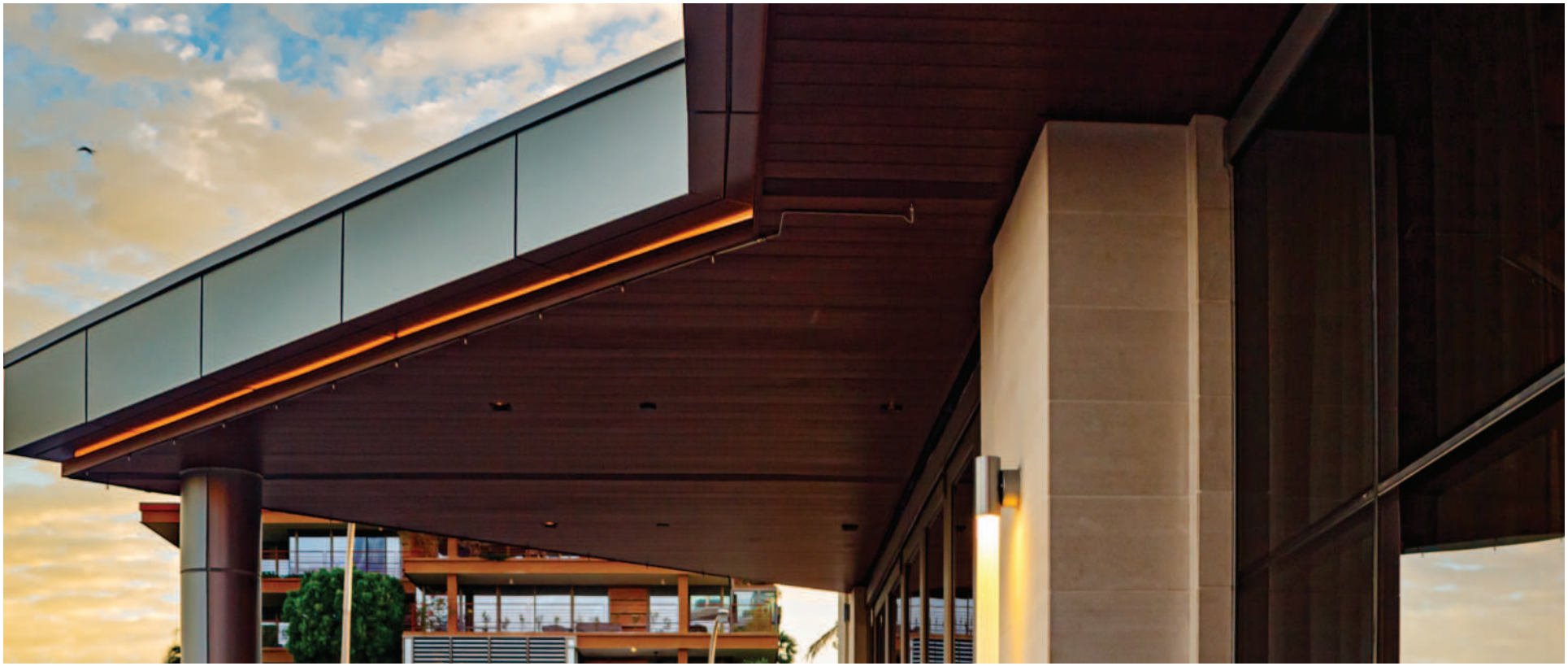


PLANK APPLICATION

Plank Direction - The decision of a Vertical, Horizontal, or Diagonal Plank Installation is based on the desired look of the layout, requirements for framing, and any penetrations through the Plank system (i.e. Doors, Windows, Lighting, Fire Sprinklers, Access Panels, Signage, etc.)

Woodgrain color options are just like real wood and will have different color variations throughout all the planks. The patterns of these color variations are repeated throughout the planks due to the manufacturing process. Please refer to our color swatch book, https://www.flipsnack.com/CCED5CDD75E/mosaic_website_swatch-book/full-view.html, for a full size view of each film pattern for our different wood grain options.

Panel End Joint Layout- Due to the expansion/contraction of the planks due to temperature change, the Plank Ends should be concealed by trim pieces. The plank layouts contained in this design guide are recommended, based on the desired final look of the install.



CALCULATING MATERIAL USAGE

After identifying & determining the plank layout, verify that the correct amount of material has been ordered for your specific application. Since material takeoffs and resulting quantities were originally based on the plank layout from either the architectural drawings or the physical project, installing the material in another pattern other than what has been pre-determined may result in material shortages.

Lumabuilt

Design Guidelines

For additional information on Mosaic please visit us online at Lumabuilt.com

Lumabuilt 2529 W. Jackson St., Phoenix, AZ 85009
For more info: Lumabuilt.com | 602.275.1676 | Info@Lumabuilt.com
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