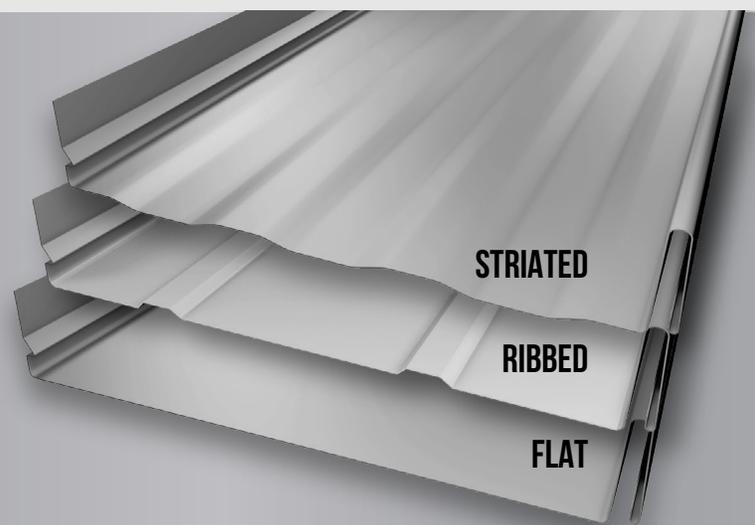


TRI COUNTY METALS



AVAILABLE IN



GALVALUME®

www.TriCountyMetals.com

SL-LOK 1 1/2" INSTALLATION MANUAL

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IMPORTANT NOTICE

- This manual is to aid the installer with the installation of the SL-Lok panel. Due to the different complexities of roofs and roofing situations, it is difficult to create a manual that covers every situation that the installer may encounter.
- This manual is to serve as a guideline to properly installing the SL-Lok panel.
- Check with local building codes prior to installing metal roofing.
- Any questions you may have regarding proper installation of the SL-Lok panel should be directed to a Tri County Metals representative.
- Panels in this profile, unless you've ordered a striated version, can show "oil canning" which is a wave-like appearance going up the panels. This can be caused by elastic buckling also known as stress wrinkling in the flat areas of the panels. Although it can be unsightly, this is not a manufacturing defect and is not a means for refusal of product. Tri County Metals highly recommends the use of striations for all standing seam panels and SL-Lok panels.

TOOLS RECOMMENDED

Variable Speed Drill or Screw Gun, Snips, Magnetic Bit, Extension Ladder, Turbo Shears (we stock these for purchase), Tape Measure, Hand Bending Tools, Chalk Line, String Line, Drill Bits, Tool Belt, and Utility Knife

SAFETY

- Failure to observe proper roofing safety can result in serious injury or death. Extreme caution should be used at all times when installing metal roofing. The information in this manual is to show the correct placement of the metal roofing parts. It is the responsibility of the erector to perform the placement of these parts in a safe manner. Refer to OSHA guidelines for applicable safety requirements.
- Never walk on a wet metal roof.
- Never walk on an unfastened roof panel.

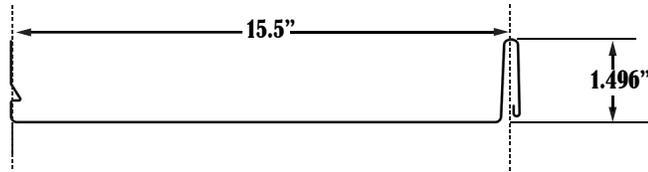
STORAGE/HANDLING

- **Important:** Moisture trapped between stacked sheets may cause water stains or white rust to form under the paint, which can affect the life and service of the metal.
- If metal is not used immediately, store in a well ventilated dry location.
- Any outdoor storage is at the customer's own risk! If outdoor storage cannot be avoided the likelihood of damage may be reduced by protecting the metal using a canvas or breathable paper.
- Fan sheets lightly at the bottom to allow for air circulation.
- **Keep the sheets off the ground** by using an insulator such as wood.
- **Never cover the metal with plastic** as this will cause condensation to form.



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SL-LOK PRODUCT INFORMATION



Applications: Residential, Light Commercial

Gauge: 24 gauge

Minimum Slope: 1/4 / 12 - Tube sealant recommended on pitches below 2 / 12

Panel Profile: 15 1/2" net coverage Substrate: Galvalume® steel sheet, conforming to ASTM A792

Finish: Mill Finish AZ55 Acrylic Coated Galvalume®; 25 year limited warranty

TCM exclusive paint systems:

Max Defender Paint System® 35 / 30 year limited warranty.

PANEL	GAUGE	SUBSTRATE	APPROVAL#
11/2" SL-Lok	24	15/32" Plywood	4595.12

PLEASE NOTE: For other installation configurations, please inquire with your salesperson for site-specific accommodations.

	Z-Flashing	Eave Cleats	Panel Starters	Rivets	Tacky Tape	Titebond (tubes)
Drip Edge		1				
Gable Trim	1	1		11	10'	
Sidewall	1			11	10'	
Endwall	1			11	10'	1
Transition	1		1	11	10'	1
Valley			2		20'	
Ridge Cap	2			22	20'	2

Clip Spacing

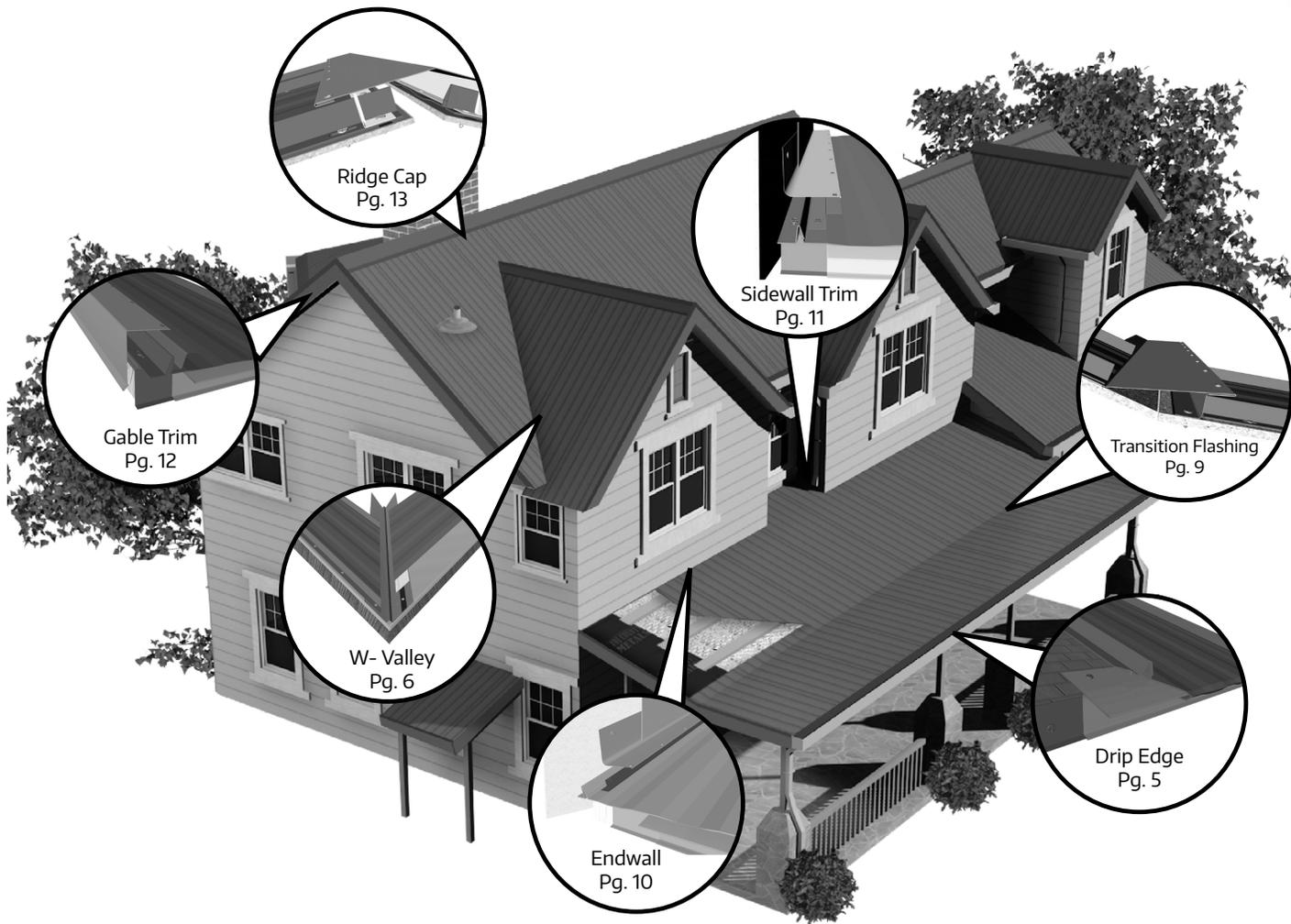
Depends on local wind load design requirements.

*Note: May vary based on local wind load design requirements.

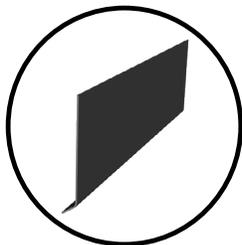


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ROOFING ANATOMY

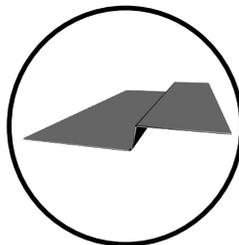


Eave Cleat



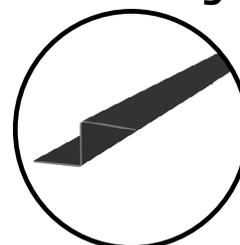
Used to attach drip edge and gable trim to the fascia board.
(Optional)

Panel Starter



Used to attach panel edges at valley ends, drip edge and at roof transitions.

Z Flashing



Used to attach the ridge cap, gable trim, sidewall, endwall, and transition flashings to the roof.



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MEASURING YOUR ROOF FOR AN ESTIMATE

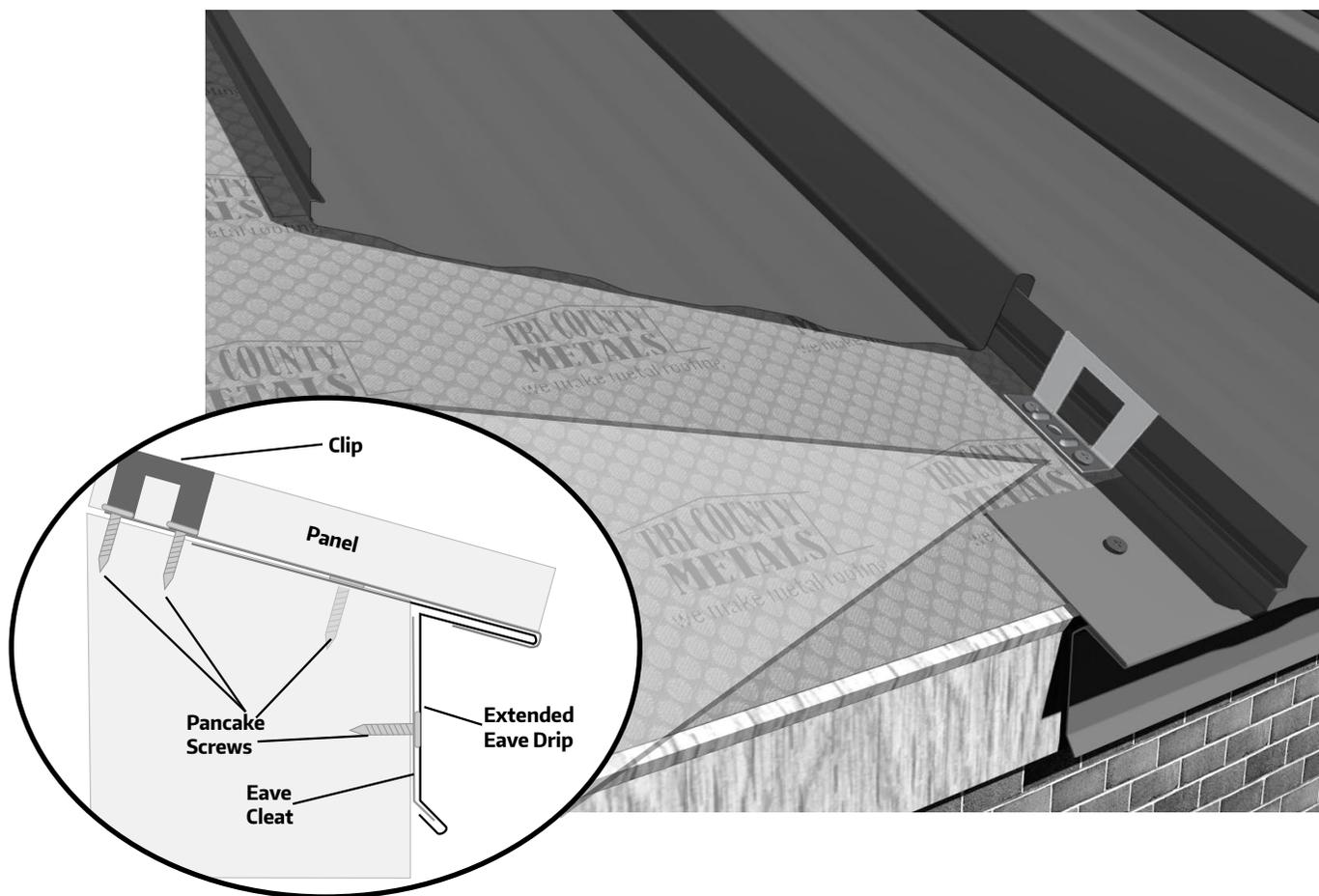
- > Start by sketching a birds eye view of your roof. This can be aided by using Google Earth or similar online programs.
- > Identify each part of your roof similar to the drawing below.
- > Once you have drawn your roof and identified each part, measure each line and include it on the drawing.
- > Include on the drawing the location of plumbing stacks (if any) and the diameter of the pipe.

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Make Your Next Roof Your Last!

DRIP EDGE



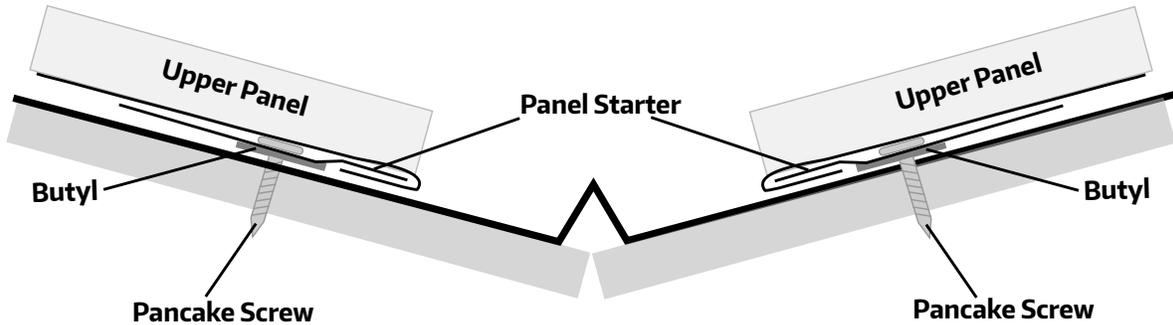
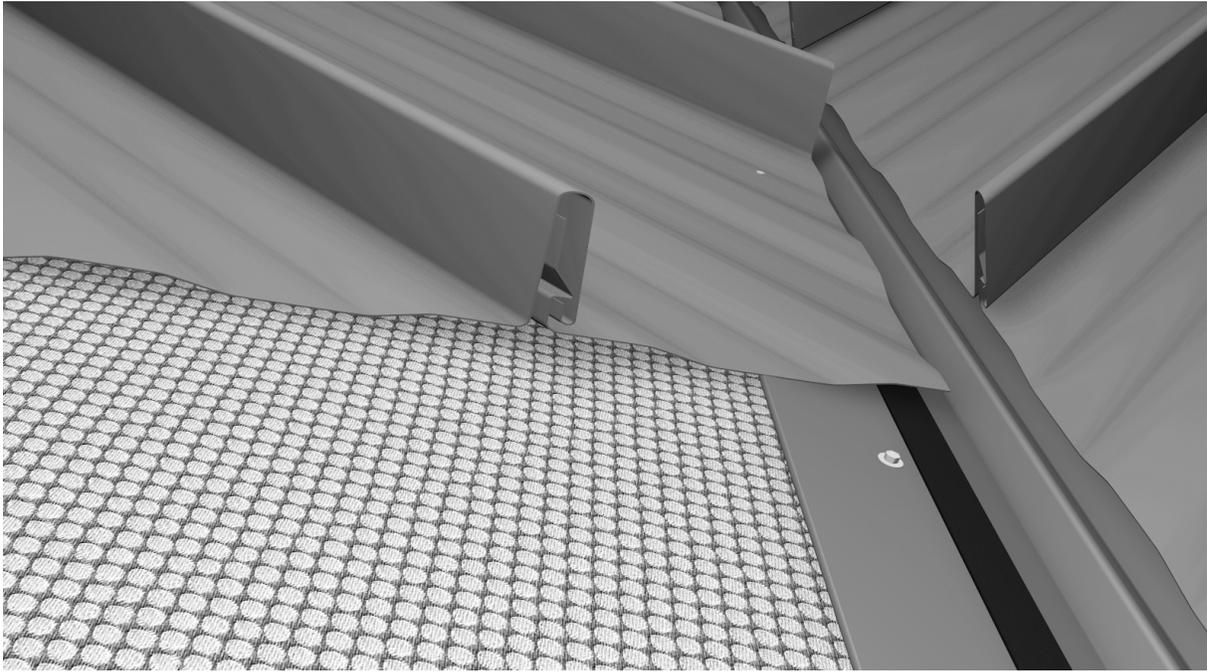
Notes:

1. Attach eave cleat flashing to fascia board using 1" pancake screws every 4" on-center.. Overlap eave cleat flashing a minimum of 3". (Optional)
3. Attach drip edge flashing to roof deck with 1" pancake screws 4" on-center, while hooking the bottom edge of the eave trim flashing to the bottom edge of the eave cleat flashing. (Optional)
4. Overlap drip edge flashing a minimum of 3".
5. Allow drip edge to run past corner of roof 3" so it can be folded to ensure maximum weather tightness.
6. Attach roofing panel at eave by notching 1" off of each panel rib from the panel edge leaving 1" of panel to be folded over the drip edge flashing.
7. Slide hemmed panel edge over drip edge flashing.
8. Use hand seamers to finish crimping panels over drip edge if using extended eave drip.



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W-VALLEY



Note:

1. Starting at the bottom, fasten W-Valley trim flashing to roof substrate using 1" pancake screws every 4" on-center.
2. Allow W-Valley trim flashing to overhang roof edge so it can be trimmed back flush with roof overhang.
3. End lap w-valley flashing a minimum of 6 inches.
3. Cut roofing panels so they stop 3" from the diverter in the center of the W-Valley trim flashing.
4. Apply Butyl the entire length of the w-valley flashing 5" from the center diverter
5. Attach panel starter on top of the Butyl and screw the panel starter down every 24" using 1" pancake screws.
6. Place clips on male rib according to spacing on page 2 and use required fastener type.

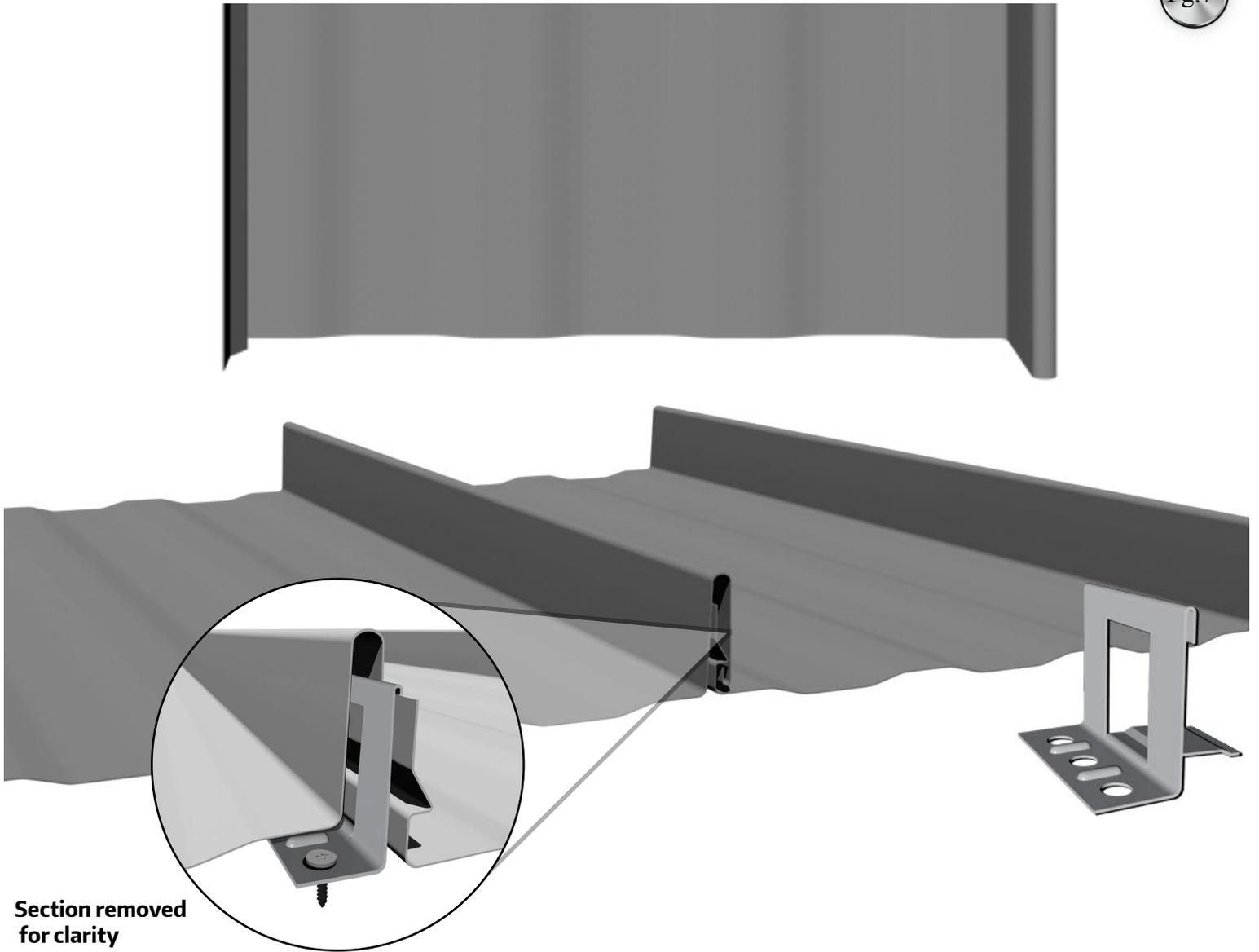
RECOMMENDED ACCESSORIES:

Butyl (1 roll = 50' of coverage)

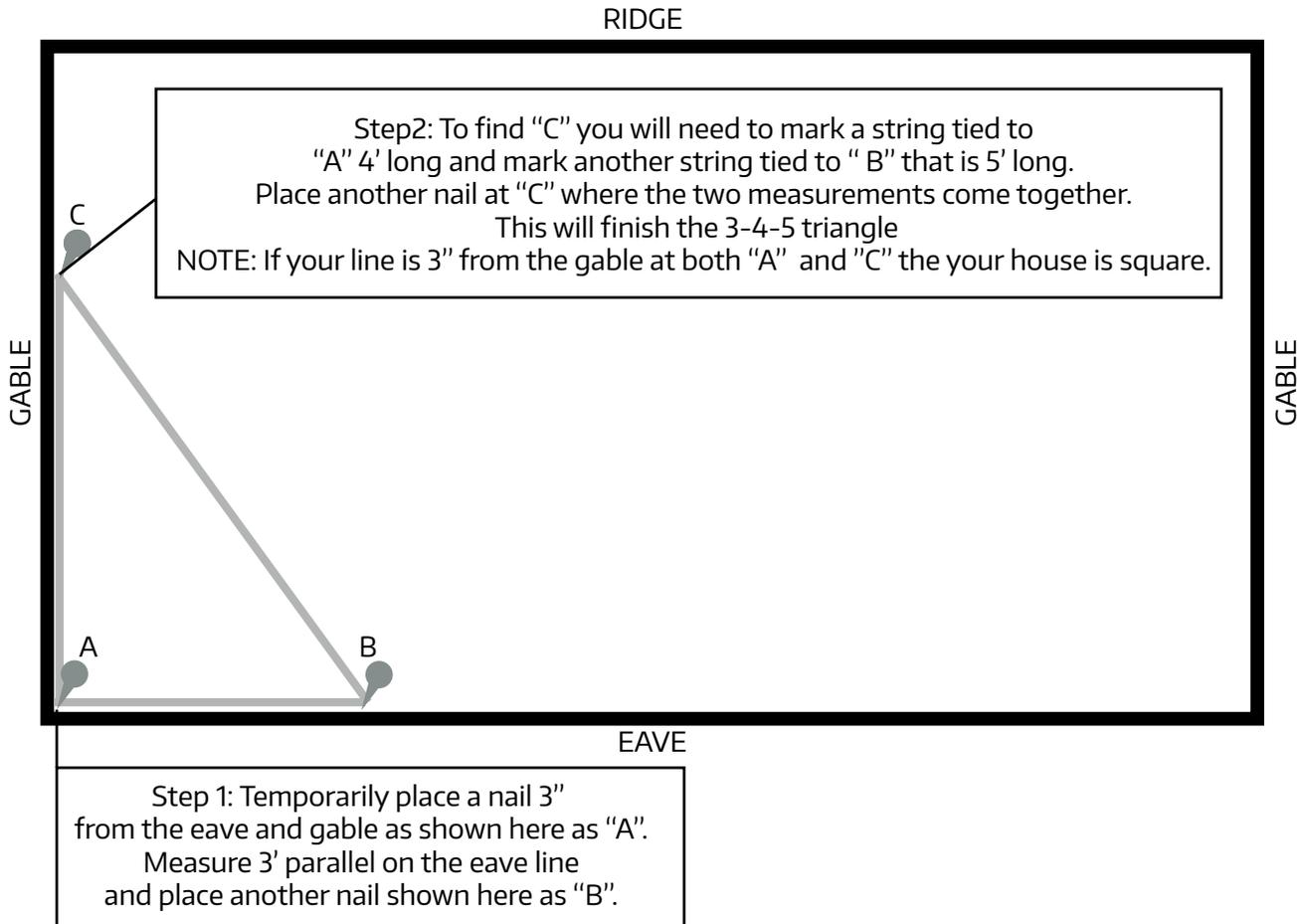


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FASTENING SCHEDULE



SQUARING PANELS

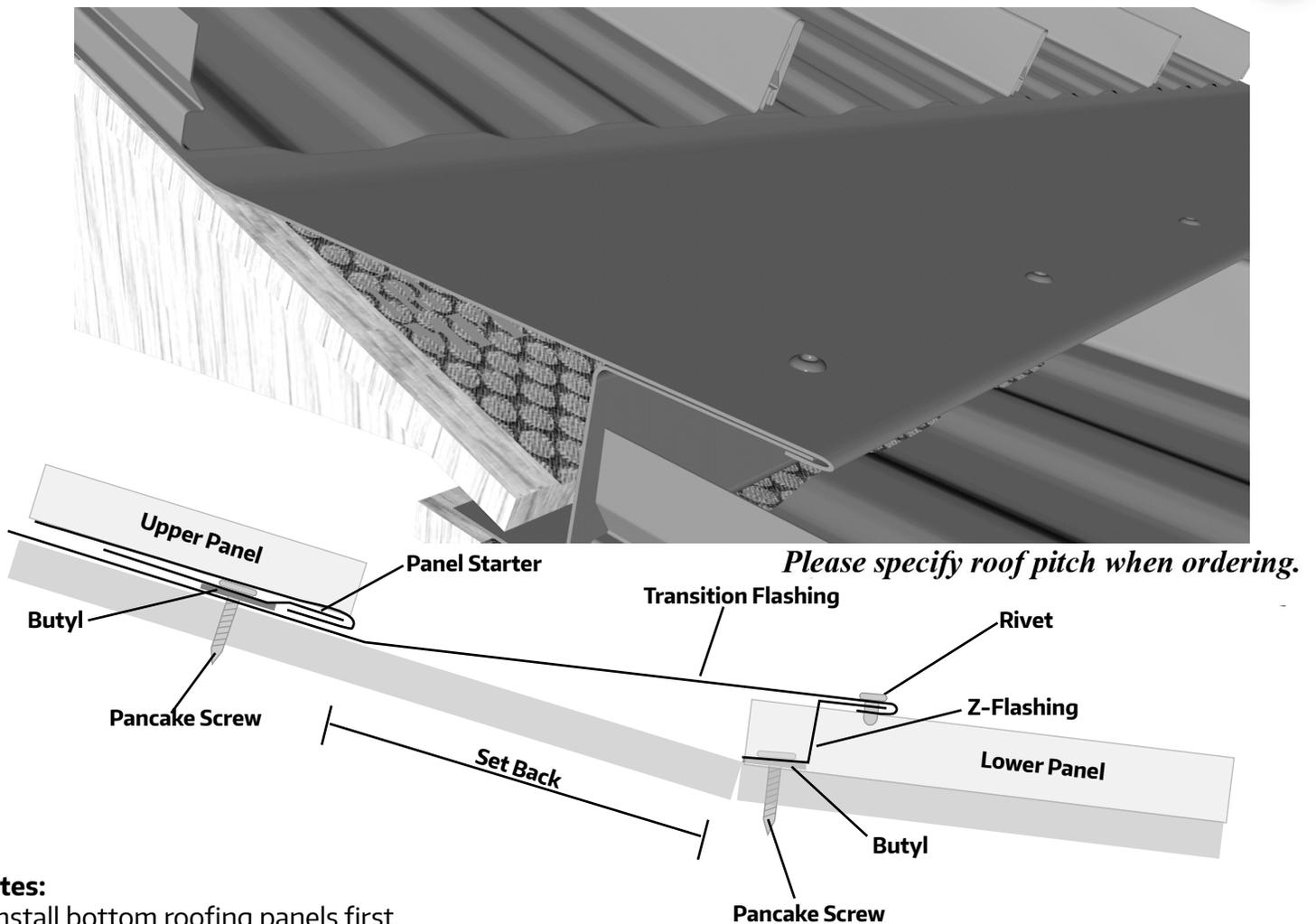


The 3-4-5 triangle method will work on a larger scale as well. For example if your roof panels are 16' long then you can multiply the 3-4-5 by 4 so you will be measuring 12-16-20. Just make sure that you multiply all measurements by the same number. The next step will be making a chalk line going from your "point A" to "point C". You will want this line to be as close to the edge of the gable as possible so your first panel will be about an 1/8" from the edge of the roof. You will want to measure 9' 6" from your chalk line at the A and C points and make another chalk line. This will help you as you start installing your panels to make sure they are still square with your eave. It is a good idea to continue this process for the entire project and on both sides of your roof.



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TRANSITION FLASHING



Notes:

1. Install bottom roofing panels first.
2. Apply Butyl in the flat part of the lower roof panels where the z-flashing is going to be installed.
3. Notch the z-flashing to fit over the panel ribs and install over the Butyl using 1" pancake screws every 6" on-center.
4. Use Titebond® to seal openings created between z-flashing and panel ribs.
5. Slide the transition flashing over the installed z-flashing.
6. Secure transition flashing to z-flashing using rivets every 12" on-center.
7. Apply tacky tape to the top side of the transition flashing.
8. Install a panel starter on top of the Butyl using 1" pancake screws every 4" on-center.
9. Slide the hemmed panel over the panel starter and attach the panel to the roof substrate using 1" pancake screws (according to screw placement on page 2).

RECOMMENDED ACCESSORIES:

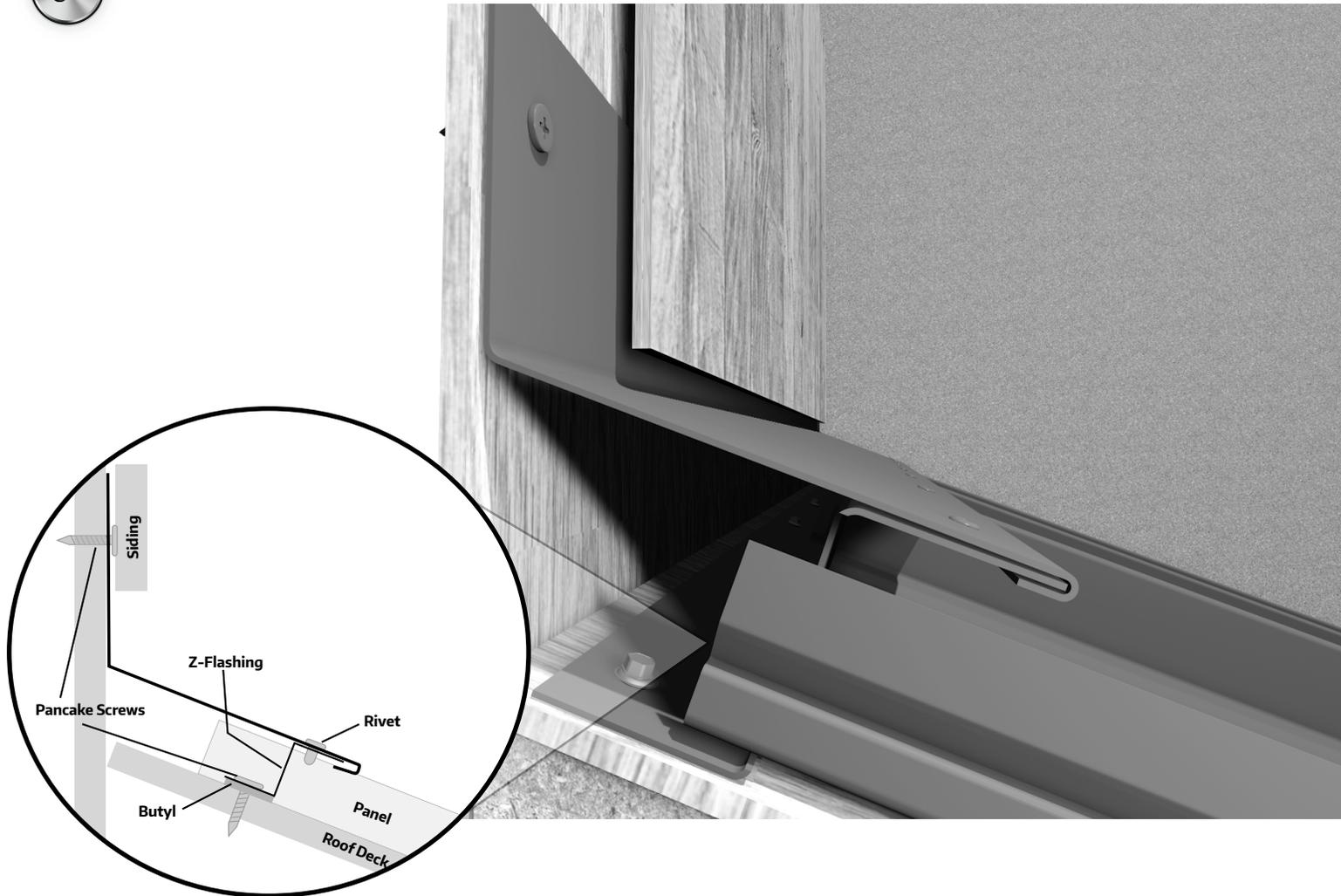
Butyl (1 roll= 50')

Titebond® (1 tube = 31 linear feet (1/4" bead)



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ENDWALL FLASHING



Notes:

- 1 Apply Butyl in between the ribs of the panel.
2. #2. Notch Z-flashing to fit over the top of the rib or cut pieces to fit in-between ribs.
3. Fasten z-flashing to panels using 1" pancake screws every 6" on-center.
4. Use Titebond® to seal openings created between z-flashing and the panel ribs
5. Slide Endwall flashing over z-flashing
6. Secure endwall flashing to z-flashing using rivets every 12" on-center.
7. Attach endwall flashing to wall
8. Cover endwall flashing with siding or counter-flashing.

RECOMMENDED ACCESSORIES:

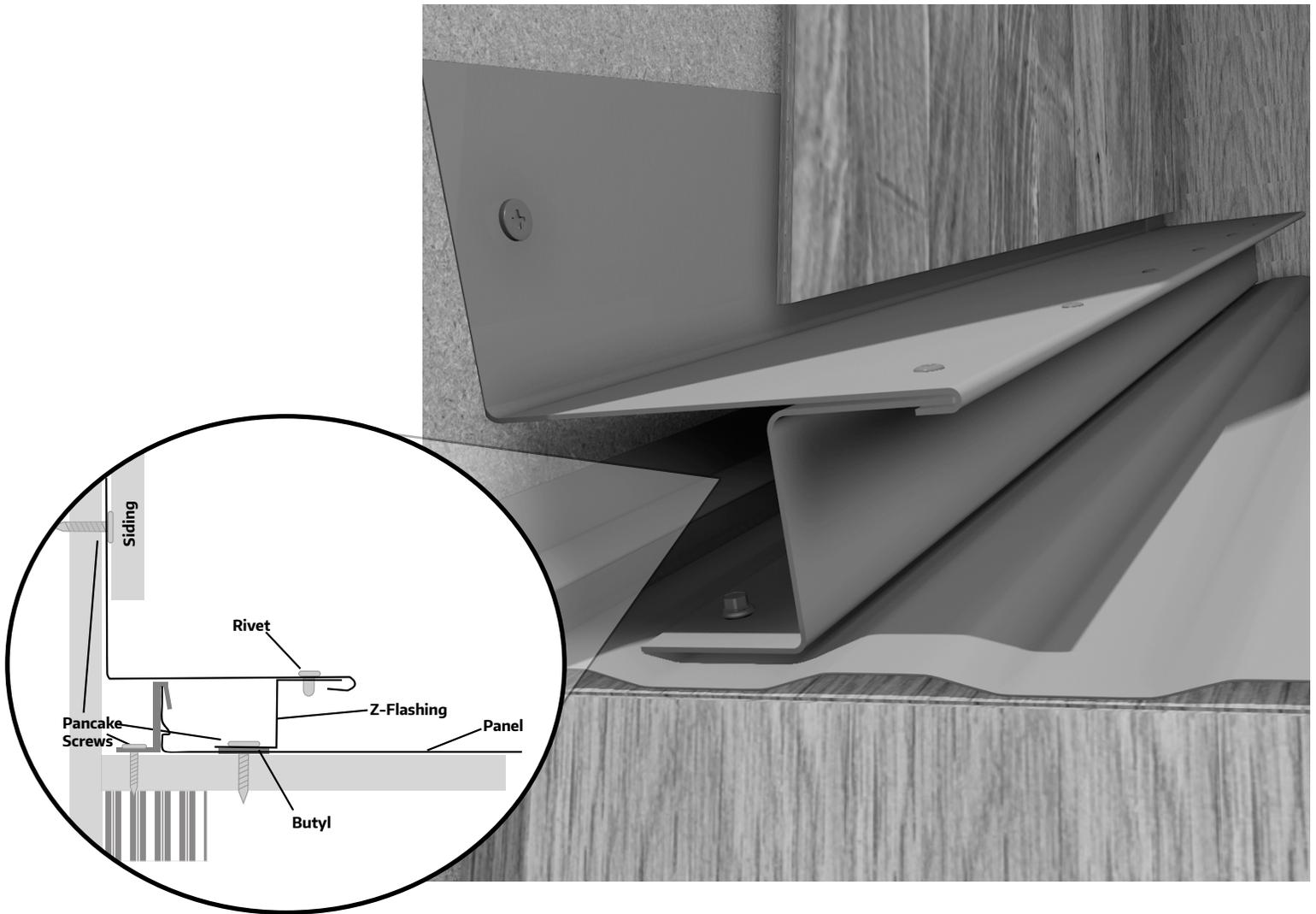
Butyl (1 roll = 50')

Titebond® (1 tube = 31 linear feet (1/4" bead))



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SIDEWALL FLASHING



Notes:

1. Apply Butyl along the panel where the z-flashing is going to be installed.
2. Attach the z-flashing to the panel by using 1" pancake screws every 6".
3. Slide the sidewall flashing over the z-flashing
4. Secure the sidewall flashing to the z-flashing using rivets every 12".
5. Attach the sidewall flashing to the wall
6. Cover the sidewall flashing with siding or counter flashing.

RECOMMENDED ACCESSORIES:

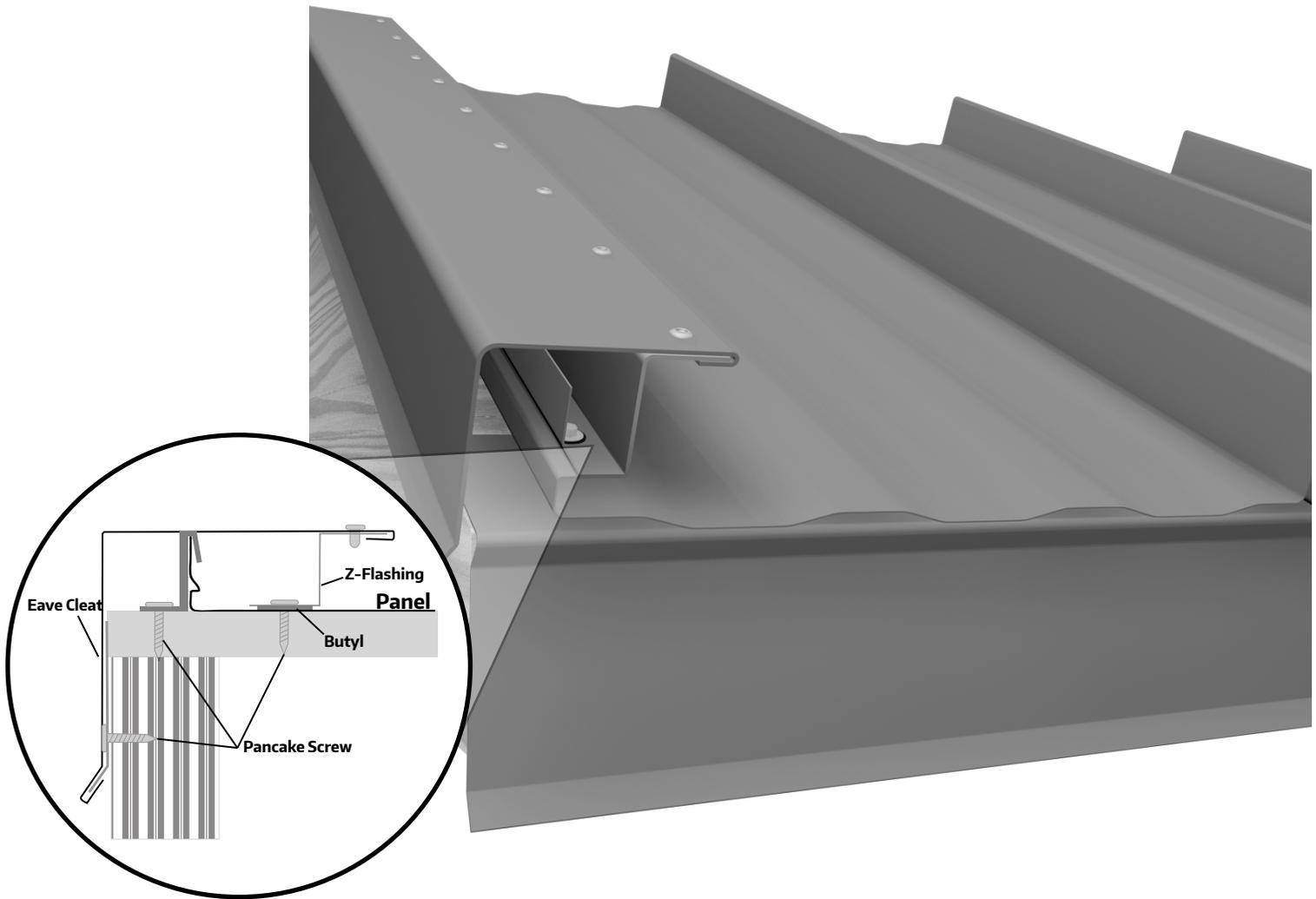
Butyl (1 roll = 50' of coverage)



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GABLE TRIM

Pg.12



Notes:

1. Apply Butyl to topside of panel where z-flashing will be installed.
2. If the panel rib is not going to be under the gable trim flashing, the panel will need to be turned up 1" along the gable end.
3. Install z-flashing on top of Butyl and fasten to roof deck using 1" pancake screws every 6".
4. Attach eave cleat to fascia board using 1" pancake screws every 4". (Optional)
5. Slide gable trim flashing over z-flashing and then snap it over the eave cleat. (Optional)
6. Secure gable trim to z-flashing using rivets every 12".

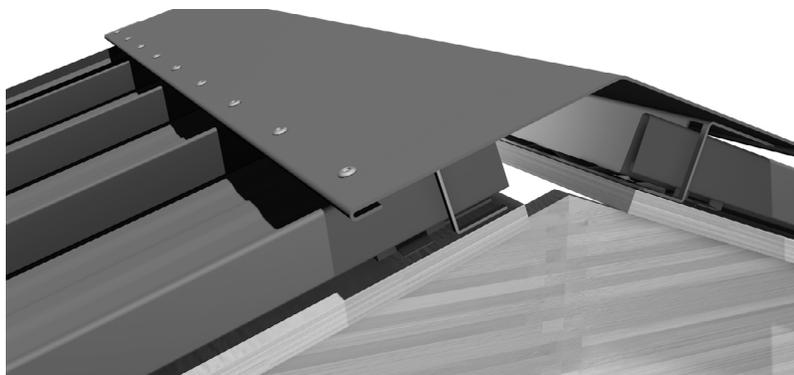
RECOMMENDED ACCESSORIES

Butyl (1 roll = 50' of coverage)



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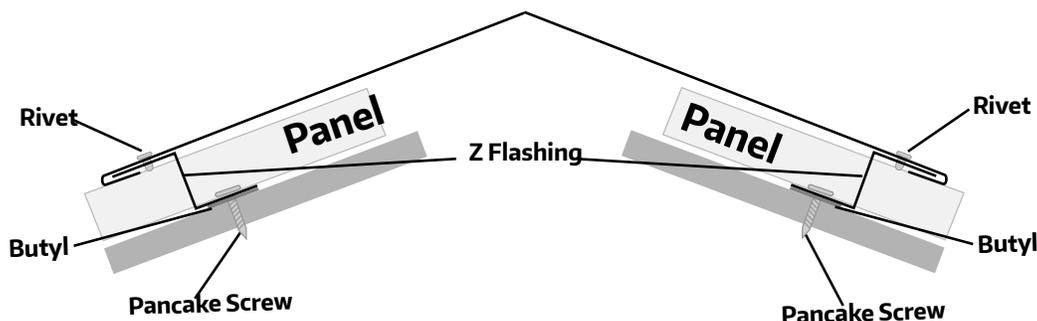
RIDGE CAP



Non-Vented Installation



Snap Z Ventilation System



Please specify roof pitch when ordering.

Non-Vented Installation

1. Stop panels 2" from center line of ridge for vented ridge installation.
2. Apply Butyl to flat part of panel
3. Notch Z-flashing to fit over the top of the rib or cut pieces to fit in-between ribs.
4. Install z-flashing on top of Butyl and fasten to panel using 1" pancake screws every 6".
5. Use Titebond® to seal openings created between z-flashing and panel ribs
6. Slide ridge cap over z flashing on both sides and secure using rivets every 12".

Recommended Accessories:

Flexo-Vent (1 box = 20' of coverage)

Titebond® (1 tube = 31 linear feet (1/4" bead))

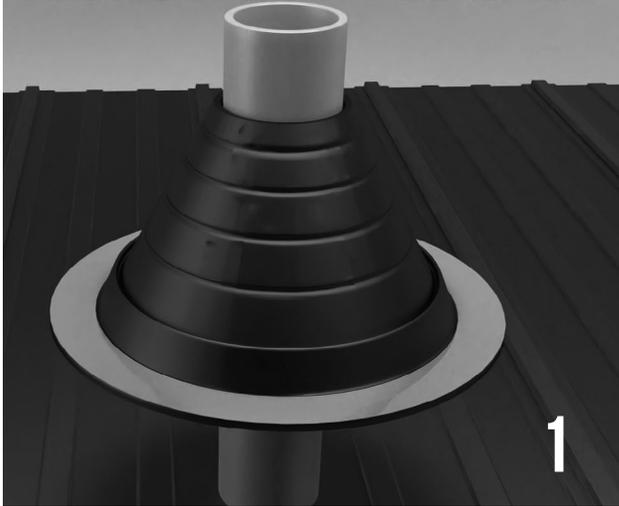
Snap Z Ventilation Installation

1. Take the Snap-Z and a screw gun and install one on each side of the ridge of the roof. Allow about 1/8" to 1/16" slack for ridge capping. Install using screws spaced every 3 inches. (Butyl tape must be installed on the bottom side of the Snap-Z prior to installing.)
 2. Next take the ridge capping and slide it onto the Snap-Z. Then fasten ridge capping to Snap-Z with stainless steel rivets. Installation instructions for vented Snap-Z
- www.standingseamroofvent.com Do not install Snap-Z on any vented closure roof less than 3/12 pitch. Apply sealant at the joint of panel rib and Snap-Z. The screw used to fasten the Snap-Z must penetrate through the decking by 1/2"



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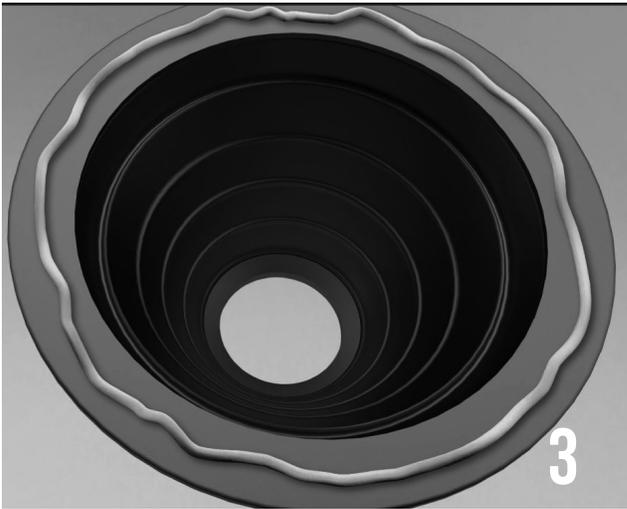
ROOF BOOT INSTALLATION



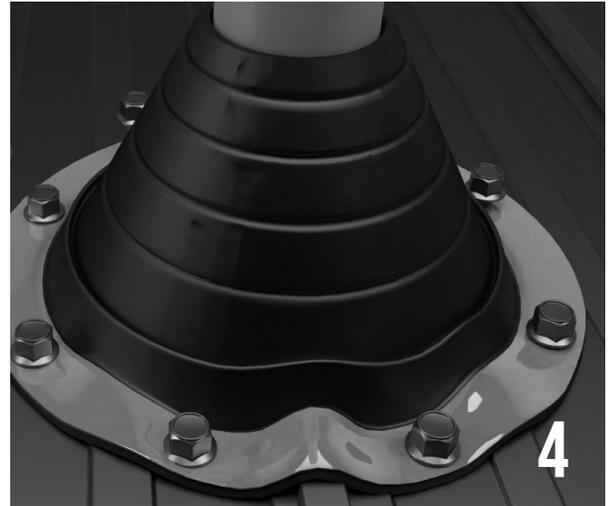
Choose appropriate Master Flash with opening at least 20% smaller than pipe diameter. If necessary trim opening to 20% smaller than pipe diameter.



Slide Master Flash down over pipe. (A nonpetroleum base lubricant will ease installation.)



Apply sealant between base and roof.



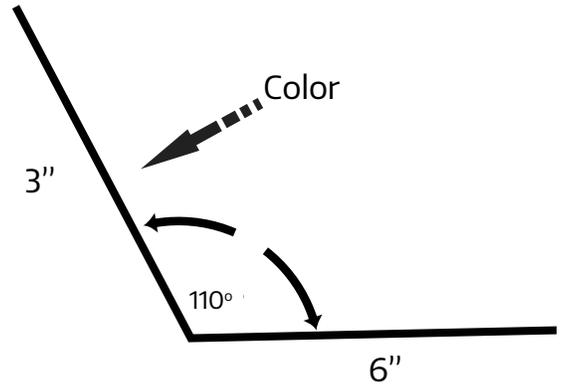
Use fasteners to complete sealing. Space screws no more than 2 1/2" apart around the pipe.

SPECIAL TRIM INFORMATION

Tri County Metals can manufacture special trim designs separate from those designs included in the manual.

If your project requires special trim, please provide us with the following information:

1. A drawing of the trim design.
2. Clearly marked dimensions of each leg of the drawing.
3. Clearly marked degrees of each angle.
4. Clearly indicate the color side.



TRIM MANUFACTURING SPECIFICATIONS

- > Hem size must be 1/2" or larger.
- > Bends on hemmed legs need to be greater than 1/2" or else the hem obstructs the break.
- > Smashed parts need to be at least 1 1/4".
- > Maximum bend break can do is 135 degrees.
- > When bending angles opposite of one another, like that of a Z Flashing, the middle part of the Z must be at least 1/2" or larger.
- > When bending two 90 degree bends on the same side, one leg has to be equal to or less than the length of the material between the two bends.
- > Pieces with more than two bends on the same side are difficult to do unless the bends are large enough. Please talk with a Tri County Metals representative for assistance.
- > For trim pieces that have to slide over another piece where the inside dimensions are critical, please indicate "CRITICAL" measurement.



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CARE AND MAINTENANCE

To maintain the original finish of the metal roofing panels, the only regular maintenance necessary is that of annual washing. Mild solutions of biodegradable cleaner or household ammonia will aid in the removal of most dirt, and the following are recommended levels:

- 1) One cup of Simple Green®, or other non-toxic biodegradable cleaner, which contain less than 0.5% phosphate, dissolved into two gallons of warm water.

NOTE: The use of detergents containing greater than 0.5% phosphate is not recommended for use in general cleaning of building panels. NEVER BLEND CLEANSERS OR DETERGENTS WITH BLEACH.

- 2.) One cup of household ammonia dissolved into five gallons of water (room temperature). Working from the bottom to the top of the metal roofing panels, the panels may be washed with either solution. The use of a well soaked cloth, sponge, brush (with very soft bristles), or a low pressure spray washer is advised.

We do not recommend the use of scouring powders or industrial solvents, since these agents may damage the film. Solvent containing cleaners such as Fantastic®, however, are very effective and can be used without concern. If mildew or other fungal growth is a problem and cannot be removed as outlined above, household bleach, mixed at a concentration of one cup of bleach to five gallons of water, along with one cup of a mild soap (e.g., Ivory) to aid wetting, is recommended.

Once the metal roofing panels is washed, thorough rinsing with clear water is necessary to eliminate the possibility of residue. Failure to remove all residues from these cleaning steps may damage the film.



Make Your Next Roof Your Last!

POLICIES

RETURN POLICY: All Tri County Metals trim is manufactured from either our Mill finish Galvalume® or TCM exclusive painted metal systems and is returnable as long as it is deemed by our Company's Production Manager as being in good, clean and resalable condition, free from scratches, mars and other damages. Tri County Metals reserves the right to charge a 20% restocking fee. The same general principle applies also to the return of other accessories such as screws, boots, closures, etc.

Trim that is custom made (different than the stated specifications in this manual, including L Flashing and Fascia are not returnable, and is considered the property of the customer once it has been made, whether paid for or not. This Policy also pertains to metal roofing and siding panels, which cannot be returned.

PAYMENT: Tri County Metals accepts cash, check, Visa, MasterCard, Discover Card and America Express. Personal checks require the check writers drivers license # and date of birth.

Returned checks will be assessed a \$35 dollar return check fee.

DELIVERY POLICY: Delivery charges apply to all orders where delivery is requested. Please call for details.

SALES TAX: All orders picked up at Tri County Metals, and all orders delivered within the State of Florida, are subject to State Sales Tax. Tax Exemptions should be verified prior to delivery or customer pick up. Orders delivered out of state are tax exempt.

WARRANTED PRODUCTS: Request written warranty for details.

INDEMNITY: All prices and designs are subject to change without notice.

DISCLAIMER: While we have made every attempt at accuracy in this manual, we are not responsible for typographic, printing or technical errors.

The success of Tri County Metals has been, and will continue to be, because of our valued customers. We strive to be a company where contractors as well as home owners are welcome. We will assist you in calculating the materials needed to complete your project and at a price you can afford. We understand that our customer's time is important and we make every effort to get you in and out as quickly and efficiently as possible. Quality, price, service and availability are the mainstays of our business and we don't plan on changing it.



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