

Essential Window Standard Mulling

Instruction for Field Application

ABSTRACT: The following instructions are intended for use in assembling multiple wide and/or high configurations of Essential windows using field applied mull kits. Please read through these instructions thoroughly and in their entirety before attempting to mull windows.

IMPORTANT

More than one mull kit may be necessary. Field mulls beyond factory mulled configurations are not recommended. Maximum dimensions are 2W x 2H up to 96" x 96" R.O. or a 4W up to 78" x 114" R.O. Field mulled windows are not certified to the advertised DP ratings of individual windows.

Before You Begin

Mull Kit Parts:

- 1 - Mull pin
- 2 - Mull bracket
- 2 - Mull plugs
- 4 - Rivets
- 1 - Sill mull bracket (for Sliding Window products)
- 2 - Flat sill structural brackets
- 4 - 90° bent structural brackets with 8-#7 x 5/16" screws
- 2 - Mull covers (interior and exterior)
- 2 - Kerf weather strips

Inspect the mull kit to ensure that there are no damaged or missing parts. Parts listed above are included in each kit. More than one kit may be needed depending on configuration.

Tools and Supplies Needed:

- Rubber mallet
- Rivet gun
- Caulking gun
- Hacksaw
- Silicone sealant
- Screw gun/drill with 7/32" drill bit
- Screwdriver with a #2 Phillips head bit
- Thin putty knife

⚠ CAUTION!

Always wear the proper eye and ear protection when using power tools. Follow all manufacturers' instructions for application and clean up of sealants.

⚠ WARNING!

Drilling, sawing, sanding or machining wood products can expose you to wood dust, a substance known to the State of California to cause cancer. Avoid inhaling wood dust or use a dust mask or other safeguards for personal protection. For more information go to www.P65Warnings.ca.gov/wood.

Preparing the Windows for Mulling

1. Remove and properly discard all shipping material.
2. Inspect the unit to make sure it is the right size, color, etc. and that there is no damage. If you find something wrong with your windows, contact your local Marvin representative and provide them with customer service number located in one of the corners of the glass. See [Figure 1](#).



Figure 1

3. Remove and set aside all screens and loose hardware.
4. Lay the units to be mullied on a flat sturdy surface exterior side up. Remove all nailing fin, if present, from windows at the mull and perpendicular to the mull. See [Figure 2](#).

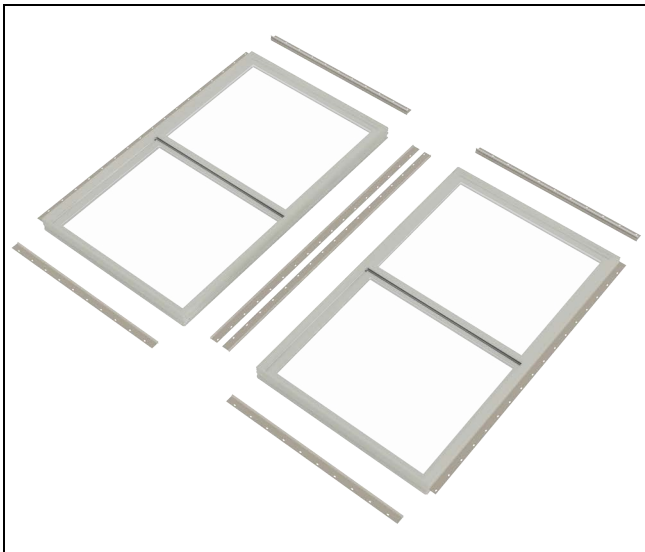


Figure 2

5. For J-Channel applications: At the corners of the mullion, carefully remove the outer wall of the accessory kerf with a hacksaw. See [Figure 3](#). (Sliding window sills are already notched.)

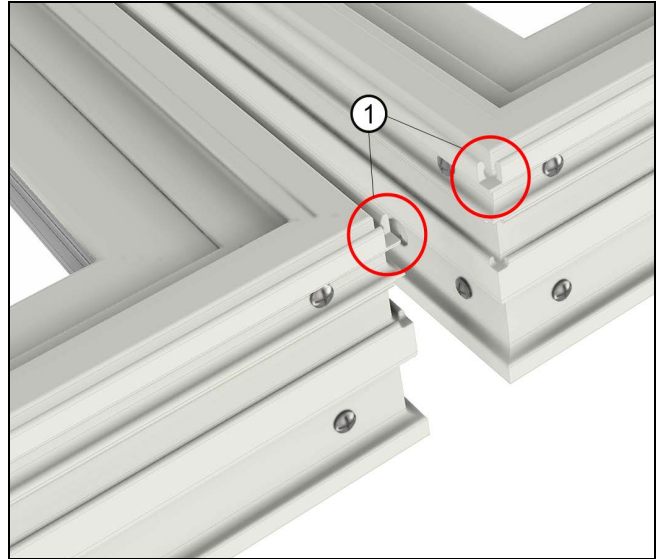


Figure 3

1	Notch Corner
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Mulling the Windows

1. Set the units to be mullied close together and slide the mull pin down the nailing fin channel on both units. If necessary pound the pin in with a rubber mallet or plastic hammer. See [Figure 4](#).

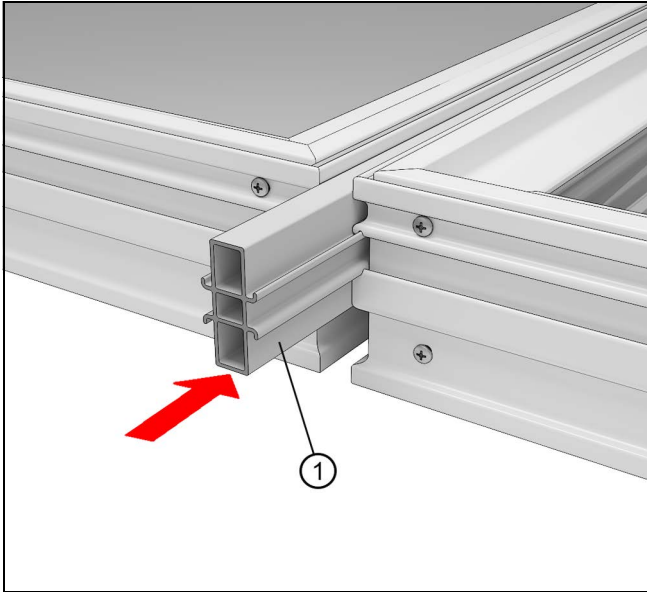


Figure 4

1	Mull pin
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2. Insert the mull plugs with the injection hole oriented toward the exterior. See [Figure 5](#).

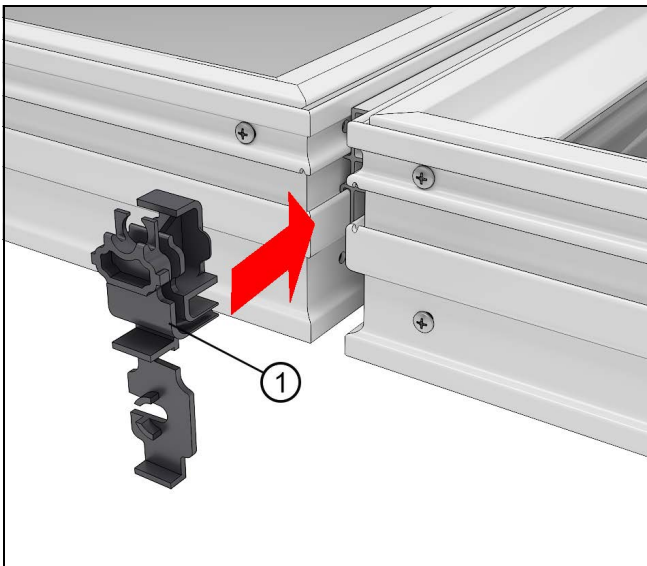


Figure 5

1	Mull plug
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3. Loosen the screws from the interior corners of the windows on both ends of the mull. See [Figure 6](#). (Remove screws from sill completely for sliding window products.)

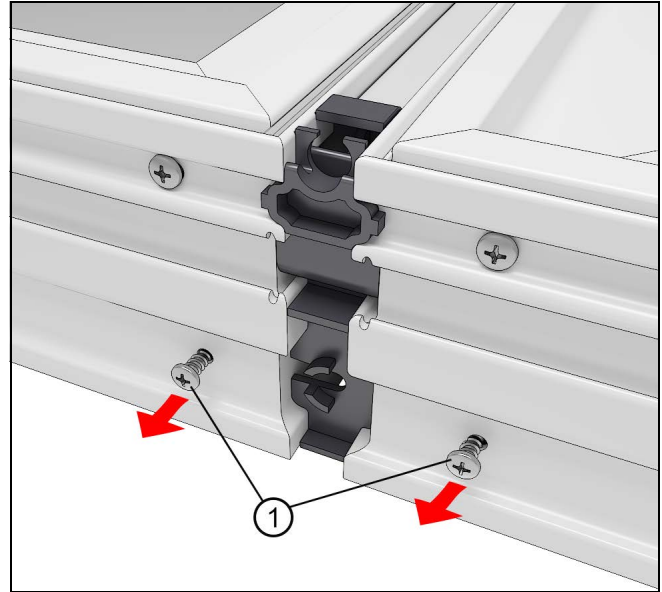


Figure 6

1	Loosen interior screws
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4. Place the brackets as shown. Fasten using screws loosened in previous steps. See [Figure 7](#). Use the smaller bracket for sill mullion joints on sliding window products. See [Figure 8](#).

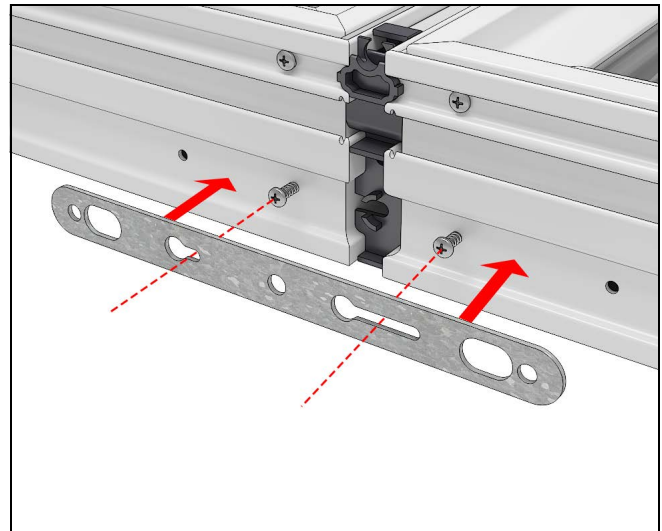


Figure 7

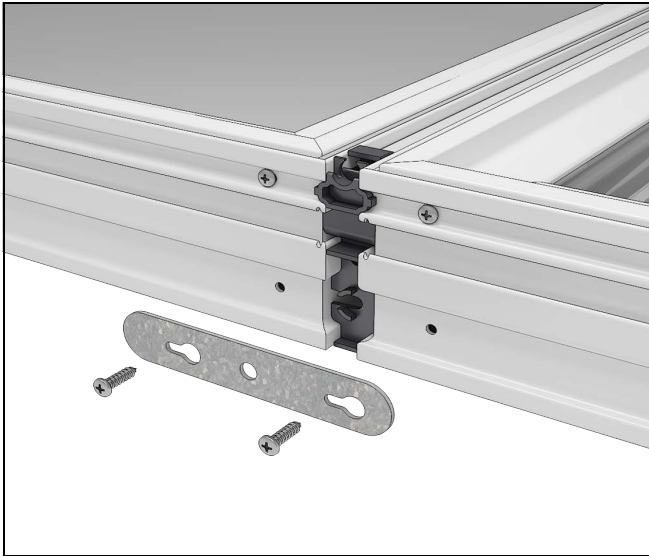


Figure 8

5. Drill out first layer of Ultrex using holes in end of bracket as a guide. Use the 7/32" drill bit to drill out the rivet holes. See [Figure 9](#).



Figure 9

6. Fasten all rivets. See [Figure 10](#). (Sill mull brackets on sliding window products do not require rivets.)

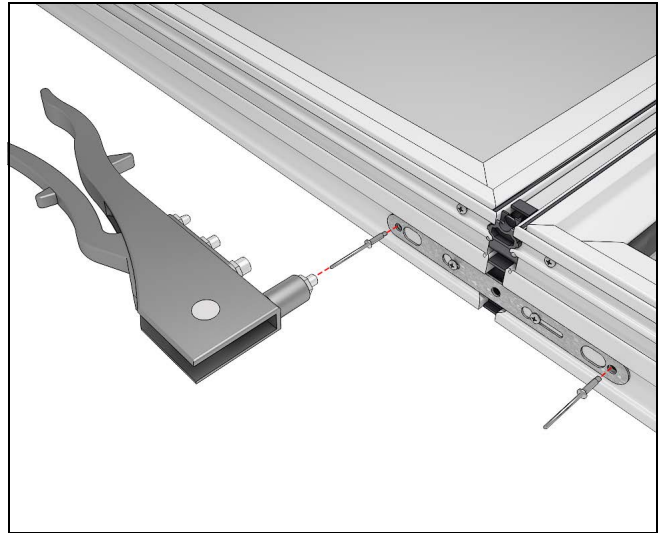


Figure 10

Sealing the Assembly

NOTE: Be sure the sealant used is compatible with any flashing materials used to install the window into the rough opening.

1. Apply kerf weather strip into exterior accessory kerf by using a thin putty knife. Kerf weather strip should reach both ends of the accessory kerf, but not wrap around the corner. See [Figure 11](#).

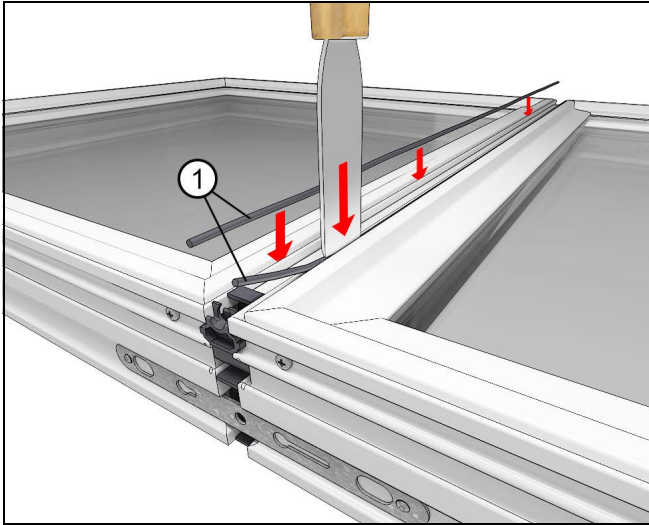


Figure 11

1	Kerf weather strip
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2. Using a high quality sealant loaded into a caulking gun, add 1" long x 1/8" wide bead of silicone to each end of accessory kerf. Locate bead on top of the inserted kerf weather strip to seal ends of the mull cover. See [Figure 12](#).

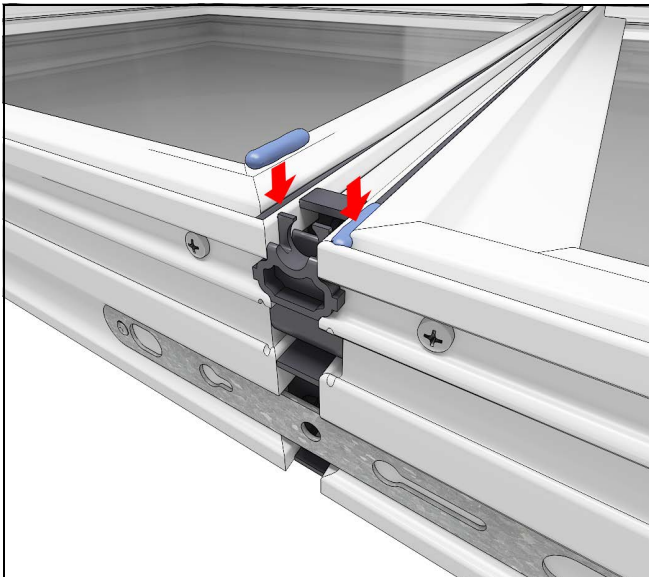


Figure 12

3. Install the exterior mull cover. These should be flush with the interior edge of the accessory kerf to allow for accessory application. You may have to seat the cover with a rubber mallet or wood block and hammer. See [Figure 13](#).

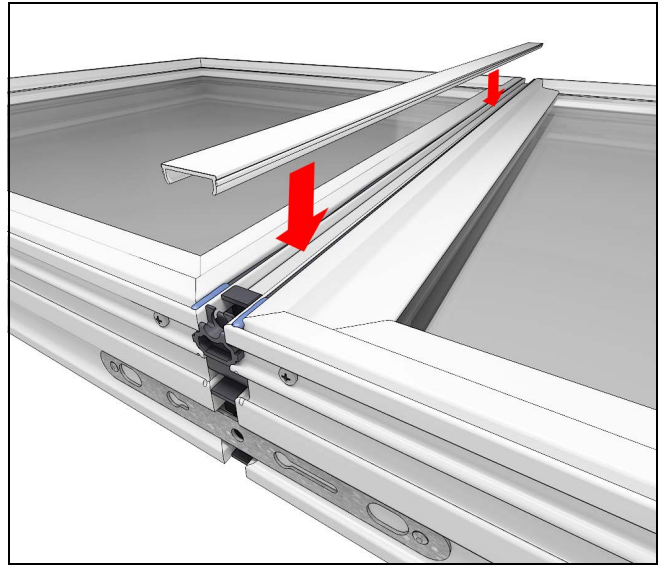


Figure 13

4. Using a high quality sealant loaded into a caulking gun, insert the nozzle into the injection hole on the mull plug and inject with sealant. You will know there is enough sealant injection when overflow appears in the marked locations in [Figure 14](#).

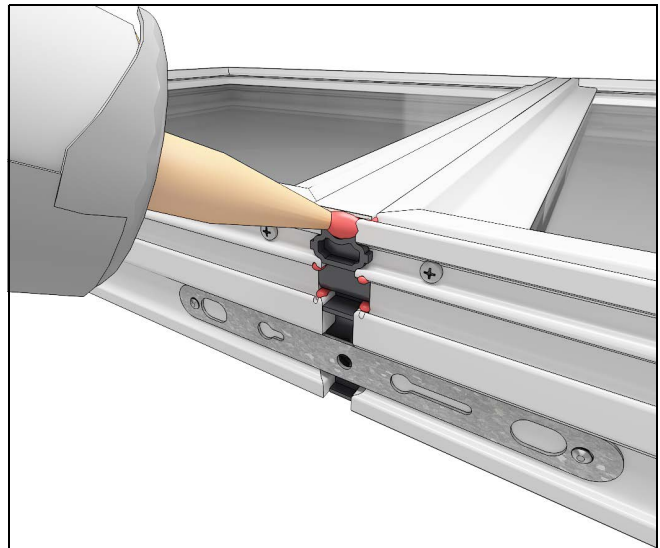


Figure 14

5. Replace the nailing fin on the frame perpendicular to the mull. Leave sill nail fin off at this point. Slide the nailing fin in from the corners all the way until they butt up against each other over the mull plugs. Install the nail fin connector gaskets and seal around the edges of the connector. See [Figure 15](#).

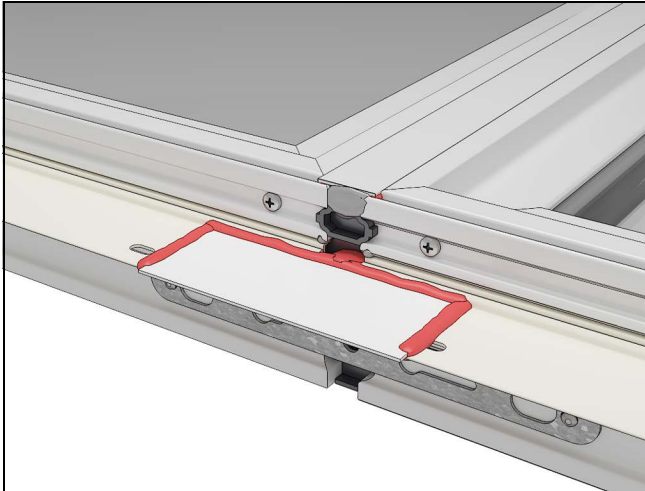


Figure 15

6. Flip assembly over so that the **interior** side is up. Install the interior mull cover. These should be flush with the interior edge of the accessory kerf to allow for accessory application. You may have to seat the cover with a rubber mallet or wood block and hammer. See [Figure 16](#).

NOTE: Take care when handling or flipping the assembly.

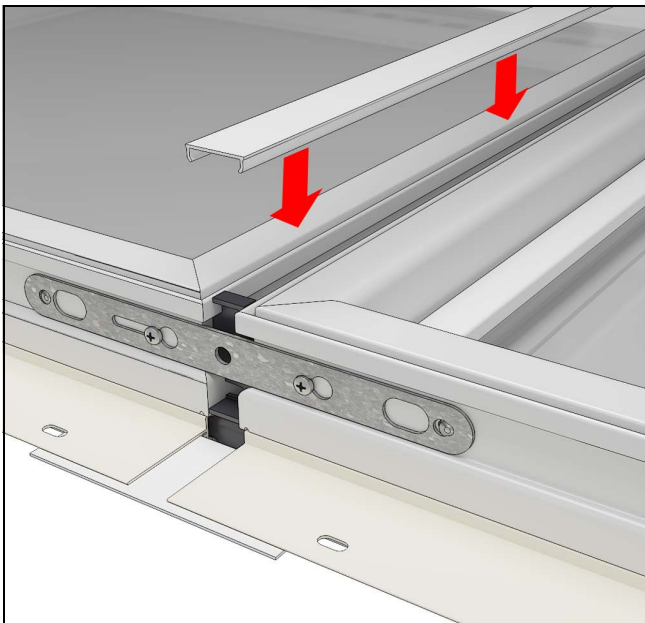


Figure 16

7. Prepare for bracket installation. At the jamb and the head jamb mullion joints, install 90° bent structural brackets on both sides of the mull within 1-1/8" on both ends. Add a bead of construction adhesive under the bracket where screws are to be placed. **DO NOT** apply 90° bent brackets to sill. See [Figure 17](#).

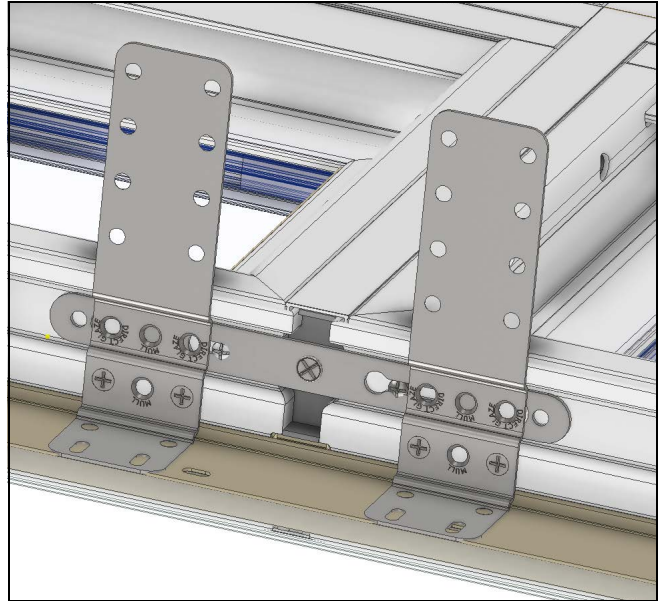


Figure 17

8. For sill mullion joints, take previously removed sill nail fin and cut sill nail fin at each mullion joint location and shorten the ends of each by 3" - 3-1/2" near each mullion to allow space for the flat sill structural brackets and nail fin pieces into the sill T-slot. See [Figure 18](#).

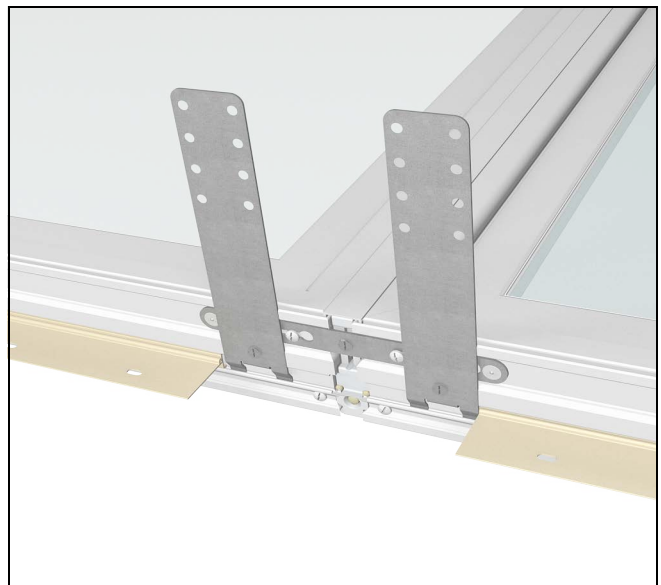


Figure 18

2W x 2H Configurations

NOTE: When mulling All Ultrex windows in 2W X 2H configuration, you will need three mull kits.

Double Hung and Single Hung Operators cannot be mulled above other units.

1. Using the techniques outlined in the previous steps, prep, mull, and seal the two vertical sections first (horizontal mulls). Do not apply nailing fin or brackets until the entire assembly is complete. See [Figure 19](#).



Figure 19

2. Mull and seal the two vertical sections together. Insert kerf weather strip continuously along the length of the vertical accessory kerfs. Apply high performance silicone with a caulking gun to span the intersection area. Bead should be 2-1/2" long x 1/8" diameter. See [Figure 20](#).

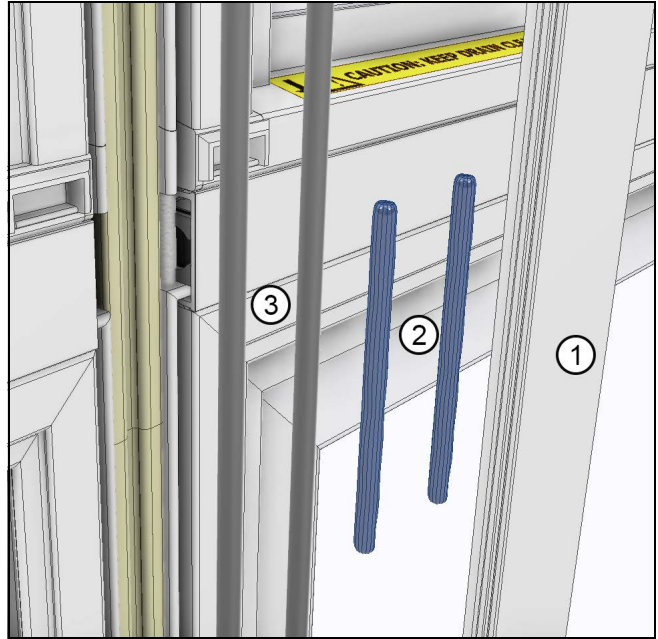


Figure 20

1	Mull cover
2	2-1/2" bead of silicone
3	Kerf weather strip

3. Apply nailing fin, nailing fin gasket connectors and structural brackets on the entire assembly. See [Figure 21](#).

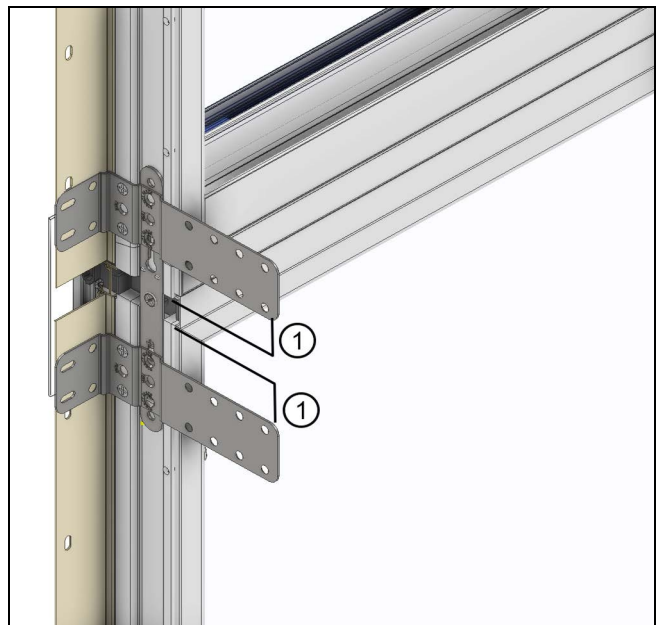


Figure 21

1	1-1/8"
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