American Original™
BUILDING PRODUCTS LLC

Installation Instructions for

Shake Siding Panels

Shake Siding Panels

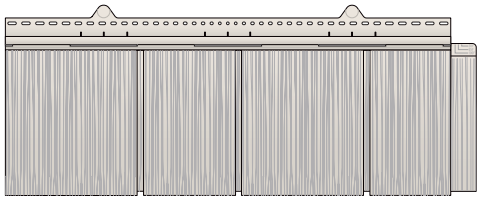
INSTALLATION INSTRUCTIONS

American Original Building Products, LLC (AOBP) provides these instructions as installation guidelines. However, AOBP 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 AOBP siding panels are installed in accordance with these instructions and any applicable building codes. AOBP assumes no liability for improper installation and/or personal injury and/or property damage resulting from improper use or installation.

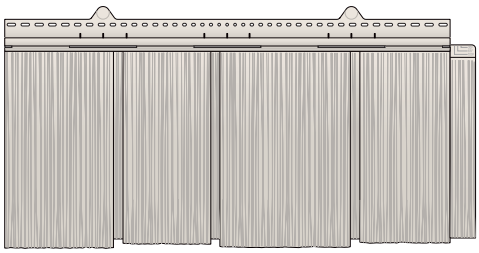
These installation instructions should not be construed as the only possible way to install this siding. Field conditions may dictate different methods. It is the responsibility of the siding installer to determine the best methods to use. Reference Building Codes for additional requirements.

1. PRODUCT OVERVIEW - AOBP offers four styles of shake siding panels.

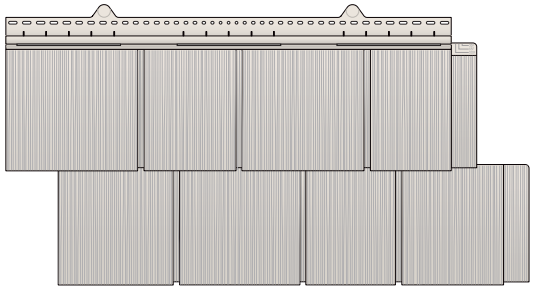
Traditional Shake (Panel length 81-1/4")



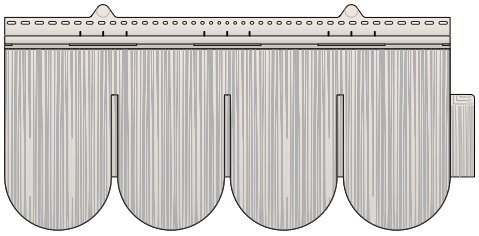
Hand Split Shake (Panel length 75-5/8")



Cape Cod Shake (Panel length 67-3/16")



Half Round Shake (Panel length 76-7/8")



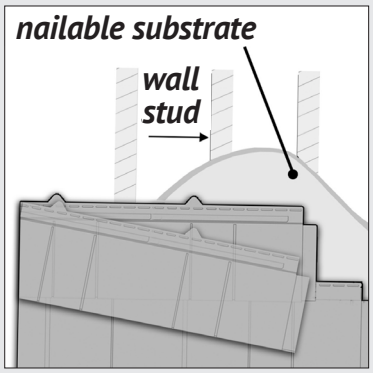
2. INSTALLATION GUIDELINES

AOBP siding panels will expand and contract with a change in temperature. It is important to compensate for this temperature effect during installation and assure siding and accessories are properly hung. The panel temperature markings on the end locks (see section 3.3) help assure the proper gap that will allow panel length changes due to temperature. Utilize the specially designed nail hem and make sure the panel "floats" on the wall by leaving a 1/16" gap between the fastener head and the panel. Do not flush nail, set or over drive fasteners. Do not nail panels in areas other than the nail hem slots provided on the full panels. Fitting panels around between windows, corner posts or around openings requires a cut-back of approximately 1/4" to allow for panel expansion. Where the panel is cut along its length for openings or at the top of a wall, install a J-channel or drill a 3/8" hole and nail in the center.

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

American Original Building Products, LLC
1000 Arlington Circle, Akron, Ohio 44306-0670
330-786-3000 | email: info@americanoriginalsiding.com

AOBP siding panels should be only installed on a smooth, flat surface. When re-siding older homes, either remove the old siding or install a sheathing over the old siding to form a smooth, flat surface. It is essential you work over a smooth, flat, nailable wall surface (7/16" or thicker OSB board or plywood is recommended). If furring strips are used, the area between the furring strips must be filled to ensure a flat and level surface. If a foil-faced sheathing is used, the foil side should be facing in towards the house.



ROCK-TO-LOCK!

When installing, starting the panel lock on the left side and rocking it into place "zips" the lock and can make installation faster!

Installation of the shake panels is made easier by holding both hands near the panel and rocking it into place. The rock-to-lock method is accomplished by dropping the right side of the panel to angle of about 45°, engage the left side in the lock and pivot the panel into place assuring full engagement.

The AOBP packaging system incorporates palletized and wrapped shipments from the factory. The pallets are longer than many and require extended forks for movements. Pallets should not be stored more than 2 units high. The shake siding should be stored indoors and away from direct sources of heat and sunlight. Do not store in any location where the temperature may exceed 120°F or in closed unventilated areas where heat can build up. Storing product outside may result in damage. Store and transport full carton on a flat surface and support the entire length of the carton.

As with any vertical siding, you may have to complete an extra step to provide solid nailing points along the vertical edge of the wall. The need for this added step depends on the type of substrate used and the nature of the construction project. Open corners or uneven walls may require furring straps to provide an adequate nail base. Furring strips are not needed if using sheathing.

This product is not designed for roof application. It is designed solely for installation on vertical surfaces. Panels must be installed with nails over a solid substrate with nail holding strength such as plywood, oriented strand board, or existing wood siding (minimum 7/16" thick). This product cannot be installed with staples.

When re-siding existing structures:

1. Nail down loose boards on existing siding and replace any rotten wood as needed. Do not install siding over rotten wood.
2. Scrape off loose caulk and other buildup that may interfere with the siding installation.
3. Install suitable sheathing, as needed, to provide a smooth, flat, and stable surface for the installation of siding.
4. Install furring strips in areas needing straightening and leveling. Apply rigid sheathing to cover and level the furring strips without sheathing.

Additional installation procedures can be found within the Vinyl Siding Institute Installation Manual. https://polymericexteriors.org/installation/installation-manual/getting-started/

3. FEATURES

3.1 Continuous top and bottom lock

All AOBP siding panels are manufactured with top and bottom continuous locks to ensure the panels are tightly secured to each other.

3.2 Engineered nailing hem

The specially engineered nailing hem features right-sized nail slots designed to allow proper expansion and contraction of individual panels to accommodate for natural fluctuations in temperature.

3.3 Temperature markings

Temperature markings are included in each panel to designate the proper gap between panels during installation. (See section 5.6 for details)

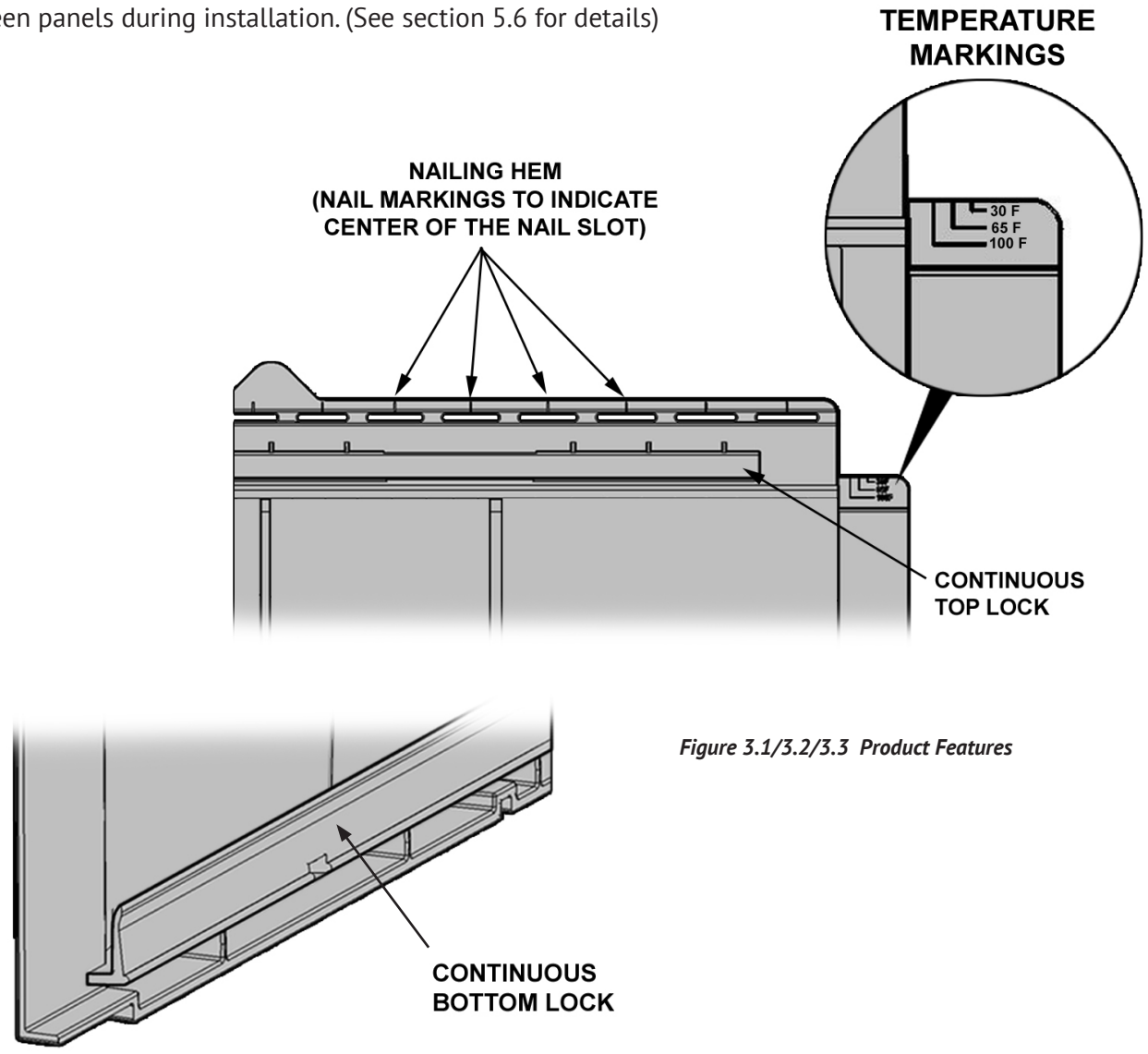


Figure 3.1/3.2/3.3 Product Features

4. ACCESSORIES REQUIRED FOR PROPER INSTALLATION

Standard siding accessories, with a minimum 3/4" pocket width (such as the J-channel, inside and outside corner posts, window and door trim) can be used with AOBP siding panels.

4.1 Starter strip

The special shake starter strip is recommended for use with all four profiles

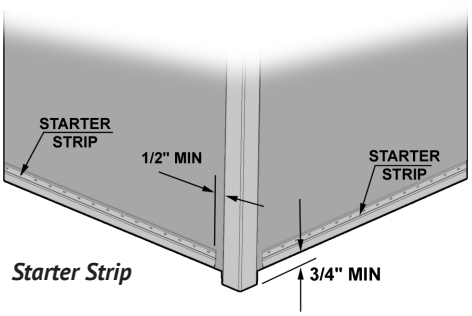


Figure 4.1 Starter Strip

5. APPLICATION TECHNIQUE

5.1 Tools required

- Hammer
- Pencil
- Snips (Tin)
- Nail slot punch
- Chalk line
- Utility knife
- Tape Measure
- Level

NOTE: Always use safety goggles when using hand or power tools.

5.2 Methods to cutting panels

For ease of installation, AOBP recommends the use of a circular saw and fine tooth blade, with blade installed so blade is spinning backwards. Siding can be cut with snips or standard utility knife if needed. NOTE: A saw blade setup in reverse direction should only be used for cutting polymer siding.

5.3 Always build wall left to right

All AOBP siding panels are designed to be installed left to right which is the industry standard. Right to left installation may be possible in certain circumstances.

5.4 Nailing Instructions

2-1/2″ minimum ring shank nails recommended. Nailheads should be 5/16″ minimum diameter.

- **Nail base sheathings**
  It is recommended to work over a smooth, flat, wall surface. Nails should penetrate a nail based sheathing 7/16″ minimum.
- **Non-nail base sheathings**
  For any non-nailable sheathing, AOBP recommends that all nails be driven through the sheathing and into the structural framing a minimum of 3/4″.

5.5 Start rows with random lengths

Care should be taken to not use the same length starter panel 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. The minimum panel length should be 16″.

5.6 Setting the panel gap for temperature

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 to set the panel gap based on panel temperature and not air temperature.

Air 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

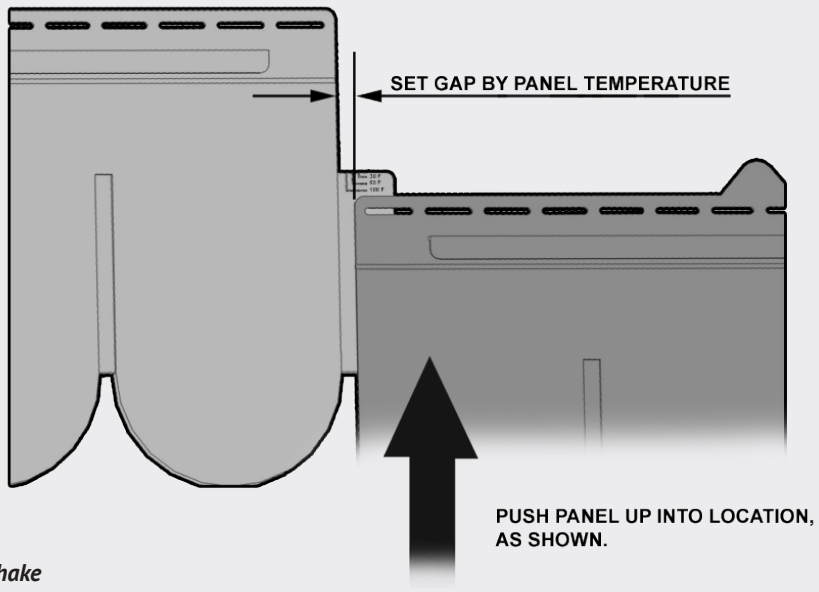


Figure 5.6
Gapping Scallop Shake

5.7 Installing the initial course

NOTE: The Hand-Split Shake corner post should be 1-1/4" min. below starter strip.

5.7.1 Starter strip

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

5.7.2 Inside and outside corner posts

Corner post and corner trim (J-channel) must be installed before any panels are nailed into position. Corner posts must extend a minimum of 3/4˝ below the starter strip.

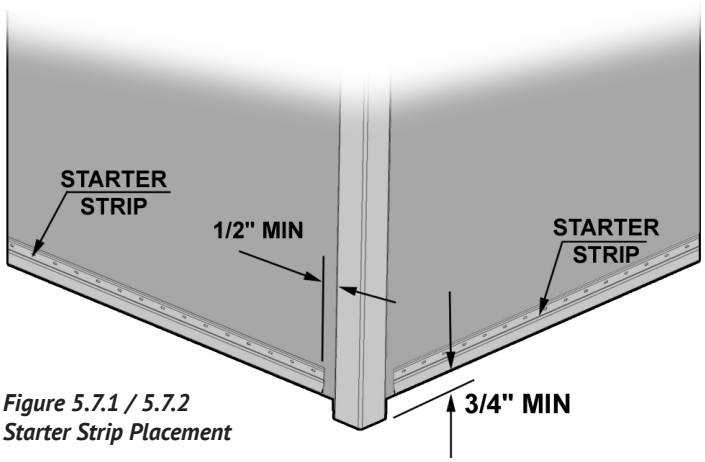


Figure 5.7.1 / 5.7.2
Starter Strip Placement

5.7.3 Starting the first course

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 1/4" away from the inside edge of the corner trim channel. This allows for expansion of the siding panel.

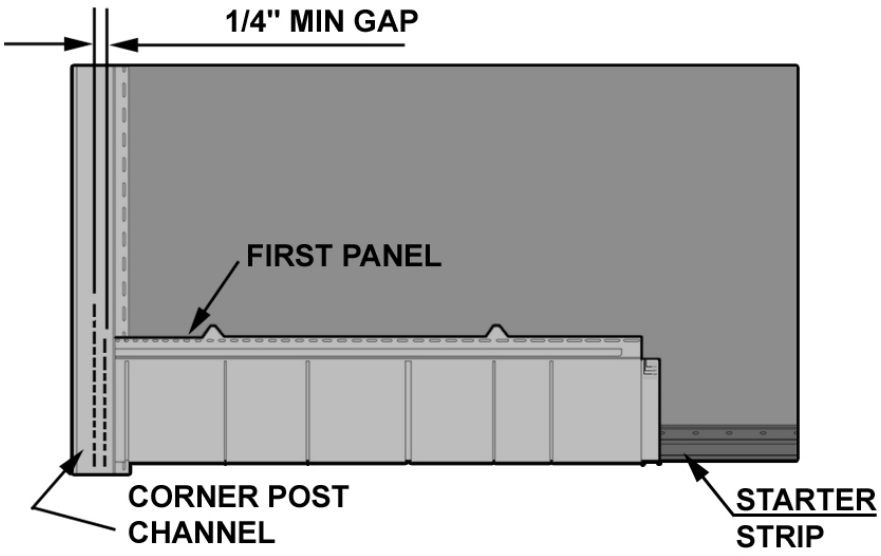


Figure 5.7.3 First Panel Installation

5.7.4 Nailing panels to wall

Nail the siding panel to the structural member (stud or nail base), closest to the center of the panel, and working out to the ends. Nail spacing cannot exceed 16″. All nails located in the nailing hem must be driven 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. Nails must be located in the center of nailing slots.

2-1/2″ minimum ring shank nails recommended. NOTE: Always drive nails straight and level.

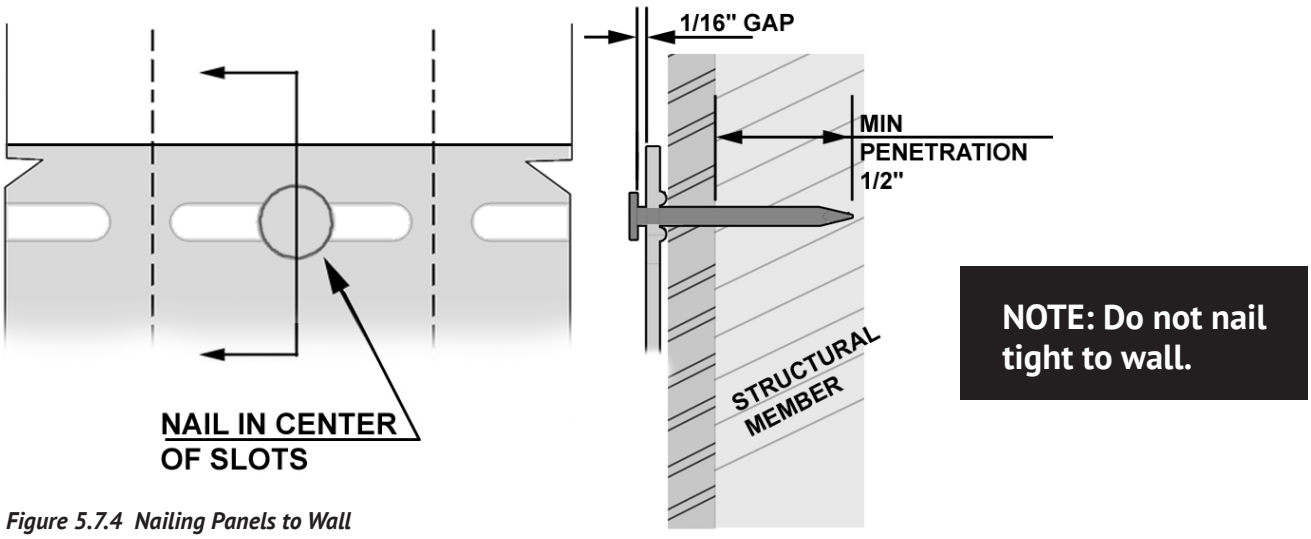


Figure 5.7.4 Nailing Panels to Wall

5.7.5 Panel spacing

AOBP siding panels must be nailed at a minimum frequency of 16″. A 3/4″ minimum nail penetration into a structural member stud or nail base is required. Install the second panel by hooking onto the starter strip and overlapping the male side lock (Temperature markings section 5.6). Position the second panel to the required gap for expansion and nail into location. Start by nailing the panel in the center area and working out.

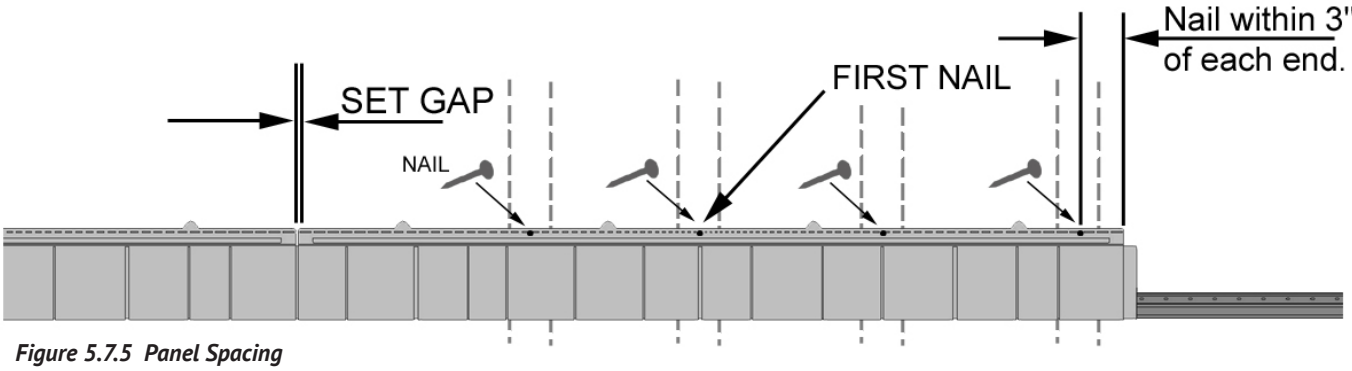


Figure 5.7.5 Panel Spacing

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.

5.8 Installing the second and subsequent courses

5.8.1 Step 1

Start each subsequent course with random length siding panels to prevent a repetitive joint or grain pattern. When connecting the panels, make sure the continuous bottom lock is fully engaged with the continuous top lock of the previous course.

Where the seams of upper course panels come together, it is advised that a nail be put in the lower courses nailing hem directly below the seam.

Make sure a minimum of 8˝ of the continuous top lock is remaining exposed for the next panel to lock onto.

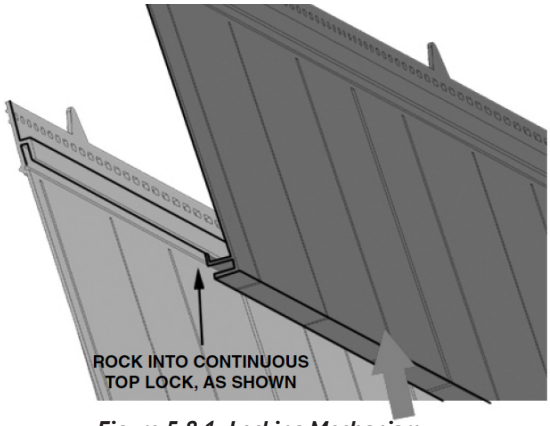


Figure 5.8.1 Locking Mechanism

5.8.2 Step 2

Position the next panel for the required gap for the expansion and nail into place.

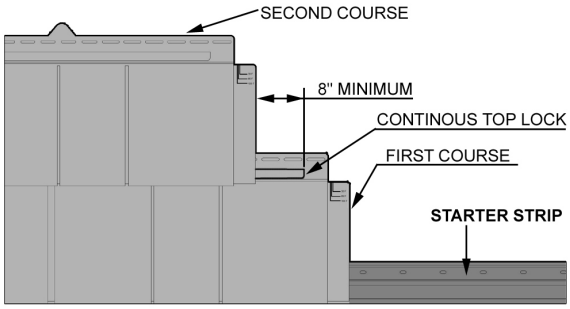


Figure 5.8.2 Illustration of Two Courses Installed

5.8.3 Step 3

Where two panels are adjoined, install a nail in the lower courses nailing hem directly underneath the seam.

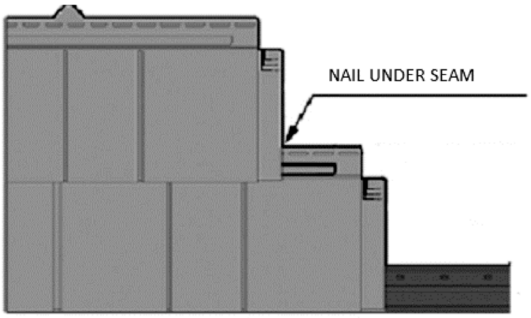


Figure 5.8.3 Nail Under Seams

5.9 Installation tip

A feature of the AOBP shake siding is the long single course which reduces scrap and installation time. Installation of these long shake panels is made easier by holding both hands near the panel and rocking it into place. The rock-to-lock method is accomplished by dropping the right side of the panel to angle of about 45°, engage the left side in the lock and pivot the panel into place assuring full engagement.

5.9.1 When installing scallop

Each next course should have the center of the scallop aligned with the groove between scallops of the course below. Panels must overhang more than 8" than the course below it.

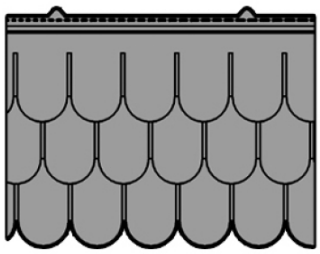


Figure 5.9.1 Scallop Alignment

5.10 Mansard roofs / Non-vertical walls (this is a non-standard application)

Polymer shake siding is not intended to be used as roofing material. Siding a non-vertical wall must be decorative and not be intended to function as a roofing surface.

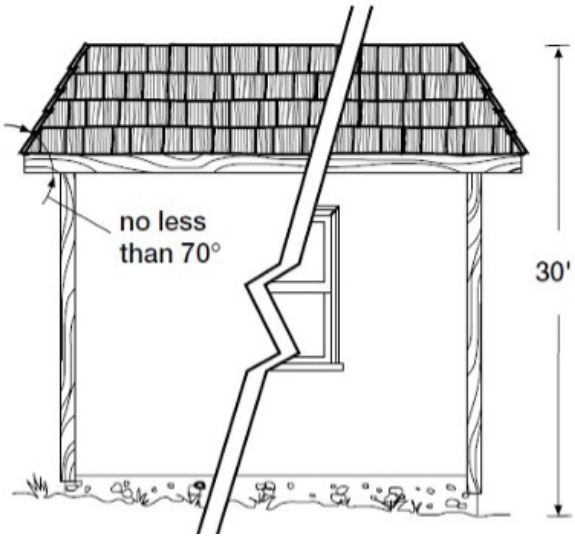


Figure 5.10 Mansard Roof Installation

Shake siding panels can be used on non-vertical applications:

- The non-vertical wall must not be greater than 20° off the vertical (no less than a 70° angle).
- The top of the wall cannot be higher than 30' above grade. (Or as required to meet your local building codes)
- For max wind resistance nailing should be like siding every 16" into studs. Nail penetration should be 1-1/4" (including sheathing and studs)
- Before you install Shake siding on a non-vertical wall, install a non-binding, self-adhering underlayment or waterproofing membrane. Cap the uppermost edge of the top course of siding to prevent water from getting behind the siding. Flash all accessories to shed water away from the substrate. Siding alone is not meant to be a watertight barrier.

6. TRIMMING

6.1 Installing final course

Use J-channel, dual undersill trim, or 2-piece molding. 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. Cut the panel to the desired height.

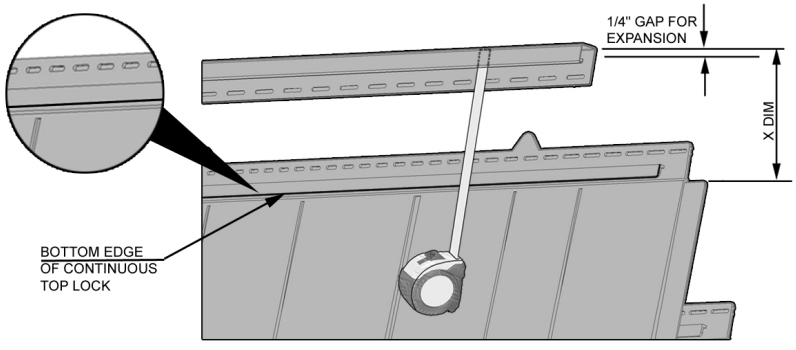


Figure 6.1 Measuring the Final Course

6.2 Cutting 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.

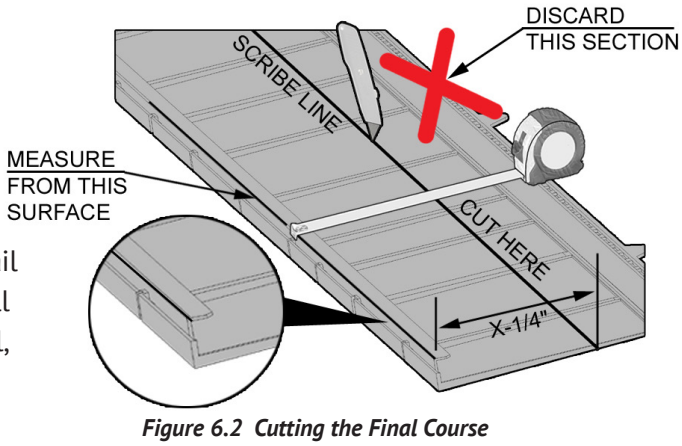


Figure 6.2 Cutting the Final Course

If using J-channel, using a nail hole slot punch, create nail slots every 16" at the top of the panel in an area that will be concealed by J-channel. Slots must be wider than nail, but smaller than nail head. Shimming behind the panel may be necessary for proper spacing in J-channel.

If using Double Sill Trim, using snap lock punch, create tabs that face away from the wall. Insert panel into inner channel if the trimmed panel was cut closer to the bottom lock. If closer to the top lock, insert the panel into the outer channel.

If using a 2-piece molding system, apply channel receiver. Create nail slots every 16" to cut panel and fasten to wall. Snap on cover piece.

6.3 Trimming around openings

Measure and cut panels around openings allowing 1/4˝ for expansion. Use J-Channel or other channeled products. Follow the same instructions as in sections 6.1 and 6.2 for measuring and installing a top course under openings.

6.4 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.

Cut along the line and now you have a gable template. Use the template to cut all gable mating panels remembering to maintain a 1/4˝ gap for expansion inside all trim channels.

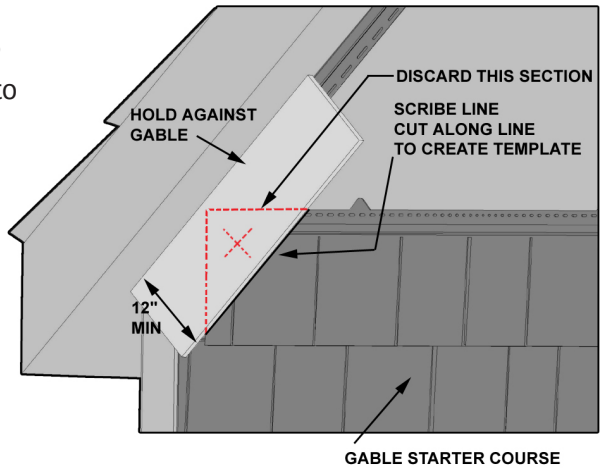


Figure 6.4 Fitting Shake at Gable

6.5 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.

7. SCALLOP INSTRUCTIONS FOR GABLE INSTALLATIONS

For a symmetrical appearance on gable walls:

1. Locate the center of the wall prior to beginning installation.
2. Temporarily install the center panel.
3. Temporarily install the left most panel remembering to set the temperature gap (reference section 5.6)
4. Measure and cut your starting panel from the space left between the left most temporary panel and the gable edge.
5. Once starting panel is established, remove the temporary panels and begin laying your first course for this wall (remember to allow a 1/4" gap between your first panel)

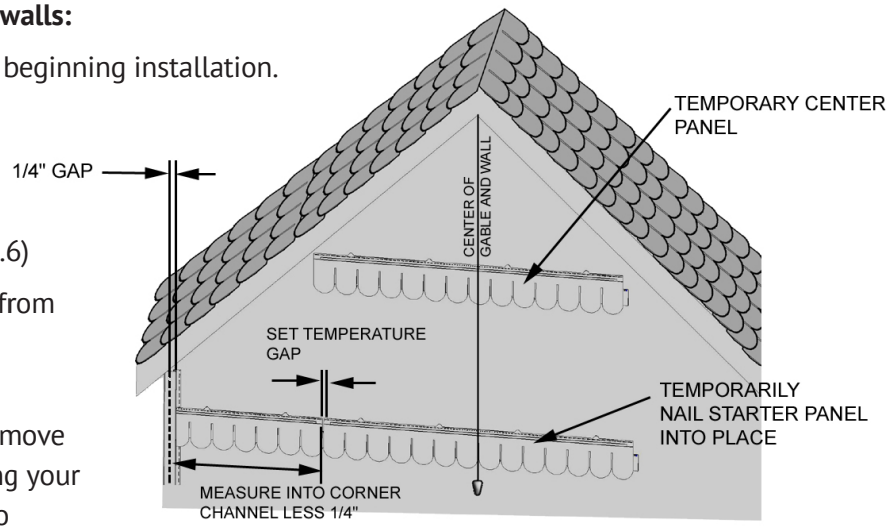


Figure 7 Scallop Installation

8. MITERED CORNER ACCESSORY INSTALLATION

8.1 General

The mitered corner accessory installs best over a solid substrate, 7/16" or better, creating a true, solid corner with nail holding strength. Installation over existing siding is not recommended. It is recommended a water resistant wrap be applied to all corners of the house before installing corner pieces. Make sure the special shake starter strip (Figure 8.1) extends to within 1/4" to 1" of the corner. Space the siding panel 3" from the edge of the corner. After the first two courses are installed, lock the first corner over the siding, making sure it also locks into the starter trip. Nail the corner through the top two nail slots. Make sure the corner accessory "floats" on the wall by leaving a 1/16" gap between the fastener head and the panel. Do not flush nail, set or over drive fasteners. Continue installing corner pieces as you move up the wall. When you reach the top panel, cut to length and nail with color-matched finish nails.

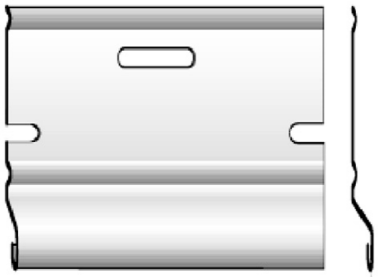


Figure 8.1 Special Shake Starter Strip

8.2 Installing American Original mitered traditional style corners

Install the siding on both sides of the wall before you install the corner. Space the siding 3" from the edge of the corner. The corners are designed to fit over the panels. After the first two courses are installed, lock the first corner over the siding, making sure it also locks into the starter strip. The top of the corner must be in line with the top of the panel. Nail the corner through the top two nail slots so that the nail penetrates the nail base 7/16" minimum. Toe nailing may be necessary especially when installing over foam and existing siding. Do not over drive the fastener, the corner must "float".

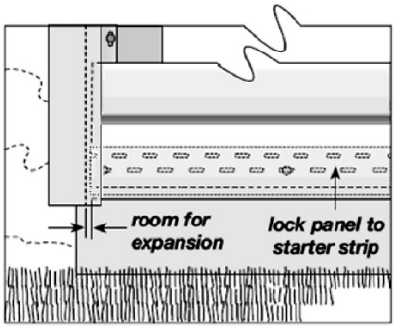


Figure 8.2 Corner Installation

8.3 Installing American Original mitered hand-split style corners

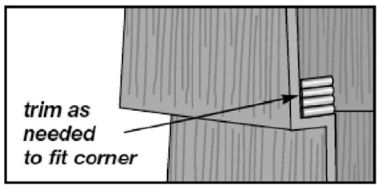


Figure 8.3 Hand-Split Tab

Install the siding on both sides of the wall before you install the corner. Space the siding 3" from the edge of the corner. The corners are designed to fit over the panels that are used to start a new course. After the first two courses are installed, lock the first corner over the siding, making sure it also locks into the starter strip. The top of the corner must be inline with the top of the second panel. Nail the corner through the top two nail slots so that the nail penetrates the nail base 7/16" minimum. Toe nailing may be necessary especially when installing over foam and existing siding. Do not over drive the fastener, the corner must "float' and be parallel to the siding.

Each side of the corner has a tab at the bottom of the shake with cut marks at 1/8" increments. They allow you to fit the corner to the different butt heights you may encounter as you finish a course. Trim the corner gap as needed to fit the panel.

NOTE: Depending upon the area of the Hand-Split panel you finish with and the top completion selected, you may have to install furring behind the top panel in the receiver to accommodate the thickness of the Hand-Split panel.

9. TIPS

- Care should be taken to not use the same length starter panel 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. The minimum panel length should be 16".
- Always start at the lowest point of the structure. Install corners accessory (optional) with siding, carefully following installation instructions included with corners.
- 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. Allow 1/4" clearance in receiving channels.
- To ensure panels are hanging straight and level, every 5-6 course stretch a level chalk line across the wall and use as a guide. Alternately, level every starting and finishing piece to make sure the course will be level.
- Always store siding panels flat. Never bend siding panels. Read Installation Instructions thoroughly.
- To assure color uniformity, use lot numbers (located on box label) within 60 units of each other. It is recommended that the entire wall covering be purchased at the same time.
- Do not caulk the panels where they meet the receiver of accessories (corners, J-channel, etc.). Do not caulk the overlap joints. Do not use adhesives for installation.
- Do not face nail through siding.
- Avoid the use of unstable or uneven underlayment. Keep in mind siding can only be as straight as what lies under it. An uneven wall will cause uneven seams and gaps the joint between panels.

Care and Maintenance

This product may become dirty over time. As a result, it is recommended that it be cleaned yearly to prevent the buildup of dirt and mildew. This product can normally be cleaned satisfactorily with the use of an ordinary garden hose and water. This siding should never be cleaned with a power washer. If the above process does not provide satisfactory results, a gentle washing with a soft bristle brush and water be tried. If there are areas with stubborn dirt, a mild cleaning solution can be made by combining the following ingredients:

- 1/3 cup detergent (e.g., Tide)
- 2/3 cup trisodium phosphate
- 4 quarts of water

The siding should be rinsed with water from garden hose after cleaning.

Recommended cleaning instructions and additional installation procedures can be found within the Vinyl Siding Institute Installation Manual. https://polymericexteriors.org/installation/installation-manual/important-notes/

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