

# PINNACLE CLAD SERIES SPREAD MULL & STUD POCKET ASSEMBLY FIELD SOP

#### Excellent Choice

#### **Purpose:**

The purpose of this document is to describe the method of mulling two or more Pinnacle Clad products in the field with a spread mull or stud pocket. Units can be mulled side-by-side and/or placed above one another. This will also include 3 and 4-way mull configurations. Adherence to this procedure will provide the consumer with a quality product. Reference Pages 09-10 for Part Numbers and Material Quantities.

#### **Spread Mull**

#### **Equipment – By Others**

- 1. Staple Gun
- 2. Nail Gun
- 3. Screw Gun
- 4. Handi-Clamp
- 5. Straight Edge Level
- 6. Hammer
- 7. 5-in-1 Tool or Dremel
- 8. UHMW Block and/or Wood Block
- 9. Silicone Gun
- 10. Cutting Utensil
- 11. Tape Measure

#### Materials

- 1. Solid Mull Material
- 2. 1" PVC
- 3. Spread Mull End Cap(s)
- 4. Nail Fin
- 5. Rigid Drip Cap
- 6. Interior Mull Cover(s)
- 7. Exterior Mull Cover(s)
- 8.  $1\frac{1}{4}$ " Nails By Others
- 9. <sup>1</sup>/<sub>2</sub>" Corrugated Staple By Others
- 10. 2" Nails By Others
- 11. 1<sup>1</sup>/<sub>2</sub>" Wood Screws By Others
- 12. Novaflex M150 Transparent Silicone (See Figure 1) By Others
- 13. Liquid Nails PL Polyurethane Construction Adhesive By Others

### Stud Pocket

#### **Equipment – By Others**

- 1. Straight Édge Level
- 2. Hammer
- 3. 5-in-1 Tool or Dremel
- 4. UHMW Block and/or Wood Block
- 5. Silicone Gun
- 6. Tape Measure

#### Materials

- 1. Spread Mull End Cap(s)
- 2. Nail Fin
- 3. Interior Mull Cover(s)
- 4. Exterior Mull Cover(s)
- 5. Novaflex M150 Transparent Silicone (See Figure 1) By Others

Figure 01. Silicone Nozzle Angle



#### Spread Mull (4" or Less)

#### **Procedure:**

- 1. Obtain the necessary materials
- 2. Position the units with the cladding facing downward.
- 3. Obtain the solid mull material. Spread mulls will only be available for 1", 2", 2 <sup>1</sup>/<sub>2</sub>", 3", & 4" widths. The solid mull material will run the entire length of the frame. For mull intersections, the material will run the entire length of the unit in the vertical direction. See below for product specific rules:
  - a) Casement / Direct Set: The solid mull material will sit flush interior face of the main jamb. Apply a 3/16" bead of "Liquid Nails PL Polyurethane" construction adhesive on each side of the spread mull filler. Using corrugated staples, staple side by side every 8"-10" the solid mull material to the frame. Center the staples between the frame and the solid mull material. Reference Figures 2 & 4 for further details. Note: If corrugated staples are not available, screw each frame through the jamb into the solid mull material using #8 x 2" wood screws. Position the screws 4" from each end and 8"-10" on center.
  - b) Double Hung / Radius: The solid mull material will inset 1/2" from the interior face of the inside stop. With the sash and jambliners removed, screw the mull material to each frame using 1 ½" screws. Position the screws 4" from each end and 8"-10" on center. Reference Figures 2 & 3 for further details.
  - c) Patio Doors: Contact your Inside Sales Representative for further information.

Figure 02. Photo of the Solid Mull Material Figure 03. Section Detail of DH Solid Mull Assy.





Figure 04. Section Detail of Casement Solid Mull Assy.



- 4. Apply the interior spread mull cover. The inside mull cover will run the entire length of the frame. For mull intersections, the mull cover will run the entire length in the vertical direction.
- 5. Using an  $1\frac{1}{4}$ " brads, nail side by side every 8"-10" the entire length of the mull.
- 6. Position the unit with the cladding facing outward.

7. Apply a 3/16" bead of silicone around the perimeter of the solid mull material. The silicone should be applied between the mull material-frame joint, each mull end, as well as each mull joint. Reference Figures 5-7 for further details.

Figure 05. Photo of Sealant Location Figure 06. Exterior Elevation View of Sealant Path





Figure 07. Section Detail of Sealant Location



8. Obtain the 1" PVC material.

Figure 08. Photo of PVC Location

- 9. Apply the PVC material to the solid mull material. The PVC material will run the entire length of the mull. For mull intersections, the 1" PVC material will run the entire length of the mull in the horizontal direction.
- 10. Nail the 1" PVC material to the solid material using 2" nails. Nail side by side every 8"-10" the entire length of the mull. Reference Figures 8-9 for further details.

Figure 09. Section Detail of PVC & Nail Location



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- 11. Apply a 3/16" bead of silicone between the cladding and 1" PVC at all frame joints. Also apply a 3/16" bead of silicone at all PVC intersections.
- 12. Tool in silicone between 1" PVC-frame joints to ensure there is no gaps. Clean off excessive amount of silicone on the surfaces. Reference Figures 10-12 for further details.



Figure 12. Section Detail of Sealant Location



Note: For units with Brickmould, stop here and follow the current instructions on how to apply Clad Brickmould in the field. Contact your Inside Sales Representative for a copy.

- 13. Obtain nail fin. Remove the nail fin accessory groove leg at all spread mull locations.
- 14. Apply nail fin to the unit. Rigid aluminum drip cap is required for all units except radius construction with a vertical spread mull. Apply the drip cap after step 7 in the "Spread Mull & Stud Pocket" section. For radius units, use vinyl nail fin in place of the drip cap. Vinyl and rigid nail fin are both options for the sides of the unit. The sill of the unit will receive standard vinyl nail fin. Notch the nail fin at each mull gap. Reference Figure 13 for details.

Figure 13. Section Detail of Rigid Drip Cap



15. With a 5-in-1 tool and a hammer or a Dremel tool, notch each frame corner where the spread mull end cap will be applied. Reference Figure 14 for details.



Figure 14. Photo of Notching Method

16. For the remaining steps, refer to "Spread Mull & Stud Pocket" procedure.

## Stud Pocket (Greater than 4")

#### **Procedure:**

- 1. Obtain the supplied nail fin.
- 2. Apply the nail fin to each individual unit. Note that standard side nail fin will be applied to the head of the unit in place of drip cap.
- 3. With a 5-in-1 tool and a hammer or a Dremel tool, notch each frame corner where the spread mull end cap will be applied. Reference Figure 15 for details.



#### Figure 15. Photo of Notching Method

- 4. Install each unit into the individual openings. Follow the current installation instructions supplied with the unit. Contact your Inside Sales Representative with any questions.
- 5. Apply the interior spread mull cover. The inside mull cover will run the entire length of the frame. For mull intersections, the mull cover will run the entire length in the vertical direction.
- 6. Using an  $1\frac{1}{4}$ " brads, nail side by side every 8"-10" the entire length of the mull.

#### <u>Spread Mull & Stud Pocket Continued (All AvailableWidths)</u> Procedure:

- 1. Determine which side(s) of the unit will receive the spread mull end cap. This can be achieved by knowing each exposed mull end will receive an end cap as well as silicone sealant. Follow step 6 for the end cap sealant procedures.
- 2. Apply a 3/16<sup>7</sup> bead of silicone in the accessory groove of the frame on all sides where the spread mull end cap will be applied. Next, apply a 3/16" bead of silicone along the face of the nail fin. Last, apply a 3/16" bead of silicone at each frame end between the accessory groove and nail fin silicone bead. Reference Figures 16-18 for further details.

Figure 16. Photo of Sealant Location

Figure 17. Detail of Sealant Path





Figure 18. Section Detail of Sealant Location



- 3. Apply the spread mull end cap along each spread mull end. The spread mull end cap will run the entire length of the unit. For a 1-way mull, the end cap will have a straight cut. For a 3 and 4-way mull, the end cap will have a miter cut matching the angle of the frame where the end caps meet. Do Not apply the end cap on the top of the unit with a vertical spread mull. The Rigid Drip cap will be installed at this location.
- 4. Using an UHMW or Wood block and a hammer, insert the spread mull end cap into the accessory groove. The end cap will be flush with the frame when completely inserted. Reference Figures 19-21 for further details.

Figure 19. Photo of Straight Cut



Figure 20. Photo of a Mitered Joint

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5. All vertical spread mulls will require a <sup>1</sup>/<sub>4</sub>" hole through the underside of the end cap. Center the hole within the spread mull. There will be 1 hole per vertical spread mull. Reference figures 22 and 23 for further details.

Figure 22. Exterior View of Weep Hole Location

Figure 23. Section detail of End Cap Hole



6. Apply a 3/16" bead of silicone between the end cap-1" PVC joint. Tool in silicone between 1" PVC-end cap joints to ensure there is no gaps. Reference Figure 24 for further details.



7. Apply a 3/16" bead of silicone on the interior side of the mull cover legs. The silicone will run the entire length of each leg. See figures 25 and 26 for further details.

Figure 25. Photo of Sealant Location



Figure 26. Section Detail of Sealant Location



8. Using a UHMW or wood block and a hammer, hammer the mull cover(s) into the accessory grooves. For mull intersections, the mull cover will run the entire mull length in the vertical direction.

## PARTS LIST

Hardware required	Part Number	Qty
Solid Mull Material - Spread Mull Only	292131 - 2" Spread Mull 292132 - 2 ½" Spread Mull 292133 - 3" Spread Mull 292134 - 4" Spread Mull	1 Per Mull-Length of Unit Specify Lineal Footage
Solid PVC Filler - Spread Mull Only	XX Manufactured – Ref. PN 2379997	1 Per Mull-Length of Unit Specify Lineal Footage/Mull Width
Mull End Cap	420018 - H. Green 420019 - Cinnamon 420020 - Black 420021 - Bronze 420022 - Ivory 420023 - White 420024 - Tan	UNITS WITH NO BM APPLIED 1 Per Vertical Mull Unit 2 Per Horizontal Mull Unit; Specify Lineal Footage – Covers Entire Unit Length
Rigid Aluminum Drip Cap - Spread Mull Only	483030 - White 483031 – Tan 483032 – Bronze 483033 - H. Green 483034 - Ivory 483038 - Black 483039 - Cinnamon	UNITS WITH NO BM APPLIED 1 Per Vertical Mull Unit & Optional for Horizontal Units
Vinyl Hinged Drip Cap - Spread Mull Only	471005	UNITS WITH NO BM APPLIED Optional for Horizontal Spread Mull Units
Vinyl Side Nail Fin – Spread Mull Vinyl Side & Head Nail Fin – Stud Pocket	460015	Spread – Height of Mulled Unit Stud – Height of Individual Unit
Vinyl Sill Nail Fin	460020	Spread – Width of Mulled Unit Stud – Width of Individual Unit
Interior Mull Cover	XX Manufactured	1 Per Mull Specify Lin. Footage/Mull Width
Exterior Mull Cover	$\begin{array}{r} 480017-2" \mbox{ White} \\ 480024-2" \mbox{ Tan} \\ 480018-2" \mbox{ Bronze} \\ 2370175-2" \mbox{ H. Green} \\ 2380461-2" \mbox{ Ivory} \\ 480029-2" \mbox{ Cinnamon} \\ 2380489-2" \mbox{ Black} \\ 420038-2.5" \mbox{ White} \\ 420039-2.5" \mbox{ Tan} \\ 420045-2.5" \mbox{ Bronze} \\ 420043-2.5" \mbox{ H. Green} \\ 420040-2.5" \mbox{ Ivory} \\ 420042-2.5" \mbox{ Cinnamon} \\ 420041-2.5" \mbox{ Black} \\ 420046-3" \mbox{ White} \\ 420047-3" \mbox{ Tan} \\ 420053-3" \mbox{ Bronze} \\ 420048-3" \mbox{ Ivory} \\ 420050-3" \mbox{ Cinnamon} \\ 420049-3" \mbox{ Black} \\ 420050-3" \mbox{ Cinnamon} \\ 420049-3" \mbox{ Black} \\ 420050-4" \mbox{ H. Green} \\ 420059-4" \mbox{ H. Green} \\ 420059-4" \mbox{ H. Green} \\ 420059-4" \mbox{ Ivory} \\ 420056-4" \mbox{ Ivory} \\ 420056-4" \mbox{ Ivory} \\ 420058-4" \mbox{ Cinnamon} \\ 420058-4"  Cinnam$	1 Per Mull Specify Lin. Footage

420057 – 4" Black	
420070 – 6" White (Stud Pocket Only)	
420071 – 6" Tan	
420077– 6" Bronze	
420075 – 6" H. Green	
420072 – 6" Ivory	
420074 – 6" Cinnamon	
420073 – 6" Black	