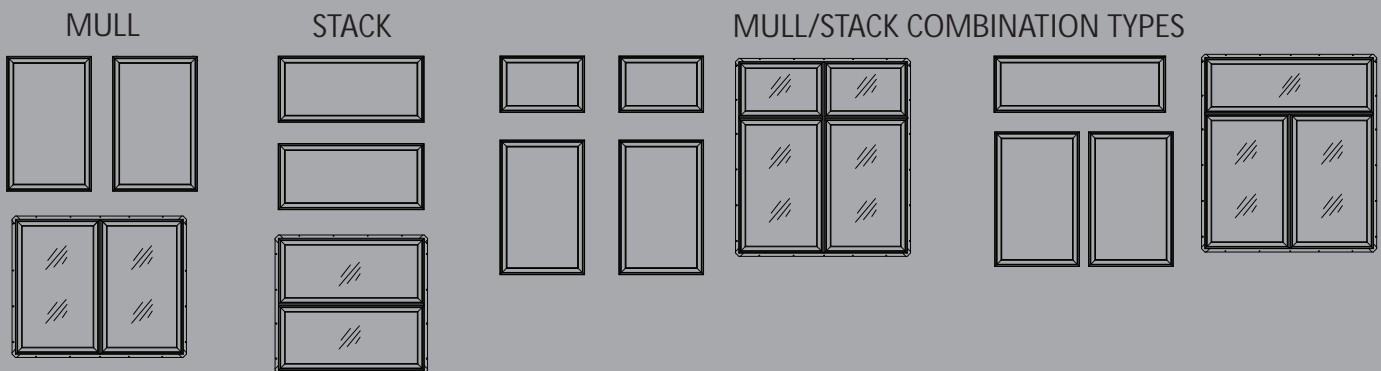


KOLBE®

WINDOWS & DOORS

Ultra Series
Ordered as a Field
1/4" & 1/2" Spread Mull/Stack
Window Combinations
w/Solid Mull Fillers
ASSEMBLY INSTRUCTIONS

READ AND COMPLETELY UNDERSTAND
THESE INSTRUCTIONS
BEFORE STARTING ANY INSTALLATION



****NOTE:**** Certain orders may require layouts different from those shown above.
Please refer to the relevant details and sections in these instructions
that corresponds to each opening in your callout schedule.

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INTRODUCTION

These instructions outline the installation of Ultra Series window units without brickmould, in a mull, stack, and mull/stack combination with field applied 1/4" or 1/2" solid spread mull fillers.

IMPORTANT Read and follow your main window installation instruction booklet along with this assembly instruction to install your windows.

NOTICE

Proper installation and periodic home maintenance of Kolbe windows & doors is essential for upholding and sustaining the quality of our products. Failure to install and maintain our product according to these instructions will void any warranty, written or implied. The installer is responsible for consulting the contractor, structural engineer, architect, or consumer, for proper installation according to local codes and/or ordinances.

NOTICE

Some codes require the use of pressure-treated lumber to LINE the rough openings. Corrosion resistant materials, such as stainless steel or hot-dip galvanized steel, must be used for fasteners and anchors having direct contact with pressure-treated lumber.

NOTICE

Before applying sealant or adhesive pads, ensure the area to be sealed is clean, dry, and frost-free. Use color-matching or transparent sealant. Photos show contrasting sealant for clarity and demonstration only.

WARNING

Improper use of hand/power tools could result in personal injury and/or product damage. Follow manufacturer's instructions for safe operation of equipment.

WARNING

Proper Eye and Hearing Protection must always be worn when installing, removing or performing adjustments to Kolbe window and door products.

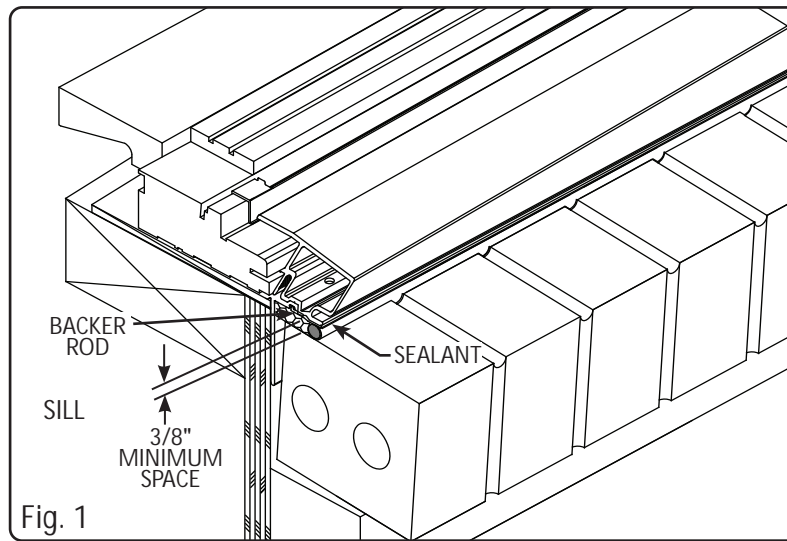
PRELIMINARY PREPARATION

- Unpacking:**
Remove and properly dispose of all shipping and packaging materials. These materials may include the protective shipping film and covers on the exterior of the frame, cardboard wrapping, skid plates, factory bracing, or factory applied ridged or strap handles attached to the frame. Please examine your order to ensure all parts required for mulling are present.
- Positioning:**
Place the windows and all parts on a clean, flat work surface with the exterior side facing up.
- Assessment:**
Ensure the unit is undamaged. Take note of its size dimensions for reference.
- Hardware Check:**
Verify that all necessary parts, hardware, such as screws, brackets, and handles, is present and accounted for.

PREPARE ROUGH OPENING

Before installation, inspect the rough openings to ensure they meet proper size requirements per entire window mull configuration. Ensure it is plumb, square, and level for a precise fit.

1. **IMPORTANT** The material/lumber quality and fasteners must be structurally adequate for design load requirements.
2. For spread mull/stack units installed in the opening, regardless of installation method, the gap all around the unit should be increased by 1/4" (6mm) on each side, equaling 1/2" (13mm) to overall height and 1/2" (13mm) to overall width of the unit. For installation consistency, ensure the same gap is used on all units in the project.
3. Ensure individual construction members are not twisted.
4. The sill plate beneath the unit must be perfectly level for proper unit operation.
5. Installing brick, stone, marble, or concrete directly up against the window sill may cause the window to not operate. Verify a minimum of 3/8" (10mm) expansion gap exists for these types of exterior facades (**Fig.1**).



INSTALLATION TECHNIQUE FOR CLIP & THRU FRAME FASTENING

For guidance on using either *Installation Clips, Technique #1* or the *Screw Through the Frame, Technique #2* method of installation read and follow your full window installation instructions that arrived with your units.

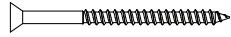
SEALANT AND FLASHING

- Kolbe recommends following ASTM E 2112 guidelines for sealing and flashing exterior windows.
- Create a proper seal between the window and the building exterior.
- Follow our pamphlets *Sealant Information* and *Flashing Information*. These publications are available from your Kolbe window and door supplier, or by visiting www.kolbewindows.com.

ITEMS REQUIRED BY INSTALLER FOR ASSEMBLING MULL/STACK UNITS

- Screws (By Others) to Assemble Frames
 Sizes Vary:

- Sash Sets #8 X 1-1/2" PFH
- Direct Sets #8 X 2" PFH Wood Screws
- Double/Single Hung Transoms #8 X 1-1/4" PFH ZC-CL
- Double/Single Operating Units #8 X 1-1/4" PFH
- Casements/Awnings #8 X 2-1/4" PFH Screws



- 7/8" Diameter Closed Cell Backer Rod



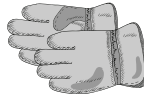
- Power Drill



- Safety Glasses/Goggles



- Gloves



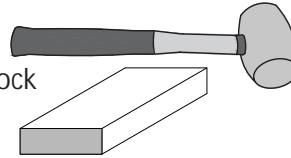
- 7/64" drill bit



- Silicone Sealant
- Caulking Gun



- Rubber Mallet
- Wood Setting Block

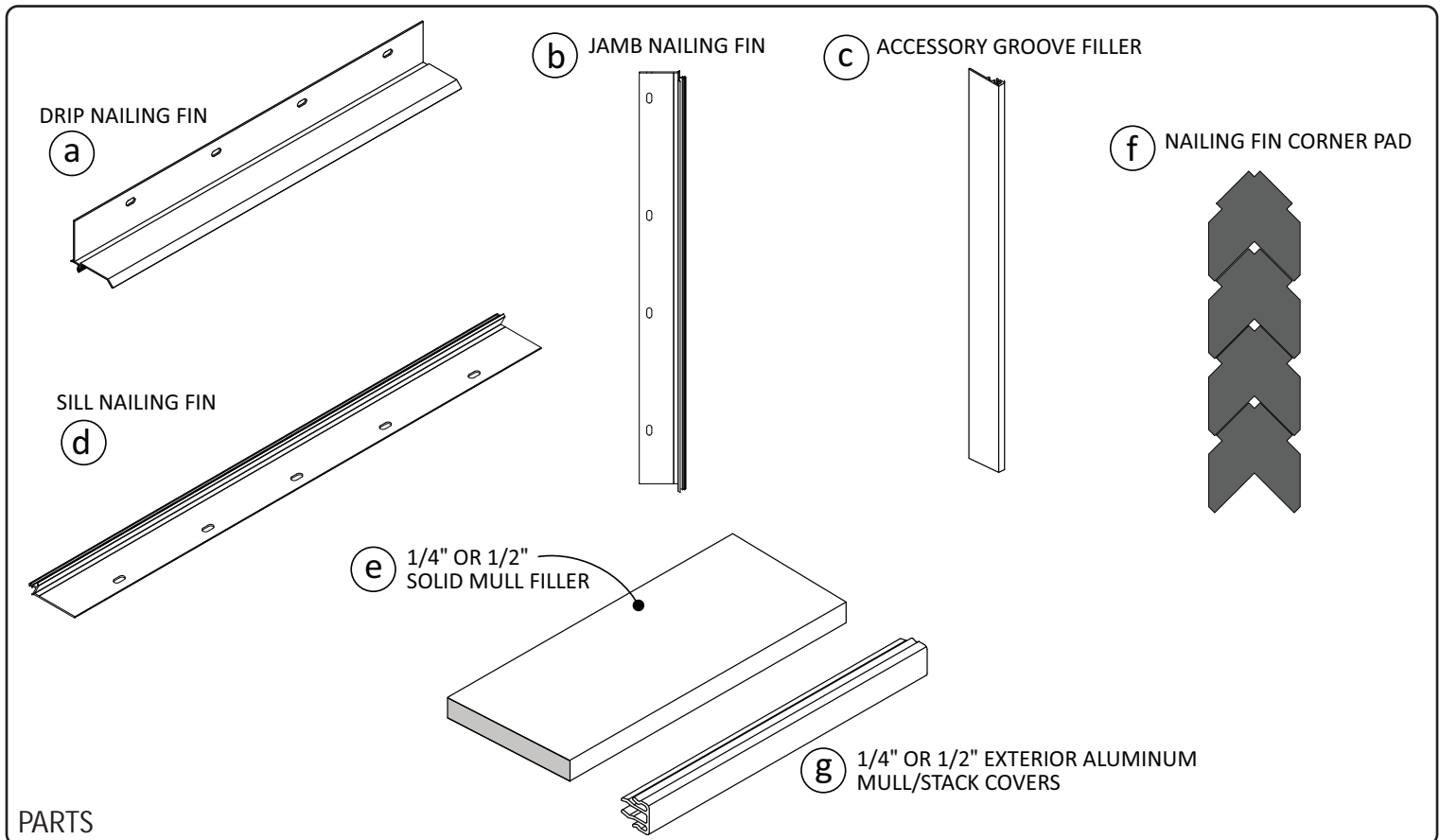


ITEMS PROVIDED WITH MULL, STACK, OR COMBINATION UNITS

Parts in your mull kit, including interior mull casings and extension jambs when ordered, will be packaged and labeled with each window unit in the specified mullion or stacked configuration, according to the corresponding opening and line item details on your order schedule.

Mull Kits will include the following common parts:

- | | | |
|----------------------------|------------------------------------|---|
| a. Drip Nailing Fin | d. Sill Nailing Fin | g. 1/4" or 1/2" Exterior Aluminum Mull/Stack Covers |
| b. Jamb Nailing Fin | e. 1/4" or 1/2" Solid Mull Fillers | |
| c. Accessory Groove Filler | f. Nailing Fin Corner Pads | |



GENERAL ELEVATIONS AS VIEWED FROM THE EXTERIOR

Below are the ELEV details for **MULLED**, **STACKED**, and **MULLED/STACKED Window Combinations**

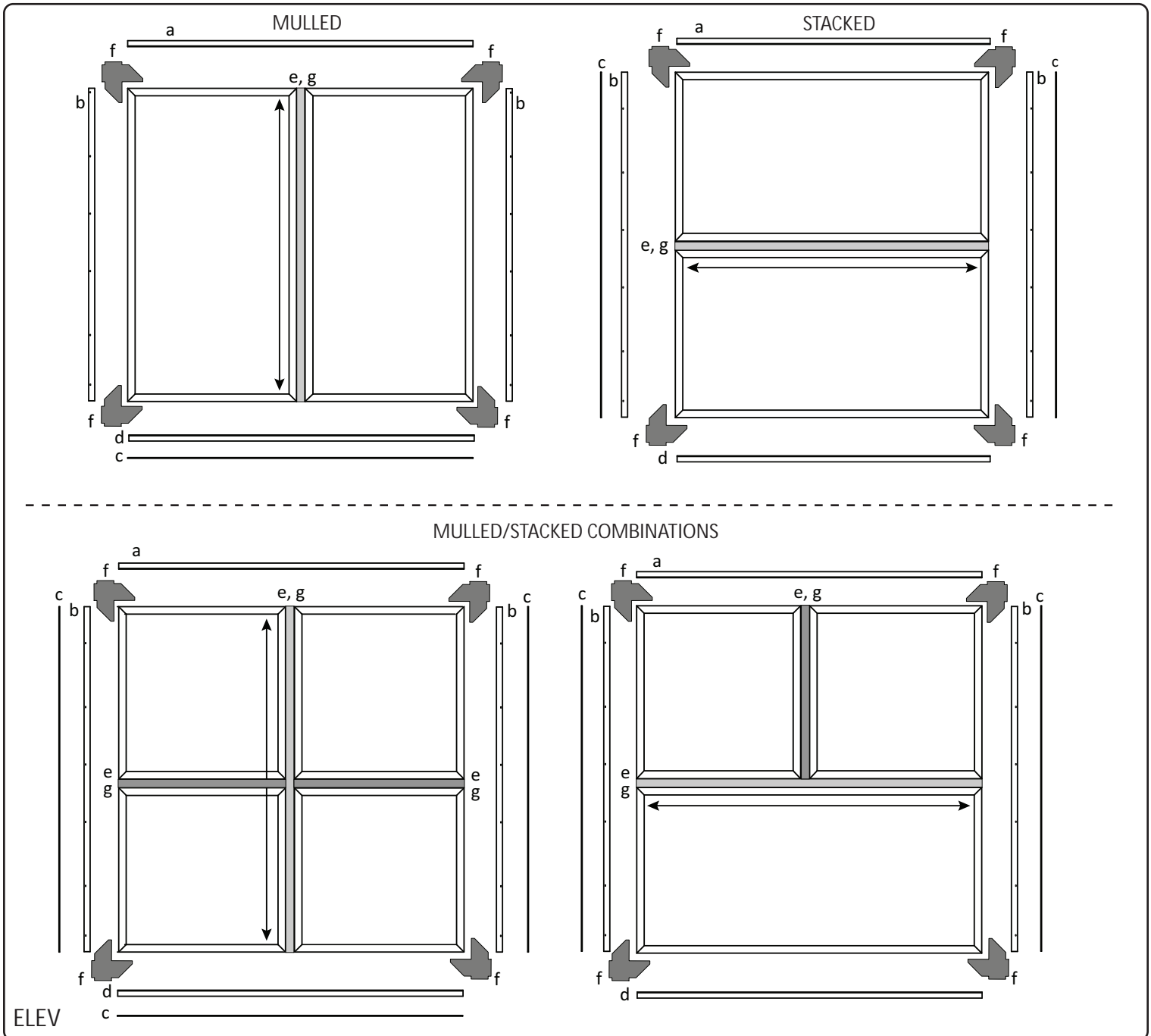
Review the details and parts specified for each scenario. The parts are listed on page 3, while additional details are provided on various other pages throughout this instruction booklet.

• **MULLED or STACKED Units:**

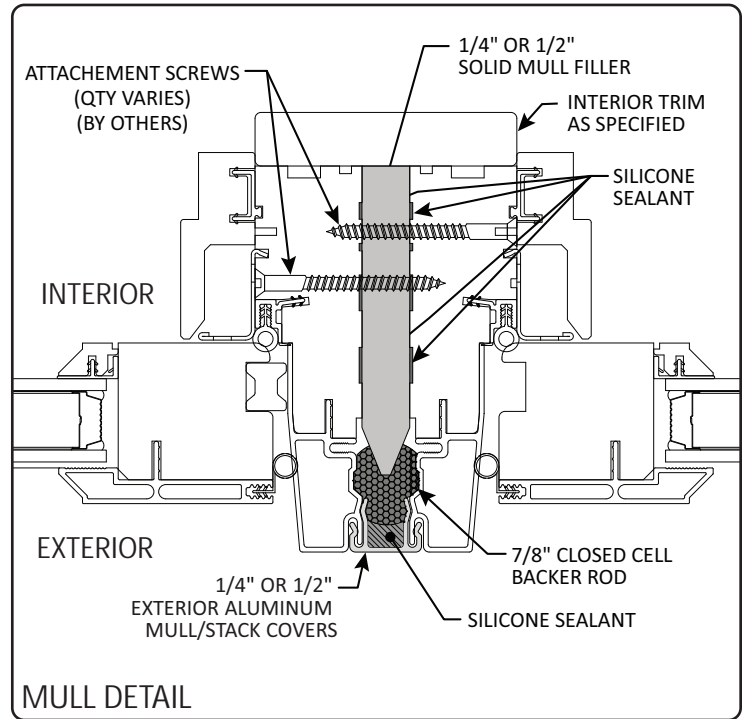
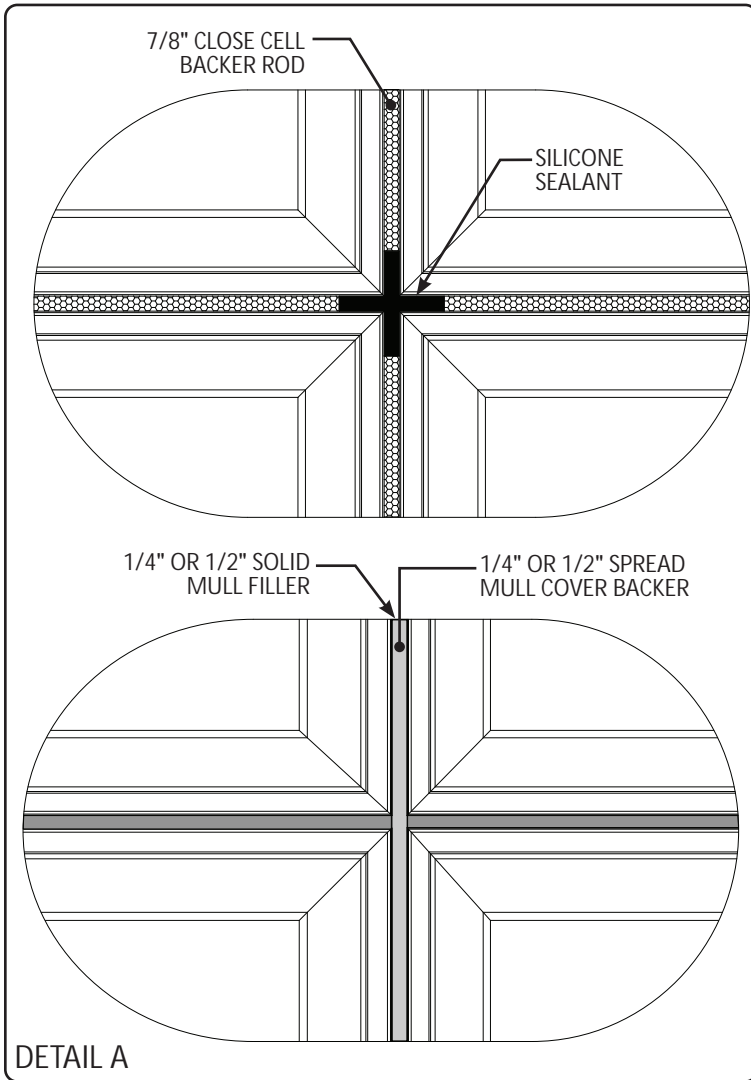
The mull filler spans the full vertical or horizontal length minus 1/8". The head nailing fin is applied first, followed by the jamb and sill nailing fins. Finally, the accessory groove filler is applied to the jambs and sill.

• **MULLED/STACKED Combinations:**

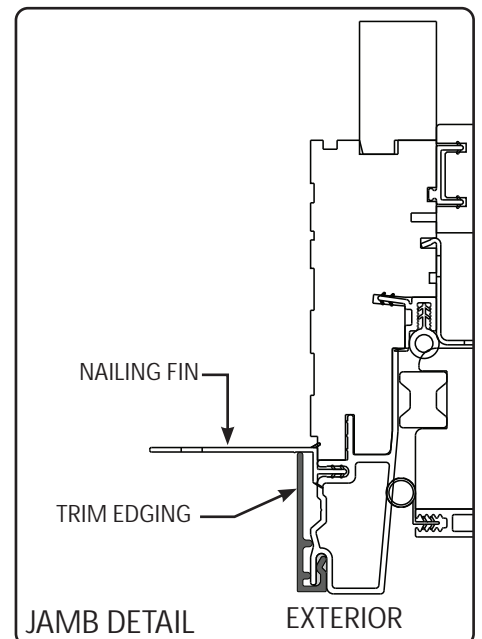
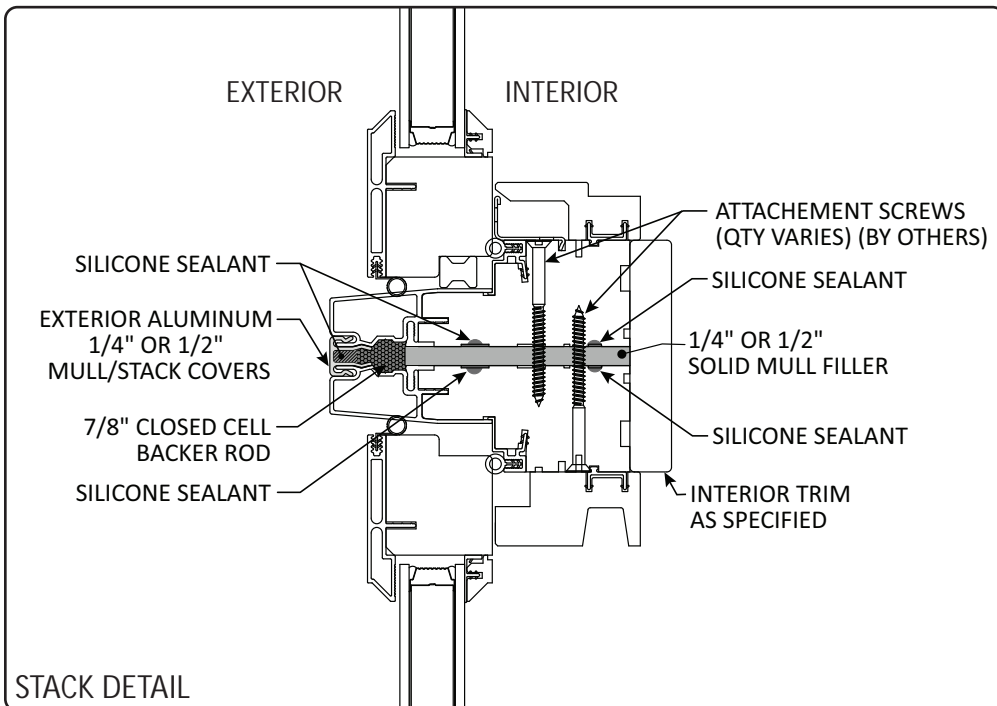
The solid vertical or horizontal spread mull filler spans the entire length of the combined frames minus 1/8". Solid horizontal spread mull fillers are designed to butt against vertical mull fillers, while solid vertical spread mull fillers butt against horizontal mull fillers. The specific configuration depends on the details of the mull/stack window combinations, as outlined below. The head nailing fin is applied first, followed by the jamb and sill nailing fins. Finally, the accessory groove filler is applied to the jambs and sill.



SECTIONS & DETAILS



CASEMENT UNITS SHOWN,
ALL OTHER WINDOWS SIMILAR

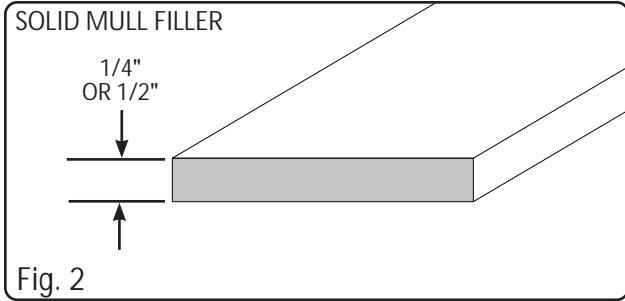


ASSEMBLING UNITS

Ensure all windows, components, and tools required for assembly are arranged on a clean, flat work surface, with the exterior side facing upward.

Arrange and position the window units in the correct mullion or stacked configuration as specified in the opening callout schedule.

1. Locate the solid mull filler (Fig. 2 below and shown on page 3 in the PARTS figure), measure to ensure it is the same size as the overall window frame width or height minus 1/8". Note, if it isn't to the correct size, cut to length.



• Power Drill

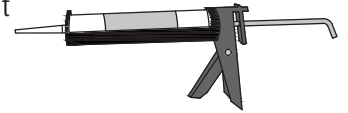


• 7/64" drill bit,



• Screws (By Others) to Fasten Frames Together

• Silicone Sealant
• Caulking Gun



2. (Fig. 3 STACK DETAILS, Fig. 4 page 7, and Fig. 5 MULLING DETAILS page 8) APPLY SOLID SPREAD MULL FILLER AND ATTACH UNITS TOGETHER

The part will be shipped to you the length needed for your units. The solid spread mull filler will fit flush and centered with the interior of the frame assemblies and ensure it runs 1/8" shorter (1/16" on each end) than the entire width or height of the frame, depending on your window configurations.

1st Remove Stops: See the unit full instruction booklet for detailed steps for the removal of the screen if installed, the head interior stop, the sill operator cover, and the side interior stops. See full instruction booklet for removal of cover and stops. Set aside for re-installation after units are assembled.

Attach solid mull filler to the jambs:

2nd Pre-drill the holes in the frame, 4" from each corner and 18" on-center thereafter, alternating on each frame.

- Apply apply 3 beads silicone to the frame in the locations indicated, the full length of the frame assembly.
- Also, see (Fig. 4 page 7) for applying silicone to the ends of the frame.

3rd Apply the 1/4" or 1/2" solid mull filler flush with the interior of the frame assemblies.

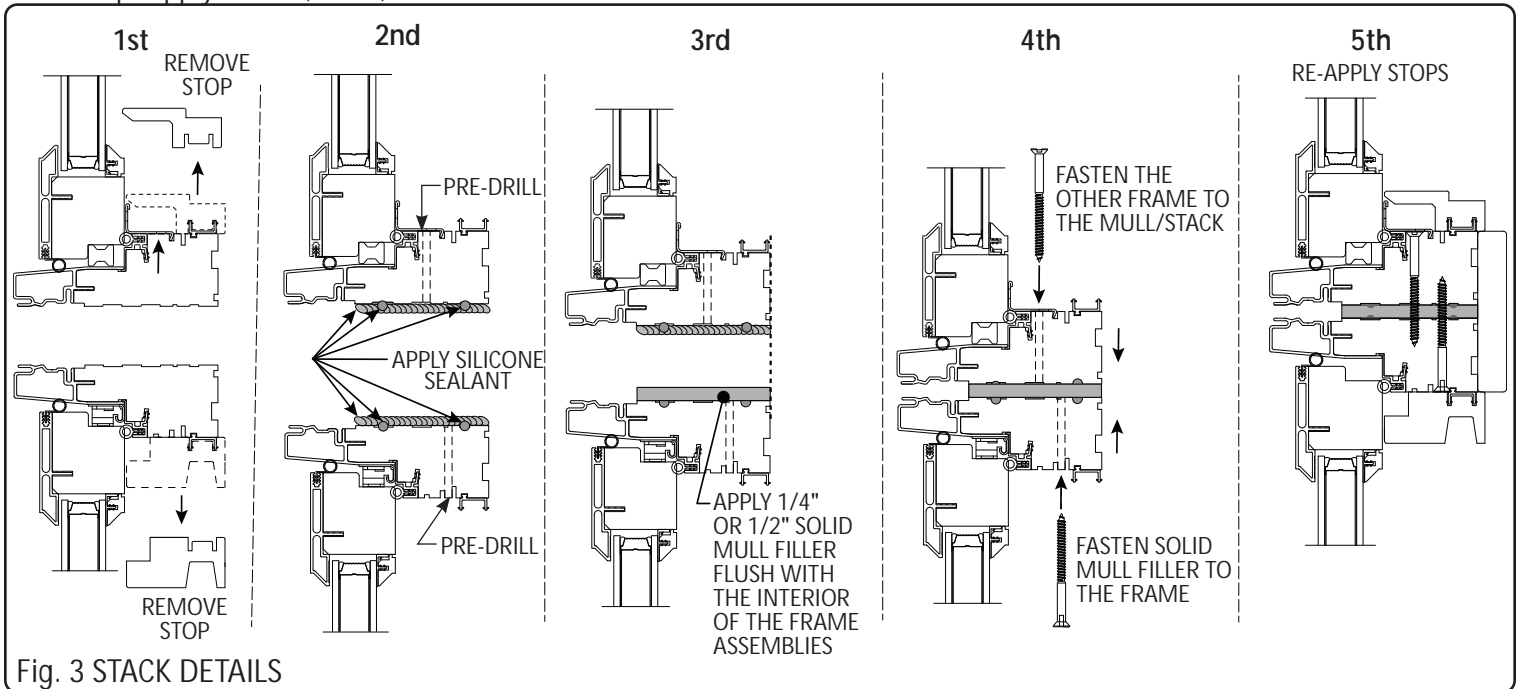
- Use brad nails, screws, or clamps to hold the solid mull filler to one of the frames, ensure it is flush to the interior of the frame.

4th Use a power drill and the attachment screws (by others) to attach the mull/stack configuration together.

- Fasten the other frame to the mull/stack.

5th Re-apply the stops.

These steps apply to mull, stack, mull/stack combination units.



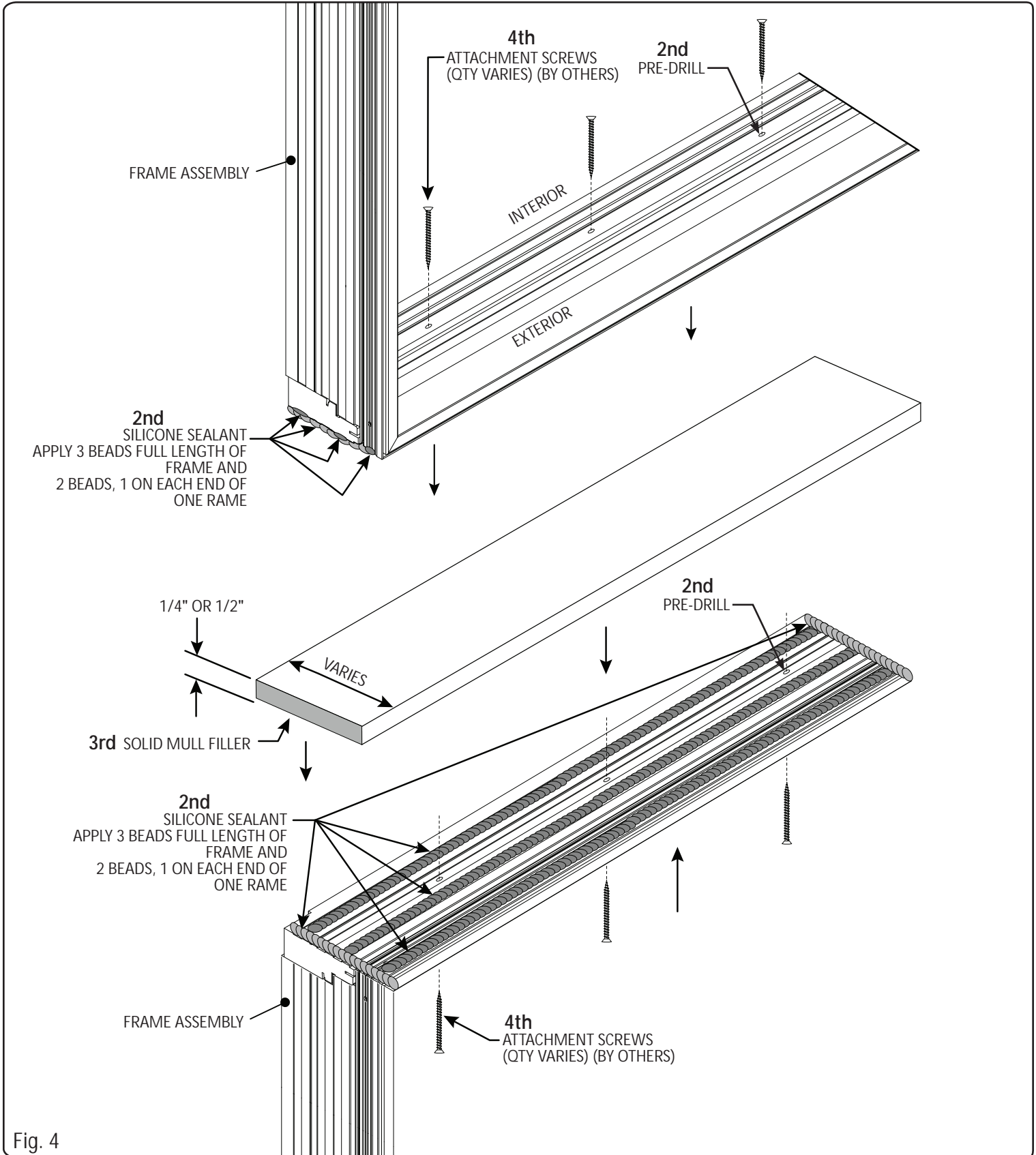
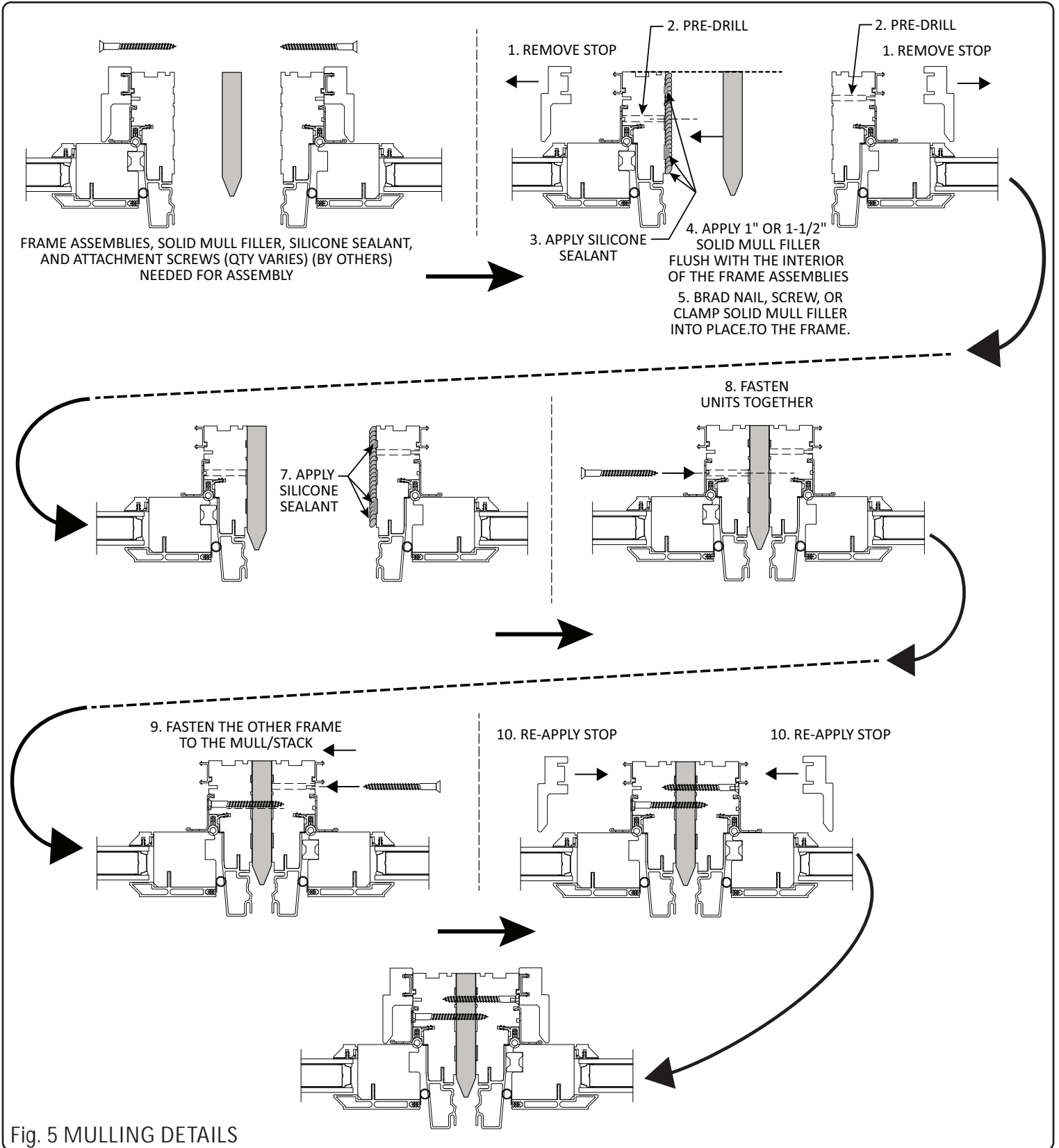


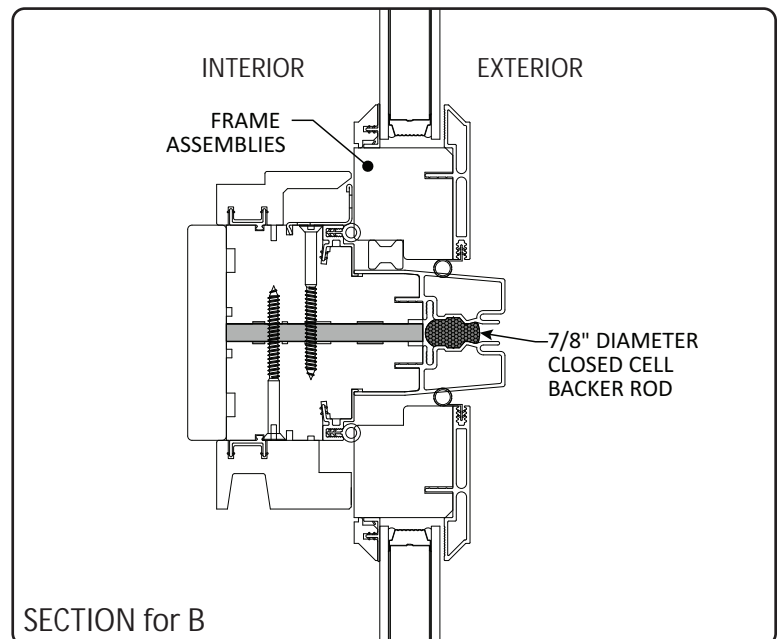
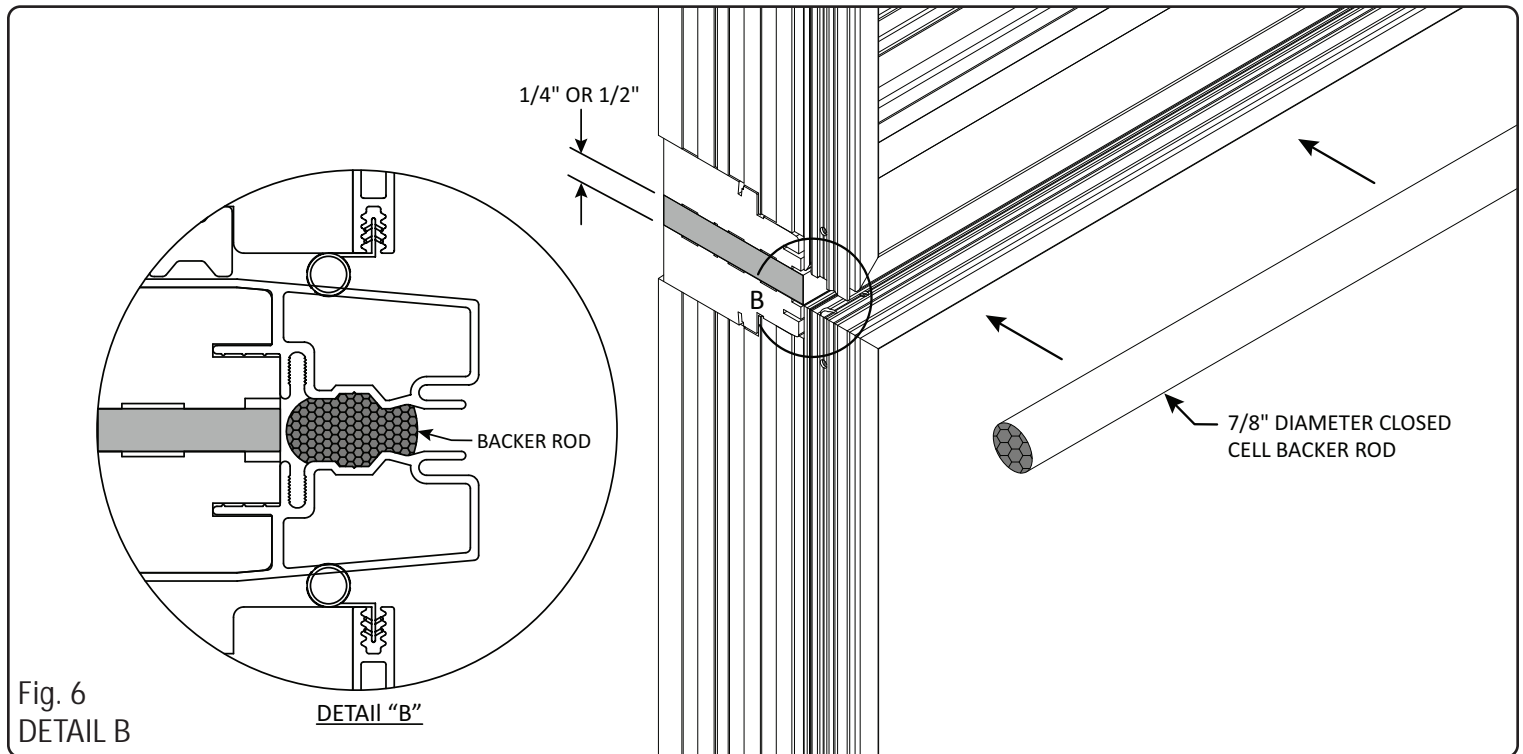
Fig. 4



3. Fig. 6 DETAIL "B" and SECTION for B: SILICONE AND APPLY BACKER ROD

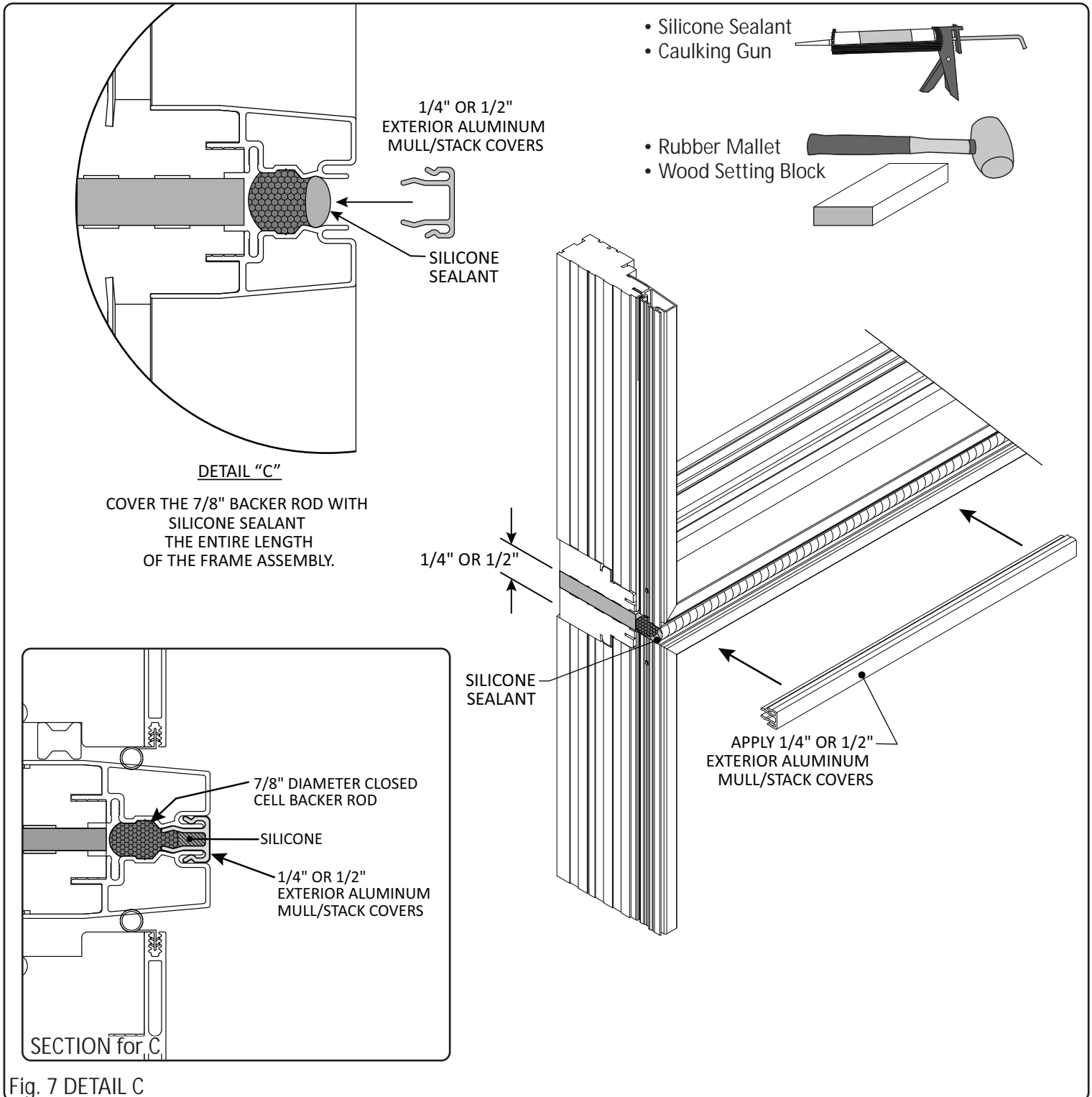
Insert a 7/8" diameter closed cell backer rods in between the frames on top of the solid mull filler for the entire length of all mull and stack locations.

- 7/8" Diameter Closed Cell Backer Rod



4. Fig. 7 SECTION & DETAIL "C" ATTACH EXTERIOR ALUMINUM MULL/STACK COVERS:

- Vertical and horizontal covers are applied in the configuration as shown on page 5.
5. Run a bead of silicone, located on the outside edge of the accessory groove **DETAIL "C"**.
6. Ensure the exterior mull cover is centered before installing and that it does not cover the vertical or horizontal accessory groove on the jambs. Trim as necessary.
7. Use a rubber mallet and a wood setting block to attach the exterior aluminum mull covers to the frames by starting at one end, and working down the unit, to firmly set onto the frame.



8. (Fig. 8 DETAIL "D") APPLY DRIP NAILING FIN:

- Ensure the drip nailing fin is equal to the width of the window assembly.

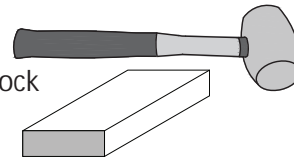
Attach the drip nailing fin to the top (head) of the window unit:

- 1A. Apply silicone sealant over the mull wedge filler and mull cover backer joint at the exterior of the units.
- 2A. Also, apply silicone sealant on each end of the frame assembly unit and a 2" long along the kerf from each end of the frames.
- 3A. Ensure the end of the drip nailing fin is flush with the side of the frame.
- 4A. Align the barb of the drip nailing fin with the accessory groove on the frame.
- 5A. Starting at one end, and working down the unit, use a rubber mallet and a wood setting block to firmly set the drip nailing fin completely onto the windows.

- Silicone Sealant
- Caulking Gun



- Rubber Mallet
- Wood Setting Block



**DRIP NAILING FIN FOR
MULL & MULL/STACK COMBINATION UNITS**

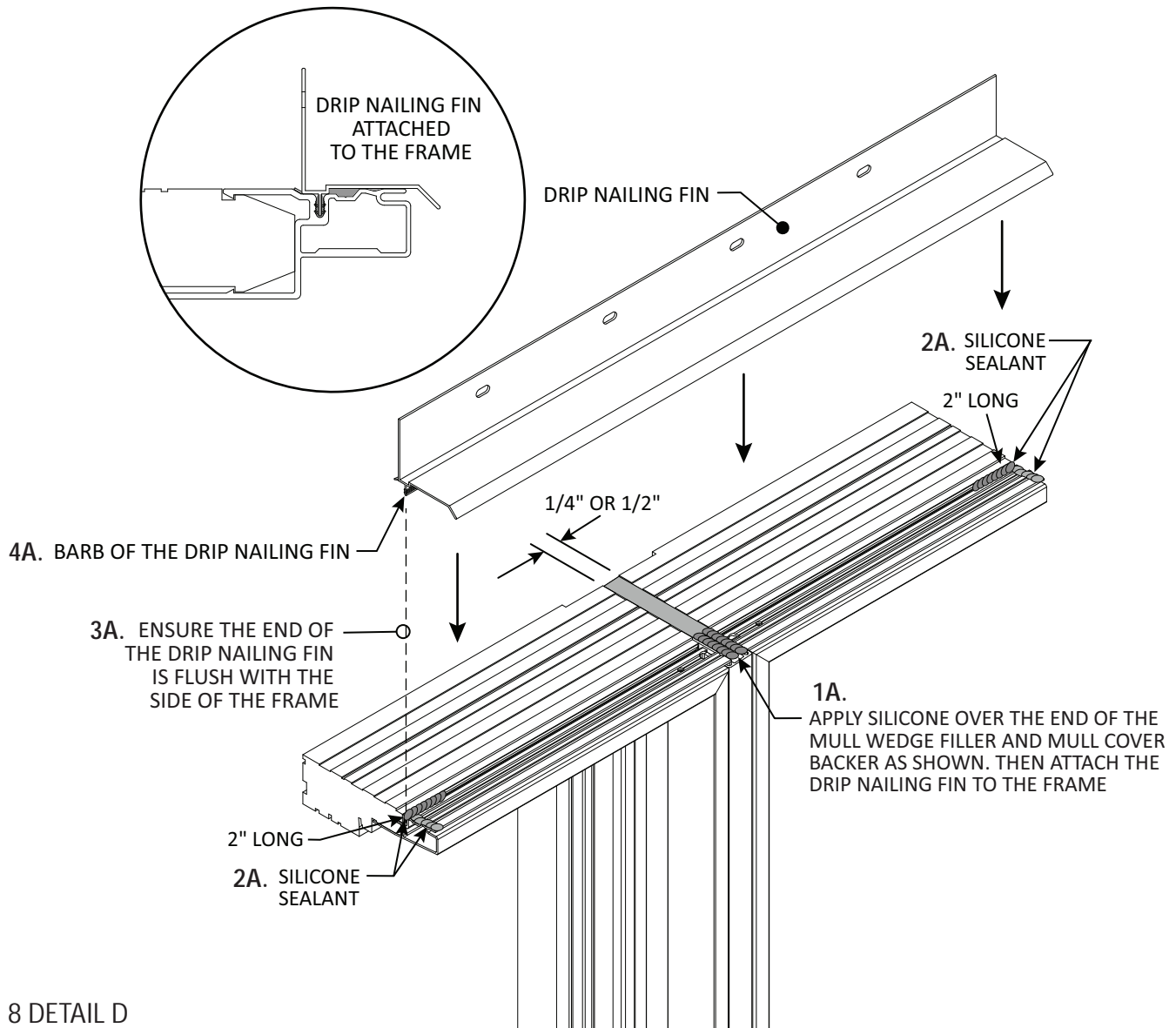


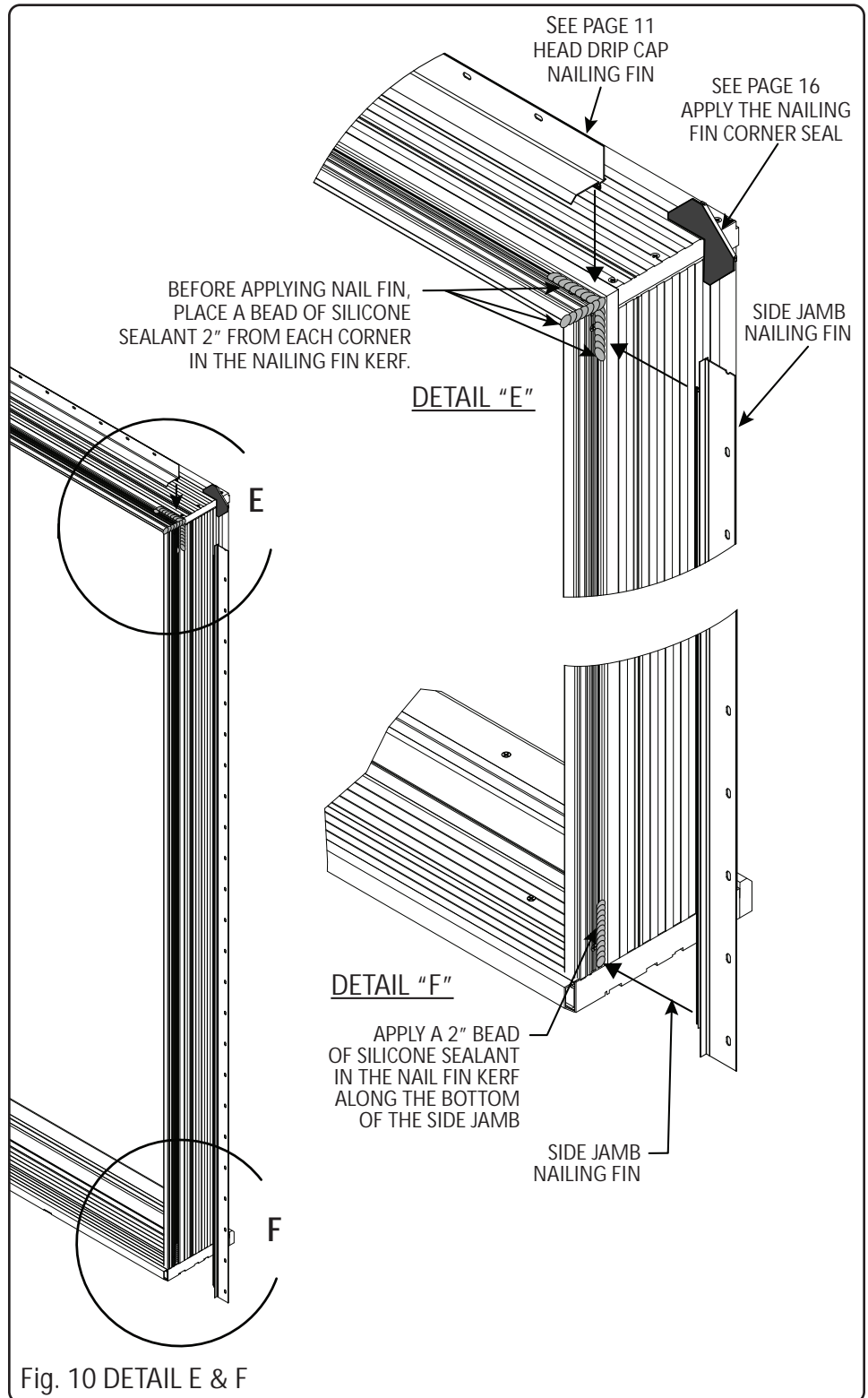
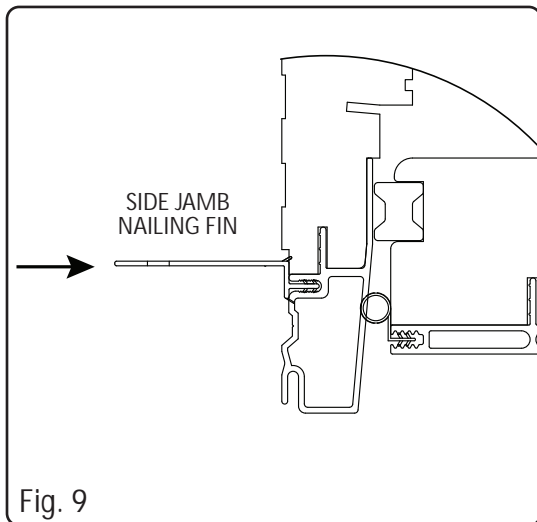
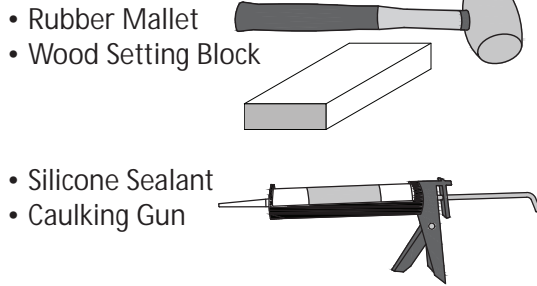
Fig. 8 DETAIL D

9. (Fig. 9 and Fig. 10 DETAIL "E & F") APPLY SIDE JAMB NAILING FIN:

- Ensure the nailing fin is the full length of the window assembly.

Attach the nailing fins to the jambs of the window unit(s):

- Before applying nail fin, place two beads of silicone sealant 2" from each corner in the nailing fin kerf and on the exterior corner.
- Apply one bead of silicone sealant in the nail fin kerf along the bottom of the side jamb.
- Align the barb of the nailing fin with the nailing fin kerf on the frame.
- Starting at one end, and working down the unit, use a rubber mallet and a wood setting block to firmly set the drip nailing fin completely onto the windows.



10. (Fig. 11 DETAIL "G") APPLY SILL NAILING FIN:

- Apply silicone sealant over the end of the mull wedge filler and mull cover backer.
- Center the sill nailing fin on the sill and using a rubber mallet and wood block, snap the part into the accessory kerf.

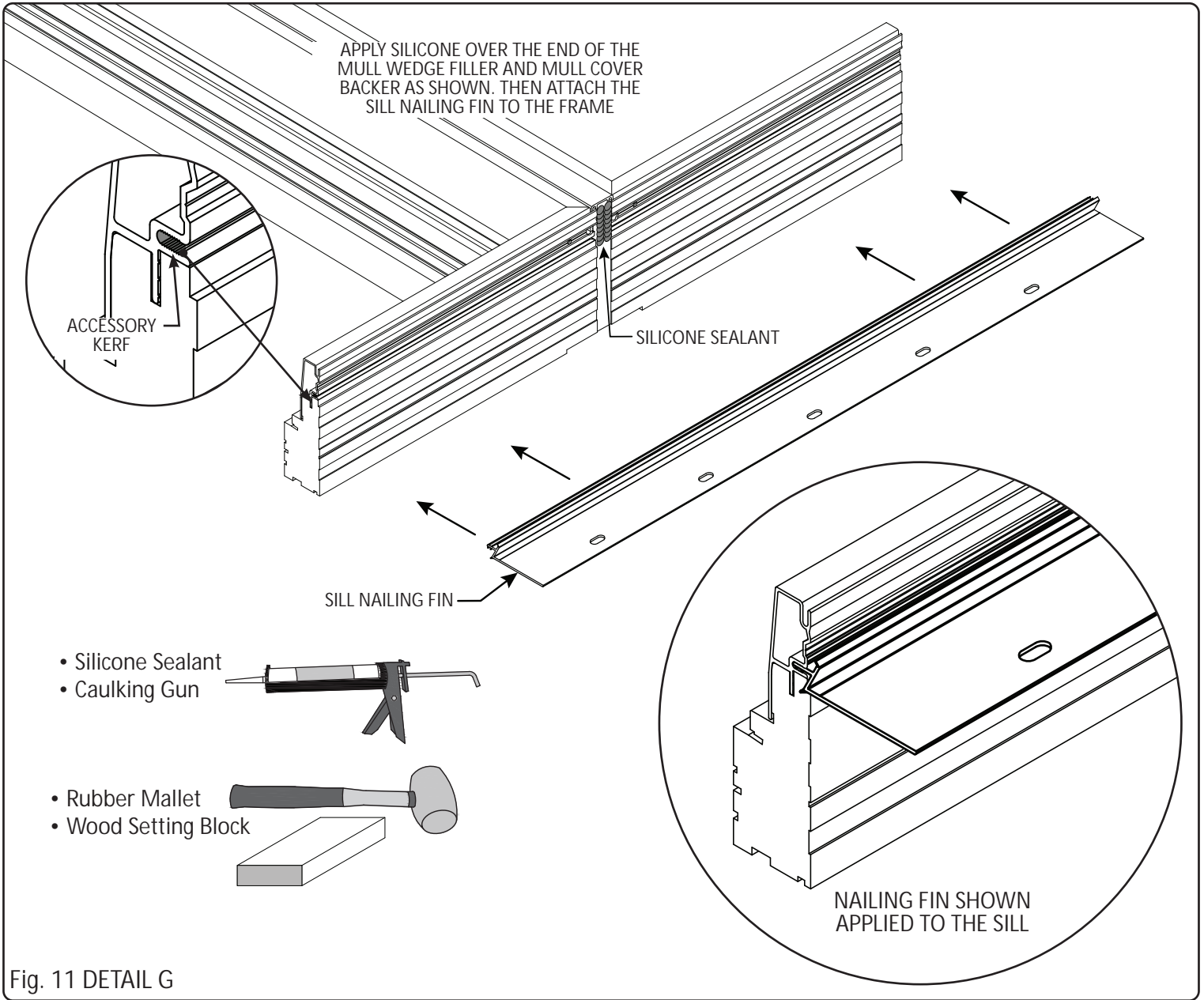


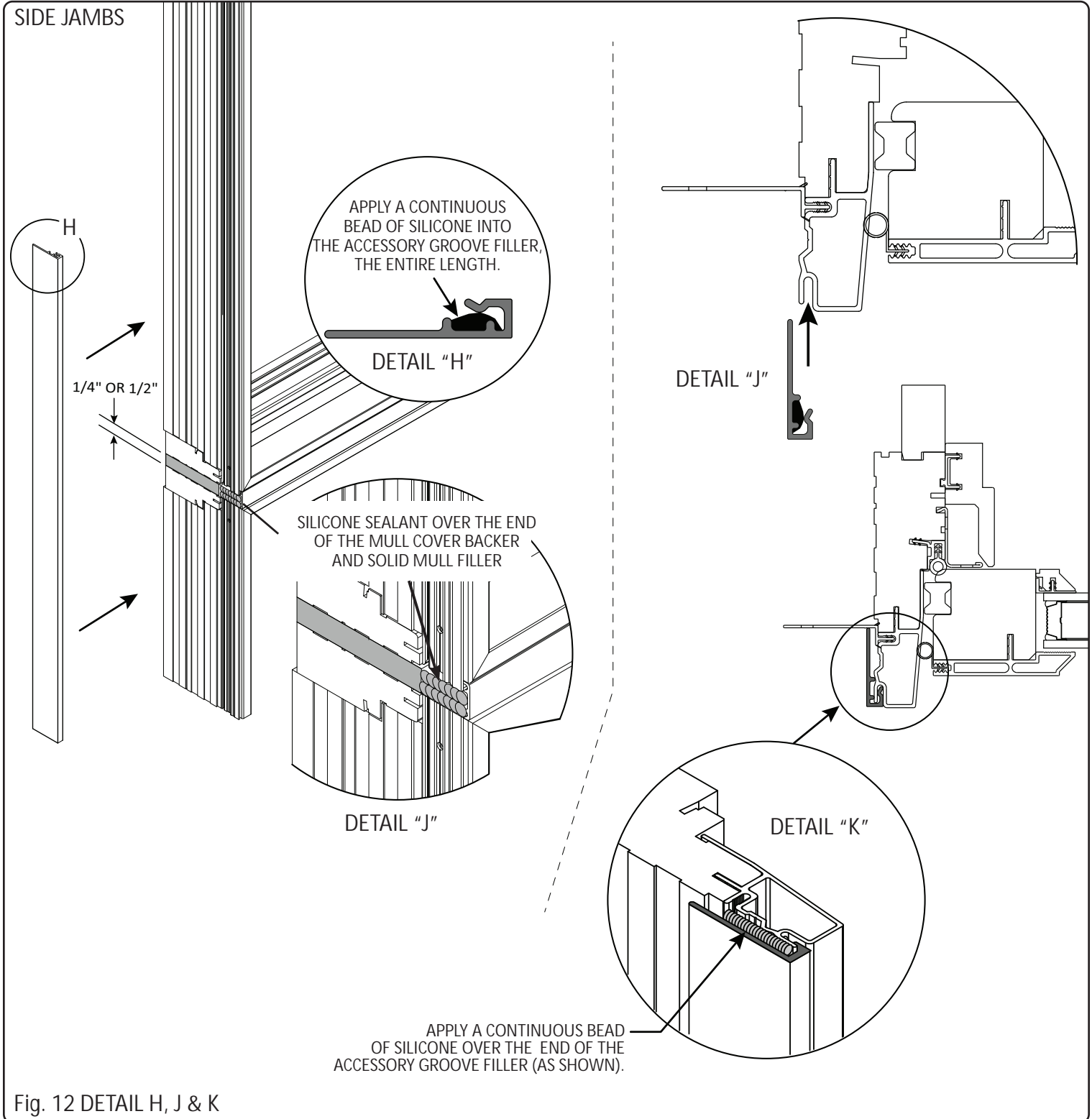
Fig. 11 DETAIL G

11. (Fig. 12 DETAIL "H, J, & K") APPLY ACCESSORY GROOVE FILLER TO JAMBS:

Apply a continuous bead of silicone into the accessory groove filler as shown in **DETAIL "H"** the entire length of the cover.

12. Using a rubber mallet and a wood setting block start at one end and firmly attach the accessory groove filler to the frame accessory groove. Apply silicone sealant over the end of the accessory groove filler **DETAIL "J"**.

13. Apply silicone sealant over the end of the accessory groove filler as shown in **DETAIL "K"**.

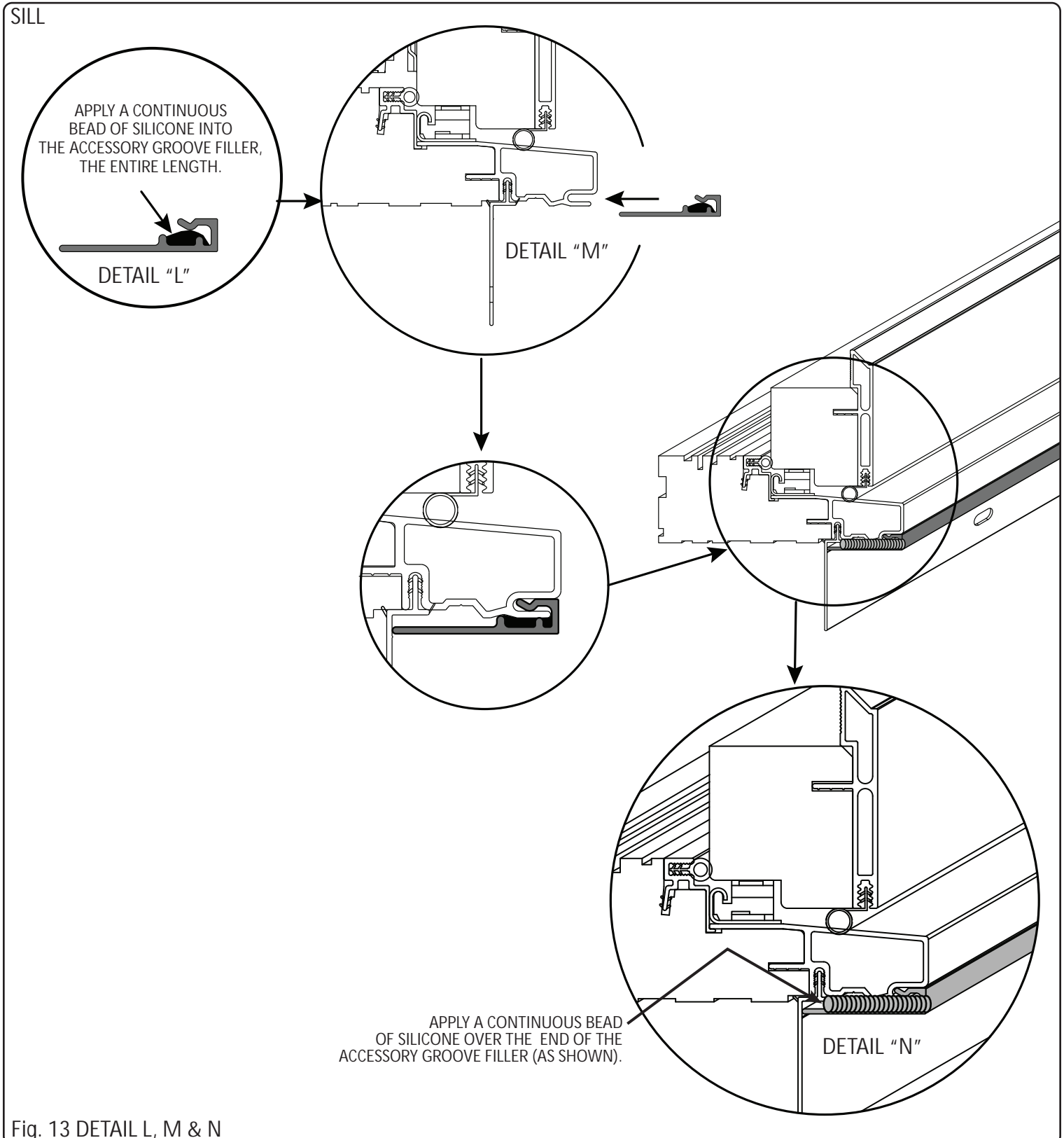


14. (Fig. 13 DETAIL "L, M & N") APPLY ACCESSORY GROOVE FILLER TO SILL:

Apply a continuous bead of silicone into the accessory groove filler as shown in DETAIL "L" the entire length of the cover.

15. Using a rubber mallet and a wood setting block start at one end and firmly attach the accessory groove filler to the frame accessory groove DETAIL "M".

16. Apply silicone sealant over the end of the accessory groove filler as shown in DETAIL "N".



17. (Fig. 14 DETAIL "P") APPLY CORNER NAILING FIN FOAM PADS:

After installing the drip nailing and nailing fins on the unit, attach the four corner nailing fin foam pads as follows:

- Remove the protective paper backing from the corner nailing fin foam pad.
- Position the nailing fin foam pad over the corner where the fins intersect, ensuring it is placed on the exterior side of the unit.
- Fold over and press on firmly.
- Repeat this process for each corner joint.

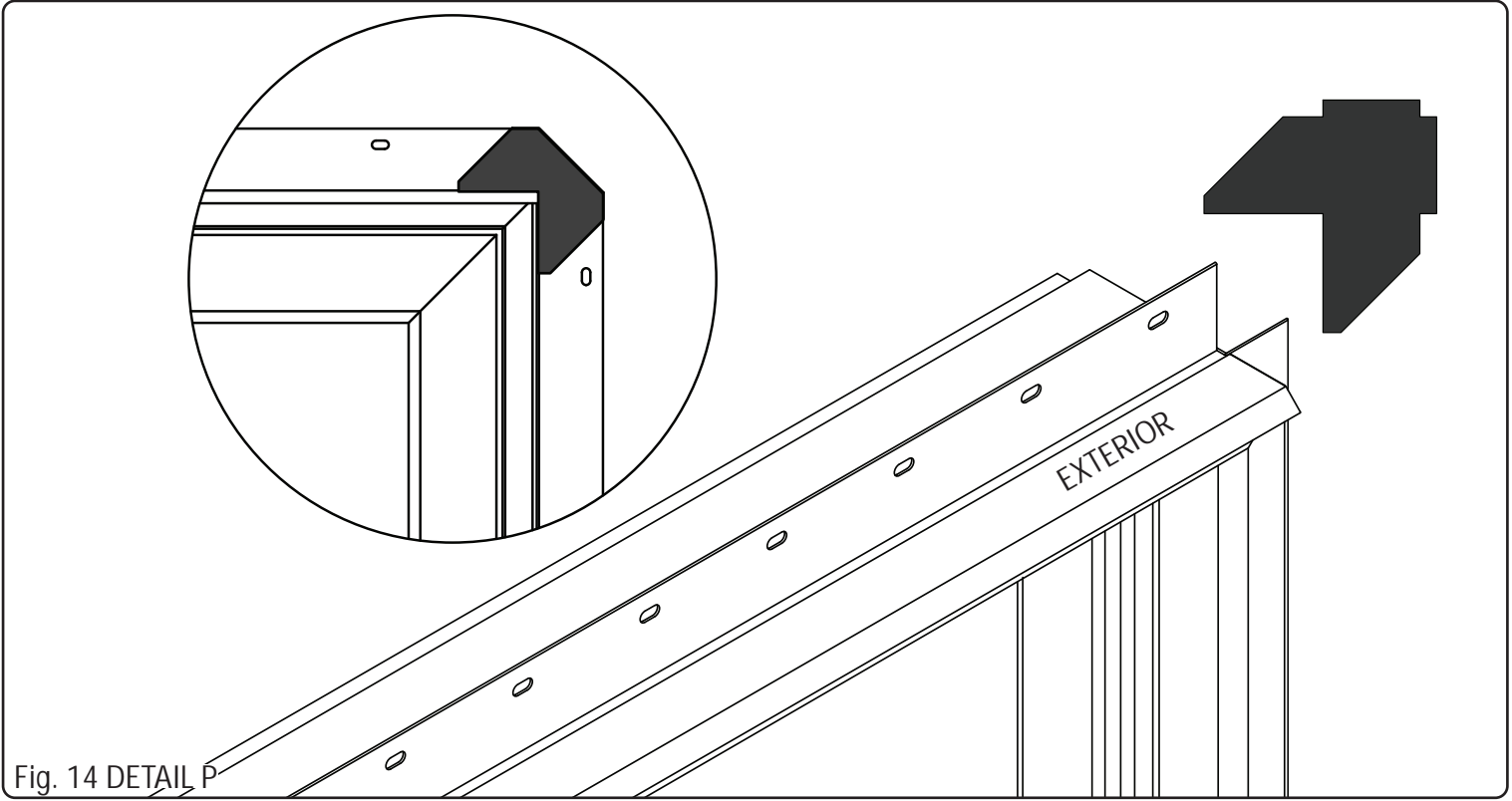
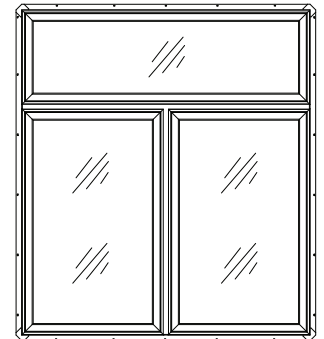
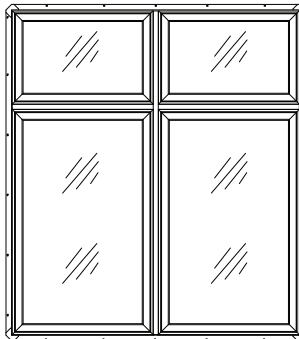
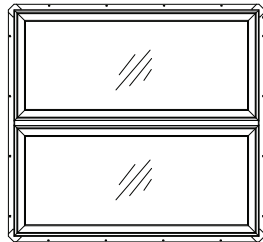
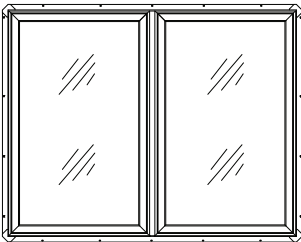


Fig. 14 DETAIL P

Units are now assembled, consult your full window instruction booklet along with the Sealant and Flashing information to install your assembled windows in to the rough openings.



ASSEMBLED UNITS

Contact your Kolbe window and door supplier, visit us at www.kolbewindows.com or call 715-842-5666 for further information.

Thank You
for purchasing Kolbe products

Kolbe & Kolbe Millwork Co., Inc. reserves the right to change specifications without notice.