



*NUCEDAR CLASSIC CLAPBOARD® AND
TRIM*

INSTALLATION INSTRUCTIONS

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NUCEDAR FUNDAMENTALS

1. *NuCedar, like all PVC products, will expand and contract with changes in temperature (e.g. ½" for every 16' with 100°F change in temperature).*
2. *Always apply NuCedar products over a properly installed weather resistant barrier system incorporating drainage plane technology.*
3. *NuCedar clapboard is installed PRIOR to installation of trim.*
4. *To accommodate clapboard expansion and contraction:
Do not drive head of fastener tightly against nailing hem.
Leave 1/16" to 1/8" between fastener head and nailing hem (Fig. 4).
Center the fastener in the slots.
Drive fasteners straight and level.*
5. *Use moderate downward hand pressure when installing clapboard onto previously fastened course. Do not use excessive force (e.g. hammers, tapping blocks, etc.) (Fig. 6).*
6. *For installations utilizing Universal or Silhouette Trim, cut a piece of Silhouette profile or Insert that covers approximately three courses, and use as a story board to ensure clapboards are seated properly.*
7. *Assembly of butt joints should not be attempted below 40°F and/or when rapid temperature drops are anticipated.*
8. *Do not nail through trimboard expansion channel (Fig. 3).*
9. *Leave a minimum of ½" clearance between clapboard ends and any fixed vertical surface.*
10. *Never pin the clapboard, (e.g. never face nail; never caulk).*

SECTION 1: ABOUT NUCEDAR PRODUCTS

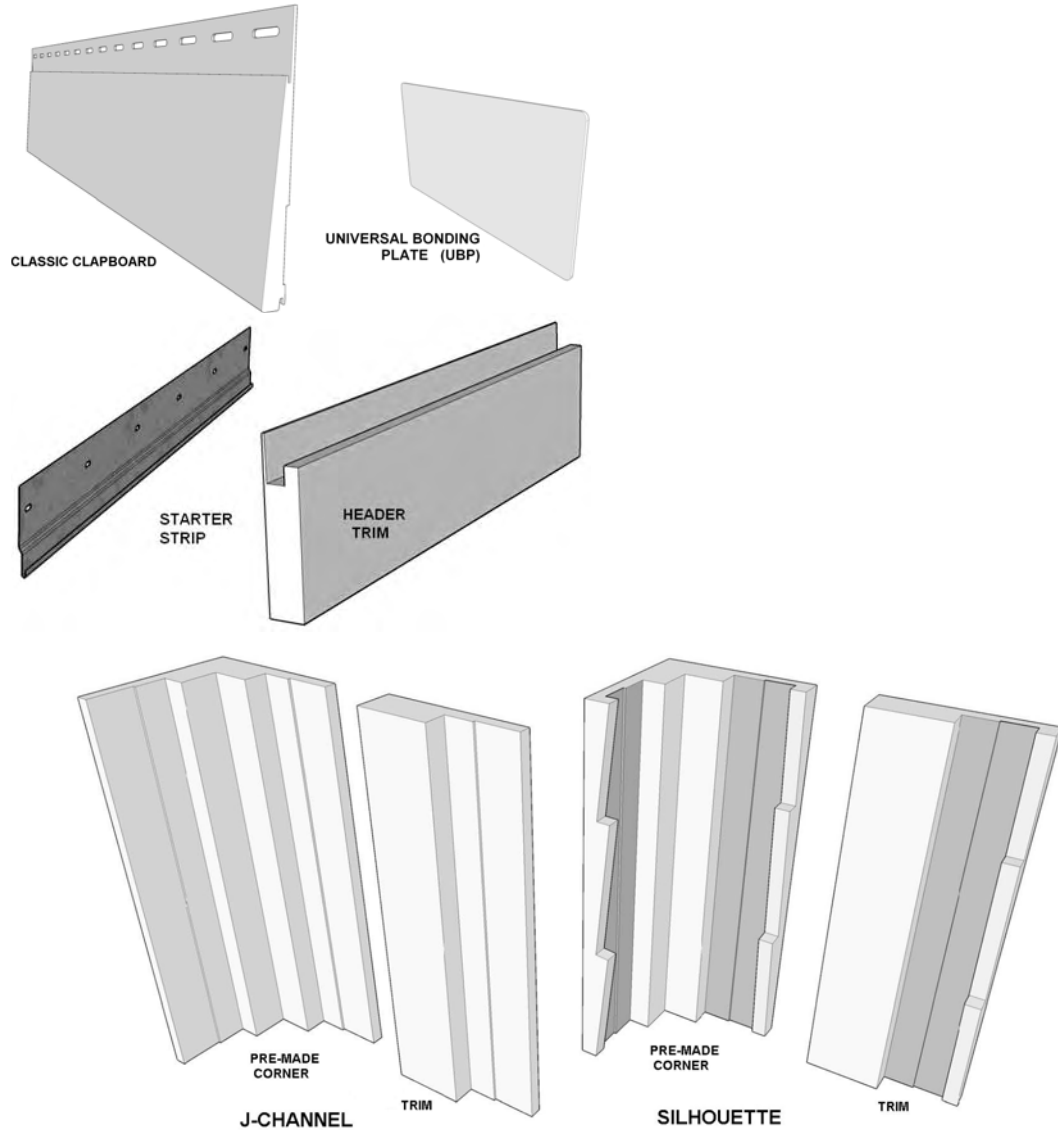
The NuCedar Cladding System will accommodate expansion and contraction when installed properly.

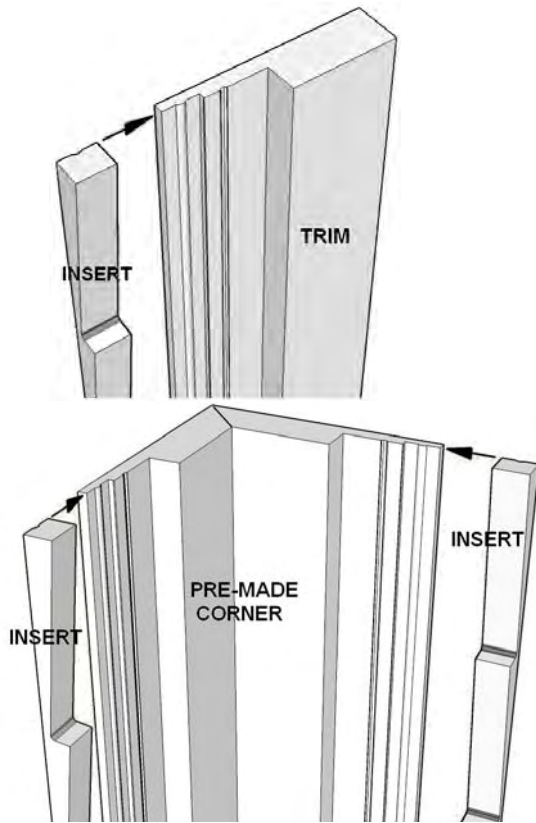


NUCEDAR FUNDAMENTAL #1

NuCedar, like all PVC products, will expand and contract with changes in temperature (e.g. 1/2" for every 16' with 100°F change in temperature).

System Components





UNIVERSAL

Fig. 1

SECTION 2: STORAGE AND HANDLING

When possible, store NuCedar products in the shade and on a flat surface.

Boxed product should be carried on edge by two people to minimize damage.

Do not store the cartons in any location where ambient temperatures may exceed 120° (e.g. on blacktop pavement, under dark tarps, etc.)

SECTION 3: PREPARATION

Determine that the framing is true and without excessive bowing.

Do not install NuCedar over open framing. Install NuCedar over solid sheathing such as plywood, OSB, or foam insulation/sheathing.



NUCEDAR FUNDAMENTAL #2

Always apply NuCedar products over a properly installed weather resistant barrier system incorporating drainage plane technology.

Apply NuCedar products over a properly installed weather resistant barrier system incorporating drainage plane technology (e.g Pactiv GreenGuard® RainDrop®, Tyvek® DrainWrap™ (Refer to manufacturers' instructions)) to control moisture flow. The NuCedar cladding system is not a water-tight barrier. It is designed to reduce the amount of water that reaches the underlying weather resistant barrier.

Ensure all wall openings and penetrations are properly flashed in accordance with local building codes.

Cut NuCedar products using standard woodworking tools and practices. Avoid using fine tooth blades.

SECTION 4: GENERAL INSTALLATION

Installation must follow the instructions in this manual to maintain product warranty.

Install NuCedar products in accordance with all local and national building codes.

Coverage Chart:	4" x16' Classic Clapboard®	19 boards/square
	6" x16' Classic Clapboard®	13 boards/square
	8" x16' Classic Clapboard®	11 boards/square
	6.5"x16' Classic Beaded Weatherboard™	12 boards/square

Plan your layout prior to installation.



NUCEDAR FUNDAMENTAL #3

NuCedar clapboard is installed PRIOR to installation of trim.

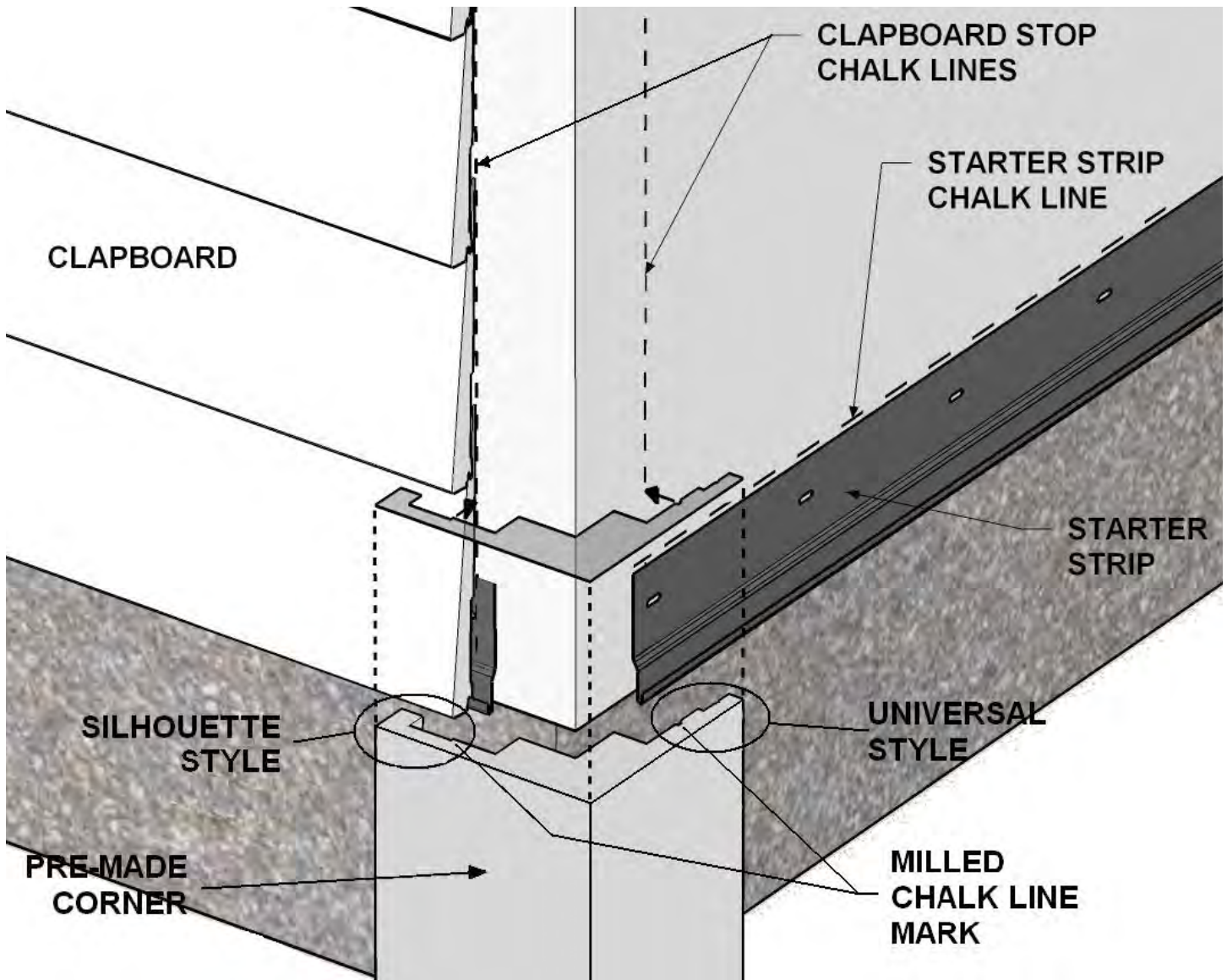


Fig. 2

Step 1: Layout the Clapboard Stop Lines (refer to Fig. 2)

Snap vertical chalk lines to establish the position of the clapboard ends relative to vertical boundaries (e.g. building corners, window and door sides, etc.). Locate the distance from the vertical boundary (building corner, window or door side, etc.) by using the milled chalk line mark as a guide.

The milled chalk line mark (refer to Fig. 3) provides a position reference for the clapboard ends behind the trim. This clapboard position, relative to the trim, allows movement in both directions to accommodate clapboard expansion and contraction.

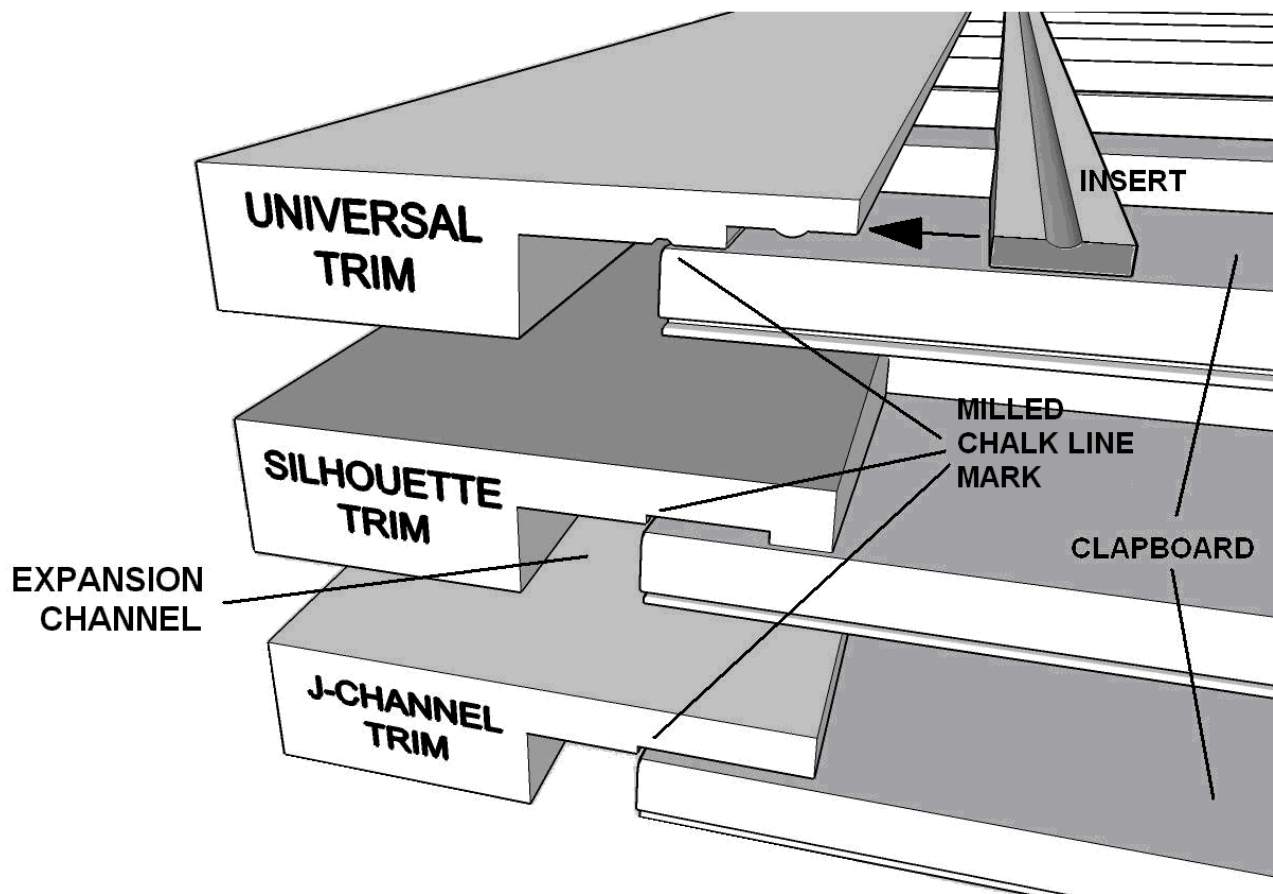


Fig. 3

Mark this distance at the bottom and top of the vertical boundary and snap a chalk line between them.

Step 2: Install NuCedar Starter Strip *(refer to Fig. 2)*

Snap a level chalk line to locate the top of starter strip.

Install the top of the starter strip along the chalk line, fastening tightly to wall every 8" and to every available stud using hot dipped galvanized roofing nails or exterior grade, ring shank nails not less than 1-1/4" long.

Keep the starter strip 1/2" away from all trim, and leave a 1/4" gap between joined starter strips.

Step 3: Install Clapboard



NUCEDAR FUNDAMENTAL #4

To accommodate expansion and contraction:

Do not drive head of fastener tightly against nailing hem.

Leave 1/16" to 1/8" between fastener head and nailing hem (refer Fig. 4).

Center the fastener in the slots.

Drive fasteners straight and level.

Warning: Tight nailing will cause clapboard to buckle with changes in temperature.

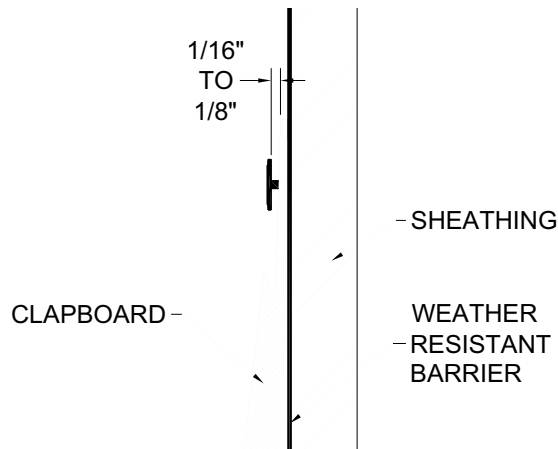


FIG.4

Insert the first course of clapboard into the starter strip groove (refer to Fig. 5).

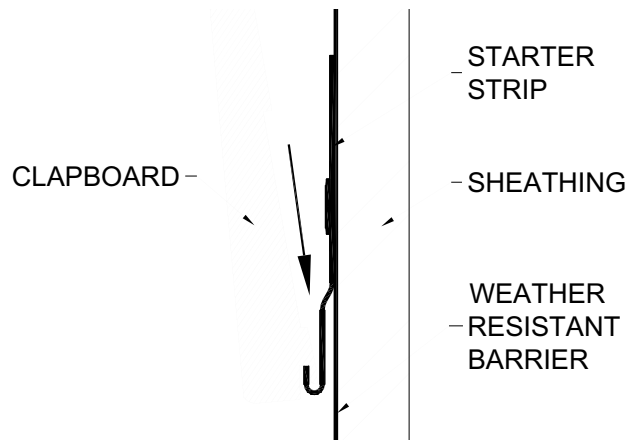


FIG.5

Laterally position the first clapboard by aligning an end with a clapboard stop line (refer to Fig. 2).

Fasten the clapboard a maximum of 16" apart and to every available stud with hot dipped galvanized roofing nails or exterior grade, ring shank nails not less than 1-1/4" long. The nails should have a minimum head diameter of 5/16".

Note: When necessary, use standard vinyl siding slot punch to alter slot for optimal positioning with studs.

Install the next clapboard course by inserting the tongue of each clapboard into the groove of the previously fastened course, ensuring the entire length of the clapboard is properly mated with the lower course.



NUCEDAR FUNDAMENTAL #5

Use moderate downward hand pressure when installing clapboard onto previously fastened course. Do not use excessive force (e.g. hammers, tapping blocks, etc.) (refer to Fig. 6).

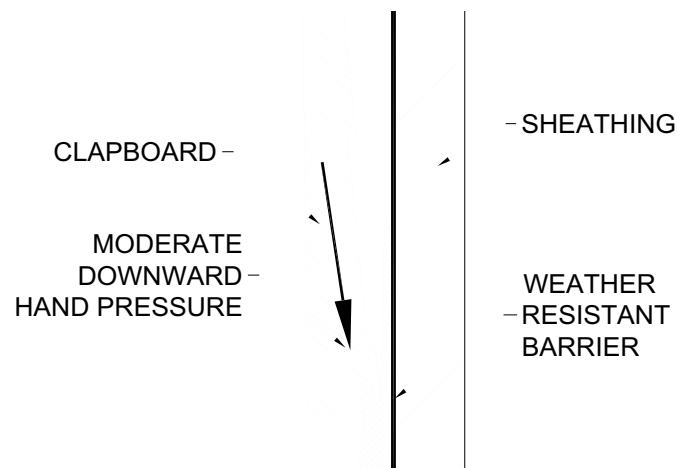


FIG.6

Stagger clapboard to separate joints.

Avoid placing joints at the bottom or top of windows and doors.



NUCEDAR FUNDAMENTAL #6

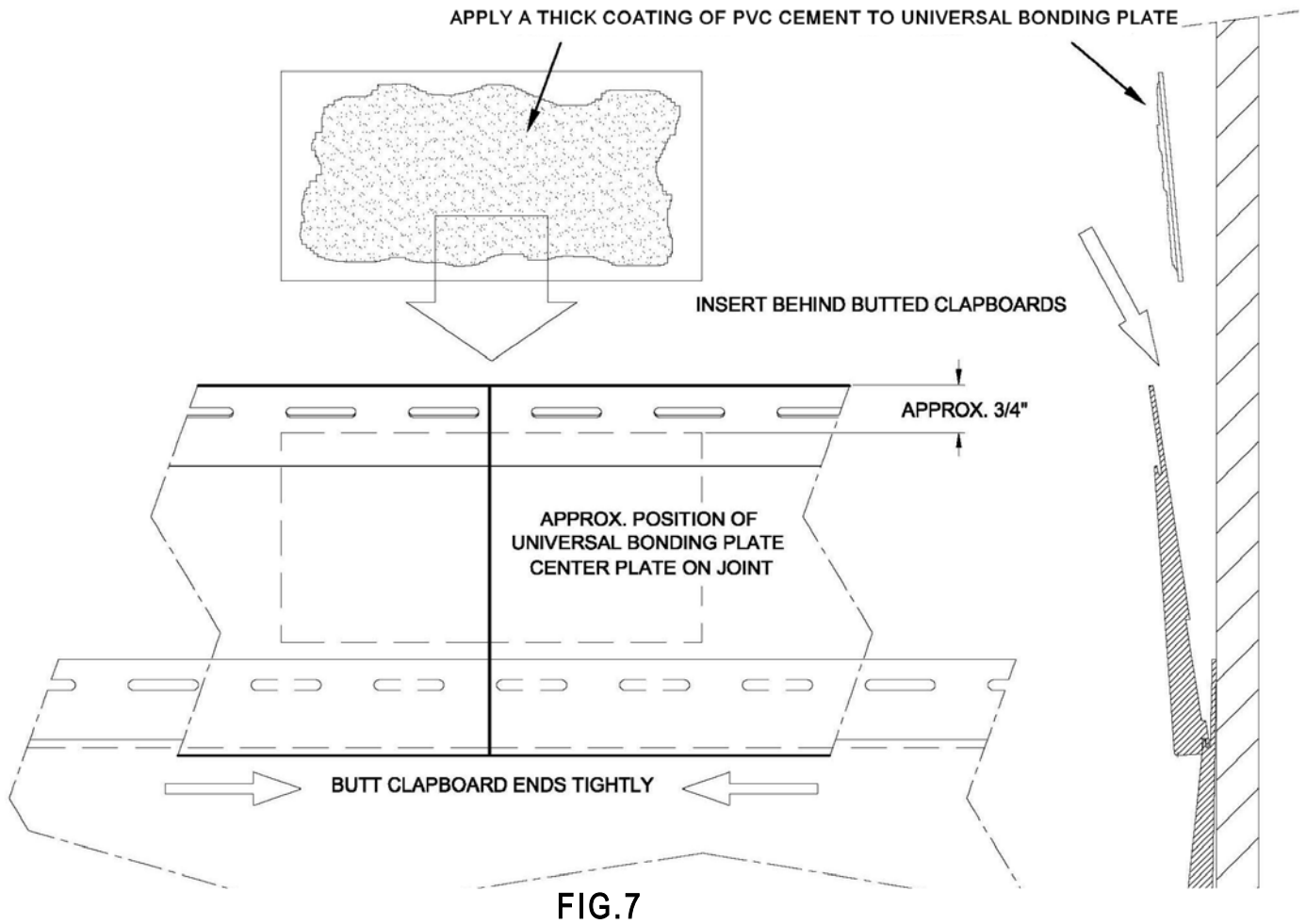
For installations utilizing Universal or Silhouette Trim, cut a piece of Silhouette profile or Insert that covers approximately three courses, and use as a story board to ensure clapboards are seated properly.

Step 4: Bond Clapboard Joint (refer to Fig. 7)



NUCEDAR FUNDAMENTAL #7

Assembly of butt joints should *not* be attempted below 40°F and/or when rapid temperature drops are anticipated.



Clapboard ends should be butted tightly and connected with the Universal Bonding Plate (UBP).

Leave approx. 24" of each butted end un-nailed.

Apply a thick coating (approx. 1/16") of Oatey® Heavy Duty Clear PVC Cement (including LO-VOC type) to the UBP. Leave roughly 1/4" of the outside edge of the UBP un-cemented.

Pull the top edge of the butted clapboards away from the wall.

Insert the cemented UBP behind the joint area as shown in Fig. 7. Center the UBP on the joint with the top edge of the UBP approximately 3/4" below the top edge of the butted clapboards and press the UBP against the joint area.

While holding the UBP against the butted clapboards, slightly move the UBP back and forth approximately 1/8" several times to ensure proper contact of the cement with the clapboards.

When the UBP begins to bond to the butted clapboards (approx. 15 seconds) and press the butt joint area against wall.

Finish fastening the joint area.

Step 5: Fasten the Trim

Face-nail the trim using the recommended schedule:

Along the length: no farther apart than 16" on center

Along the width: no farther apart than 4" on center

No more than 2" from the end of the board

Use exterior grade, smooth shank nails – either nailed or shot. Exterior grade screws (6, 8, 10) are also acceptable. In colder temperatures, pre-drilling of nails holes may be necessary to avoid cracking.



NUCEDAR FUNDAMENTAL #8

Do not nail through trimboard expansion channel (refer to Fig. 3).

SECTION 5: WINDOW, DOOR AND MISC. SIDING PENETRATION TRIMMING

Important: Properly flash all windows and doors in accordance with local building codes and window and door manufacturer's flashing recommendations.



NUCEDAR FUNDAMENTAL #9

Leave a minimum of 1/2" clearance between clapboard ends and any fixed vertical surface. NuCedar clapboard expands and contracts with changes in temperature.



NUCEDAR FUNDAMENTAL #10

Never pin the clapboard, (e.g. never face nail; never caulk).

The following sections will illustrate several basic techniques utilized in the installation of finished NuCedar trim work around doors, windows and other siding penetrations.

Window and Door Surrounds

The bottoms of windows must be trimmed with trim board or sill incorporating a rabbet cut into the bottom back edge (refer to Fig.8). This rabbet must also continue through the bottom ends of the side trim boards.

Note: The function of this rabbet is to hold the top edge of the clapboard course against the siding and prevent this course from lifting out of engagement with the next lower course, while at the same time allowing for unencumbered lateral movement of the clapboard.

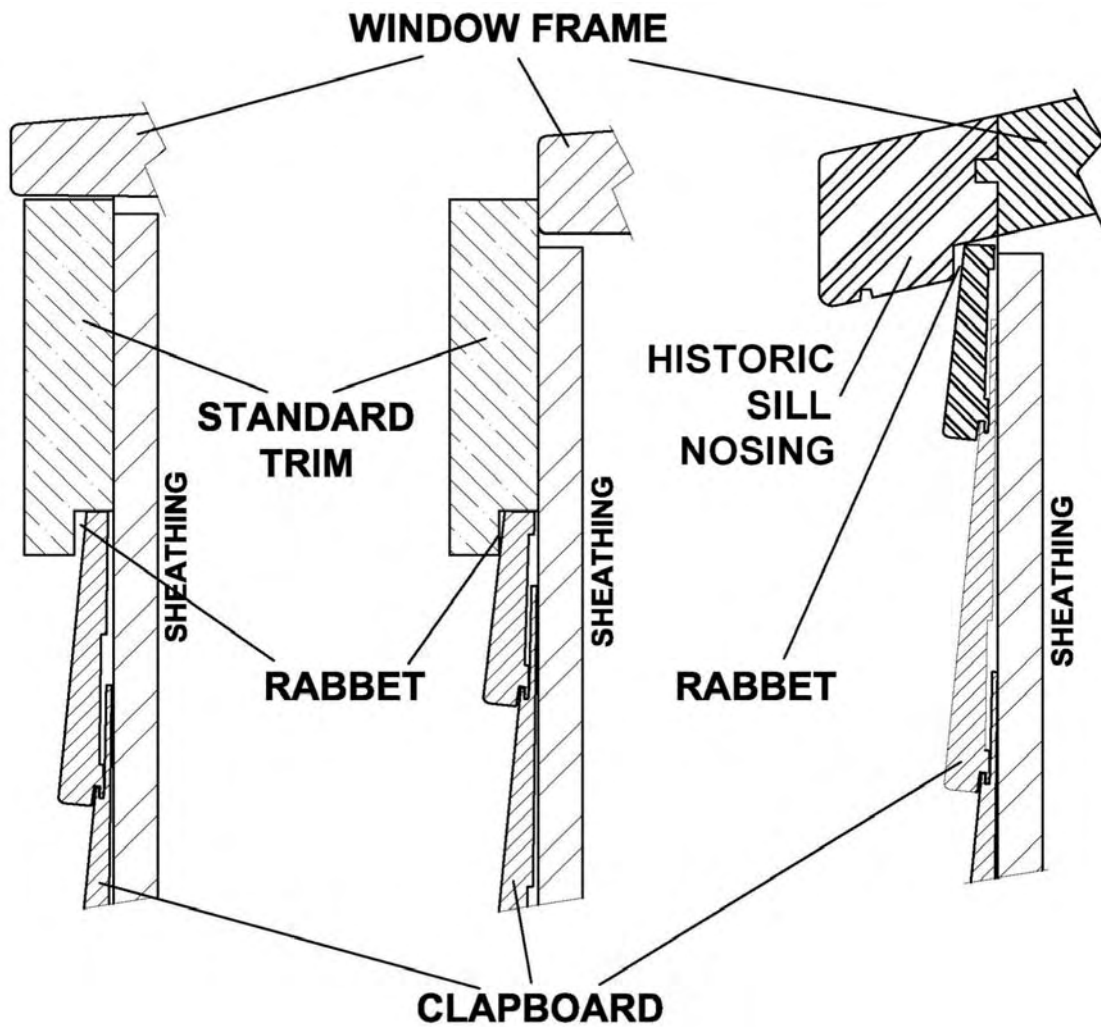


FIG. 8

Trim window and door sides with NuCedar Universal, J-channel or Silhouette Trim. The lower ends of the sides start at the lower edge of the bottom trim board (refer to Fig. 9).

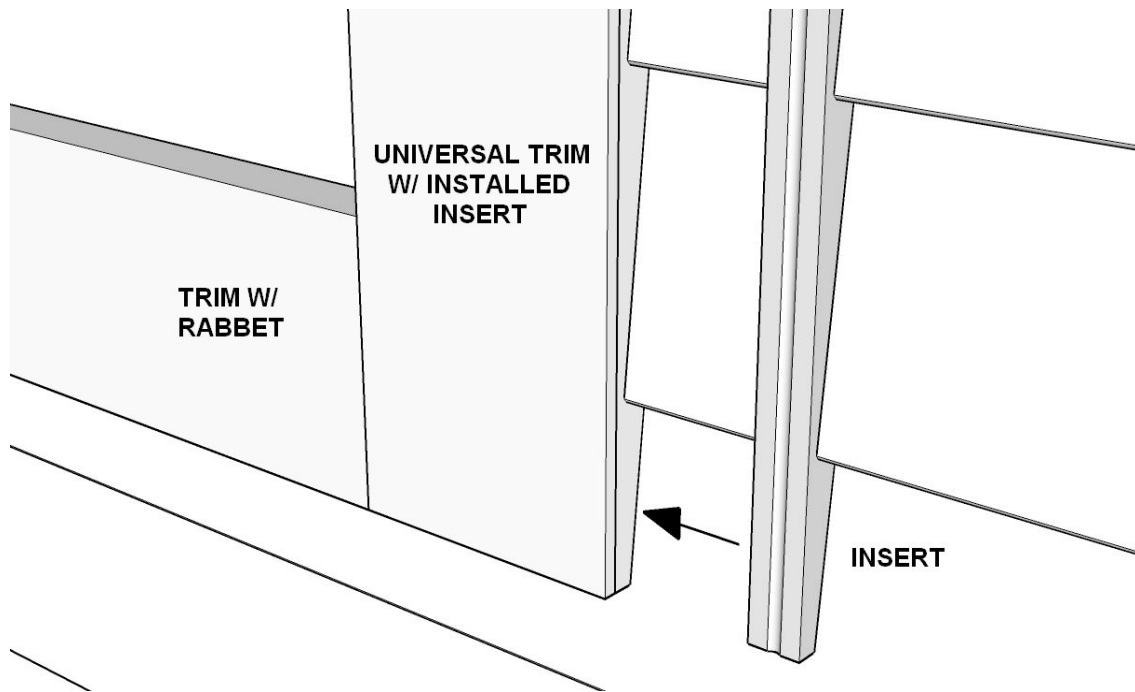


FIG. 9

In the case of historical sill treatment, the sill, in addition to the retention rabbet described above, must also be rabbeted at the ends to allow for expansion and contraction of the clapboard (refer to Fig. 10).

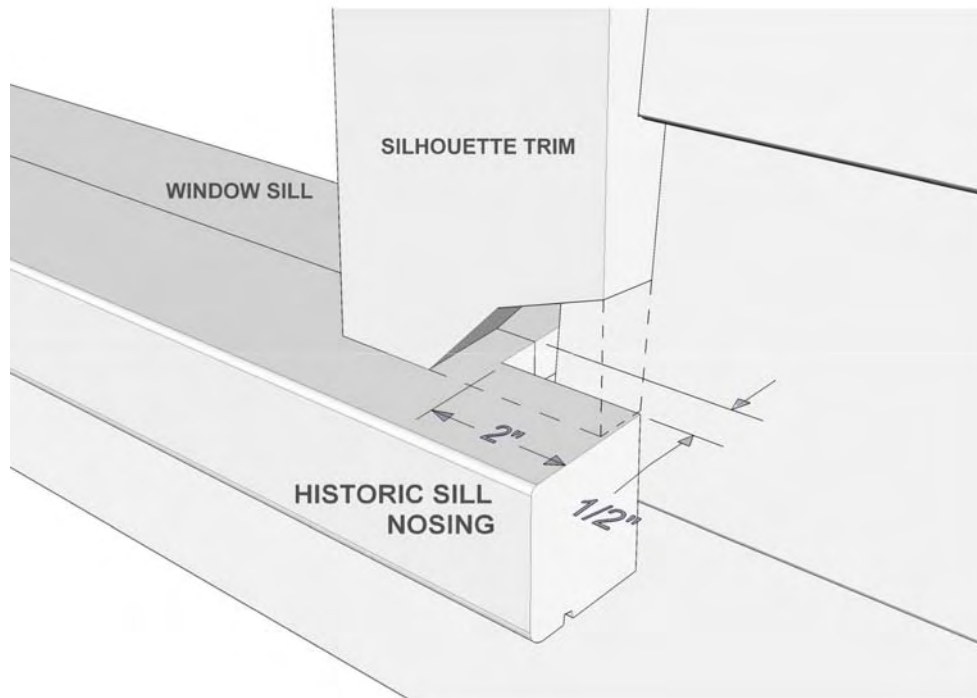
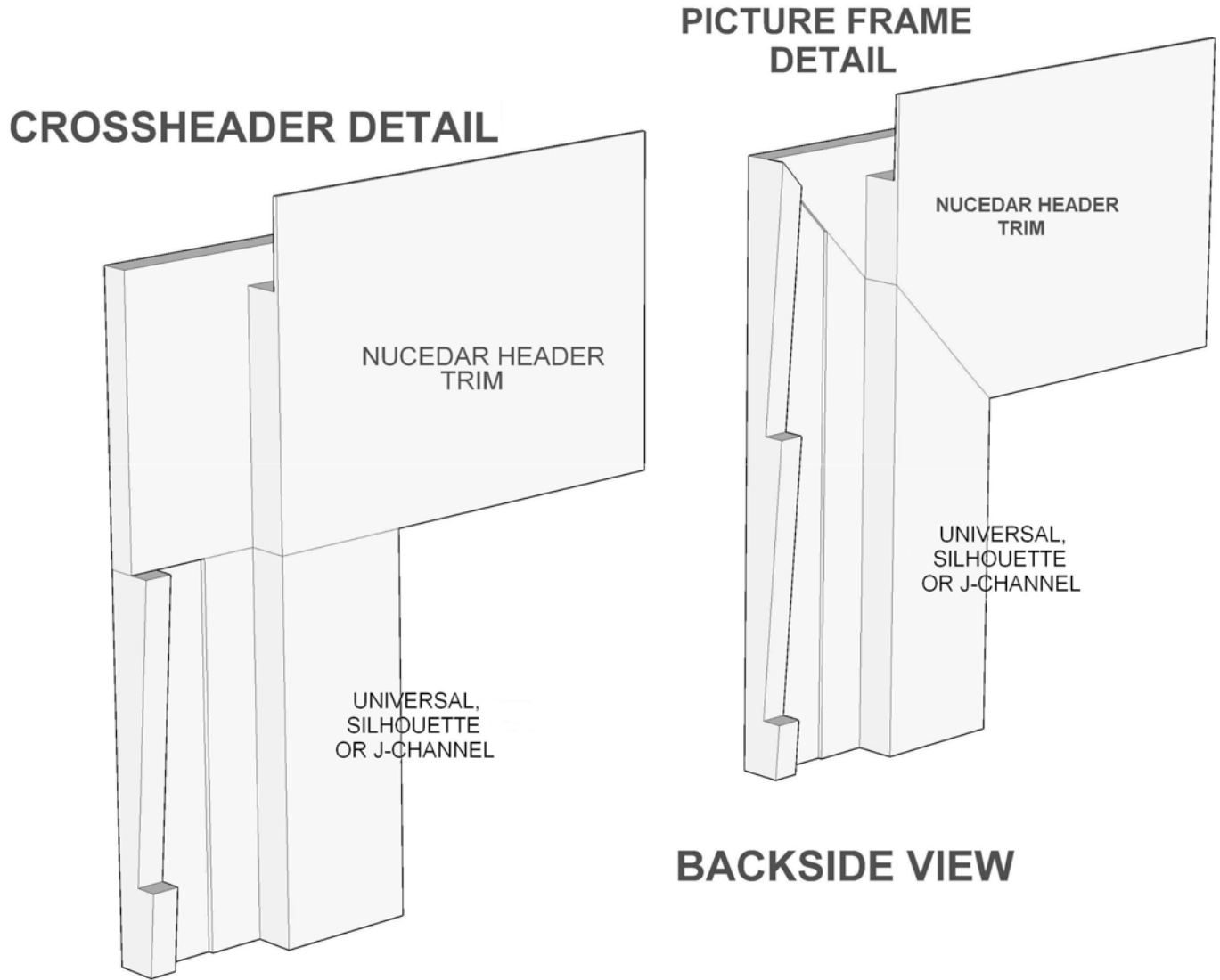


FIG. 10

The tops of windows and doors must be trimmed with either NuCedar Header Trim (refer to Fig. 11) or a combination of a rabbeted standard trimboard and field-formed aluminum flashing (refer to Fig. 12).

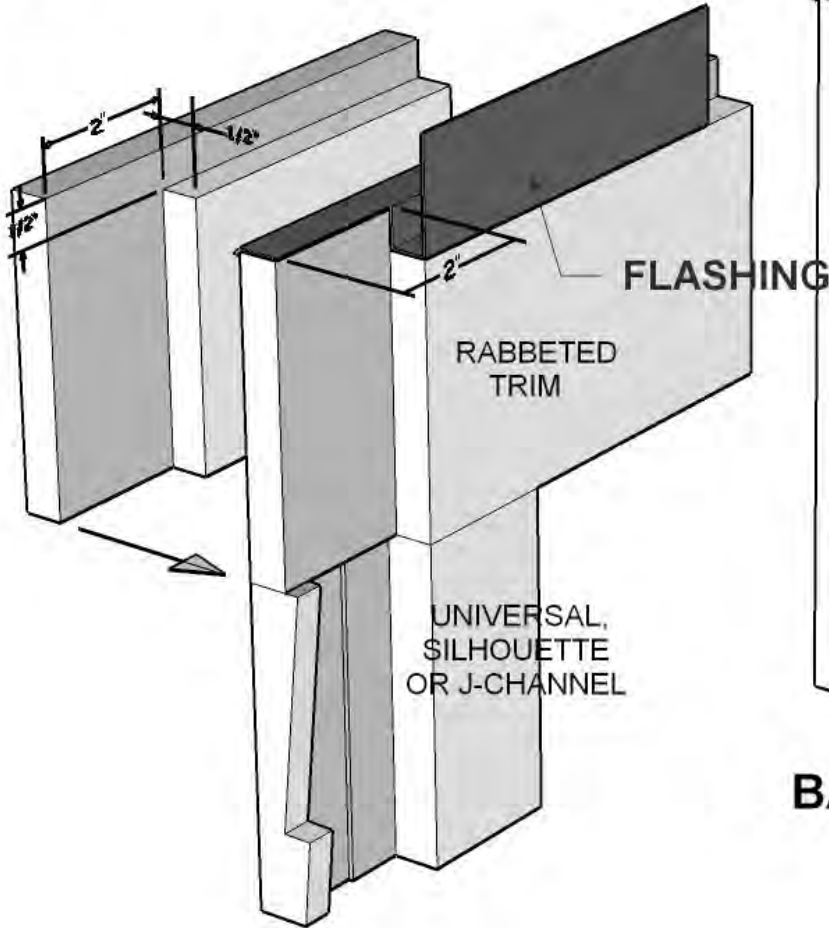
Note: The top trim detail must hold the lower edge of the clapboard course against the siding and allow for unencumbered lateral movement of the clapboard while at the same time provide a means for water shedding and/or diversion.



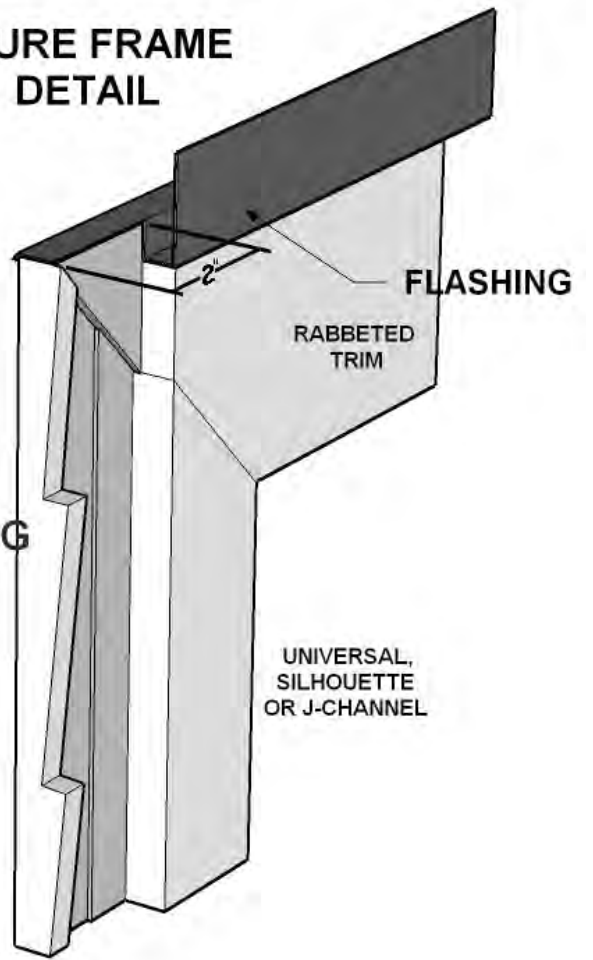
NuCedar Header Trim

FIG. 11

CROSSHEADER DETAIL



PICTURE FRAME DETAIL



BACKSIDE VIEW

Rabbeted Trim and Field-Formed Flashing

FIG. 12

All Header Trim must be cut away as shown in Fig. 13 to allow expansion and contraction of the clapboard behind the header.

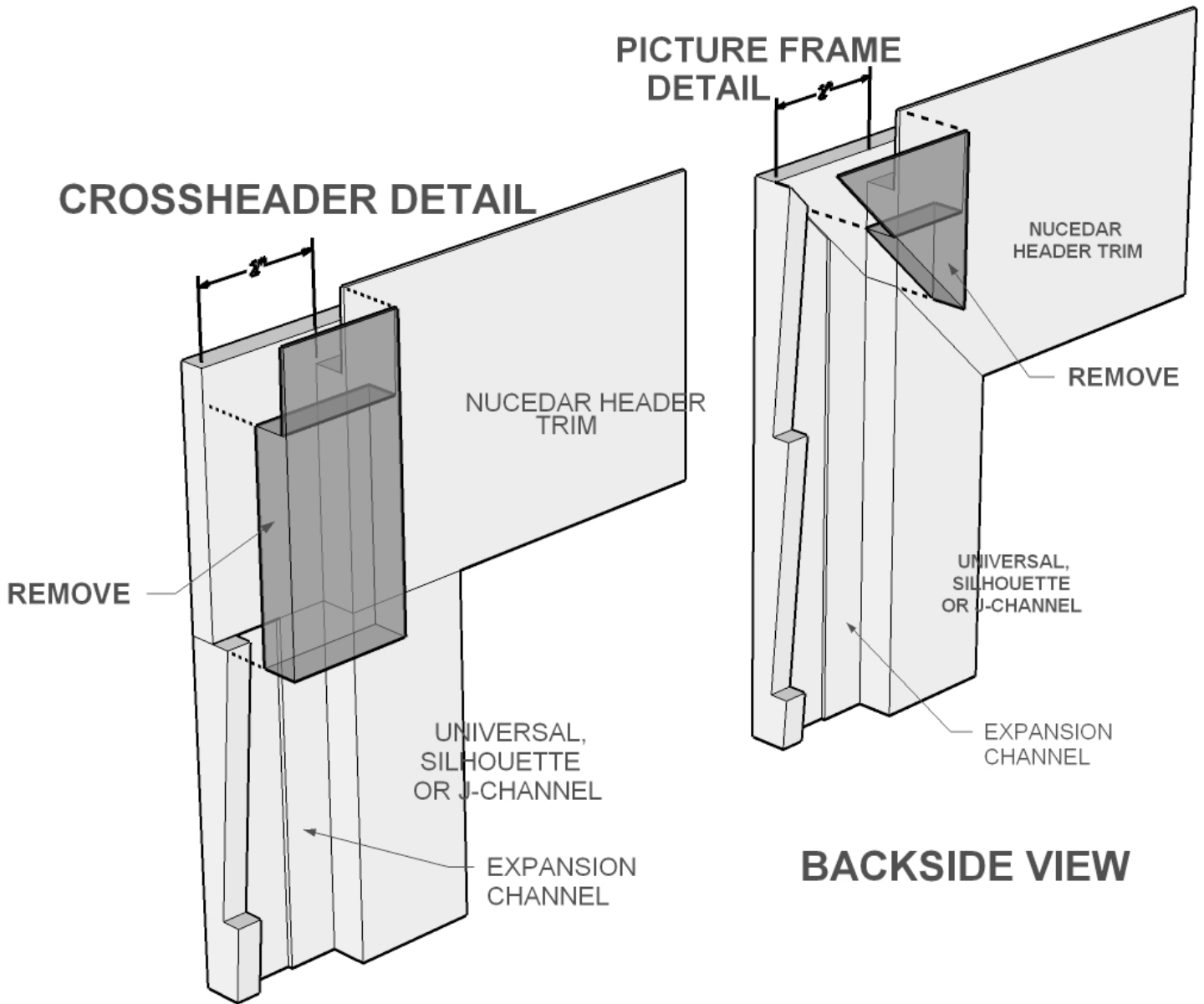


FIG. 13

Clapboard Coursing Above Windows and Doors

If the clapboard course that extends over the window or door must be notched, the ends of the notch must line up with the milled chalk line mark (refer to Fig. 3) in the NuCedar trim.

The top of the notch must have 1/8" clearance from the bottom of the channel in the NuCedar Header Trim or the channel in the field-formed flashing (refer to Fig. 14).

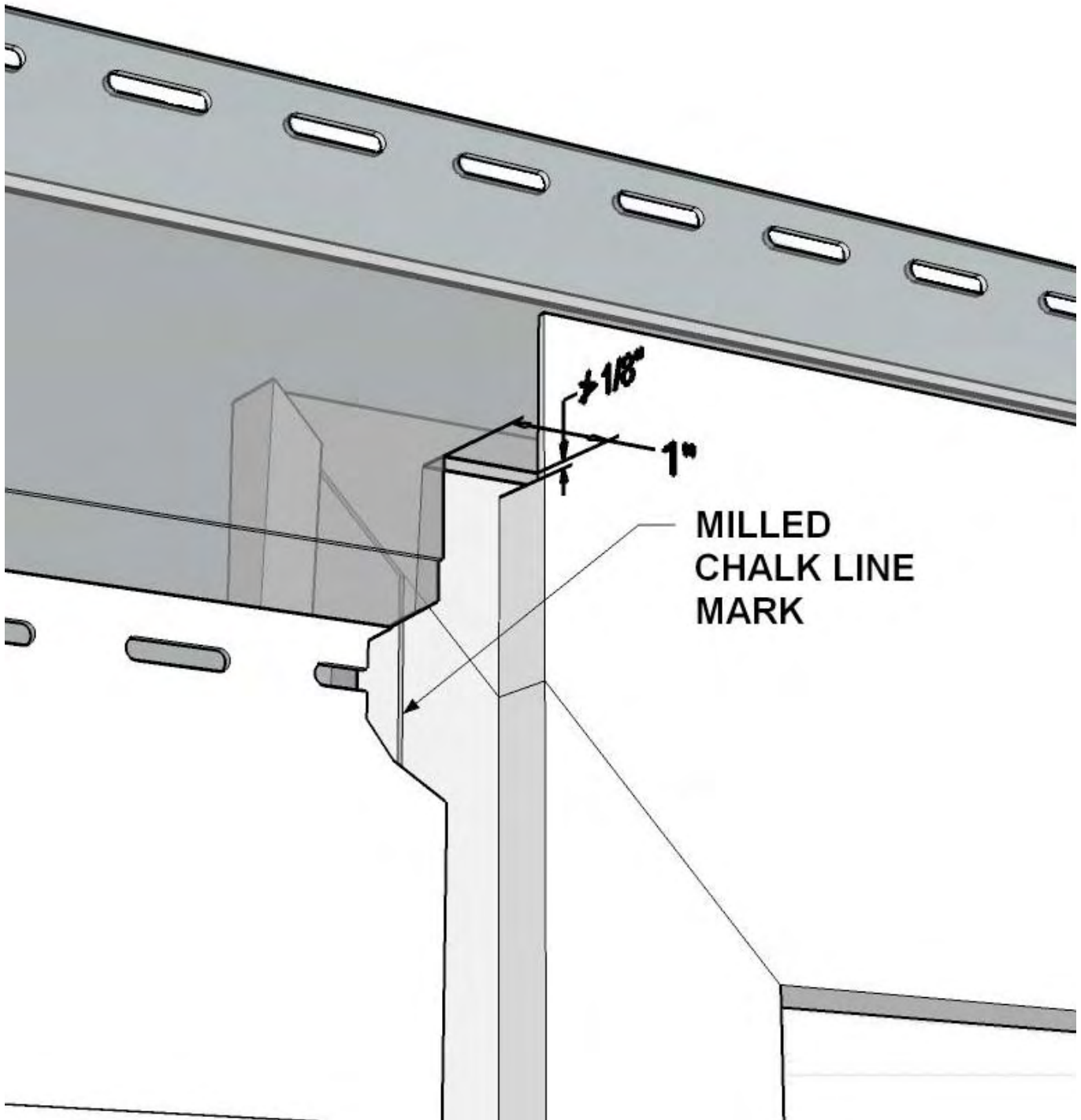


FIG. 14

Trimming of Misc. Siding Penetrations and Architectural Features

Trimming under a horizontal run of any architectural feature (eaves, second floor decks, etc.) can utilize the techniques pictured in Fig. 8. The rabbeted trim board is usually called a frieze board in these situations.

Note: The function of this frieze board is to hold the top edge of the clapboard course against the siding and prevent this course from lifting out of engagement with the next lower course, while at the same time allowing for unencumbered lateral movement of the clapboard.

NuCedar Universal or J-Channel Trim may be used for trimming of gable rakes. Utilize the milled chalk line mark (refer to Fig.3) as a cutting guide for all angle cuts on the clapboard ends within gable rake areas.

Universal Trim: Insert Installation

After the Universal Trim has been installed, (refer to Fig. 15) position the Insert vertically with respect to the clapboard courses and cut to length. Position the Insert against the clapboard face and gently push it into the expansion channel in the trim until it snaps into place. The Insert is now flush with the edge of the trim. Follow this procedure along the entire length of the Insert.

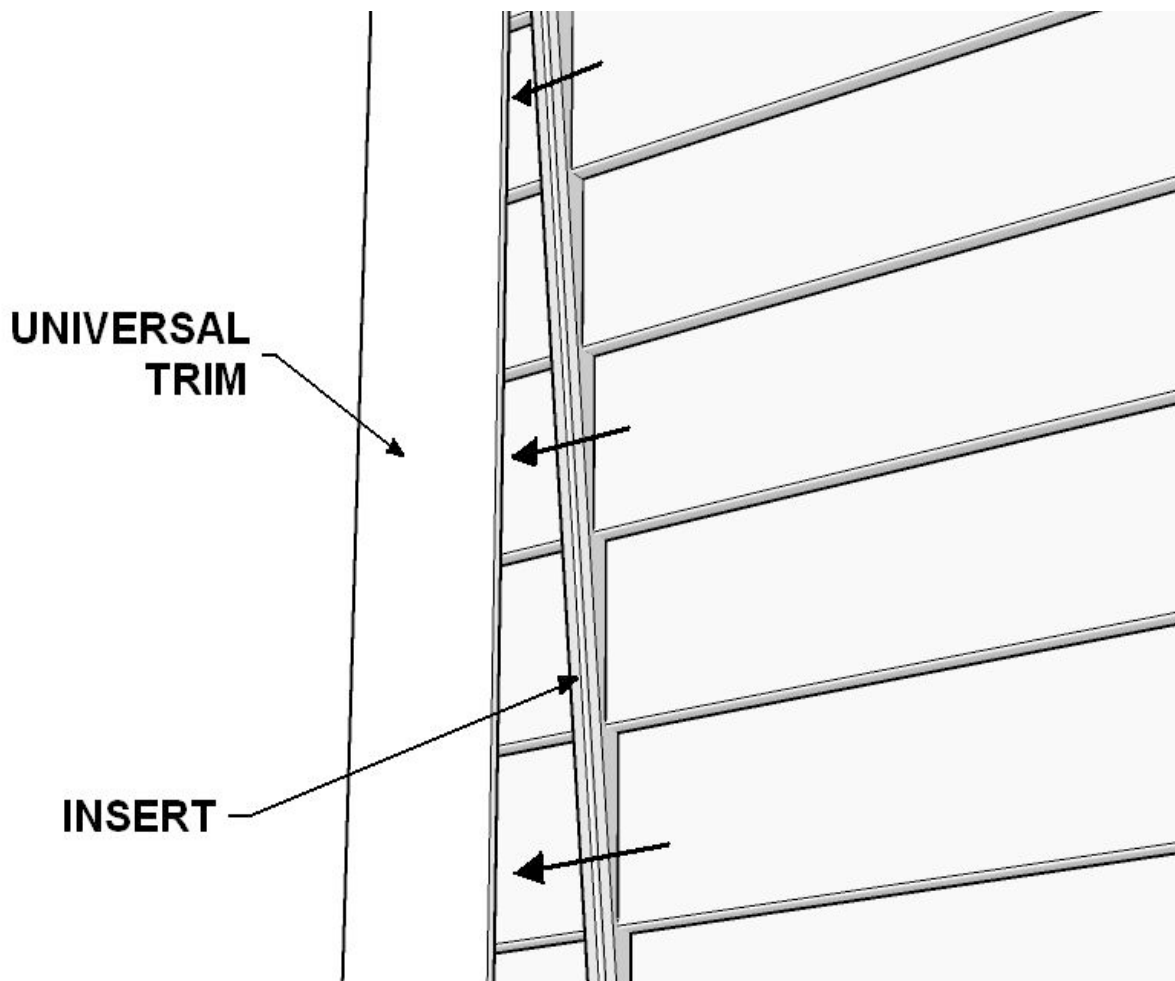


FIG. 15

SECTION 6: TOUCH-UP PAINT

NuCedar products are coated with Polane®, an industrial coating, by Sherwin-Williams™. NuCedar's Satin Color Collection™ matches colors from the Sherwin-Williams™ Duration® paint line. The color names are unique to NuCedar, however the 4-digit color codes match Sherwin-Williams' numbering system.

A 4 oz. edge coater is provided with all of NuCedar's 22 standard colors. For custom colors, please visit any of the 3,000 Sherwin-Williams' stores to match your selection. NuCedar recommends Sherwin-Williams™ Duration® or Super-Paint® (Exterior, Satin Finish).

NuCedar can be repainted with any high-grade exterior latex paint. Prior to repainting, make sure that the surface area is properly cleaned and lightly sanded

SECTION 7: CARE AND MAINTENANCE

NuCedar products can be safely cleaned using a cloth and a mixture of water and mild detergent or a mild household cleaner. NuCedar can also be powerwashed to remove dust or debris.

Remove mold/mildew using a mild commercial mold/mildew remover.