

DuPont Self-Adhered Flashing Products Installation Guidelines

Air Barrier Rough Opening Treatment for Integral Flanged Windows **BEFORE** Water-Resistive Barrier (WRB) is Installed

For buildings less than 5 stories and low-rise multi-family residential buildings less than 6 stories.





Table of Contents

Applicable Products	3
Required Materials Based on Project Requirements, Details, and Specifications*	3
Warranty	3
General Instructions	3
Key Installation Requirements for Drainable Window/Door Installation Under the Limited Product and Labor Warranty	4
Integral Flanged Window BEFORE DuPont™ Tyvek® WRB Is Installed	5
Method 1 – Rough Opening Treatment With Single Piece of DuPont™ Tyvek® WRI	B 5
Method 2 – Rough Opening Treatment Using Strips of DuPont™ Tyvek® WRB	13
Drip Cap Installation with Integral Flanged Windows	23
Option 1	
Option 2	25
Option 3	27
Type Tight Typek T	



Applicable Products

Water-Resistive Barriers (WRB)

Product	Dimensions	Area
DuPont™ Tyvek® HomeWrap®	3 ft x 100 ft 3 ft x 165 ft 5 ft x 200 ft 9 ft x 100 ft 9 ft x 150 ft 10 ft x 150 ft 10 ft x 150 ft	300 sq ft 495 sq ft 1,000 sq ft 900 sq ft 1,350 sq ft 1,000 sq 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 10 ft x 125 ft	1,125 sq ft 1,250 sq ft
DuPont™ Tyvek® ThermaWrap™ LE	5 ft x 150 ft 9 ft x 100 ft	750 sq ft 900 sq ft
DuPont™ Tyvek® CommercialWrap®	5 ft x 200 ft 10 ft x 125 ft	1,000 sq ft 1,250 sq ft
DuPont™ Tyvek® CommercialWrap® D	5 ft x 200 ft 10 ft x 125 ft	1,000 sq ft 1,250 sq ft

Flashing Products

Product	Width
DuPont™ FlexWrap™ (Formerly DuPont™ FlexWrap™ NF)	6 in 9 in
DuPont™ StraightFlash™	4 in 9 in
DuPont™ VersaFlange™ (Formerly DuPont™ StraightFlash™ VF)	6 in
DuPont™ Flashing Tape	4 in 6 in 9 in 12 in

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

- DuPont[™] Tyvek[®] Tape
- DuPont™ Tyvek® Wrap Cap Fasteners or recommended fastening system
- · Great Stuff Pro™ Window & Door Polyurethane Foam Sealant
- DuPont™ Residential Sealant, or other recommended sealant
- DuPont™ Adhesive/Primer
- Backer Rod
- Brushes for Surface Preparation
- J-Roller

*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.

Warranty

Please refer to the <u>DuPont Weatherization Products 10-Year Limited Warranty for 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 Performance Building Solutions 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 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.

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**.

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

If 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™**. Then install **FlexWrap™** over sill and corner guard back dam. If using 6″ **FlexWrap™** 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 Products are not intended for through-wall flashing applications.

DO NOT STRETCH FlexWrap™ when installing along the length of sills or jambs. **FlexWrap**™ is only intended to be extended when fanned out at corners or curved sections.

DuPont Self-Adhered Flashing Products perform best when installed at temperatures above $25^{\circ}F$ ($-4^{\circ}C$).

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

Please call 1-800-448-9835, visit <u>building.dupont.com</u>, or consult your local DuPont™ Tyvek® Specialist for additional information and installation support.

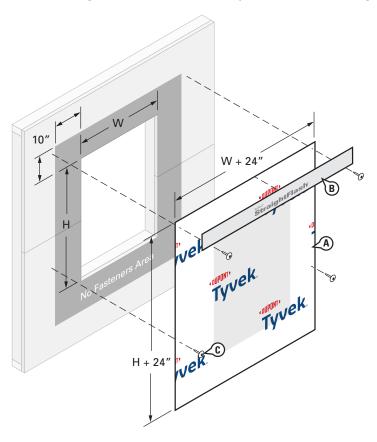
Key Installation Requirements for Drainable Window/Door Installation Under the Limited Product and Labor Warranty

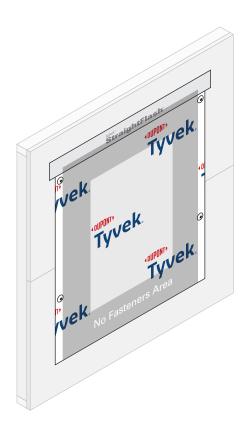
When flashing windows or doors, the following principles must be followed:

- When installed properly, DuPont™ StraightFlash™, FlexWrap™, 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 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 Products must
 be applied with a minimum 2" lap onto the WRB.
- DuPont requires that FlexWrap[™] 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.

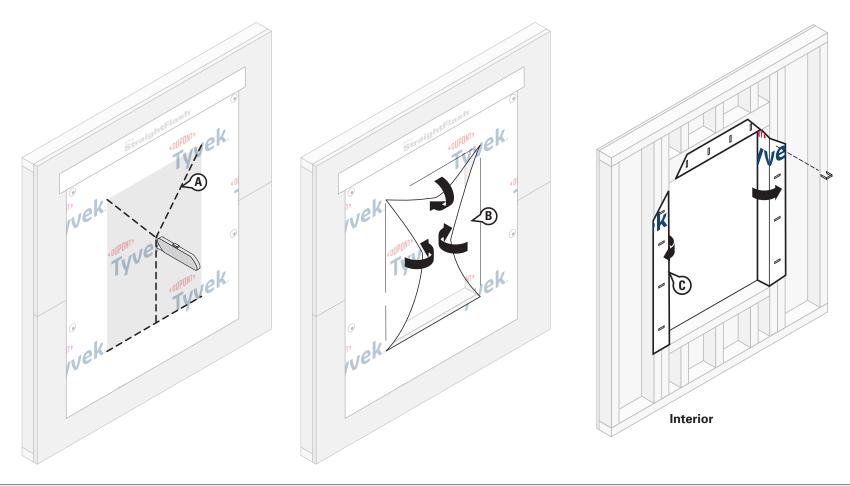
Method 1 – Rough Opening Treatment With Single Piece of DuPont™ Tyvek® WRB

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

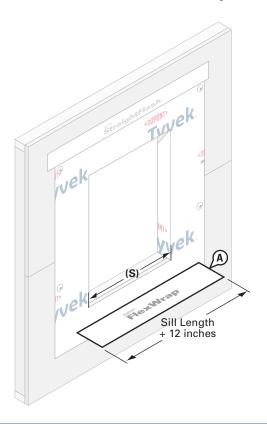




- A. Cut a piece of **Tyvek® WRB** that is 24" wider and taller than the window rough opening.
- B. Center the piece of **Tyvek® WRB** over the rough opening to allow a 12" width around all sides. Secure to sheathing along top edge using **StraightFlash™** or **DuPont™ Flashing Tape**.
- C. Install DuPont Tyvek Wrap Caps or recommended fastening system. Fasteners should not be installed within 10" of the edge of the rough opening along jambs and head, and no fasteners should be installed below the sill rough opening. Avoid placing fasteners where DuPont Self-Adhered Flashing Products will be installed.

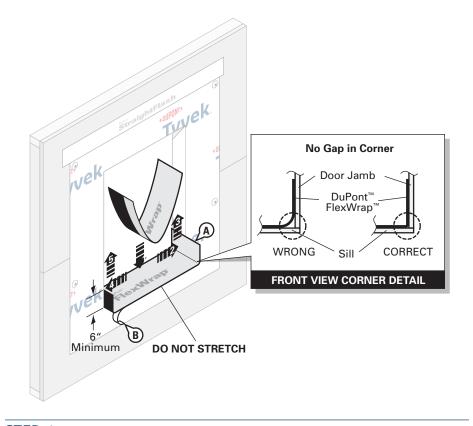


- A. Cut opening as shown.
- B. Fold head and jamb flaps into rough opening.
- C. Secure flaps to inside wall framing using staples. Cut off excess flaps if desired.

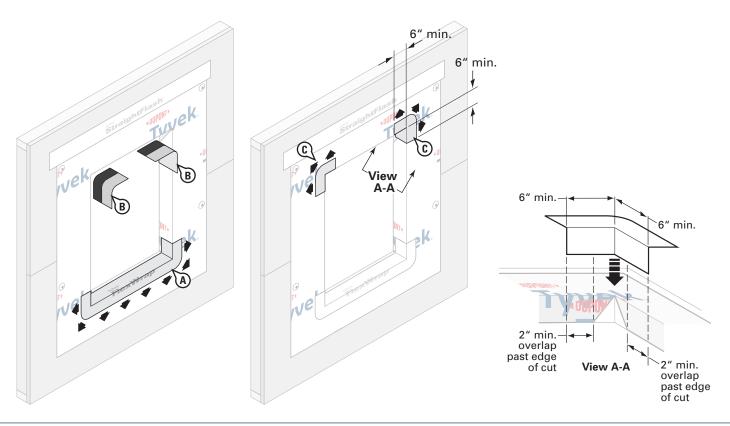


STEP 3

A. Cut **DuPont™ FlexWrap™** 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.



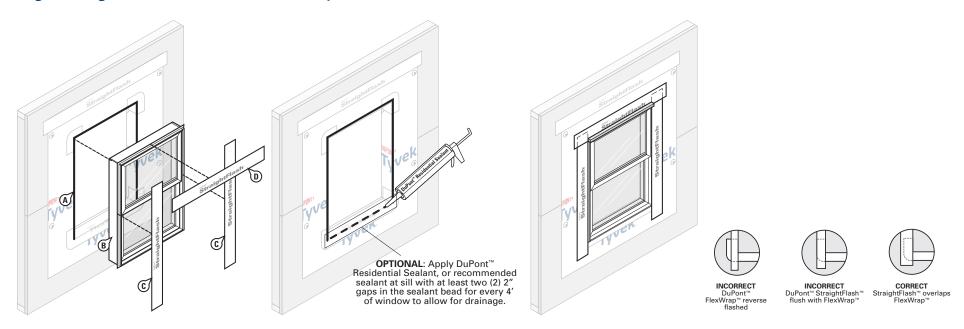
- A. Remove wide piece of release paper. Position **FlexWrap**™ on horizontal sill by aligning the inside edge of the narrow release paper with the face of the wall to ensure 2″– 3″ of the **FlexWrap**™ will be adhered to the face of the wall with a minimum of 6″ up each jamb. Adhere into rough opening.
- B. Remove narrow release paper.



STEP 5

- A. Fan out **DuPont™ FlexWrap™** at corners and adhere onto face of wall. Continue adhering onto face of wall along sill. Coverage of **FlexWrap™** should be 2″– 3″ onto the face of the wall.
- B. Cut (2) 12" long pieces of **FlexWrap**™ for top corners of rough opening. 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. Remove wide pieces of release paper. Install the cut pieces of **FlexWrap**™ into the rough opening at the top corners of the jamb and head so that the narrow release paper is aligned with the outer edges of the rough opening. Each piece should be folded tight into the corner and extend 6" onto the head and 6" down the jambs as shown.
- C. Remove the remaining release paper and fan each **DuPont™ FlexWrap™** corner pieces out onto the face of the wall.

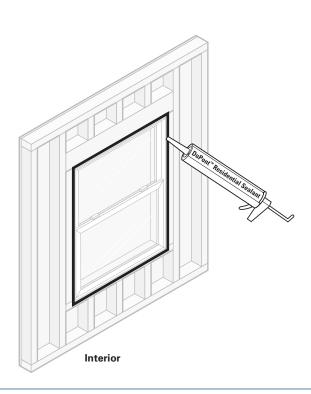
NOTE: Longer pieces of **FlexWrap**™ may be required to properly cover the exposed areas of the opening to establish a 2″ minimum overlap past edge of cut. See detail View A-A.



STEP 6

- A. Apply **DuPont™ Residential Sealant**, or recommended sealant, on three sides (jambs and head) as shown below.
- B. Install window according to manufacturer's instructions.
- C. Cut two pieces of **DuPont™ StraightFlash™**, **DuPont™ FlexWrap™** 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 product 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.
- D. Cut a piece of StraightFlash™, FlexWrap™ or DuPont™ Flashing Tape for head flashing, which should extend beyond the outer edges of the jamb flashings. Remove release paper and install to completely cover flange while also adhering to the face of the wall. 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. **StraightFlash**™ or **DuPont**™ **Flashing Tape** must overlap **FlexWrap**™ and adhere to the **Tyvek**® **WRB**.

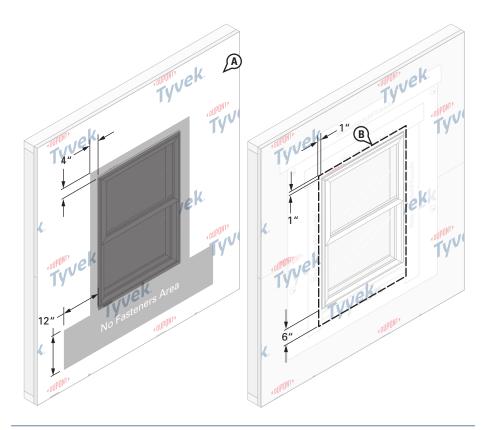


STEP 7

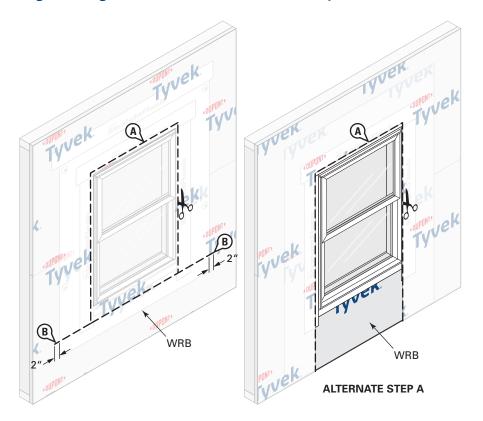
Seal Interior Opening

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, Great Stuff Pro™ Window & Door Polyurethane Foam Sealant, or recommended foam. When using DuPont™ Residential Sealant, tool sealant bead flat to allow the natural curing process to create a concave shape. Be sure that the sealant penetrates the grooves of the DuPont™ FlexWrap™ around the sill. When using Great Stuff Pro™ Window & Door Polyurethane Foam Sealant in perimeter openings less than 1/2″, apply using the plastic extension tip for the Great Stuff Pro™ Dispensing Gun during installation.

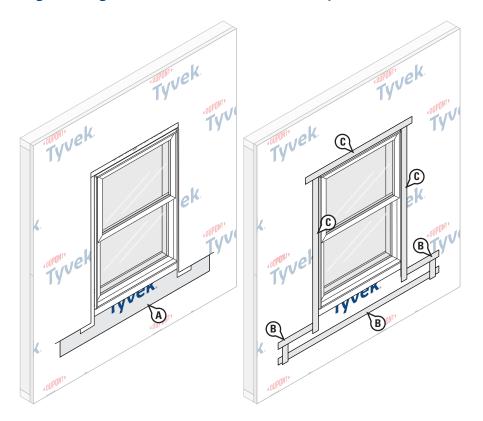
NOTE: Installations that specify a window/door design rating of DP45 or greater require extra precautions. See General Instructions for performance requirements exceeding this design rating.

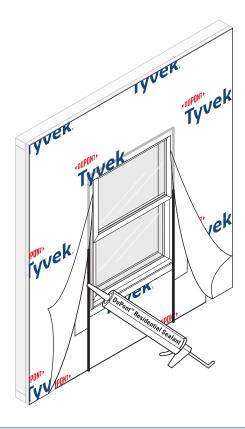


- A. Install the **Tyvek® WRB** according to the DuPont™ Tyvek® Water Resistive and Air Barriers Installation Guidelines. Do not install fasteners within 4" of the window frame at jambs and head and within 12" of the window frame at sill or location of **Tyvek® WRB** piece below sill of window.
- B. Mark a perimeter on the **Tyvek**° **WRB** around the rough opening a minimum of 1" from the jambs and head of the window frame, and 6" below the sill of the window frame.



- A. Cut the **Tyvek**° **WRB** along perimeter marking to expose window. Do not cut through the **DuPont Self-Adhered Flashing Products** or the piece of **Tyvek**° **WRB** underneath.
- B. ALTERNATE STEP A: If piece of **Tyvek® WRB** extends far enough below the sill rough opening to overlap the sill plate, base of wall flashing, or the **Tyvek® WRB** below, the **Tyvek® WRB** can be cut along jambs and head only to overlap the piece of **Tyvek® WRB** underneath.
- C. Create horizontal slits in the **Tyvek**° **WRB** at each lower corner of the perimeter cut that extend a minimum of 2" beyond the piece of **Tyvek**° **WRB** underneath.





STEP 10

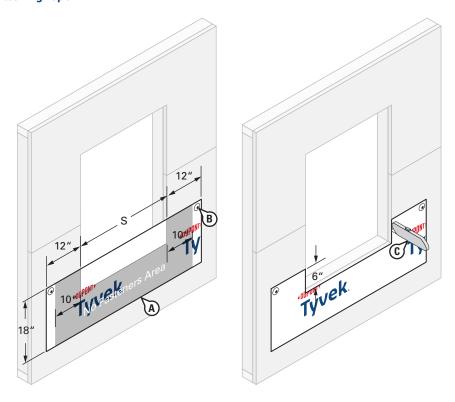
- A. Bring the bottom portion of the piece of **Tyvek**° **WRB** underneath through the sill perimeter cut and horizontal slits so it laps over the top layer of **Tyvek**° **WRB**.
- B. Working from bottom to top, install **DuPont™ Tyvek® Tape** to secure horizontal and vertical seams of **Tyvek® WRB** piece below sill.
- C. Install Tyvek® Tape along jambs and head to seal Tyvek® WRB around window.
 OPTIONAL: If installing a drip cap AFTER the Tyvek® WRB is installed and sealed, see Drip Cap Installation section and refer to Option 3.

Alternate Tape Detail

Place a continuous bead of **DuPont**™ **Residential Sealant**, or recommended sealant, around the jamb and head flashing under the **Tyvek® WRB**. Press the **Tyvek® WRB** securely into the sealant. **NOTE**: This option only applies when ALTERNATE STEP 9A is followed.

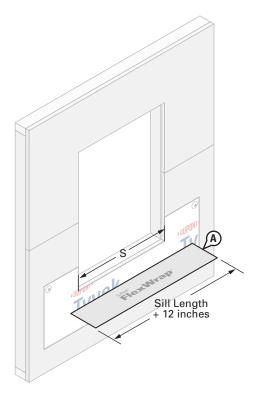
Method 2 - Rough Opening Treatment Using Strips of DuPont™ Tyvek® WRB Alternate Installation For Air Barrier Continuity Into Rough Opening

This method applies to **DuPont[™] StraightFlash[™]**, **DuPont[™] FlexWrap[™]** and **DuPont[™] Flashing Tape**.



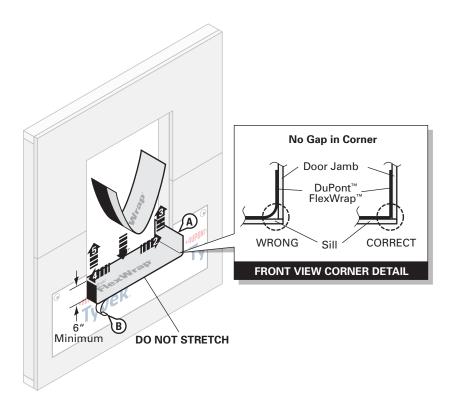


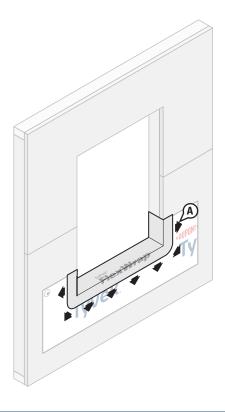
- A. Cut an apron made of **Tyvek**® **WRB** that is 24" LONGER than sill rough opening (S) and a minimum of 18" wide, or extend far enough below the sill to overlap the sill plate, base of wall flashing, or the **Tyvek**® **WRB** below.
- B. Position apron over rough opening to extend 12" beyond rough opening jambs and 6" above rough opening sill. The top of the apron should be securely attached to the wall using **DuPont™ Tyvek® Wrap Cap** Fasteners or recommended fasteners. Fasteners should not be installed within 10" of the edge of the rough opening along jambs, and no fasteners should be installed below the sill rough opening. Avoid placing **Tyvek® Wrap Cap** Fasteners where **DuPont Self-Adhered Flashing Products** will be installed.
- C. Cut apron along jamb and sill edges of rough opening as shown.



STEP 2

A. Cut **FlexWrap**[™] 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.



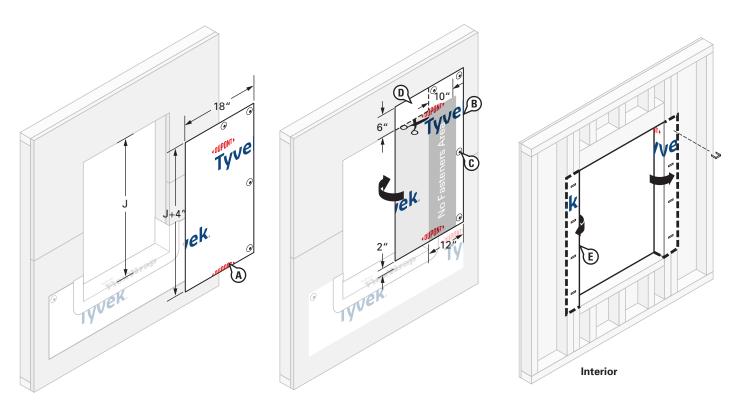


STEP 3

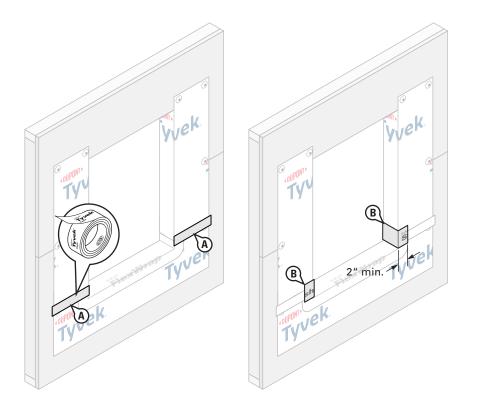
- A. Remove wide piece of release paper. Position **DuPont™ FlexWrap™** on horizontal sill by aligning the inside edge of the narrow release paper with the face of the wall to ensure 2″– 3″ of the **FlexWrap™** will be adhered to the face of the wall with a minimum of 6″ up each jamb. Adhere into rough opening.
- B. Remove narrow release paper.

STEP 4

A. Fan out **FlexWrap**™ at corners and adhere onto face of wall. Continue adhering onto face of wall along sill. Coverage of **FlexWrap**™ should be 2″–3″ onto the face of the wall.

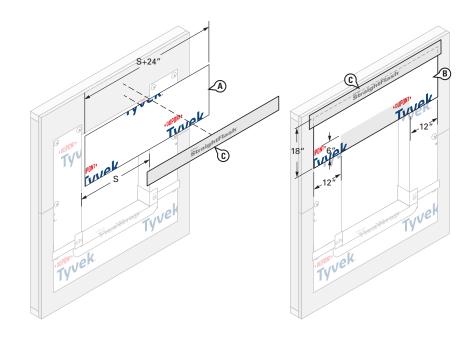


- A. Cut a piece of **Tyvek**° **WRB** that is 18" wide and 4" LONGER than jamb rough opening (J) to create jamb piece.
- B. Position piece to extend 12" beyond jamb rough opening and 2" above sill rough opening to overlap the apron and **DuPont™ FlexWrap™** at sill. The cut piece of **Tyvek® WRB** will extend 6" above rough opening.
- C. Secure to wall using DuPont™ Tyvek® Wrap Cap Fasteners or recommended fasteners. Fasteners should not be installed within 10" of the edge of the rough opening along jambs. Avoid placing Tyvek® Wrap Cap Fasteners where DuPont Self-Adhered Flashing Products will be installed.
- D. Cut along the edge of head rough opening and fold resulting flap into the rough opening.
- E. Secure to inside wall and cut off excess flap if desired.
- F. **OPTIONAL**: Remove piece of **Tyvek**° **WRB** at head by making a vertical cut at corner of the rough opening.
- G. Repeat Steps A thru E for opposite jamb.

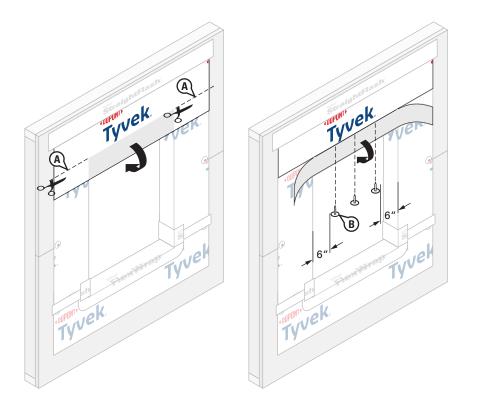




- A. Tape bottom edges of jamb liner seam along face of wall using **DuPont™ Tyvek® Tape**.
- B. Install 4" wide **DuPont™ StraightFlash™** or **DuPont™ Flashing Tape** along bottom edge of jamb liner in rough opening, extending onto the face of the wall by 2"-3".

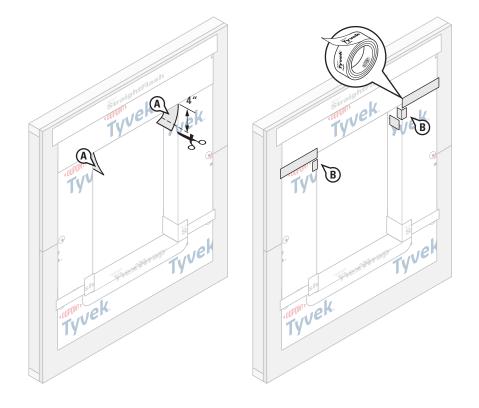


- A. Cut a piece of **Tyvek® WRB** that is 24" LONGER than the rough opening and 18" wide to create the head piece.
- B. Center over rough opening with the bottom edge extending below the rough opening head by 6".
- C. Secure to sheathing along top edge using $\mathbf{StraightFlash}^{\mathtt{m}}$ or $\mathbf{DuPont}^{\mathtt{m}}$ $\mathbf{Flashing}$ \mathbf{Tape} .

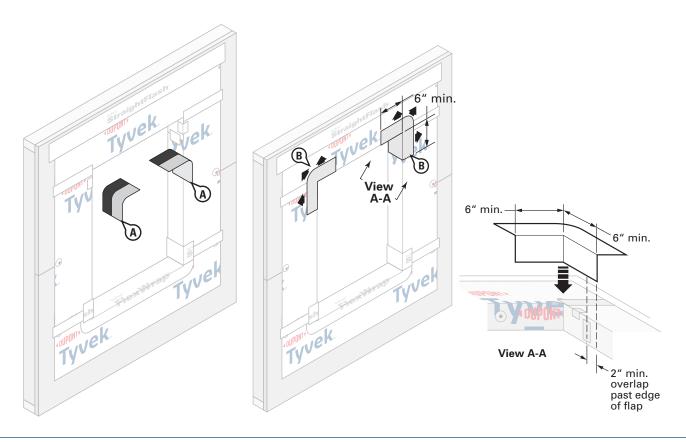




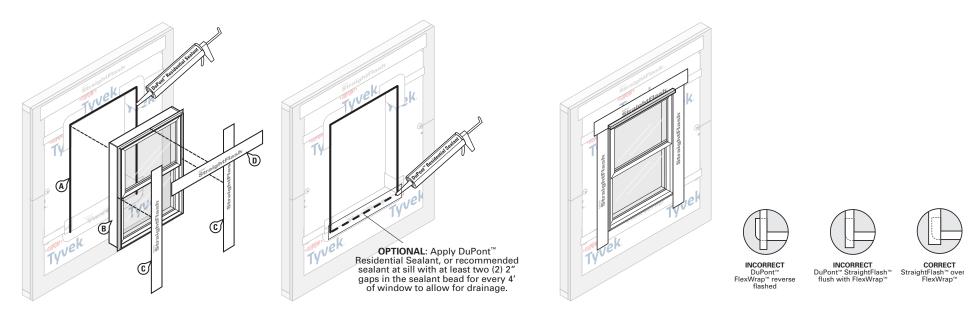
- A. Make horizontal cuts that that allow resulting flaps to be folded into rough opening. Cuts should be made carefully to avoid damaging the jamb pieces underneath, and should extend from each corner of the rough opening to the outside edges of head piece.
- B. Secure flap to head framing with **DuPont™ Tyvek® Wrap Caps** or recommended fastener system. Do not install fasteners within 6" of corners.



- A. Trim resulting flaps at each jamb to a length of 4" and temporarily secure with **DuPont™ Tyvek® Tape** to help facilitate installation of corner flashing in Step 10.
- B. Tape horizontal seams along face of wall using **Tyvek**° **Tape**.



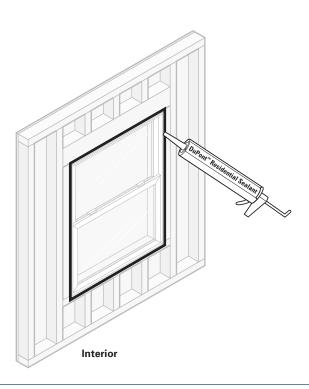
- A. Cut (2) 12" long pieces of **DuPont™ FlexWrap™** for top corners of rough opening. Use roll widths sufficient to achieve a minimum of 1" adhesion BEYOND where the window frame will be located, ensuring 2"− 3" adhesion onto the face of the wall. Remove wide pieces of release paper. Install the cut pieces of **FlexWrap™** into the rough opening at the top corners of the jamb and head so that the narrow release paper is aligned with the outer edges of the rough opening. Each piece should be folded tight into the corner and extend 6" onto the head and 6" down the jambs as shown. **NOTE**: Ensure a 2" min. overlap of **Tyvek® WRB** flap at jamb (see diagram below).
- B. Remove the remaining release paper and fan each **FlexWrap**™ corner piece out onto the face of the wall.



STEP 11

- A. Apply **DuPont™ Residential Sealant**, or recommended sealant, on three sides (jambs and head) as shown below.
- B. Install window according to manufacturer's instructions.
- C. Cut two pieces of **DuPont™ StraightFlash™**, **DuPont™ FlexWrap™** 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 Product** 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.
- D. Cut a piece of StraightFlash™, FlexWrap™ or DuPont™ Flashing Tape for head flashing, which should extend beyond the outer edges of the jamb flashings. Remove release paper and install to completely cover flange while also adhering to the face of the wall. 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. **StraightFlash**™, **FlexWrap**™ or **DuPont**™ **Flashing Tape** installed over flanges at head and jambs must overlap **FlexWrap**™ at sill and head corners and adhere to the piece of **Tyvek**® **WRB**.

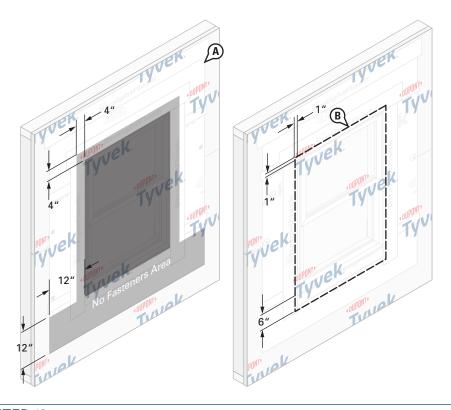


STEP 12

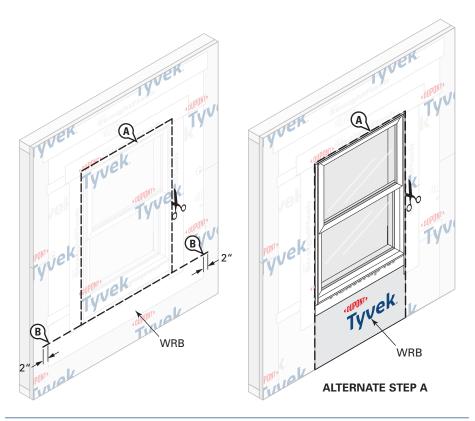
Seal Interior Opening

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, Great Stuff Pro™ Window & Door Polyurethane Foam Sealant,** or recommended foam. When using **DuPont™ Residential Sealant**, tool sealant bead flat to allow the natural curing process to create a concave shape. Be sure that the sealant penetrates the grooves of the **DuPont™ FlexWrap™** around the sill. When using **Great Stuff Pro™ Window & Door Polyurethane Foam Sealant** in perimeter openings less than 1/2″, apply using the plastic extension tip for the **Great Stuff Pro™ Dispensing Gun** during installation.

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.



- A. Install the **Tyvek® WRB** according to the *DuPont™ Tyvek® Water Resistive and Air Barriers Installation Guidelines*. Do not install fasteners within 4" of the window frame at jambs and head and within 18" of the window frame at sill or location of **Tyvek® WRB** piece below sill of window.
- B. Mark a perimeter on the **Tyvek® WRB** around the rough opening a minimum of 1" from the jambs and head of the window frame, and 6" below the sill of the window frame.

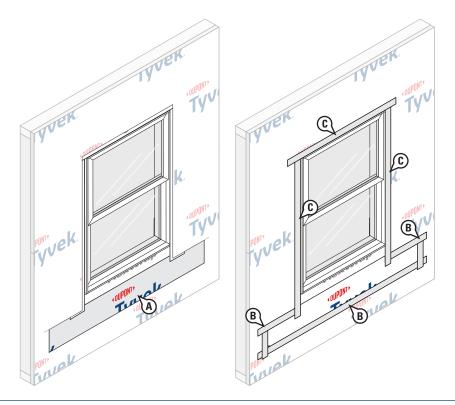


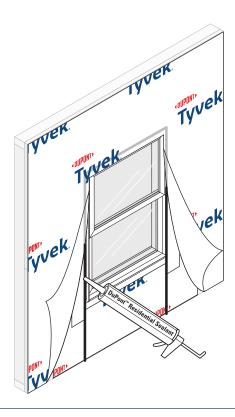
STEP 14

Cut the **Tyvek**° **WRB** along perimeter marking to expose window. Do not cut through the **DuPont Self-Adhered Flashing Products** or the piece of **Tyvek**° **WRB** underneath.

ALTERNATE STEP A: If piece of **Tyvek® WRB** extends far enough below the sill rough opening to overlap the sill plate, base of wall flashing, or the **Tyvek® WRB** below, the **Tyvek® WRB** can be cut along jambs and head only to overlap the piece of **Tyvek® WRB** underneath.

Create horizontal slits in the **Tyvek**° **WRB** at each lower corner of the perimeter cut that extend a minimum of 2" beyond the piece of **Tyvek**° **WRB** underneath.





STEP 15

- A. Bring the bottom portion of the piece of **Tyvek**° **WRB** underneath through the sill perimeter cut and horizontal slits so it laps over the top layer of **Tyvek**° **WRB**.
- B. Working from bottom to top, install **DuPont™ Tyvek® Tape** to secure horizontal and vertical seams of **Tyvek® WRB** piece below sill.
- C. Install Tyvek® Tape along jambs and head to seal Tyvek® WRB around window.
 OPTIONAL: If installing a drip cap AFTER the Tyvek® WRB is installed and sealed, see Drip Cap Installation section and refer to Option 3.

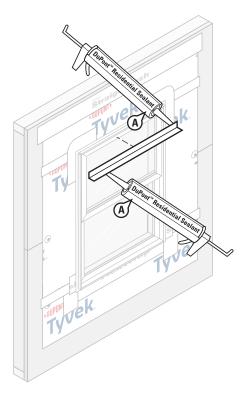
Alternate Tape Detail

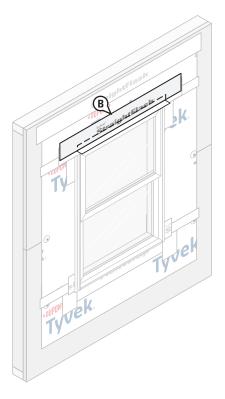
Place a continuous bead of **DuPont™ Residential Sealant**, or recommended sealant, around the jamb and head flashing under the **Tyvek® WRB**. Press the **Tyvek® WRB** securely into the sealant. **NOTE**: This option only applies when ALTERNATE STEP 12A is followed.

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 product installed at the head of the window BEFORE the **DuPont**[™] **Tyvek**[®] **WRB** is installed 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.





- 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™**, or **DuPont™ Flashing Tape**. The **DuPont Self-Adhered Flashing Products** product should be long enough to extend beyond the jamb flashing and adhere a minimum of 2″ onto the wall.

Option 1 (continued)



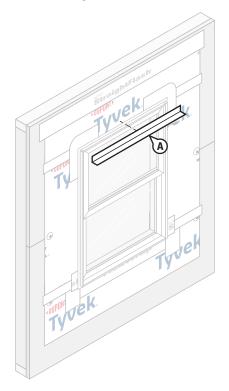
STEP 2

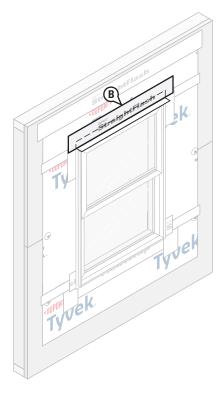
Install the **DuPont™ Tyvek® WRB** according to the *Integral Flanged Window BEFORE DuPont™ Tyvek® WRB* section, Steps 6-8.

NOTE: The horizontal perimeter cut in the **Tyvek® WRB** at top of window will need to extend slightly beyond window frame at jambs to accommodate the drip cap and be sealed onto the vertical leg with **DuPont™ Tyvek® Tape**.

Option 2

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





- A. After the **DuPont™ StraightFlash™**, **DuPont™ FlexWrap™**, 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 **StraightFlash™**, **FlexWrap™**, or **DuPont™ Flashing Tape** extending past the top and sides of the drip cap.

Option 2 (continued)



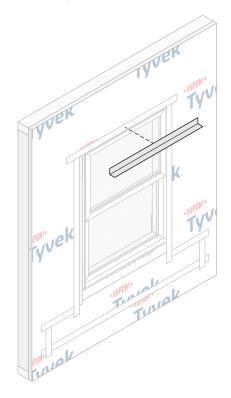
STEP 2

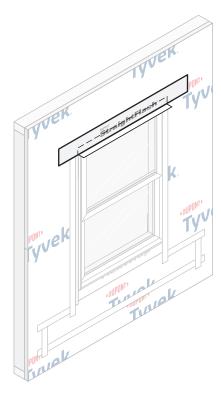
Install the **DuPont™ Tyvek® WRB** according to the *Integral Flanged Window BEFORE DuPont™ Tyvek® WRB* section, Steps 6-8.

NOTE: The horizontal perimeter cut in the **Tyvek**° **WRB** at top of window will need to extend slightly beyond window frame at jambs to accommodate the drip cap and be sealed onto the vertical leg with **DuPont**™ **Tyvek**° **Tape**.

Option 3

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





- A. After **Tyvek**° **WRB** is installed 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™ FlexWrap™**, or **DuPont™ Flashing Tape** extending past the top and sides of the drip cap and side edges of the window head flashing.

Technical Specifications

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™, DuPont" FlexWrap™ EZ, and DuPont "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 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 1-800-448-9835.

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.

Caution

When cured, Dow Great Stuff Pro Window & Door Polyurethane Foam Sealant is combustible and will burn if exposed to open flame or sparks from highenergy sources. Do not expose to temperatures above 240°F (116°C). For more information, consult (Material) Safety Data Sheet ((M)SDS), call Dow at 1-866-583-BLUE (2583) or contact your local building inspector. In an emergency, call 1-989-636-4400 in the U.S. or 1-519-339-3711 in Canada. When air sealing buildings, ensure that combustion appliances, such as furnaces, water heaters, wood burning stoves, gas stoves and gas dryers are properly vented to the outside. See website: http://www.epa.gov/iaq/homes/hip-ventilation.html.

In Canada visit: http://archive.nrc-cnrc.gc.ca/eng/ibp/ irc/bsi/83-house-ventilation.html.

Great Stuff Pro™ Window & Door Polyurethane Foam **Sealant** and adhesive products contain isocvanate and a flammable blowing agent. Read all instructions and (Material) Safety Data Sheet ((M)SDS), carefully before use. Eliminate all sources of ignition before use. Cover all skin. Wear long sleeves, gloves, and safety glasses or goggles. Not for use in aviation, or food/beverage contact, or as structural support in marine applications. Provide adequate ventilation or wear proper respiratory protection. Contents under pressure. Not to be used for filling closed cavities or voids such as behind walls and under tub surrounds; this improper use of the product could result in the accumulation of flammable vapors and/ or uncured material. Failure to follow the warnings and instructions provided with the product, and/or all applicable rules and regulations, can result in injury

Building and/or construction practices unrelated to building materials could greatly affect moisture and the potential for mold formation. No material supplied by Dow can give assurance that mold will not develop in any specific system.

Read all instructions and (Material) Safety Data Sheet ((M)SDS) carefully before use.

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® WRB**s. Use of additives, coatings or cleansers on or in the facade system may impact the performance of **Tyvek®WRB**s. 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 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 building.dupont.com or call 1-800-448-9835.

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



For more information about DuPont Performance Building Solutions, please call 1-800-448-9835 or visit us at <u>building.dupont.com</u>