# **Essential Series Windows**

# Field Applied Replacement Mulling

**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" (2.4m) x 96" (2.4m) R.O. or a 4W up to 78" (1.98m) x 114" (2.89m) 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 brackets

4 - Rivets

• 1 - Sill mull bracket

• 1 - Mull reinforcement bracket

• 2 - Mull plugs

2 - Mull covers (interior and exterior)

• 6 - #7 - 19 x 5/8" screws

• 3 - #8 - 18 x 3" screws

· 2 - Through jamb installation brackets

NOTE: Numbers listed in parentheses () are metric equivalents to the nearest whole number.

# (!) CAUTION!

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

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



# <u>^</u>WARNING!

Drilling, sawing, sanding or machining wood products generates 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. California Health and Safety Code section 25249.6.

#### 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 mulled 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.

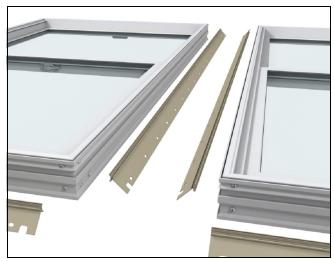


Figure 2

### **Mulling the Windows**

1. Set the units to be mulled 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 3.



Figure 3

ſ	1	Mull pin

**2.** Insert the mull plugs with the injection hole oriented toward the exterior. See Figure 4.

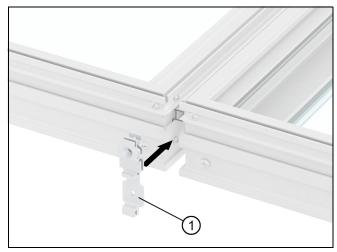


Figure 4

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 5. (Remove screws from sill completely for sliding window products.)

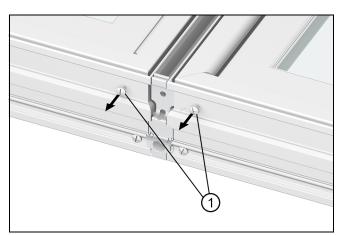


Figure 5

1 Loosen screws

**4.** Place the brackets as shown. Fasten using screws loosened in previous steps. See Figure 6. Use the smaller bracket for sill mullion joints on sliding window products. See Figure 7.

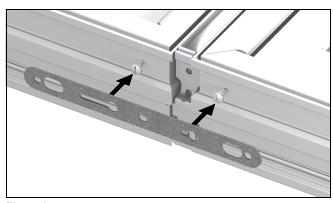


Figure 6

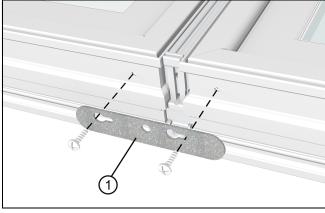


Figure 7

1 Sill mull bracket

**5.** Using the 7/32" drill bit, drill out first layer of Ultrex using holes in end of bracket as a guide. Fasten all rivets. See Figure 8. (Sill mull brackets on sliding window products do not require rivets.)

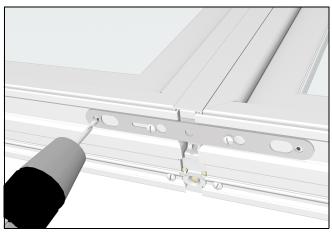


Figure 8

NOTE: Take care when handling or flipping the assembly.

**6.** Install the exterior mull cover. These should be flush with the interior edge of the accessory kerf. You may have to seat the cover with a rubber mallet or wood block and hammer. Flip the assembly. Interior mull cover will be installed after unit is secured in the opening. See Figure 9.

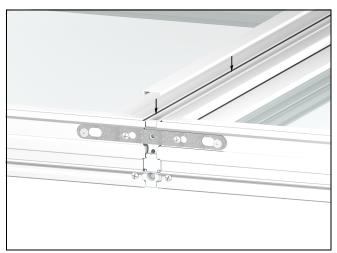


Figure 9

### Sealing the Assembly

1. 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 nailing fin channel below the injection hole. See Figure 10.

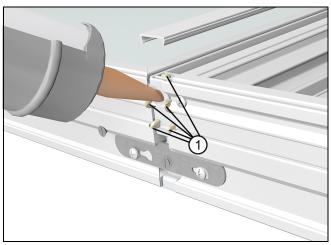


Figure 10

1 Squeeze out

2. Place a mull bracket at the sill end of the aluminum mull tie and attach with #7 x 5/8"(16) flat head screws. Using the hole on the angled portion of the bracket as a guide, drill a 3/16"(5) hole through the mull plug and mull bracket. See Figure 11.

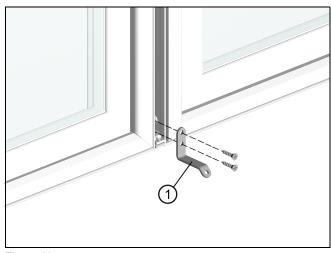


Figure 11

1 Mull reinforcement bracket

**3.** On Essential Double Hung Picture (ESDHP) units, Remove the head jamb stop with a stiff putty knife. See Figure 12.



Figure 12

**4.** Install through jamb installation brackets on each side of mull. Space brackets 4" (102) from the corners of the mull and use the center hole on the bracket as a guide to drill 3/16"(5) hole in the frame. Fasten to frame with #7 x 5/8"(16) screws. See Figure 13.

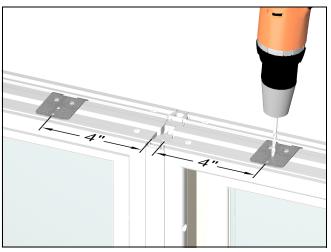


Figure 13

- **5.** Install the unit as instructed in the replacement instructions.
- **6.** Secure sill using 3"(76) screw provided, making sure that the unit stays firmly against the existing sill.
- **7.** Bend the interior mull cover slightly to insert it. You may need to use a rubber mallet or hammer with a wooden block to seat it properly.

### 2W x 2H Configurations

NOTE: 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). See Figure 14.



Figure 14

**2.** Mull and seal the two vertical sections. See Figure 15.



Figure 15

**3.** Install the unit as instructed in the replacement instructions.