



Installation Guide



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INSTALLATION BASICS

Before you begin, take the time to read this entire guide to clearly understand the requirements and steps to follow for proper installation.

WARNING: The specifications in the guide apply to the installation of Grayne Engineered Composite Shingle to exterior wall surfaces only.

Before you begin, consult your local building code for the installation requirements for shingle siding, breather membrane (housewrap), caulking, etc. Follow manufacturer's instructions for the breather membrane and caulking.

Failure to follow these installation requirements will void the warranties.

INSTALLATION BASICS

- Leave a minimum of 1/16" gap (up to 3/16" max) gap between the Grayne panel and trim board when installing in temperatures below 60° F.
- When lapping panels, leave 1/8" gap at nailing hem (**FIG 1**).
- When installing a siding panel, push up from the bottom until the lock is fully engaged with the piece below it. The panels should not be under tension or compression when they are fastened. Allow the butt edge to rest on the top edge of the course below (**FIG 2**).

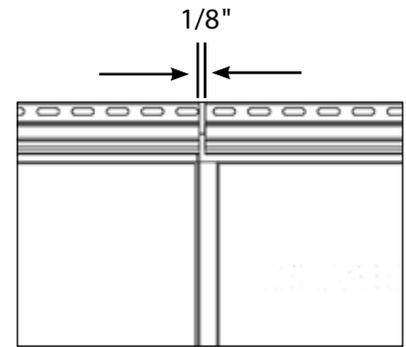


FIGURE 1

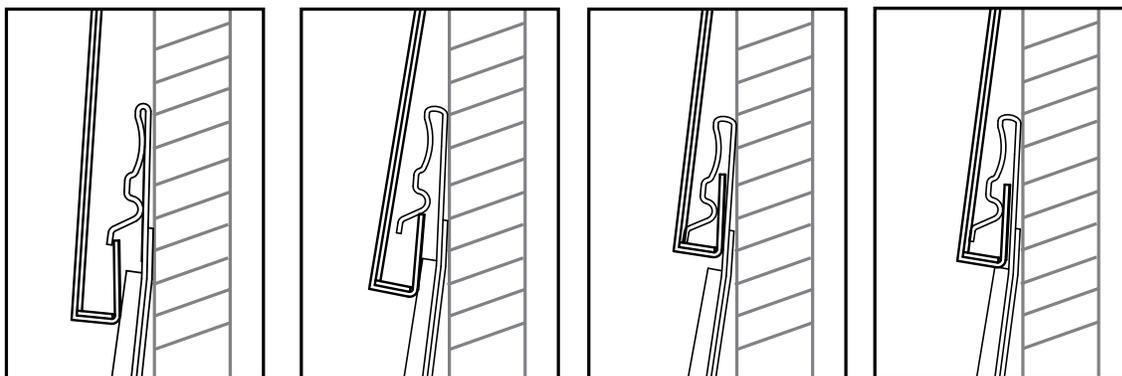


FIGURE 2

1. Align panels

2. Engage lock

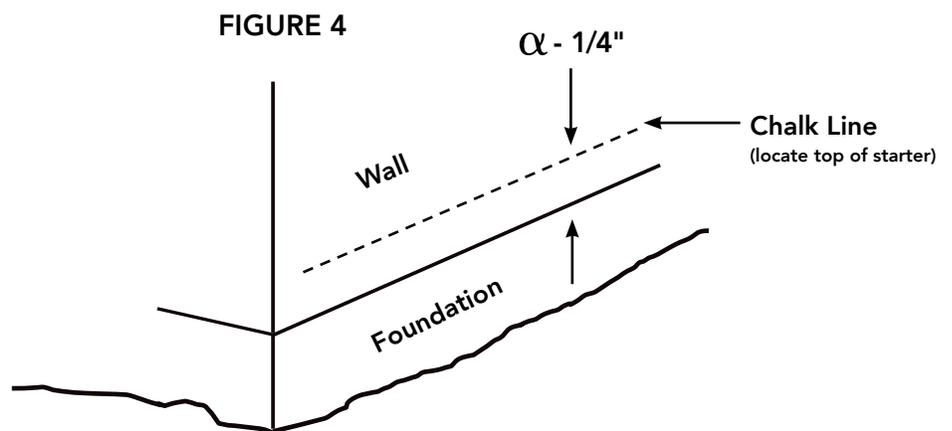
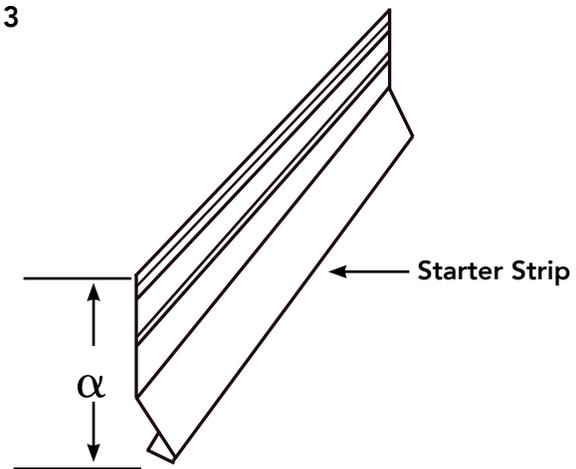
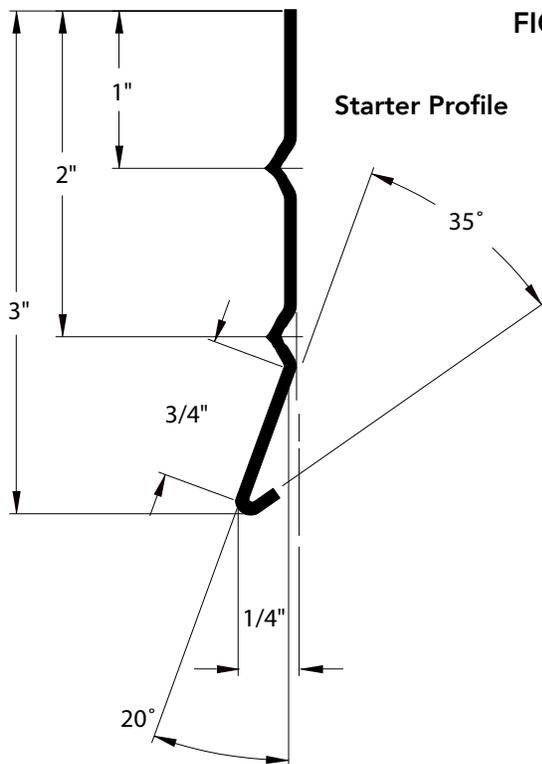
3. Press upward
to fully engage

4. Let top panel rest
on panel below

- Do not drive the head of the fastener tightly against the nail hem. Allow clearance between the fastener head and the siding nail hem (approx. 1/32"). Drive fasteners straight and level to prevent any restriction of the panel. Nail panels every 10".
- **Grayne Panel Fastener:** 3/8" (9.5mm) Head with .120" (3mm) Shank, fastener must penetrate 3/4" (19mm) beyond solid substrate. **Kleer Trim Fasteners:** Recommended Cortex system, optional using 6d & 8d stainless steel or hot-dipped galvanized nails 12" on-center and approximately 3/4" (19mm) from each edge. Use the proper quantity and size of fasteners that will penetrate the substrate at least 1-1/2". **Refer to trim manufacturing guide for additional installations techniques.**

STARTER COURSE

- If your using **Grayne Engineered Shingle** for an entire wall, start by installing a starter strip.
- Determine the lowest point of the wall that will be sided; from that point measure up 1/4" (6.4mm) less than the width of the starter strip, use a chalk line to make a straight level reference mark (**Fig 3**). This location will position the top of the starter (**Fig 4**).

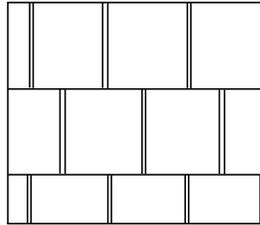


- Align the starter on the reference mark and fasten every 8" -12" (203mm-305mm).

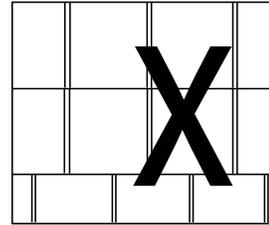
DUAL OFFSET INSTALLATION METHOD

- Dual offset installation methods ensures shingles will have proper "side laps".

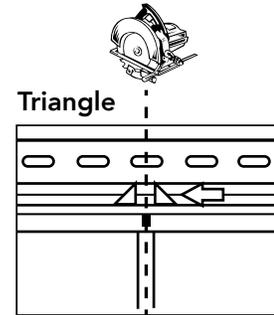
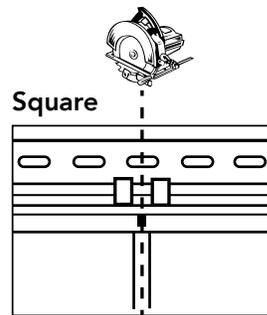
Correct Installation



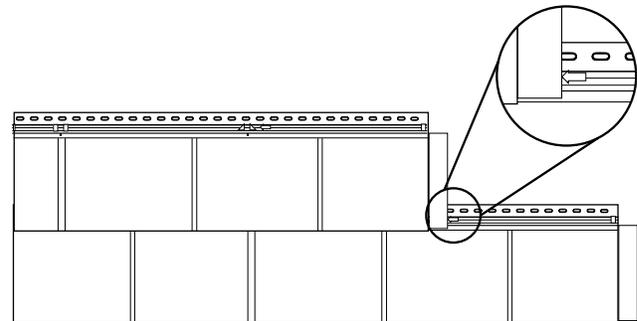
Incorrect Installation



- When starting a course, panels will be cut between the "cut marks".

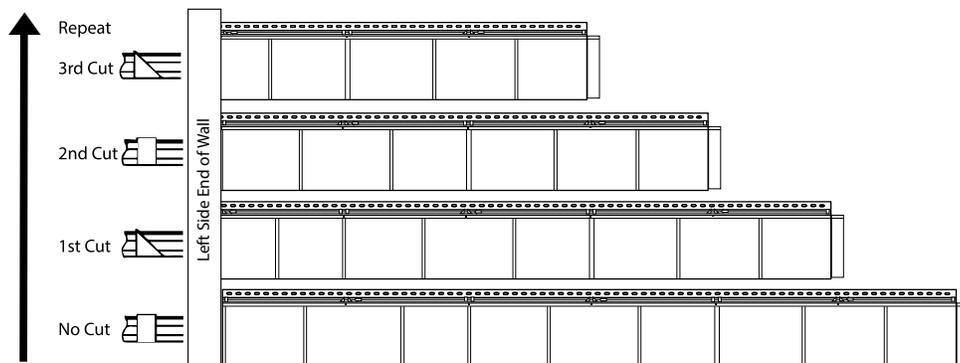


- The installed course should always end on the "panel end mark" of the course below.



This feature is useful around windows and doors

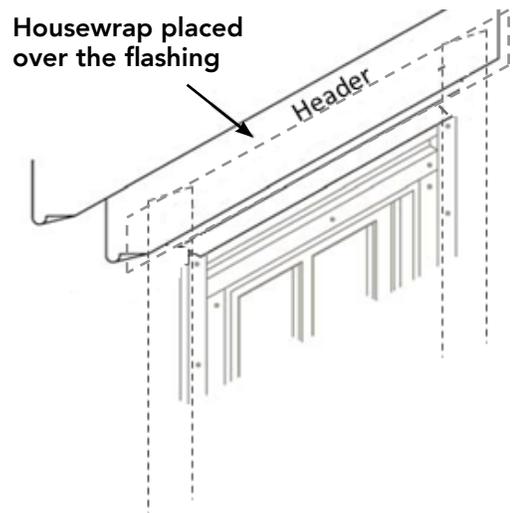
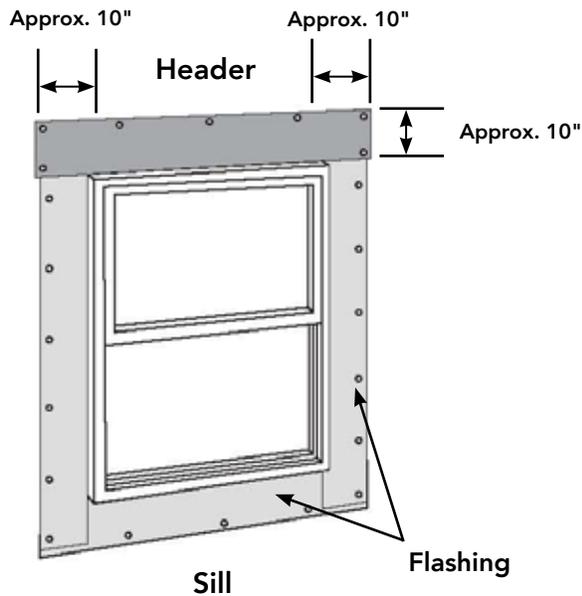
- Alternate between square and triangle cuts for the first course on the wall, this will ensure proper "side laps" for the entire installation.



WINDOWS AND DOORS

- If not using a window with a built in "J" pocket, we recommend using Klear Konceal Trim Board (or equivalent too) around windows and doors.
 - Use proper flashing methods to avoid water infiltration (**Fig 5**).

FIGURE 5



WINDOWS AND DOORS KONCEAL TRIM

- Flashing should extend beyond face nails and/or trim nailing locations (Fig 6 & 7).
- Shims may be required to correctly position the siding panel projection to the wall. Shim thickness depends on location of custom trimming of the panel(s) for window sills and window or door headers (Fig 7).

FIGURE 6

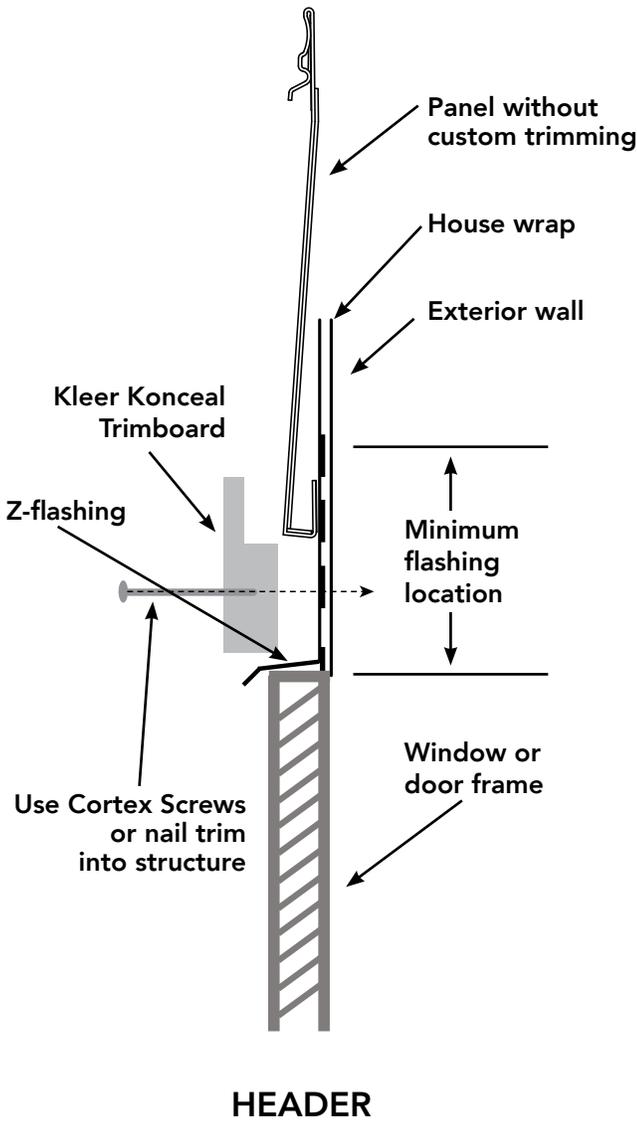
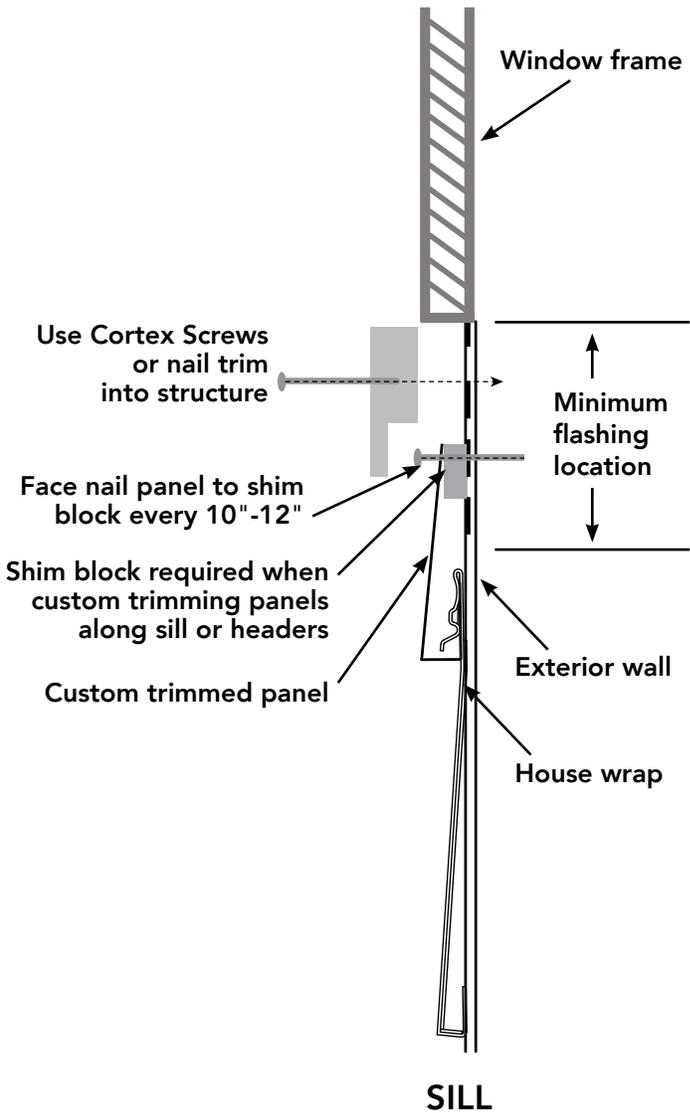


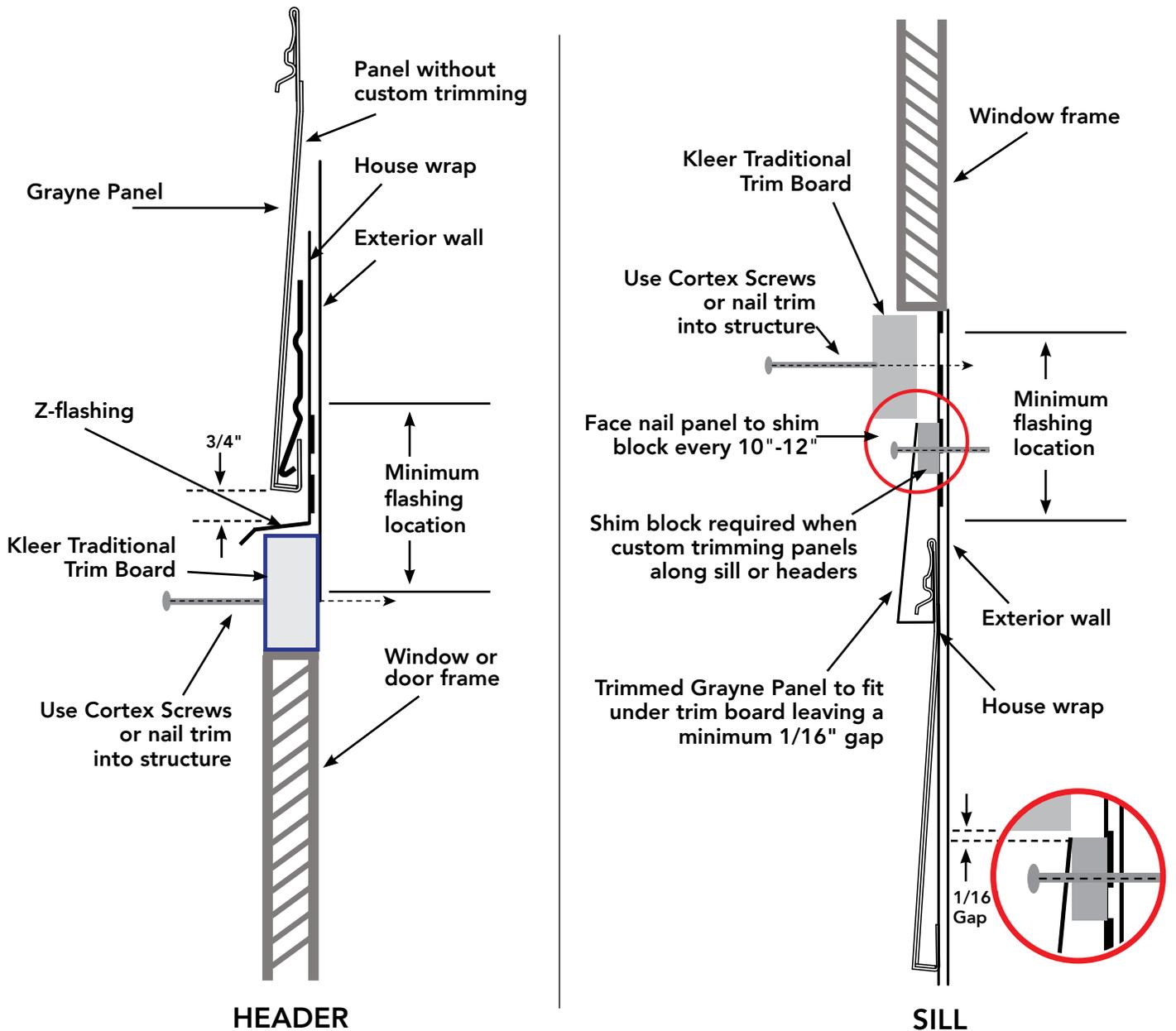
FIGURE 7



WINDOWS AND DOORS TRADITIONAL TRIM

- When butting up to standard hardboard trim properly flash around windows and doors.
- Use a 3/4" min. thick trim board (Kleer or equivalent hardboard trim is recommended).
- Fasten trim board per manufacturing and code requirements.
- Fasten Grayne siding (**Fig 8**). Leaving a minimum of 1/16" gap (up to 3/16" max) gap between the Grayne panel and trim board when installing in temperatures below 60° F.

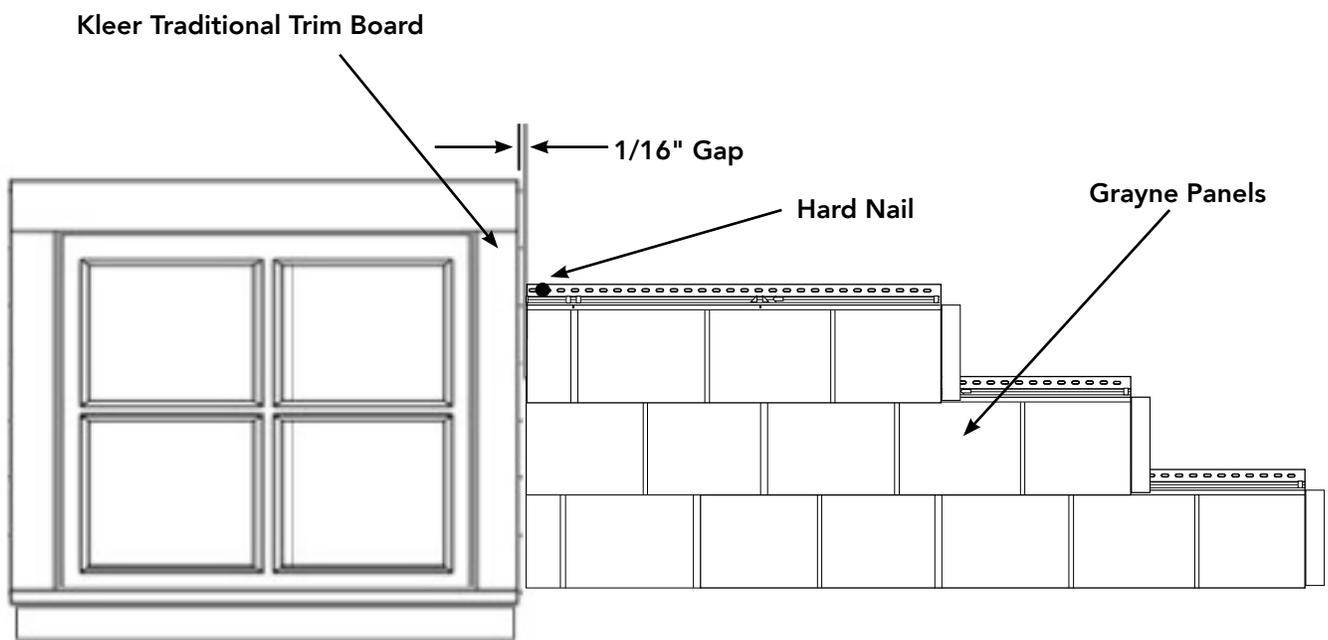
FIGURE 8



WINDOWS AND DOORS TRADITIONAL TRIM

- Fasten Grayne siding (**Fig 9**). Leaving a minimum of 1/16" gap (up to 3/16" max) gap between the Grayne panel and trim board when installing in temperatures below 60° F.
- Hard nail Grayne panel along trim board as shown in (**Fig 9**).

FIGURE 9



SOFFITS/TERMINATION

OPTION 1

- When using Klear Konceal Trim, shims may be required to correctly position the siding panel projection to the wall when custom trimming panel/s is required. Shim thickness depends on location of custom trimming of the panel/s (**Fig 10**).
- Face nail Grayne Panel into shim.

OPTION 2

- Place a trim/fascia board over the installed shingles. This is typically called "capping". A wood spacer is sometimes needed behind the fascia trim for a proper flush setting, as is the case with gables (**Fig 11**).

FIGURE 10

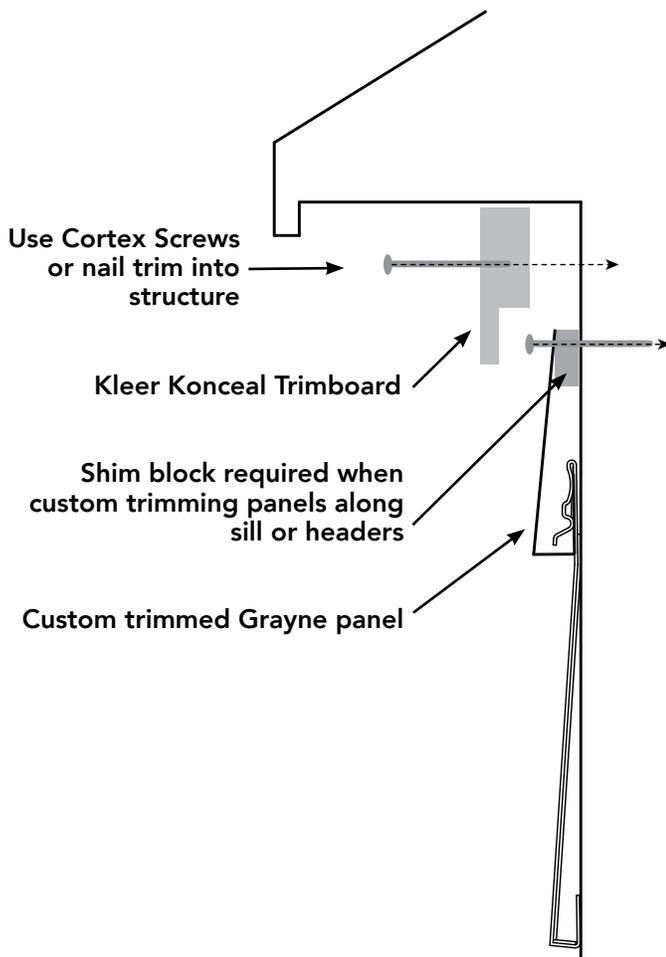
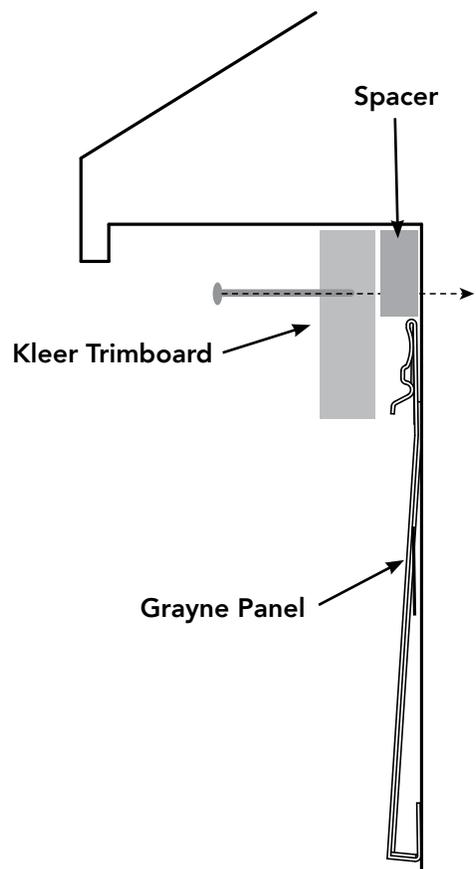


FIGURE 11



TRANSITION WITH BELLY-BAND

- Fig 12 demonstrates a transition application.
- In Fig 13 you will have up to 3/4" gap between the flashing and butt-end of the Grayne Siding Panel.

FIGURE 12

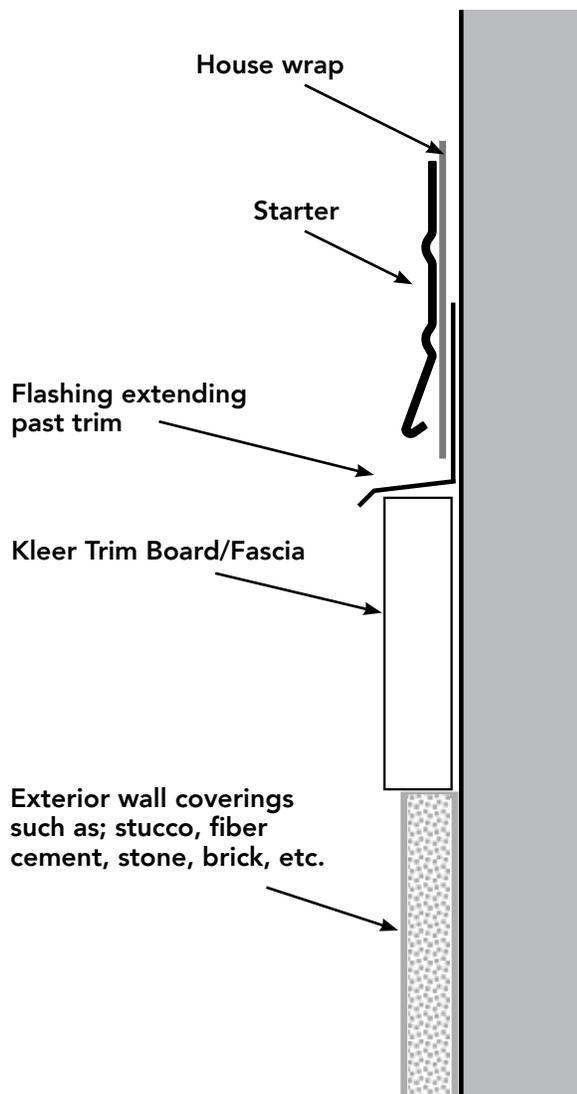
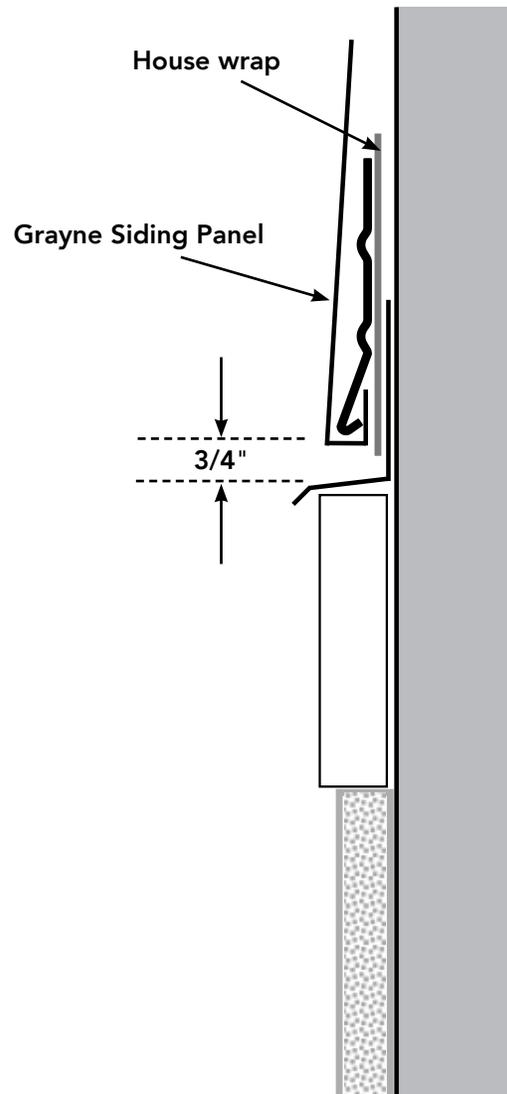
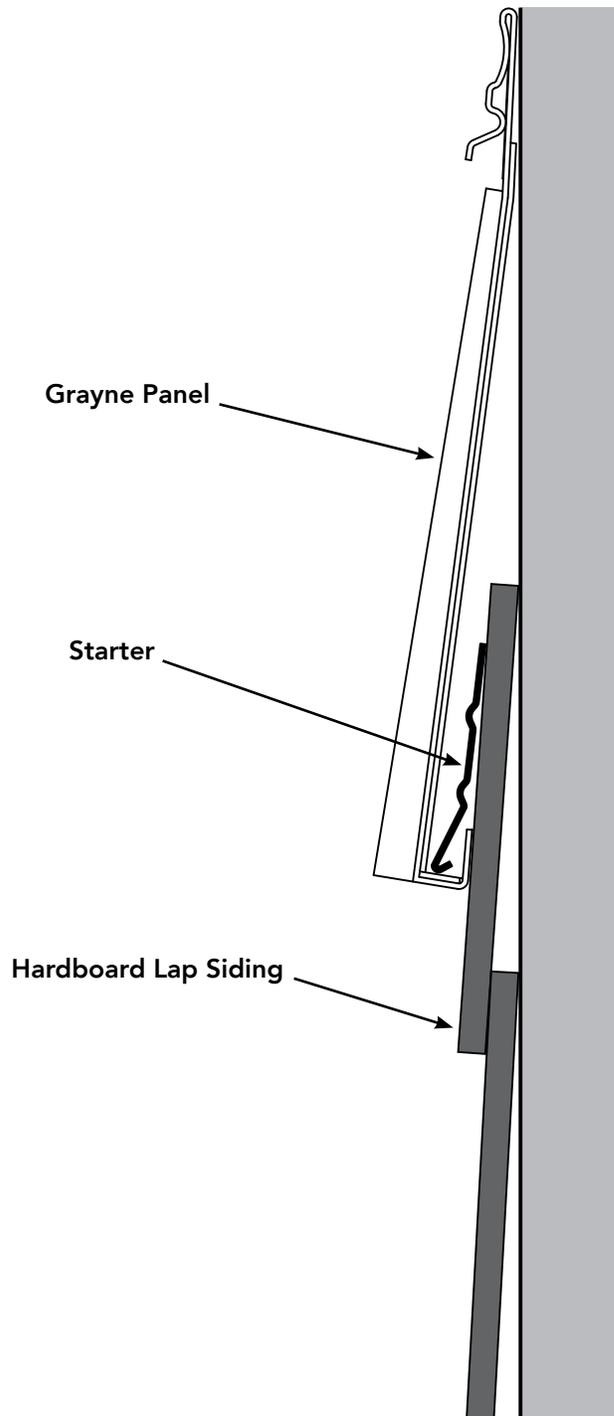


FIGURE 13



TRANSITION FROM HARDBOARD LAP SIDING

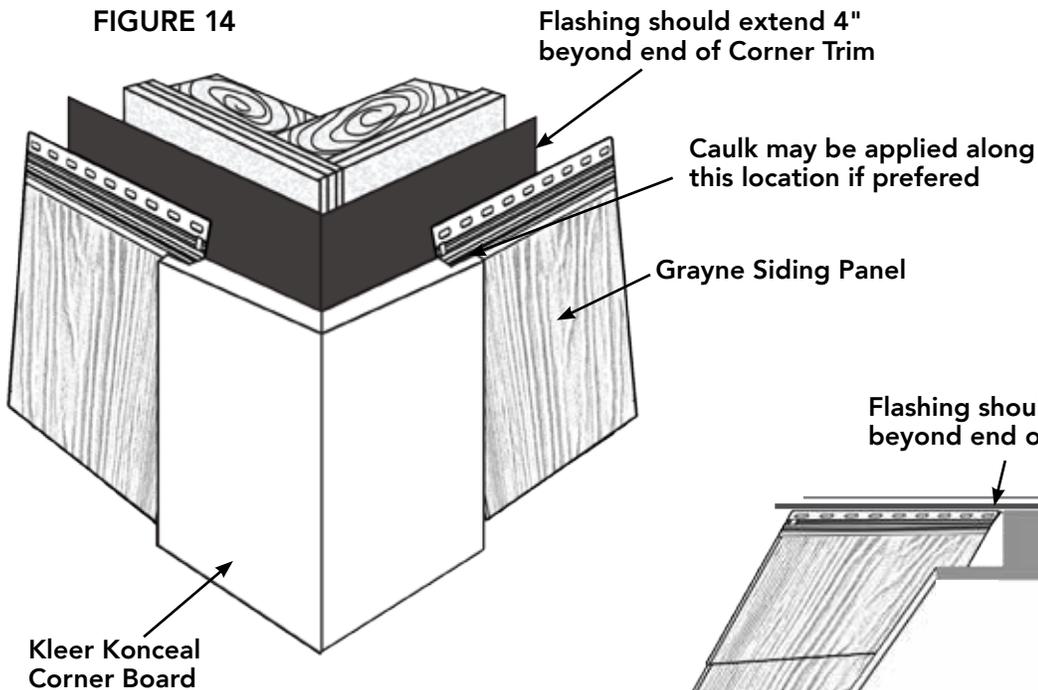
- Below demonstrates a transition application from Hardboard Style Lap Siding.



OUTSIDE/INSIDE CORNER

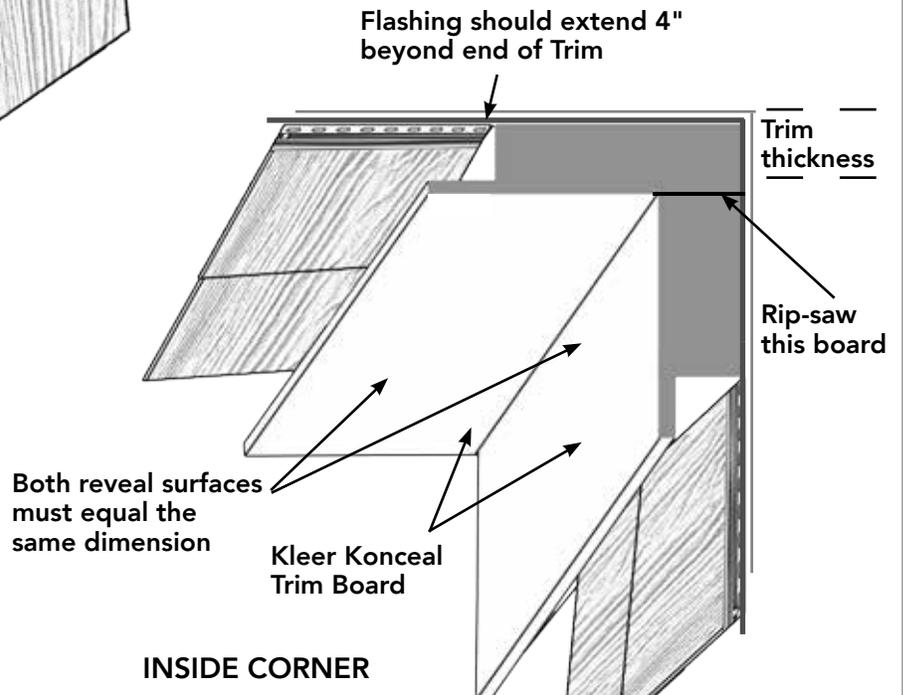
- Recommend using Klear Konceal Cornerboards or equivalent. **Refer to manufacturers installation guide for additional information.**
- All corner sheathing must be properly flashed prior to installing cornerboards (Fig 14).
- Outside and Inside corners must be installed prior to installing the Grayne Siding Panel.
- Inside corners you will need to rip-saw along the length of one of the trim boards the board thickness, to achieve an even reveal surface on each side (Fig 15).

FIGURE 14



OUTSIDE CORNER

FIGURE 15



INSIDE CORNER

MOUNTING BLOCK

- Create two blocks which are at least 3/4" thick.
 - First, the finishing block, which will be the only visible part of the mounting block.
 - Second, the bump-out block, which is 1-1/2" less in width and 3/4" less in height.
- Attach the bump-out block to the wall (**Fig 16**).
- Attach the finishing block on top of the bump-out block, making the two tops flush (**Fig 17**).
 - This creates a 3/4" pocket on the bottom and sides.
- Apply a piece of Z-flashing to the top of the block (**Fig 18**).
 - Use proper flashing methods to avoid water infiltration.

FIGURE 16

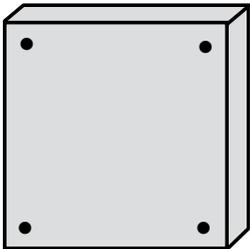


FIGURE 18

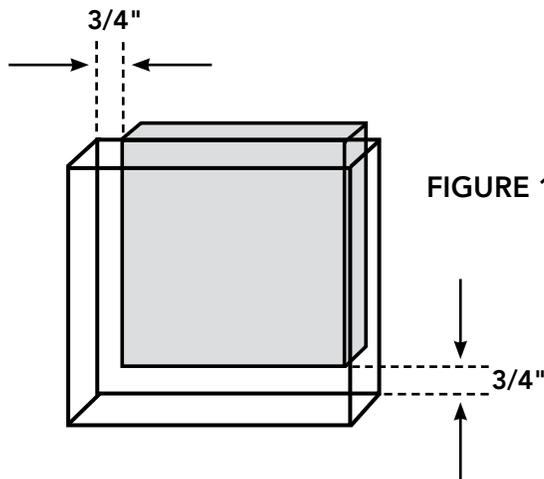
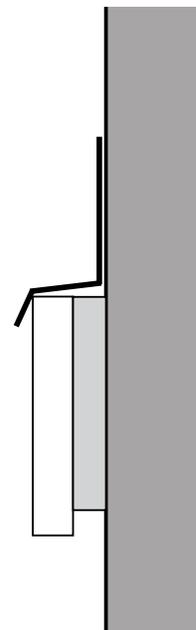


FIGURE 17