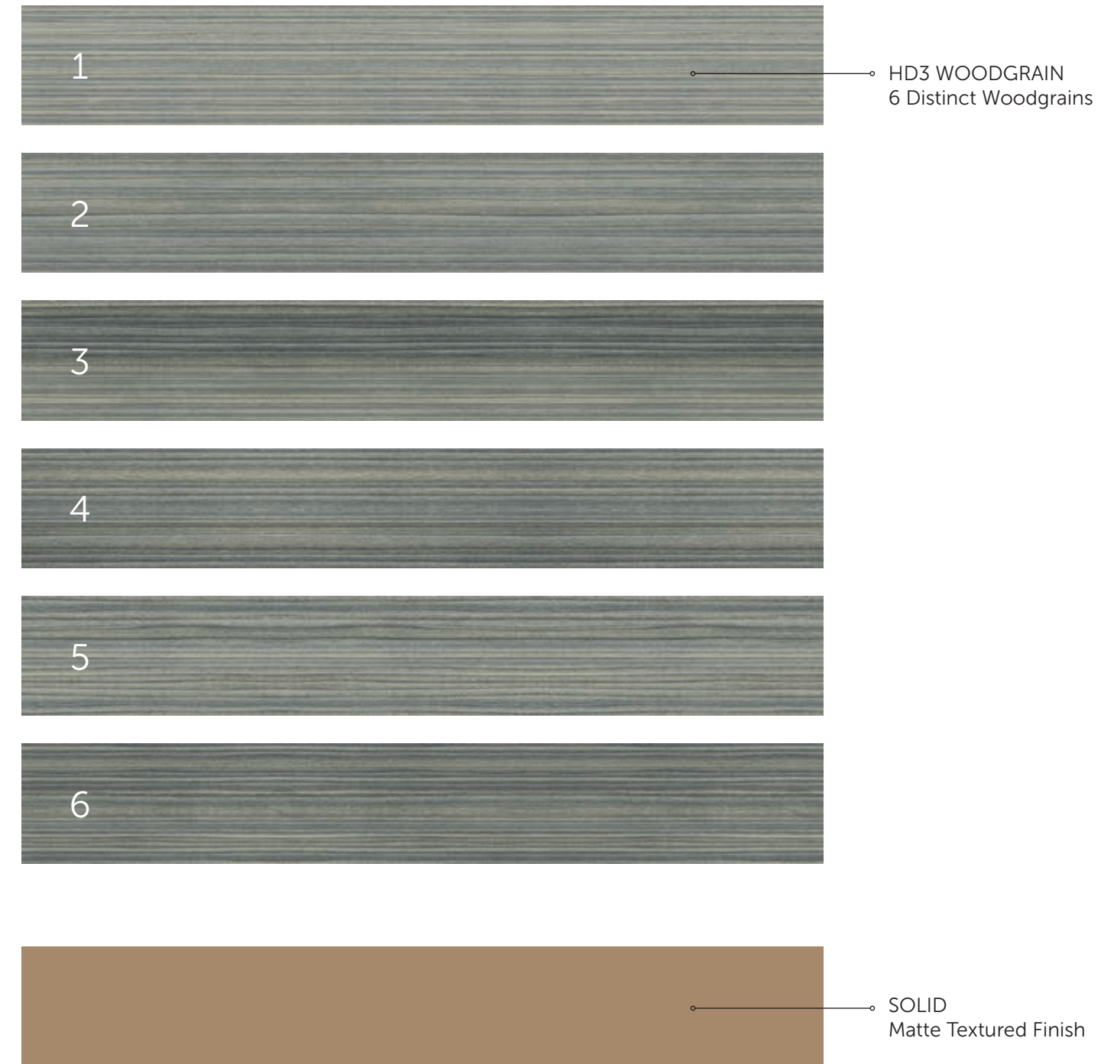


V E S T A[®]
S T E E L S I D I N G
INSTALLATION GUIDE

TABLE OF CONTENTS

Overview & Terminology.....4
Tools & Equipment.....6
Cutting Steel.....7
Fastener Selection.....9
Installation Guidelines.....10
Preparation.....11
Inside Corners.....13
Outside Corners.....16
Starter Strip.....17
Windows & Doors.....18
Gables.....21
Panel Fastening Specifications.....22
Panel Layout & Installation.....24
Tips & FAQs.....29

VESTA PANEL DETAILS



PATENTS

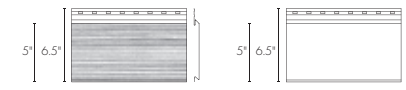
U.S. Patents: 10,508,455 & 10,760,282
U.K. Patent: 2,588,713
Canadian Patent Pending

COPYRIGHTS (U.S.)

© Sand Dollar Woodgrain Artwork VAu1-378-183
© Driftwood Woodgrain Artwork VAu1-378-232
© Autumn Thistle Woodgrain Artwork VAu1-378-233
© Gilded Grain Woodgrain Artwork VAu 1-382-425



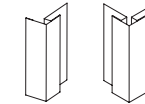
- 1. **PLANK PANEL**
8 ft woodgrain panels and 12 ft solid panels



- 2. **PLANK STARTER STRIP**
Secures the first row of panels to the wall. Color matched starter strip for the panels to hook into.



- 3. **OUTSIDE CORNER POST SINGLE AND DUAL FLANGE**
Installed at the outside corner of the wall, allowing siding to be inserted on both sides.



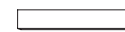
- 4. **INSIDE CORNER BLOCK**
Used to flash inside corners. Use with or without J-Channel.



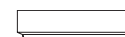
- 5. **J-CHANNEL**
Installed around windows and doors, also used to cap the last row of panels.



- 6. **L-FLASHING**
Install as an alternative to J-Channel on the sides of windows or doors.



- 7. **PLANK DRIP CAP**
Installed above windows and doors to keep water away. Also used as a starter when installing panels vertical. Drip Cap is color matched.



- 8. **TRIM COIL**
Used to make custom parts and flashing on site.



- 9. **SUPPORT TRIM**
Used to support the last row of panels, must be installed inside of J-channel, the cut piece of siding is inserted in between the support trim and J-channel.



- UTILITY TRIM**
Covers or caps trimmed panels.



- BRICK LEDGE FLASHING**
Installed over a brick or stone wall transition to keep water out.



- H-CHANNEL**
Used as a transition/seam from solid or woodgrain finish on the wall.



- TOUCH-UP PAINT**
Use only to touch up the panel.



TOOLS & EQUIPMENT

REQUIRED TOOLS

- Hammer
- Level (2 ft. and 4 ft.)
- Tape Measure
- Power Saw
- Ferrous Cutting Saw Blade
- Electric Shear
- Utility Knife
- Safety Goggles
- Aviation Snips
- Flathead Screwdriver
- Caulk Gun
- Speed Square
- Needles Nose Pliers
- Cordless Driver
- Tin Snips
- Chalk Line
- Sheet Metal Gloves
- Hand Seamer
- Foam Pad
- Driver bit for Panel Screws (if using screws)

HELPFUL TOOLS

- Sheet Metal Brake
- Power Shears
- Ladder Hook
- Table Saw
- Circular Saw
- Trim Coil
- Touch-up Paint
- Nail Punch
- Butyl or urethane based caulk

LADDERS AND SCAFFOLDS

Many different styles and options are available. Most common system used by siding professionals are extension ladders and ladder jacks, simply because of their portability and minimal cost. Contact your local OSHA office for specifications on proper scaffolding for your particular need.

CUTTING STEEL SIDING

The best saws to use when cutting steel siding are a sliding miter saw and a siding cutting table using a circular saw. Never set up your saw in an area that will throw cutting chips on or at the steel siding. Hot chips can damage the paint and protective coating.

SAW BLADE TYPE



When cutting steel siding a ferrous cutting blade must be used. A carbide tip saw blade with the max number of teeth per the diameter of the blade. Cutting thin steel requires lots of teeth on the saw blade. Never use a grinder or an abrasive type of saw. Failure to do this may damage the protective finish applied to the siding and void the warranty. Always make sure to wear protective safety glasses and gloves when cutting/handling steel siding. Follow safety instructions that accompany your tools/blades and wear the suggested protective gear.

SIDING CUTTING TABLE



This table allows for a normal circular saw to be used with the proper steel blade to cut siding and soffit, especially helpful for angled cuts on peaks and rakes. These tables are lightweight and portable and can be set up and moved by one person with ease. These tables also allow for the saw to be away from the siding when being cut. This allows for fewer scratches or damage to occur to the siding panels.

SLIDING MITER SAW



When cutting steel siding one option is to use a sliding miter saw. Never plunge down into the steel panel, start off the steel panel then push down and thru the panel slow.

ELECTRIC SHEAR



This tool may be used for length wise cuts across face of siding. Especially helpful for window and door cuts.

TIN SNIPS



Tin snips may be used to cut siding. Also used to cut J-Channel, finish trim, and O.C.P. Offset snips are the best. Use Left-hand and right-hand snips for detailed cuts.

FASTENING TECHNIQUES



FASTEN ALL PANELS LOOSE, HANG/FLOAT

- Gap or space behind the nail/screw head, min of a 1/8"
- Drive the head of the fastener to the nailing flange and stop before it hits
- This will hide the imperfections in the wall, use the panel as a straight edge

FASTENER SELECTION

TYPE AND SIZE

PREFERRED METHOD - NAILS: #11 Electro-Galvanized Steel Roofing Nails



ALTERNATE METHOD - SCREWS: #8 Zinc Lath Screws/Modified Truss Head Screw:

FOR METAL STUDS: Truss-Head Drill Point Lath Screws



FOR WOOD STUDS: Truss Head Screw/Lath Screw with a sharp point



**Use only zinc/galvanized coated steel or stainless steel.
Never use aluminum nails or staples.**

FASTENER LENGTH FOR FRAMING TYPE

HORIZONTAL SIDING, WOOD FRAMING

Both nails and screws must penetrate a minimum of 1-1/4" into the wood sheathing and framing. For wood framing the fasteners must go through the 1/2" sheathing and 3/4" into the framing.

VERTICAL SIDING, WOOD FRAMING

Vertical siding cannot be fastened into the framing because of the direction of the nailing flange. For this reason, screws will provide the best holding performance. Both nails and screws must penetrate all the way through the wood sheathing for the best grip.

HORIZONTAL SIDING, STEEL FRAMING

The screws must penetrate through the wood sheathing and steel framing.

VERTICAL SIDING, STEEL FRAMING

Vertical siding cannot be fastened into the framing because of the direction of the nailing flange. For this reason, screws will provide the best holding performance. The screws must penetrate all the way through the wood sheathing for the best grip.

DETAILS AND EXAMPLES

There must also be room for the siding to expand and contract due to temperature changes. A minimum of 3/16" to 1/4" is best between the head of the fastener and the siding. Add this 1/4" to the total length when determining the length of the fastener.

As an example, mounting horizontal siding on a wood framed wall with 1/2" sheathing. Start with the 1/4" clearance for expansion and contraction, then add the 1/2" sheathing and then 3/4" into the stud framing and the minimum nail length is 1 1/2".

$$(\frac{1}{4}'' + \frac{1}{2}'' + \frac{3}{4}'' = 1 \frac{1}{2}'') \text{ or } (0.25'' + 0.5'' + 0.75'' = 1.5'')$$

INSTALLATION GUIDELINES

GENERAL

Plank must be installed on a minimum ½" O.S.B. or plywood solid flat wall over house wrap such as Tyvek® Brand from DuPont™.

STORAGE

Metal building materials should always be stored in a dry, well-ventilated place. **Never cover materials with a non-breathing or plastic tarp.** This causes condensation to form, which deteriorates the protective coating of the material.

HANDLING

Carry the plank panels standing on their edge, instead of laying flat, to keep them from bending and warping.

SAFETY GUIDELINES

Follow all governmental safety procedures, including, but not limited to, all OSHA guidelines. Always wear safety gloves, safety glasses and fall protection gear when installing plank panels.

MAINTENANCE

Remove any and all debris that may accumulate on the wall during its lifespan to keep it moisture free. Tighten any loose fasteners or trim pieces as access allows. Do not attempt to repair or replace any parts of the system without consulting a certified applicator. Repainting the wall should not be necessary through the duration of the warranty.

WARRANTY

Register the warranty by filling out the form on QualityEdge.com/warranties. This is required to begin any coverage.

DISSIMILAR METALS



When certain metals are put together, there could be a negative interaction that causes early corrosion that would not occur otherwise. This most commonly occurs between the metal components themselves and the accessories used to secure them to the building (like nails, screws and fasteners).

- Add an insulator between the two materials so they no longer connect. Without that connection, the transfer of electrons cannot occur.
- Use materials with the same potential. Metals with the same corrosion resistance are typically ok to use together.
- If you are in a situation where only one of the materials will come into contact with an electrolyte then transfer of electrons will not occur.
- If there is a coating on the cathode it can prevent the transfer through increased resistance.
- Consider your environment before installing. Choose materials that will work for your environment.
- Coat or paint your assembly (completely) so that the electrolyte cannot make contact with the materials
- Use neoprene EPDM or bonding washers as a barrier in between the metals.

PREPARATION

SURFACE PREPARATION

Remove and replace any rotted or damaged boards. Check for waves in the wall and shim out (or build out) if necessary. Nail or screw down any loose boards or trim. Scrape away any old caulking, especially where it may interfere with the new trim pieces (windows and doors). New caulking should be installed to seal any air leaks where old caulk was removed. Remove or loosen objects that may be in the way of the new panels (downspouts, cables, planters, shutters, house numbers, mailboxes etc.). If meter boxes or power lines must be removed contact a local professional.

HOUSE WRAP

For a typical siding application, house wrap must be installed over the exterior vertical wall sheathing. All windows, doors and wall penetrations should be flashed with self-adhered flashing as part of your water management strategy. [FIGURE 11.1] House wrap (such as DuPont™ Tyvek® HomeWrap® or DuPont™ Tyvek® DrainWrap™) will help keep air and water out of walls while letting water vapor to escape. Properly installed house wrap and flashing products will contribute to improved building durability by helping to protect buildings against damaging wind and rain that can penetrate the exterior cladding. Follow house wrap and flashing manufacturer installation guides for proper details. [FIGURE 11.2]

WINDOW & DOOR BUILD OUT

This is an optional step but adds a great deal to the overall appearance of the finished job. When insulating or applying fan fold, build out the window and door casing using a trim board of choice. This is done so you have something to butt your J-Channel to, and also hides the back side of the J-Channel.

NOTE: Steel siding and trim must never come in contact with other metals like aluminum. Flashing tape can be used as a spacer to separate the metals.

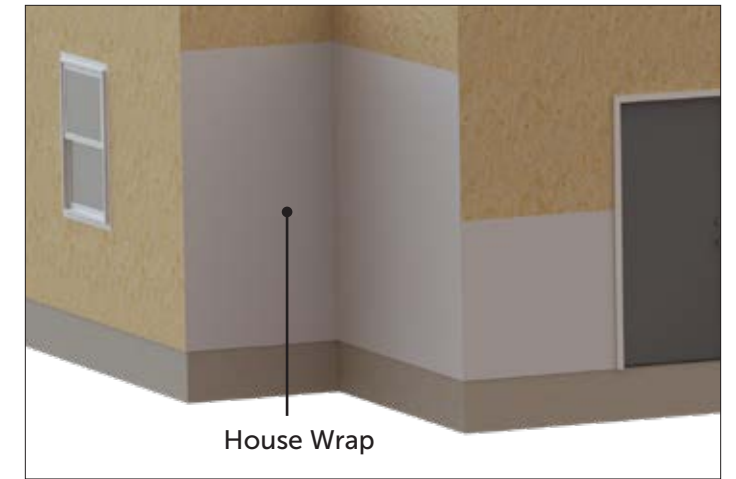


Figure 11.1



Figure 11.2

PREPARATION

STRAIGHTLINE

A chalk line is a good way to start an installation. Often times this is used to develop a reference line as to which the starter strip can be installed. We recommend measuring equal distances down from the eave line, or from the window sills that are at the same height. [FIGURE 12.1] This line allows for the siding to be run parallel with the eaves or windows which gives the appearance that the siding is running level regardless of the actual levelness of the house or ground.

LEVEL

Start an installation by checking to see if the walls are level. If the walls are reasonably level a chalk line and level may be used to determine a line for the starter strip to be installed. This is done by driving a nail at the desired height for the top of the starter strip. Connect the end of the chalk line to the nail and pull to the opposite end of the wall, make sure to pull the line tight. Then use a level in the middle of the line to determine where the chalk line should be snapped. Be sure there is no sag in the line when it is snapped, this can easily occur when the line is stretched over 20 ft. Continue this process on all sides of the building making sure the line matches up on all sides. This is very important because this is the basis for all subsequent rows of siding.

NOTE: It is recommended to use a level 4 ft. or longer in this process and also to take level readings at the center of the line.

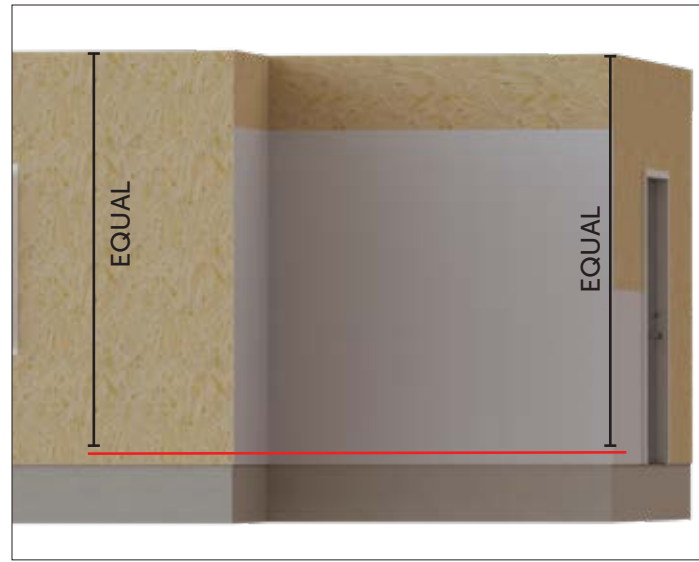


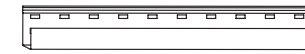
Figure 12.1

INSIDE CORNERS

OPTION 1: J-CHANNELS

Two J-Channels at right angles may be used for the inside corners. [FIGURE 13.1] Install a small bead of caulking where the two J-Channels meet one another. [FIGURE 13.2] J-Channels should be installed at full lengths, $\frac{1}{2}$ " below the bottom of the starter strip and extending to the eave line or gable trim. If a shorter piece is needed to reach the eave or gable trim be sure to overlap the bottom piece with the top piece. J-Channel flanges should be nailed every 12", making sure not to drive the nails to tight. Driving nails to tight may cause a distortion to occur in the J-Channel. J-Channels can easily be cut with a pair of aviation snips.

Siding is installed into the receiving end of the J-Channel, making sure to leave $\frac{1}{16}$ " of space between the back side of the J-Channel and siding. [FIGURE 13.3]



J-Channel



Figure 13.1

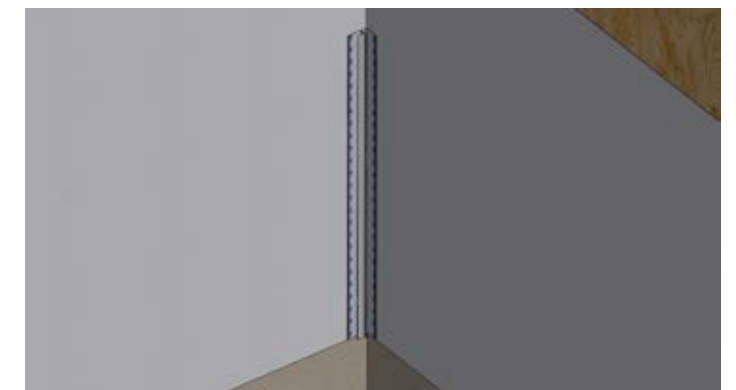


Figure 13.2

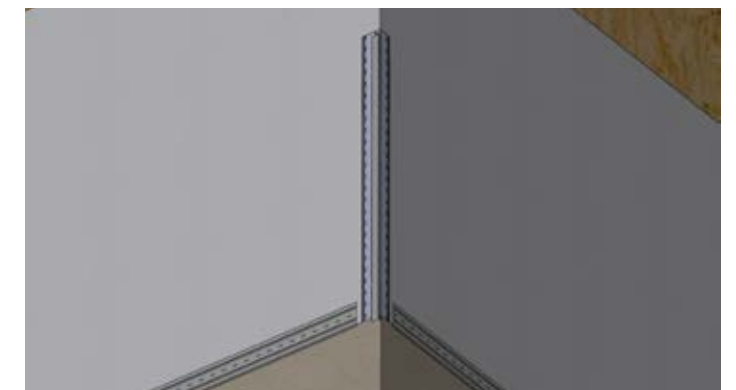


Figure 13.3

INSIDE CORNERS

OPTION 2: INSIDE CORNER BLOCK

Mount the corner block onto the wall starting at the bottom of the wall. [FIGURE 14.1] Overlap the net piece overtop of the lower block. [FIGURE 14.2]

Fit panels up to the inside corner block. [FIGURE 14.3] Anchor the panel of siding on the side of the corner block by nailing in between the nail holes. Use all the nail holes for the rest of the panel for expansion and contraction. This will keep the panel from walking away from the corner block.



Inside Corner Block



Figure 14.1

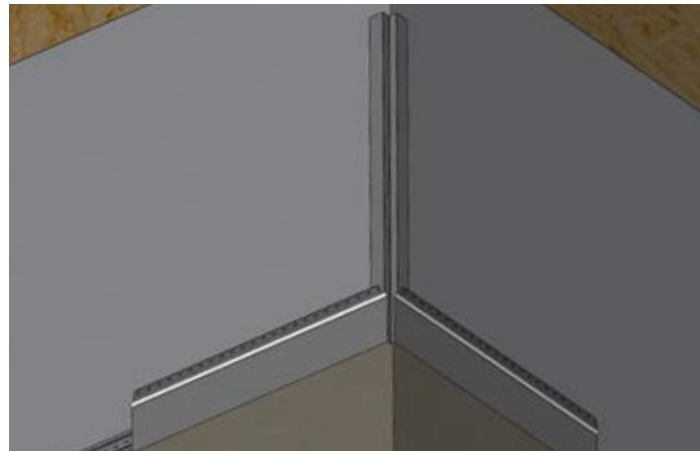


Figure 14.2

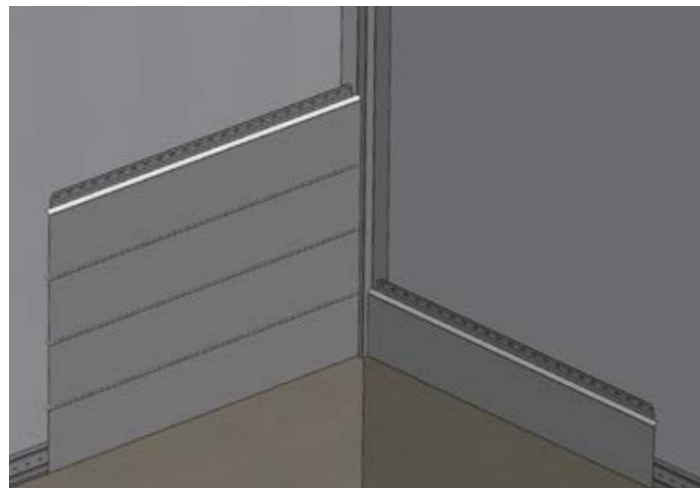


Figure 14.3

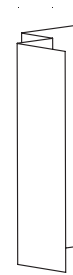
INSIDE CORNERS

OPTION 3: INSIDE CORNER BLOCK WITH 2 FINISH TRIM J-CHANNELS

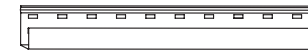
Mount the corner block onto the wall starting at the bottom of the wall. [FIGURE 15.1] Overlap the net piece overtop of the lower block.

Install the J-Channels on the two sides of the inside corner block. [FIGURE 15.2]

Fit panels into the J and keep a 1/8" gap in between the inside of the J and the panels. [FIGURE 15.3]



Inside Corner Block



J-Channel



Figure 15.1

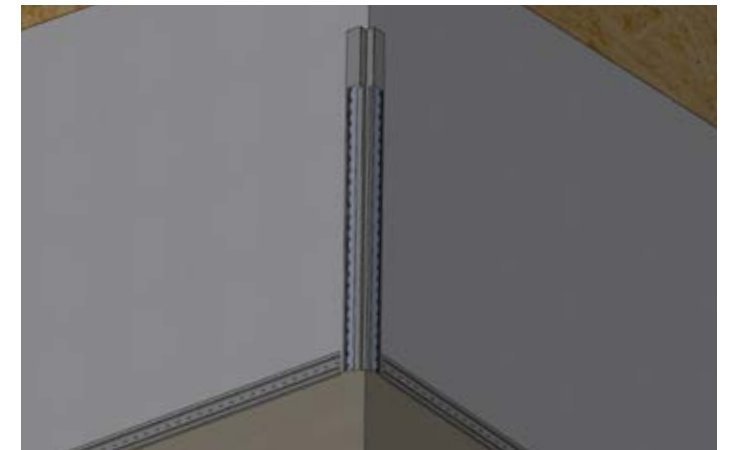


Figure 15.2

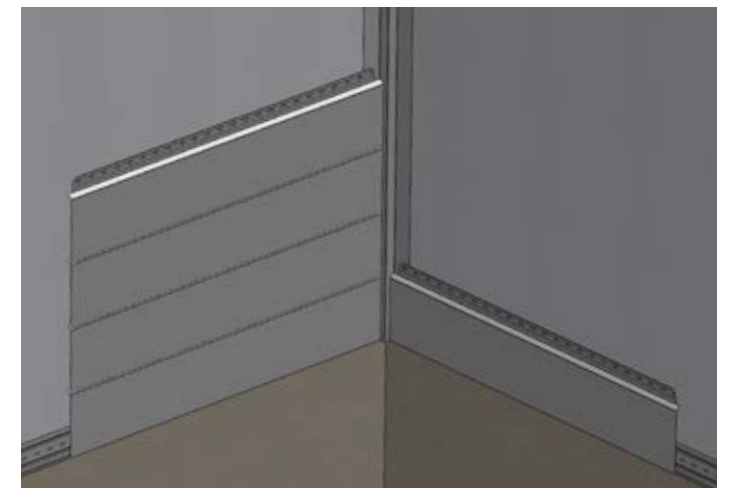


Figure 15.3

OUTSIDE CORNERS

OUTSIDE CORNER POST (O.C.P.)

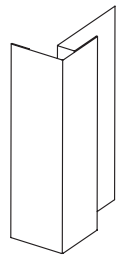
There are two types of Outside Corner Posts—Single and Dual Flange—en fonction de vos préférences d'installation.

The bottom of the O.C.P. can be capped by cutting away the J portion of the corner and folding the remaining faces of the corner back to close the bottom of corner. Tops of corners may be capped in the same fashion.

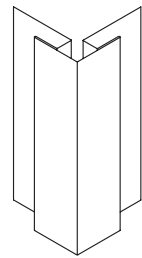
O.C.P. INSTALLATION

Corner posts should be installed prior to the siding panels. [FIGURE 16.1 & 16.2]

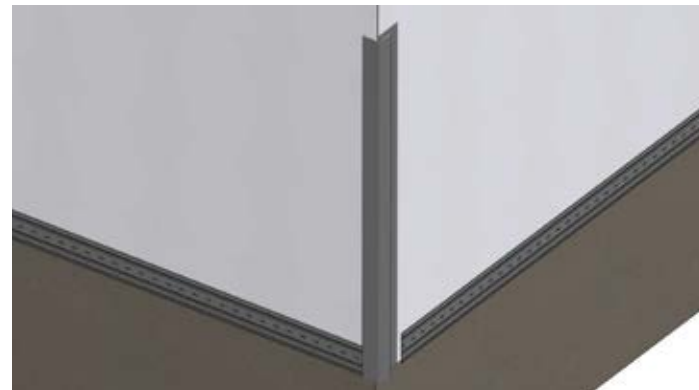
The O.C.P. is installed in the same manner as the inside corners, ½" below the bottom of the starter strip and running to the eave line or gable trim. If more than one post is needed to reach the desired height be sure to overlap bottom corner with the top corner. Be sure to install nails every 12" on the nailing flange. **Avoid driving nails to tight because distortion can occur if this is done.** Make sure corners are installed squarely to the wall, this will add to the final appearance of the job. [FIGURE 16.3 & 16.4]



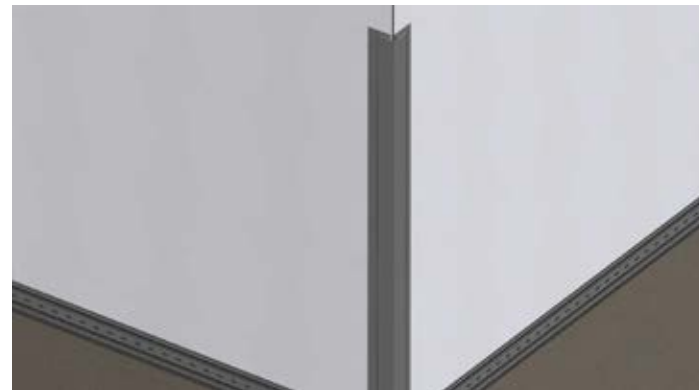
Outside Corner Post
Single Flange



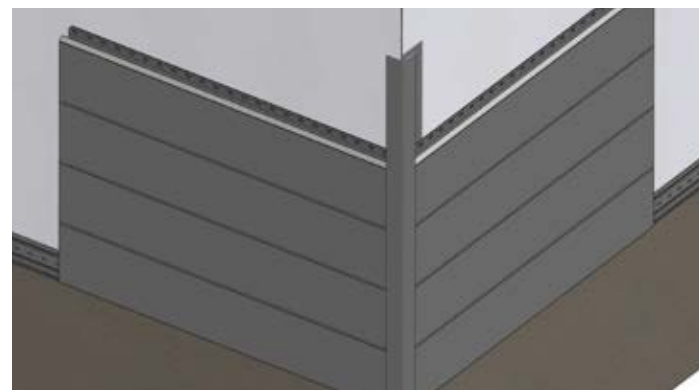
Outside Corner Post
Dual Flange



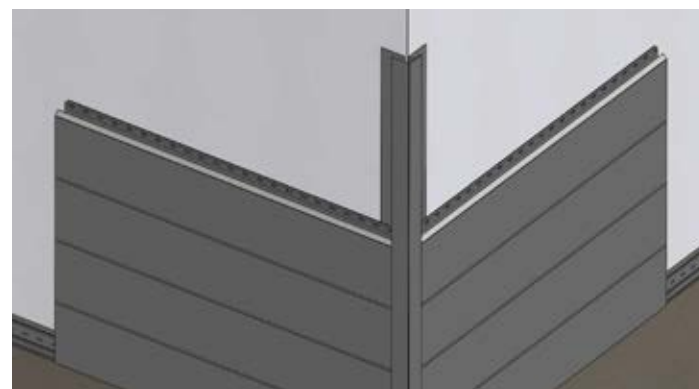
Outside Corner Post - Single Flange Figure 16.1



Outside Corner Post - Dual Flange Figure 16.2



Outside Corner Post - Single Flange Figure 16.3



Outside Corner Post - Dual Flange Figure 16.4

STARTER STRIP

PLANK STARTER STRIP

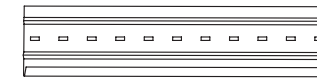
Using your chalk line previously established, install top of starter strip on the line. [FIGURE 17.1-17.3] Be sure to build out any hollow spots behind starter strip to prevent any wavy appearances in bottom row of siding. Make sure starter strip is straight and meets accurately at all corners of building.

NAILING/DRIVING SCREWS

Be sure to install starter strip with nails/screws spaced no more than 12" O.C. Be sure to nail/screw starter strip as low as possible this will provide extra rigidity to bottom row of siding. Do not overdrive nails or screws to prevent distortion. Butt starter strip to each other. Starter can be cut with tin snips when shorter lengths are needed.

OTHER STARTER METHODS

Starter strip may not work in all situations, often times J-Channel may be used to start rows of siding especially over decks, concrete porches, brick, retaining walls, garage doors etc.



Plank Starter Strip



Figure 17.1

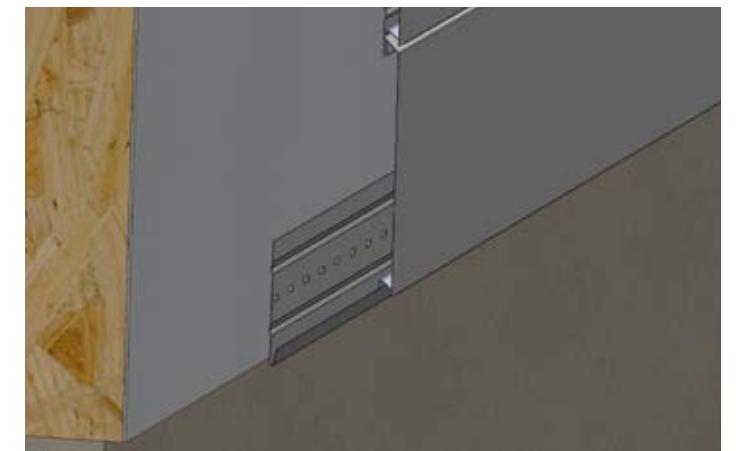


Figure 17.2

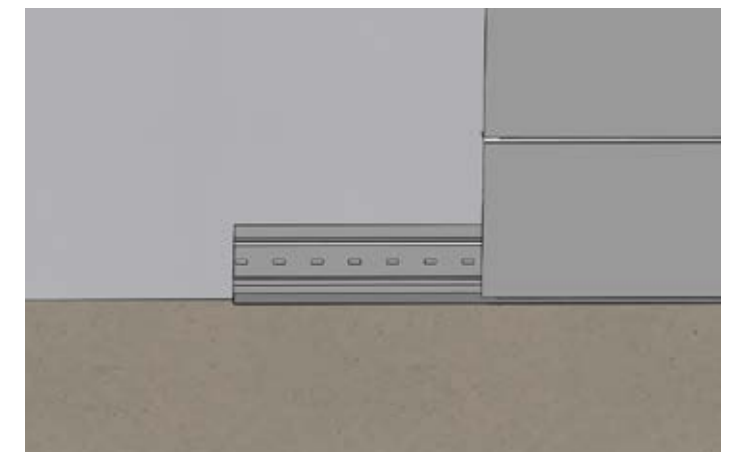


Figure 17.3

WINDOWS AND DOORS

DRIP CAP

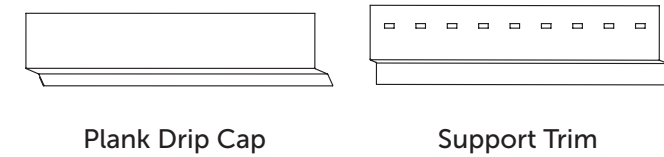
Plank has a color matched drip cap that can be used as an alternative to standard steel drip cap. This drip cap has angles to help cover different size windows and doors. [FIGURE 18.1] Install the drip cap over the window or door [FIGURE 18.2], then mount the J-Channel. [FIGURE 18.2-18.3]

PANELS AT WINDOWS AND DOORS (TOPS)

Cutting out the tops of windows and doors is nearly the same as the bottoms. The difference in this process is the clearance needed to install the siding. When measuring your clearance, measure tight to the inside of the J-Channel. When cutting horizontally, cut an extra 1/4" to allow for the bottom of the panel to slide over the lock of the lower panel and engage it. [FIGURE 18.4]

SUPPORT TRIM

Check to see if you need any support trim to keep the panel supported. If needed, nail support trim behind the finish trim that covers your horizontal cut.



Plank Drip Cap

Support Trim

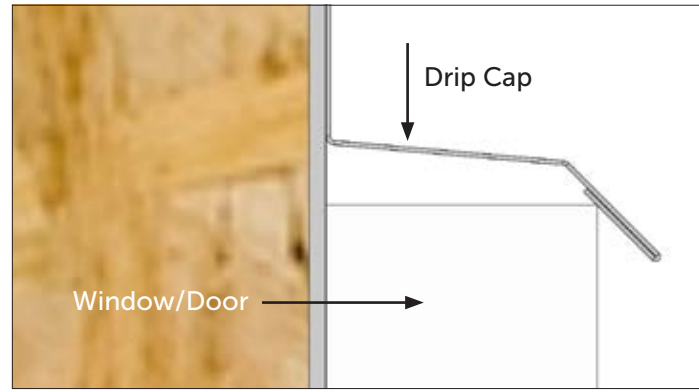


Figure 18.1

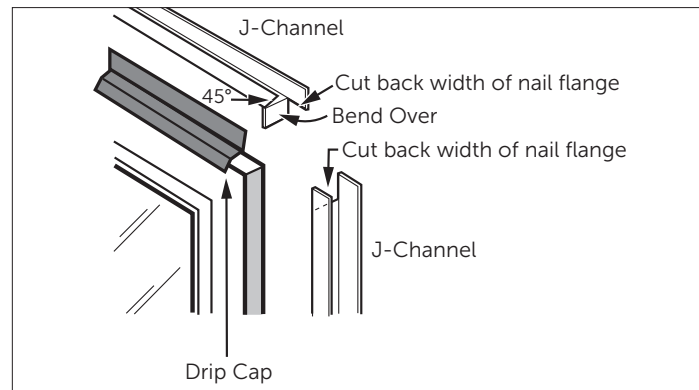


Figure 18.2

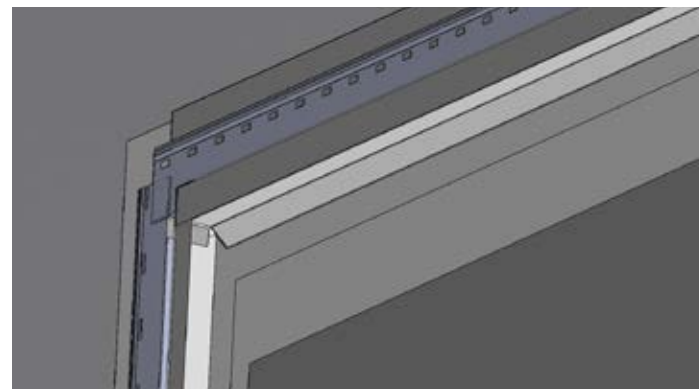


Figure 18.3

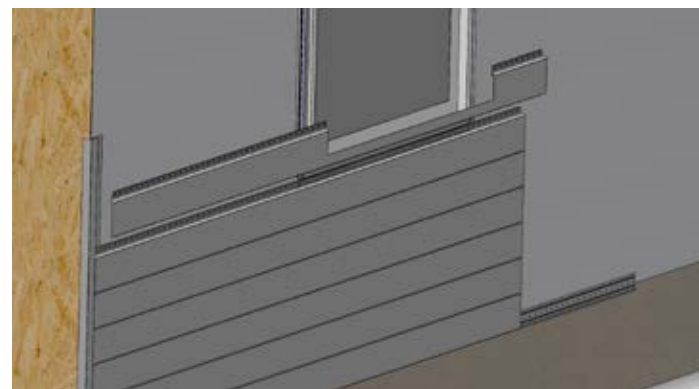
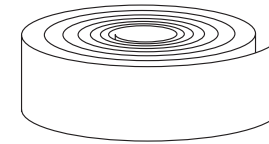


Figure 18.4

WINDOWS AND DOORS

FLASHING

It is a good idea to install window tape over existing window nail flange. Also you may install a piece of window tape or coil stock under the nail flange of the side finish trim and lap over the nail flange of the siding panel directly under the window or opening. This will allow water to run over the top of the siding and out the weep holes in the bottom of the siding instead of behind the siding panel.



TruWrap Window Flashing

WINDOWS AND DOORS

L-FLASHING

L-Flashing can be used as an alternative to J-Channel on the sides of windows and doors. [FIGURE 20.1]

Fit panels up to the L-Flashing. Anchor the panel of siding on the side of the L-Flashing by nailing in between the nail holes. Use all the nail holes for the rest of the panel for expansion and contraction. This will keep the panel from walking away from the L-Flashing. [FIGURE 20.2]



L-Flashing

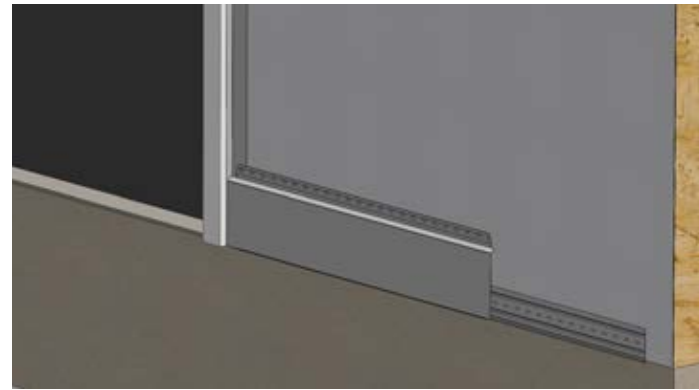


Figure 20.1

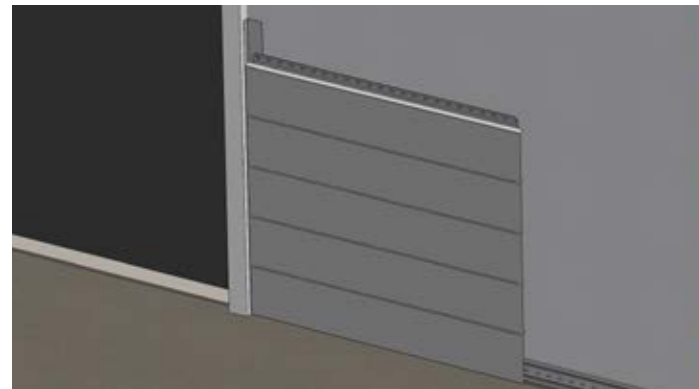
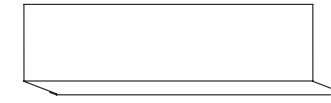


Figure 20.2

WINDOWS AND DOORS

BRICK LEDGE FLASHING

Brick ledge flashing is used to keep water from getting behind stone or brick. Install this flashing before the J-Channel finish trim. [FIGURE 21.1]



Brick Ledge Flashing

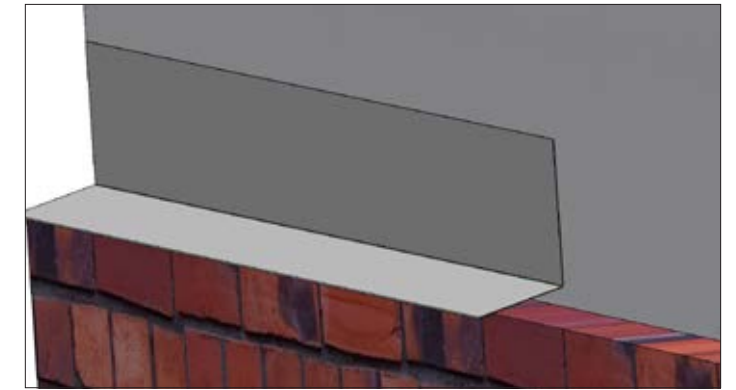


Figure 21.1

GABLES

GABLE SIDEWALL FINISH TRIM

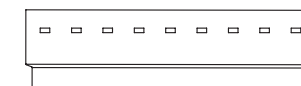
Prior to siding installation a finish trim may be placed at the bottom of the sidewall. This allows cut ends of siding to be hidden. Start finish trim at bottom of gable sidewall and work to the top of the gable. Be sure to overlap bottom finish trim with top finish trim if more than one piece is needed to reach top. At the top of the gable butt one finish trim into the peak and overlap this finish trim with the other side finish trim. Nail or screw every 16".

INSTALLING PANELS IN THE GABLES

When installing in gables, it works better to use short pieces and not full length panel if possible. Support trim will be needed for the last panel.

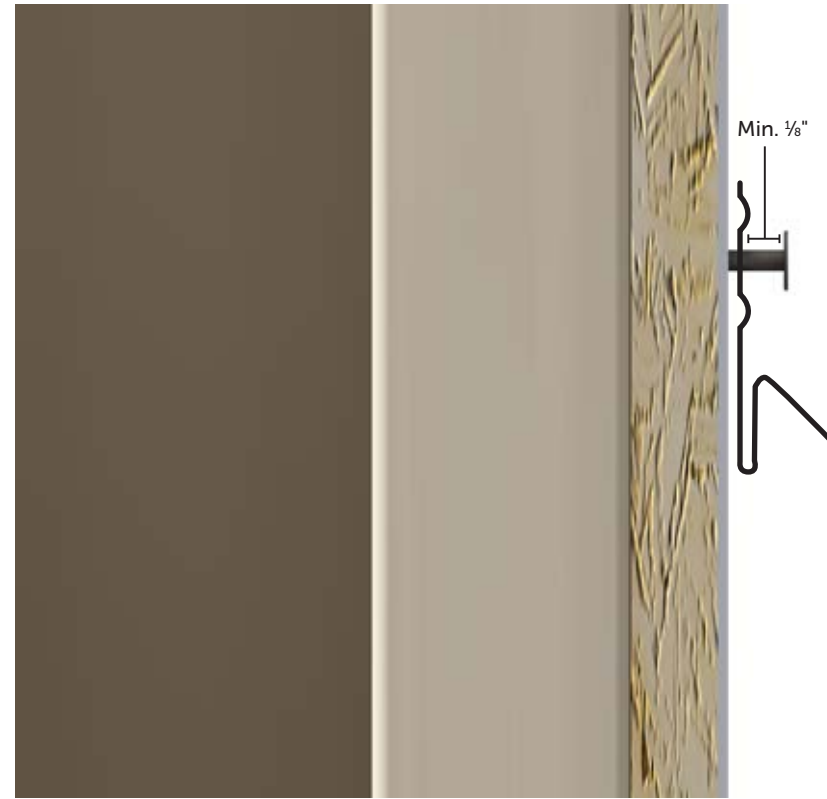


Utility Trim



Support Trim

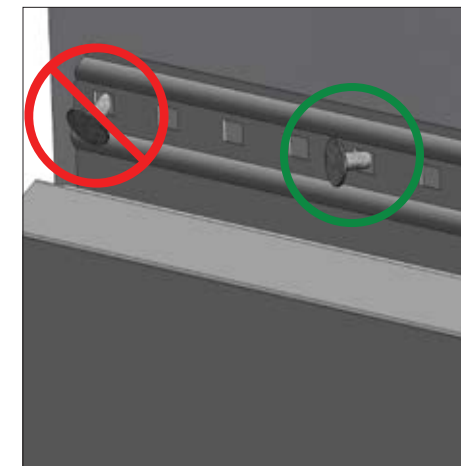
PANEL FASTENING SPECIFICATIONS



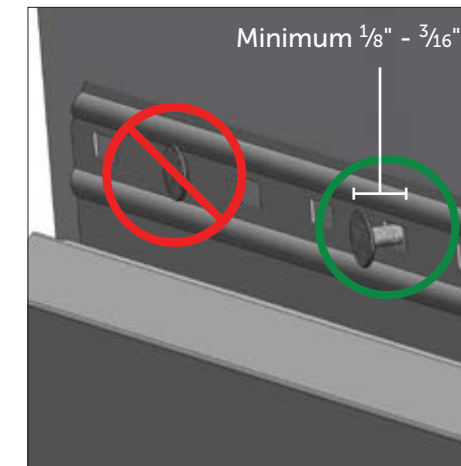
FASTEN ALL PANELS LOOSE, HANG/FLOAT

- Gap or space behind the nail/screw head, min of a $\frac{1}{8}$ "
- Drive the head of the fastener to the nailing flange and stop before it hits
- This will hide the imperfections in the wall, use the panel as a straight edge

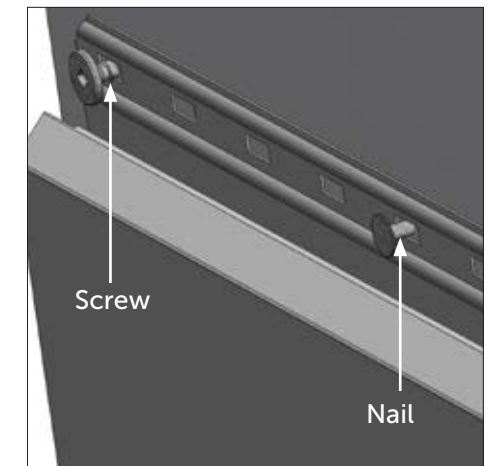
PANEL FASTENING SPECIFICATIONS



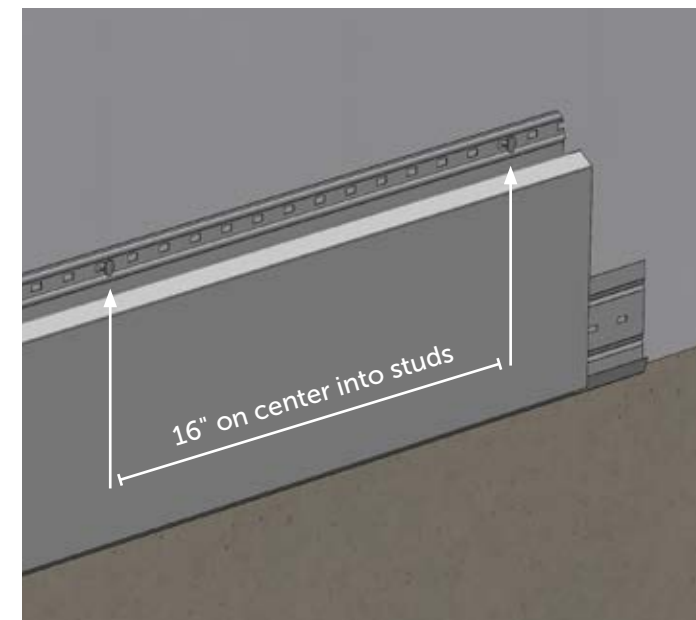
Always drive fasteners straight into the wall, **never on an angle**.



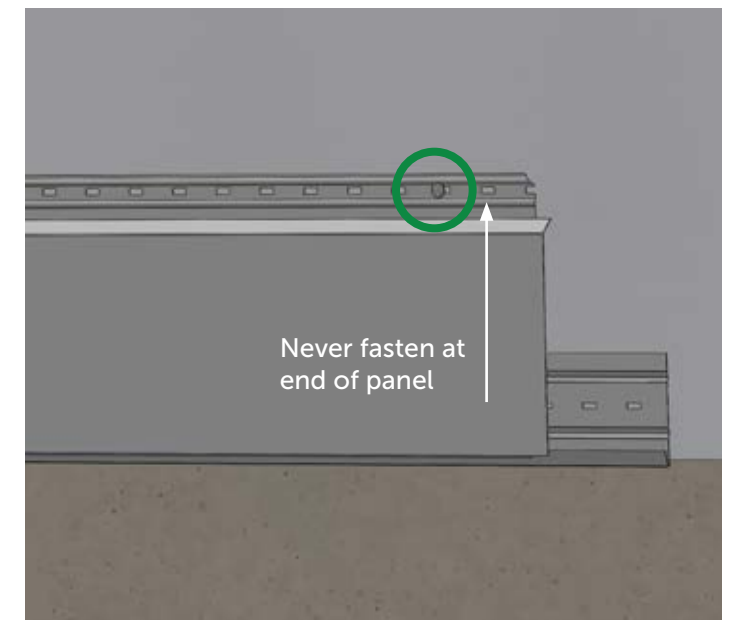
Always leave a minimum of $\frac{1}{8}$ " - $\frac{3}{16}$ " gap behind the fastener head.



When using screws or nails, always float the panel



Fasten all panels loose (floating) to the wall using only the required nail or screw type, inserting fastener into the holes along the top of the panel 16" on center. Ensure each panel is fully engaged to the one below via the pre-rolled feature at the bottom of the panel before fastening it.



IMPORTANT:
To avoid oil canning, do not tightly fasten the panel to the wall. The panel should look like it's hanging on the screw or nail. Do not push down with intense force while fastening the panel.

PANEL LAYOUT AND INSTALLATION

SIDING OVERLAP OPTIONS

OPTION 1: Slide the 1/2" tab inside the panel but leave a 1/8" gap by the nailing flange. This option will give you the largest overlap and will close the bottom notch in the siding the most. Always use this option when installing panel on the wall. [FIGURE 24.1]

OPTION 2: Only use option 2 when installing around windows, doors or any obstacles on the wall.

Overlap the panel 1/2" and do not slide the panel into the next panel. [FIGURE 24.2-24.3] When installing around windows, doors and any obstacles on the wall it can be hard to interlock the panel. Only use this option when needed because it will leave a larger gap on the notch in the lower end of the siding panel.

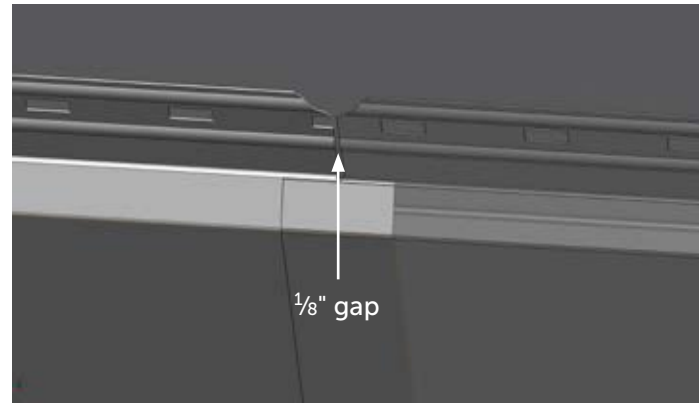


Figure 24.1

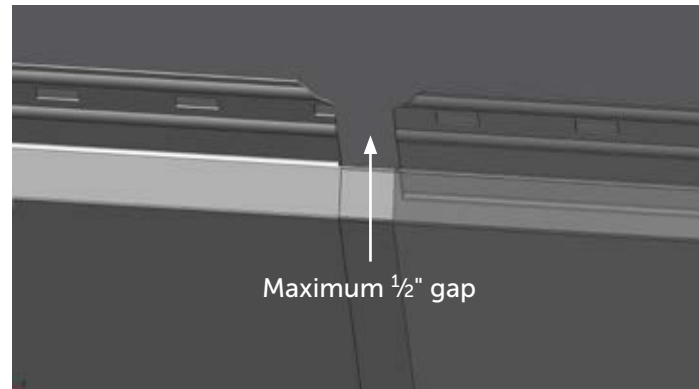


Figure 24.2

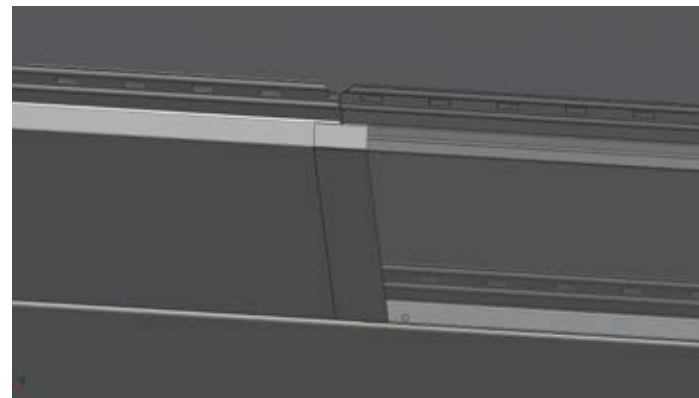


Figure 24.3

PANEL LAYOUT AND INSTALLATION

ROW ONE

Row one is the most important row of siding on the building. This row is the basis for all other rows of siding to be installed. Make sure this row runs parallel to the eaves and or windows, or is level depending on the situation. [FIGURE 25.1]

Install bottom lock of siding around bottom edge of starter strip, be sure that entire bottom lock of siding is around the bottom of starter. Be sure not to pull too hard on this row when nailing, if forced too hard a distortion of the panel may occur.

Check for alignment of inside and outside corners making sure panel matches up at all corners. You should have a minimum of 6" clearance between ground and bottom of the first row. Install end of siding into corner post openings first. Apply light pressure down the entire piece of siding, making sure the panel goes into the steel starter strip. Screws should be in the middle of the factory holes provided at the top of the panel.



Figure 25.1

PANEL LAYOUT AND INSTALLATION

PANEL INSTALL DETAILS FOR WOOD PAINTED PANELS

The wood printed panels have 6 distinct wood grains. Printed on the top nailing flange are numbers 1 to 6. [FIGURE 26.1] These numbers identify the different paints. When installing the panels look at the number and mix them on the wall. The panels are mixed in the box 1 thru 6 from the factory, for the best look install different numbers by the previous panels. [FIGURE 26.2]

Take care not to install in a stair step pattern with 6 rows high, the cartons are packed 1 thru 6. It is possible to install the panels next to the same number in this step pattern.

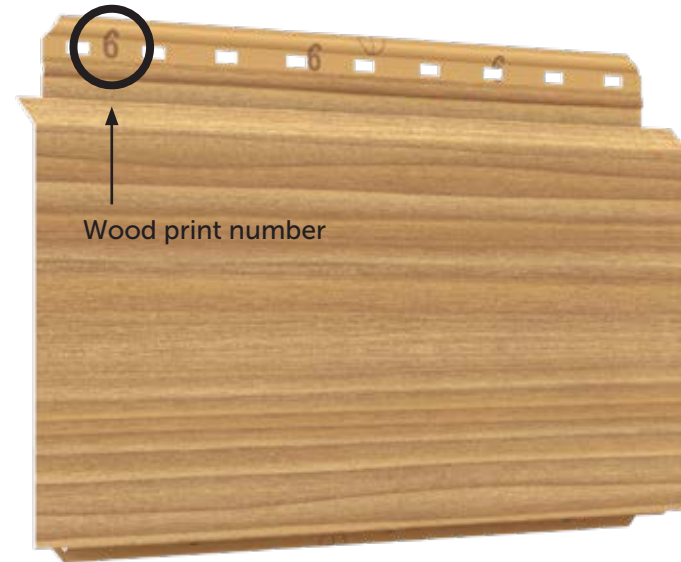


Figure 26.1



Figure 26.2

PANEL LAYOUT AND INSTALLATION

LAST ROW OF PANEL INSTALLATION

1. Install the finish trim J under the soffit at the eave edge.
2. Set the support trim inside of the J, this will support the panel
3. Measure the and cut the last panel
4. Push the panel up in between the finish trim J and the support trim
5. Pull the cut panel back down into the lower panel receiver

VERTICAL INSTALLATION OPTION

The plank panels can be installed vertically. [FIGURE 27.1] Use the plank drip cap as a starter to cap the bottom of the panels. Start with a full panel of plank, make sure the panel is parallel to the next wall or corner post. Check this after installing a few panels to keep the wall parallel. Always overlap the upper panel over the lower panel for water management. Installing the panels with a off set pattern can be a fantastic look. If installing with 12 ft. panels a 12 ft. then 6 ft. pattern looks great.



Figure 27.1

V E S T A[®]
S T E E L S I D I N G

888.784.0878

QualityEdge.com/**Vesta**



Quality Edge Headquarters

550 3 Mile Rd., Suite E
Walker, MI 49544

Quality Edge Michigan

2712 Walkent Drive NW
Walker, MI 49544

Quality Edge Georgia

5520 Export Boulevard
Garden City, GA 31408

Quality Edge Texas

634 107th Street
Arlington, TX 76011