TLS Laboratories
Lightning Flash
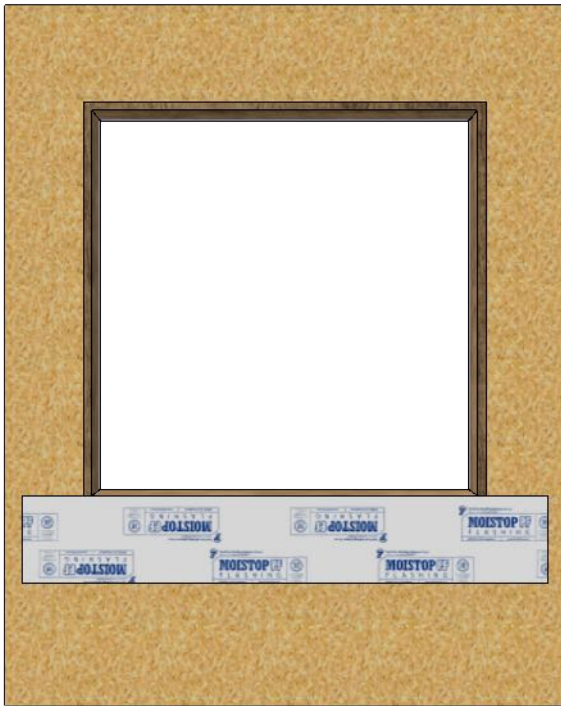## AAMA Method B Window Installation Requirements
With Pan System

Required materials:

1. Flashing products 9" or 12" width

- FortiFlash® Butyl self adhered flashing or pre-approved equal.
- Moistop Next® nail on flashing
- If Dens Glass is used then Henry Aquatac primer should be used before the SAF is applied.
- 3M Super 77 is an acceptable alternate for Henry Aquatac primer.

2. Flashing Corners

- Lightning Flash® flashing corners,
- Corner Flash® GS 100A corners
- Moistop **Rigid** Cornershield®

3. Sealant

- Moistop® Sealant

- Staples and J-Roller

4. 1 5/8" - 2" (min) exterior grade pan head screws and screw gun

5. Levels, tape measure, ladder

STEP 1
Prepare RO & Apply Apron

STEP 2
Apply Lightning Flash Corners

STEP 3
Apply Fortiflash as shown

Membrane Pan step 1

Cut   Fold   Cut

Membrane Pan step 2

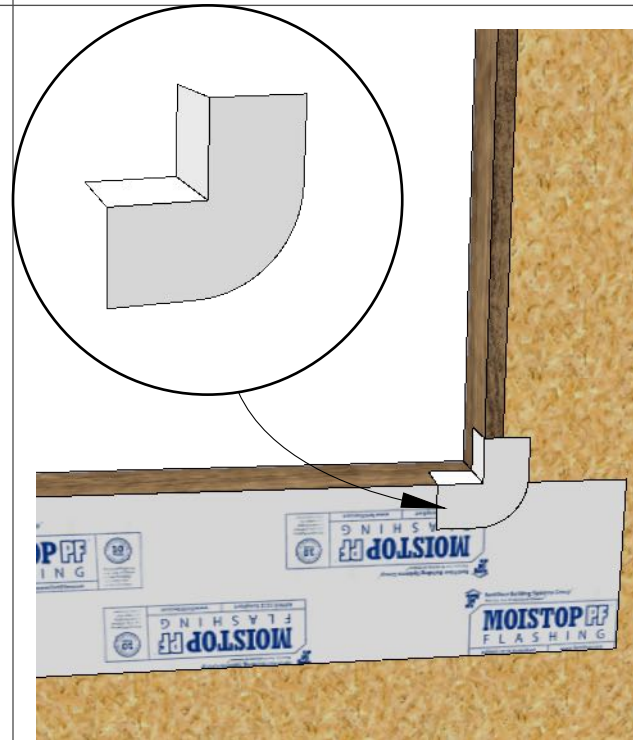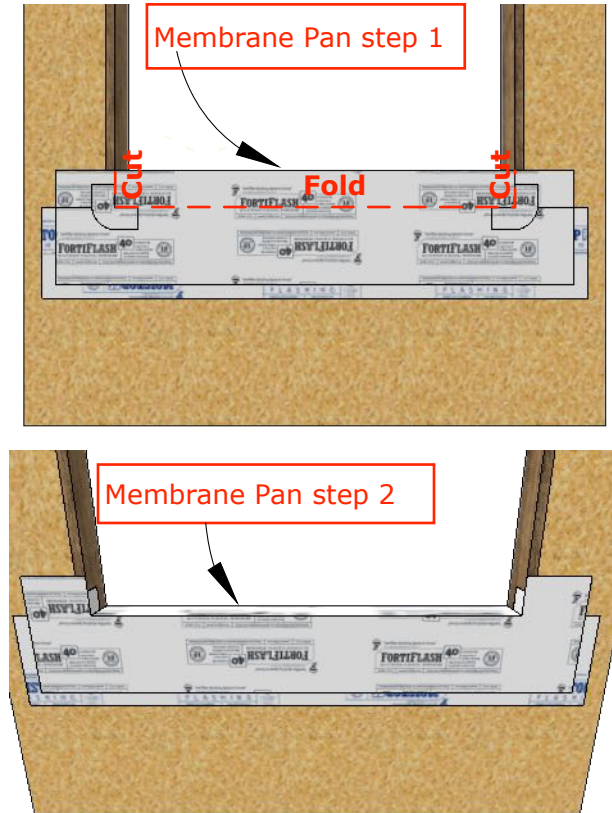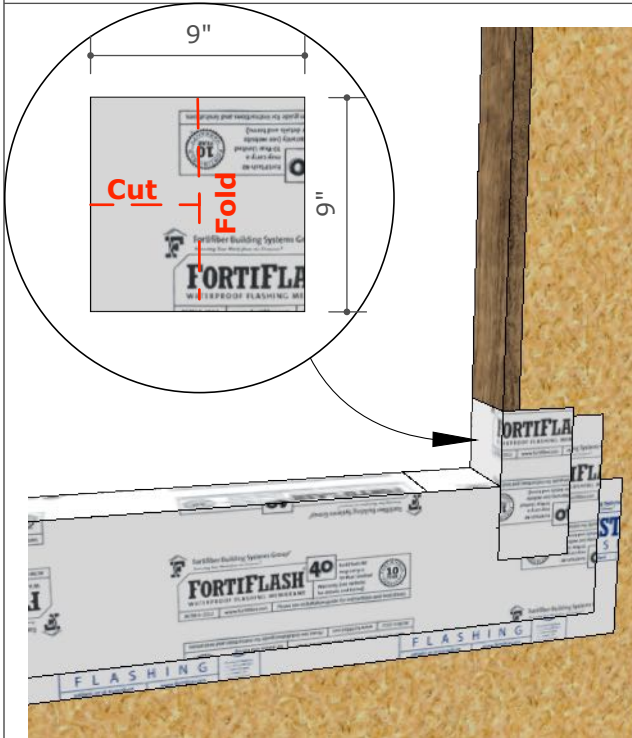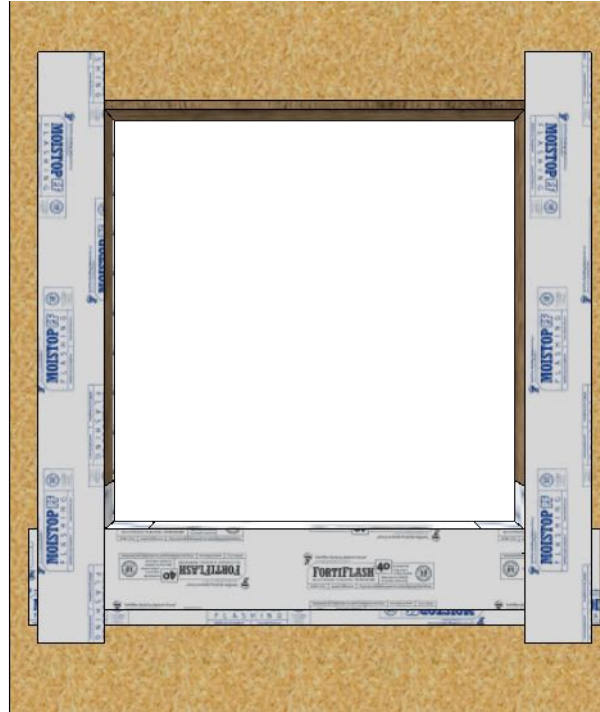| NOTE:	NOTE:	NOTE:
Rough opening should be 1/2" greater in width and height than the net frame size of the window. Ensure it is level, square and plumb. Use a Nail-on flashing product to create the apron. 　✓　9" Moistop Next Alternates: 　✓　9" Moistop PF 　✓　Cut a 9" strip of Super Jumbo Tex building paper	Apply the Lightning Flash corners into wet sealant at the lower corners. Alternates: 　✓　Moistop RIGID Cornershield 　✓　Corner Flash GS 100"A" 　✓　Lightning Flash XL	Apply your membrane pan as shown using: 　✓　12" FortiFlash Butyl Alternates: 　✓　12" FortiFlash 40 　✓　12" FortiFlash Step 1- Hold the FortiFlash 4" over the framing sill and cut vertically on the right and left corners as shown. Step 2- Fold the FortiFlash on to the framing sill and J-Roll flat.

STEP 4

Apply End Dams

NOTE:

Use your FortiFlash product to create end dams. Cut squares as shown and lay on top of the Lightning Flash corners. After placement, cut the lower edge as shown and fold into place.
Ensure the inside corners are tight.

STEP 5

Apply Side Flashing

NOTE:

Use Moistop Next as your side flashing.
Alternates:
- ✓ Moistop PF
- ✓ FortiFlash Butyl
- ✓ FortiFlash 40
- ✓ FortiFlash

STEP 6

Install window

NOTE:

Apply 3/8"-1/2" tube shape bead of sealant behind the nail fin as shown.
Leave 3"-4" open gaps in sealant at the lower nail fin on the right and left corners.
Cover any prepunched holes in the nail fin with sealant.
Apply screws every 6"-9" OC. Do not apply screws through the open gaps in the sealant.
Use 2" exterior pan head or deck screws

STEP 7.1
Apply Cap bead of sealant

NOTE:

Apply a 1/2" cap bead of Moistop sealant on top of the nail fin. Cover all screws, cracks and pre-punched holes in the nail fin.

STEP 7.2
Tool sealant flat

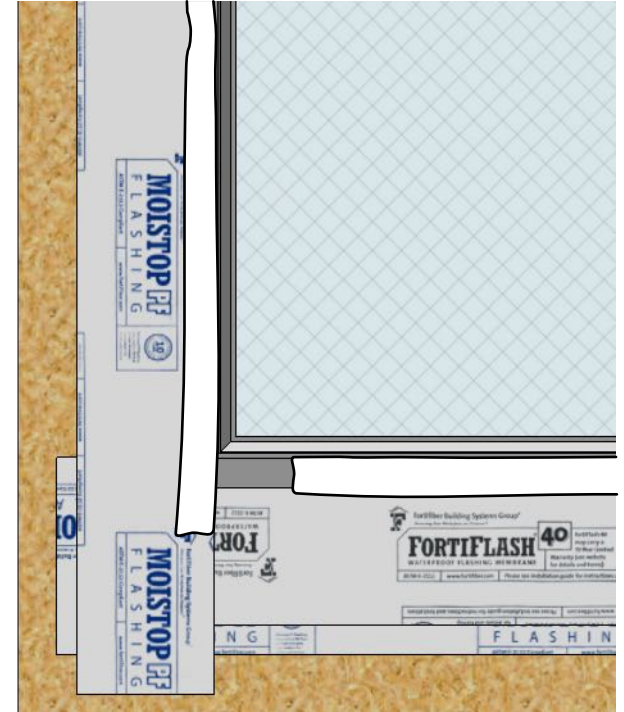| NOTE: |
|---|

Butter the Moistop sealant flat. Completely cover the entire nail fin and all screws. Sealant should extend 1" away from the edge of the nail fin onto the flashing.

STEP 7.3
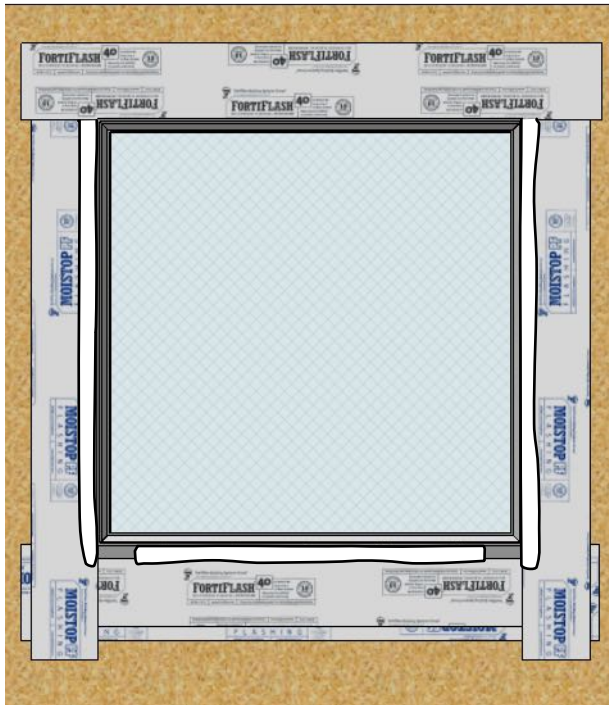## Sealant - Leave gaps open at the lower corners

NOTE:

Leave the gaps in the nail fin uncovered with sealant.

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STEP 8
Top Flashing

STEP 9
Interior Sealant
Pan Termination

SECTION DETAIL

TLS LABS BUTTERED SEALANT METHOD OF WINDOW INSTALLATION WITH PAN USING LIGHTNING FLASH CORNERS
"ELIGIBLE FOR FORTISHIELD 15 YEAR WARRANTY BY THE FORTIFIBER BUILDING SYSTEMS GROUP*."
AAMA METHOD B

APPLY MOISTOP SEALANT ACROSS INSIDE LOWER EDGE & 6" UP EACH SIDE

VINYL WINDOW FRAME

1/2" BEAD OF MOISTOP SEALANT

1/2" CAP BEAD OF MOISTOP SEALANT BUTTER FLAT

MOISTOP RIGIDD CORNER SHIELD

APPLY FORTIFLASH MEMBRANE / FLASHING ACROSS ROUGH OPENING AND ON FRAMED SILL

DOUBLE FRAMING SILL

APPLY BIBB / APRON @ LOWER EDGE OF ROUGH OPENING USING MOISTOP PRODUCT

FRAMED WALL BY ARCHITECT

2 LAYERS OF JUMBO TEX - BUILDING PAPER

*ALL FLASHING PRODUCTS, SEALANT PRODUCTS AND WEATHER RESISTIVE BARRIERS MUST BE MANUFACTURED BY THE FORTIFIBER BUILDING SYSTEMS GROUP

SAF = SELF ADHERED FLASHING: FORTIFLASH 40, FORTIFLASH OR FORTIFLASH BUTYL

WINDOW SILL

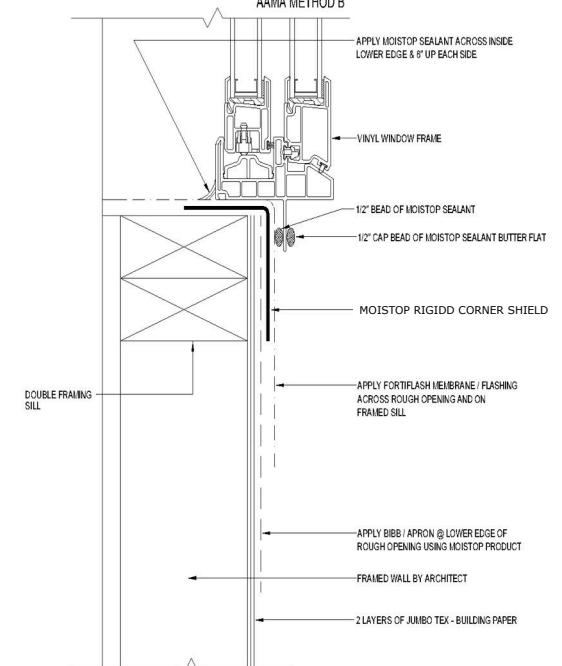| NOTE:	NOTE:	NOTE:
Cut your top piece of flashing so it extends beyond the side flashing by 1" on each side. Apply top flashing as shown.	Apply Moistop sealant across the inside edge of the window and 6"-8" up each side. Tool sealant to compress it under the frame of the window.	

Nail fin window installation.

AAMA method B

This method uses SAF (Self Adhered Flashing, AKA Peel and Stick) and flashing corners to create membrane pans under windows.

Required materials:

- SAF Butyl membrane product either 9″ or 12″ wide. (Fortiflash Butyl or pre-approved equal).
- Either 9″ or 12″ Nail On Flashing may be used **at the sides of the RO only** as an alternate to the SAF material. (Moistop Next or pre-approved equal)
- Either 9″ or 12″ Nail On Flashing will be used as an apron under the window.
- Lightning Flash flashing corners. Moistop **RIGID** Corner Shield and Corner Flash GS 100 A are an acceptable alternates.
- The top of the window must use SAF Butyl flashing material in 9″ or 12″ widths.
- Moistop Sealant or pre-approved equal.
- Notes: **Regarding sealant-** Do not use a generic silicone product or any acrylic based siliconized products to install windows. Dow Corning 795 or GE silpruf 2000 are acceptable silicone alternates.

Steps:

1. **Rough (RO) opening** should be 1/2″greater in width and height than the net frame size of the window. Ensure RO is level, square and plumb. Apply a course of nail-on flashing across the bottom edge of the RO. Flashing should be cut wider than the RO by 2x (2 times) the dimension of the flashing product used. I.E. if 12″ wide material is used, cut material 24″ longer than RO Width. If 9″ wide material is used, cut material 18″ longer than RO Width. Affix the nail-on flashing product with staples held tight to the top edge of the RO. This apron material will be pulled upwards later to install the building envelope. Do not staple in the lower field of the flashing material.

2. **Flashing Corners:** Apply sealant in each of the 2 lower corners. Press 2 Pre-made Lightning Flash flashing corners (or approved equal) into each lower corner and affix with staples.

3. **Membrane Pan steps 1and 2:** Cut a piece of SAF flashing the same dimension as the width of the nail-on apron material at the sill. Hold the SAF material 4 inches over the lower edge of the framing sill. Stick the SAF material to the vertical wall on each side of the RO. The material will be higher than the framing sill by 4″. Cut the SAF material vertically on each side of the RO so that it may be folded downwards and layered upon the framing sill. Use a J-Roller and roll the SAF material across all surfaces to ensure complete adhesion and flatten any wrinkles.

4. **Apply end dams:** Cut 2 square pieces of SAF membrane material and apply the at each lower corner. Lay end dams upon the horizontal surface first, covering the flashing corner, then up the side trimmer of the RO. The material should extend outwards from the RO. Cut the lower edge of the material across the framing sill edge and swing the SAF out to the side of the vertical wall. J-roll the material flat. See drawing for additional detail. Ensure the SAF material at lower corners is tight at the inside corners.

5. **Apply side flashing:** Cut the side flashing 1″ shorter in height than the dimension of the RO + 2x the dimension of your flashing products. This will allow the side flashing to be 1/2″ short of the top and bottom flashing material. Apply side flashing securing with staples. If using SAF flashing at the sides J-roll the material flat.

6. **Install window:** Apply 3/8″-1/2″ tubular shaped bead of sealant to the rear of the nail fins on the center line of all the pre-punched holes on both sides and the top nail fin. On the lower nail fin, leave 3-4 inch gaps at each side and under all vertical mulls. Set the window into the RO. After checking reveals, secure lower corners with 2″ exterior grade pan head screws. Verify window is plumb then install screws at both upper corners. Install screws at 6″-9″ OC around the perimeter of the window. Avoid screws at the sections of the lower nail fin that do not have sealant. Squeezeout should exist around the perimeter of the window as well as ooze through all pre-punched holes.

7. **Install a 1/2″ wide tubular shaped cap bead of sealant** on top of the nail fins, avoiding the areas at the lower nail fin with gaps in the sealant. Tool the sealant flat, covering all pre-punched holes and covering any small cracks in the nail fins. Sealant should cover the entire nail fin and extend beyond the window by 1″.

8. **Install top SAF Flashing:** Cut top Flashing the width of the RO + 2x the dimension of the flashing plus 2″. This will allow the flashing to extend 1″ beyond the side flashing on each side. Apply top flashing and secure top edges with staples. J-roll all SAF flat.

9. **Install interior sealant:** Apply a bead of sealant across the width of the lower inside edge of the window frame and 6″-8″ up each side. Tool into place.