

Please read and follow these instructions completely for assembly.



Field Spread Mull Installation Instructions

Pinnacle Clad Products



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Installers Page

- Read instructions completely before attempting installation. Failure to follow these guidelines will forfeit the Windsor warranty coverage, written or implied.
- Always provide a copy of these instructions to the homeowner.
- These instructions are consistent with ASTM 2112 "Standard Practice for Installation of Exterior Windows, Doors, and Skylights" into common wall constructions. Contact your architect or construction professional for installation into other building designs or construction methods.
- Regional codes and environmental conditions may require installation that is different from these guidelines. It is your responsibility to ensure that local codes and ordinances are followed.

Warnings

- ⚠ **Work Safe!** Always wear proper eye and hearing protection when installing or adjusting Windsor products.
- ⚠ **Use Power Tools Properly!** To avoid personal injury, always follow manufacturer's instructions for safe operation of power tools.
- ⚠ **Ladder Safety!** Working at elevated levels can be hazardous. Always use ladders and scaffolding properly. Consult manufacturer's guidelines for safe use of these types of equipment.

Handling & Storage

- Always carry window units upright. If not carried upright, could result in damage to the window.
- Do not store windows outside.

Parts, Tools and Materials Needed

<u>Parts Needed</u>	<u>Tools Needed</u>	<u>Materials Needed</u>
<p>Note: Part #'s listed on Page 10</p> <ul style="list-style-type: none"> • LVL Spread Mull Material • PVC Material <ul style="list-style-type: none"> ○ 3-1/2" Flat ○ 5-1/2" Flat ○ 1/2" <u>Synboard</u> • Exterior Mull Cover • Exterior End Cap • Interior Mull Cover • Nail Fin 	<ul style="list-style-type: none"> • Hammer • UHMW/Wood Block • Tape Measure • 5-in-1 Tool • Clamp • Power Drill • Silicone Gun • Saw or similar Cutting Tool • Corrugated Staple Gun (1/2") • Nail Gun <ul style="list-style-type: none"> ○ 2" ○ 1-1/4" 	<ul style="list-style-type: none"> • 100% Silicone • Liquid Nails • Corrugated Staples (1/2") • 2" Nails • 1-1/4" Nails • 1/8" Drill Bit

1: Inspect Window

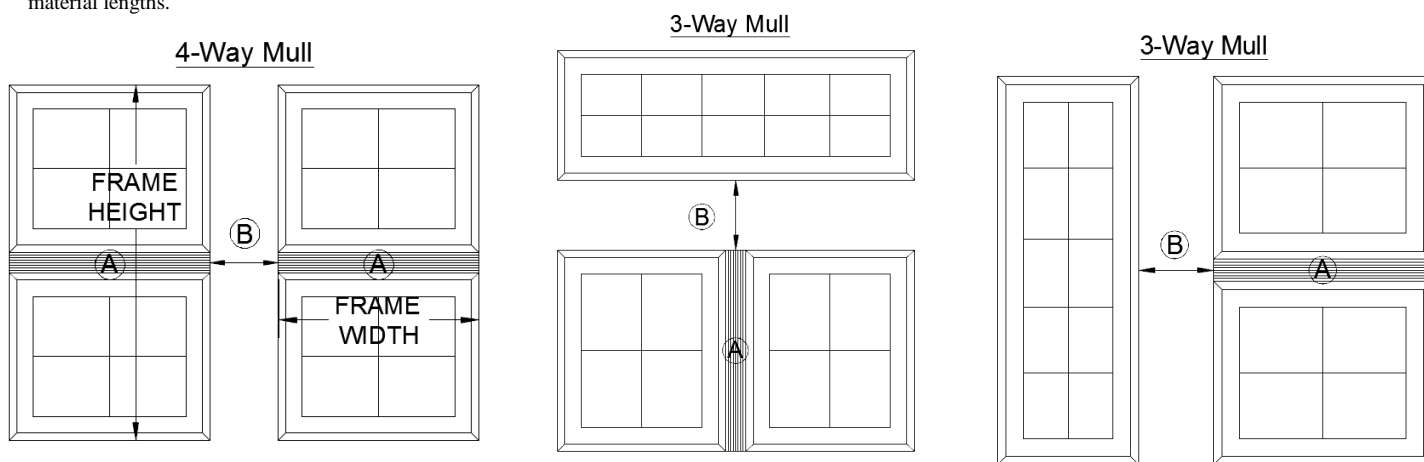
- A. Un-wrap units to be mulled.
- B. Verify Window Specification (product, size, color, grille pattern, etc.).
- C. Visually inspect window for physical or cosmetic damages.
- D. Verify frame dimensions of units to be mulled together are correct

Note: Contact dealer or distributor for recommendations before installing if any of the above list is concerning.

2: Preparation For Spread Mull Construction

- E. Determine mull configuration (1-way, 3-way, and 4-way).

For 3- way/4-way mulls, mull together units with short mull length (A) before mulling long mull lengths (B), see diagrams below. Use frame width and height for mull material lengths.



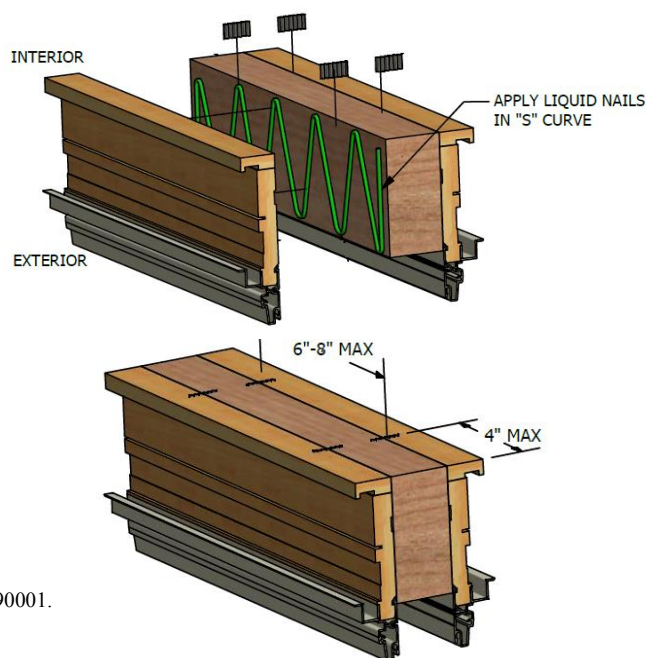
- F. Gather all necessary parts, tools, and materials for mull construction (shown above in “Parts, Tools, and Materials Needed” section).

3: Spread Mull Construction

- G. Place units to be mulled exterior (cladding) down.
- H. Cut mull material to length of mull
- I. Apply Liquid Nails between mulling material and unit. Clamp mull material to unit. Make sure the unit interior and mull material is flush.
- J. Apply corrugated staples (4” from ends, 6”-8” spacing) securing mull material to unit.
- K. Perform Steps I’-J to both sides of mull material
- L. Flip unit configuration, placing the unit interior face down
- M. Rip 1” thick pvc material to spread mull width

Note: For 1”, 2”, 2.5”, 3” spread mulls, use P/N: 2390000. For 4” spread mulls, use P/N: 2390001.

- N. Cut 1” thick pvc material to length (frame width/height of intended mull)

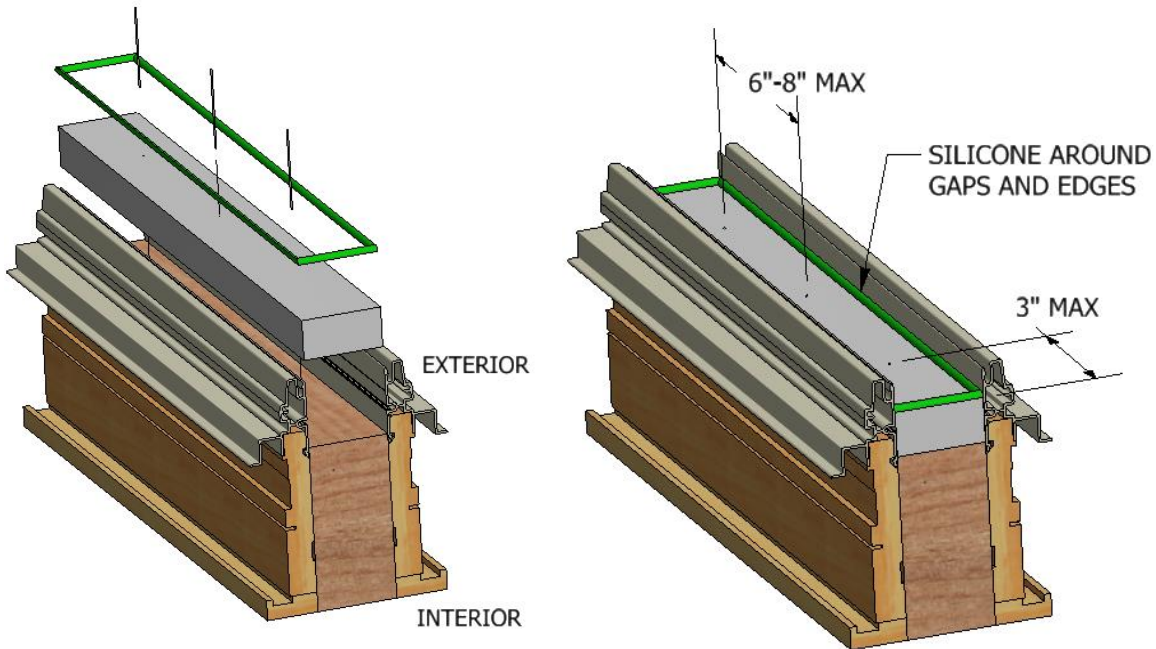


3: Spread Mull Construction (Continued)

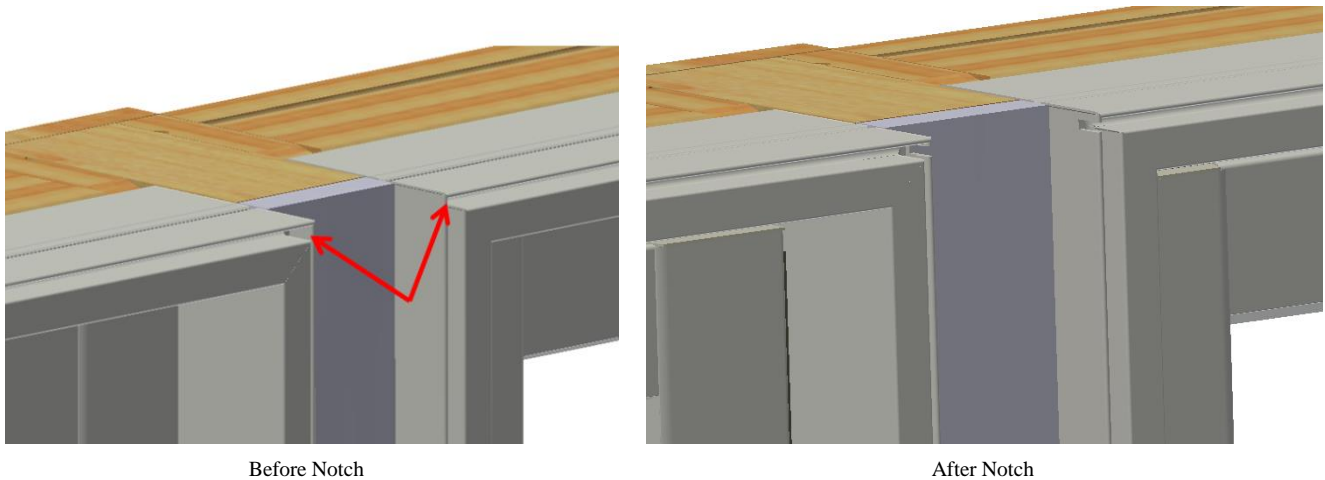
For Steps O-U see figures below

- O.** Insert 1" pvc material into mull channel
- P.** Secure pvc material with 2" nails along mull (3" max from ends, 6"-8" spacing)
- Q.** Apply silicone along edges and ends of pvc material (exterior side), sealing all gaps

Note: For 3-way/4-way mulls, complete Steps O-Q for each mull according to mull configuration shown in Step E.



- R.** For each mull, the accessory grooves must be notched on both ends of the mull in order to accept an end cap. Using a utility tool (5-in-1 painter's tool) and a hammer, notch the accessory grooves on both ends of each mull (shown by red arrows below).

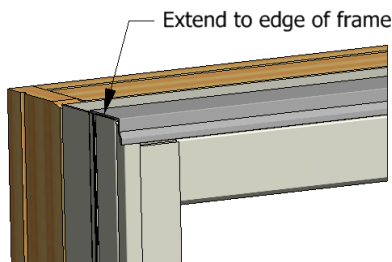


3: Spread Mull Construction (Continued)

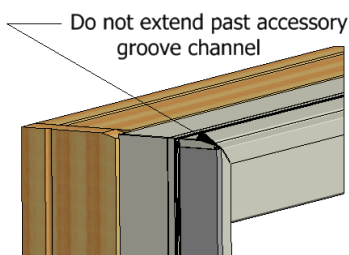
S. Apply drip cap and end caps to muller unit configuration.

Use the following set of diagrams to apply the drip cap and end caps.

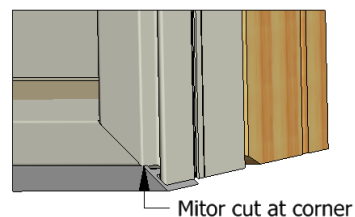
Drip Cap
(always straight cut)



End Cap
(straight cut)

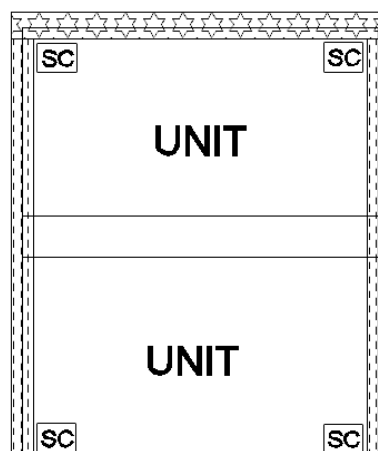
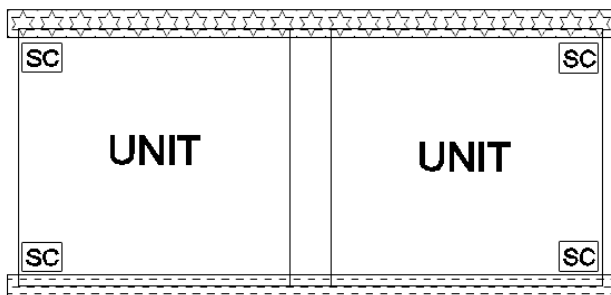


End Cap
(miter cut)

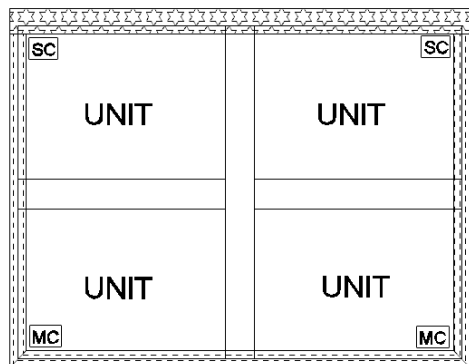


1-Way Mull

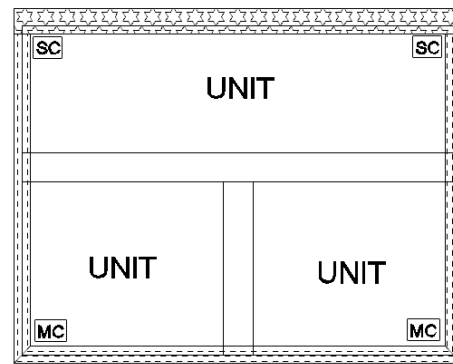
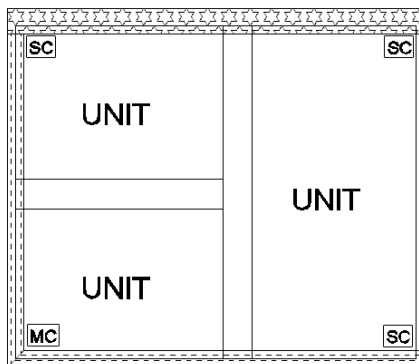
- | | |
|--|--|
|  Drip Cap |  Straight Cut |
|  End Cap |  Mitor Cut |



4-Way Mull



3-Way Mull



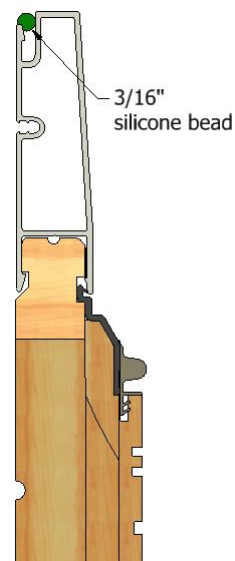
T. Apply drip cap to top of unit. Drip cap to be straight cut the width of the unit.

Note: Make sure to properly clean surface if using two-sided tape, and properly seal gaps to prevent water infiltration issues in the future.

3: Spread Mull Construction (Continued)

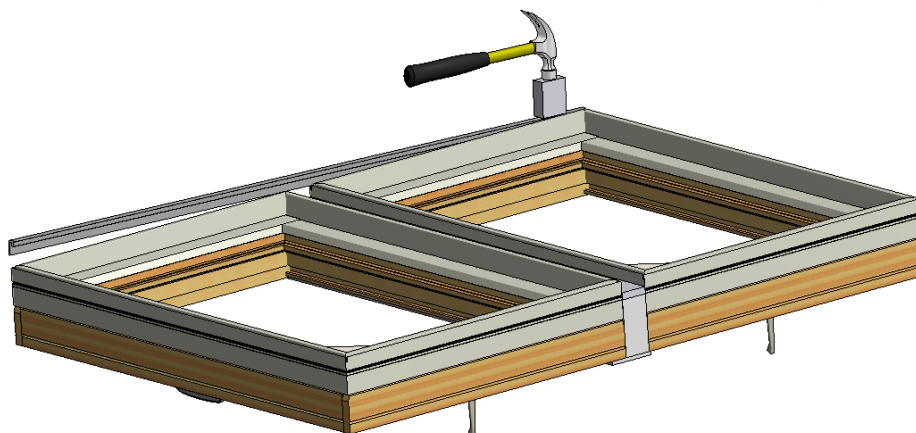
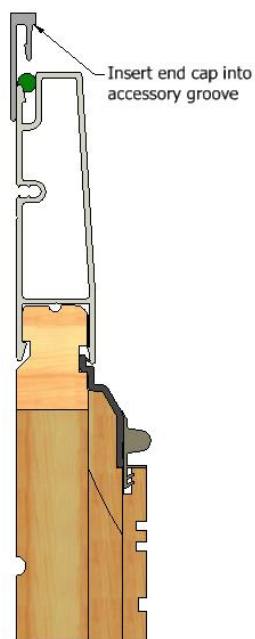
- U. Apply silicone to accessory groove for endcap along frame on all sides that require an end cap (see right)

Note: Only apply silicone to sides of unit configuration that end caps will be applied.



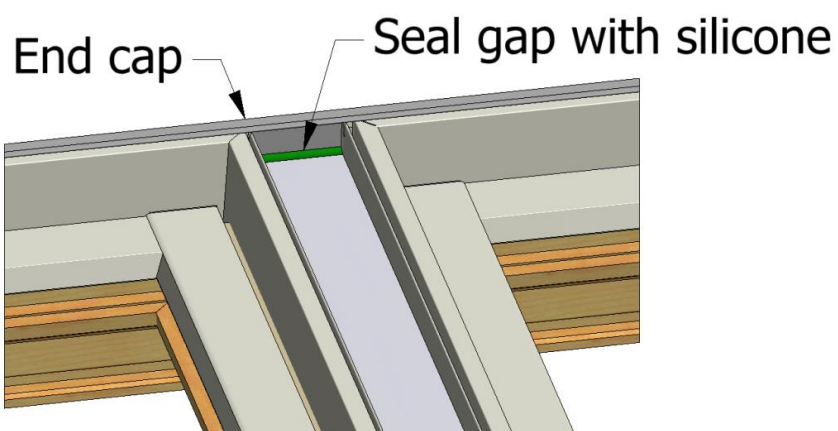
- V. Apply end cap to frame accessory groove using hammer and UHMW/wood block.

Note: Do not directly apply end caps with hammer. Damage to end caps may occur.



- W. Seal gaps between mull material and end caps. Complete for each mull-endcap connection (1-way: 2x, 3-way: 3x, 4-way: 4x)

- X. Complete Steps S-W for each end cap to be applied

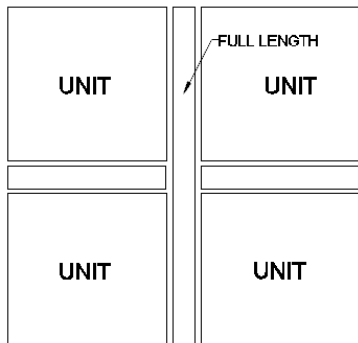


3: Spread Mull Construction (Continued)

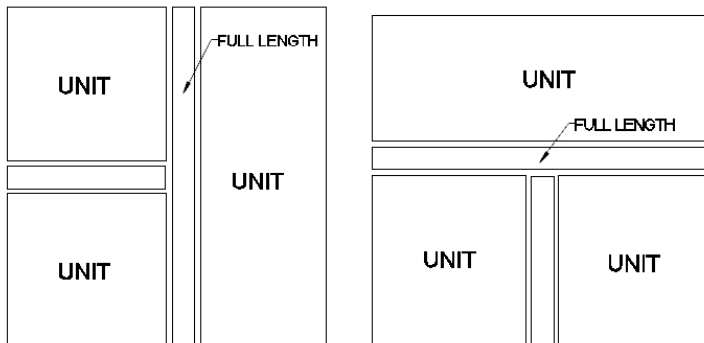
- Y. Measure and straight cut mull covers once the length is determined.

Note: See below for mull cover lengths on 3-way and 4-way mull constructions.

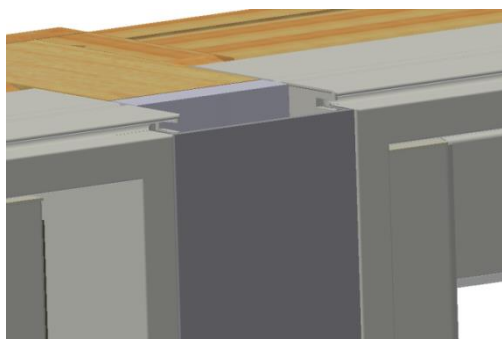
4-Way Mull



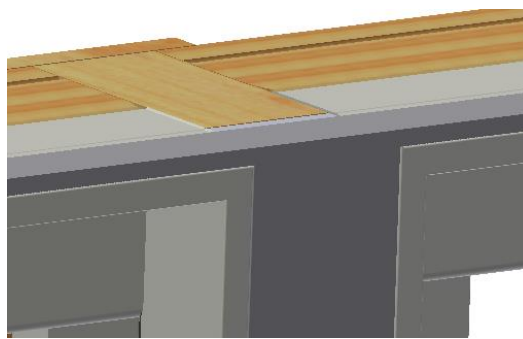
3-Way Mull



Note: End of mull covers should stop at beginning of accessory groove (see below), aligning flush with end caps.



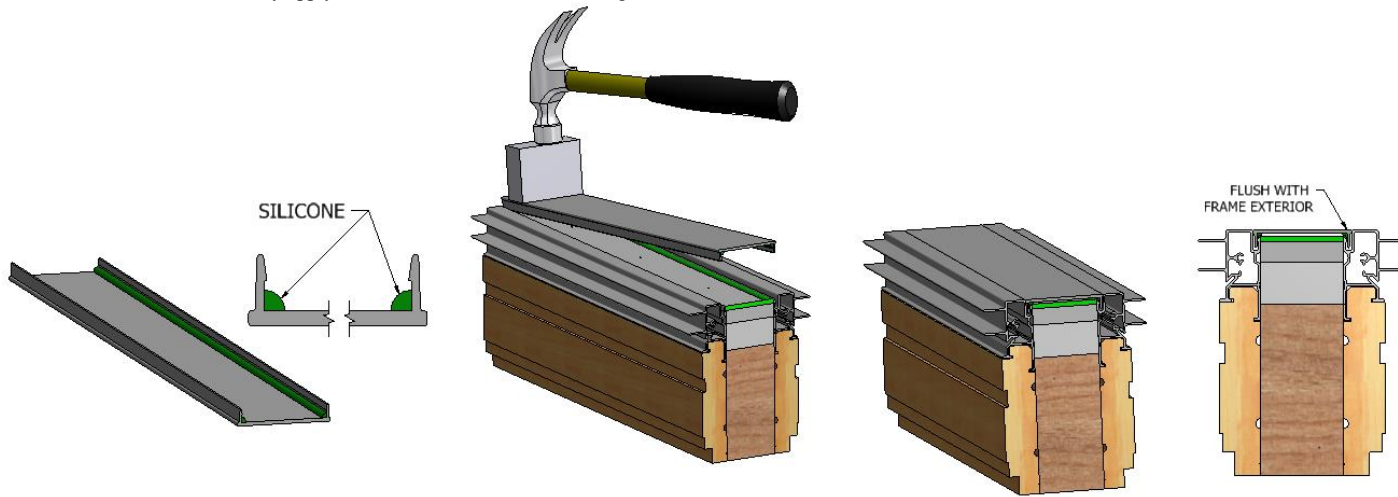
End Cap Not Applied



End Cap Applied

- Z. Apply silicone to mull cover (inside legs), and apply along spread mull with hammer and UHMW/wood block. See images below.

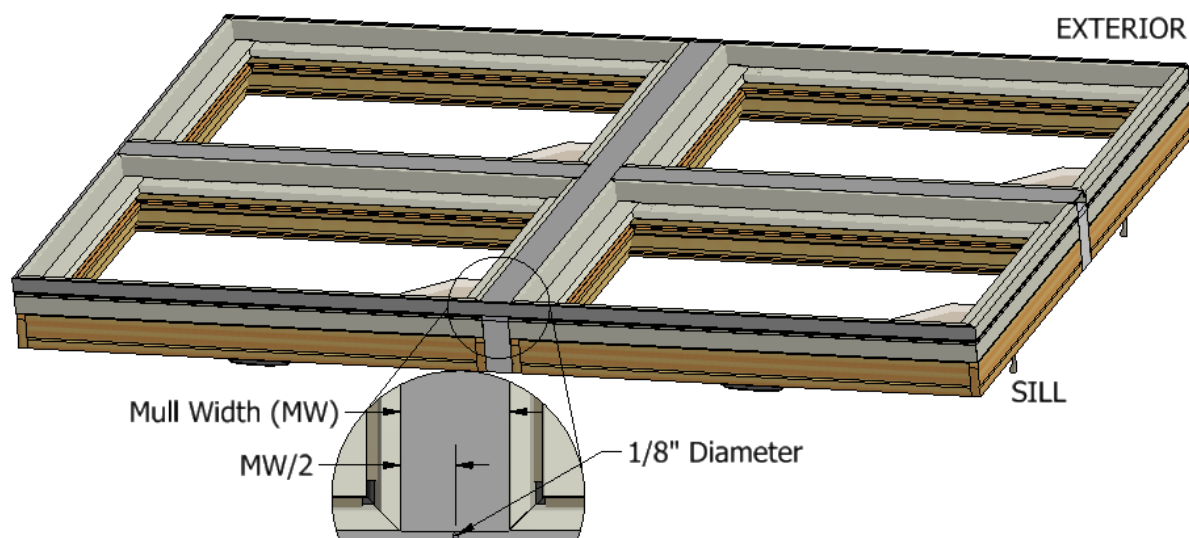
Note: Do not directly apply mull cover with hammer. Damage to mull cover could occur.



- AA. Repeat Steps Y-Z until all mull covers are applied to the unit configuration

3: Spread Mull Construction (Continued)

BB. If unit has an end cap on the sill, predrill a Weep hole in the sill end cap at the center of the spread mull.



CC. Flip Unit configuration (exterior side down).

DD. Verify interior mull cover width. Custom widths are acceptable; the following width is a recommendation. Interior mull cover length = Spread Mull Width + 1-3/8" (For Example, 1" spread mull will use a 2-3/8" mull cover).

Note: If mull cover is too wide, rip to correct width. Rounding edges of mull cover is optional.

EE. Cut interior mull covers to length (should extend to edge of frame configuration). For 1-way mulls, cut mull cover to frame width/height. For 3-way and 4-way mull constructions, use diagram in Step Y for direction and lengths of mull covers.

FF. Apply interior mull covers using finish nails or staples. Two rows with spacing of 3" max from the ends, and 6"-8" spacing between nails/staples.

GG. Fill nail holes if necessary.

4: Completing The Installation

- Remove all labels or shipping materials.
- Operate window to ensure proper operation. The sash will not operate correctly if the window frame is out of square, over-shimmed or over-insulated.
- Properly finish all interior wood components within 60 days of installation. See the “Care and Use” guide located at www.windsorwindows.com for further details pertaining to finishing wood windows.
- **IMPORTANT:** Do not stain or paint any hardware or vinyl components.

If you should have any questions from installation to adjustments of the Windsor Products please contact Windsor Windows directly at 1-800-218-6186. Also, if you choose, visit our website www.windsorwindows.com in our **About Us/Contact Us Section**, you will find an easy to fill out form that will be forwarded electronically and your question(s) will be directed to one of our window specialists, who will contact you. While at our website please find in the **Resources Section** our **Windsor “Care and Use” Guide** to assist you in preserving the integrity and reliability of your Windsor Products.

Care and Use:

An inspection of your window should be made annually. Visit the Windsor website (www.windsorwindows.com) or contact your local independent Windsor distributor for information on the care and use of your product. Ask for the “Care and Use” guide. Contained in this guide is information on finishing, cleaning, what to look for during yearly inspections, general maintenance tips, sash/panel adjustment, sash/panel removal, screen removal, and information on condensation.

Parts List

Parts					
Mull Type	Part Description	Mull Width /Dimensions	P/N:	Length	Rule
Clad/Prime	LVL Spread Mull Material	1"	292301	12'	-Cut to mull length (see Step E for length)
		2"	292302		
		2.5"	292303		
		3"	292304		
		4"	292305		
	PVC Filler Material	1/2" x 11-1/4"	2380100	20'	-Rip to mull midth
		1" x 3-1/2"	2390000	16'	-Cut to mull length
		1" x 5-1/2"	2390001	16'	(see Step M-N for length)
Clad Only	Exterior Mull Cover	1"	420036	14'	-Cut to lengths (see Step X for length)
		2"	2374065		
		2.5"	2374066		
		3"	420052		
		4"	420060		
Prime Only	Exterior Mull Cover	1/2" x 11-1/4"	2380100	20'	-Rip to mull midth -Cut to length (see Steps U for length)