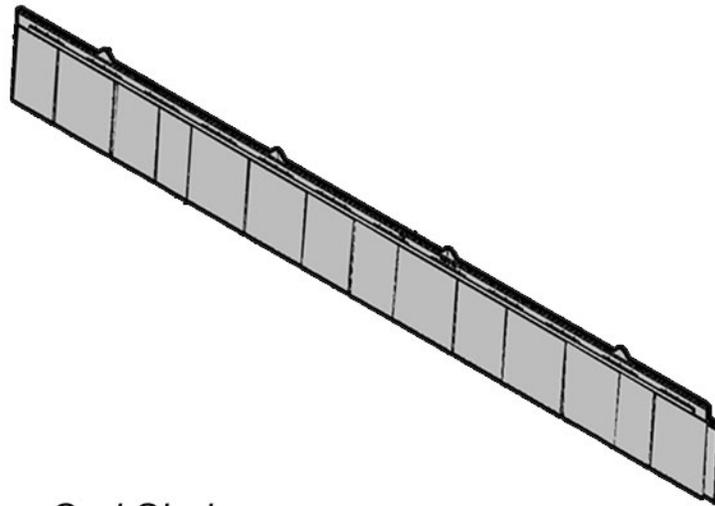


INSTALLATION INSTRUCTIONS FOR SHAKE SIDING PANELS

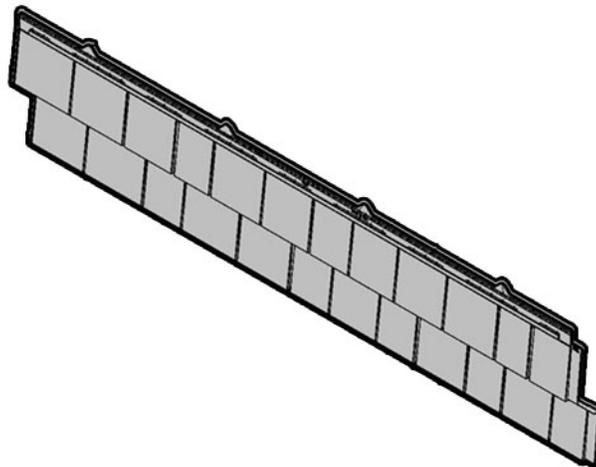
Norandex provides these instructions as installation guidelines. However, Norandex neither installs the siding panels nor has any control over the installation. It is the responsibility of the contractor and/or the installer to ensure Norandex siding panels are installed in accordance with these instructions and any applicable building codes. Norandex assumes no liability for improper installation and/or personal injury and/or property damage resulting from improper use or installation.

1. PRODUCT OVERVIEW - *Norandex offers two styles of shake siding panels.*

1.1.1 *Traditional Shake*



1.1.3 *Cape Cod Shake*



2. FEATURES

2.1 Continuous top and bottom lock.

All Norandex siding panels are created with a continuous top and bottom lock to insure the panels are secured to each other.

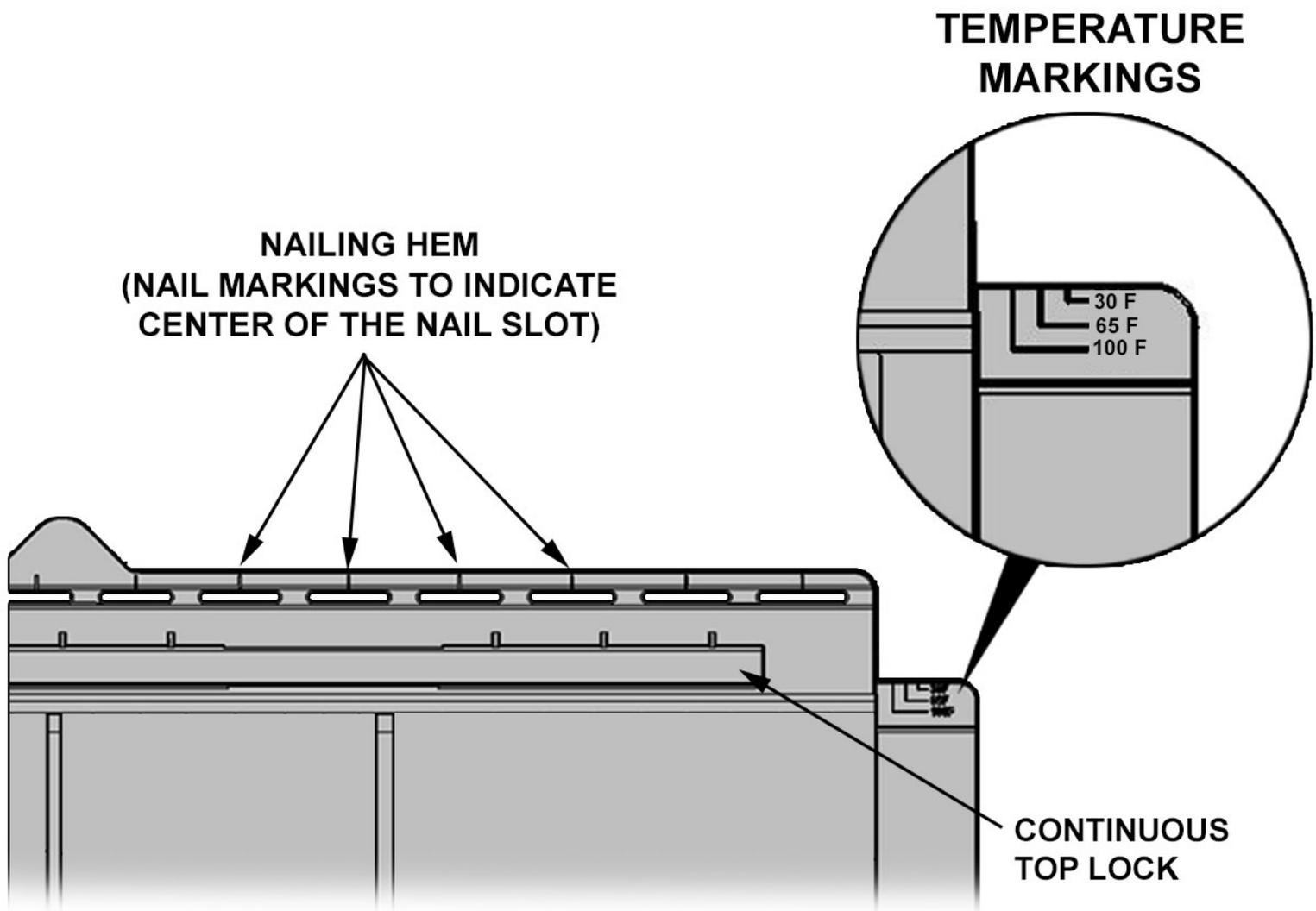
2.2 Engineered nailing hem.

The nailing hem is designed to allow for the expansion and contraction of each panel, to accommodate changes in temperature.

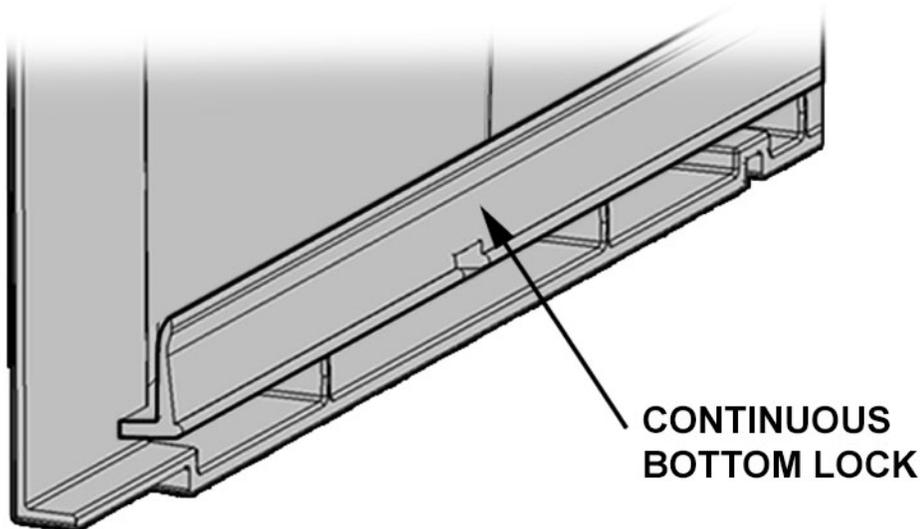
2.3 Temperature markings

These panels will expand and contract with the change in temperature.

The temperature markings are to be use to set the proper distance between panels during installation. (See section 4.4 for details)



2. FEATURES continued...

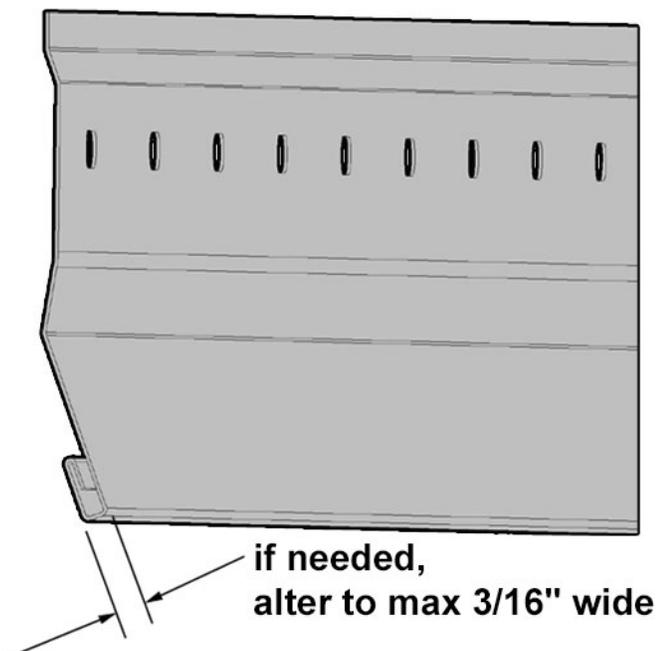


3. ACCESSORIES REQUIRED FOR PROPER INSTALLATION

Any commercially available siding components such as starter strip, J channel, inside and outside corner post, and window and door trim can be used with Norandex siding panels.

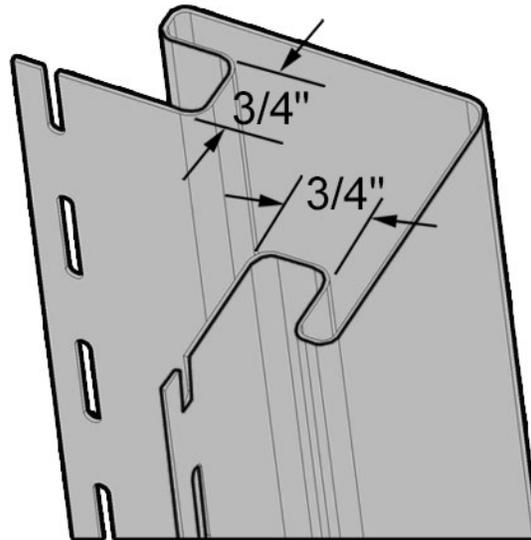
3.1 Starter strip

The starter strip may not be more than 3/16" wide at the base of the strip. If so alter the strip by bending the edge in a siding break.



3.2 J-channel and other trim components

J-channel and other trim components must be able to accept a $\frac{3}{4}$ " wide panel. This applies to all outside, inside, and termination trim.



(OUTSIDE CORNER CHANNEL IS SHOWN FOR REFERENCE)

4. APPLICATION TECHNIQUE

4.1 Tools Required

- * Hammer
- * Pencil
- * Snips (Tin)
- * Nail slot punch
- * Chalk line
- * Utility knife
- * Tape Measure
- * Level
- * Standard galvanized roofing nails.

NOTE: ALWAYS USE SAFETY GOGGLES WHEN USING HAND OR POWER TOOLS.

4.1.1 Methods to cutting panels.

Norandex siding panels can be cut with snips or a standard utility knife, no saw or the reversing of a saw blade is required. However, standard practices of using an electric hand saw can be used to cut the panels if desired.

4.2 Always build wall left to right.

All siding panels are designed to be installed left to right which is the industry standard. The siding panel can accommodate a right to left install if necessary.

4.3 Start rows with random lengths.

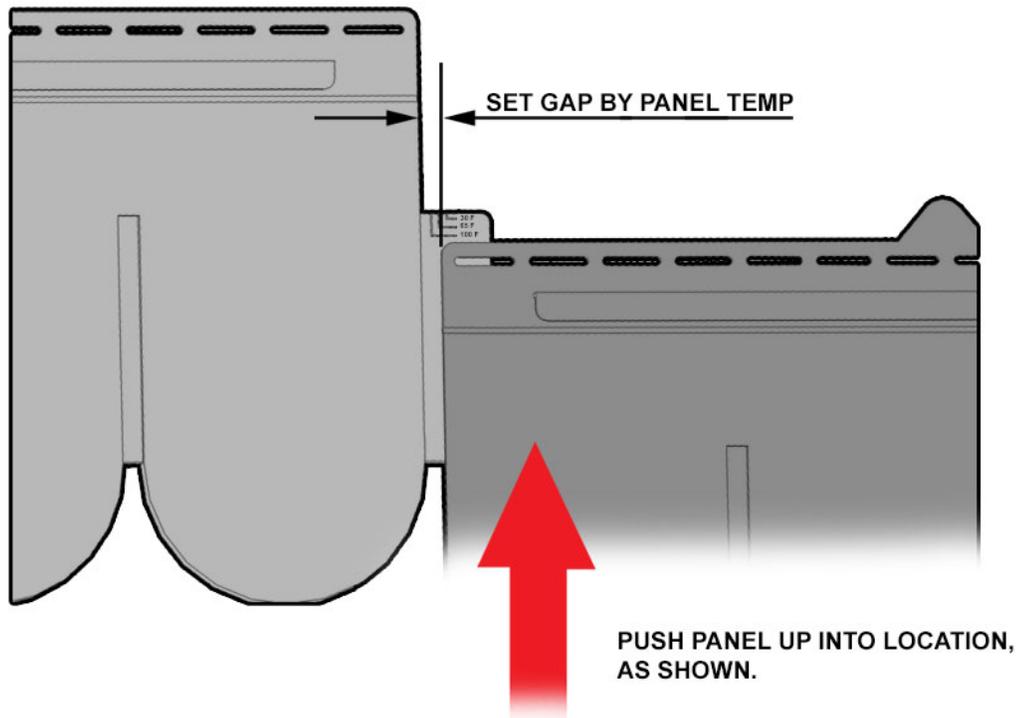
The starting piece on every course should always be a random or full length siding panel. The minimum starter length should be 12" in length.

Care should be taken to prevent from using the same length starters on the same wall. This will minimize the chance of creating a pattern. Cut panels should only be used to start and terminate a course.

4.4 Setting the panel gap for temperature.

The amount of gap between siding panels is important and varies depending on the temperature of the siding panel. It is important to have the proper amount of gap because the siding panels will expand and contract with a change in temperature. Each siding panel has temperature markings indicating the proper panel spacing during installation. It is important set the panel gap based on panel temperature and not air temperature.

Panel Temperature Range in °F	Position on temperature marking gauge
91°F and above	On the 100° F line
90°F – 76°F	Between 65°F and the 100°F lines
75°F – 56°F	On the 65°F line
55°F – 41°F	Between the 35°F and the 65°F lines
40°F and below	On the 30°F line.



4.6 Installing the initial course.

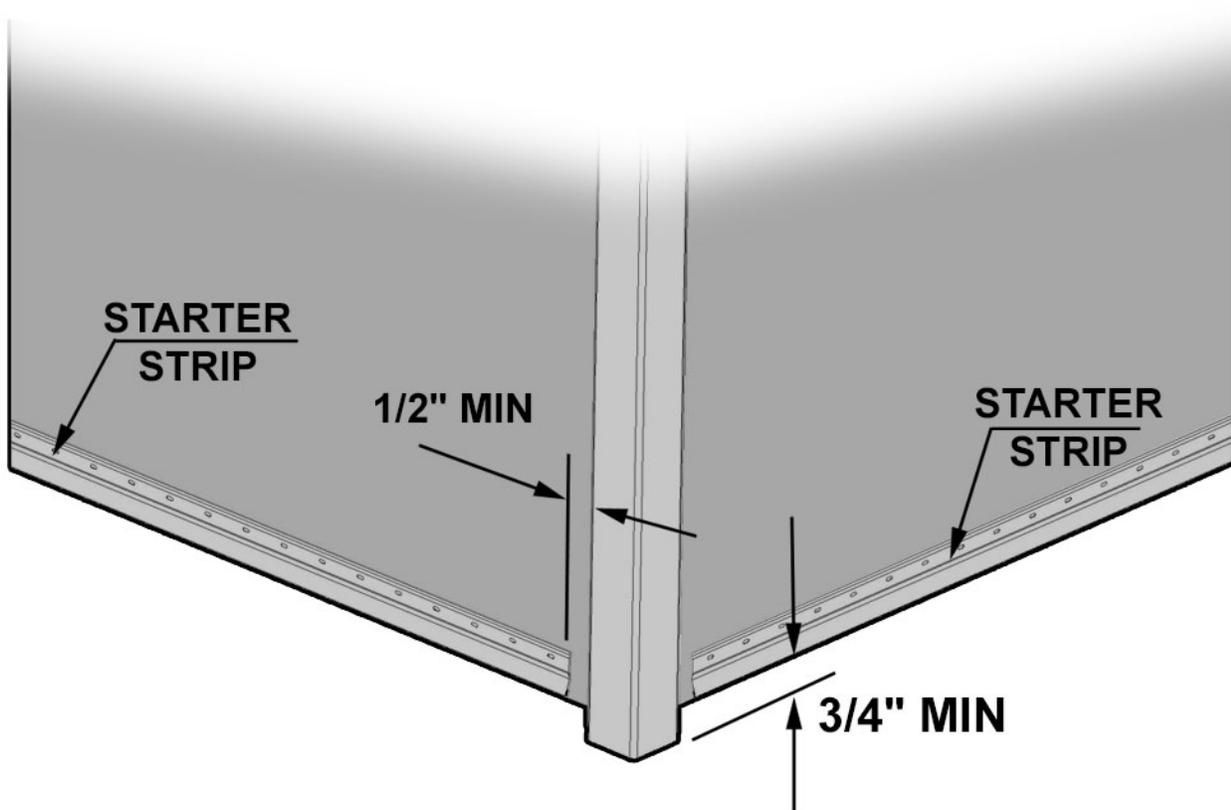
4.6.1 Starter strip.

Install starter strips at the lowest point of the structure making sure they are level. Leave a minimum of $\frac{1}{2}$ " between the starter strips and any type of trim components (J-channel, inside or outside corner post.)

NOTE: AOBP does not recommend the use of J-channel as a starter strip for the first course.

4.6.2 Inside and outside corner post

All corner post and corner trim (J-channel) must be installed before any panels are to be nailed into position. All corner post must be $\frac{3}{4}$ " minimum below the starter strip.



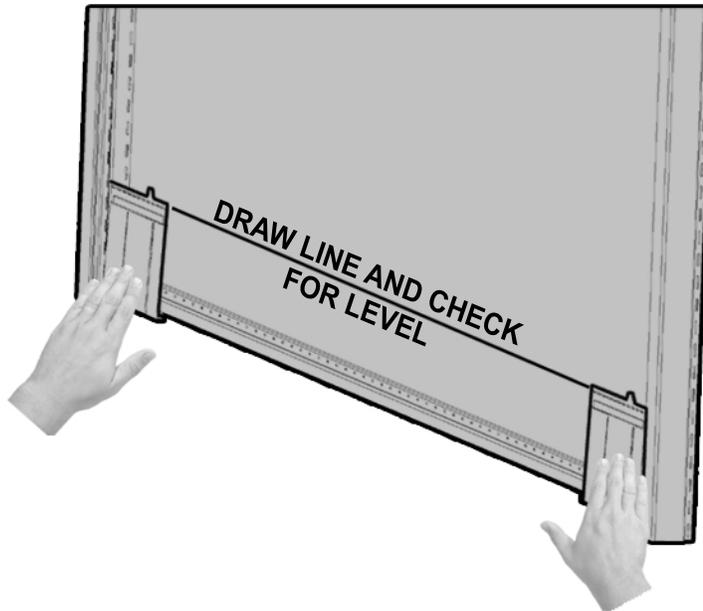
NOTE: For the Hand-Split Shake corner post should be $1\frac{1}{4}$ " min. below starter strip.

4.6.3 Starting the first course

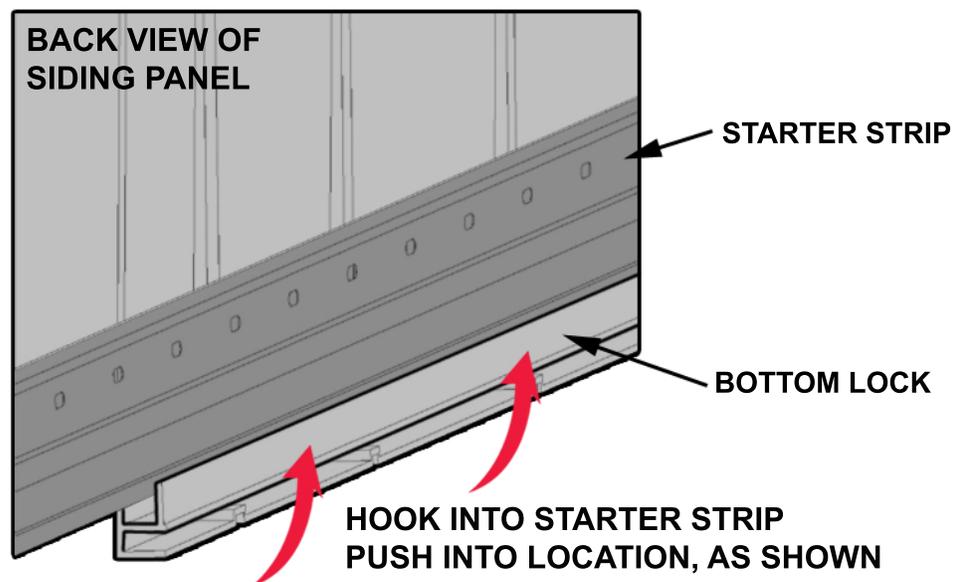
Place a siding panel section onto the left side of the starter strip and mark the top of the panel. Repeat this step for the right side of the starter strip.

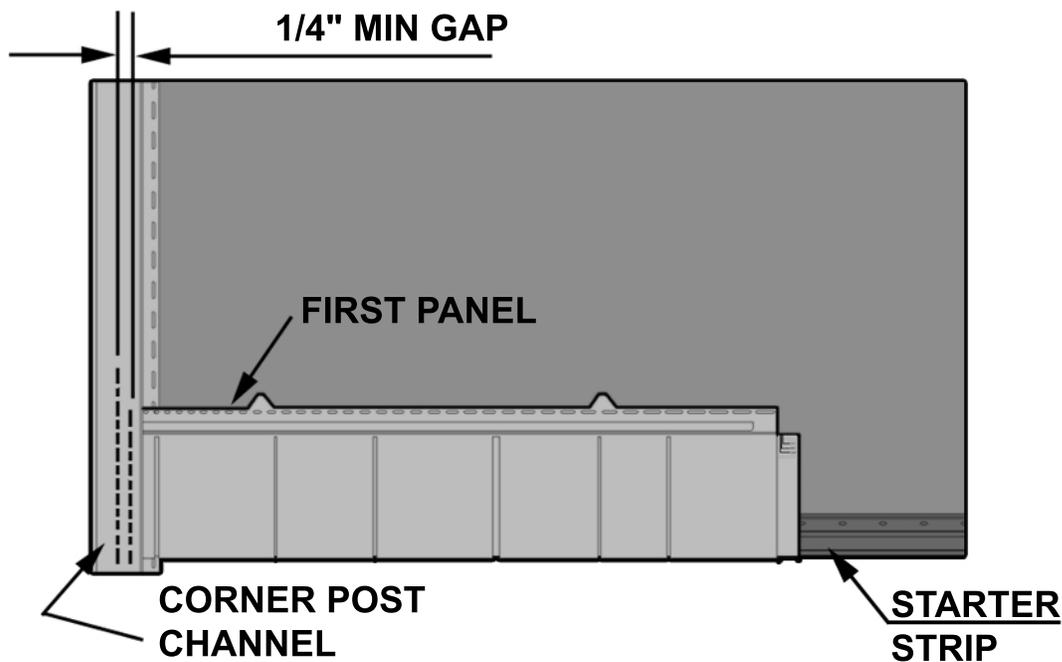
Stretch a chalk line across these two marks and snap a line. This is your guide for your first course of siding panels.

NOTE: Verify the chalk line is level before proceeding.

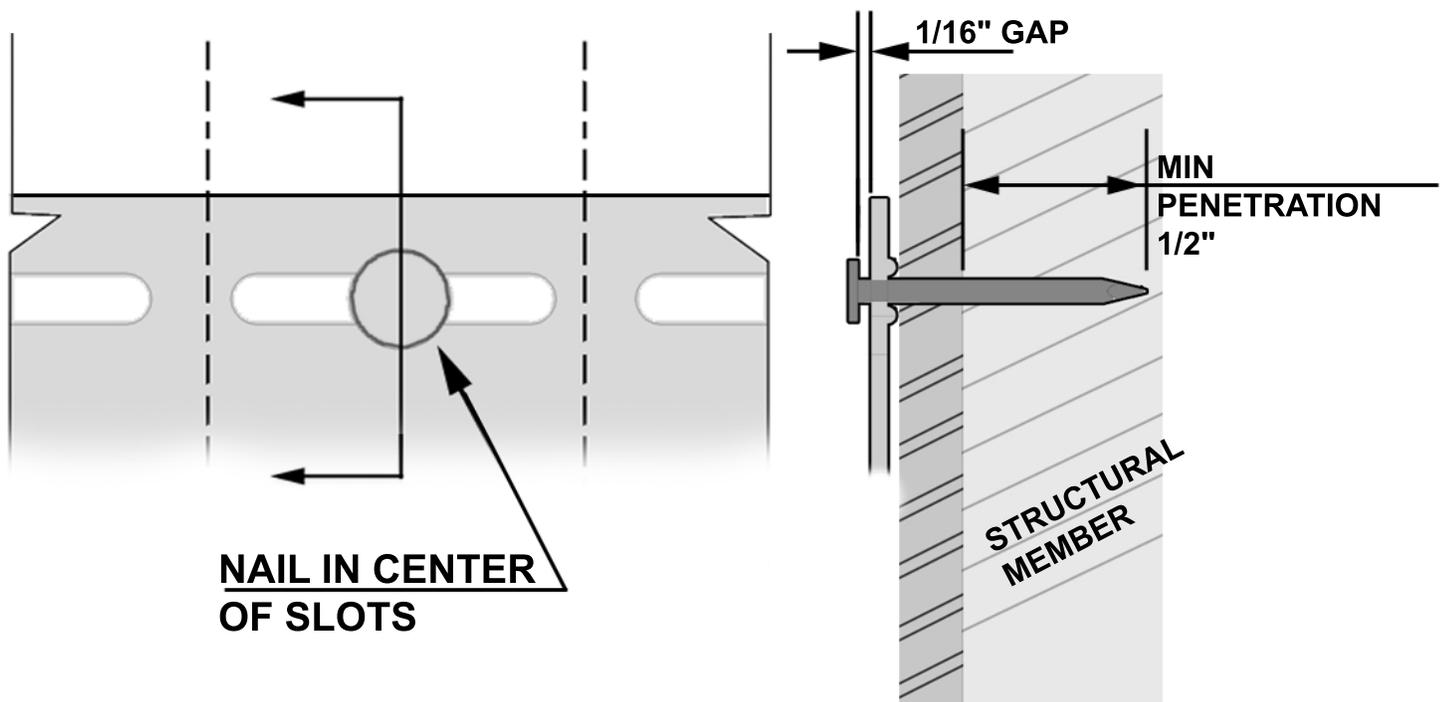


To install the first siding panel cut a straight edge on the side that is to be inserted into the corner trim channel. Hook the bottom lock into the starter strip and slide the panel into the corner trim channel. Keep the siding panel a minimum of $\frac{1}{4}$ " away from the inside edge of the corner trim channel. This is to allow for expansion of the siding panel.





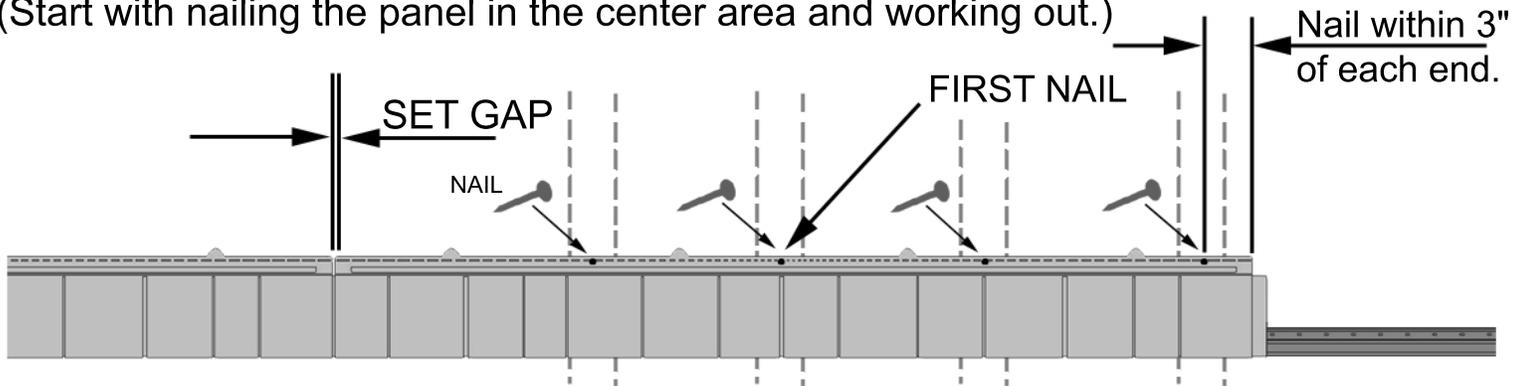
Nail the siding panel to the structural member, start by nailing the siding panel in the center and working out to the ends. All nails located in the nailing hem must be driven in until there is a 1/16" gap between the nail head and the siding panel. This allows for expansion and contraction of the siding panel. All nails must be located in the center of nailing slots.



Note: Do not nail tight to wall.

Norandex siding panels must be nailed a maximum of every 16" and must be nailed within 3" of each end of the siding panel. A 1/2" minimum nail penetration into a structural member is required. Reference building codes for additional requirements. Install the second panel by hooking into the starter strip and overlapping the male side lock (Temperature markings section 4.4). Position the second panel to the required gap for expansion and nail into location.

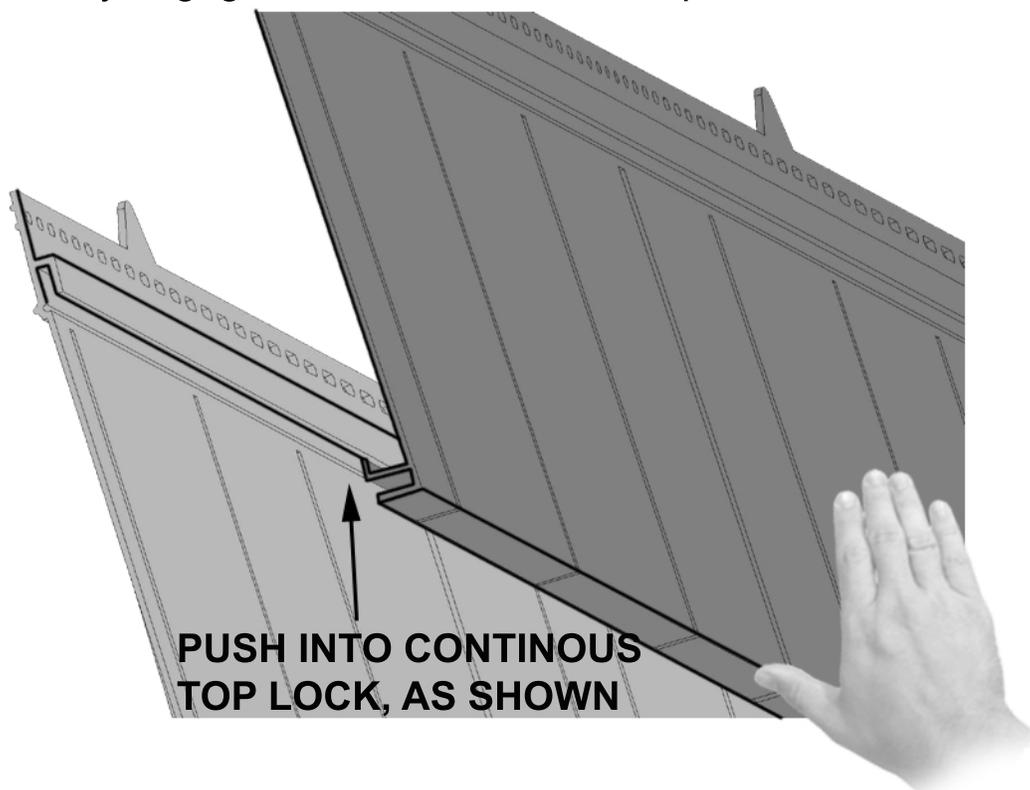
(Start with nailing the panel in the center area and working out.)



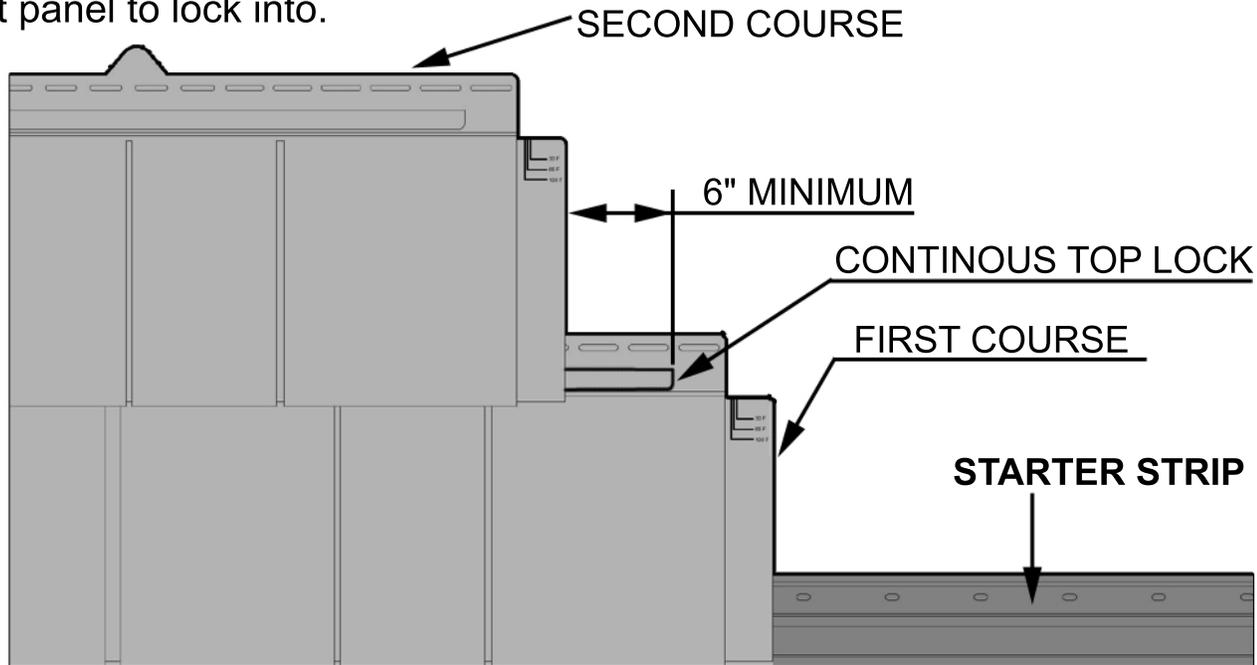
Continue with this process until the first course is completed remembering to leave a minimum 1/4" gap for the last panel into the corner trim channel.

4.7 Installing the second and subsequent courses

Start each subsequent course with random length siding panels to prevent from creating a repetitive pattern. When applying your first piece make sure the continuous bottom lock is fully engaged with the continuous top lock of the last course.



Remember to keep $\frac{1}{4}$ " gap between the siding panel and the corner trim channel. Always start by nailing the center of the siding panel first and working out to the ends. Make sure a minimum of 6" of the continuous top lock is remaining exposed for the next panel to lock into.



Position the next panel for the required gap for expansion and nail into place. (Start with nailing the panel in the center area and working out.) Repeat until course is complete.

4.8 Installation over various substrates.

NOTE: For applications requiring engineering evaluation of wind load parameters, please contact our manufacturing partner AOBP at:

American Original Building Products, LLC.
1000 Arlington Circle
Akron, Ohio 44306-0670
330-786-3000

4.8.1 Nail based sheathings.

It is recommended to work over a smooth, flat, wall surface. Nails should penetrate a structural member $\frac{1}{2}$ " minimum.

4.8.2 Non-nail based sheathings.

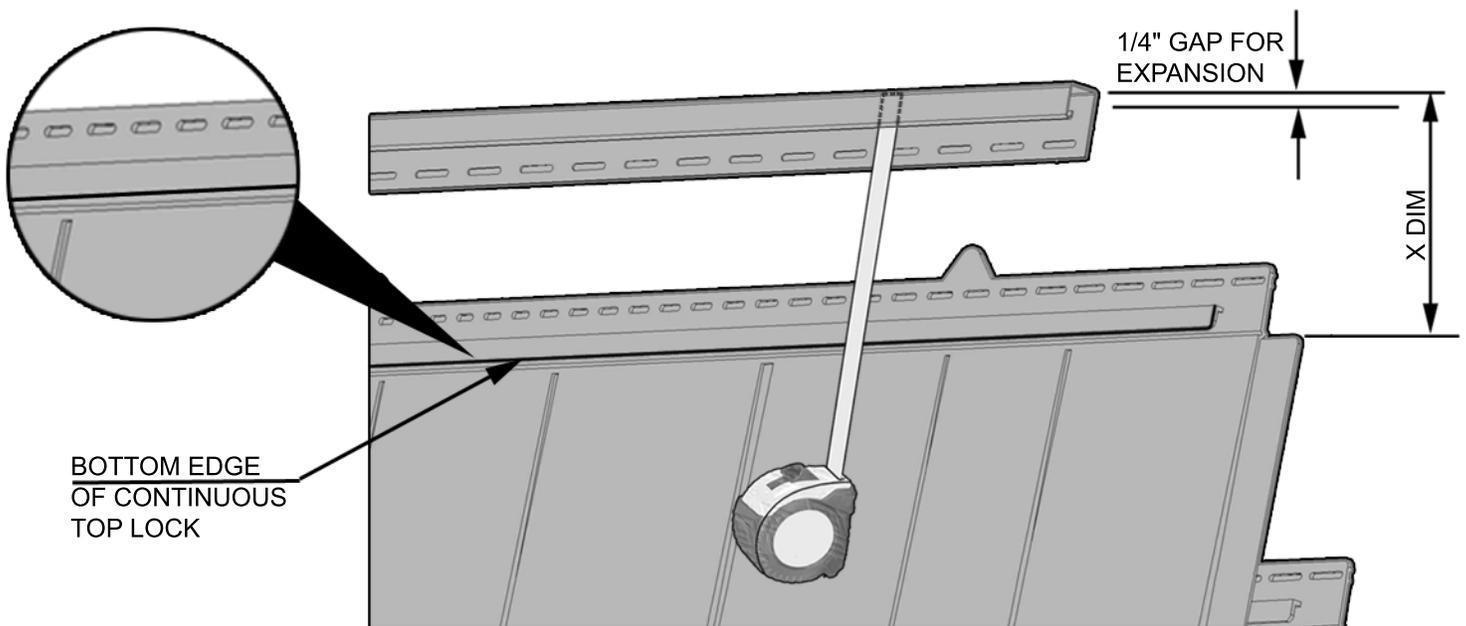
For any non-nailable sheathing, Norandex recommends that all nails be driven into the structural framing.

5. TRIMMING

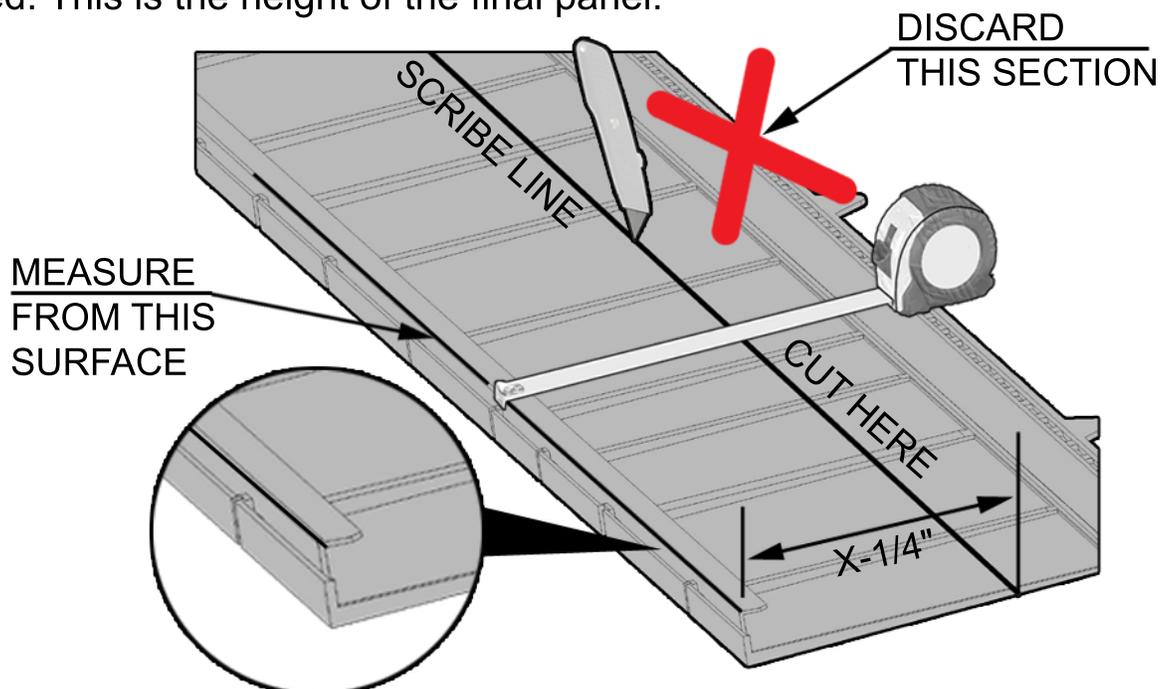
5.1 Installing final course

Any crown molding, J-channel or wide window type casing can be used in the eaves for the final course.

Measure from the inside of the trim channel down to the bottom edge of the continuous top lock minus 1/4". This is the height dimension for the final course.

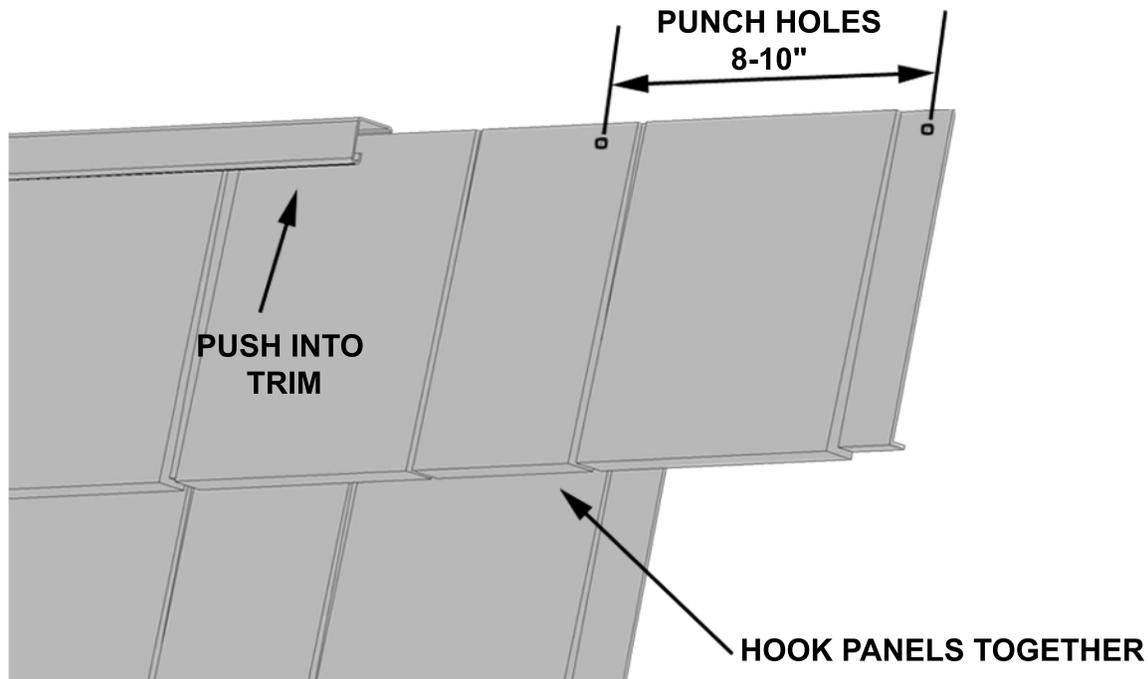


Lay the panel face down and measure from the bottom lock up to the number that was established. This is the height of the final panel.



5. TRIMMING - continued

After cutting the panel punch nail slots every 8-10".
Hook panels together and slide
the top of the panel into the trim channel. Nail into position as described earlier.



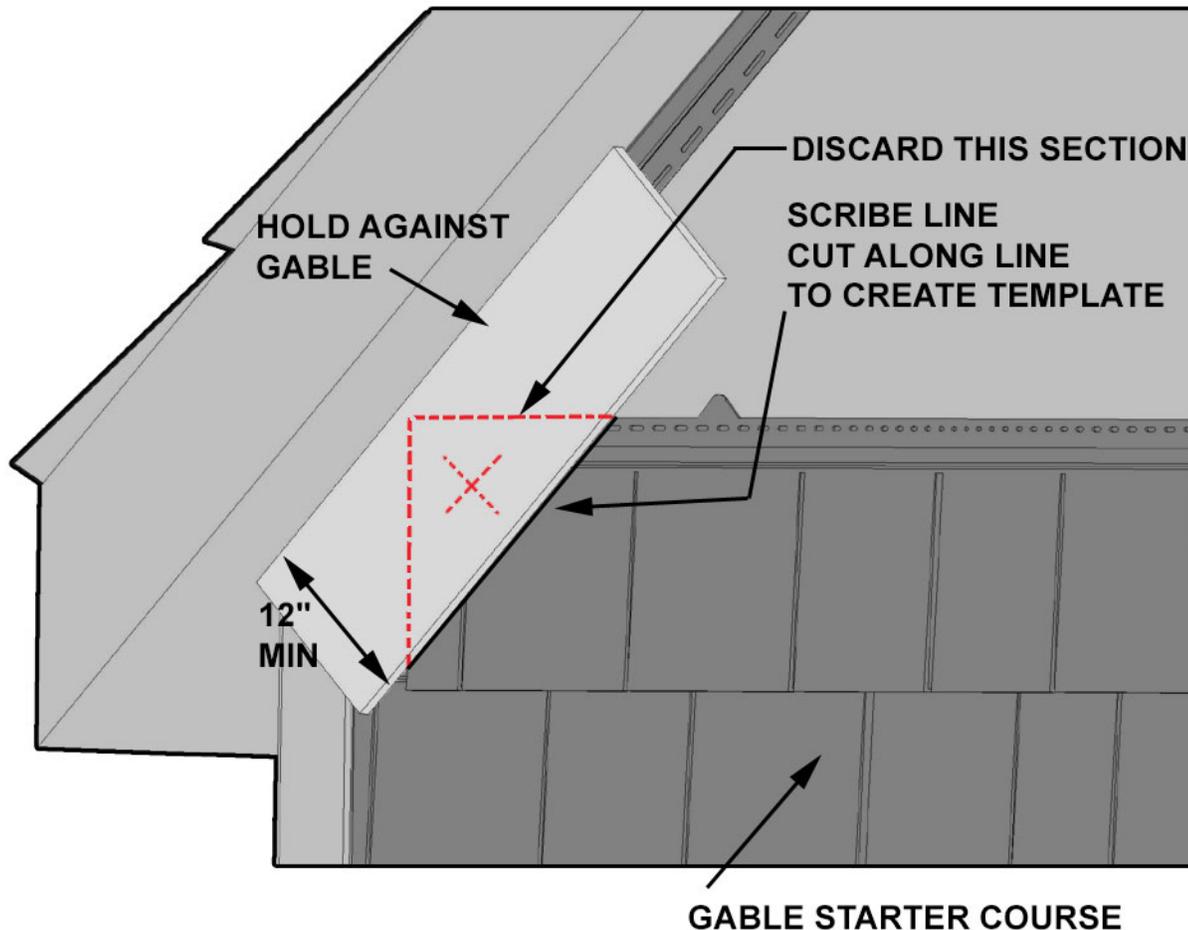
5.2 Trimming around openings

Measure and cut panels for around openings allowing $\frac{1}{4}$ " for expansion.
Follow the same instructions as in section 5.1 for measuring and installing around openings.

5.3 Trimming gables

It is recommended that a template be made for a guide when fitting and cutting panels for gables. Any scrap wood or material at least 12" wide can be utilized to make the guide. Snap into location any scrap piece of panel into the gable starter course. With the 12" wide scrap material placed against the bottom of the gable, scribe a line onto the scrap panel.

5. TRIMMING - continued



Cut along the line and now you have a gable template. Use the template to cut all gable mating panels remembering to maintain a $\frac{1}{4}$ " gap for expansion inside all trim channels. Punch nail slots every 8 – 10" and install following the same instructions as in section 5.1.

5.4 Trimming fixtures

Fixtures cannot be attached directly to the siding. Always use a block or a J-box to attach fixtures. Drill a hole slightly larger than the diameter of the fasteners, allowing for expansion and contraction.

Note that fasteners must penetrate the solid substrate.

6. TIPS

Complete one wall before beginning another.

Always start at the lowest point of the structure.

Nailing the panels should not restrict movement. Nails should be driven straight into the center of any nailing slots leaving about 1/16" between the nail head and the panel.

Nail spacing should not exceed 16".

Top run can be installed by putting silicone caulking in bottom lock and attaching it to the last course and pushing into final location. Take care not to get silicone caulking on the front of the siding panel.

Top run may be installed with double undersill trim.

To insure panels are hanging straight and level, every 5-6 course stretch a chalk line across the wall and use as a guide.

Always store siding panels flat. Never bend siding panels.

Norandex siding panels are not to be used as a roof covering.

Norandex siding panels can be cleaned with any standard house wash or household detergent.

Nail within 3" of each end of siding panel.