



Installation Manual ALUZION SIDING SYSTEM

ELEGANT | DURABLE | ACCESSIBLE

Edition 1 Revision 0 July, 2024



Revolutionary Aluzion Click & Go Technology

ALUZION SIDING

You have chosen a solution that goes beyond the use of everyday materials—the inspired wood grain finish added to a unique panel composition makes it the right choice for a timeless design. Lightweight, easy-to-install, minimal upkeep, ALUZION panels boast exceptional resistance to North America's challenging climate zones.

KEY BENEFITS

- 01 Exceptional Quality
- 02 Weather-Resistant Design
- 03 Ease of Installation
- 04 Low Maintenance
- 05 Environmentally Sustainable

WARRANTY

Aluzion Siding is backed by an industry leading and fully transferable 25- year warranty. For more information on our warranty, please visit www.aluzion.ca, or Contact your Aluzion representative for terms and conditions.

DISCLAIMER

The information provided in this manual is presented in good faith and with the expectation that the reader is familiar with general construction practices, basic code requirements and experienced in the installation of siding and related materials. Please note that this manual is general in scope with its focus on installation of Aluzion products, not framing or other construction elements. Before beginning, insure you are familiar with and follow all applicable building code and local requirements, including those related to safety. By proceeding you are assuming the contractor role and attesting to your familiarity with the aforementioned. If there is an issue with the product, (e.g., colour), immediately notify your local Aluzion representative. Aluzion will not be responsible for issues that should be detectable within the first 100 square feet of installation. Aluzion Architectural Products assumes no liability, expressed or implied as to the project architecture, engineering (if an where applicable) or workmanship. To ensure you are using the most up to date information, please visit www.aluzion.ca, or contact your local Aluzion distributor.

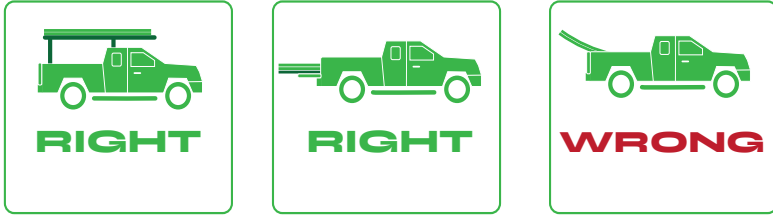
FIRST THINGS FIRST

Aluzion Handling, Storage and Transportation

To prevent incidental damage the products must be properly handled, transported and stored.

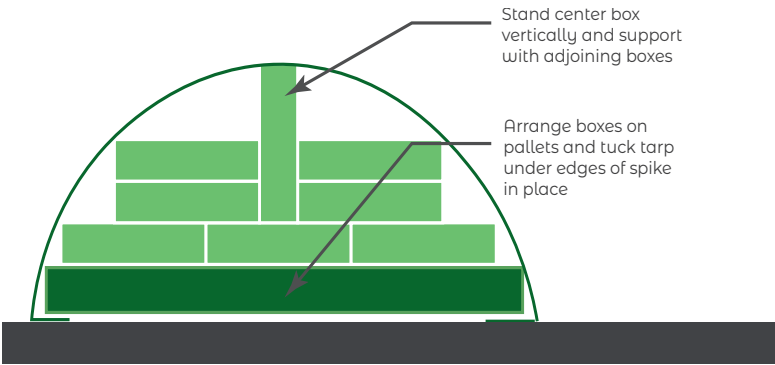


No more than 36" can be unsupported during transport. Properly secured for safe travel. Do not simply load and go as damage may occur.



Storage

Protect the product from the elements and other workers/site activity. Ideally, boxes are stored out of direct sunlight and protected from rain. Store boxes on flat high ground (not in location that could pool during rain events). Place boxes on pallets, or other barrier to avoid direct contact with ground. Boxes should be fully supported along their length and under protective cover (vented tarp). Tarp should be white to limit heat gain. Slope tarp so that it sheds rain (i.e. tent).



Personal Protective Equipment (PPE)

Please refer to you local OHSA/safety regulations for complete list of personal protective equipment requirements for your region. We recommend the following items which may vary depending on the activity:



Tools

Installation of Aluzion materials can be completed with limited tools, but for more accurate and productive installations, power and/or larger scale tools are available. You should have the following:

Tools for Basic Installation			
Tape Measure	Level	Plumb Line	Utility Knife
Power Drill	Bending Pliers + Seamer Profile	Mitre or circular saW(with appropriate blade)	Metal Shears/Snips
Marking Tools	Pliers	Claw Hammer	Screw Drivers
Commercial Installers			
Power Nibblers or Shears	10-12' Bending Brake	Wheeled Cutter/Slitter	Coil Cradle
J-Cutter	Edge Roller		

We recommend screws a minimum #8 - 29 mm (1.125"). Screws are to be stainless steel or non-reactive to galvanic corrosion (do not use galvanized or zinc plated screws) with a minimum load rating of at least 76 N (17 lbf) after 2000 hours exposure per ASTM B117 Test Method. Screws need to have a minimum 6 mm (1/4") smooth shank. Note: Screws incompatible with aluminum will void the warranty. Insure aluminum compatibility before purchasing.

Course Thread

Ideal from trims where an screw head may be tight against the item being fastened.

Fine Thread

Fine thread allows greater control of fastener depth. Ideal where connection requires allowance for expansion and should be used to fasten the siding.



Power Drill Settings

Impact drivers and drills without an adjustable clutch should not be used. An adjustable depth setter may be beneficial. When used in combination with the appropriate clutch setting, helps to avoid over-tightening. A variable speed screw-gun with a low speed setting can also be used.

PRE-CONSTRUCTION ACTIVITIES

Pre-Installation Wall Check

Depending on your location, code requirements for water resistive barrier continuity, presence of a “drainage gap”, etc. will vary. Review your local requirements and ensure they are present before beginning the installation. While regional requirements may vary, at no time is installation to proceed without a secondary barrier, meeting local material and installation requirements. This guide depicts application over 19 mm (3/4”) strapping spaced a maximum 406 mm (16”) on center. Where a drainage gap is neither required nor desired, strapping is not required. The impact on installation steps shown in this guide is marginal and should be obvious. There is no need to increase fastener frequency or reduce its spacing.

Certain substrates are not appropriate for direct application and fastener strips/straps are to be installed. In some cases, additional bracing (e.g., Noggins) may be required to prevent buckling. Examples of substrates not suitable for direct application include, but is not limited to:

- Insulated Concrete Forms (ICF)
- Insulated Sheathings (XPS, polyisocyanurate, Type I Cellulosic Fibreboard (CFB), < Class 3 Type II CFB)
- Zip Composite Sheathing System

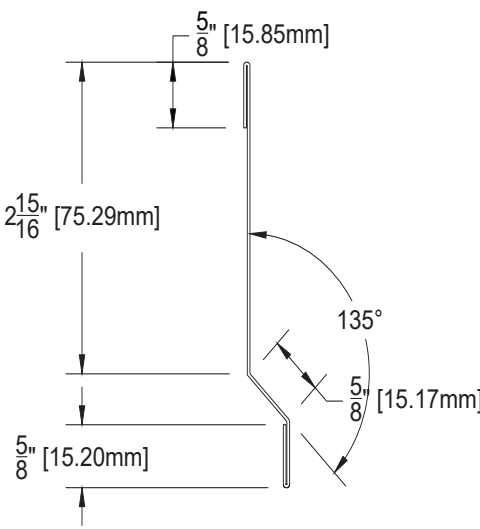
You should also check to ensure that your installation will have the minimum required clearance from finished grade. Where the foundation wall does not sufficiently extend above grade to provide required clearance from grade, advise the responsible party (e.g., builder) for correction before proceeding.

Inventory Check

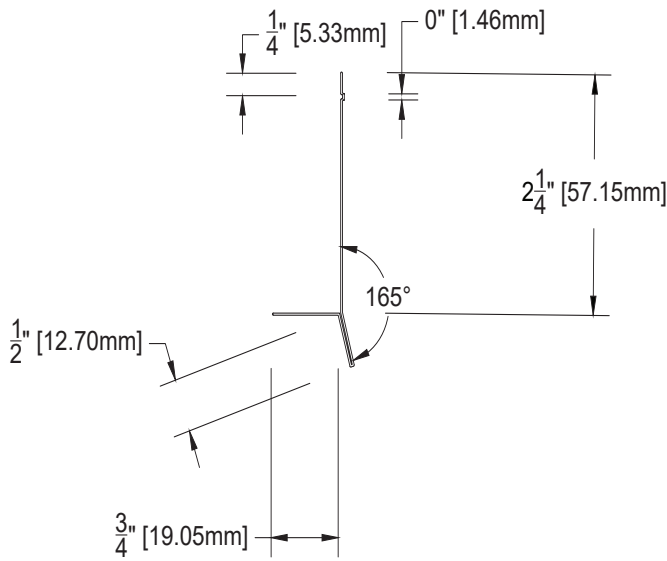
Before you begin your installation, it is worth while and generally saves time to conduct a pre-construction inventory check to ensure you have enough material, required tools and accessories. The tools and accessories required will depend on the scope of your project and the conditions you will be dealing with (e.g., inside or outside corners, window, existing roof, etc.).

Aluzion Accessories and Function

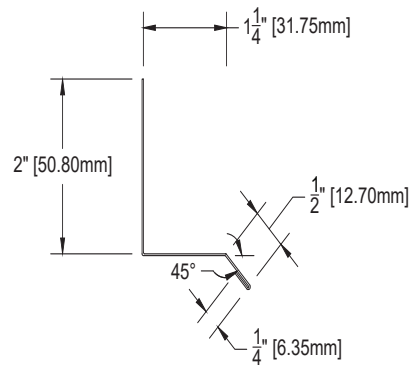
Unvented Starter



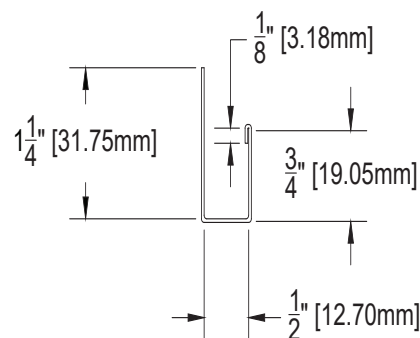
Vented Starter



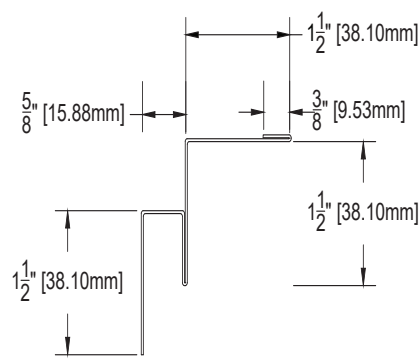
Drip Flashing



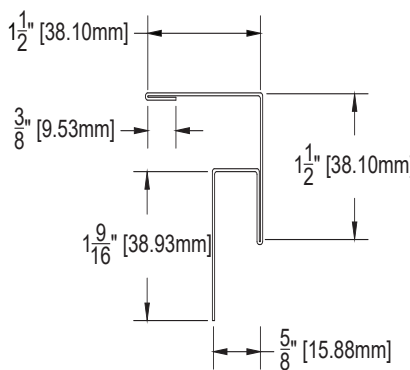
J-Trim



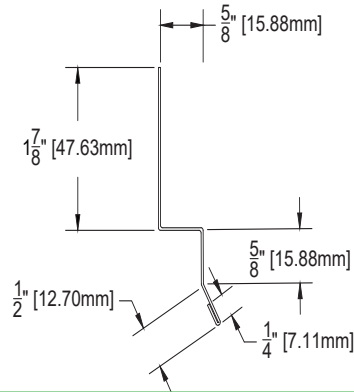
Inside Corner



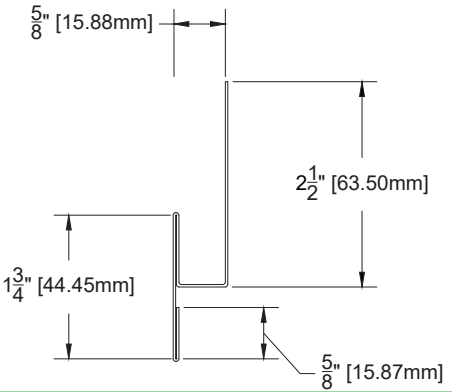
Outside Corner



Horizontal Transition



Vertical Transition



Plan your layout and installation approach. Depending on your project there may be conditions not covered by the basic parameters addressed in the guide. In such scenarios, it is important to apply the principles covered to your particular/unique condition.

Layout Considerations (Racking Out Your Wall)

The overall height of your wall, distance between your starting point and windowsills, window height and so on, will influence the height dimension of your starter row. The objective is to minimize waste and avoid conditions where the top row, sections below or above windows are significantly thinner/ shorter than adjoining rows. You may also have conditions where the Aluzion Siding System is being installed immediately above an alternative cladding material (e.g. masonry veneer), that result in varied overall heights. In some cases you will not be able to accommodate all variables and a narrow portion is required to be somewhere. In these cases, pick the location that is the least noticeable, while providing for the least amount of waste.

Points:

- 1. At inside and outside corners or at opposing sides of vertical interruptions, layout rows so that horizontal joints are in alignment.
- 2. Balance the layout to avoid very narrow strips bearing in mind that a soffit may reduce the exposed area even more. To balance layout, use the center distance between the base of your planned installation and the line of the soffit. Depending on the number of rows, this center point will be a joint or a center of panel location. The same applies in vertical applications keeping in mind that at an outside corner, the corner cap is going to reduce the visible area.

- 3. Avoid conditions where adjoining pieces are too short in length. E.g., using a 10’ length in an enclosed area 10’ 6” wide resulting in one piece being < 6 inches long/wide. Divide distance more evenly.
- 4. To give good colour variation and joint off sets, plan your layout to avoid situations such as H-joints and repeating row by row colour variations . Examples:



Repeating colour order row by row L*M*D*L*M*D and so on.



Repeated panel length and colour in each row working from side to side



Repeating pattern, not randomizing colour vertical, only horizontally,



Randomizing colours vertically and horizontally





Good Work

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Good overall colour mix, level and clean. Areas to improve:

1. Narrow strip visible beneath flashing and above soffit
2. Horizontal joints either side of masonry column not aligned.

Improved/Advanced Work

1. Balanced width beside window and outside corner, good colour mix and joint layout.
2. Alignment of horizontal joints of each wall.
3. Good "Racking" of colour mix and joint layout,.
4. Adjusted starter row height to balance row height below window and at the soffit.



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INSTALLATION OF THE ALUZION SIDING SYSTEM

Basic Installation Starting off Right

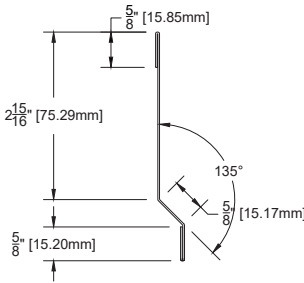
Before starting, the secondary plane of protection should be complete, including flashings. Where required, strapping/furring should also be installed and appropriately spaced - maximum 406 mm for horizontal and 305 mm for vertical applications .

Create reference line to position the Aluzion Starter Strips on all elevations. If only completing a single elevation and the foundation is flat and level it may be a usable reference, otherwise use a water-level or other (e.g., soffit framing) reference point to align rows. Use the reference point/line to find the lowest framing point as use as starting row location. Use this as your base line/starting point and mark starter rows. Mark the top for the starter strip or the top of the first row of siding where not using a full height starter row.

Apply principles describe under the layout considerations to balance the installation and minimize waste.



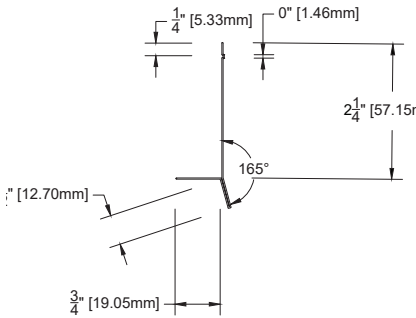
Aluzion Starter Strips



Unvented Starter

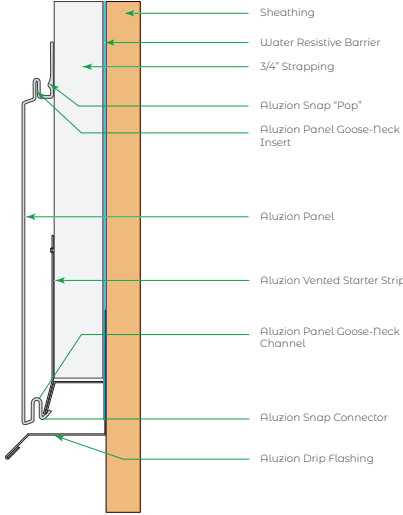
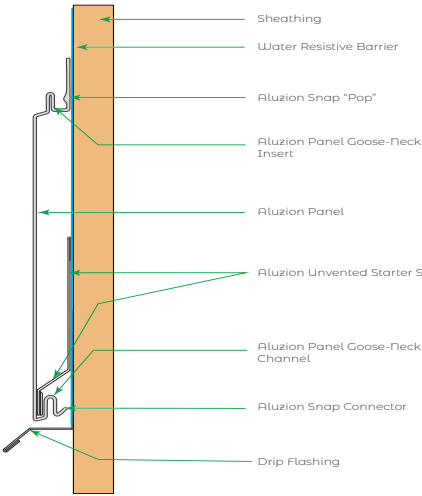
Use where siding is being installed on flat/unstrapped walls.

Use in locations where vented configuration prevents use of Vented Starter or where siding is being installed vertically.



Vented Starter

Use where siding is being installed over 19 mm (3/4") Strapping. Horizontal leg of starter Should be flush or just below the end of the strapping.



Panel Installation

Hook the first row into the starter and screw fasten (Figures 1-3). Do not over-tighten. Leave a gap about the thickness of a dime between the screw head and connection strip. Fasteners to be installed every 406 mm (16"). Locate the screw in the center of the screw slots and periodically check that you can shift your first panel from side to side. If you cannot move it, you are not leaving a large enough gap and need to increase the gap. A depth stop on your drill may be helpful if not using a screw gun.

If not using a full height panel in your first row, you will need to incorporate or create a stand-off and use in combination with perforated J-Trim (Figures 4, 5) You can fabricate stand-offs using trim coil, or by adding a half inch to the required depth and folding at 90 degrees. Use a stand-off wherever a panel cannot be connected to another row of siding along its top and bottom, or where a starter strip cannot be used. Note: where the siding is installed over strapping, insect screen should be installed wherever there's a path for nesting insects to enter.

Double check for level before starting next row.

For vertical applications, use the same principles covered in this guide, simply rotate 90 degrees. The final screw at the top of a panel should not be gapped but installed tight. All other screws gapped as describe in this guide. Additional requirements will be noted as they apply to the condition being covered.

See page 30 for strapping configuration

Note: Remove protective film as you install. If you leave in place, it can fuse to the siding when exposed to direct sunlight and cause damage.



Figure 1- Hooking Aluzion Base Profile into Vented Starter Strip

Figure 3 - Properly gapped screw set evenly, level and square to the panel - see "Additional Considerations" section for more

Figure 2- Hooking Aluzion Base Profile and applying even vertical pressure to set panel evenly into the starter strip.

Note: This method should be used over minimum lengths within a single panel, not across multiple panels

Figure 4 - cut panel with stand-off

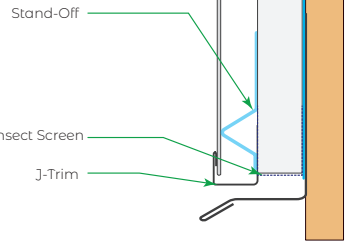
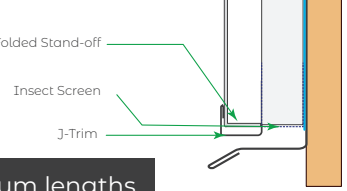
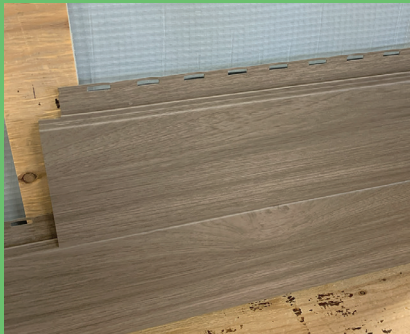
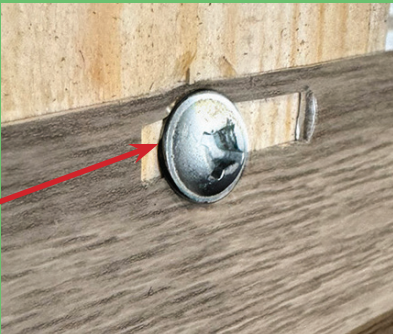


Figure 5 - cut panel with bent stand-off





When setting screws make sure to hold the drill level and square to the wall so that screws are installed straight and evenly gapped. Avoid screwing too tight or at any angle that can apply directional force upward or downward to the panel .



When transitioning around a corner, cut and fold the vent screen, insert Starter into the corner trim and fasten through both. This screw can be installed tight to the face.



Aluminum expands when temperatures increase, and contract during colder periods. Therefore, you must fabricate joints that allow for expansion and contraction to avoid buckling and gaps. Leave a gap of 19 mm (3/4") in the fastening strip. Trim the concealed top and bottom portions to create a 6 mm (1/4") overlap on the face of the siding.

Aluzion's patented "Click & Go" technology allows joints to occur in between strapping (unsupported) if your layout requires, however, you should plan your layout to minimize this occurring with joints occurring at the strapping. You can also add a small section of strapping at the joint in increase joint strength. Remember to off-set joints and randomize colours as described in the layout section of this guide.

Tip: Use only factory cut ends at joints. If required, touch-up any exposed aluminum on the edges with touch-up paint.



Doors and Windows



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1. Double check local codes for head flashing requirements.
2. Install J-Trim as shown starting with the trim at the sill location. Exposed edge should be flush with outside of vertical J-trim, add 19 mm (3/4") on each side. If sill flashing is installed, it should extend the outer plane of the siding and not be directed behind the Aluzion siding.
3. Cut vertical sections so that the top and bottom edges are flush with the exposed J-Trim. The top piece should be an additional 38 mm (1.5") so the ends are flush with vertical pieces.
4. Create the illustrated drip and connection tabs at corners insuring positive overlaps (i.e., higher pieces/tabs lap over the lower with tabs visible).
5. Where head flashing is required, the top J-Trim should be perforated to allow drainage of any incidental water to the exterior. Top J-Trim should be spaced at least 6 mm above the head flashing. Insect scree should be installed across the window head.
6. Cut siding to fit. Where the height is less than full height, a stand-off will be needed in combination with the J-Trim. Create a fold per Figure 5 the width of the cut section to keep the panel flat and straight. Alternatively, use a stand-off per Figure 4. (See page 17)
7. A 6 mm (1/4") space should be left between the edge of the siding and the bottom of the J-Trim.

Inside and Outside Corners

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1. Aluzion corner trims are designed for installation efficiency and are installed as you complete each elevation.
2. Once you've completed one side of the wall, install the required trim for the type of corner. Aluzion corner trims only require fastening on the unfinished side. On outside corners use a level and ensure trims are plumb and square to the corner.
3. Fasteners are to be spaced every 200 - 300 mm (8 -12 inches). Where siding is installed vertically, fasten into every row of strapping.
4. Where the length of the corner requires a joint in the trim, remove 20 mm (3/4") of the nailing hem to allow for a 9.5 mm (3/8") overlap (higher over the lower). Joint is shown here at lower section, but should always occur above the 12' section where a joint is required.
5. Aluzion panels should be inserted into trims leaving a 6 mm gap (deepest edge of panel to inside base of trim). Where used at the base of the wall, the J-Trim is to be perforated. In vertical applications where cut ends are inserted into the base J-Trim, insure panel is wiped clean before inserting. See page 21 for more information.



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Vertical Transition

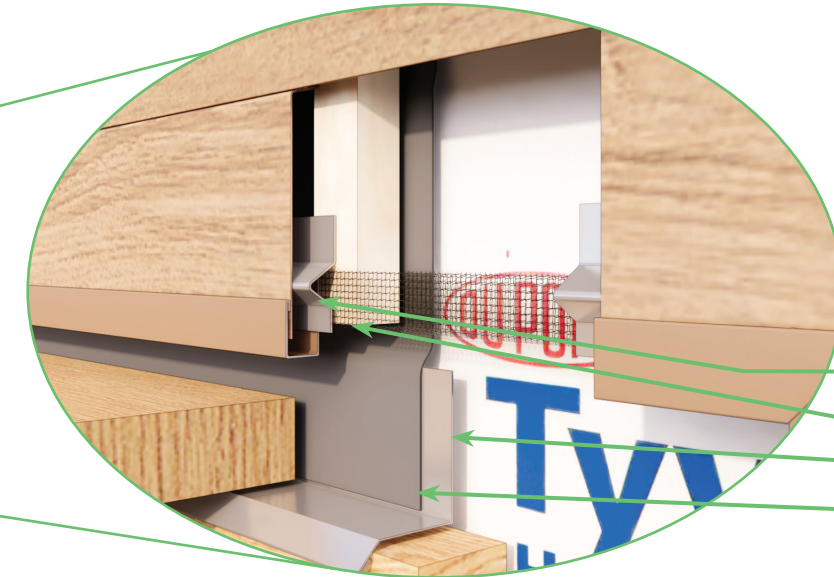
Page 24

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1. Follow the same procedure as described for inside and outside corners, Finishing one side of the transition and then installing the transition trim straight and plumb.
2. Where transition involves a change in colour, use a trim colour matching the most dominant colour of siding used.
3. Transition trim should lap over the J-Trim and extend just below the bottom edge.



Stand-off for less than full width section.



Deck penetrations require coordination between persons completing the deck, the siding installer and persons responsible for completion of the water resistive barrier. This guide addresses the siding and is not providing instruction for deck connection, its construction or related code requirements which are the responsibility of others.

1) Insure the secondary barrier is in place prior to installing the siding including behind the ledger board. If not present contact responsible party for correction.

- Stand-off per Fig. 3
- Insect Screen per Fig. 3
- Ledger Flashing
- Transition Membrane

Transition Membrane and WRB over base flashing

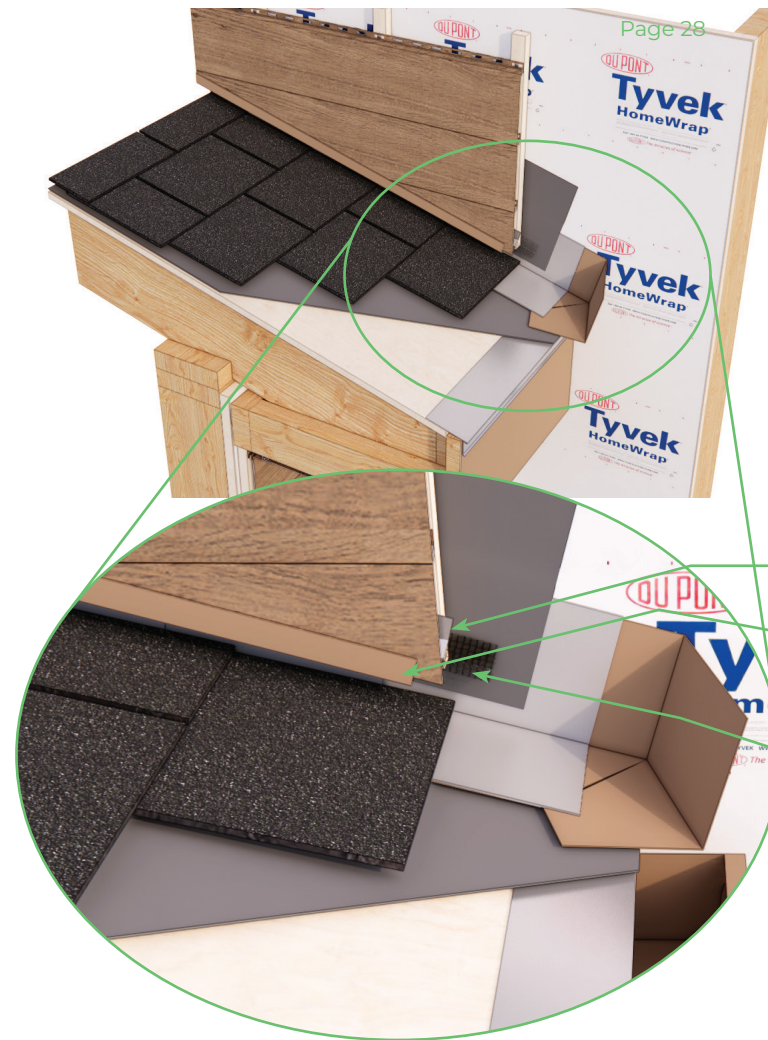
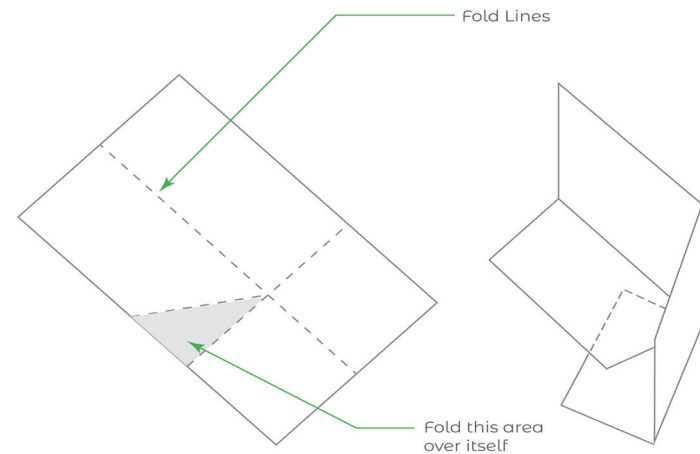
Starter Strip per Fig.2 Page 17

Note: Components are exploded/spaced for clarity of placement and installation sequence.

Roof/Wall Diverter Flashing

Diverter flashings are a critical component of a successful installation and should not be omitted for aesthetic concerns. Over time, they are generally not noticed.

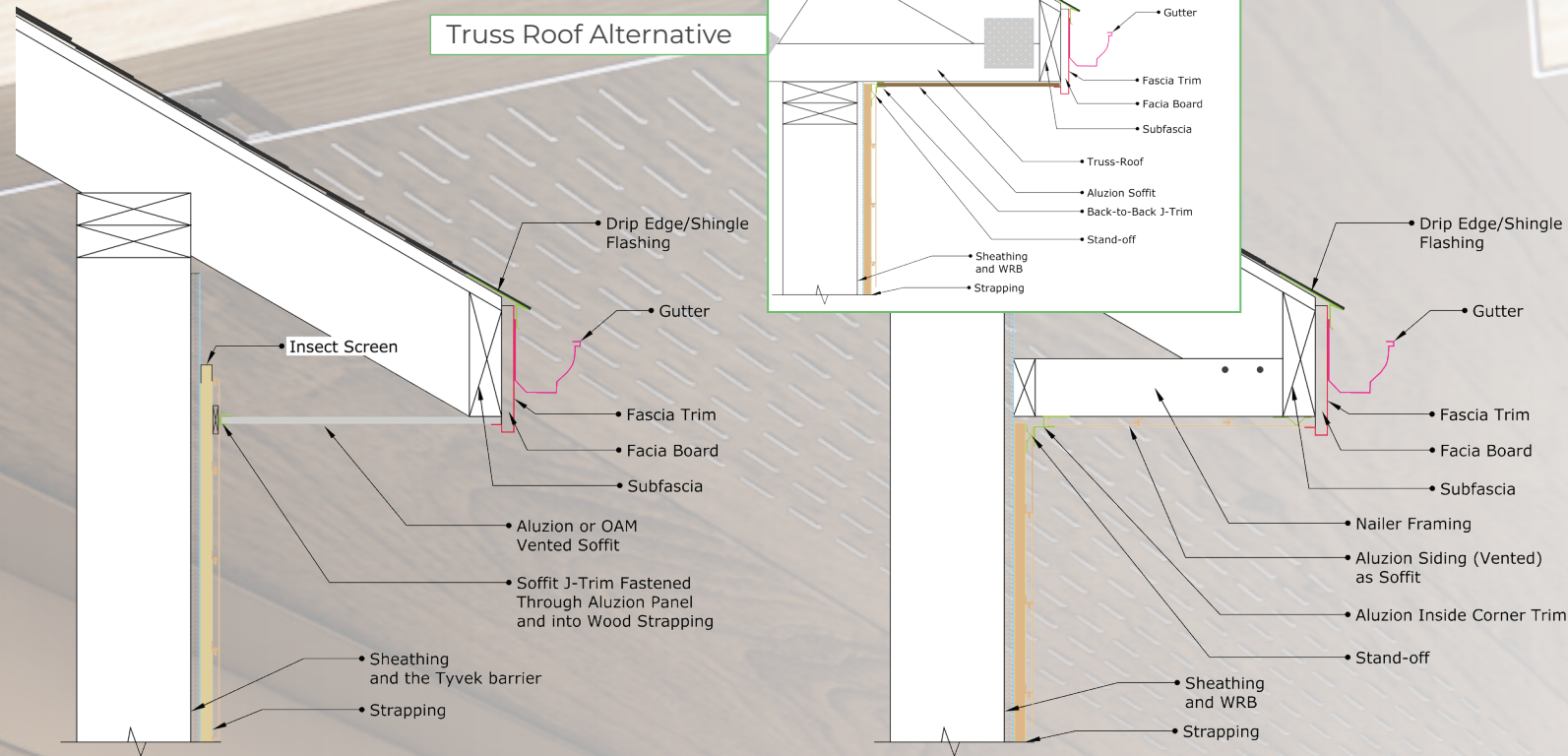
These flashing can be purchased already fabricated or can be formed using colour coordinated trim coil in a few simple steps:



Wall and Soffit Interface

The orientation of the Aluzion panels, the height of the final/top row and the type of soffit being installed will influence how this intersection is to be handled. There are more combinations than can be illustrated/described here. Some key considerations:

1. Insure the top of the wall is closed to nesting insects such as wasps.
2. You cannot fasten soffit J-Trim direct to the Aluzion siding without backing or a modified stand-off where location is more than 12.7 mm (1/2") from the top of a panel.
3. Applications on buildings or parts of buildings required to be of noncombustible construction may require integration of a metal fire break between the vented cladding and the soffit.



Complete the wall and use Aluzion Inside Corner Trim - follow basic installation procedures for the Aluzion Vented Soffit as per Aluzion Panels



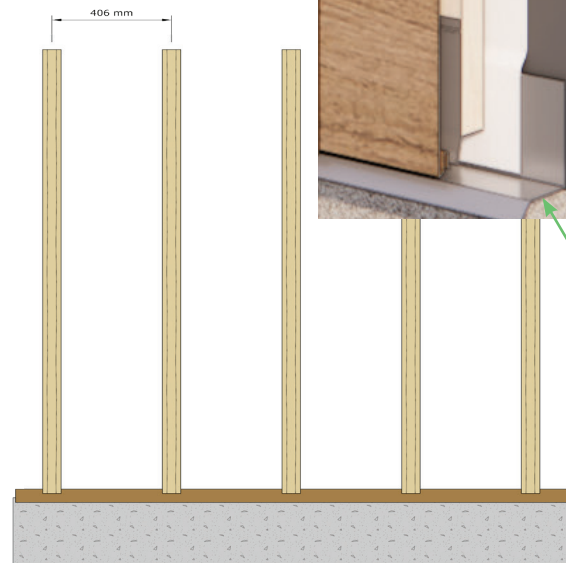
Wall Strapping/Furring

Furring Channel or Strapping is required in some locations in Canada and the US. Regardless of location, it is still considered good practice. The depth of cavity varies between 10 mm and 20 mm. The below is included for information purposes. You should always refer to your local code for installation requirements for your area.

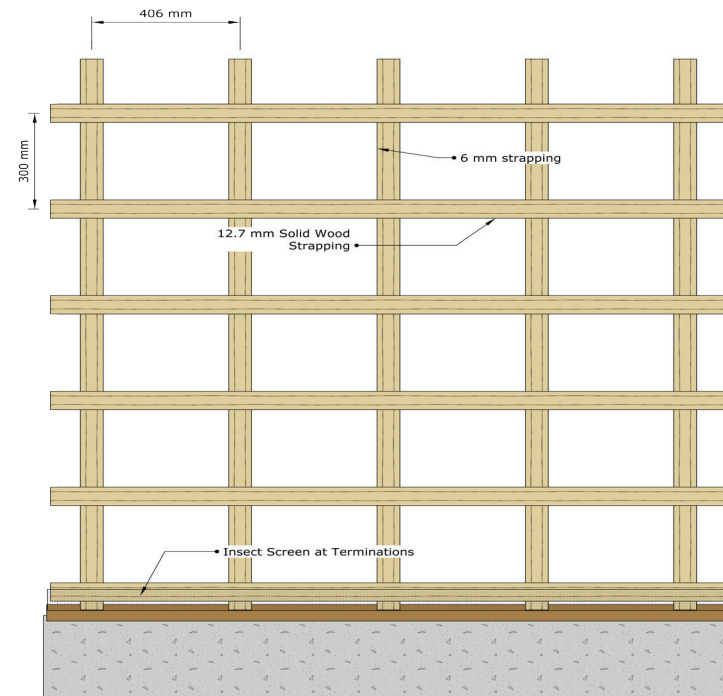
1. Strapping should only be fastened to framing members. While some sheathing may be robust enough for nailing, the contractor should not determine suitability.
2. Furring strips/strapping is not to be pressure treated. Pressure treated woods should not come into contact with aluminum.
3. Where installing over exterior insulation, the insulation should be applied continuously over the secondary barrier material and strapping over top of the insulation. Nails should be long enough to maintain min. 25 mm penetration into framing. Flashings are still required to terminate at the outside face of the cladding.

4. As integration of strapping makes access to the secondary barrier challenging. Always confirm that the secondary barrier is complete (e.g., transition membranes, flashing) before installing the strapping.

Typical Base of Wall Condition

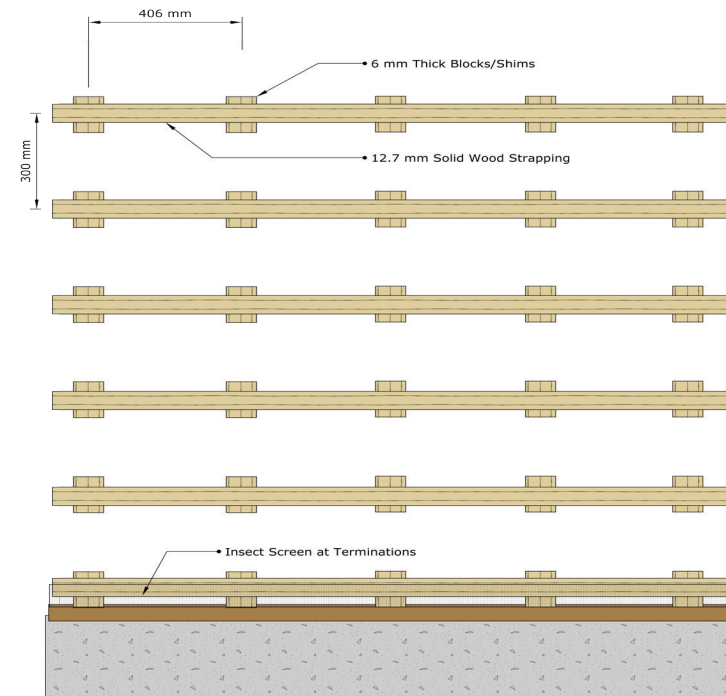


Vertical Siding Configuration Option 1



Termination Flashing at the base of the wall is optional unless terminating above a projection or other cladding.

Vertical Siding Configuration Option 2



25 YEAR TRANSFERABLE WARRANTY APPLICATION

Aluzion siding comes with a fully transferabel 25 year limited warranty. To apply for a warranty, please visit aluzion.ca/warranty or write Aluzion Inc. for a copy of the warranty request form at:

Aluzion Inc.
4 rue du Moulin, Saint-André
d'Argenteuil, QC, J0V 1X0

Attn: Warranty Services

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Aluzion products help protect our precious woodlands by providing the warm look of natural wood without deforestation.



ELEGANT | DURABLE | ACCESSIBLE

Aluzion Inc.

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