INSTALLATION GUIDE

IMPORTANT: PLEASE READ BEFORE YOU BEGIN INSTALLATION.
Before installing any projects with Diamond Kote® Siding System, it is highly recommended the entire installation guide is reviewed.

Click on the chapter heading to go directly to a specific section.

INDEX:

PLEASE REFER TO THE LP® SMARTSIDE® INSTALLATION INSTRUCTIONS FOR THE BELOW:

LAP SIDING

NICKEL GAP SIDING

PANEL SIDING

SOFFIT

TRIM & FASCIA

CLICK HERE FOR LP® SMARTSIDE® INSTALLATION INSTRUCTIONS

CLICK HERE FOR EASYTRIM INSTALLATION INSTRUCTIONS
Internet Connection Required

PRIOR TO INSTALLATION

- Inspect product for any issues before installing (breakage, surface defects, foreign objects, color inconsistency, or color correctness).
- Do not install questionable product.
- Report any problems you may have to your dealer before installing.

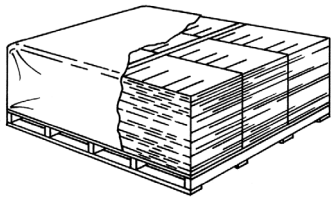
CAL. PROP 65 WARNING:

- This product can expose you to chemicals known to the State of California to cause cancer, birth defects, or other reproductive harm. For more information go to www.P65Warnings.ca.gov

STORAGE

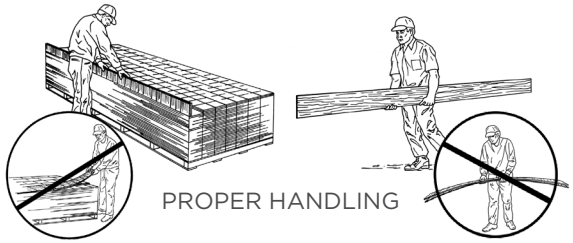
It is important to properly store all Diamond Kote® products for protection.

- Store siding flat on a dry, clean, and well-supported surface. Protect material from direct exposure to weather.
- Do not store directly on the ground.
- Diamond Kote® packaging is not waterproof. All products must be kept dry and covered at all times.
- The factory shroud is for temporary storage and is not sufficient protection while being stored on site during installation.
- Store products under roof or an additional separate waterproof covering.



STORE UNDERCOVER

PROPER HANDLING



PROPER HANDLING

- Product may come in long, heavy sections, which requires proper handling.
- Carry shrink wrapped bundles to desired location before opening to avoid damaging the painted surface.
- Don't carry in a flat position. Pick up product from the center to avoid marring the surface of items below.
- Only carry multiple pieces of siding: face-to-face or back-to-back.
- Do not slide prefinished siding material across each other.
- Support the product when you cut large pieces.
- Sealed product could become saturated if not protected during storage. If the product becomes saturated, do not install until it dries out completely.

GENERAL GUIDELINES

NOTE: Do not use staples.

WARNING: Drilling, sawing, sanding, or machining wood products can expose you to wood dust, a substance known to the State of California to cause cancer. Avoid inhaling wood dust or use a dust mask or other safeguards for personal protection. Visit: www.P65Warnings.ca.gov/wood-dust.

Minimum 6″ clearance must be maintained between siding and finish grade.

- Siding applied adjacent to surfaces such as porches, patios, balconies, walking surfaces, or porch columns must have a clearance of at least 1″ (25 mm) above any horizontal surface.
- Clearance may be reduced to 3/8″ (10 mm) for:
  - Porches, patios, balconies, or walking surfaces that slope away from the structure and are covered by a roof, not an eave or overhang.
  - Porch columns.
- 3/8″ clearance should be left between siding and horizontal flashings.
- All wood substrate that is exposed to the weather must be sealed in a manner that prevents moisture intrusion and water build-up.
- Seal all exposed cuts of siding and trim. Field spray applied coatings on cuts are not recommended.
- Sealing can be accomplished by applying a coating or sealant according to the manufacturer's requirements.
- Butt joints that are covered with joint molding, sealant, or factory prefinished ends, are considered sealed from the weather.
- Siding must not be in direct contact with masonry, concrete, brick, stone, stucco, or mortar.
- Best practice for blind or exposed nailing is to use only 316 stainless steel nails within 15 miles of the seacoast. Beyond 15 miles, either 304 stainless steel or hot-dipped galvanized is acceptable. **NOTE:** Always follow the local building codes for acceptable fastening.
- Adequate drying time must be allowed prior to enclosing the wall cavity when using wet-blown cellulose insulation.
- With wet-blown cellulose insulation, the insulation must not be in direct contact with the siding, and it will need time to dry, a minimum of 24 hours or longer if specified by the insulation manufacturer.
- Diamond Kote® Siding System should be cut in a manner to avoid marring the finished face.
- It is recommended to face the board up when using a combination blade power miter saw.
- Do not force or spring siding into place. Where siding butts window trim, door casing, masonry, etc., leave a 3/16″ gap and caulk. Do not caulk butt joints.
- Seal all gaps with a paintable sealant that meets ASTM C920 Specification, it is recommended to use DAP® SpecLine 920.
- Use drip cap flashing above all horizontal trim to ensure a weather-tight installation. 1″ drip cap is available in all Diamond Kote® colors.

DIAMOND KOTE® 5D BUILDING WRAP CCRR-1018

- Install building wrap over structural sheathing, over insulation board, or directly to studs. Black cords must be vertical.

INSTALLATION

- Begin by aligning the bottom edge of the roll with the base of the wall, approximately 2′ around a corner, fastening securely to structural sheathing, through insulation boards to studs, or directly to studs.
- Unroll building wrap with printed side facing out, wrapping the entire building, including door and window openings. Acceptable fasteners are common galvanized roofing nails, plastic cap nails, 1″ crown staples and 3/8″ non-corrosive staples. Acceptable fastener spacing for WRB applications is 36″ – 48″ vertically along every other stud location.
- **NOTE:** Fewer fasteners may be used to provide preliminary attachment of the building wrap if the siding or cladding installation immediately follows the building wrap installation. However, environmental conditions must be taken into consideration so the building wrap is not damaged by wind or becomes detached. The installer assumes responsibility when fewer fasteners are used. If installing through-wall flashing at the bottom of a wall after building wrap is installed, wrap may remain unfastened to allow for installation of flashing, but must be sealed prior to siding or cladding installation.
- At window rough openings, make a modified “I” cut in the building wrap, fold excess material inside opening, and fasten to studs.
- When the end of a roll is reached, firmly attach the loose end of the building wrap to a stud or structural sheathing. Seams must be overlapped a minimum of 6″ for vertical seams and 2″ for horizontal seams. Upper courses must overlap lower courses in shingle fashion. Sealing of building wrap seams is optional unless the building wrap is intended to be the primary air barrier. If so, then Diamond Kote® Housewrap Tape, or other seam tape approved by Diamond Kote® Siding System, is required on all vertical joints.
- **NOTE:** Use recommended DAP 800 under the 2″ overlap joint on all horizontal seams so as not to Interrupt the drainage plane.

For commercial applications, visit www.kingspan.com/us/en-us/resources

Diamond Kote® 5D Building Wrap is not intended for use as roofing paper or as a vapor retarder for internal use.

DIAMOND KOTE® HOUSEWRAP TAPE

- Make sure the wall surface is flat and free of dust and moisture before installing Diamond Kote® Housewrap Tape.
- Diamond Kote® Housewrap Tape has excellent cold weather adhesion and can be installed in temperatures down to -10°F.
- Diamond Kote® Housewrap Tape is intended for use on vertical building wrap seams only.
- Apply Diamond Kote® Housewrap tape using firm, uniform pressure.

GAPS AND SEALANTS

- **NOTE:** Do not apply sealant to butt joints.
- Seal gaps with a paintable sealant that meets ASTM C920 minimum Class 25 sealant.
- We recommend the DAP® Spec Line 920. Check out the application instructions for the manufactured sealant.
- Do not smear sealant over face nails on prefinished siding as a replacement for touch-up paint.
- Do not tool sealants. DAP® Spec Line 920 sealants are self leveling.

TOUCH-UP PAINT

- Before starting, read all label instructions and warnings.
- Diamond Kote® Touch-Up Paint is intended for use on Diamond Kote® prefinished products only. We cannot guarantee the performance of Diamond Kote® Touch-Up Paint on products not originally prefinished with Diamond Kote®. **NOTE:** DuoBlend touch-up paint is a solid color.
- Only apply paint to bare area. Minimize applying paint over paint.
- Keep container from freezing.
- Be sure to shake quarts, gallons, and 8oz bottles a minimum of 2 minutes to thoroughly mix paint before use!

PROPER DIAMOND KOTE® TOUCH-UP

- Surface must be clean and dry.
- Test the color on a sample piece or hidden area of the siding/trim before applying.
- Do NOT fan out or try to blend the paint.
- Allow 24 hours dry time.
- Apply touch-up paint to all exposed cut edges of siding and trim surfaces, including drip edges, using the provided foam brush or roller applicator.
- Avoid getting touch-up paint on the face of the boards and try not to apply more paint than what is needed.
- Thoroughly paint all the bottom edges of siding especially the cut ends next to the roof line. Touch-up all exposed face nails. Touch-Up Paint Pens are recommended for touch-up painting exposed face nails and on the finished face of products.

- Apply touch-up paint with Diamond Kote® Touch-Up Pens to conceal scratches (up to 1" in length and less than 1/16" wide), exposed nail heads, or small nicks.
- Do not apply touch-up paint to spots greater than 3/4" in diameter.
- It is recommended to apply paint only when air and siding temperatures are above 40° F.

PAINT CARE:

- Do not allow touch-up paint to freeze.
- Do not use the touch-up paint if you suspect it has frozen.
- Clean up with soap and water after use.
- Shake 8oz bottles, quarts, and gallons a minimum of 2 minutes to mix. Inspect for swirling.
- If swirls appear on the surface of the paint, continue shaking until the paint is thoroughly mixed. The absence of swirls on the surface ensures the paint is thoroughly mixed.

TOUCH-UP ROLLERS

- To fill, remove the top, place the Touch-Up Roller on a flat surface and fill the chamber with Diamond Kote® Touch-Up Paint. Securely replace the top.
- Rotate the top until it clicks, and the arrows align to “apply paint”. To draw paint into the roller, gently squeeze the paint chamber while rolling back and forth on a horizontal surface, such as cardboard or newspaper, until the fabric is fully coated.
- Use the Touch-Up Roller for sealing cut ends only. Squeeze bottle as necessary to keep paint flowing.
- When finished, remove the roller head by spreading the wheel sides. Replace the roller head by aligning the pivots and pressing firmly until the wheel clicks into place. Rotate the top to “seal & store” to keep the paint fresh. Stand upright for storage.
- **IMPORTANT:** Replace the roller head after each use.
- **IMPORTANT:** Do not allow paint to freeze. Do not attempt to apply paint that has been frozen.

TOUCH-UP PENS

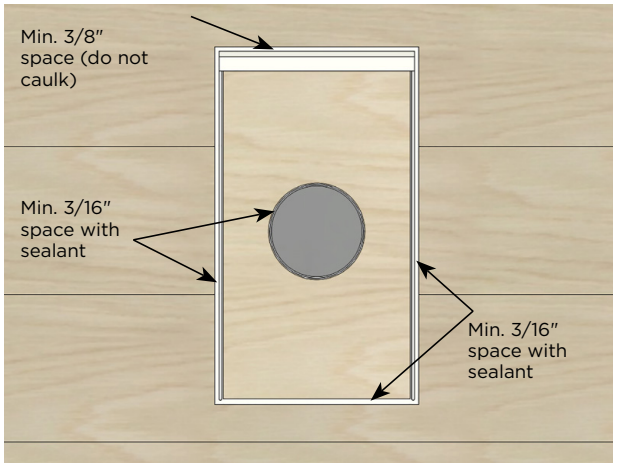
- Use the included syringe to fill the Touch-Up Pen with Diamond Kote® Touch-Up Paint.
- Snap the brush-tip securely into place. **IMPORTANT:** Do not twist the bottom of the pen until it is loaded with paint and ready to use.
- Twist the bottom of the pen to force paint into the brush-tip.
- Use the Touch-Up Pen to conceal small chips, nail heads, or Cortex® plugs.
- When finished painting, thoroughly rinse the brush-tip with water to remove excess paint and replace the cap.
- **IMPORTANT:** Do not allow paint to freeze. Do not attempt to apply paint that has been frozen.

RIGIDMOUNT™

Ensure the penetration is sealed and/or flashed properly by integrating it into the Diamond Kote® 5D Building Wrap. RigidMount™ trim should extend beyond the face of the siding.

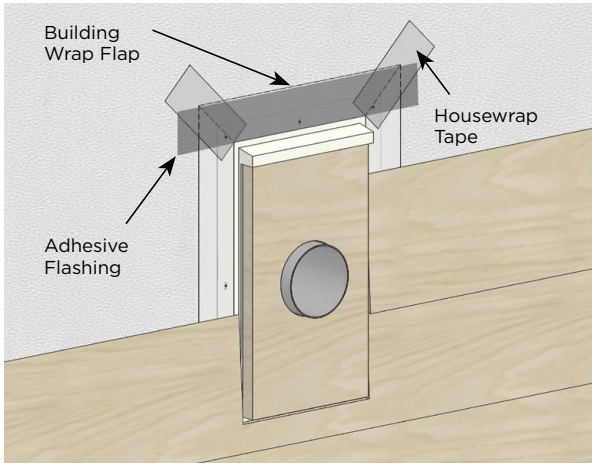
INSTALLATION

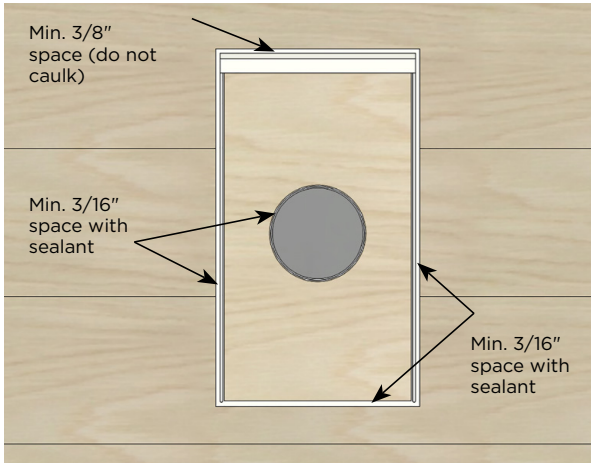
- Start by preparing for the application needed. Some cutting may be necessary for fitment of your specific situation.
- Cuts should always be re-sealed with touch-up paint.
- A jigsaw works best for cutting, be sure to cut from the back to keep the finished surface intact.
- Set the mount into position and mark the weather-resistive barrier by using the nail holes (about 1/2" above the built in flashing) and the outside edges of the flange. **NOTE:** Diamond Kote® 5D Building Wrap is the recommended weather-resistive barrier.
- Remove the mount and slit the weather-resistive barrier horizontally (slightly wider than the top flange across those marks) creating a flap in the weather-resistive barrier.
- Next install the RigidMount™ by slipping the top of the nailing flange under the weather-resistive barrier flap.
- Set the mount at the correct elevation, level, and then fasten the RigidMount™ to the wall, filling every hole in nail flange.
- Hand-driven galvanized roofing nails are recommended for fastening, such as 1-3/4" Maze STORMGUARD®.
- Place the adhesive flashing tape over the top of the RigidMount™ flange, making sure to cover nailing holes.
- Fold the flap down and seal the slit. **NOTE:** If using Diamond Kote® 5D Building Wrap, it is recommended to seal with DAP 800.
- This shingle fashion installation helps shed bulk water out and away from the structure.
- Install siding around the mount and leave the proper spacing between the RigidMount™ placement flange and the siding. (Min. 3/16")
- Note that the top course of siding should be cut 3/8" above the built-in flashing as measured from the face of the siding.
- Make sure to seal cut edges of siding with touch-up paint. This area should be left uncaulked.
- Finish by applying sealant, starting approximately 3/4" in from the top corner and then working your way out, down the side, and across the bottom.
- Also seal the space between the wall penetrating material and the RigidMount™ cut out.
- DAP® Spec Line 920 sealant which meets ASTM C920 Specification is recommended.

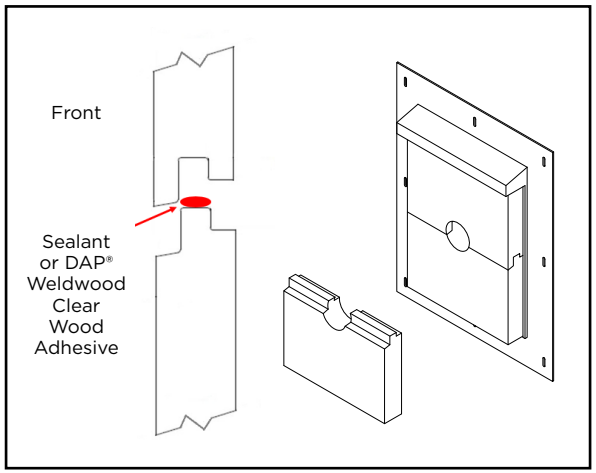


RIGIDMOUNT™ SPLIT BLOCK

- After preparing the RigidMount™ Split Block as detailed above, remove the loose lower half of the mount (set this aside until later).
- Feed the pipe or other application through the rectangular flange hole.
- For remodel applications it may be necessary to cut the bottom of the placement flange to slip this over certain items.
- Install the RigidMount™ Split Block as you would the rest of the mounts. (see pg. 9)
- Then, install the lower half of the Split Block by applying a small bead of color matching sealant or DAP® Weldwood Clear Wood Adhesive to the joint as shown below.
- Next, slide the bottom half of the block back up until the joint is tight.
- No fasteners should be needed to secure lower half of Split Block.





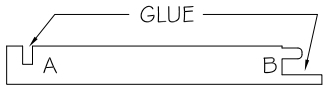


PRO-POST WRAP™

- Pro-Post Wraps are not engineered for structural load-bearing use. These are designed for decorative wraps around structural and non-structural nominal 4″x4″, 4″x6″, and 6″x6″ posts.
- Ensure that areas above brick or stone ledges are properly flashed before installing wraps.
- A minimum 3/8″ clearance should be maintained between Pro-Post Wraps and metal flashings and a minimum 1″ clearance must be maintained between Pro-Post Wrap™ and concrete or decks.

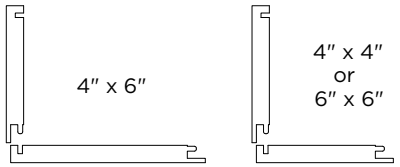
PREPARATION

- Glue all joints with a high quality, fast set, weather-resistive adhesive. Be sure to keep glue warm for proper spread rates.
- Use adhesive with minimum shear strength of no less than 300 psi, as tested in accordance with ASTM D905 Standard Test Method for Strength Properties of Adhesive Bonds in Shear by Compression Loading. We recommend DAP® Weldwood Clear Adhesive.
- Special care must be taken when assembling 4″x6″ Pro-Post Wraps.
- Please note details on proper gluing.
- Measure each post locations separately as there may be variance from post to post.



INSTALLATION

- Begin by cutting all four sides to the desired length.
- Be sure to repaint all cut ends of the Pro-Post Wrap™ with Diamond Kote® Touch-Up Paint before assembly.
- Start with two boards and begin assembling by applying an even bead of the supplied glue, about 1/8″, to Groove A on one board and then Groove B on the other board, this will create an ″L″ shaped piece.
- When assembling the 4″x6″ post, be sure to glue Groove B on the 4″ board and Groove A on the 6″ board. Assemble so the 4″ board is the top of the “L” and the 6″ board is the bottom of the “L”.



- Working quickly, assemble the pieces and clamp as necessary using bar clamps to bring the joints together tightly. Apply enough pressure to secure fitment, being careful not to break edges of trim.
- Repeat this step in order to create a second “L”.
- Next, glue Groove A and Groove B on BOTH of the “L” shaped pieces.
- Join the two “L” shaped pieces around the post to be wrapped creating a 4-sided post wrap. Clamp as necessary using bar clamps to bring the joints tightly together. Leave the clamps installed until the glue sets (approx. 5-10 min.)
- Installations in cold temperatures or dry climates may require longer clamping times. Position the wrap on the post for best appearance and plumb as needed.
- Begin fastening on the side that is in the most direct contact with the post. Be careful to keep the nails away from the structural post mounting hardware. Fasten around the post, with one nail minimum, at the top and bottom on all four sides. Touch-up all nail heads using Diamond Kote® Touch-Up Paint and Touch-Up Pen.
- You can complete the installation with a site built trim ring. The best practice is to keep trims 3/8″ above flashings and/or 1″ above concrete or decks. Trim rings constructed of PVC trim are recommended for areas close to grade. Items installed without the proper clearances to grade may not be covered under manufacturer's warranties.

DRIP CAP

INSTALLATION

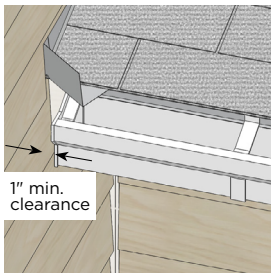
- Cut the drip cap to length.
- Mark the building wrap by putting the drip cap on top of the trim, mark it ¾″ down from the top leg of the drip cap and then cut it so that the drip cap can be slid under the building wrap flap to allow water to shed.
- Slide the drip cap under the building wrap and secure it with 1-1/2″ hot dipped galvanized roofing nails.
- When securing the drip cap, be sure to keep fasteners and building wrap at least 3/8″ above drip cap so they are not exposed once the siding is installed.
- To keep the drainage plane of the building wrap from being interrupted, seal under the building wrap flap with DAP 800.

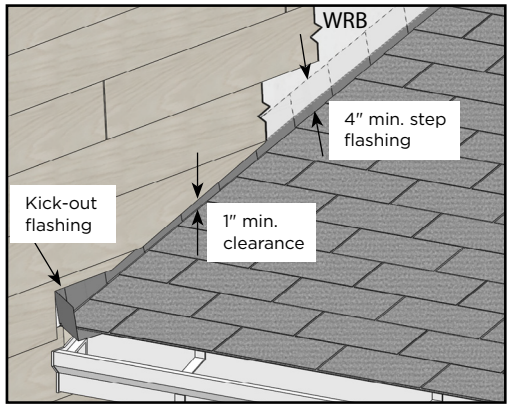
DIVERTER FLASHING

INSTALLATION

- **NOTE:** Do not extend the siding or trim into the kick-out flashing or gutter.
  - Additional metal flashing may be required to achieve this.
- Install kick-out flashing to direct the water into the gutter.
- A recommended product would be the DryFlekt® Kick-Out Diverters.
- Install step flashing with minimum 4″ upper leg.
- Properly integrate flashing with the secondary water-resistive barrier.
- Use Diamond Kote® Building Wrap, z-flashing, or other items as needed to maintain the counter flashing principle.
- Maintain the proper clearance between the end of the gutter and the adjoining wall to allow for proper maintenance of the siding.
- Paint all exposed cut edges; Roof to wall details.

ROOF FLASHING DETAIL

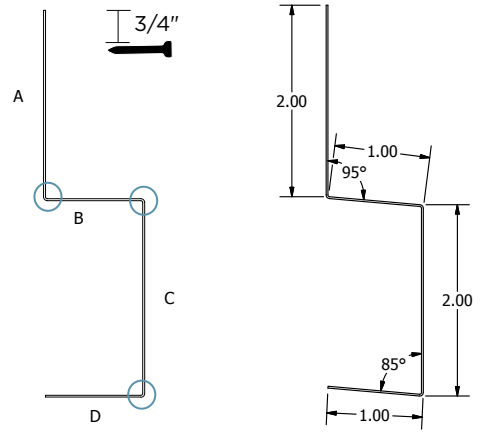




SPACER FLASHING

INSTALLATION

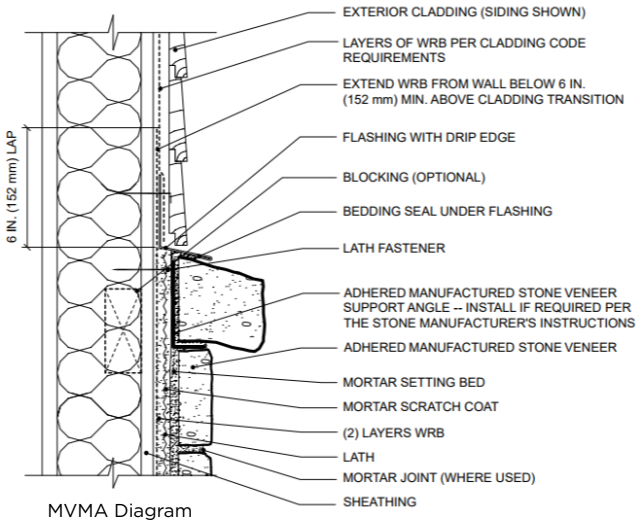
- Spacer Flashing is designed to allow for the minimum clearance requirements for proper spacing between siding materials and roofing, decks, driveways, or sidewalks.
- Spacer Flashing can be installed with side “D” in moderate contact, or slightly gapped from the roofing, deck, driveway, or sidewalk.
- It is recommended to close the open end of the Spacer Flashing by making approximately 1″ deep cuts on the bends (circled in Spacer Diagram) in from the end of the piece. Then bend the tabs created from those cuts inward in this order: B, D, then C.
- Fasten through side “A” to the wall every 12″-16″ on center. Place fastener 3/4″ down from the top of side “A”.
- Properly integrate flashing with the secondary water-resistive barrier.
- Use Diamond Kote® Building Wrap or other items as needed to maintain the counter flashing principle.
- When installing siding, it's important to retain 3/8″ minimum clearance between the siding panels and side “B” of the Spacer Flashing and DO NOT caulk.



Spacer Diagram

BRICK LEDGE FLASHING

- Brick Flashing is designed to protect the structure from water penetration by flashing behind the siding and shed water away from the house at the transition where siding and stone or brick meet.
- Brick Ledge Flashing should be installed as shown in the Masonry Veneer Manufactures Association (MVMA) installation guide.

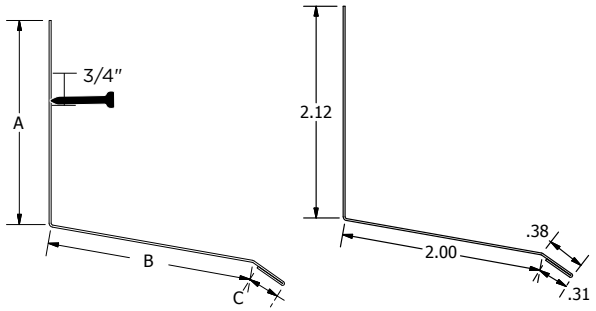


MVMA Diagram

- It is recommended to use bedding sealant under side “B” of the flashing. DAP® Spec Line 920 Sealant is recommended.
- Verify installation requirements with brick or adhered concrete masonry veneer manufacturer.

INSTALLATION

- Fasten through side “A” to the wall every 12″-16″ on center. Place fastener 3/4″ down from the top of side “A”.
- Properly integrate flashing with the secondary water-resistive barrier.



Brick Ledge Diagram

- Use Diamond Kote® Building Wrap or other items as needed to maintain the counter flashing principle. See the MVMA diagram.
- When installing siding, it's important to retain 3/8″ minimum clearance between the siding panels and side “B” of the Brick Ledge Flashing and do not caulk.

H-MOLDING

- **NOTE:** H-Moldings do not space the board for expansion. H-Moldings are designed to cover the expansion gap.
- Butt joints must occur over studs when not installing over minimum 7/16″ structural sheathing. For alternate nailing pattern into structural sheathing see APA Product Report PR-N124.
- Using the factory painted ends of the board at butt joints is highly recommended.
- Leave a 1/4″ gap between the siding pieces. 3/16″ gap plus the thickness of H-Molding web equals 1/4″.
- Apply both adjoining pieces of the siding, fasten along the entire length (except for the ends) with the required gap.
- Then, slide the H-Molding in place, from the bottom of the siding up, slightly bending outward on the flanges first to help the H-Molding slide into place. (Figure 1a)
- Finish fastening by nailing both pieces of siding at the end of the siding.
- At butt joints, fasteners should be driven 3/4″ down from the top and 3/8″ in from the ends.


Figure 1a

Bend slightly outward on the flanges

STARTER BOARD

Starter Boards can be installed at finished grade. Best practice is to install Starter Board using the following manner:

- Min. of 6″ clearance must be maintained between corners and finished grade. Notch Starter Board to achieve proper clearance. (Figure 2a)
- Be sure to snap a level line as this will set the exact placement for the first course of siding. (Figure 2b)

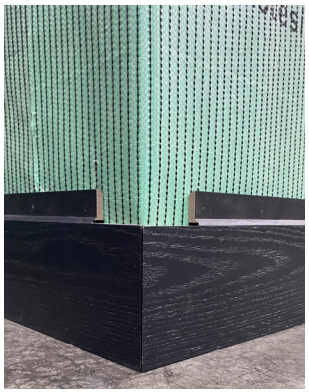


Figure 2a

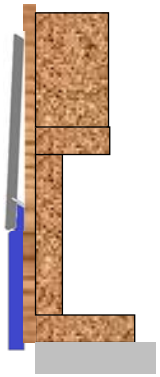


Figure 2b

CERTA-TRIM STARTER BOARD INSTALLATION

- Use 3 Cortex® fasteners at every framing member. For more information refer to CertainTeed® Certa-Trim install instructions.
- Using the Cortex® setting tool, set the Cortex® fasteners perpendicular to the trim board, spaced a max. of 16″ o.c.
- Using a standard 18V cordless impact drill, drive the fastener to the pre-set level below the trim surface.
- Place the PVC trim plug into the hole with the trim-surface-side up and gently tap until it is flush with the starter board.
- Finish by painting the plugs with Diamond Kote® Touch-Up Paint using a Touch-Up Pen.

TRUEXTERIOR STARTER BOARD INSTALLATION

***SAFETY NOTE:** When cutting or shaping, avoid breathing dust. Use only outdoors or in a well-ventilated area. In case of inadequate ventilation, use respiratory protection. Always wear eye protection.

*Boral Trim should never be used for structural or load bearing applications.

- On long runs, use butt joints cut at 30 to 45 degree angles.
- Use 2 fasteners every 16″ along the length of the trim piece. Use .113 x 2-3/8″ or greater stainless steel or hot-dipped hand-driven or pneumatic ring shank nail; 15 gauge trim nails; or exterior-grade trim head screws within 2″ of the edge of the trim piece.
- Cortex® screw and plug fasteners available for TruExterior Starter Board.
- When installing in situations where fasteners are unable to penetrate solid framing, fasten into minimum 7/16″ O.S.B. or 15/32″ plywood no more than 12″ apart along the length.

RIGIDSTACK™ METAL STARTER STRIP INSTALLATION

- The bottom edge of RigidStack™ Metal Starter Strip should be installed at the foundation along the sill plate or up to 1-1/8″ below this to properly hold the bottom of Lap Siding with RigidStack™ in place.
- Placement may vary as required by course layout. (Figure 2c)
- Snap a level chalk line 3-3/8″ above the bottom of where the first course of siding will start. Align the TOP of the metal starter strip on the chalk line. RigidStack™ Metal Starter Strip will set the exact placement for the 1st course of siding.
- Fasten the RigidStack™ Metal Starter Strip every 12″-16″ on center.

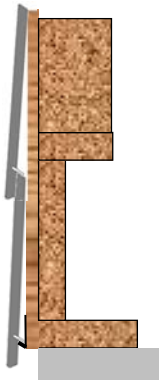


Figure 2c

LAP SIDING WITH RIGIDSTACK™

- Apply the siding over properly prepared walls. (see general guidelines on page 2) .
- Diamond Kote® Lap Siding with RigidStack™ products are installed blind fastened.
- It can be installed by starting with a RigidStack™ Metal Starter Strip, or by stacking onto a Diamond Kote® Starter Board.
- Begin by installing Diamond Kote® Nail Fin Outside Corners and Nail Fin Trim.
- Next, install the appropriate starter material, being sure to keep the bottom of the siding at least 6″ from finished grade.

INSTALLATION

- Now install the first course of siding so that the plastic spline fastened into the back of the siding fits over the beveled edge of the starter board (Figure 2b) or into the Metal Starter Strip, as shown in. (Figure 2c)
- If using Standard Trim, or Nail Fin Corners, leave a 3/16″ gap where the siding butts the trim.
- If using Rabbeted Nail Fin Trim and/or Outside Corners leave a 3/16″ gap where siding butts the inside of the pocket.
- When attaching siding, avoid nailing closer than 1-1/2″ from the end of the board to avoid penetration of the power nails into the nail fin.
- Fasten the siding by nailing through the nail line (about 3/4″ from top edge of siding) at each stud, leaving no more than 16″ between nails.
- Begin nailing at one end of the siding and work toward the other end to prevent rippling of the siding. Do not countersink nail heads.
- Then, install subsequent courses of siding so that the plastic spline fits over the top edge of the previously installed piece of siding.
- Make sure that the spline is firmly seated to the top of the previous course by pushing in and slightly down on the face, BEFORE and DURING nailing, to ensure the material lines up at the butt joints and at course lines at the corners.
- At some point during the installation, it may be necessary to remove the spline from the back of the siding material. Removal of the spline is not uncommon and does not void the substrate or finish warranty. To remove the spline, grasp it using a pliers at first, then with your hand. Wiggle it back and forth while pulling upwards, cut as necessary, or continue until the entire spline is removed.

Remove and/or cut the spline:

- To make the courses line up at corners or to adjust for an out of level wall.
- During installations in gable ends or the last course of siding under an eave, remove 4″ of the spline at the ends of the boards that intersect soffits or rooflines.

JOINT PREPARATIONS USING H-MOLDINGS

- When using Lap Siding with RigidStack™ the butt joints are REQUIRED to be covered with an H-Molding. (Figure 2f)

H-Moldings do not automatically space the board for expansion. They're designed to cover the expansion gap.

- Diamond Kote® does not recommend the use of caulk on butt joints!
- Leave a 1/4″ gap between siding pieces. 3/16″ gap plus thickness of H-Molding web equals 1/4″.
- Best method is to install both adjoining pieces of siding fastening along the entire length (except for the ends with the 1/4″ gap).
- Then, slide the H-Molding in place from the bottom of the siding up. Slightly bending outward on the flange first to help the H-Molding slide into place. (Figure 2f)
- Finish fastening by nailing both pieces of siding at the end of the siding.
- At butt joints, fasteners should be driven 3/4″ down from the top and 3/8″ in from the ends.
- Fasteners below window sill need to be spaced a maximum of 8″ o.c. Fasteners will be exposed on the siding located immediately below window sills, fascia boards, and horizontal trim.

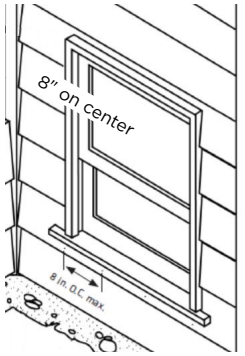


Figure 2e

Slightly bend tips of flanges on one end

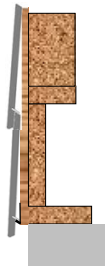
Figure 2f

SHAKE SIDING WITH RIGIDSTACK™ STRAIGHT EDGE: 7", 9", & 12"

- Apply the siding over properly prepared walls. (see general guidelines on page 2)
- It is required to use nailable structural sheathing.
- Diamond Kote® Shake Siding with RigidStack™ products are installed blind fastened to sheathing only and are not required to be nailed into studs.

INSTALLATION

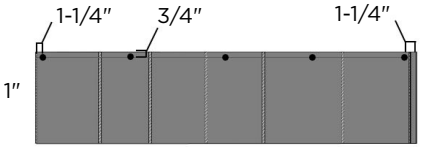
- Start installation with a Metal Starter Strip or by overlapping a previous course of lap siding (2-1/16" minimum) or by over lapping the top of Starter Board. (Figure 3)
- It is recommended to use the Metal Starter Strip when starting with the Straight Edge Shake. (Figure 3a)
- Work installations left to right.
- If using Standard Trim, or Nail Fin Corners, leave a 3/16" gap where the siding butts the trim.
- If using Rabbeted Nail Fin Trim and/or Outside Corners leave a 3/16" gap where siding butts the inside of the pocket.
- Butt joint seams are not required to land on studs.



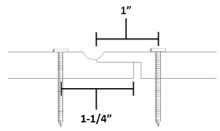
Bottom Course Detail Figure 3a

- Starting from left, level and install the first course of shakes so that the plastic spline, fastened into the back of the siding, fits over the beveled edge of the siding, or into the metal starter strip.
- Do not place fasteners into bottoms of grooves or shiplaps.
- Fasten the siding by nailing through the nailing line 3/4" down from the top of panel, into the sheathing and/or framing with one of the below options:
  - For screws, fasten 12" o.c. use a minimum #8 corrosion resistant tapered head wood screw. (Figure 3b)
  - For nails, fasten 8" o.c. use a minimum 6d (0.09" shank diameter) corrosion resistant ring shank nail. (Figure 3c)
- Fastener length should be long enough to fully penetrate wood structural panel sheathing by at least 1/4". Ensure that the ring shanks of the fastener fully engage the wood structural panel sheathing.
- Continue row, working left to right. Overlap shiplap butt ends without any gap. (Figure 3d)
- Start subsequent courses in same manner, but trim each course to create the effect of staggered joints.
- Best appearance is obtained by trimming the second course starter piece 16" shorter than the first course, and trimming the third course starter piece 32" shorter than the first.
- Repeat this same sequence every 3 courses.
- Shim siding at studs, as needed, to avoid drawing siding against uneven walls. (Figure 3) Then, install subsequent courses of siding so that the plastic spline fits over the top edge of the previously installed piece of siding. (Figure 3e)

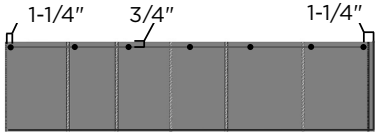
Screw Placement 12" o.c. Detail Figure 3b



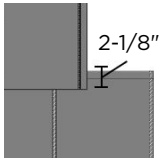
Shiplap Butt Ends Figure 3d



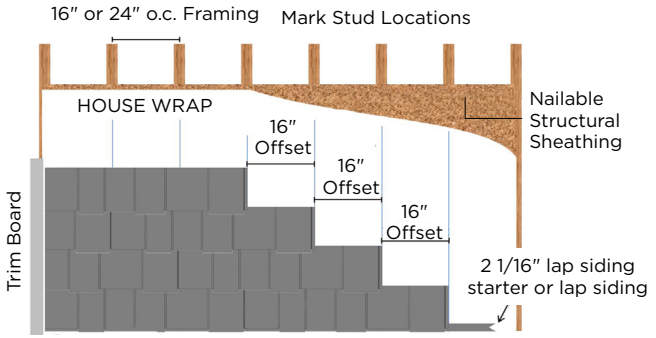
Nail Placement 8" o.c. Detail Figure 3c



Minimum Overlap Figure 3e



Straight Edge Application Figure 3

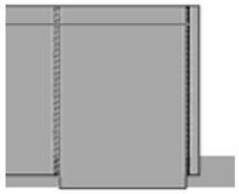


SHAKE SIDING WITH RIGIDSTACK™ STAGGERED EDGE: 7", 9", & 12"

- Apply the siding over properly prepared walls. (see general guidelines on page 2)
- It is required to use nailable structural sheathing.
- Diamond Kote® Shake with RigidStack™ products are installed blind fastened to sheathing only and are not required to be nailed into studs.

INSTALLATION

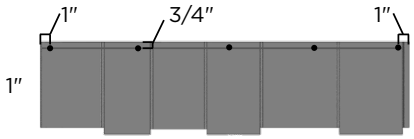
- If not installing over lap siding the preferred way to begin is to first install a row of straight shakes then all subsequent rows of staggered shakes. (see page 17 for starting Straight Shakes with Lap Siding)
- Do not cut off the bottom factory end of staggered shakes to start a 'straight' row! This practice will void substrate warranty.
- An optional starting method is to use a 3/8" x 2-1/16" piece of same color lap siding as a starter shim, as this will partially show because of the staggered bottom edge.
- Cut this at a 30 degree bevel and paint all cut edges. Install keeping the factory painted edge down. (Figure 4a)
- Work installations left to right. Start installation by overlapping the previous course of lap siding. (Figure 4)
- If using Standard Trim, or Nail Fin Corners, leave a 3/16" gap where the siding butts the trim.
- If using Rabbeted Nail Fin Trim and/or Outside Corners leave a 3/16" gap where siding butts the inside of the pocket.
- Butt joint seams are not required to land on studs.
- Starting from left, level and install the first course of Diamond Kote® Shake with RigidStack™ so the bottom edge is flush with the shim.
- Do not place fasteners into bottoms of grooves or shiplaps.
- Fasten the siding by nailing through the nailing line 3/4" down from the top of panel, into the sheathing and/or framing with one of the below options:
  - For screws, fasten 12" o.c. using a minimum #8 corrosion resistant tapered head wood screw. (Figure 4b)
  - For nails, fasten 8" o.c. using a minimum 6d (0.09" shank diameter) corrosion resistant ring shank nail. (Figure 4c)
- Fastener length should be long enough to fully penetrate wood structural panel sheathing by at least 1/4". Ensure that the ring shanks of the fastener fully engage the wood structural panel sheathing.
- Continue row, working left to right. Overlap shiplap butt ends without any gap. (Figure 4d)
- Start subsequent courses in same manner but trim each course to create the effect of staggered joints.



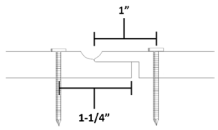
Bottom Course Detail
Figure 4a

- Best appearance is obtained by trimming second course starter piece 16" shorter than the first course and trimming the third course starter piece 32" shorter than the first.
- Repeat this same sequence every 3 courses.
- Shim siding at studs, as needed, to avoid drawing siding against uneven walls. (Figure 4) Then, install subsequent courses of siding so that the plastic spline fits over the top edge of the previously installed piece of siding. (Figure 4e)

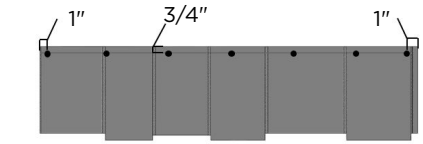
Screw Placement 12" o.c. Detail
Figure 4b



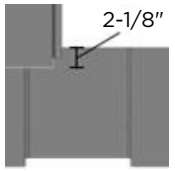
Shiplap Butt Ends
Figure 4d



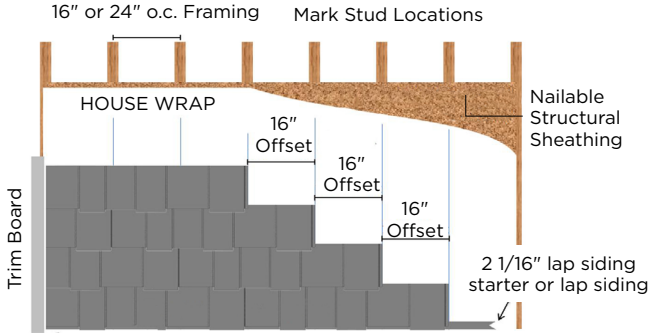
Nail Placement 8" o.c. Detail
Figure 4c



Minimum Overlap
Figure 4e



Straight Edge Application
Figure 4



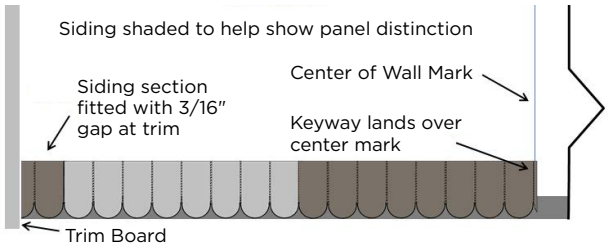
OCTAGON & SCALLOP SHAKES

Prior to installation: Find the center of the gable or wall so that shapes will be visually centered. For best finished appearance, gable installations should end with a single Scallop or Octagon at the peak.

STRAIGHT WALL PREPARATION

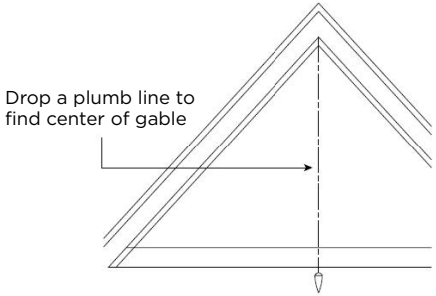
- Begin by measuring the length of the wall between the corner trims.
- Next, divide length of wall by two to find the center of the wall.
- Mark the center of the wall.
- The easiest layout for the Octagons or Scallops to be visually centered on the wall, is to start so that a keyway lands over the center of wall mark.
- Calculate the layout of full panels from the center mark and make a mark on the wall (full panels measure 48″).
- Measure from the trim to the mark so that siding section fits against corner board, with a 3/16″ gap.
- Trim left side of a panel to fit and begin installation.

Layout of Scallops and Octagons from Center of Wall Mark



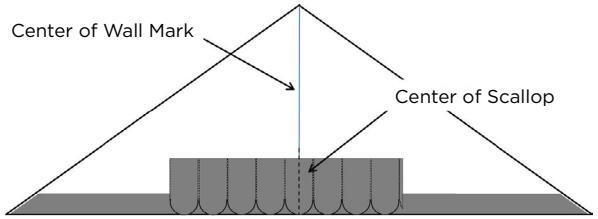
GABLE PREPARATION

- Start by dropping a plumb line to find the center of the gable. Mark this line.
- Next measure the height of the gable (in inches) on this line. For Octagons divide by 9-5/8″. For Scallops divide by 7-3/4″.



- The purpose of this simple equation is to find out the number of courses or rows.
- Then, divide the height of the gable by the size of the exposure of the profile that will be installed.
- If the answer is an even number, center the first course of Scallop or Octagons on a keyway.
- If the answer is an odd number, center the first course on a Scallop or Octagon.
- Example: 64″ gable height with scallops. (64″÷ 7.75″ = 8.25 - Eight is an even number, do not worry about the decimal, center on a keyway to start.)

- Begin by locating the first piece relative to the centerline of the gable. The panel may be positioned anywhere along its length, as long as the keyway or shingle face is centered.



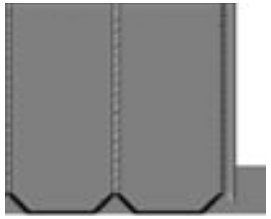
OCTAGON SHAKE

- Apply the siding over properly prepared walls. (see general guidelines on page 2)
- It is required to use nailable structural sheathing.
- Diamond Kote® Octagons are installed blind fastened to sheathing only and are not required to be nailed into studs.

INSTALLATION

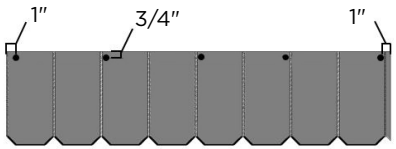
- Start installation left to right.
- It is recommended to use a 3/8" x 2-1/8" piece of same color lap siding as a starter strip, as this will partially show because of the angled bottom edge. Paint all cut edges and install keeping the factory painted edge down. (Figure 5a)
- If using Standard Trim, or Nail Fin Corners, leave a 3/16" gap where the siding butts the trim.
- If using Rabbeted Nail Fin Trim and/or Outside Corners leave a 3/16" gap where siding butts the inside of the pocket.
- Butt joint seams are not required to land on studs.

Bottom Course Detail
Figure 5a

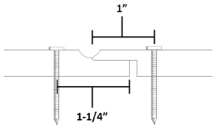


- Do not place fasteners into bottoms of grooves or shiplaps.
- Fasten 3/4" down from the top of panel, into sheathing and/or framing with one of the below options.
  - For screws, fasten 12" on center using a minimum #8 corrosion resistant tapered head wood screw. (Figure 5b)
  - For nails, fasten 8" on center using a minimum of 6d (0.09" shank diameter) corrosion resistant ring shank nail. (Figure 5c)
- Fastener length should be long enough to fully penetrate wood structural panel sheathing by at least 1/4". Ensure that the ring shanks of the fastener fully engage the wood structural panel sheathing.
- Continue row, working left to right. Overlap shiplap butt ends without any gap. (Figure 5d)
- Start subsequent courses in the same manner by overlapping courses a minimum of 2-1/8". (Figure 5e)
- Offset each course to affect staggered joints. Best appearance is installing second course starter piece 21" shorter than the first course. (Figure 5)
- Start the third course starter piece 27" shorter than the second course. (Figure 5)
- Repeat this sequence every 3 courses. Shim siding at studs, as needed, to avoid drawing siding against uneven walls.

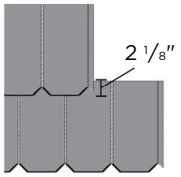
Screw Placement 12" o.c. Detail
Figure 5b



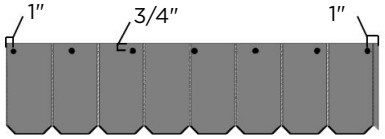
Shiplap butt ends
Figure 5d



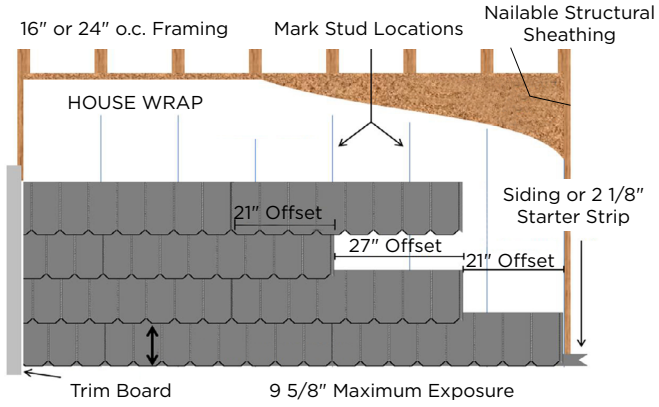
Minimum Overlap
Figure 5e



Nail Placement 8" o.c. Detail
Figure 5c



Octagon Application
Figure 5



SCALLOP SHAKE

- Apply siding over properly prepared walls. (see general guidelines on page 2)
- It is required to use Nailable structural sheathing. Scallops are installed blind fastened to sheathing only and are not required to be nailed into studs.
- Scallops can be installed by starting with a starter strip or by overlapping a previous course of lap siding (4″ minimum). (Figure 6)

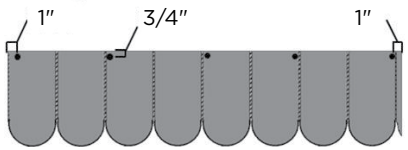
INSTALLATION

- Start installation left to right.
- It is recommended to use a 3/8″ x 4″ piece of same color lap siding as a starter shim, as this will partially show because of the rounded bottom edge. Paint all cut edges and install keeping the factory painted edge down. (Figure 6a)
- If using Standard Trim, or Nail Fin Corners, leave a 3/16″ gap where the siding butts the trim.
- If using Rabbeted Nail Fin Trim and/or Outside Corners leave a 3/16″ gap where siding butts the inside of the pocket.
- Butt joint seams are not required to land on studs.

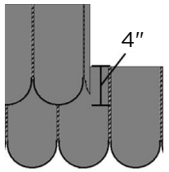
Bottom Course Detail
Figure 6a

- Do not place fasteners into bottoms of grooves or shiplaps.
- Fasten 3/4″ down from the top of panel, into sheathing and/or framing with one of the below options.
  - For screws, fasten 12″ on center using a minimum #8 corrosion resistant tapered head wood screw. (Figure 6b)
  - For nails, fasten 8″ on center using a minimum of 6d (0.09″ shank diameter) corrosion resistant ring shank nail. (Figure 6c)
- Fastener length should be long enough to fully penetrate wood structural panel sheathing by at least 1/4″. Ensure that the ring shanks of the fastener fully engage the wood structural panel sheathing.
- Continue row, working left to right. Overlap shiplap butt ends without any gap. (Figure 6d)
- Start subsequent courses in the same manner by overlapping courses a minimum of 4″. (Figure 6e)
- Offset each course to affect staggered joints. Best appearance is obtained by installing second course starter piece 21″ shorter than the first course. (Figure 6)
- Start the third course starter piece 27″ shorter than the second course. (Figure 6)
- Repeat this sequence every 3 courses. Shim siding at studs, as needed, to avoid drawing siding against uneven walls.

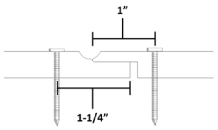
Screw Placement 12″ o.c. Detail
Figure 6b



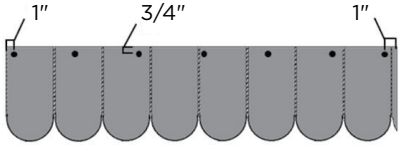
Minimum Overlap
Figure 6e



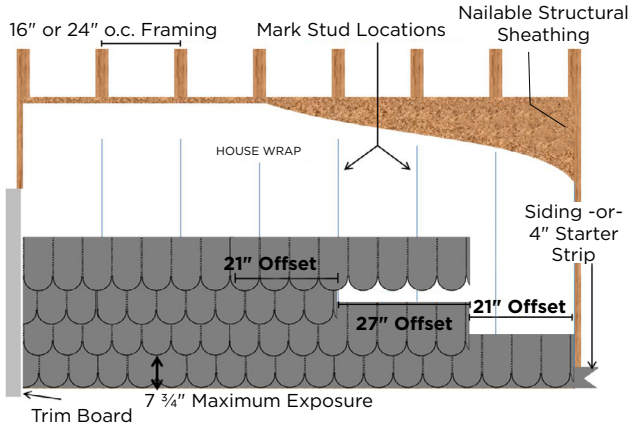
Shiplap butt ends
Figure 6d



Nail Placement 8″ o.c. Detail
Figure 6d



Scallops Application Figure 6



RABBETED NAIL FIN INSIDE AND OUTSIDE CORNERS

It is recommended to install corners with nailing fin over nailable structural sheathing. Some face nailing may be required if nailable sheathing is not present.

- Apply corners over properly prepared walls. (see general guidelines on page 2)
- Diamond Kote® Rabbeted Nail Fin Inside and Outside Corners are designed to be installed blind nailed through the attached nail fins to help complete a hidden fastener install.
- Install corners and trims first before beginning installation of the siding products. Start by carefully removing the corners from protective shipping packaging. Do not cut packaging on face of material.
- Avoid drawing corners against uneven or out of square walls. Before installation make sure that the foundation or foundation coverings do not project beyond the plane of the wall.
- Shim as necessary to avoid potential to split corners lengthwise.
- Minimum 6″ clearance must be maintained between corners and finished grade. Notch Starter Board as shown to achieve proper clearance. (Figures 7a and 7b)

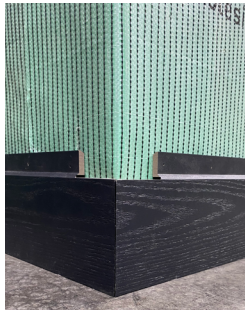


Figure 7a

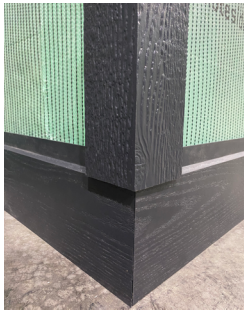


Figure 7b

FINGER JOINTS

- 10′ corners are manufactured with a random finger jointed trim board. For aesthetic purposes it is recommended to attempt to turn, flip, and/or cut off corners in order to reduce the visibility of the finger joints around high traffic areas of the building. 16′ outside corners do not contain finger joints.

CUTTING

- Measure and mark corners for length, typically 1/2″ - 3/4″ lower than the bottom course of siding.
- Cut corners carefully to avoid marring the finished surface.
- It is recommended to utilize a compound miter saw for cutting.

SEALING

- Diamond Kote® Touch-Up Pens are recommended for touch-up painting on the finished face of products. Paint and/or seal ALL cut ends and edges of corners using a Diamond Kote® Touch-Up Roller.

FASTENING

- Not recommended to use pneumatic roofing, or siding nail guns to install trim with nailing fin.
- When attaching siding, avoid nailing closer than 1-1/2″ from the end of the board so the power nail does not penetrate the nail fin of the corner.
- Use hand-driven galvanized roofing nails for installation of corners.
- 1-3/4″ StormGuard Ring shank nails from Maze Nails are recommended.
- When installing over (up to) 1″ rigid foam sheathing, be careful not to drive nails so hard as to compress the foam and distort the fin. Nail length must be increased to ensure penetration of the wood substrate.

CONTINUED ON NEXT PAGE

RABBETED NAIL FIN OUTSIDE CORNER (CONT.)

INSTALLATION

- Hold the corner up to the wall, level, plumb and set it to the correct height before nailing.
- Alternate nailing through the fin in the provided holes on both sides of the corner.
- Fasten every 3rd hole.
- Do not overdrive nails.
- Nail heads should be set firmly to the face of fin, but should not be over driven to distort or damage the fin surface.

STACKING:

FOR 2 CORNERS, ONE JOINT

- Lightly butt painted cut ends together and leave a 3/16" gap where the top corner meets the soffit.

FOR 3 OR MORE CORNERS 2+ JOINTS:

- Leave a 1/8" gap between painted cut ends and apply a small bead of color matched sealant by back caulking during assembly. Leave a 3/16" gap where the top corner meets the soffit.

NAIL FIN OUTSIDE CORNERS

- See Rabbeted Nail Fin Outside Corners (above) for recommendations and installation steps.

INDIVIDUAL METAL OUTSIDE CORNERS

Install the siding as per manufacturer's recommendations. While installing, please be sure to observe the following cautions:

- Space boards 1/4" from the building corner in each direction. (Figure 8a)
- If the siding is installed 'short' at the corners, the siding corners may not be long enough to adequately cover the siding at the bottom.
- Be sure that the bottom edge of two courses line up. If not, one side or the other will have a gap when the corner is installed. (Figure 8b)
- If you need to bottom nail the siding, do not nail within 4" of the corner.

INSTALLATION

- Starting with the bottom course, carefully slide the first metal corner up and under the second course. Continue until the bottom wrap around lip is fully fitted to the bottom courses.
- Nail diagonally into the corner stud, using a galvanized nail with a head of at least 3/16", and a length sufficient to penetrate the stud at least 1". (Figure 8c)
- While driving the nail, pay attention to the vertical and horizontal alignment of the siding corner. By drifting the nail left/right/up/down, it is fairly simple to ensure good alignment of the corner. Drive the nail so that the corner is snug, but do not overdrive the nail, as the corner will become distorted and have to be replaced. Do not use a power nailer!
- Repeat steps working from the bottom up. Trim the last corner to fit, and nail on the sides (top corner only).

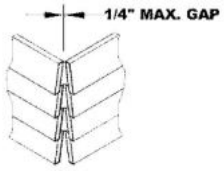


Figure 8a

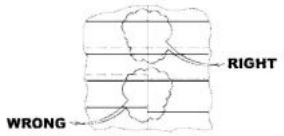


Figure 8b

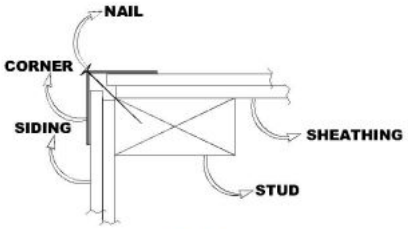


Figure 8c

RABBETED NAIL FIN TRIM

- Apply trim over properly prepared walls. (see general guidelines on page 2)
- Ensure all Building Wrap and Flashing Tapes are properly installed.
- It's recommended to install Diamond Kote® Rabbeted Nail Fin Trim over nailable structural sheathing.
- If nailable sheathing is not present, some face nailing may be required.
- Horizontal trim or bands shall be flashed with drip cap to redirect water away from the wall assembly.
- Rabbeted Nail Fin Trim is designed to be blind nailed through the attached nailing fin to help complete a hidden fastener installation.
- Install the outside corners and trim first before installation of siding products.
- Start by carefully removing trim from protective shipping packaging.
- Do not cut packaging on face of material. Avoid drawing trim against uneven or out of plane surfaces.

CUTTING

- It is recommended to cut trim face up and to utilize power compound miter saws.
- Align edge of trim without fin against fence.
- When cutting by circular saw, it is recommended to cut face down.
- Be careful to avoid marring the finished surfaces.

SEALING

- Paint and/or seal ALL cut ends and edges of trim. Diamond Kote® Touch-Up Rollers are recommended for touch-up painting cut ends.

TRIM NAILING REQUIREMENTS

- Hand-driven galvanized roofing nails are recommended for installing trim with nailing fin. (1-3/4" StormGuard® Ring shank nails from Maze Nails are recommended).

Not recommended to use pneumatic roofing, or siding nail guns to install.

- When installing siding after trim, avoid nailing closer than 1-1/2" from the end of the board so the power nail does not penetrate the nail fin.
- When installing trim over up to 1" rigid foam sheathing, be careful not to drive nails so hard as to compress the foam and distort the fin.

INSTALLATION FOR WINDOW/DOOR FRAME WITH L BRACKETS

- Measure your opening, making sure you leave proper clearance between the trim and the opening.
- Cut the trim to length, mitering the ends of the trim at a 45 degree angle for best installation. Remember to paint all cut ends with Diamond Kote® color-matched touch-up paint.
- Assemble the trim together using Diamond Kote® L Brackets to create your window or door frame. Start on one end of the trim, and insert the metal L Bracket into the kerf of the trim (Figure 9a).

Figure 9a

Figure 9b

Figure 9c

Figure 9d

Figure 9e

- Then, slide the next piece of trim onto the bracket to create an "L" with your trim pieces (Figure 9b).
- When the miter cuts of the trim pieces are aligned, staple the back of the miters together using a 3/8" non-corrosive staple (Figure 9c).
- Repeat the previous two steps until you have a window or door frame.
- Put the trim frame around the window or door, ensuring a 3/8" gap is left at the top. Refer to the manufacturer's recommendation on proper gapping on the bottom and sides of the window or door.
- Using a hammer, and 1-1/2" hot dipped galvanized roofing nails, fasten the trim around the window by nailing every 3rd hole.

CONTINUED ON NEXT PAGE

WINDOW & DOOR DRIP CAP INSTALLATION

- Cut the drip cap to length, leaving 3/8″ extra at each end.
- Cut tabs at each end of the drip cap and bend them over the side of the trim to allow for water drainage.
- Mark the building wrap by putting the drip cap on top of the trim, mark it 3/4″ down from the top leg of the drip cap and then cut it so that the drip cap can be slid under the building wrap flap to allow water to shed.
- Slide the drip cap under the building wrap and secure it with 1-1/2″ hot dipped galvanized roofing nails.
- When securing the drip cap, be sure to keep fasteners and building wrap at least 3/8″ above drip cap so they are not exposed once the siding is installed.
- To keep the drainage plane of the building wrap from being interrupted, seal under the building wrap flap with DAP 800.
- After siding is installed, caulk the top corners of the trim where the siding is notched over the drip cap (Figure 9f).

Figure 9f

INSTALLATION IN A GABLE WITH TRIM CLIPS

- Position the clips tight against the bottom of the soffit. Nail through the clips into the substrate.
- Place clips no greater than 16” o.c. along the bottom of the soffit.
- Cut your trim to length and place it on the wall, ensuring the edge with the kerf is faced towards the Trim Clips.
- Starting at one end of the trim, align the trim kerf with the clip and slide the trim onto the clip.
- Using a slight up and down motion continue rotating the trim into position with the trim clips.
- Hold the trim against the wall, leaving the proper gap between the trim and the soffit.
- Using a hammer, and 1-1/2″ hot dipped galvanized roofing nails, fasten the trim through the nailing flange, nailing every 3rd hole.

INSTALLATION AS A BAND BOARD WITH TRIM CLIPS

- Use your chalk box to establish a level line for where the top of the band board will be.
- Position the trim clips along the level chalk line. Nail through the clips into the substrate.
- Place clips no greater than 16” o.c. along the line.
- Cut your trim to length. Place trim on the wall, make sure the edge with the kerf is faced towards the clips.
- Starting at one end of the trim, align the trim kerf with the clip and slide the trim onto the clip.
- Using a slight side to side motion continue rotating the trim into position with the trim clips.
- Hold the trim against the wall, ensuring the top of your trim is aligned along your level line.
- Using a hammer, and 1-1/2″ hot dipped galvanized roofing nails, fasten the trim through the nailing flange, nailing every 3rd hole.
- Drip cap the band board (See Drip Cap Installation on Page 9).

ARCH TRIM

- It's recommended to install arched trims around the opening before cutting or installing the sides or bottom trim.
- Read and understand instructions.
- Carefully remove trim from protective packaging.
- Place the Arched Trim over the arched area and center it so the bottom ends are level.

FASTENING:

- Fastener length needs to be long enough to fully penetrate structural framing or wood structural panels and structural framing a minimum of 1".
- Minimum hot-dipped galvanized nail with a full round head is required, ring shank fasteners are recommended.
- Trim must be fastened with two nails at both ends, with additional fasteners spaced a maximum of 24" o.c. along the length of the board.

FLASHING:

- Flashing is required to protect the top edge of trim from weather.
- It's recommended to flash along the top of trim utilizing a bendable head flashing such as ASTRO Flashing, or similar. (go to: astroplastics.com/products/astro-flashing)
- Follow all head flashing manufactures installation guidelines.
- All flashing materials should have a minimum 4" upper leg. Add a minimum 4" wide adhesive flashing to flashing legs less than 4".
- When integrating flashing with a water-resistive barrier (WRB), be sure to follow the WRB installation instructions.

FINISHING:

- Install siding around the Diamond Kote® Arched Trim leaving the proper gap, and sealing joints as required by the manufacturer.