

# *Installation Guidelines*

## HAND-SPLIT SHAKE



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

Tested per ICC NER-580.

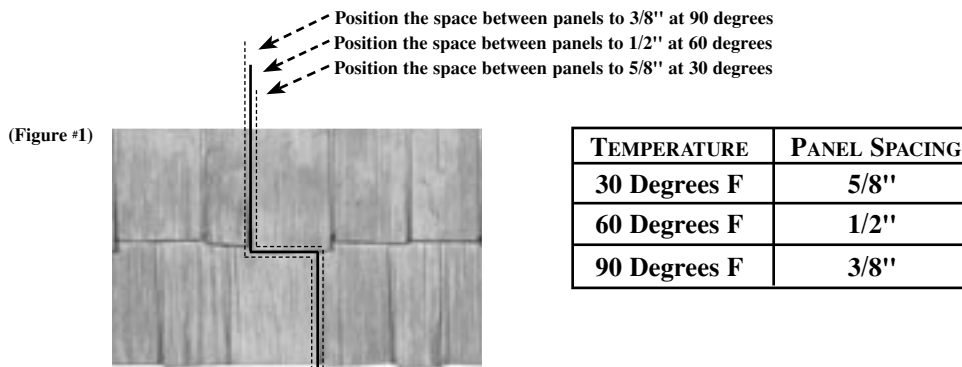
# NAILITE

For more information on Nailite and its wide variety of state-of-the-art products, please call us at (305) 620-6200; or fax to (305) 623-8227; or write: 1111 NW 165th Street, Miami, Florida 33169-5819

[www.nailite.com](http://www.nailite.com)

## BASIC GUIDELINES:

1. Always work from left to right, completing installation on one wall before beginning another. Always starting at the lowest point of the structure.
2. As with any plastic exterior building materials, Nailite panels will expand and contract with a change in temperature. Therefore, during installation it is necessary to position the panels properly to compensate for temperature effects. Note that the average spacing between shingle seams within a panel is approximately 1/2". **If the temperature is about 30 degrees F, position the panels so the shingle seam between them is about 5/8" wide to allow for expansion in warmer weather. If the temperature is about 60 degrees F, decrease the spacing to about 1/2" thereby allowing for both expansion and contraction as the temperature changes. If the temperature is about 90 degrees F, decrease the spacing further to about 3/8" to allow for contraction in colder weather. (Figure #1 and table) Note: for installation around 30 degrees F, you should also allow an 1/8" spacing around all openings.** Use caution not to force panels down onto the flange of the lower row, as this will override the expansion joints and may cause buckling. Storing panels in heated areas make them more pliable, allowing for easier installation in colder temperatures. Store panels on edge, do not stack flat.



3. Variations in shade and color are an inherent characteristic of Nailite's shaded colors. Shaded means the variegated cedar panels and brick and stone panels (see brochure for specific colors). It is recommended that the entire wall to be covered be purchased at one time using the same lot numbers. Before installing Nailite's shaded colors please verify that the lot numbers are the same. Installed siding is considered acceptance of product and no claims for color match will be honored after installation.
4. Nailite panels are intended for use in a vertical placement only, and are not designed or warranted for roofing or flooring applications. Mansard roofs with a 45/12 slope or greater are acceptable applications.
5. It is essential that you work over a smooth, flat, nailable wall surface, (i.e. 7/16" OSB board or plywood is recommended). If furring strips are utilized, the area between the furring strips must be filled to ensure a flat and level surface.
6. Fasteners used to secure Nailite panels must penetrate a solid substrate by at least 7/16". Plan ahead since the size of your **non-corrosive fasteners** may vary from job to job.
7. If face nailing is employed, pre-drill a hole in an inconspicuous area, such as a shingle seam. The hole must be larger than the shank of the nail or screw, but smaller than the head, to allow for possible expansion. The head can be covered with matching paint or caulk.
8. Fastening the panels should not restrict panel movement. Fasteners should be driven straight into the **center of any elongated hole making light contact** with the panel, allowing the panel to be hung. It is best to work with the panels at waist-level, allowing the installer to inspect the back of the panels, **verifying that all fingers are properly engaged**.
9. Siding has always been designed as an exterior cladding, not a weather resistant barrier. Nailite siding is designed to allow the material underneath it to breathe; therefore, it is not a watertight covering. To achieve designed performance, Nailite siding must be installed over a weather resistant house barrier system such as house wrap.
10. **Do not install all corners at one time or you will lose the ability to adjust and properly align them to the panels.** Install no more than two corners at a time.

## INSTALLATION STEPS:

**STEP ONE:** Install the starter strip (Figure #2) at the lowest point of the structure. The strip should be positioned 4" from the wall corner allowing for the width of the corner piece. (Figure #3) Nail the starter strip every 12". Make sure the starter strip remains level.

**STEP TWO:** Determine the number of panels needed for the wall by measuring the total length of the wall in inches, subtracting the width of the corner pieces used and dividing by 38 1/2". As you will need to cut the end panel, ensure that it remains at least 12" wide by reducing the size of the starting panel. The panel can be cut anywhere along the panel, however, do not overlap the seams of the panel below to ensure a pleasing and authentic shingle look is maintained. Do not cut more than one end piece at this time since adjustments will be required for succeeding rows.

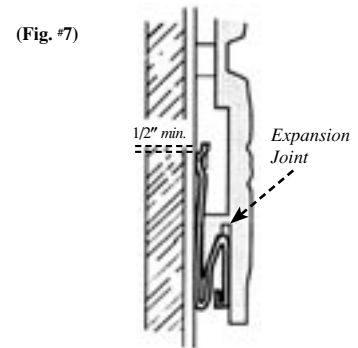
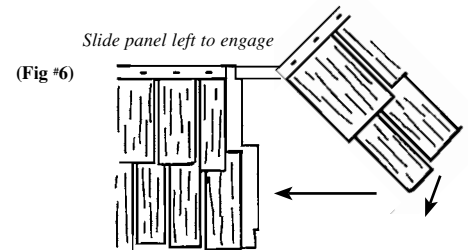
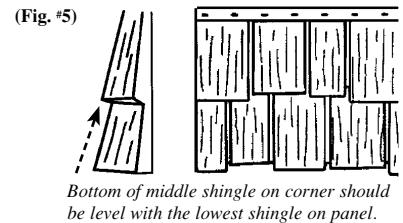
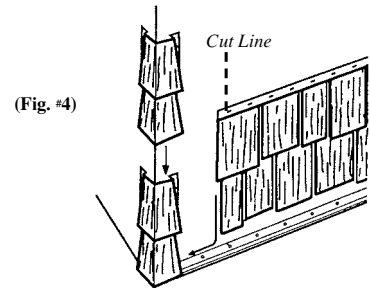
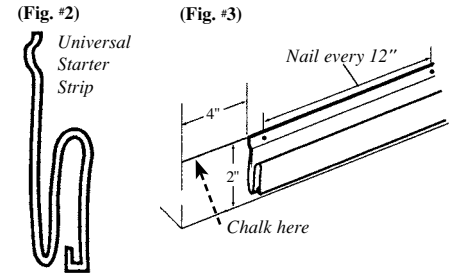
**STEP THREE:** Working from left to right, install the first Hand-Split Shake corner approximately 1" below the bottom edge of the starter strip. Slide the first panel left, butting it flush to the corner. (Figure #4) Be sure to position the corner so the bottom of the middle shingle on the corner piece is level with the lowest point of any shingle. (Figure #5) **DO NOT FOLLOW THESE INSTRUCTIONS FOR INSTALLING NAILITE'S ADJUSTABLE M SERIES™ CORNER WITH BUILT-IN J-CHANNEL. IF YOU ARE USING THE M SERIES™ CORNER, PLEASE FOLLOW INSTALLATION INSTRUCTIONS ENCLOSED IN THE M SERIES™ CORNER CARTON.**

**STEP FOUR:** For all succeeding panels of the present row, it is easier to install the Hand-Split Shake by holding both hands at either end of the panel at the bottom. By raising the right side of the panel at approximately a 45 degree angle it will be easier to engage the bottom fingers. Then carefully work your way to the right side of the panel (Figure #6), ensuring all fingers are properly engaged.

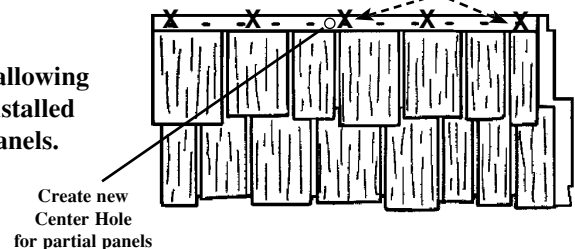
**STEP FIVE:** After positioning the panel at the proper spacing for the installation temperature, install a nail or fastener in the center hole of the panel. By attaching a fastener through the center hole, the panel will move evenly in both directions from the center out. (Figure #8) If a partial panel is used at either end, a new center hole should be created by drilling a 1/8" hole in the top flange, near the center of the partial panel at the same height as the other installation holes.

**STEP SIX:** Note: Nailite provides expansion joints in the back installation fingers. When installing succeeding rows of panels do not force the panels beyond the expansion joints. The joints are designed to prevent buckling due to changing temperatures. (Figure #7) The panel requires a minimum of five fasteners per panel as shown. (Figure #8) A closer spacing of fasteners is required for high velocity wind areas; for details refer to report NER-580. The non-corrosive fasteners must be installed into a solid substrate of no less than 7/16" thick.

When attaching the fasteners be sure they only lightly touch the panel allowing the panel to move with varying temperatures. The fasteners must be installed flush with the panel, so as not to interfere with the succeeding row of panels.

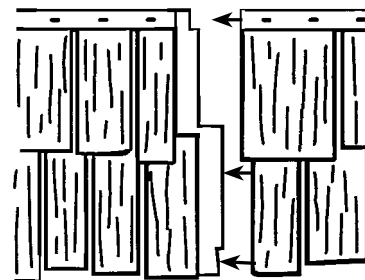


(Fig. #8) A minimum of five fasteners is required per panel as indicated with X's.



**STEP SEVEN:** Engage the next panel into the starter strip and slide it left. (Figure #9) Be sure to position panels correctly, leaving the correct space between shingles (as indicated in the chart in Figure #10) and described in Step Eight below.

(Fig. #9)



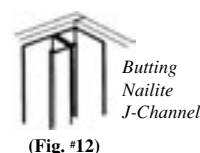
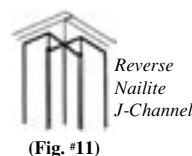
**STEP EIGHT:** Note that the average spacing between shingle seams within a panel is approximately 1/2". If the temperature is about 30 degrees F, position the panels so the shingle seam between them is about 5/8" wide to allow for expansion in warmer weather. If the temperature is about 60 degrees F, decrease the spacing to about 1/2" thereby allowing for both expansion and contraction as the temperature changes. If the temperature is about 90 degrees F, decrease the spacing further to about 3/8" to allow for contraction in colder weather. (Figure #10) Note, for installation around 30 degrees F, also allow an 1/8" spacing around all openings.

(Fig. #10)

TEMPERATURE	PANEL SPACING
30 Degrees F	5/8"
60 Degrees F	1/2"
90 Degrees F	3/8"

**STEP NINE:** Repeat Steps Four through Eight until you get to the last two panels at the right. Do not secure the last two panels until you have inserted the end piece into a corner piece or J-channel. Then re-position the last two panels to the proper shingle seam spacing and install the necessary fasteners.

**STEP TEN:** Nailite J-channels may be used for inside corner treatments or you may scribe and cut panels to fit into the corner. It is recommended to sleave the corner with vinyl or aluminum coil prior to installation of panels. Caulk corner after installation. (Figure #11 and #12)



**STEP ELEVEN:** When completing a wall, face nailing may be required. If face nailing is employed, pre-drill a hole in an inconspicuous area, such as a shingle seam. The hole must be larger than the shank of the nail or screw, but smaller than the head, to allow for possible expansion. The head can be covered with matching paint.

## REMINDERS :

Some adjustment may need to be made at the vertical overlap of two corners (as they are installed) in order to maintain the corner/panel horizontal alignment. There is approximately a 1/2" vertical adjustment available.

Fitting panels between windows or around openings requires a cut-back spacing of approximately 1/8" to allow for product expansion.

## ATTACHING OBJECTS TO PANELS

Never attach fixtures directly to Nailite siding. When attaching fixtures, use a block and first drill a hole slightly larger than the shank of the fasteners, allowing for expansion and contraction. Note: fasteners for fixtures must penetrate the solid substrate.

## SPECIAL SITUATIONS AND SUGGESTIONS

### SITUATION

1. Panels won't lock together side to side.
2. The bottom locking fingers won't lock into the previous row.

### ITEMS TO CHECK

The wall may not be level and flat. Check previous panels to ensure that all panels and installation fingers are properly seated. (See Basic Guidelines)

1. Panels are buckling on the wall.
2. Panels are not laying down flat.

Make sure the nails are not restricting panel movement. Check for proper spacing between adjacent panels. Make sure all fingers are engaged into previous panel.