(WRB) is Installed Installation Instructions for Windows AFTER Water-Resistive Barrier





INSTALLATION INSTRUCTIONS FOR WINDOWS AND DOORS **AFTER** WATER-RESISTIVE BARRIER (WRB) IS INSTALLED



FOR BUILDINGS LESS THAN 5 STORIES AND LOW-RISE MULTI FAMILY RESIDENTIAL BUILDINGS LESS THAN 6 STORIES

REVISION 11/17

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Applicable Products

DuPont™ Self-Adhered Flashing Systems Products

PRODUCT	WIDTH
DuPont™ FlexWrap™ NF	6 in 9 in
DuPont™ FlexWrap™ EZ	2.75 in
DuPont™ StraightFlash™	4 in 9 in
DuPont™ StraightFlash™VF	6 in
DuPont™ Flashing Tape	4 in 6 in 9 in 12 in

Water-Resistive Barriers (WRB)

PRODUCT	DIMENSIONS	AREA
DuPont™ Tyvek® HomeWrap®	3 ft x 100 ft	300 sq ft
	3 ft x 165 ft	495 sq ft
	5 ft x 200 ft	1,000 sq ft
	9 ft x 100 ft	900 sq ft
	9 ft x 150 ft	1,350 sq ft
	10 ft x 100 ft	1,000 sq ft
	10 ft x 150 ft	1,500 sq ft
DuPont™ Tyvek® StuccoWrap®	5 ft x 200 ft	1,000 sq ft
DuPont™ Tyvek® DrainWrap™	9 ft x 125 ft	1,125 sq ft
	10 ft x 125 ft	1,250 sq ft
DuPont™ Tyvek® ThermaWrap® LE	5 ft x 150 ft	750 sq ft
	9 ft x 100 ft	900 sq ft
DuPont™ Tyvek® CommercialWrap®	5 ft × 200 ft	1,000 sq ft
	10 ft x 125 ft	1,250 sq ft
DuPont™ Tyvek® CommercialWrap® D	5 ft × 200 ft	1,000 sq ft
	10 ft x 125 ft	1,250 sq ft

Required Materials Based on Project Requirements, Details, and Specifications*

PRODUCT

DuPont™ Tyvek® Tape

DuPont™ Tyvek® Wrap Cap Fasteners or recommended fastening system

DuPont™ Window & Door Foam

DuPont™ Residential Sealant, or other recommended sealant

DuPont™ Adhesive/Primer

Backer Rod

Brushes for Surface Preparation

J-Roller

Warranty

Please refer to the <u>DuPont Weatherization Products 10-Year Limited Warranty for</u> <u>Buildings Less Than 5 Stories and Low-Rise Multi-Family Residential Buildings Less Than 6 Stories</u>.

NOTE: In order to make a claim under the DuPont Weatherization Products 10-Year Limited Product and Labor Warranty, you must have met all of the terms and conditions of the warranty, including use of the applicable DuPont Installation Guidelines. In the event that a specific detail or installation technique is not covered in the DuPont Installation Guidelines at the time you are building, then the Key Installation Requirements outlined in this document must have been followed in order to make a claim under the warranty. It is in the sole discretion of DuPont to determine if full compliance with the Key Installation Requirements exists. Please contact DuPont or a DuPont™ Tyvek® Specialist if you have any questions regarding any DuPont Installation Guideline.

General Instructions

These installation guidelines are intended **for buildings less than 5 Stories and low-rise multi-family residential buildings less than 6 stories** when performance requirements do not exceed ASTM E1677 (65 mph equivalent structural load and 15 mph equivalent wind-driven rain water infiltration), and window/door design ratings that do not exceed DP45.

DuPont™ self-adhered flashing systems products should be installed on clean, dry surfaces that are free of frost. Wipe surfaces to remove moisture, dirt, grease and other debris that could interfere with adhesion.

Apply pressure along entire surface of flashing for a good bond using firm hand pressure, J-roller, or alternate tool without sharp edges (such as a plastic carpet tuck tool) to assist with application of uniform pressure during installation of DuPont™ self-adhered flashing systems products.

Remove all wrinkles and bubbles that may allow for water intrusion by smoothing surface and repositioning as necessary.

When flashing the sill area for windows and doors, DuPont recommends the use of 6" wide DuPont™ FlexWrap™ NF for 2" x 4" framing and 9" wide DuPont™ FlexWrap™ NF for 2" x 6" framing. As an option, if a rigid back dam is desired, cut the corner back dam the length of the sill and nail into place on the interior edge of the sill prior to installation of DuPont™ FlexWrap™ NF. Then install DuPont™ FlexWrap™ NF over sill and corner guard back dam. If using 6" DuPont™ FlexWrap™ NF with optional rigid back dam, seal ends of corner guard with DuPont™ Residential Sealant or recommended sealant.

Door and window rough sill framing must be level or slightly sloped to the exterior to ensure proper drainage to the exterior. This best practice ensures continuous support with positive slope to the exterior.

DuPont™ self-adhered flashing systems products are not intended for throughwall flashing applications.

In lieu of temporarily taping, DuPont™ Tyvek® flaps at window head and jambs can be tucked under the DuPont™ Tyvek® air and water barrier.

DuPont™ Residential Sealant should be tooled flat to allow the natural curing process to create a concave joint.

Please contact your local DuPont™ Tyvek® Specialist for additional information and installation support.

^{*}Apply per manufacturers' guidelines. For non DuPont products, DuPont assumes no liability in use of recommended products; installers need to evaluate suitability of recommended products in their end-use applications.

DO NOT STRETCH DuPont™ FlexWrap™ NF when installing along the length of sills or jambs. DuPont™ FlexWrap™ NF is only intended to be extended when covering corners or curved sections.

DuPont[™] self-adhered flashing systems products perform best when installed at temperatures above 25°F (–4°C).

Avoid placing DuPont™ Tyvek® Wrap Cap Fasteners where flashing or DuPont™ Tyvek® Tape will be installed; however, DuPont™ Tyvek® Wrap Cap Fasteners can be applied over the flashing.

Adverse weather conditions or cold temperatures may require use of a primer to promote adhesion of DuPont™ self-adhered flashing products to most common building materials. Concrete, masonry, and fiber-faced exterior gypsum board require the use of DuPont™ Adhesive/Primer.

Please call 1-800-44-Tyvek (800-448-9835), visit www.weatherization.tyvek.com, or consult your local DuPont™ Tyvek® Specialist for additional information and installation support.

Key Installation Requirements for Drainable Window / Door Installation Under the Limited Product and Labor Warranty

When flashing windows or doors, the following principles must be followed:

- When installed properly, DuPont™ StraightFlash™, DuPont™ FlexWrap™ NF, and
 DuPont™ Flashing Tape provide nail sealability at window/door openings to help
 protect critical window-wall interfaces. Metal sill pan flashing may be used, but must
 not replace flexible sill flashing that provides nail sealability.
- DuPont[™] self-adhered flashing systems products comply with AAMA 711-13,
 Voluntary Specification for Self Adhering Flashing Used for Installation of Exterior Wall Fenestration Products, which has a modified version of ASTM D 1970 that is
 more representative for vertical wall applications.
- Direct water onto an acceptable air and water barrier drainage plane with an unobstructed path to the exterior of the wall. Provide a drainage path for any water intrusion through the window/door attachment system that collects at the sill.
- Properly integrate flashing with acceptable DuPont™ Tyvek® WRB in accordance with
 the details in this installation guideline. DuPont™ self-adhered flashing systems
 products must be applied with a minimum 2" lap onto the WRB.
- DuPont requires that DuPont[™] FlexWrap[™] NF and StraightFlash[™] be covered within nine months (270 days) of installation. DuPont requires that DuPont[™] Flashing Tape be covered within four months (120 days) of installation.
- Ensure that window / door and flashing system design takes into account common factors that will impact performance, such as:
 - Climate considerations: Rainfall, Wind, Temperature (hot / cold cycles), Humidity
 - Building design: Window / Wall Design (overhangs, recessed openings, bumpouts), Wall Assembly (wood frame or masonry), Window System (wood or vinyl), New Construction or Replacement Window drainage path
 - UV exposure prior to the construction of the exterior facade
- Field testing the window / door and wall installation as a complete system is a recommended best practice.
- Use of trained installers is highly recommended.

Integral Flanged Window AFTER DuPont™ Tyvek® WRB is Installed

This method applies to the following products:

DuPont[™] StraightFlash[™], DuPont[™] FlexWrap[™] NF and DuPont[™] Flashing Tape

STEP 1

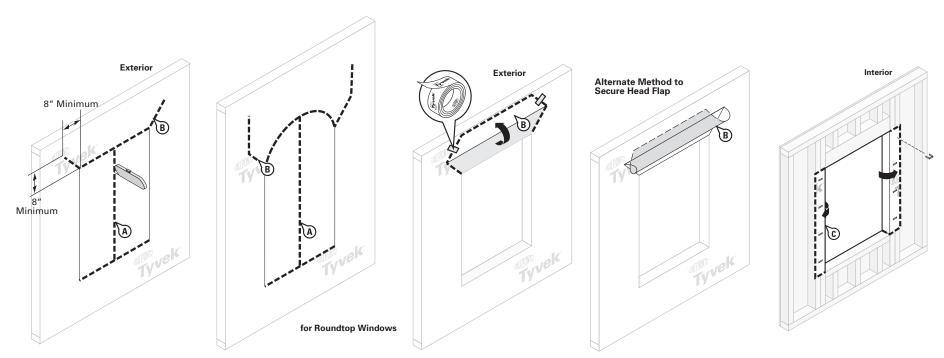
Prepare the DuPont™ Tyvek® WRB for window installation:

- A. Make an "I-Cut" (Standard I-Cut) in the DuPont™ Tyvek® WRB (modified I-Cut is also accepted). For an "I-Cut", begin with a horizontal cut across the bottom and the top of the window frame (for round top windows, the cut should begin above the mull joint). From the center, cut straight down to the sill.
- B. Cut two 45 degree slits a minimum of 8" extending from the corner of the window head, up and away from the window opening. This will create a flap above the rough opening to expose sheathing or framing members to allow head flashing installation (see step 4). Flip head flap up and temporarily secure with DuPont™ Tyvek® Tape.

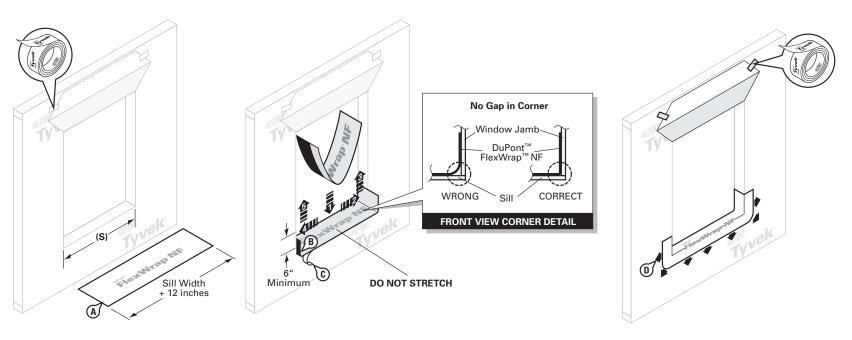
ALTERNATE METHOD TO SECURE HEAD FLAP: In lieu of temporarily taping, the head flap can be tucked under the DuPont™ Tyvek® WRB.

NOTE: Some windows and flashing widths may require longer slits.

C. Fold side flaps into rough opening and secure to inside wall. Cut off excess flaps if desired.

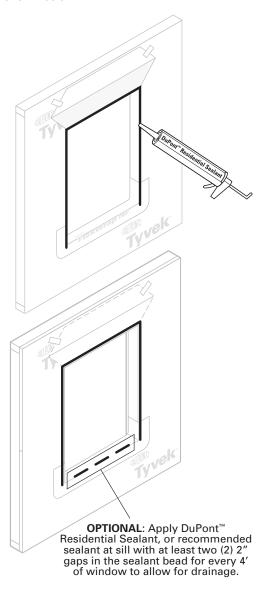


- A. Cut DuPont™ FlexWrap™ NF at least 12" **LONGER** than width of rough opening sill (S). Use roll widths sufficient to achieve a minimum of 1" adhesion BEYOND where the window frame will be located, ensuring 2"−3" adhesion onto the face of the wall.
- B. Remove wide piece of release paper. Position on horizontal sill by aligning the inside edge of the narrow release paper with the face of the wall to ensure 2"−3" of the FlexWrap™ NF will be adhered to the face of the wall with a minimum of 6" up each jamb. Adhere into rough opening.
- C. Remove narrow release paper.
- D. Fan out FlexWrap™ NF at corners and adhere onto face of wall. Continue adhering onto face of wall along sill. Coverage of DuPont™ FlexWrap™ NF should be 2"-3" onto the face of the wall.



STEP 3

Apply DuPont™ Residential Sealant, DuPont™ or recommended sealant, on three sides (jambs and head) as shown below.



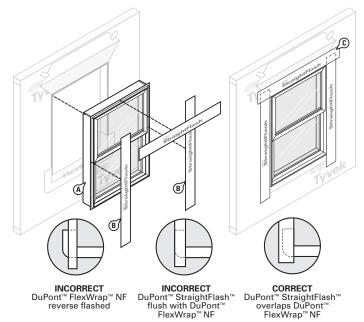
For Rectangular Windows

STEP 4

A. Install window according to manufacturer's instructions.

- B. Cut two pieces of DuPont™ StraightFlash™, DuPont™ FlexWrap™ NF, or DuPont™ Flashing Tape for jamb flashing extending 1" above window head flange and below bottom edge of sill flashing. Remove release paper and press tightly along sides of window frame. **OPTIONAL**: If installing a drip cap as part of the window installation before the DuPont™ self-adhered flashing membrane at the window head flange, see Drip Cap Installation Section and refer to Option 1. **NOTE**: The vertical leg of the drip cap must not be taller than the window head flange when installing drip cap according to Option 1.
- C. Cut a piece of DuPont™ StraightFlash™, DuPont™ FlexWrap™ NF, or DuPont™ Flashing Tape for head flashing long enough to extend beyond outer edges of jamb flashings. Remove release paper and install completely covering flange and adhering to exposed sheathing or framing members. **OPTIONAL**: If installing a drip cap as part of the window installation, but after the window head flashing, see Drip Cap Installation Section and refer to Option 2.

NOTE: Ensure proper shingling. DuPont™ StraightFlash™, DuPont™ FlexWrap™ NF, or DuPont™ Flashing Tape at jambs must overlap the DuPont™ FlexWrap™ NF at the sill and adhere to the DuPont™ Tyvek® WRB below the sill.

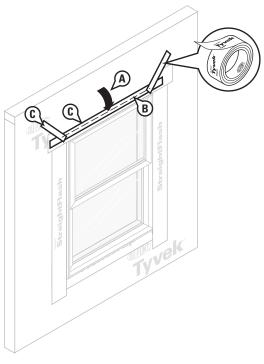


STEP 5

- A. Flip down upper flap of DuPont™ Tyvek® WRB so it lays flat across head flashing.
- B. Cut ~1" strip of the DuPont™ Tyvek® WRB at lower horizontal edge of head flap.
- C. At the head, continuous tape seams as shown with DuPont™ Tyvek® Tape. **DO NOT TAPE** at bottom of window.

NOTE: Skip-taping at head with a maximum of two (2) 2" gaps for every 3' of window is acceptable if an air barrier is not required or if additional drainage is desired.

OPTIONAL: If installing a drip cap AFTER the DuPont[™] Tyvek[®] WRB head flap is flipped down and sealed, see Drip Cap Installation Section and refer to Option 3.

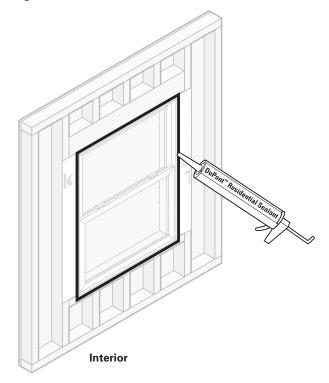


STEP 6

Final Step

Install DuPont™ Residential Sealant, or recommended sealant, (and backer rod as necessary) around the window opening at the interior. It is also acceptable to use DuPont™ Window & Door Foam or recommended foam on jambs and head, but it should not be used at sill and 6″ up the jambs from the sill. The seal created by the sealant (and backer rod as necessary) or foam will also serve as a back dam. **DuPont™** Residential Sealant should be tooled flat to allow the natural curing process to create a concave shape. Be sure that the sealant penetrates the grooves of the **DuPont™** FlexWrap NF™ around the sill.

NOTE: Installations that specify a window/door design rating of DP45 or greater require extra precautions. See *General Instructions* for performance requirements exceeding this design rating.



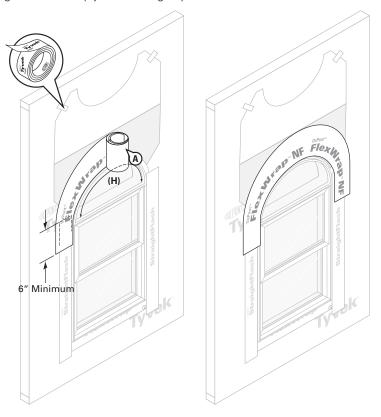
For Roundtop Windows

STEP 4

NOTE: Follow rectangular window instructions (Steps 1 through 4B) for proper installation of sill and jamb flashing prior to head flashing installation.

Install head flashing

- A. Cut DuPont™ FlexWrap NF™ head flashing at least 12" LONGER than the arc length (H) of round-top window.
- B. Remove both release papers and install to conform around top of window, covering entire mounting flange and adhering to exposed sheathing or framing members. Head flashing should overlap jamb flashings by at least 6".



STEP 5

- A. Flip down upper flap of DuPont™

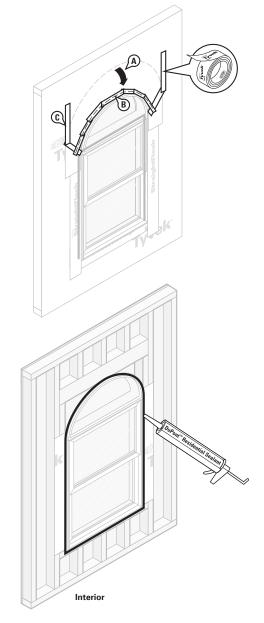
 Tyvek® WRB so it lays flat across head flashing.
- B. Cut ~1" strip of the DuPont™ Tyvek® WRB at lower horizontal edge of head flap.
- C. Tape seams as shown. **DO NOT TAPE** at bottom of window. At the head, continuous tape seams as shown with DuPont™ Tyvek® Tape. Skip-taping at the head is acceptable if an air barrier is not required or if additional drainage is desired.

STEP 6

Final Step

Install DuPont™ Residential Sealant, or recommended sealant, (and backer rod as necessary) around the window opening at the interior. It is also acceptable to use DuPont™ Window & Door Foam or recommended foam on jambs and head, but it should not be used at sill and 6" up the jambs from the sill. The seal created by the sealant (and backer rod as necessary) or foam will also serve as a back dam. DuPont™ Residential Sealant should be tooled flat to allow the natural curing process to create a concave shape. Be sure that the sealant penetrates the grooves of the **DuPont™ FlexWrap NF™ around the sill.**

NOTE: Installations that specify a window/ door design rating of DP45 or greater require extra precautions. See *General Instructions* for performance requirements exceeding this design rating.



Integral Flanged Adjacent Rectangular Windows AFTER DuPont™ Tyvek® WRB is Installed

This method applies to DuPont™ StraightFlash™, DuPont™ FlexWrap™ NF and DuPont™ Flashing Tape

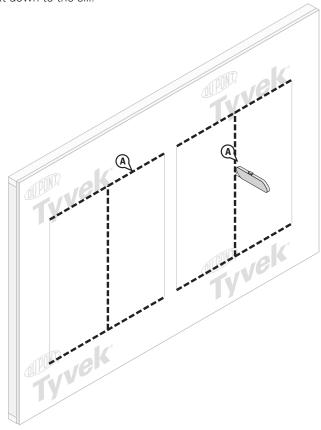
STEP 1

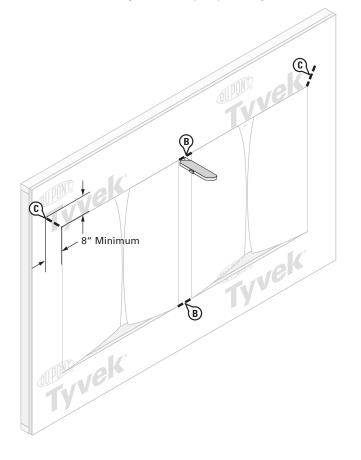
Prepare DuPont™ Tyvek® WRB for window installation:

A. Make "I-Cuts" (Standard I-Cut) in the DuPont™ Tyvek® WRB (modified I-Cuts are also accepted) for each adjacent window rough opening. For an "I-Cut", begin with a horizontal cut across the bottom and the top of the window frame. From the center, cut straight down to the sill.

- B. Cut the DuPont™ Tyvek® WRB along the top and bottom of the shared window framing and/or sheathing to connect the top and bottom of the "I-Cuts" as shown. Remove the DuPont™ Tyvek® WRB to expose the vertical sheathing/framing.
- C. Cut two 45 degree slits a minimum of 8" extending from each outside corners of the window rough openings, up and away from the window opening. This will create a flap above the adjacent window rough openings to expose sheathing or framing members to allow head flashing installation (see step 5).

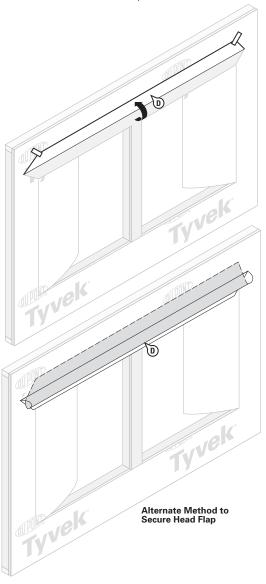
NOTE: Some windows and flashing widths may require longer slits.



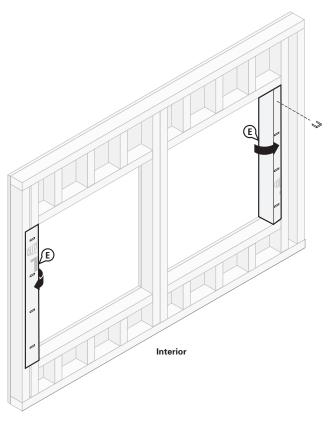


D. Flip head flap up and temporarily secure with DuPont™ Tyvek® Tape.

ALTERNATE METHOD TO SECURE HEAD FLAP: In lieu of temporarily taping, the head flap can be tucked under the DuPont™ Tyvek® WRB.



E. Fold the 2 side flaps into rough opening and secure to inside wall. Cut off excess flaps if desired.



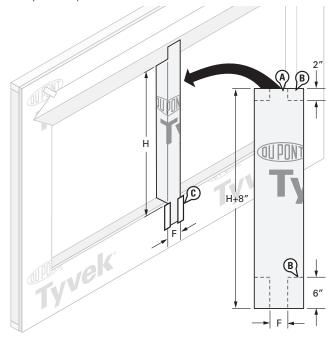
Option 1 – When Using DuPont™ Tyvek® WRB at Sheathing/Framing Separating Adjacent Windows

Follow STEPS 2-5 when using a piece of DuPont™ Tyvek® WRB between the windows. Refer to Adjacent Window Option 2, when using DuPont™ self-adhered flashing products between adjacent windows.

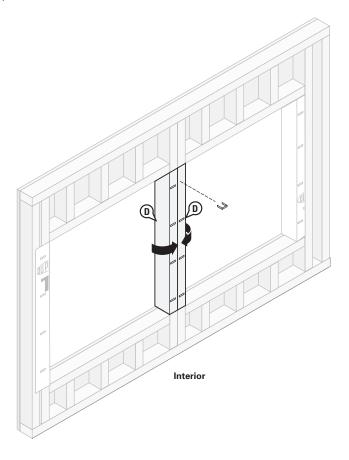
STEP 2

Preparation of framing/sheathing separating adjacent windows using DuPont™ Tyvek® WRB.

- A. Cut a piece of DuPont™ Tyvek® WRB wide enough to cover the framing/sheathing between windows when wrapped into the window rough openings and 8" longer than the height of the rough opening.
- B. Cut corners to create side flaps that will fold into adjacent window rough openings with 2" of the Tyvek® WRB piece extending above the rough openings and 6" below.
- C. Install Tyvek® WRB piece onto the framing/sheathing between windows. Do not install fasteners within 6" of the rough openings. DuPont™ Tyvek® Tape may be used if necessary to hold Tyvek® WRB piece in place. Seal vertical seams below window with DuPont™ Tyvek® Tape.

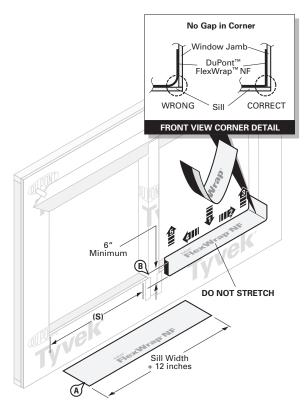


D. Fold the two side flaps into rough opening, and secure. Cut off excess flaps if necessary.

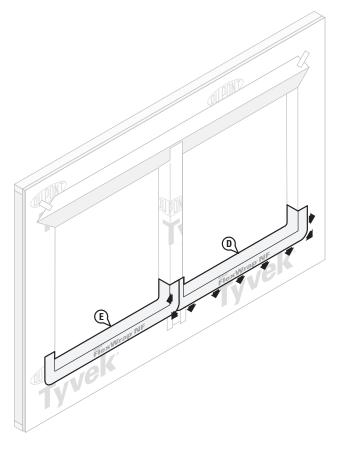


Option 1 (continued)

- A. Cut 2 pieces of DuPont™ FlexWrap™ NF at least 12" **LONGER** than width of rough opening sill (S). Use roll widths sufficient to achieve a minimum of 1" adhesion BEYOND where the window frame will be located, ensuring 2"–3" adhesion onto the face of the wall.
- B. Remove wide piece of release paper from the first piece of DuPont™ FlexWrap™ NF. Position on horizontal sill by aligning the inside edge of the narrow release paper with the face of the wall to ensure 2"-3" of the FlexWrap™ NF will be adhered to the face of the wall with a minimum of 6" up each jamb. Adhere into rough opening.
- C. Remove narrow release paper from the DuPont™ FlexWrap™ NF.



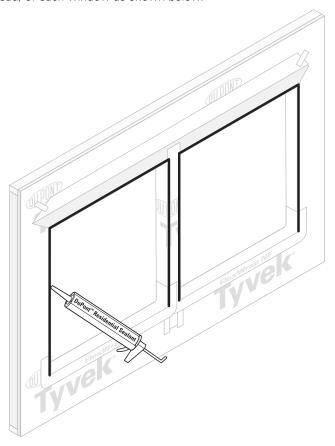
- D. Fan out DuPont™ FlexWrap™ NF at bottom corners onto face of wall and framing/ sheathing between windows. Coverage of DuPont™ FlexWrap™ NF should be 2"-3" onto the face of the wall.
- E. Repeat Steps B-D for second window. **NOTE**: The DuPont™ FlexWrap™ NF installed in the second window may overlap the DuPont™ FlexWrap™ NF installed in the first window at the vertical exposed sheathing/framing separating the windows.

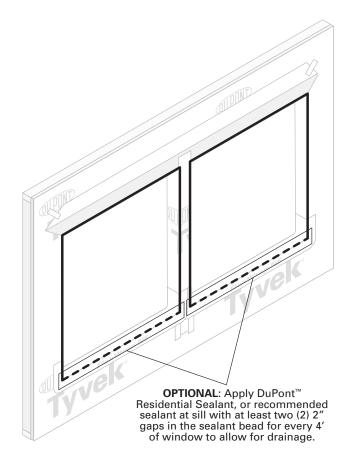


Option 1 (continued)

STEP 4

Apply DuPont™ Residential Sealant, DuPont™ or recommended sealant, on three sides (jambs and head) of each window as shown below.





Option 1 (continued)

STEP 5

A. Install windows according to manufacturer's instructions.

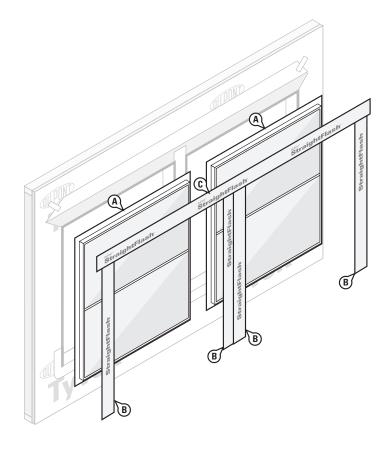
B. Cut four pieces of DuPont™ StraightFlash™, DuPont™ FlexWrap™ NF, or DuPont™ Flashing Tape for jamb flashing extending 1" above window head flanges and below bottom edge of sill flashing. Remove release paper and press tightly along sides of window frame. **NOTE**: The DuPont™ StraightFlash™, DuPont™ FlexWrap™ NF, or DuPont™ Flashing Tape for the inside jamb flashing of one window may overlap the DuPont™ StraightFlash™, DuPont™ FlexWrap™ NF, or DuPont™ Flashing Tape on the inside jamb of the other window.

OPTIONAL: If installing a drip cap as part of the window installation before the DuPont[™] self-adhered flashing membrane at the window head flange, see Drip Cap Installation Section and refer to Option 1. The vertical leg of the drip cap must not be taller than the window head flange when installing drip cap according to Option 1.

- C. Cut a piece of DuPont™ StraightFlash™, DuPont™ FlexWrap™ NF, or DuPont™ Flashing Tape for head flashing long enough to extend beyond edges of flashing at outer jambs. Remove release paper and adhere to head flanges, extending onto sheathing. The DuPont™ self-adhered membrane over the window must extend beyond the top edge of the DuPont™ self-adhered membrane previously installed between windows.
- D. Continue to STEP 6.

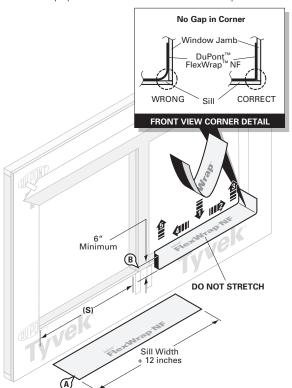
NOTE: Ensure proper shingling. DuPont™ StraightFlash™, DuPont™ FlexWrap™ NF, or DuPont™ Flashing Tape at jambs must overlap the DuPont™ FlexWrap™ NF at the sill and adhere to the Tyvek® WRB below the sill.

OPTIONAL: If installing a drip cap as part of the window installation, but after the window head flashing, see Drip Cap Installation Section and refer to Option 2.

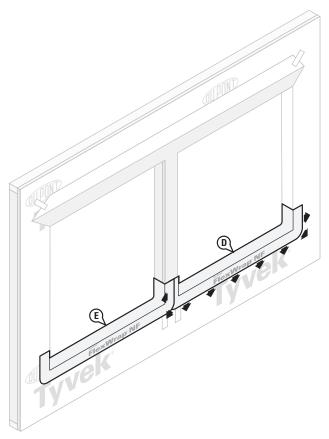


Option 2 – When using DuPont™ self-adhered membrane at sheathing/framing separating adjacent windows.

- A. Cut 2 pieces of DuPont™ FlexWrap™ NF at least 12" **LONGER** than width of rough opening sill (S). Use roll widths sufficient to achieve a minimum of 1" adhesion BEYOND where the window frame will be located, ensuring 2"–3" adhesion onto the face of the wall.
- B. Remove wide piece of release paper from the first piece of DuPont™ FlexWrap™ NF. Position on horizontal sill by aligning the inside edge of the narrow release paper with the face of the wall to ensure 2"-3" of the FlexWrap™ NF will be adhered to the face of the wall with a minimum of 6" up each jamb. Adhere into rough opening.
- C. Remove narrow release paper from the DuPont™ FlexWrap™ NF.



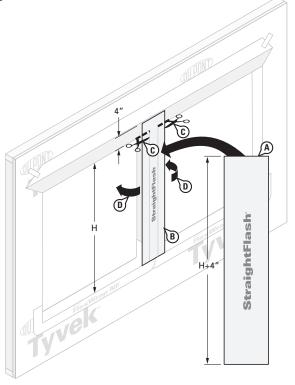
- D. Fan out DuPont™ FlexWrap™ NF at bottom corners onto face of wall and framing/ sheathing between windows. Coverage of DuPont™ FlexWrap™ NF should be 2"-3" onto the face of the wall.
- E. Repeat Steps B-D for second window. **NOTE**: The DuPont™ FlexWrap™ NF installed in the second window may overlap the DuPont™ FlexWrap™ NF installed in the first window at the vertical exposed sheathing/framing separating the windows.



Option 2 (continued)

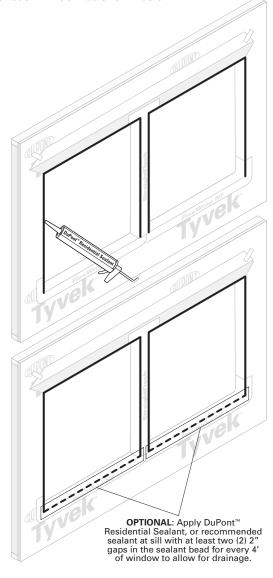
STEP 3

- A. Cut a piece of 9" wide DuPont™ StraightFlash™ or DuPont™ Flashing Tape 4" longer than the height of the rough opening.
- B. Remove release paper and center the DuPont™ StraightFlash™ or DuPont™ Flashing Tape onto the face of the vertical exposed framing/sheathing with the bottom edge aligned with the sill rough opening. Adhere the exposed butyl onto the face of the vertical exposed framing/sheathing and 4" above the window rough openings.
- C. Make horizontal cuts in the DuPont™ StraightFlash™ or DuPont™ Flashing Tape along the top of the rough opening to the edge of the vertical framing/sheathing between windows.
- D. Fold the resulting DuPont™ StraightFlash™ or DuPont™ Flashing Tape flaps into the rough opening and adhere.



STEP 4

Apply DuPont™ Residential Sealant, DuPont™ or recommended sealant, on three sides (jambs and head) of each window as shown below.



Option 2 (continued)

STEP 5

A. Install windows according to manufacturer's instructions.

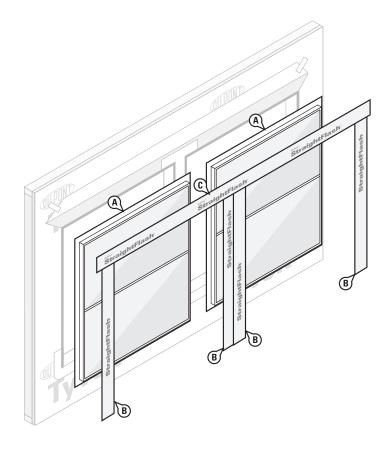
B. Cut four pieces of DuPont™ StraightFlash™, DuPont™ FlexWrap™ NF, or DuPont™ Flashing Tape for jamb flashing extending 1" above window head flanges and below bottom edge of sill flashing. Remove release paper and press tightly along sides of window frame. **NOTE**: The DuPont™ StraightFlash™, DuPont™ FlexWrap™ NF, or DuPont™ Flashing Tape for the inside jamb flashing of one window may overlap the DuPont™ StraightFlash™, DuPont™ FlexWrap™ NF, or DuPont™ Flashing Tape on the inside jamb of the other window.

OPTIONAL: If installing a drip cap as part of the window installation before the DuPont™ self-adhered flashing membrane at the window head flange, see Drip Cap Installation Section and refer to Option 1. The vertical leg of the drip cap must not be taller than the window head flange when installing drip cap according to Option 1.

C. Cut a piece of DuPont™ StraightFlash™, DuPont™ FlexWrap™ NF, or DuPont™ Flashing Tape for head flashing long enough to extend beyond edges of flashing at outer jambs. Remove release paper and adhere to head flanges, extending onto sheathing. The DuPont™ self-adhered membrane over the window must extend beyond the top edge of the DuPont™ self-adhered membrane previously installed between windows.

NOTE: Ensure proper shingling. DuPont™ StraightFlash™, DuPont™ FlexWrap™ NF, or DuPont™ Flashing Tape at jambs must overlap the DuPont™ FlexWrap™ NF at the sill and adhere to the Tyvek® WRB below the sill.

OPTIONAL: If installing a drip cap as part of the window installation, but after the window head flashing, see Drip Cap Installation Section and refer to Option 2.

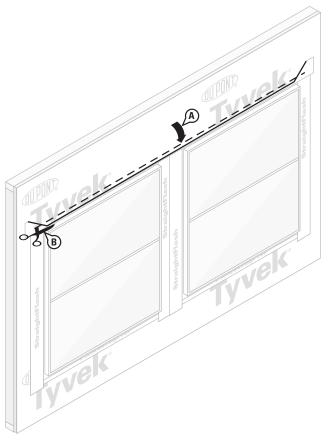


Option 2 (continued)

STEP 6

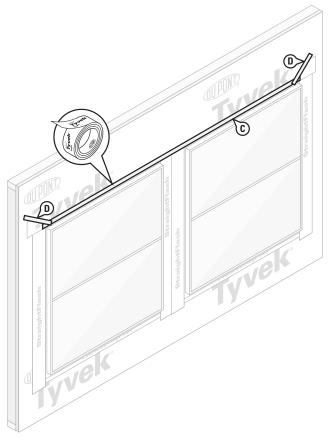
A. Flip down upper flap of DuPont™ Tyvek® WRB so it lays flat across head flashing.

B. Cut ~1" strip of the DuPont™ Tyvek® WRB at lower horizontal edge of head flap.



- C. Tape seams as shown. **DO NOT TAPE** at bottom of window. At the head, continuous tape seams as shown with DuPont™ Tyvek® Tape. Skip-taping at the head is acceptable if an air barrier is not required or if additional drainage is desired.
- D. Tape down diagonal seams of DuPont™ Tyvek® WRB.

OPTIONAL: If installing a drip cap AFTER the DuPont™ Tyvek® WRB head flap is flipped down and sealed, see Drip Cap Installation Section and refer to Option 3.



Option 2 (continued)

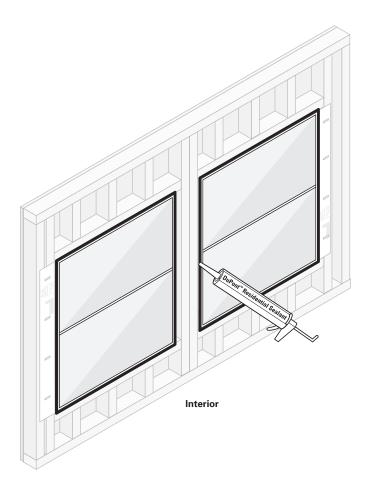
STEP 7

Final Step

Install DuPont™ Residential Sealant or recommended sealant (and backer rod as necessary) around the window openings at the interior. It is also acceptable to use DuPont™ Window & Door Foam or recommended foam on jambs and head, but it should not be used at sill and 6" up the jambs from the sill. The seal created by the sealant (and backer rod as necessary) will also serve as a back dam. **DuPont™ Residential Sealant should be tooled flat to allow the natural curing process to**

Residential Sealant should be tooled flat to allow the natural curing process to create a concave shape. Be sure that the sealant penetrates the grooves of the DuPont™ FlexWrap™ NF around the sill.

NOTE: Installations that specify a window/door design rating of DP45 or greater require extra precautions. See *General Instructions* for performance requirements exceeding this design rating.



Drip Cap Installation with Integral Flanged Windows and Doors

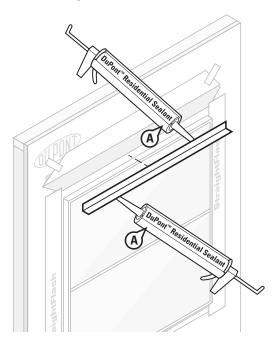
The following drip cap options can also be used for integral flanged doors.

Option 1

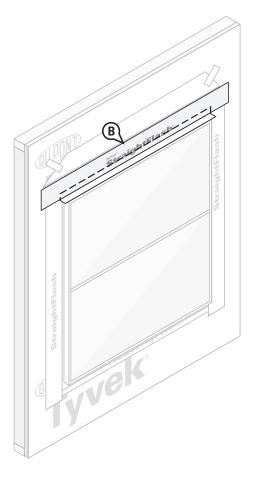
A drip cap with a short vertical leg can be installed at the window head flange so it is integrated with the DuPont™ self-adhered flashing membrane installed at the head of the window **BEFORE** the DuPont™ Tyvek® WRB head flap is flipped down and sealed. **NOTE**: When using this method, the vertical leg of the drip cap **must not** be taller than the window head flange when installed.

STEP 1

A. After the window is installed and jamb flashing applied, cut a piece of metal or vinyl drip cap slightly **LONGER** than the width of the window. Place a bead of DuPont™ Residential Sealant, or recommended sealant, on the rear side of the vertical leg **AND** a bead on the rear side of the bottom horizontal leg. Install the drip cap tight against the window head flange.



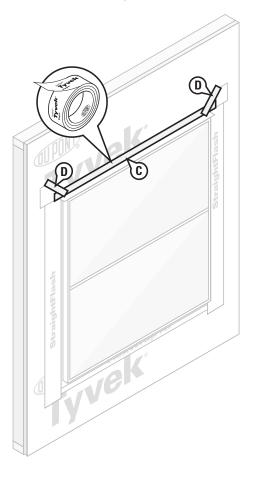
B. Cover the head flange and top edge of the drip cap with a piece of DuPont™ StraightFlash™, DuPont™ FlexWrap™ NF, or DuPont™ Flashing Tape. The DuPont™ self-adhered flashing systems product should be long enough to extend beyond the jamb flashing and adhere a minimum of 2" onto the wall.



Option 1 (continued)

- A. Flip down DuPont™ Tyvek® WRB head flap so it lays flat across the DuPont™ StraightFlash™, DuPont™ FlexWrap™ NF, or DuPont™ Flashing Tape covering the drip cap and window head flange.
- B. Cut ~1" strip of the DuPont™ Tyvek® WRB at lower horizontal edge of head flap.

- C. Tape seams as shown. **DO NOT TAPE** at bottom of window. At the head, continuous tape seams as shown with DuPont™ Tyvek® Tape. Skip-taping at the head is acceptable if an air barrier is not required or if additional drainage is desired.
- D. Tape down diagonal seams of DuPont™ Tyvek® WRB.

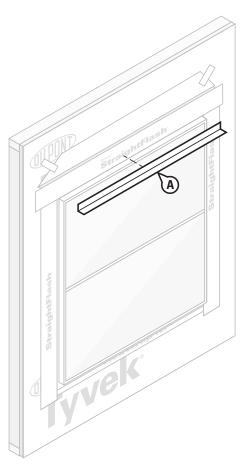


Option 2 Drip Cap Installation with Integral Flanged Windows and Doors

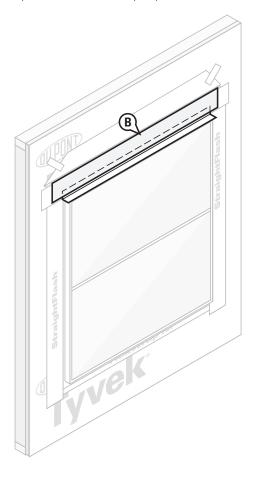
A drip cap can be installed over the head flashing above the window head **BEFORE** the DuPont™ Tyvek® WRB head flap is flipped down and sealed.

STEP 1

A. After the DuPont™ StraightFlash™, DuPont™ FlexWrap™ NF, or DuPont™ Flashing Tape is installed over window head flange, cut metal or vinyl drip cap slightly **LONGER** than the width of the window.



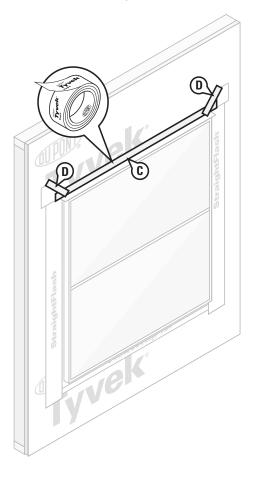
B. Install the drip cap tight against the window head flashing and cover the top edge with DuPont™ StraightFlash™, DuPont™ FlexWrap™ NF, or DuPont™ Flashing Tape extending past the top and sides of the drip cap.



Option 2 (continued)

- A. Flip down DuPont™ Tyvek® WRB head flap so it lays flat across the DuPont™ StraightFlash™, DuPont™ FlexWrap™ NF, or DuPont™ Flashing Tape covering the drip cap.
- B. Cut ~1" strip of the DuPont™ Tyvek® WRB at lower horizontal edge of head flap.

- C. Tape seams as shown. **DO NOT TAPE** at bottom of window. At the head, continuous tape seams as shown with DuPont™ Tyvek® Tape. Skip-taping at the head is acceptable if an air barrier is not required or if additional drainage is desired.
- D. Tape down diagonal seams of DuPont™ Tyvek® WRB.

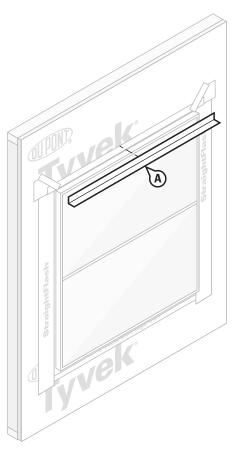


Drip Cap Installation with Integral Flanged Windows and Doors Option 3

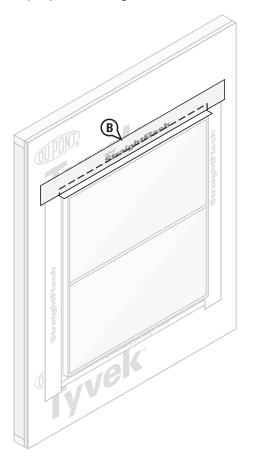
A drip cap can be installed over the DuPont™ Tyvek® WRB above the window head **AFTER** the DuPont™ Tyvek® WRB head flap is flipped down and sealed.

STEP 1

A. After DuPont™ Tyvek® WRB head flap is flipped down and sealed, cut metal or vinyl drip cap slightly **LONGER** than the width of the window and install.



B. As a recommended best practice, cover the top edge of the drip cap with DuPont™ StraightFlash™, DuPont™ Flashimg NF, or DuPont™ Flashing Tape extending past the top and sides of the drip cap and side edges of the window head flashing.



Integral Flanged Door AFTER DuPont™ Tyvek® WRB is Installed

This installation guideline is intended for doors installed above grade and/or with wood floor construction.

This method applies to the following products:

DuPont[™] StraightFlash[™], DuPont[™] FlexWrap[™] NF and DuPont[™] Flashing Tape

STEP 1

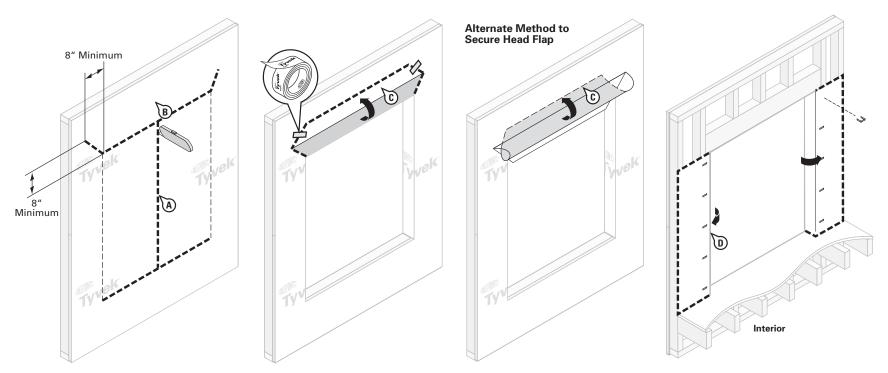
Prepare DuPont[™] Tyvek[®] WRB for door installation:

- A. Make an "I-Cut" (Standard I-Cut) in the WRB. For an "I-Cut", begin with a horizontal cut across the bottom and the top of the door frame. From the center, cut straight down to the sill.
- B. Cut two 45 degree slits a minimum of 8" extending from the corner of the door head up and away from door opening from the corner of the header, to create a flap above the rough opening to expose sheathing or framing members, to allow head flashing installation (see step 8). **NOTE:** Some doors and flashing widths may require longer slits.

C. Flip head flap up and temporarily secure with DuPont™ Tyvek® Tape.

ALTERNATE METHOD TO SECURE HEAD FLAP: In lieu of temporarily taping, the head flap can be tucked under the DuPont™ Tyvek® WRB.

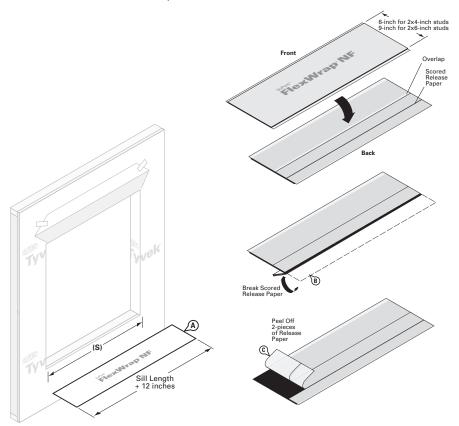
 D. Fold side flaps into rough opening and secure to inside wall. Cut off excess flaps if desired.



STEP 2

Preparation of sill flashing:

- A. Cut DuPont™ FlexWrap™ NF at least 12" **LONGER** than width of rough opening sill (S). Use roll widths sufficient to achieve a minimum of 1" adhesion BEYOND where the window frame will be located, ensuring 2"-3" adhesion onto the face of the wall.
- B. 9" DuPont™ FlexWrap™ NF has perforated release paper to help with the formation of the back dam (see Step 9). To ensure that the perforation tears cleanly, fold the perforation 180° and crease the flashing.
- C. Remove the two widest pieces of release paper leaving the narrowest release paper on the flashing. When the finished floor is applied, the release paper can be removed and the back dam can be completed.

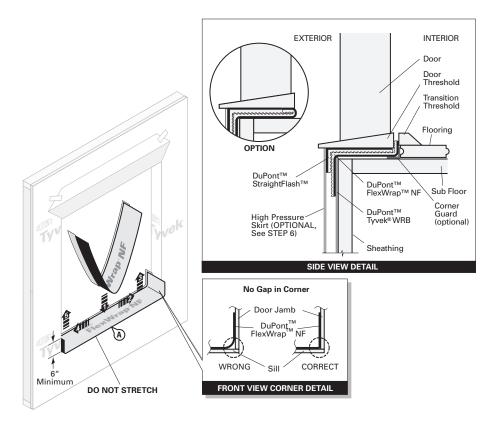


STEP 3

A. Position the sill flashing as indicated so the section with the release paper still attached extends past the door threshold on the inside. Ensure that 2"−3" of the FlexWrap™ NF will be adhered to the face of the wall with a minimum of 6" up each jamb. Adhere into rough opening. When the 1" of release paper is removed, the remaining section of DuPont™ FlexWrap™ NF can be used to form a back dam.

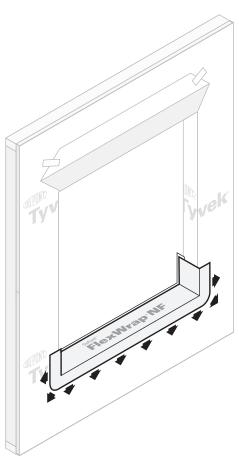
OPTIONAL: Create back dam by folding back narrow section of DuPont™

FlexWrap™ NF: Some flooring cannot accommodate a back dam. In that case fold the back dam on top of DuPont™ FlexWrap™ NF in the sill. The door will be installed on top of the fold to create a back dam (see Side View Detail below).



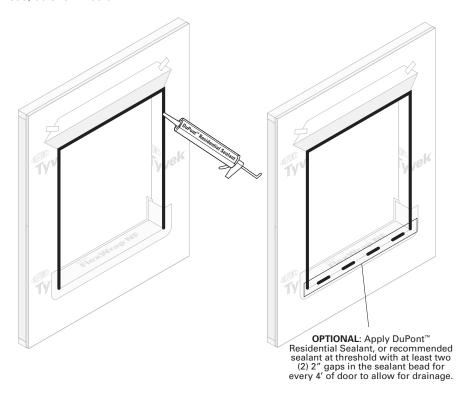
STEP 4

Fan out FlexWrap^{$^{\text{M}}$} NF at corners and adhere onto face of wall. Continue adhering onto face of wall along sill. Coverage of DuPont^{$^{\text{M}}$} FlexWrap^{$^{\text{M}}$} NF should be 2"–3" onto the face of the wall.



STEP 5

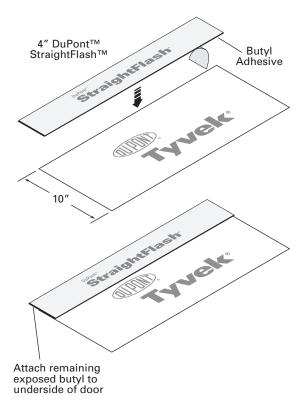
Apply DuPont™ Residential Sealant, or recommended sealant, on three sides (jambs and head) as shown below.



STEP 6 (OPTIONAL)

For extreme weather conditions, performance requirements exceeding ASTM E1677, or window/door design ratings of DP45 or greater, see *General Instructions*.

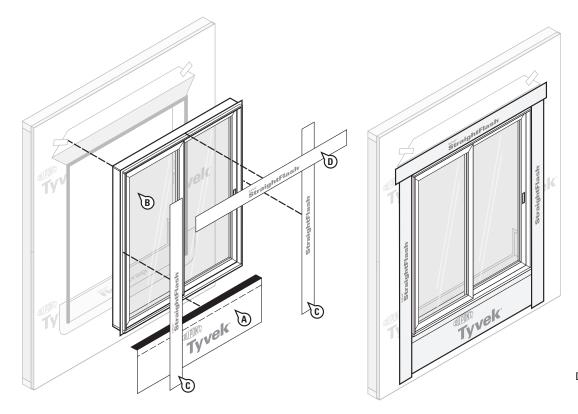
- A. Create the high pressure skirt by cutting a piece of DuPont™ Tyvek® WRB 1" wider than the width of door opening and approximately 10" in depth.
- B. Cut a 4" piece of DuPont™ StraightFlash™ or DuPont™ Flashing Tape to the same width as the skirt. Remove two pieces of release paper and adhere to the DuPont™ Tyvek® WRB.
- C. Remove the last piece of release paper and attach the skirt to the underside of the door. This skirt may be made with DuPont™ StraightFlash™, DuPont™ Flashing Tape, or DuPont™ StraightFlash™ VF.



STEP 7

- A. **OPTIONAL:** Adhere high pressure skirt to the bottom threshold of the door.
- B. Install door according to manufacturer's instructions.
- C. Cut two pieces of DuPont™ StraightFlash™, or DuPont™ FlexWrap™ NF, or DuPont™ Flashing Tape for jamb flashing extending 1" above door head flange and below bottom edge of sill flashing. Remove release paper and press tightly along sides of door frame. **OPTIONAL**: If installing a drip cap as part of the door installation before the DuPont™ self-adhered flashing membrane at the door head flange, see Drip Cap Installation Section and refer to Option 1. The vertical leg of the drip cap must not be taller than the door head flange when installing drip cap according to Option 1.
- D. Cut a piece of DuPont™ StraightFlash™, or DuPont™ FlexWrap™ NF, or DuPont™ Flashing Tape for head flashing, which extends beyond outer edges of jamb flashings. Remove release paper and install completely covering mounting flange and adhering to exposed sheathing or framing members (see D). **OPTIONAL**: If installing a drip cap as part of the door installation, but after the door head flashing, see Drip Cap Installation Section and refer to Option 2.

NOTE: Ensure proper shingling. DuPont™ StraightFlash™ or DuPont™ Flashing Tape must overlap DuPont™ FlexWrap™ NF and adhere to the DuPont™ Tyvek® WRB.





INCORRECT
DuPont™ FlexWrap™ NF
reverse flashed



INCORRECT
DuPont™ StraightFlash™
flush with DuPont™
FlexWrap™ NF



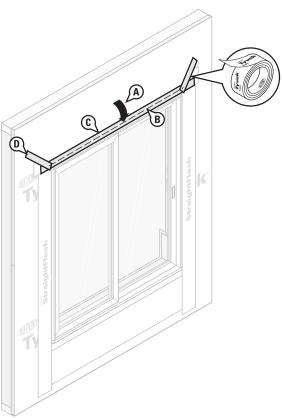
CORRECT
DuPont™ StraightFlash™
overlaps DuPont™
FlexWrap™ NF

STEP 8

- A. Flip down upper flap of DuPont™ Tyvek® WRB so it lays flat across head flashing.
- B. Cut ~1" strip of the DuPont™ Tyvek® WRB at lower horizontal edge of head flap.
- C. At the head, continuous tape seams as shown with DuPont™ Tyvek® Tape. Skiptaping at the head is acceptable if an air barrier is not required or if additional drainage is desired.

DO NOT TAPE at bottom of door.

D. Tape down diagonal seams of DuPont™ Tyvek® WRB. **OPTIONAL**: If installing a drip cap AFTER the DuPont™ Tyvek® WRB head flap is flipped down and sealed, see Drip Cap Installation Section and refer to Option 3.

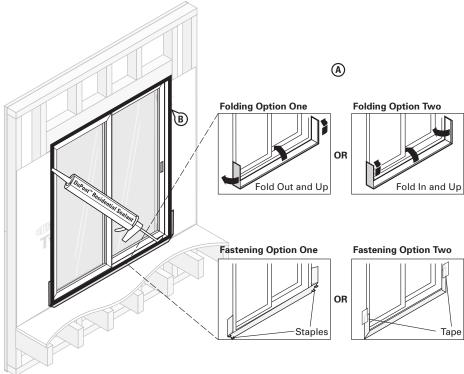


STEP 9

Final Step

- A. **OPTIONAL:** When the interior flooring is ready to install, remove release paper and use Folding Option One or Two (shown below) to form back dam.
- B. Install DuPont™ Residential Sealant, or recommended sealant, (and backer rod as necessary) around the window opening at the interior. It is also acceptable to use DuPont™ Window & Door Foam or recommended foam on jambs and head, but it should not be used at sill and 6" up the jambs from the sill. The seal created by the sealant (and backer rod as necessary) or foam will also serve as a back dam. DuPont™ Residential Sealant should be tooled flat to allow the natural curing process to create a concave shape. Be sure that the sealant penetrates the grooves of the DuPont™ FlexWrap NF™ around the sill.

NOTE: Installations that specify a window/door design rating of DP45 or greater require extra precautions. See *General Instructions* for performance requirements exceeding this design rating.



Brick Mold Window AFTER DuPont™ Tyvek® WRB Is Installed

This method applies to the following products:

 DuPont™ StraightFlash™, DuPont™ StraightFlash™VF, DuPont™ FlexWrap™ NF and DuPont™ Flashing Tape

STEP 1

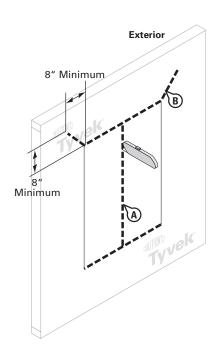
Prepare DuPont™ Tyvek® WRB for window installation:

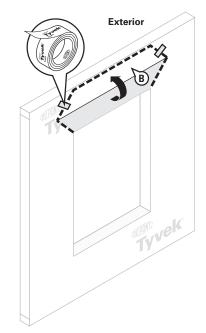
- A. Make an "I-Cut" (Standard I-Cut) in the DuPont™ Tyvek® WRB (modified I-Cut is also accepted). For an "I-Cut", begin with a horizontal cut across the bottom and the top of the window frame. From the center, cut straight down to the sill.
- B. Cut two 45 degree slits a minimum of 8" extending from the corner of the window head, up and away from the window opening. This will create a flap above the rough opening to expose sheathing or framing members to allow head flashing installation. Flip head flap up and temporarily secure with DuPont™ Tyvek® Tape.

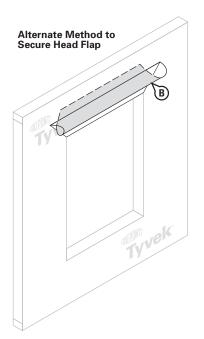
ALTERNATE METHOD TO SECURE HEAD FLAP: In lieu of temporarily taping, the head flap can be tucked under the DuPont™ Tyvek® WRB.

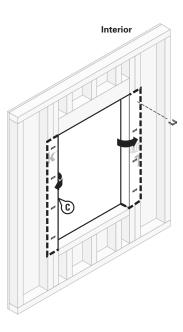
NOTE: Some windows and flashing widths may require longer slits.

C. Fold side flaps into rough opening and secure to inside wall. Cut off excess flaps if desired.

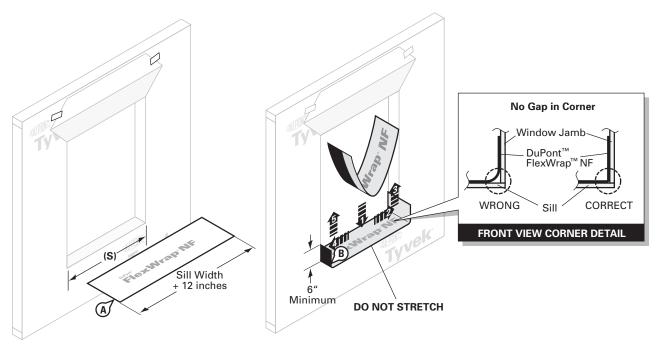




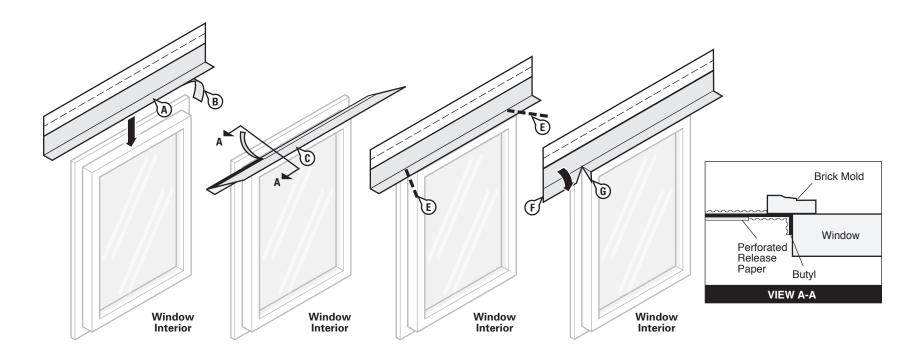




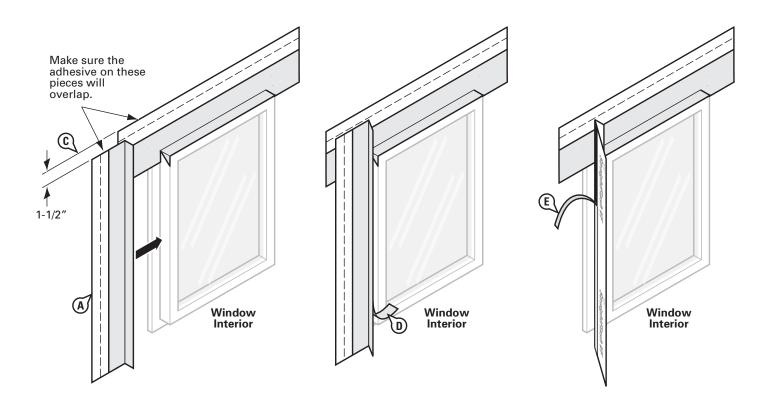
- A. Cut DuPont™ FlexWrap™ NF at least 12" **LONGER** than width of rough opening sill (S). Use roll widths sufficient to achieve a minimum of 1" adhesion BEYOND where the window frame will be located, ensuring 2"-3" adhesion onto the face of the wall.
- B. Remove wide piece of release paper. Position on horizontal sill by aligning the inside edge of the narrow release paper with the face of the wall to ensure 2"−3" of the FlexWrap™ NF will be adhered to the face of the wall with a minimum of 6" up each jamb. Adhere into rough opening.
- C. Remove narrow release paper.
- D. Fan out FlexWrap™ NF at corners and adhere onto face of wall. Continue adhering onto face of wall along sill. Coverage of DuPont™ FlexWrap™ NF should be 2"-3" onto the face of the wall.



- A. Prepare head flashing by cutting a piece of DuPont™ StraightFlash™ VF at least 12" **LONGER** than the head length.
- B. Break the scored release paper on one side of the head flashing by folding it back and forth upon itself.
- C. Center the DuPont™ StraightFlash™ VF on the window head and position so that it contacts the window frame and interior side of the brick mold. Remove the outer release paper and adhere the flashing to the window frame. Use the inner release paper to form a tight seal in the corner.
- D. Remove the inner release paper and adhere the flashing to the back of the brick mold.
- E. Beginning at the junction of the jamb and head, and away from the corner, cut the DuPont™ StraightFlash™ VF at a 45° angle.
- F. Fold the newly created flashing flap down flat against the brick mold.
- G. Fold remaining head flashing flaps down and adhere to the jamb frame.

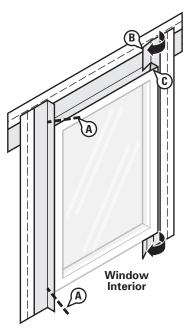


- A. Prepare jamb flashing by cutting a piece of DuPont™ StraightFlash™ VF at least 6" **LONGER** than the jamb.
- B. Break the scored release paper on one side of the jamb flashing by folding it back and forth upon itself.
- C. Position so that the DuPont™ StraightFlash™ VF contacts the window frame and interior side of the brick mold. Ensure that the jamb flashing is positioned 1-1/2 inch below the top edge of the head flashing. **Jamb flashing adhesive must come in contact with head flashing adhesive and overlap by one-inch**.
- D. Remove the outer release paper and adhere the flashing to the window frame. Use the inner release paper to form a tight seal in the corner.
- E. Remove the inner release paper and adhere the flashing to the back of the brick mold.
- F. Repeat on opposite jamb.



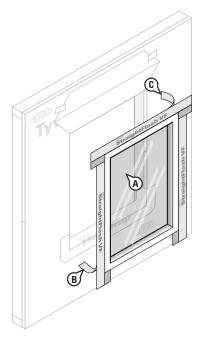
STEP 5

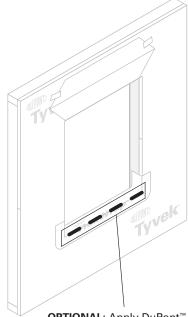
- A. Beginning at the junction of the jamb and head, and away from the corner, cut the DuPont™ StraightFlash™ VF at a 45° angle. Repeat this procedure at the junction of the sill and jamb.
- B. Fold cut jamb, sill and head corners flashing parallel to the window frame so that the jamb flashing lies flat.
- C. Fold the newly created jamb flashing flaps down at all corners and adhere to the window frame.



STEP 6

- A. Install the window per manufacturer's instructions.
- B. Remove the remaining release paper from the DuPont™ StraightFlash™ VF jamb flashing and press firmly to adhere the butyl adhesive to the DuPont™ Tyvek® WRB.
- C. Remove the release paper at the head and adhere the DuPont[™] StraightFlash[™] VF to the wall surface.





OPTIONAL: Apply DuPont™
Residential Sealant, or recommended sealant at sill with at least two (2) 2" gaps in the sealant bead for every 4' of window to allow for drainage.



INCORRECT

DuPont™ FlexWrap™ NF
reverse flashed



INCORRECT
DuPont™ StraightFlash™
flush with DuPont™
FlexWrap™ NF



CORRECT

DuPont™ StraightFlash™
overlaps DuPont™
FlexWrap™ NF

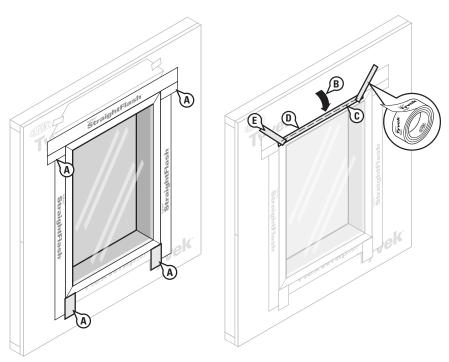
NOTE: Do not reverse shingle. DuPont[™] StraightFlash[™] must overlap DuPont[™] FlexWrap[™] NF and adhere to the substrate.

STEP 7

A. **OPTIONAL:** Cover exposed butyl with DuPont[™] StraightFlash[™], DuPont[™] Flashing Tape or DuPont[™] Tyvek[®] Tape.

OPTIONAL: If installing a drip cap as part of the window installation **BEFORE** the DuPont™ Tyvek® WRB head flap is flipped down and sealed, see Drip Cap Installation Section and refer to Option 2.

- B. Flip down upper flap of DuPont™ Tyvek® WRB so it lays flat across head flashing.
- C. Cut ~1" strip of the DuPont™ Tyvek® WRB at lower horizontal edge of head flap.
- D. Tape seams as shown. **DO NOT TAPE** at bottom of window. At the head, continuous tape seams as shown with DuPont™ Tyvek® Tape. Skip-taping at the head is acceptable if an air barrier is not required or if additional drainage is desired.
- E. Tape down diagonal seams of DuPont™ Tyvek® WRB. **OPTIONAL**: If installing a drip cap **AFTER** the DuPont™ Tyvek® WRB head flap is flipped down and sealed, see Drip Cap Installation Section and refer to Option 3.

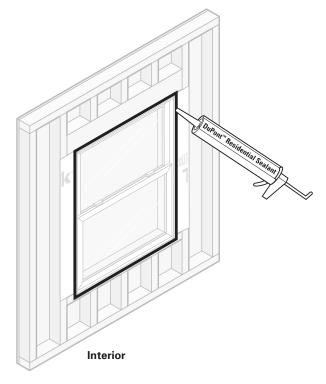


STEP 8

Final Step

Install DuPont™ Residential Sealant, or recommended sealant, (and backer rod as necessary) around the window opening at the interior. It is also acceptable to use DuPont™ Window & Door Foam or recommended foam on jambs and head, but it should not be used at sill and 6″ up the jambs from the sill. The seal created by the sealant (and backer rod as necessary) or foam will also serve as a back dam. **DuPont™** Residential Sealant should be tooled flat to allow the natural curing process to create a concave shape. Be sure that the sealant penetrates the grooves of the **DuPont™** FlexWrap NF™ around the sill.

NOTE: Installations that specify a window/door design rating of DP45 or greater require extra precautions. See *General Instructions* for performance requirements exceeding this design rating.



Brick Mold Door AFTER DuPont™ Tyvek® WRB Is Installed

This installation guide is intended for doors installed above grade and/or with wood floor construction.

This method applies to the following products:

 DuPont[™] StraightFlash[™], DuPont[™] StraightFlash[™] VF, DuPont[™] FlexWrap[™] NF, and DuPont[™] Flashing Tape

STEP 1

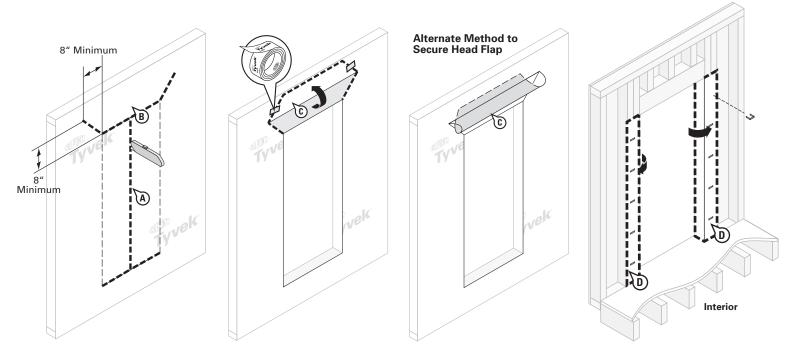
Prepare the DuPont[™] Tyvek[®] WRB for door installation:

- A. Make an "I-Cut" (Standard I-Cut) in the DuPont™ Tyvek® WRB. For an "I-Cut", begin with a horizontal cut across the bottom and the top of the door frame. From the center, cut straight down to the sill.
- B. Cut two 45 degree slits a minimum of 8" extending from the corner of the door head, up and away from door opening. This will create a flap above the rough opening to expose sheathing or framing members to allow head flashing installation (see step 8). **NOTE:** Some doors and flashing widths may require longer slits.

C. Flip head flap up and temporarily secure with DuPont™ Tyvek® Tape.

ALTERNATE METHOD TO SECURE HEAD FLAP: In lieu of temporarily taping, the head flap can be tucked under the DuPont™ Tyvek® WRB.

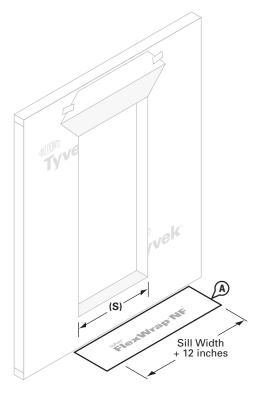
D. Fold side flaps into rough opening, and secure to inside wall framing. Cut off excess flaps if desired.

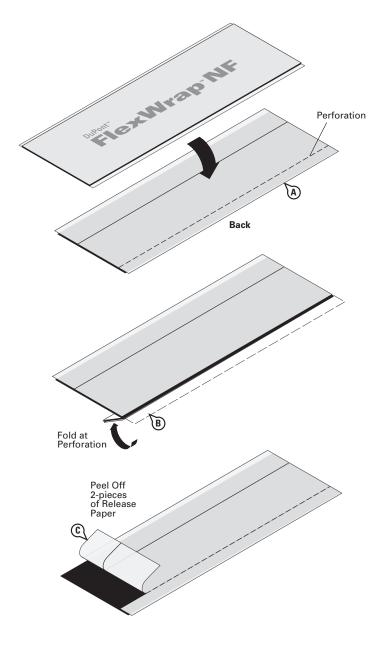


STEP 2

Preparation of sill flashing:

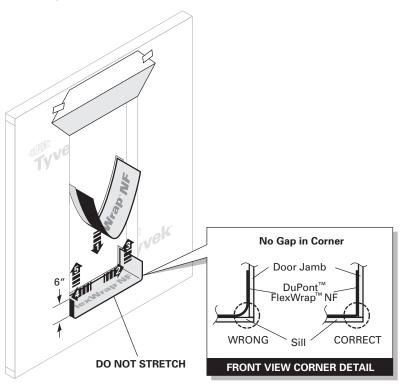
- A. Cut 9" DuPont™ FlexWrap™ NF at least 12" **LONGER** than width of the sill (S).
- B. 9" DuPont™ FlexWrap™ NF has perforated release paper to help with the formation of the back back dam (see Step 9). To ensure that the perforation tears cleanly, fold the perforation 180° and crease the flashing.
- C. Remove the two widest pieces of release paper leaving the narrowest release paper on the flashing. When the finished floor is applied, the release paper can be removed and the back dam can be completed.





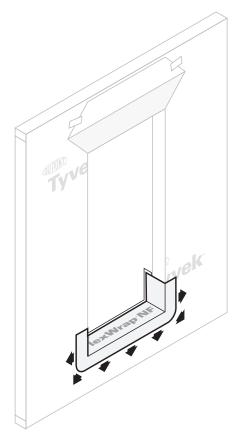
STEP 3

Position the sill flashing as indicated so the section with the release paper still attached extends past the door threshold on the inside. Ensure that 2"−3" of the FlexWrap™ NF will be adhered to the face of the wall with a minimum of 6" up each jamb. Adhere into rough opening. When the 1" of release paper is removed, the remaining section of DuPont™ FlexWrap™ NF can be used to form a back dam.

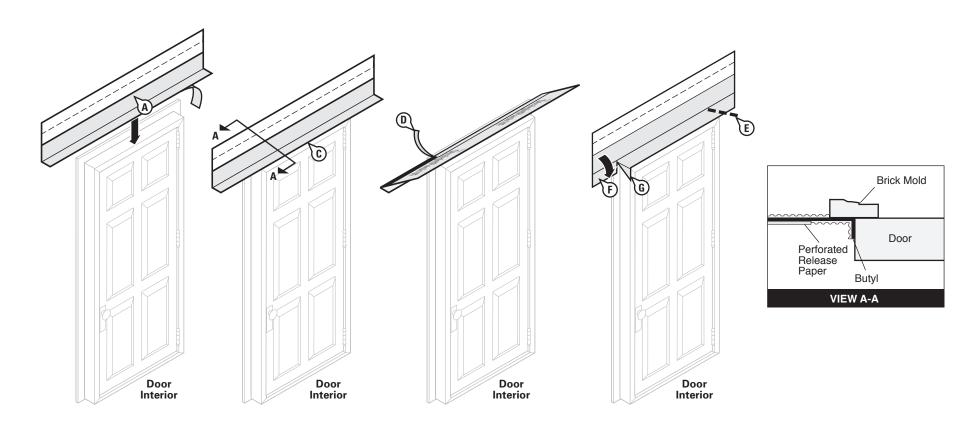


STEP 4

Fan DuPont[™] FlexWrap[™] NF at bottom corners onto face of wall. Coverage of DuPont[™] FlexWrap[™] NF should be 2" – 3" onto the face of the wall.

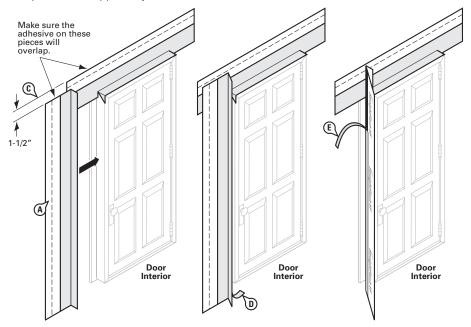


- A. Prepare head flashing by cutting a piece of DuPont™ StraightFlash™ VF at least 12" **LONGER** than the head length.
- B. Break the scored release paper on one edge of the head flashing by folding it back and forth upon itself.
- C. Center the DuPont™ StraightFlash™ VF along the length of the door head and position so that it contacts the door frame and interior side of the brick mold. Remove the outer release paper and adhere the flashing to the door frame. Use the inner release paper to form a tight seal in the corner.
- D. Remove the inner release paper strip and adhere the flashing to the back of the brick mold.
- E. Beginning at the junction of the jamb and head, and away from the corner, cut the DuPont™ StraightFlash™ VF at a 45° angle.
- F. Fold the newly created flashing flap down flat against the brick mold.
- G. Fold remaining head flashing flaps down onto the jamb frame.

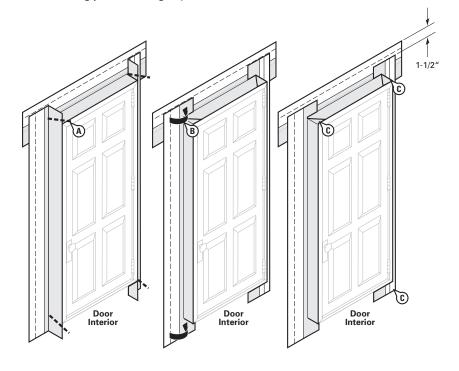


STEP 6

- A. Prepare jamb flashing by cutting a piece of DuPont[™] StraightFlash[™] VF at least 6" **LONGER** than the jamb.
- B. Break the scored release paper on one side of the jamb flashing by folding it back and forth upon itself.
- C. Position so that the DuPont™ StraightFlash™ VF contacts the door frame and interior side of the brick mold. Ensure that the jamb flashing is positioned 1-1/2 inch below the top edge of the head flashing. Jamb flashing adhesive must come in contact with head flashing adhesive by one inch.
- D. Remove the outer release paper and adhere the flashing to the door frame. Use the inner release paper to form a tight seal in the corner.
- E. Remove the inner release paper and adhere the flashing to the back of the brick mold.
- F. Repeat on for opposite jamb.



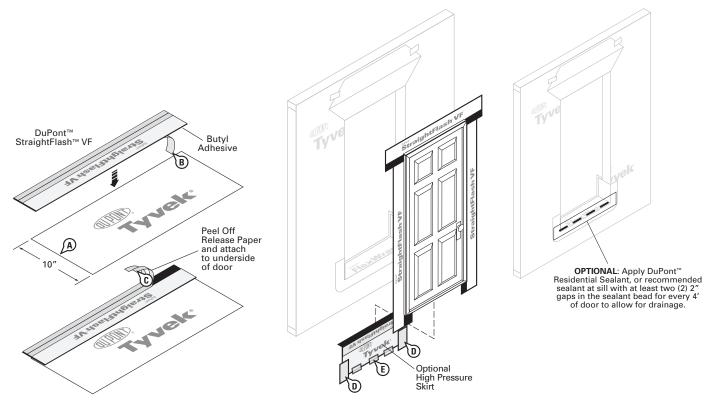
- A. Beginning at the junction of the jamb and head, and away from the corner, cut the DuPont™ Straightflash™ VF at a 45° angle. Repeat the procedure at the junction of the sill and jamb.
- B. Fold cut jamb flashing parallel to the door frame so that the jamb flashing lies flat.
- C. Fold remaining jamb flashing flaps down at all corners and adhere to the door frame.



STEP 8 (OPTIONAL) - HIGH PRESSURE SKIRT

For extreme weather conditions, performance requirements exceeding ASTM E1677, or window/door design ratings of DP45 or greater, see *General Instructions*.

- A. Create the high pressure skirt by cutting a piece of DuPont™ Tyvek® WRB 1" wider than the width of door opening and approximately 10" in height.
- B. Cut a piece of DuPont™ StraightFlash™ VF to the same width of skirt. Remove release paper from one side of DuPont™ StraightFlash™ VF and adhere to DuPont™ Tyvek® WRB. The skirt may be made with either DuPont™ StraightFlash™ VF or DuPont™ StraightFlash™.
- C. Remove the release paper from the other side of DuPont™ StraightFlash™ VF and adhere the butyl adhesive at the sill skirt to the underside of the door threshold behind the jamb flashing.
- D. After installation of door, secure edges of the optional skirt with two 4" pieces of DuPont™ StraightFlash™.
- E. Tape the bottom of the optional skirt to allow for drainage and to minimize wind damage during construction.



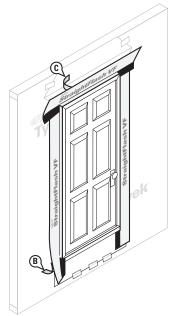
STEP 9

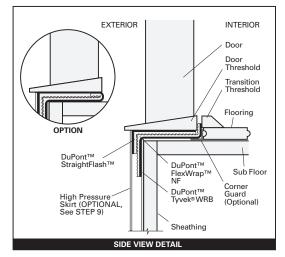
- A. Install door according to manufacturer's installation instructions.
- B. Remove the remaining release paper from the DuPont™ StraightFlash™ VF jamb flashing and press firmly to adhere the butyl adhesive to the DuPont™ Tyvek® WRB.
- C. Remove the release paper at the head and adhere the DuPont™ StraightFlash™ VF to the wall surface.

OPTIONAL: Create back dam by folding back narrow section of DuPont™

FlexWrap™ NF: Some flooring cannot accommodate a back dam. In that case fold the 1" back dam on top of the 9" DuPont™ FlexWrap™ NF in the sill. Door will be installed on top of 1" fold to create a back dam.

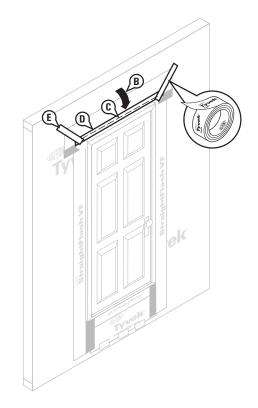
OPTIONAL: Cover exposed butyl with DuPont[™] StraightFlash[™] or DuPont[™] Flashing Tape.





STEP 10 (RECOMMENDED BEST PRACTICE)

- A. **OPTIONAL:** If installing a drip cap as part of the door installation **BEFORE** the DuPont™ Tyvek® WRB head flap is flipped down and sealed, see Drip Cap Installation Section and refer to Option 2.
- B. Flip down upper flap of DuPont™ Tyvek® WRB so it lays flat across head flashing.
- C. Cut ~1" strip of the DuPont™ Tyvek® WRB at lower horizontal edge of head flap.
- D. Tape seams as shown. **DO NOT TAPE** at bottom of door. At the head, continuous tape seams as shown with DuPont™ Tyvek® Tape; if an air barrier is not required or if additional drainage is desired. Skip-taping at the head is acceptable.
- E. Tape down diagonal seams of DuPont™ Tyvek® WRB. **OPTIONAL**: If installing a drip cap **AFTER** the DuPont™ Tyvek® WRB head flap is flipped down and sealed, see Drip Cap Installation Section and refer to Option 3.

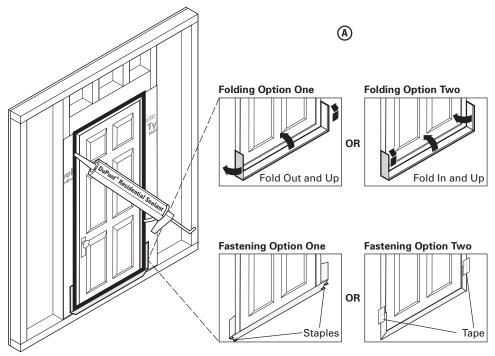


STEP 11

Final Step

- A. When the interior flooring is ready to install, remove release paper and use Folding Option One or Two to form back dam.
- B. Install DuPont™ Residential Sealant, DuPont™ or recommended sealant, (and backer rod as necessary) around the door opening at the interior. It is also acceptable to use DuPont™ Window & Door Foam or recommended foam on jambs and head, but it should not be used at sill and 6" up the jambs from the sill. The seal created by the sealant (and backer rod as necessary) or foam will also serve as a back dam.
 - DuPont™ Residential Sealant should be tooled flat to allow the natural curing process to create a concave shape. Be sure that the sealant penetrates the grooves of the DuPont™ FlexWrap™ NF around the sill.

NOTE: Installations that specify a window/door design rating of DP45 or greater require extra precautions. See *General Instructions* for performance requirements exceeding this design rating.



Field Applied Flanged Window AFTER DuPont™ Tyvek® WRB Is Installed

Ensure DuPont™ StraightFlash™ VF logo side faces the exterior.

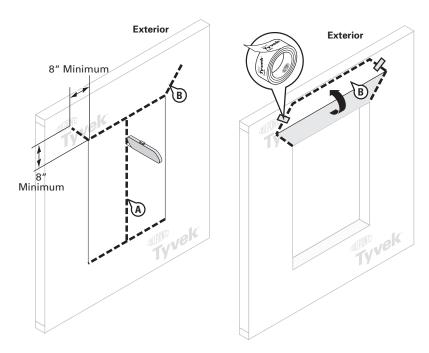
This method applies to the following products:

 DuPont[™] StraightFlash[™], DuPont[™] StraightFlash[™] VF, DuPont[™] FlexWrap[™] NF, and DuPont[™] Flashing Tape

STEP 1

Prepare the DuPont™ Tyvek® WRB for window installation:

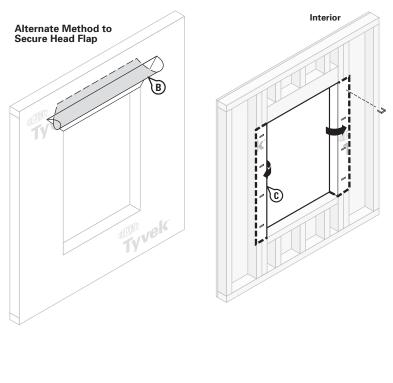
- A. Make an "I-Cut" (Standard I-Cut) in the DuPont™ Tyvek® WRB (modified I-Cut is also accepted). For an "I-Cut", begin with a horizontal cut across the bottom and the top of the window frame. From the center, cut straight down to the sill.
- B. Cut two 45 degree slits a minimum of 8" extending from the corner of the window head, up and away from the window opening. This will create a flap above the rough opening to expose sheathing or framing members to allow head flashing installation. Flip head flap up and temporarily secure with DuPont™ Tyvek® Tape.



ALTERNATE METHOD TO SECURE HEAD FLAP: In lieu of temporarily taping, the head flap can be tucked under the DuPont™ Tyvek® WRB.

NOTE: Some windows and flashing widths may require longer slits.

C. Fold side flaps into rough opening and secure to inside wall. Cut off excess flaps if desired.

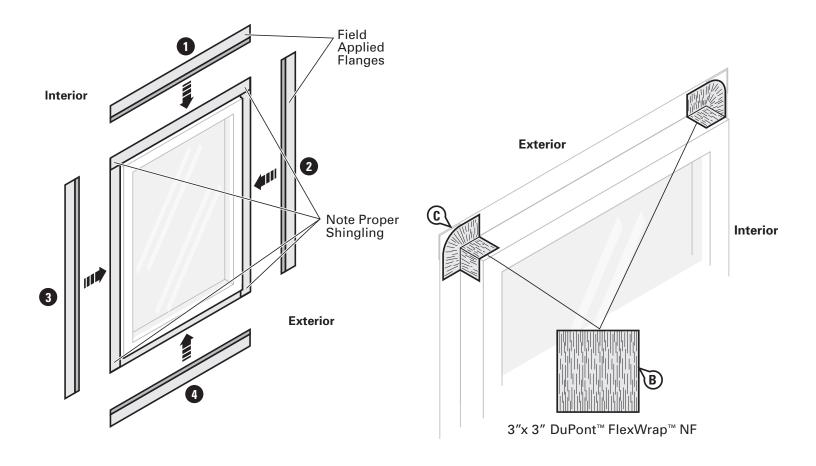


STEP 2

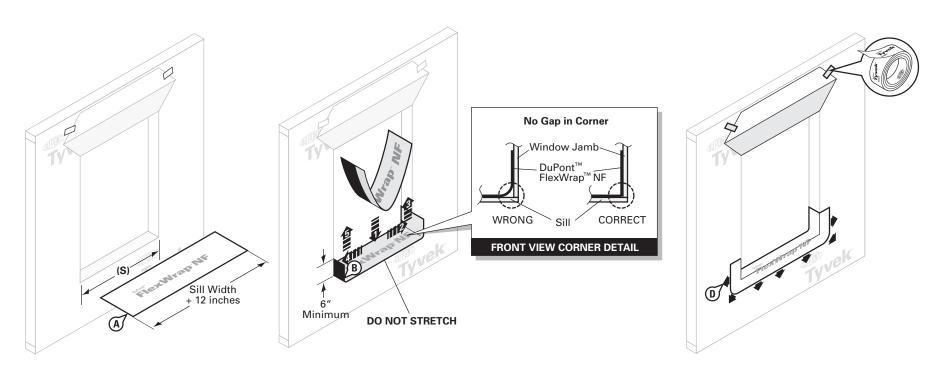
A. Apply field applied flanges in the correct shingling fashion per manufacturer's installation instructions.

DO NOT REVERSE SHINGLE.

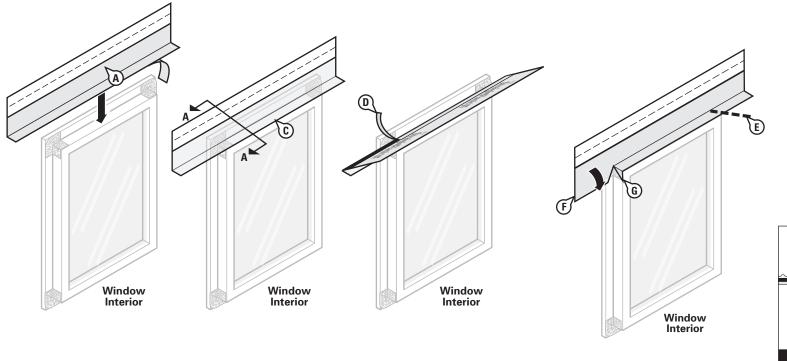
- B. Cut 3"x 3" piece of DuPont™ FlexWrap™ NF.
- C. Apply DuPont™ FlexWrap™ NF patches to back of flange corners before applying DuPont™ StraightFlash™ VF.

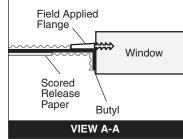


- A. Cut DuPont™ FlexWrap™ NF at least 12" **LONGER** than width of rough opening sill (S). Use roll widths sufficient to achieve a minimum of 1" adhesion BEYOND where the window frame will be located, ensuring 2"-3" adhesion onto the face of the wall.
- B. Remove wide piece of release paper. Position on horizontal sill by aligning the inside edge of the narrow release paper with the face of the wall to ensure 2"−3" of the FlexWrap™ NF will be adhered to the face of the wall with a minimum of 6" up each jamb. Adhere into rough opening.
- C. Remove narrow release paper.
- D. Fan out FlexWrap™ NF at corners and adhere onto face of wall. Continue adhering onto face of wall along sill. Coverage of DuPont™ FlexWrap™ NF should be 2"-3" onto the face of the wall.

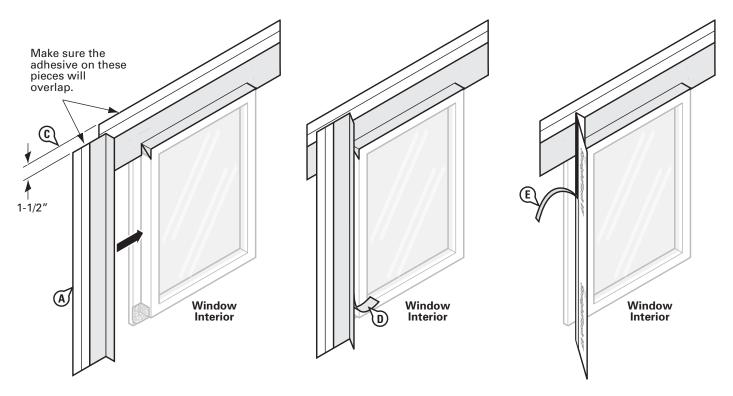


- A. Prepare head flashing by cutting a piece of DuPont™ StraightFlash™ VF at least 12" **LONGER** than the head length.
- B. Break the scored release paper on one side of the head flashing by folding it back and forth upon itself.
- C. Center the DuPont™ StraightFlash™ VF on the window head and position so that it contacts the window frame and interior side of the flange. Remove the outer release paper and adhere the flashing to the window frame. Use the inner release paper to form a tight seal in the corner.
- D. Remove the inner release paper and adhere the flashing to the back of the flange.
- E. Beginning at the junction of the jamb and head, and away from the corner, cut the DuPont™ StraightFlash™ VF at a 45° angle.
- F. Fold the newly created flashing flap down flat against the flange.
- G. Fold remaining head flashing flaps down onto the jamb frame.



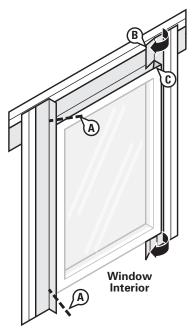


- A. Prepare jamb flashing by cutting a piece of DuPont™ StraightFlash™ VF at least 6" **LONGER** than the jamb.
- B. Break the scored release paper on one side of the jamb flashing by folding it back and forth upon itself.
- C. Position so that DuPont™ StraightFlash™ VF contacts the window frame and interior side of the brick mold or flange. Ensure that the jamb flashing is positioned 1-1/2 inch below the top edge of the head flashing. **Jamb flashing adhesive must come in contact with head flashing adhesive and overlap by one inch**.
- D. Remove the outer release paper and adhere the flashing to the window frame. Use the inner release paper to form a tight seal in the corner.
- E. Remove the inner release paper and adhere the flashing to the back of the flange.
- F. Repeat on opposite jamb.



STEP 6

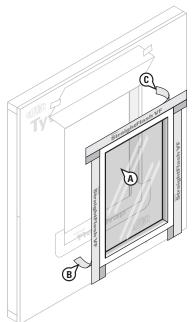
- A. Beginning at the junction of the jamb and head, and away from the corner, cut the DuPont™ StraightFlash™ VF at a 45° angle. Repeat this procedure at the junction of the sill and jamb.
- B. Fold cut jamb, sill and head corners flashing parallel to the window frame so that the jamb flashing lies flat.
- C. Fold the remaining flaps down at corner and adhere to the window frame.

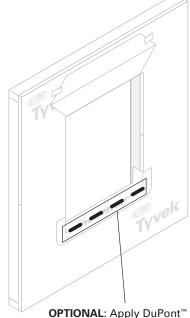


STEP 7

- A. Install the window per manufacturer's instructions.
- B. Remove the remaining release paper from the DuPont™ StraightFlash™ VF jamb flashing and press firmly to adhere the butyl adhesive to the DuPont™ Tyvek® WRB.
- C. Remove the release paper at the head and adhere the DuPont[™] StraightFlash[™] VF to the wall surface.

NOTE: Do not reverse shingle. DuPont[™] StraightFlash[™] must overlap DuPont[™] FlexWrap[™] NF and adhere to the substrate.





OPTIONAL: Apply DuPont Residential Sealant, or recommended sealant at sill with at least two (2) 2" gaps in the sealant bead for every 4' of window to allow for drainage.



INCORRECT
DuPont™ FlexWrap™ NF
reverse flashed



INCORRECT

DuPont™ StraightFlash™
flush with DuPont™
FlexWrap™ NF

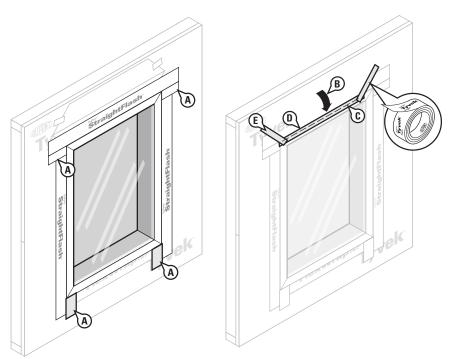


CORRECT

DuPont™ StraightFlash™
overlaps DuPont™
FlexWrap™ NF

STEP 8

- A. **OPTIONAL:** Cover exposed butyl with DuPont™ StraightFlash™, DuPont™ Flashing Tape or DuPont™ Tyvek® Tape. **OPTIONAL:** If installing a drip cap as part of the door installation **BEFORE** the DuPont™ Tyvek® WRB head flap is flipped down and sealed, see Drip Cap Installation Section and refer to Option 2.
- B. Flip down upper flap of DuPont™ Tyvek® WRB so it lays flat across head flashing.
- C. Cut ~1" strip of the DuPont™ Tyvek® WRB at lower horizontal edge of head flap.
- D. Tape seams as shown. **DO NOT TAPE** at bottom of window. At the head, continuous tape seams as shown with DuPont™ Tyvek® Tape. Skip-taping at the head is acceptable if an air barrier is not required or if additional drainage is desired.
- E. Tape down diagonal seams of DuPont™ Tyvek® WRB. **OPTIONAL**: If installing a drip cap **AFTER** the DuPont™ Tyvek® WRB head flap is flipped down and sealed, see Drip Cap Installation Section and refer to Option 3.

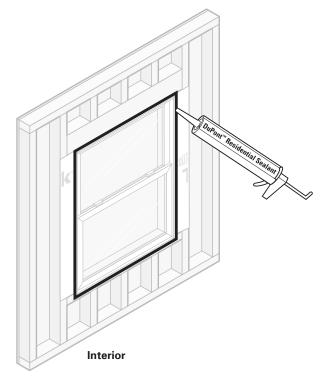


STEP 9

Final Step

Install DuPont™ Residential Sealant, or recommended sealant, (and backer rod as necessary) around the window opening at the interior. It is also acceptable to use DuPont™ Window & Door Foam or recommended foam on jambs and head, but it should not be used at sill and 6″ up the jambs from the sill. The seal created by the sealant (and backer rod as necessary) or foam will also serve as a back dam. **DuPont™** Residential Sealant should be tooled flat to allow the natural curing process to create a concave shape. Be sure that the sealant penetrates the grooves of the **DuPont™** FlexWrap NF™ around the sill.

NOTE: Installations that specify a window/door design rating of DP45 or greater require extra precautions. See *General Instructions* for performance requirements exceeding this design rating.



Field Applied Flanged Door AFTER DuPont™ Tyvek® WRB Is Installed

This installation guide is intended for doors installed above grade and/or with wood floor construction.

This method applies to the following products:

 DuPont[™] StraightFlash[™], DuPont[™] StraightFlash[™] VF, DuPont[™] FlexWrap[™] NF and DuPont[™] Flashing Tape

STEP 1

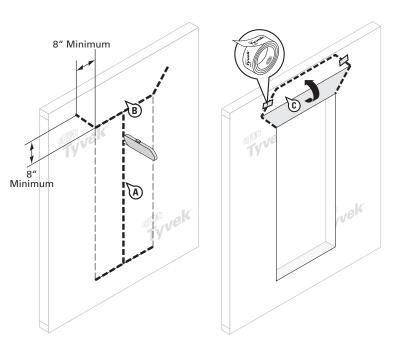
Prepare the DuPont[™] Tyvek[®] WRB for door installation:

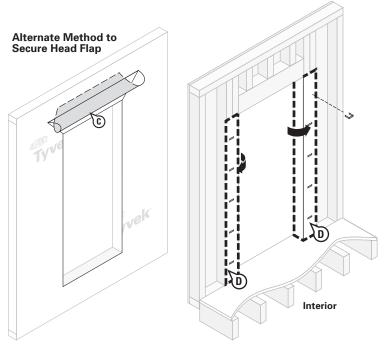
- A. Make an "I-Cut" (Standard I-Cut) in the DuPont™ Tyvek® WRB. For an "I-Cut", begin with a horizontal cut across the bottom and the top of the door frame. From the center, cut straight down to the sill.
- B. Cut two 45 degree slits a minimum of 8" extending from the corner of the door head, up and away from door opening. This will create a flap above the rough opening to expose sheathing or framing members to allow head flashing installation (see step 8). **NOTE:** Some doors and flashing widths may require longer slits.

C. Flip head flap up and temporarily secure with DuPont™ Tyvek® Tape.

ALTERNATE METHOD TO SECURE HEAD FLAP: In lieu of temporarily taping, the head flap can be tucked under the DuPont™ Tyvek® WRB.

D. Fold side flaps into rough opening, and secure to inside wall framing. Cut off excess flaps if desired.

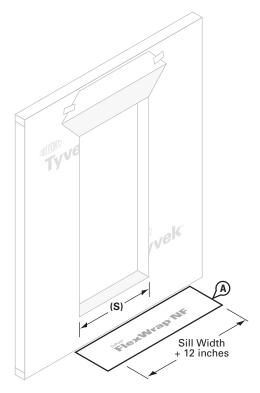


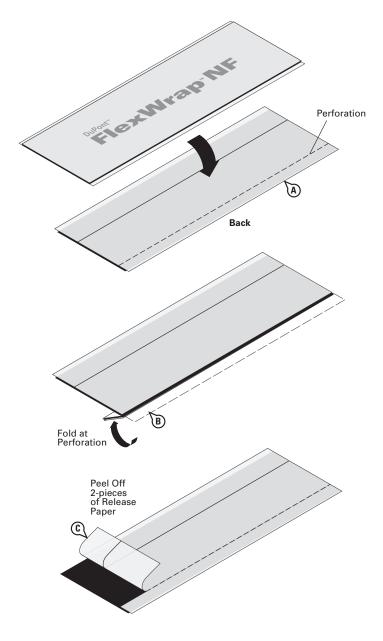


STEP 2

Preparation of sill flashing:

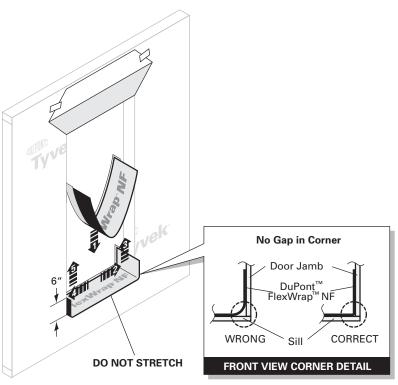
- A. Cut DuPont™ FlexWrap™ NF at least 12" **LONGER** than width of the sill (S).
- B. 9" DuPont™ FlexWrap™ NF has perforated release paper to help with the formation of the back dam (see Step 10). To ensure that the perforation tears cleanly, fold the perforation 180° and crease the flashing.
- C. Remove the two widest pieces of release paper leaving the narrowest release paper on the flashing. When the finished floor is applied, the release paper can be removed and the back dam can be completed.





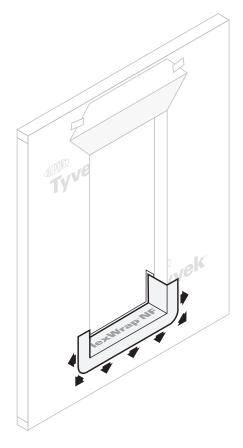
STEP 3

Position the sill flashing as indicated so the section with the release paper still attached extends past the door threshold on the inside. Ensure that 2"-3" of the FlexWrap™ NF will be adhered to the face of the wall with a minimum of 6" up each jamb. Adhere into rough opening. When the narrow release paper is removed, the remaining section of DuPont™ FlexWrap™ NF can be used to form a back dam (see Step 10).



STEP 4

Fan out FlexWrap $^{\text{\tiny{M}}}$ NF at corners and adhere onto face of wall. Continue adhering onto face of wall along sill. Coverage of DuPont $^{\text{\tiny{M}}}$ FlexWrap $^{\text{\tiny{M}}}$ NF should be 2"–3" onto the face of the wall.

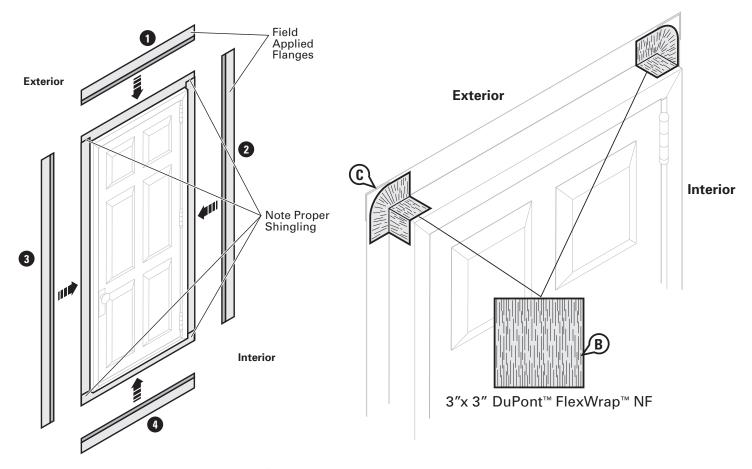


STEP 5

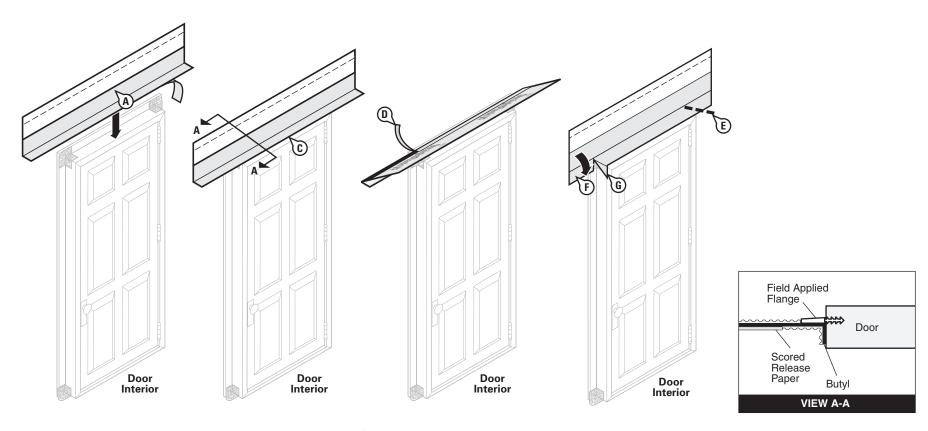
A. Apply field applied flanges in the correct shingling fashion as per manufacturer's installation instructions.

DO NOT REVERSE SHINGLE.

- B. Cut four 3"x 3" pieces of DuPont™ FlexWrap™ NF.
- C. Apply DuPont™ FlexWrap™ NF patches to back of flange corners before applying DuPont™ StraightFlash™ VF.

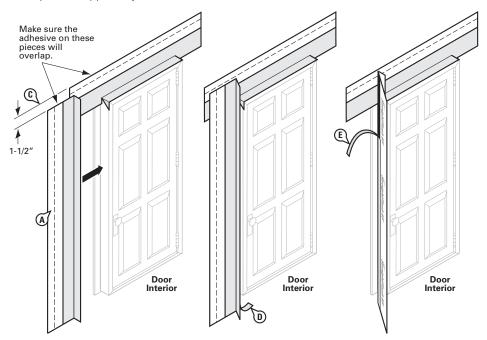


- A. Prepare head flashing by cutting a piece of DuPont™ StraightFlash™ VF at least 12" **LONGER** than the head length.
- B. Break the scored release paper on one edge of the head flashing by folding it back and forth upon itself.
- C. Center the DuPont™ StraightFlash™ VF along the length of the door head and position so that it contacts the door frame and interior side of the flange. Remove the outer release paper and adhere the flashing to the door frame. Use the inner release paper to form a tight seal in the corner.
- D. Remove the inner release paper strip and adhere the flashing to the back of the flange.
- E. Beginning at the junction of the jamb and head, and away from the corner, cut the DuPont™ StraightFlash™ VF at a 45° angle.
- F. Fold the newly created flashing flaps down flat against the flange.
- G. Fold remaining head flashing flaps down onto the jamb frame.

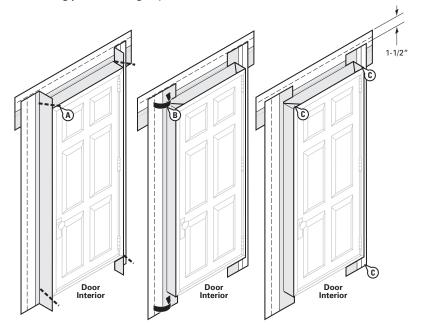


STEP 7

- A. Prepare jamb flashing by cutting a piece of DuPont[™] StraightFlash[™] VF at least 6" **LONGER** than the jamb.
- B. Break the scored release paper on one side of the jamb flashing by folding it back and forth upon itself.
- C Position so that the DuPont™ StraightFlash™ VF contacts the door frame and interior side of the flange. Ensure that the jamb flashing is positioned 1-1/2 inch below the top edge of the head flashing. Jamb flashing adhesive must come in contact with head flashing adhesive by one inch.
- D. Remove the outer release paper and adhere the flashing to the door frame. Use the inner release paper to form a tight seal in the corner.
- E. Remove the inner release paper and adhere the flashing to the back of the flange.
- F. Repeat on opposite jamb.



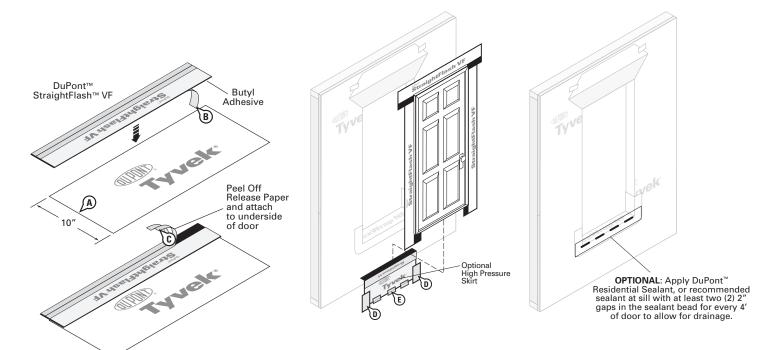
- A. Beginning at the junction of the jamb and head, and away from the corner, cut the DuPont™ Straightflash™ VF at a 45° angle. Repeat the procedure at the junction of the sill and jamb.
- B. Fold cut jamb flashing parallel to the door frame so that the jamb flashing lies flat.
- C. Fold remaining jamb flashing flaps down at all corners and adhere to the door frame.



STEP 9 (OPTIONAL) - HIGH PRESSURE SKIRT

For extreme weather conditions, performance requirements exceeding ASTM E1677, or window/door design ratings of DP45 or greater, see *General Instructions*.

- A. Create the high pressure skirt by cutting a piece of DuPont™ Tyvek® WRB 1" wider than the width of door opening and approximately 10" in height.
- B. Cut a piece of DuPont™ StraightFlash™ VF to the same width of skirt. Remove release paper from one side of DuPont™ StraightFlash™ VF and adhere to DuPont™ Tyvek® WRB. The skirt may be made with either DuPont™ StraightFlash™ VF or DuPont™ StraightFlash™.
- C. Remove the release paper from the other side of DuPont™ StraightFlash™ VF and adhere the butyl adhesive at the sill skirt to the underside of the door threshold behind the jamb flashing.
- D. After installation of door, secure edges of the optional skirt with two 4" pieces of DuPont™ StraightFlash™.
- E. Tape the bottom of the optional skirt to allow for drainage and to minimize wind damage during construction.

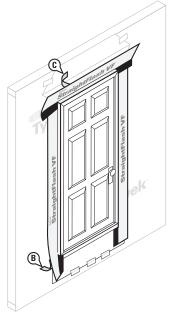


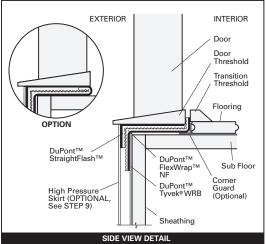
STEP 10

- A. Install door according to manufacturer's installation instructions.
- B. Remove the remaining release paper from the DuPont™ StraightFlash™ VF jamb flashing and press firmly to adhere the butyl adhesive to the DuPont™ Tyvek® WRB.
- C. Remove the release paper at the head and adhere the DuPont™ StraightFlash™ VF to the wall surface.

OPTIONAL: Create back dam by folding back narrow section of DuPont™ FlexWrap™ NF: Some flooring cannot accommodate a back dam. In that case fold the 1" back dam on top of the 9" DuPont™ FlexWrap™ NF in the sill. Door will be installed on top of 1" fold to create a back dam.

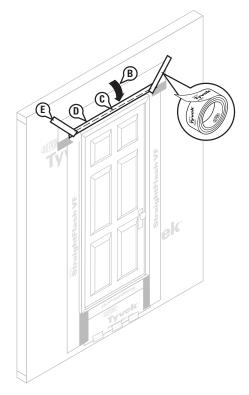
OPTIONAL: Cover exposed butyl with DuPont™ StraightFlash™ or DuPont™ Flashing Tape.





STEP 11 (RECOMMENDED BEST PRACTICE)

- A. **OPTIONAL:** If installing a drip cap as part of the door installation **BEFORE** the DuPont™ Tyvek® WRB head flap is flipped down and sealed, see Drip Cap Installation Section and refer to Option 2.
- B. Flip down upper flap of DuPont™ Tyvek® WRB so it lays flat across head flashing.
- C. Cut ~1" strip of the DuPont™ Tyvek® WRB at lower horizontal edge of head flap.
- D. Tape seams as shown. **DO NOT TAPE** at bottom of door. At the head, continuous tape seams as shown with DuPont™ Tyvek® Tape; if an air barrier is not required or if additional drainage is desired. Skip-taping at the head is acceptable.
- E. Tape down diagonal seams of DuPont™ Tyvek® WRB. **OPTIONAL**: If installing a drip cap **AFTER** the DuPont™ Tyvek® WRB head flap is flipped down and sealed, see Drip Cap Installation Section and refer to Option 3.

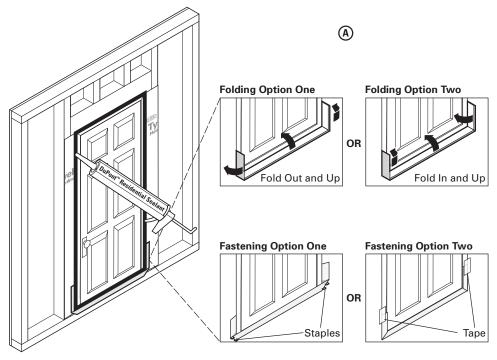


STEP 12

Final Step

- A. When the interior flooring is ready to install, remove release paper and use Folding Option One or Two to form back dam.
- B. Install DuPont™ Residential Sealant, or recommended sealant, (and backer rod as necessary) around the door opening at the interior. It is also acceptable to use DuPont™ Window & Door Foam or recommended foam on jambs and head, but it should not be used at sill and 6" up the jambs from the sill. The seal created by the sealant (and backer rod as necessary) or foam will also serve as a back dam. DuPont™ Residential Sealant should be tooled flat to allow the natural curing process to create a concave shape. Be sure that the sealant penetrates the grooves of the DuPont™ FlexWrap NF™ around the sill.

NOTE: Installations that specify a window/door design rating of DP45 or greater require extra precautions. See *General Instructions* for performance requirements exceeding this design rating.



Non-Flanged Window AFTER DuPont™ Tyvek® WRB Is Installed

Ensure DuPont™ StraightFlash™ VF logo side faces the exterior.

This method applies to the following products:

DuPont[™] StraightFlash[™], DuPont[™] StraightFlash[™] VF, DuPont[™] Flashing Tape

STEP 1

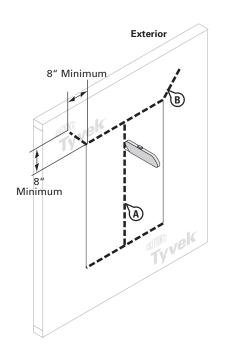
Prepare the DuPont[™] Tyvek[®] WRB for window installation:

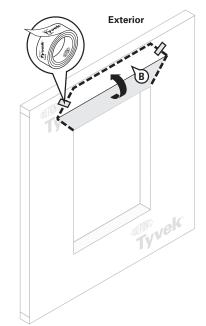
- A. Make an "I-Cut" (Standard I-Cut) in the DuPont™ Tyvek® WRB (modified I-Cut is also accepted). For an "I-Cut", begin with a horizontal cut across the bottom and the top of the window frame. From the center, cut straight down to the sill.
- B. Cut two 45 degree slits a minimum of 8" extending from the corner of the window head, up and away from the window opening. This will create a flap above the rough opening to expose sheathing or framing members to allow head flashing installation. Flip head flap up and temporarily secure with DuPont™ Tyvek® Tape.

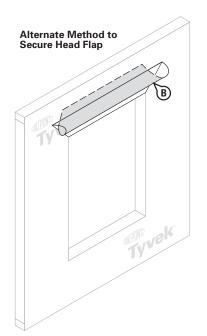
ALTERNATE METHOD TO SECURE HEAD FLAP: In lieu of temporarily taping, the head flap can be tucked under the DuPont™ Tyvek® WRB.

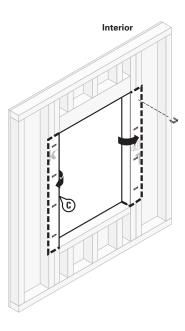
NOTE: Some windows and flashing widths may require longer slits.

C. Fold side flaps into rough opening and secure to inside wall. Cut off excess flaps if desired.

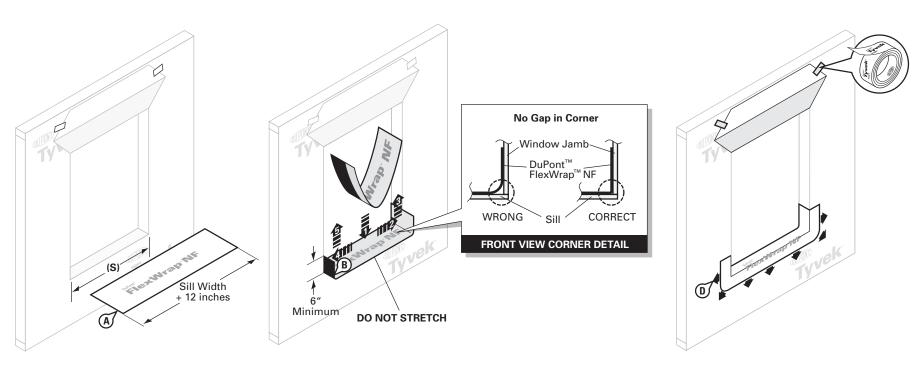






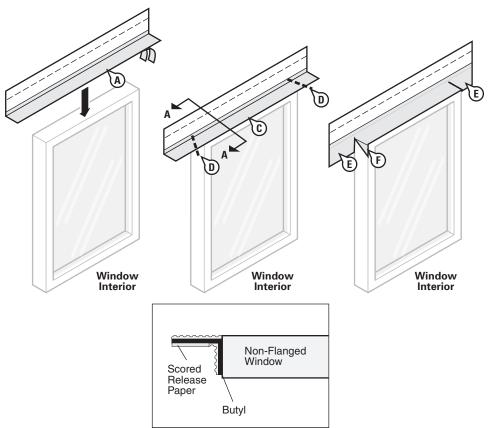


- A. Cut DuPont™ FlexWrap™ NF at least 12" **LONGER** than width of rough opening sill (S). Use roll widths sufficient to achieve a minimum of 1" adhesion BEYOND where the window frame will be located, ensuring 2"-3" adhesion onto the face of the wall.
- B. Remove wide piece of release paper. Position on horizontal sill by aligning the inside edge of the narrow release paper with the face of the wall to ensure 2"−3" of the FlexWrap™ NF will be adhered to the face of the wall with a minimum of 6" up each jamb. Adhere into rough opening.
- C. Remove narrow release paper.
- D. Fan out FlexWrap™ NF at corners and adhere onto face of wall. Continue adhering onto face of wall along sill. Coverage of DuPont™ FlexWrap™ NF should be 2"-3" onto the face of the wall.



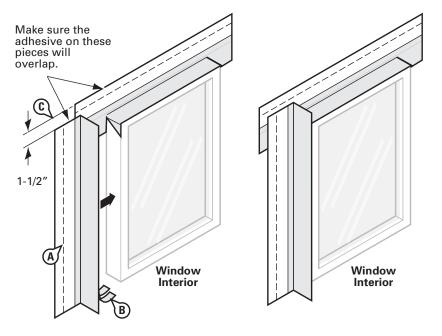
STEP 3

- A. Prepare head flashing by cutting a piece of DuPont™ StraightFlash™ VF at least 12" **LONGER** than the head length.
- B. Remove the release paper from one side of DuPont™ StraightFlash™ VF.
- C. Center the flashing along the length of the window and position so that it contacts the window frame.
- D. Beginning at the junction of the jamb and head and away from the corners, cut the DuPont™ Straightflash™ VF at a 45° angle.
- E. Fold the newly created flashing flaps down parallel to the window frame.
- F. Fold remaining head flashing flaps down onto the jamb.



STEP 4

- A. Prepare jamb flashing by cutting a piece of DuPont™ StraightFlash™ VF at least 6" **LONGER** than the jamb length.
- B. Remove the release paper from one side of DuPont™ StraightFlash™ VF.
- C. Position the DuPont™ StraightFlash™ VF so that it contacts the window frame up to the exterior face of the window. Ensure that the jamb flashing is positioned 1-1/2 inches below top of head flashing. Jamb flashing adhesive must come in contact with head flashing adhesive and overlap by one inch.
- D. Repeat on opposite jamb.



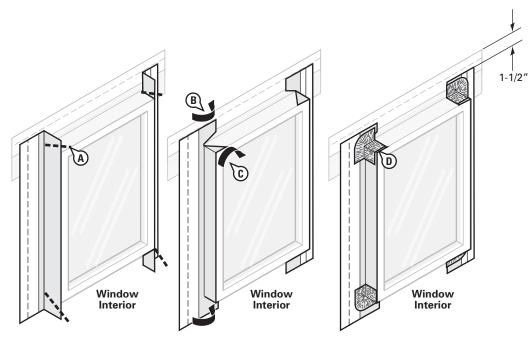
VIEW A-A

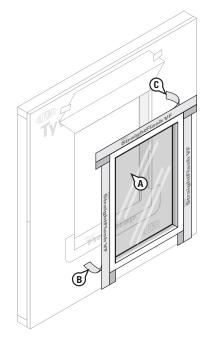
STEP 5

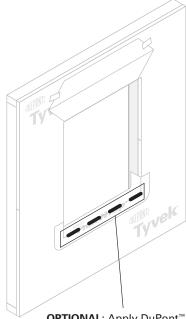
- A. Beginning at the junction of the jambs and the head, and away from the corners, cut the DuPont™ StraightFlash™ VF at a 45° angle. Repeat the procedure at the junction of the sill and jambs.
- B. Fold cut jamb flashing parallel to the window frame so that the jamb flashing lies flat.
- C. Fold remaining jamb flashing flaps down at all corners and adhere to the window frame.
- D. Cut four 3"x 3" pieces of DuPont™ FlexWrap™ NF and add patches to corners of the window.

STEP 6

- A. Install the window per manufacturer's instructions.
- B. Remove the remaining release paper from the DuPont™ StraightFlash™ VF jamb flashing and press firmly to adhere the butyl adhesive to the DuPont™ Tyvek® WRB.
- C. Remove the release paper at the head and adhere the DuPont[™] StraightFlash[™] VF to the wall surface.







OPTIONAL: Apply DuPont™
Residential Sealant, or recommended sealant at sill with at least two (2) 2" gaps in the sealant bead for every 4' of window to allow for drainage.



INCORRECT

DuPont™ FlexWrap™ NF
reverse flashed



INCORRECT
DuPont™ StraightFlash™
flush with DuPont™
FlexWrap™ NF



CORRECT

DuPont™ StraightFlash™
overlaps DuPont™
FlexWrap™ NF

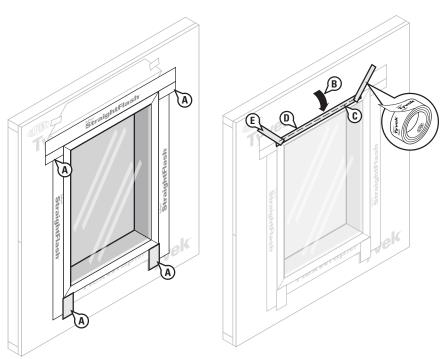
NOTE: Do not reverse shingle. DuPont™ StraightFlash™ must overlap DuPont™ FlexWrap™ NF and adhere to the substrate.

STEP 7

A. **OPTIONAL:** Cover exposed butyl with DuPont[™] StraightFlash[™], DuPont[™] Flashing Tape or DuPont[™] Tyvek[®] Tape.

OPTIONAL: If installing a drip cap as part of the window installation **BEFORE** the DuPont™ Tyvek® WRB head flap is flipped down and sealed, see Drip Cap Installation Section and refer to Option 2.

- B. Flip down upper flap of DuPont™ Tyvek® WRB so it lays flat across head flashing.
- B. Cut ~1" strip of the DuPont™ Tyvek® WRB at lower horizontal edge of head flap.
- D. Tape seams as shown. **DO NOT TAPE** at bottom of window. At the head, continuous tape seams as shown with DuPont™ Tyvek® Tape. Skip-taping at the head is acceptable if an air barrier is not required or if additional drainage is desired.
- E. Tape down diagonal seams of DuPont™ Tyvek® WRB. **OPTIONAL**: If installing a drip cap **AFTER** the DuPont™ Tyvek® WRB head flap is flipped down and sealed, see Drip Cap Installation Section and refer to Option 3.

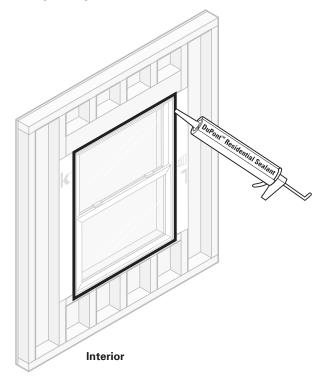


STEP 8

Final Step

Install DuPont™ Residential Sealant, or recommended sealant, (and backer rod as necessary) around the window opening at the interior. It is also acceptable to use DuPont™ Window & Door Foam or recommended foam on jambs and head, but it should not be used at sill and 6″ up the jambs from the sill. The seal created by the sealant (and backer rod as necessary) or foam will also serve as a back dam. **DuPont™** Residential Sealant should be tooled flat to allow the natural curing process to create a concave shape. Be sure that the sealant penetrates the grooves of the **DuPont™** FlexWrap NF™ around the sill.

NOTE: Installations that specify a window/door design rating of DP45 or greater require extra precautions. See *General Instructions* for performance requirements exceeding this design rating.



Non-Flanged Door AFTER DuPont™ Tyvek® WRB Is Installed

This installation guide is intended for doors installed above grade and/or with wood floor construction.

This method applies to the following products:

 DuPont[™] StraightFlash[™], DuPont[™] StraightFlash[™] VF, DuPont[™] FlexWrap[™] NF, and DuPont[™] Flashing Tape

STEP 1

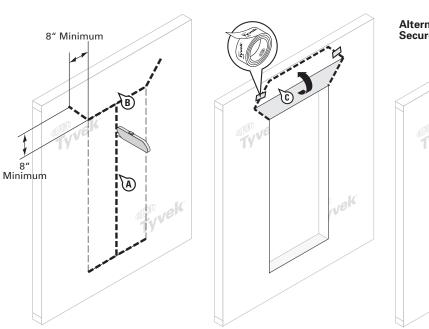
Prepare the DuPont[™] Tyvek[®] WRB for door installation:

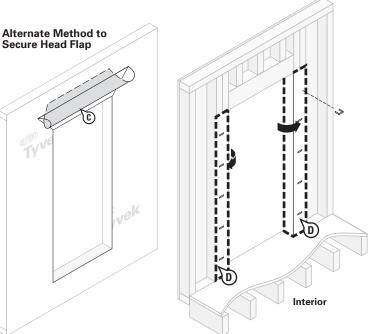
- A. Make an "I-Cut" (Standard I-Cut) in the DuPont™ Tyvek® WRB. For an "I-Cut", begin with a horizontal cut across the bottom and the top of the door frame. From the center, cut straight down to the sill.
- B. Cut two 45 degree slits a minimum of 8" extending from the corner of the door head, up and away from door opening. This will create a flap above the rough opening to expose sheathing or framing members to allow head flashing installation (see step 9). **NOTE:** Some doors and flashing widths may require longer slits.

C. Flip head flap up and temporarily secure with DuPont[™] Tyvek[®] Tape.

ALTERNATE METHOD TO SECURE HEAD FLAP: In lieu of temporarily taping, the head flap can be tucked under the DuPont™ Tyvek® WRB.

D. Fold side flaps into rough opening, and secure to inside wall framing. Cut off excess flaps if desired.

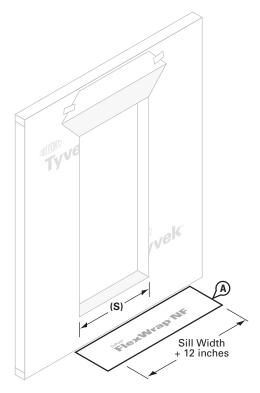


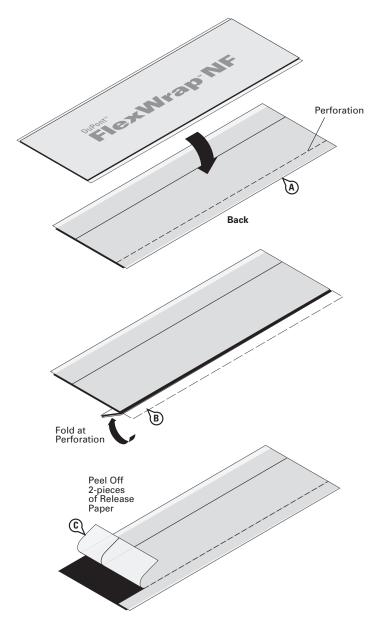


STEP 2

Preparation of sill flashing:

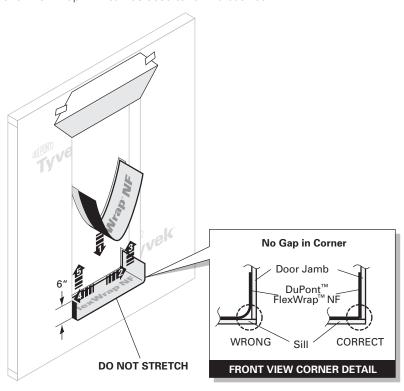
- A. Cut 9" DuPont™ FlexWrap™ NF at least 12" **LONGER** than width of the sill (S).
- B. 9" DuPont™ FlexWrap™ NF has perforated release paper to help with the formation of the back back dam (see Step 9). To ensure that the perforation tears cleanly, fold the perforation 180° and crease the flashing.
- C. Remove the two widest pieces of release paper leaving the narrowest release paper on the flashing. When the finished floor is applied, the release paper can be removed and the back dam can be completed.





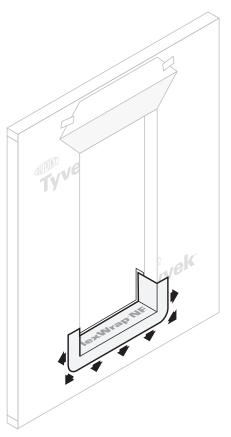
STEP 3

Position the sill flashing as indicated so the section with the release paper still attached extends past the door threshold on the inside. Ensure that 2"−3" of the FlexWrap™ NF will be adhered to the face of the wall with a minimum of 6" up each jamb. Adhere into rough opening. When the 1" of release paper is removed, the remaining section of DuPont™ FlexWrap™ NF can be used to form a back dam.

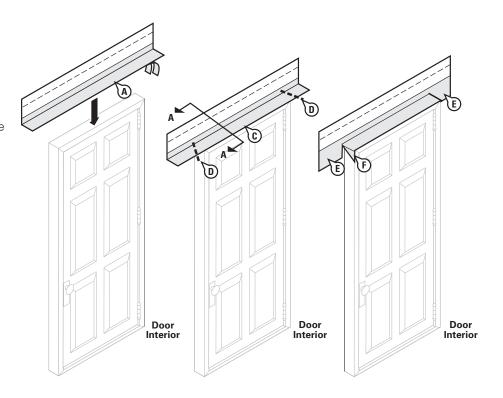


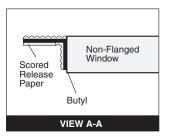
STEP 4

Fan $DuPont^{T}$ FlexWrap NF at bottom corners onto face of wall. Coverage of $DuPont^{T}$ FlexWrap NF should be 2" – 3" onto the face of the wall.

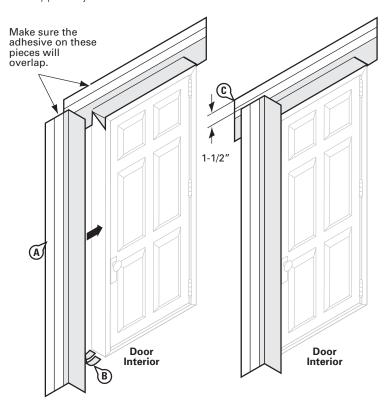


- A. Prepare head flashing by cutting a piece of DuPont™ StraightFlash™ VF at least 12" **LONGER** than the head length.
- B. Remove the release paper from one side of DuPont™ StraightFlash™ VF.
- C. Center the DuPont™ StraightFlash™ VF along the length of the door and position so that it contacts the door frame.
- D. Beginning at the junction of the jamb and head, and away from the corners, cut the DuPont™ StraightFlash™ VF at a 45° angle.
- E. Fold the newly created flashing flaps down flat.
- F. Fold the remaining head flashing flaps down and adhere to the jamb frame.

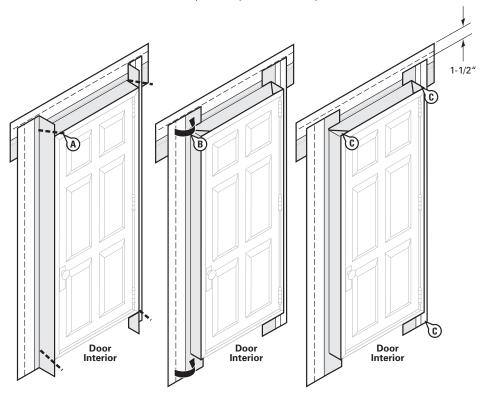


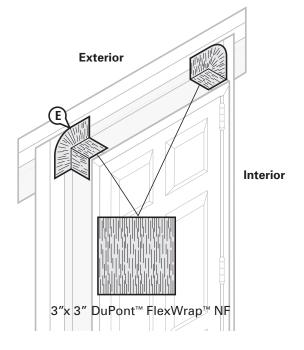


- A. Prepare jamb flashing by cutting a piece of DuPont™ StraightFlash™ VF at least 6" **LONGER** than the jamb length.
- B. Remove the release paper from one side of DuPont™ StraightFlash™ VF.
- C. Position the DuPont™ StraightFlash™ VF so that it contacts the door frame up to the exterior face of the door. Ensure that the jamb flashing is positioned 1-1/2 inches below top of head flashing. Jamb flashing adhesive must come in contact with head flashing adhesive and overlap by one inch.
- D. Repeat on opposite jamb.



- A. Beginning at the junction of the jamb and the head, and away from the corner, cut the DuPont™ StraightFlash™ VF at a 45° angle. Repeat the procedure at the junction of the sill and jambs.
- B. Fold cut jamb flashing parallel to the door frame so that the jamb flashing lies flat.
- C. Fold remaining jamb flashing flaps down at all corners and adhere to the door frame.
- D. Repeat on opposite jamb.
- E. Cut two 3" x 3" DuPont™ FlexWrap™ NF squares and add patches to corners of the door.

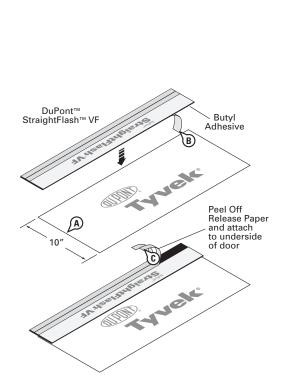


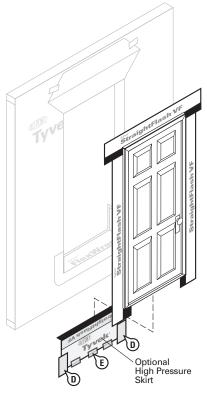


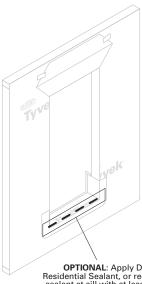
STEP 8 (OPTIONAL) - HIGH PRESSURE SKIRT (Completing installation of flashing for non-flanged door)

For extreme weather conditions, performance requirements exceeding ASTM E1677, or window/door design ratings of DP45 or greater, see *General Instructions*.

- A. Create the high pressure skirt by cutting a piece of DuPont™ Tyvek® WRB 1" wider than the width of door opening and approximately 10" in height.
- B. Cut a piece of DuPont™ StraightFlash™ VF to the same width of skirt. Remove release paper from one side of DuPont™ StraightFlash™ VF and adhere to DuPont™ Tyvek® WRB. The skirt may be made with either DuPont™ StraightFlash™ VF or DuPont™ StraightFlash™.
- C. Remove the release paper from the other side of DuPont™ StraightFlash™ VF and adhere the butyl adhesive at the sill skirt to the underside of the door threshold behind the jamb flashing.
- D. After installation of door, secure edges of the optional skirt with two 4" pieces of DuPont™ StraightFlash™.
- E. Tape the bottom of the optional skirt to allow for drainage and to minimize wind damage during construction.







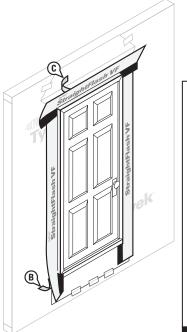
STEP 9

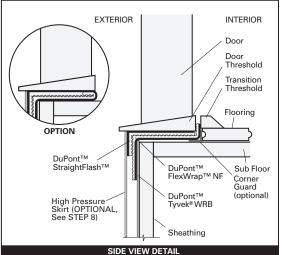
- A. Install door according to manufacturer's installation instructions.
- B. Remove the remaining release paper from the DuPont™ StraightFlash™ VF jamb flashing and press firmly to adhere the butyl adhesive to the DuPont™ Tyvek® WRB.
- C. Remove the release paper at the head and adhere it to the wall surface.

OPTIONAL: Create back dam by folding back narrow section of DuPont™

FlexWrap™ NF: Some flooring cannot accommodate a back dam. In that case fold the 1" back dam on top of the 9" DuPont™ FlexWrap™ NF in the sill. Door will be installed on top of 1" fold to create a back dam.

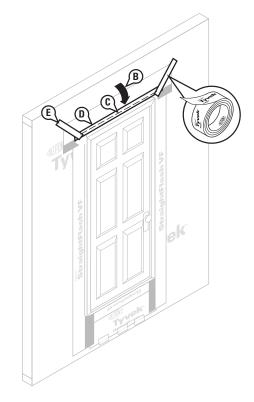
OPTIONAL: Cover exposed butyl with DuPont™ StraightFlash™ or DuPont™ Flashing Tape.





STEP 10 (RECOMMENDED BEST PRACTICE)

- A. **OPTIONAL:** If installing a drip cap as part of the door installation **BEFORE** the DuPont™ Tyvek® WRB head flap is flipped down and sealed, see Drip Cap Installation Section and refer to Option 2.
- B. Flip down upper flap of DuPont™ Tyvek® WRB so it lays flat across head flashing.
- C. Cut ~1" strip of the DuPont™ Tyvek® WRB at lower horizontal edge of head flap.
- D. Tape seams as shown. **DO NOT TAPE** at bottom of door. At the head, continuous tape seams as shown with DuPont™ Tyvek® Tape. Skip-taping at the head is acceptable if an air barrier is not required or if additional drainage is desired.
- E. Tape down diagonal seams of DuPont™ Tyvek® WRB. **OPTIONAL**: If installing a drip cap **AFTER** the DuPont™ Tyvek® WRB head flap is flipped down and sealed, see Drip Cap Installation Section and refer to Option 3.

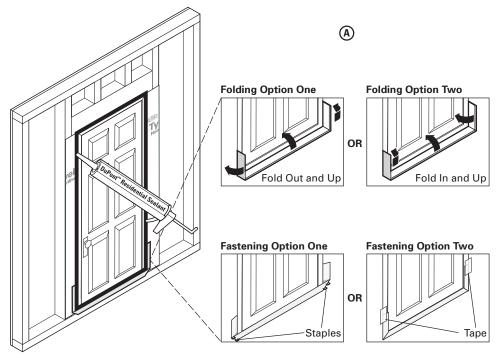


STEP 11

Final Step

- A. When the interior flooring is ready to install, remove release paper and use Folding Option One or Two to form back dam.
- B. Install DuPont™ Residential Sealant, or recommended sealant, (and backer rod as necessary) around the door opening at the interior. It is also acceptable to use DuPont™ Window & Door Foam or recommended foam on jambs and head, but it should not be used at sill and 6" up the jambs from the sill. The seal created by the sealant (and backer rod as necessary) or foam will also serve as a back dam. DuPont™ Residential Sealant should be tooled flat to allow the natural curing process to create a concave shape. Be sure that the sealant penetrates the grooves of the DuPont™ FlexWrap™ NF around the sill.

NOTE: Installations that specify a window/door design rating of DP45 or greater require extra precautions. See *General Instructions* for performance requirements exceeding this design rating.



Integral Flanged Window with a Wood Buck Bump-Out AFTER DuPont™ Tyvek® WRB is Installed

This method applies to the following products:

DuPont[™] StraightFlash[™], DuPont[™] FlexWrap[™] NF and DuPont[™] Flashing Tape

STEP 1

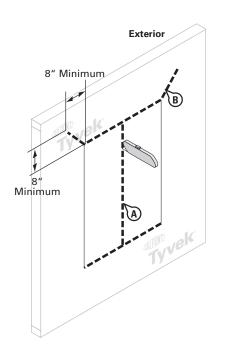
Prepare WRB for window installation:

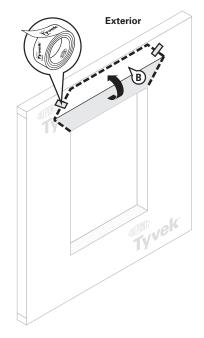
- A. Make an "I-Cut" (Standard I-Cut) in the WRB (modified I-Cut is also accepted). For an "I-Cut", begin with a horizontal cut across the bottom and the top of the window frame (for round top windows, the cut should begin above the mull joint). From the center, cut straight down to the sill.
- B. Cut two 45 degree slits a minimum of 8" extending from the corner of the window head, up and away from the window opening. This will create a flap above the rough opening to expose sheathing or framing members to allow head flashing installation. Flip head flap up and temporarily secure with DuPont™ Tyvek® Tape.

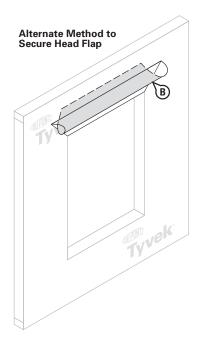
ALTERNATE METHOD TO SECURE HEAD FLAP: In lieu of temporarily taping, the head flap can be tucked under the DuPont™ Tyvek® WRB.

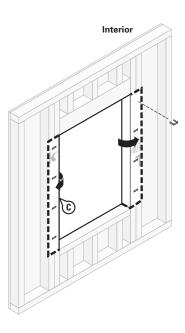
NOTE: Some windows and flashing widths may require longer slits.

C. Fold side flaps into rough opening and secure to inside wall. Cut off excess flaps if desired.



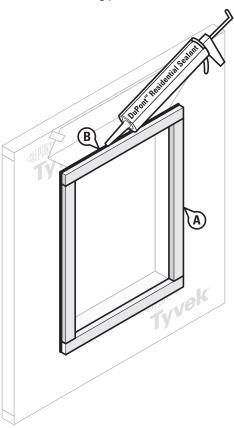




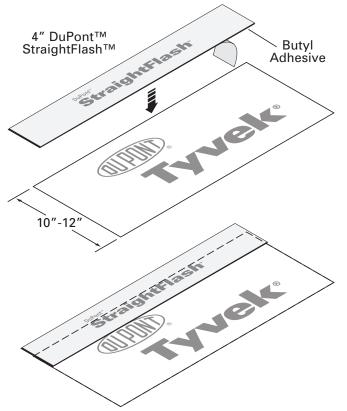


STEP 2

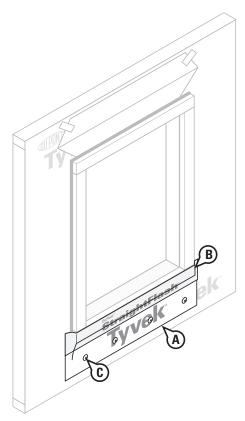
- A. Install wood buck bump-out per Architect's guides. Securely fasten in place.
- B. Apply DuPont™ Residential Sealant, or recommended sealant, on 3 sides (jambs and head) of wood buck, and seal wood buck to wall. DuPont™ Residential Sealant should be tooled flat to allow the natural curing process to create a concave shape.



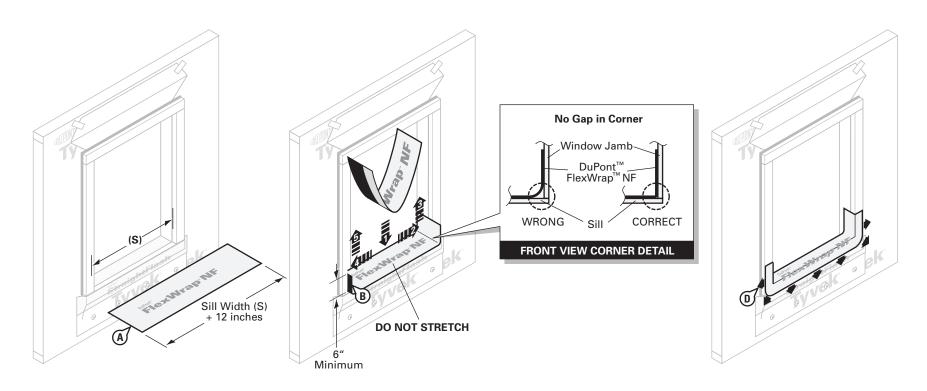
- A. Cut DuPont™ Tyvek® WRB a minimum of 10"-12" wide and minimum 12" **LONGER** than the width of the window.
- B. Cut 4" wide DuPont™ StraightFlash™ or DuPont™ Flashing Tape the same length as the DuPont™ Tyvek® WRB.*
- C. Remove release paper and 2" of the exposed butyl onto the DuPont™ Tyvek® WRB.



- A. After DuPont™ Tyvek® WRB skirt is constructed, remove remaining release paper and install onto face of sill wood buck bump-out just below the horizontal sill.
- B. Fold excess flashing around the corner of the wood buck bump-out and onto the face of the wall.
- C. Apply DuPont™ Tyvek® Wrap Cap screws or appropriate fasteners at each stud line to secure DuPont™ Tyvek® WRB skirt.

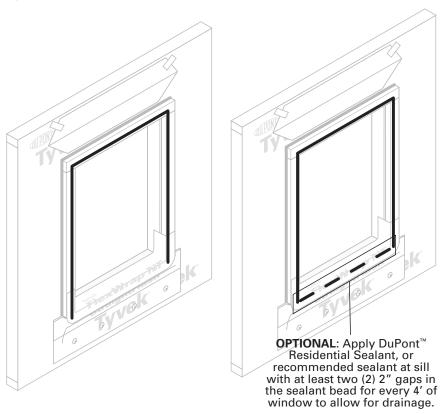


- A. Cut DuPont™ FlexWrap™ NF at least 12" **LONGER** than width of rough opening sill (S). Use roll widths sufficient to achieve a minimum of 1" adhesion BEYOND where the window frame will be located, ensuring 2"–3" adhesion onto the face of the wood buck bump-out.
- B. Remove wide piece of release paper. Position on horizontal sill by aligning the inside edge of the narrow release paper with the face of the wall to ensure 2"−3" of the FlexWrap™ NF will be adhered to the face of the wall with a minimum of 6" up each jamb. Adhere into rough opening.
- C. Remove narrow release paper.
- D. Fan out DuPont™ FlexWrap™ NF at corners and adhere onto wood buck bump out. Continue adhering onto face of wall along sill. Coverage of DuPont™ FlexWrap™ NF should be 2"-3" onto the face of the wood buck bump-out.



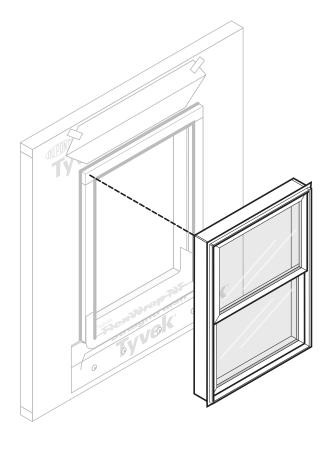
STEP 6

Apply DuPont™ Residential Sealant, or recommended sealant, on three sides (jambs and head) as shown below.



STEP 7

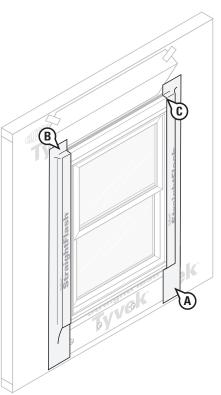
Install window according to manufacturer's instructions.



STEP 8

Cut 2 pieces of 9" DuPont™ StraightFlash™ for the jamb flashing. It is also acceptable to use 6" or 9" DuPont™ Flashing Tape depending on the size of the wood buck bump-out.

- A. Flashing should extend to the bottom of the DuPont[™] Tyvek[®] WRB skirt.
- B. The flashing should extend 1"-2" above the head of the wood buck bump-out.
- C. Fold the jamb flashing at the head . To minimize puckering, install as tightly as possible so the DuPont™ StraightFlash™ lies flat against the flange and wood buck bump out.



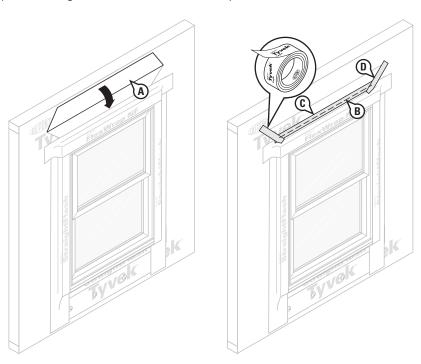
- A. If there is glass mat gypsum sheathing, apply DuPont™ Adhesive/Primer to sheathing surface.
- B. Install DuPont™ FlexWrap™ NF* at head of window and onto the flange of the window.
- C. Make sure at least 2" of DuPont™ FlexWrap™ NF is adhered to the face of the sheathing.
- *DuPont™ StraightFlash™ or DuPont™ Flashing Tape may be substituted for the DuPont™ FlexWrap™ NF at the head of the window.





STEP 10

- A. Flip down upper flap of DuPont™ Tyvek® WRB so it lays flat across head flashing.
- B. Cut ~1" strip of the DuPont™ Tyvek® WRB at lower horizontal edge of head flap.
- C. At the head, continuously tape seams as shown with DuPont™ Tyvek® Tape. Skiptaping at the head is acceptable if an air barrier is not required or if additional drainage is desired.
- D. Tape down diagonal seams of the DuPont™ Tyvek® WRB.

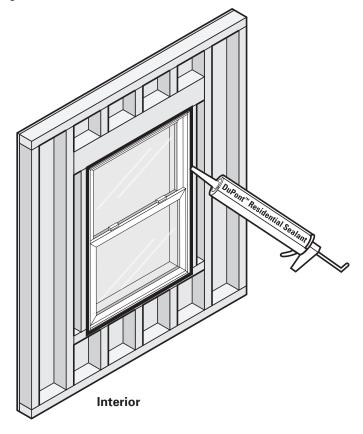


STEP 11

Final Step

Install DuPont™ Residential Sealant, or recommended sealant, (and backer rod as necessary) around the window opening at the interior. It is also acceptable to use DuPont™ Window & Door Foam or recommended foam on jambs and head, but it should not be used at sill and 6" up the jambs from the sill. The seal created by the sealant (and backer rod as necessary) or foam will also serve as a back dam. **DuPont™ Residential**Sealant should be tooled flat to allow the natural curing process to create a concave shape. Be sure that the sealant penetrates the grooves of the DuPont™ FlexWrap NF™ around the sill.

NOTE: Installations that specify a window/door design rating of DP45 or greater require extra precautions. See *General Instructions* for performance requirements exceeding this design rating.



Technical Specifications

DuPont™ Tyvek® WRBs used in construction products are made from 100% flash spunbonded high density polyethylene fibers which have been bonded together by heat and pressure, without binders or fillers, into a tough durable sheet structure. Additives have been incorporated into the polyethylene to provide ultraviolet light resistance. DuPont requires that DuPont™ Tyvek® CommercialWrap® and CommercialWrap® D be covered within nine months (270 days) of installation and that all other DuPont™ Tyvek® WRB's be covered within 4 months (120 days) of installation.

DuPont[™] self-adhered flashing products are made from a synthetic rubber adhesive and a laminate of polyethylene film, polypropelene film, elastic fiber, synthetic rubber adhesive, polyurethane adhesive, and a top sheet of flash spunbonded high density polyethylene fibers or polypropelene film. Additives have been incorporated into these materials to provide ultraviolet light resistance. DuPont requires that DuPont[™] FlexWrap[™] NF, and StraightFlash[™] be covered within nine months (270 days) of installation. DuPont requires that DuPont[™] Flashing Tape be covered within four months (120 days) of installation

Warning

DuPont™ Tyvek® WRBs are slippery and should not be used in any application where they will be walked on. In addition, because they are slippery, DuPont recommends using kickjacks, scaffolding, or lifts for exterior work above the first floor. If ladders must be used, extra caution must be taken to use them safely by following the requirements set forth in ANSI Standards 14.1, 14.2, and 14.5 for ladders made of wood, aluminum, and fiberglass, respectively. DuPont™ Tyvek® products are combustible and should be protected from flames and other high heat sources. DuPont™ Tyvek® products will melt at 275°F (135°C) and if the temperature of DuPont™ Tyvek® reaches 750°F (400°C), it will burn and the fire may spread and fall away from the point of ignition. For more information, call 1-800-44-Tyvek.

DuPont™ self-adhered flashing products and their release paper are slippery and should not be walked on. Remove release paper from work area immediately. DuPont™ self-adhered flashing products will melt at temperatures greater than 250°F (121°C). DuPont™ self-adhered flashing products are combustible and should be protected from flames and other high heat sources. DuPont™ self-adhered flashing products will not support combustion if the heat source is removed. However, if burning occurs, ignited droplets may fall away from the point of ignition. For more information, call 1-800-44-Tyvek.

DuPont™ Residential Sealant is irritating to skin, eyes, and respiratory tract. For proper usage, follow directions stated on the product label. For health information, refer to the Material Safety Data Sheet or call Chemtrec at 1-800-424-9300.

Note

When installed in conjunction with other building materials, DuPont™ self-adhered flashing products must be properly shingled with these materials such that water is diverted to the exterior of the wall system. DuPont™ Tyvek® products are air and water barriers and not the primary water barrier. The outer facade is the primary barrier. You must follow facade manufacturer's installation and maintenance requirements for all facade systems in order to maintain water holdout properties and ensure performance of DuPont™ Tyvek® WRBs. Use of additives, coatings or cleansers on or in the facade system may impact the performance of DuPont™ Tyvek® WRBs. DuPont™ Tyvek® Weatherization Systems products are to be used as outlined in this installation guideline. DuPont™ self-adhered flashing products should only be used to seal penetrations and flash openings in houses or buildings. DuPont™ self-adhered flashing products are not to be used in roofing applications. For superior protection against bulk water penetration, DuPont suggests a system combining a quality exterior facade, a good secondary air and water barrier and exterior sheathing, high quality windows and doors, and appropriate flashing materials paying attention to proper installation of each component. In a system where no exterior sheathing is used and DuPont™ Tyvek® WRBs are installed directly over the wall studs, exterior facade materials should be selected to ensure maximum protection against water intrusion. Careful workmanship and proper installation of each component is very important.

DuPont believes this information to be reliable and accurate. The information may be subject to revision as additional experience and knowledge is gained. It is the user's responsibility to determine the proper construction materials needed.

For complete warranty information please visit www.weatherization.tyvek.com or call 1-800-44-Tyvek.

This information is not intended to be used by others for advertising, promotion, or other publication for commercial purposes.

For more information about DuPont Weatherization Systems, please call 1-800-44-Tyvek or visit us at www.weatherization.tyvek.com

