

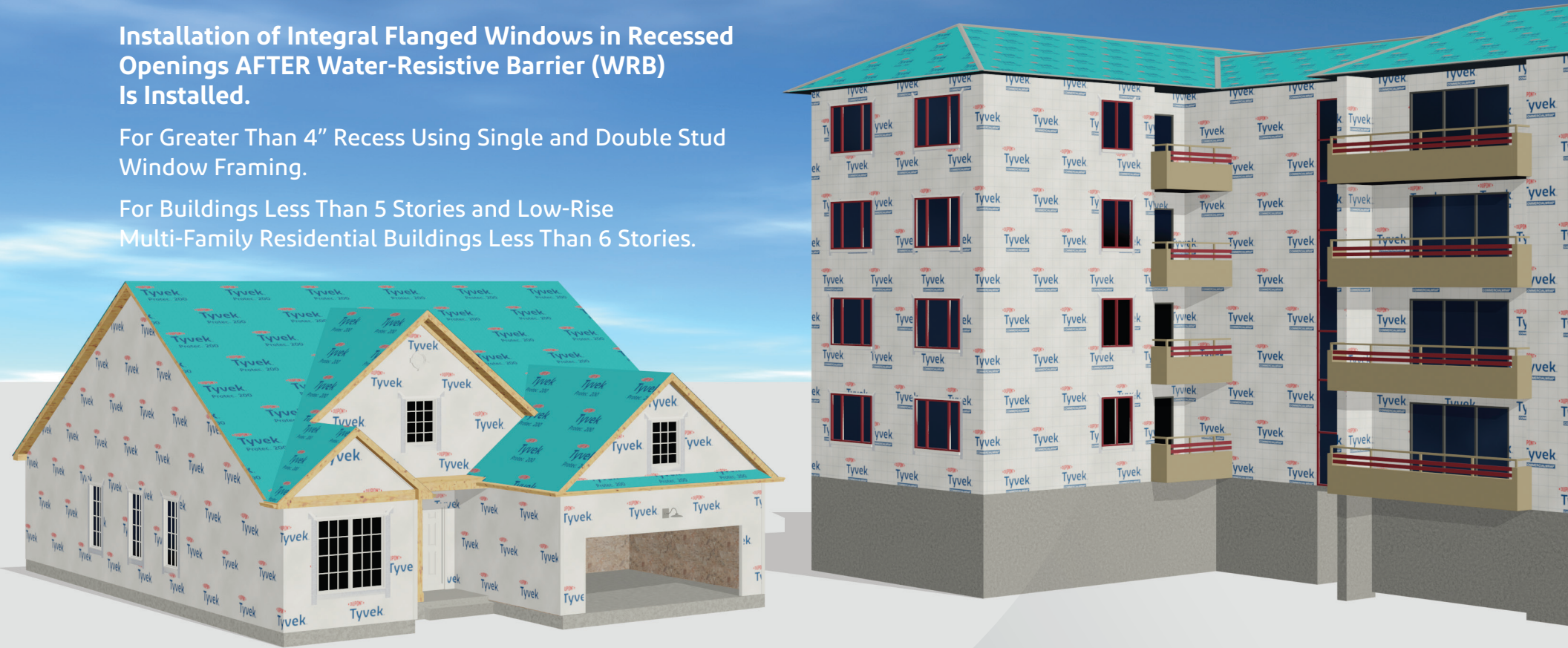
DuPont Performance Building Solutions

DuPont Self-Adhered Flashing Products Installation Guidelines

Installation of Integral Flanged Windows in Recessed Openings AFTER Water-Resistive Barrier (WRB) Is Installed.

For Greater Than 4" Recess Using Single and Double Stud Window Framing.

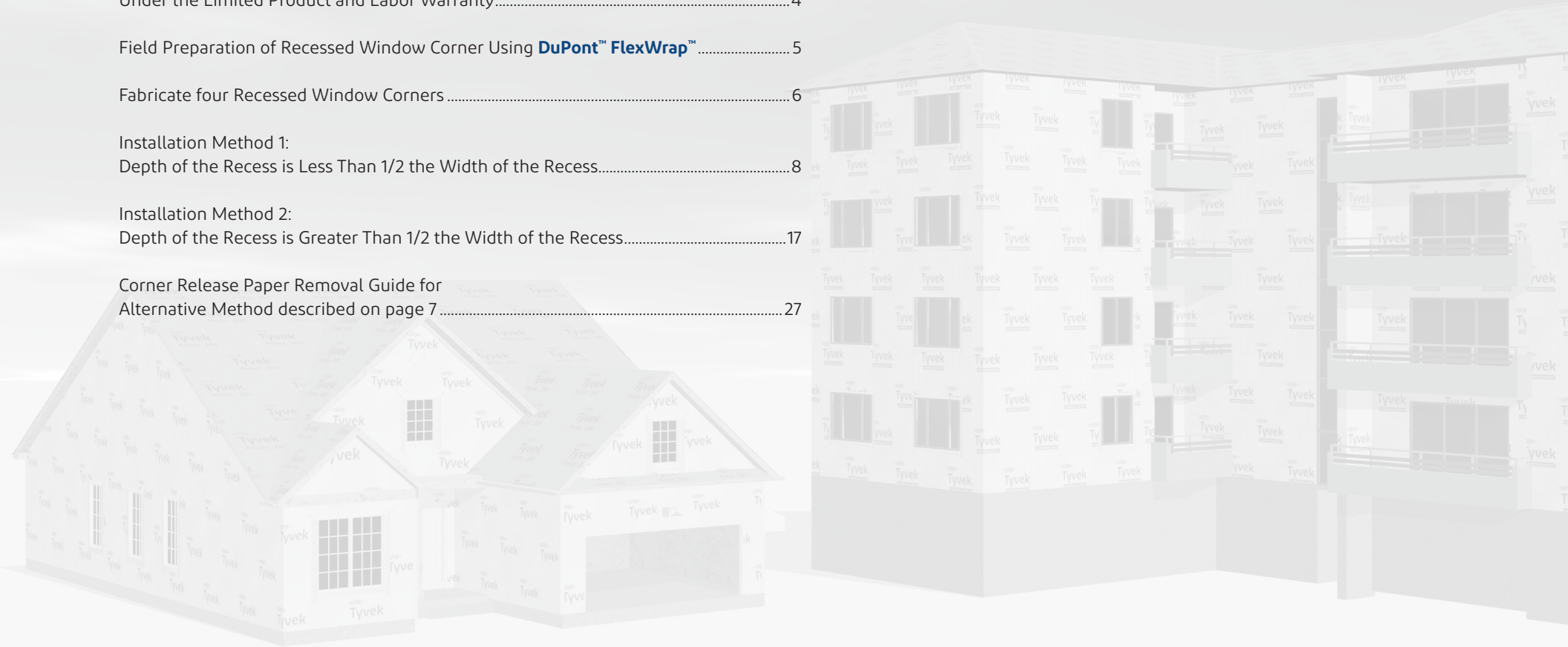
For Buildings Less Than 5 Stories and Low-Rise Multi-Family Residential Buildings Less Than 6 Stories.



March 2020

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Applicable Products

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 10 ft x 150 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	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 x 200 ft	1,000 sq ft
	10 ft x 125 ft	1,250 sq ft
DuPont™ Tyvek® CommercialWrap® D	5 ft x 200 ft	1,000 sq ft
	10 ft x 125 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 [DuPont Weatherization Products 10-Year Limited Warranty for Buildings Less Than 5 Stories and Low-Rise Multi-Family Residential Buildings Less Than 6 Stories](#).

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°F (-4°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 building.dupont.com, or consult your local DuPont™ Tyvek® Specialist for additional information and installation support.

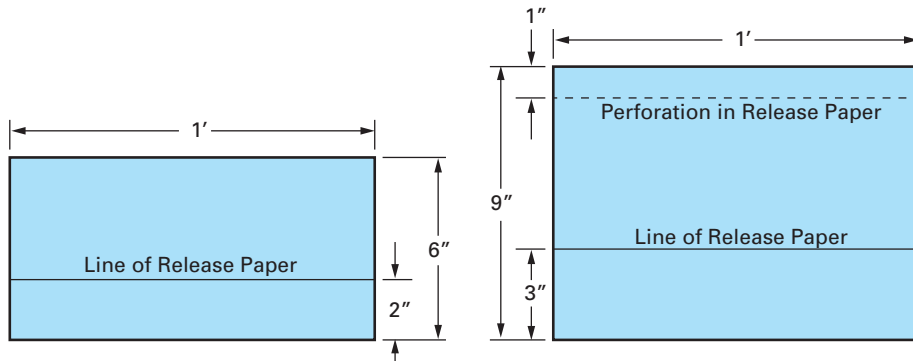
Key Installation Requirements for Drainable Window/Door Installation Under the Limited Product and Labor Warranty

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

- When installed properly, **DuPont™ StraightFlash™**, **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, bump-outs), 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.

Field Preparation of Recessed Window Corner Using DuPont™ FlexWrap™

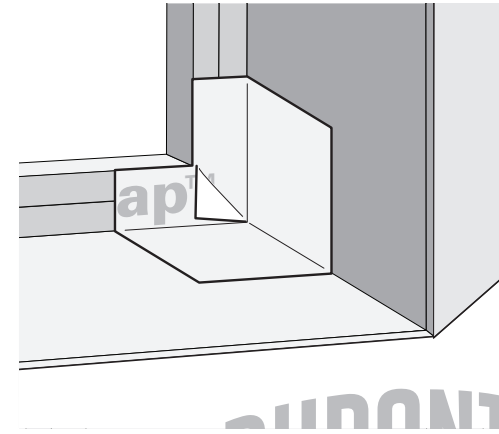
The method illustrated in this bulletin uses 6" wide **FlexWrap™** to fabricate Recessed Window Corners for recesses that are greater than 4" deep with double stud framing. The same method can be used to create Recessed Window Corners from 9" wide **FlexWrap™**. This installation guideline also applies to single stud framing which is limited to the use of 6" **FlexWrap™** for fabrication of Recessed Window Corners. See summary of **FlexWrap™** dimensions below and pictures to right for additional guidance.



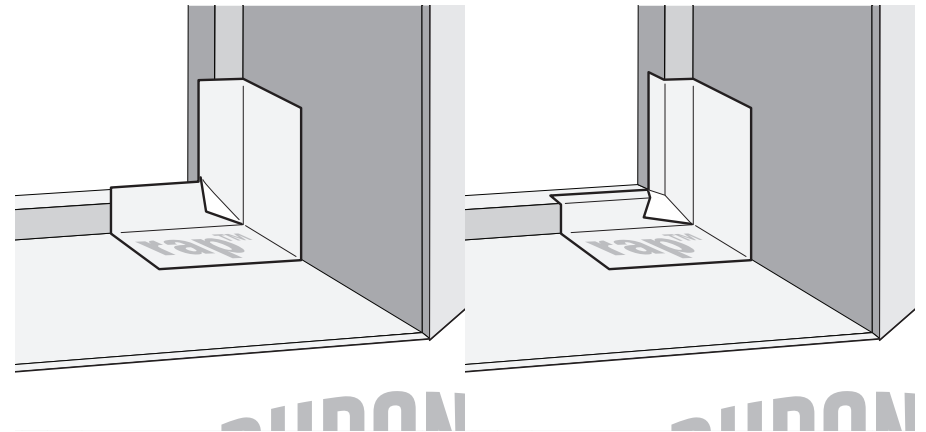
6" **FlexWrap™**
(for greater than 4" recesses,
single stud framing)

9" **FlexWrap™**
(for greater than 4" recesses,
double stud framing)

The following image shows the fabricated Recessed Window Corners for a recess that is greater than 4" deep with double stud window framing using 9" **FlexWrap™**.



The images below show the 6" **FlexWrap™** Recessed Window Corner installed on a single stud window. Note that the **FlexWrap™** Recessed Window Corner extending slightly beyond the face of the stud (left) can be fully adhered into framing (right). See Step 3 for additional information.



Fabricate four Recessed Window Corners



1. Cut Four 12" Pieces of 6" DuPont™ FlexWrap™

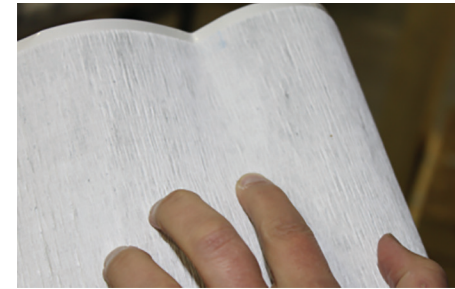


2. Create Horizontal CREASE A. Fold FlexWrap™ at release paper to break perforations and create crease.

NOTE: The narrow release paper will be used to guide corner fold in Step 5.



3. Create Vertical CREASE B. Fold FlexWrap™ in half, lengthwise, and create sharp crease at the fold.

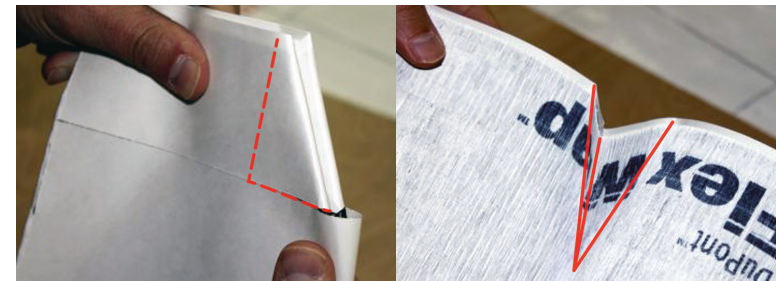


4. Set Corner Fold Width. Place index finger on the top side of the FlexWrap™ at the intersection of CREASE A and CREASE B.

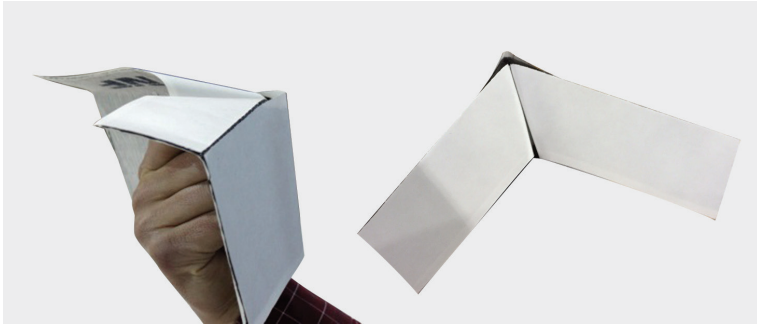
NOTE: This will put pressure on the opposite side of release paper at the crease, and set the corner fold width.



5. Create Corner Fold. On the reverse side of the FlexWrap™, starting at the intersection of CREASE A and CREASE B, fold along CREASE B going out towards edge of narrow release paper.



6. Crease Center Fold. Press firmly to create sharp crease in center and edges of fold. Sharp creases are necessary so the folds remain in the top sheet of the FlexWrap™ after release paper is removed.



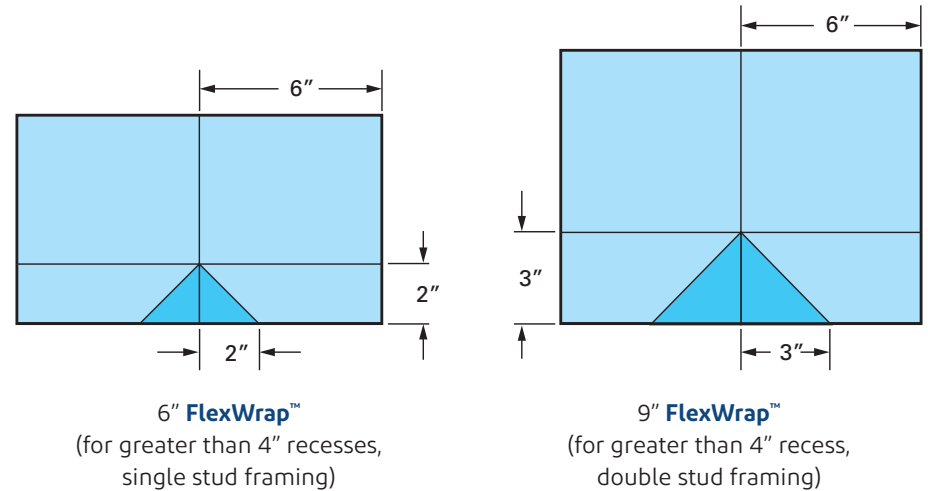
NOTE: Center crease should be sharp enough to assist in creating a ~90° fold between the two release papers at a right angle with vertical crease (Crease B), as shown below:



7. Form Recessed Window Corner. Remove narrow-width release paper and, using the creases made in Step 6, carefully press together the exposed butyl within the corner fold to create Recessed Window Corner. Repeat with the 3 remaining 12" pieces of DuPont™ FlexWrap™.

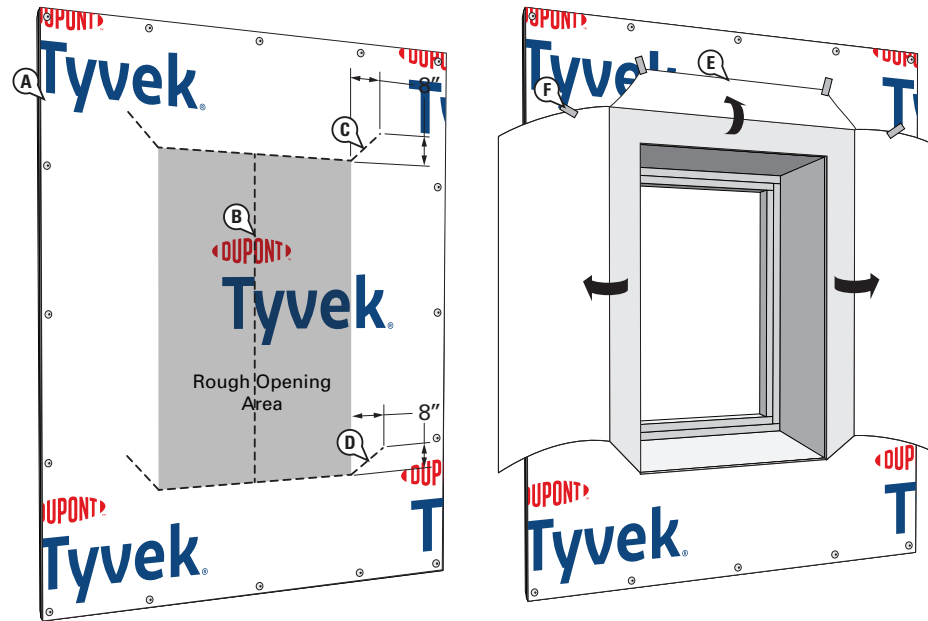
Alternative Method: Use the guide on page 27 of this document to create a reusable template using a piece of hard/rigid plastic. Once created, the template can be used to aid in removal of the release paper from the corner section only as indicated below. The template will be placed over the 12" piece of FlexWrap™ (release paper facing up) and aligned according to the applicable marks on the template. The release paper can then be torn along the edge of the template to expose the butyl. Alternatively, the template can be used to mark the release paper for removal. In this case a straight edge can be used to assist in tearing the release paper. **Do not cut the release paper with a knife or other sharp object** as this could result in damage to the butyl and compromise protection provided by the FlexWrap™ Recessed Window Corners.

Once the release paper is removed to create a triangular area of expose butyl, fold the FlexWrap™ according to Step 6 above to create the 90° corner and press exposed butyl together. Once the remaining narrow release paper is removed, the Recessed Window Corner is ready to install.



Installation Method 1: Depth of the Recess is Less Than 1/2 the Width of the Recess

Used when the depth of recess is less than 1/2 the width of the recess allowing for DuPont™ Tyvek® WRB jamb flaps to be folded into the rough opening to cover jamb walls of the recess. Follow Method 2 (page 17) when the depth of recess is greater than 1/2 the width of the recess which requires strips of Tyvek® WRB to cover jamb walls of the recess.



STEP 1

Prepare Tyvek® WRB Frame for Window Installation

- H. Wrap wall as shown in *DuPont™ Tyvek® Water-Resistive and Air Barriers Installation Guidelines for Buildings Less Than 5 Stories* that can be found at building.dupont.com. Do not install fasteners within 6" of the sills and jambs of the openings and within 9" of the head of the openings.
- H. Make an "I-Cut" in the Tyvek® WRB. For an "I-Cut" begin with a horizontal cut across the bottom and the top of the window frame
- I. Cut a head flap at a 45° angle to expose 8" of sheathing to allow for head flashing installation.

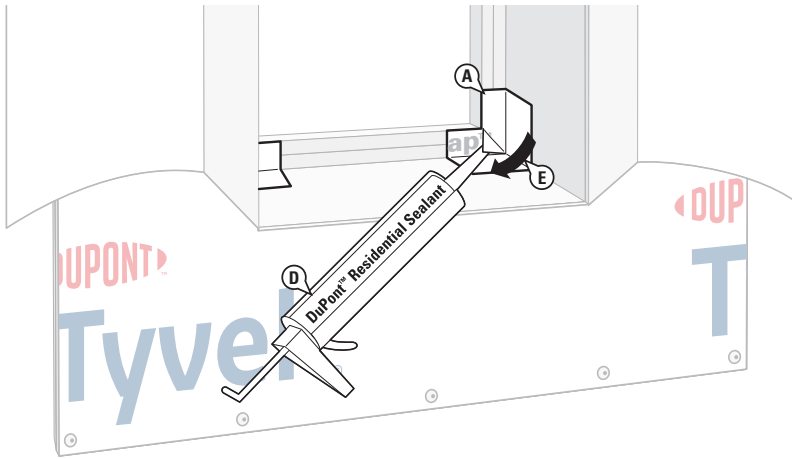
- J. Cut two 45° slits extending from the bottom corner up and away from the window opening to expose 6"– 8" of sheathing. This will create a flap at each jamb to allow for jamb flashing installation.

- K. Flip the head flap up to expose the sheathing and temporarily secure with DuPont™ Tyvek® Tape.

Flip the flaps to the side to expose the sheathing and temporarily secure with Tyvek® Tape.

Alternative Method to Secure Head Flap: In lieu of temporarily taping, the head flap can be tucked under the Tyvek® WRB.

Installation Method 1: Depth of the Recess is Less Than 1/2 the Width of the Recess



STEP 2

Install **DuPont™ FlexWrap™** Recessed Window Corner at Sill

A. Place **FlexWrap™** Recessed Window Corner into corner of recess so exposed butyl is against face of recessed window frame and adhere.

NOTE: For double stud window frames, the **FlexWrap™** Recessed Window Corner should extend a minimum of 2" onto the face of the recessed window frame and cover the seams between the studs. For single stud window frames, the **FlexWrap™** Recessed Window Corner extending slightly beyond the face of the stud can be fully adhered into framing.

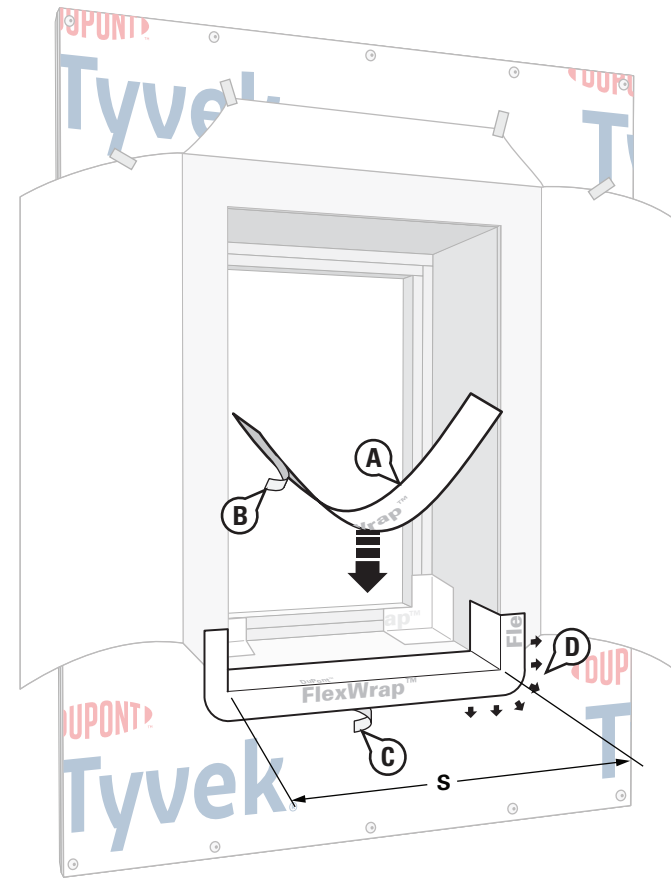
B. Remove remaining release paper.

C. Adhere exposed butyl to sill and jamb surfaces of recess.

D. Place a bead of **DuPont™ Residential Sealant** or recommended sealant behind the loose triangular flap within the **FlexWrap™** Recessed Window Corner.

E. Press down the loose triangular flap onto the sealant.

F. Repeat Steps A-E for opposite side.



STEP 3

Install **FlexWrap™** at Outer Sill of Recessed Opening

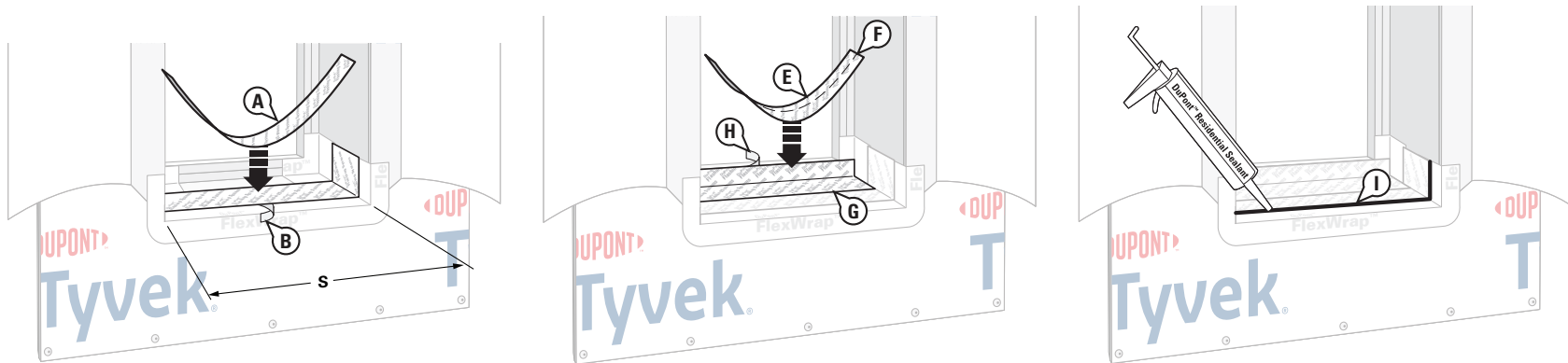
A. Cut **FlexWrap™** at least 12" LONGER than width of outer sill of recess (S).

B. Remove wide piece of release paper. Position on horizontal surface of outer 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 onto horizontal surface.

C. Remove narrow release paper.

D. Fan out **FlexWrap™** at bottom corners 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.

Installation Method 1: Depth of the Recess is Less Than 1/2 the Width of the Recess



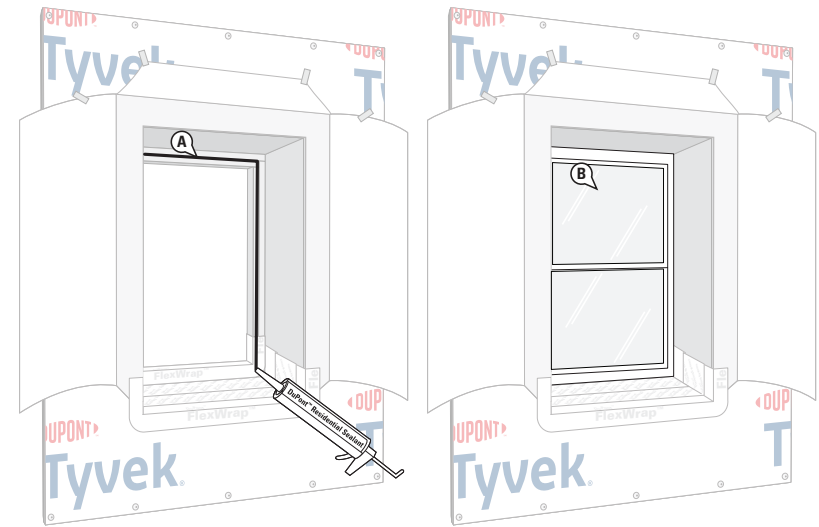
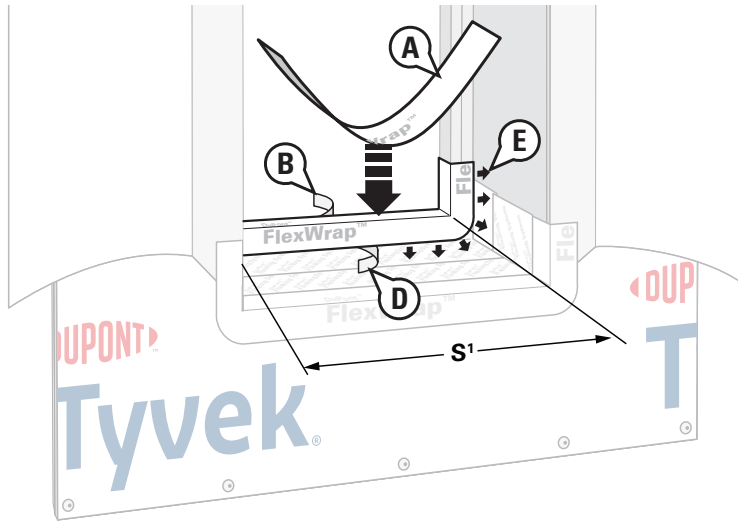
STEP 4

Install **DuPont™ Flashing Tape** at Sill of Recess

DuPont™ Flashing Tape will be used at the sill of the recess in this Step to overlap the **DuPont™ FlexWrap™** at the outer sill and extend onto the face of the stud framing at the inner window sill. The number of layers and product widths can be modified accordingly but all overlaps need to be a minimum of 2". All but the last layer of **DuPont™ Flashing Tape** will extend 6" min. up each side of the recess jamb walls. The last layer will be the width of the outer rough opening and will extend 2" min. onto the face of the stud framing at the sill of the window.

- A. Cut the first course of **DuPont™ Flashing Tape** 12" longer than outer sill (S).
- B. Remove the release paper and align on sill to overlap **FlexWrap™** by 2" and extend up each jamb wall of recess by 6". **DuPont™ Flashing Tape** should be installed tightly into the corner at the intersection of the recess sill and wall of recess. **NOTE:** The **DuPont™ Flashing Tape** on the jamb walls will have an angled offset from the window framing in recesses that have a sloped sill.
- C. Adhere exposed butyl to sill of recess and up jamb walls of recess.
- D. If necessary, repeat Step B with appropriate width of **DuPont™ Flashing Tape** to overlap the first layer of **DuPont™ Flashing Tape** by 2".
- E. Cut the last layer of **DuPont™ Flashing Tape** the length of the inner window sill (S), and use appropriate width for a minimum of 2" adhesion of butyl onto the face of the stud framing at the window sill maintaining a 2" overlap onto previous layer. **NOTE:** This dimension will need to be adjusted if the side walls of the recess are tapered.
- F. Fold to create a sharp crease that is aligned with the intersection of the recessed sill and the face of the stud framing. Tear release paper at the fold so exposed butyl can be adhered on to sill of recess. Do not cut release paper with sharp object as this may damage the butyl and compromise protection provided by the **DuPont™ Flashing Tape**.
- G. Adhere exposed butyl on sill of recess and tight into the intersection of recessed sill and face of stud framing.
- H. Remove second release paper and adhere exposed butyl onto face of stud framing.
- I. Apply a continuous bead of **DuPont™ Residential Sealant** or recommended sealant along the edge of the overlap between the **DuPont™ Flashing Tape** and the **FlexWrap™**.

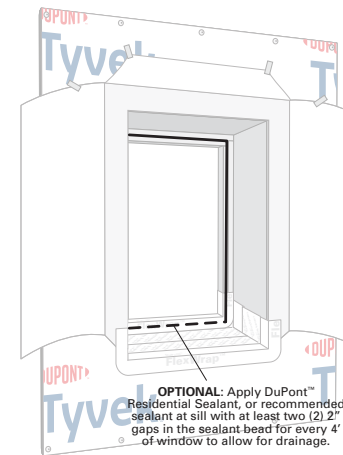
Installation Method 1: Depth of the Recess is Less Than 1/2 the Width of the Recess



STEP 5

Install **DuPont™ FlexWrap™** in Rough Opening at Sill

- Cut **FlexWrap™** at least 12" LONGER than width of inner/recessed 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 framing.
- Remove wide piece of release paper.
- Position on horizontal surface of inner/recessed sill by aligning the inside edge of the narrow release paper with the face of the framing to ensure 2"- 3" of the **FlexWrap™** will be adhered to the face of the framing. Adhere into rough opening along sill and a minimum of 6" up each jamb.
- Remove narrow release paper.
- Fan out **FlexWrap™** at bottom corners onto face of recessed window framing. Coverage of **FlexWrap™** should be 2"- 3" onto the face of the window frame.

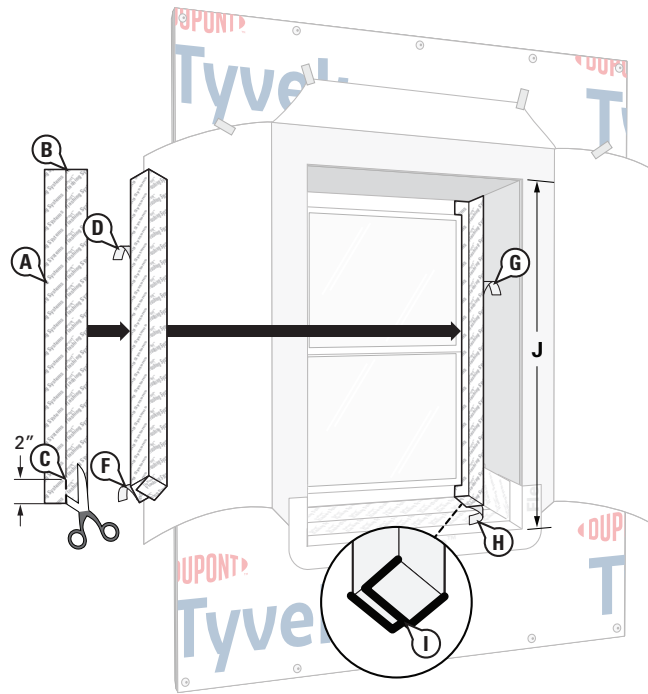


STEP 6

Install Window

- Apply **DuPont™ Residential Sealant** or recommended sealant on three sides of the face of the inner recess framing at jambs and head as shown below.
- Install window per window manufacturer's instructions.

Installation Method 1: Depth of the Recess is Less Than 1/2 the Width of the Recess



STEP 7

Install **DuPont™ Flashing Tape** at Jamb

A. Cut a piece of **DuPont™ Flashing Tape** 2" LONGER than the length of the outer jamb (I).

NOTE: This dimension will need to be adjusted accordingly to accommodate the slope in the sill. Use appropriate width of **DuPont™ Flashing Tape** to overlap window flange, adhere onto face of stud frame, and extend a minimum of 2" onto jamb wall of recess.

B. Fold lengthwise to create a sharp crease in release paper that is aligned with the intersection of the face of the stud framing and jamb wall of recess.

C. Starting at the bottom, cut a 2" vertical slit in the **DuPont™ Flashing Tape** along the crease. This will be used to create the **DuPont™ Flashing Tape** corner in Steps F and H shown below.

D. Remove the first piece of release paper to expose the butyl that will be installed onto the window flange by tearing along the crease. Leave the release paper on the 2" flap created in Step C. Do not cut release paper with sharp object as this could result in damage to butyl and compromise protection provided by the **DuPont™ Flashing Tape**.

E. Starting at top corner of recess, adhere exposed butyl adhesive onto window flange and face of stud framing.

F. Remove the release paper from the corner flap in the **DuPont™ Flashing Tape**, created in Step C, and adhere the flap to the sill. **NOTE:** Keeping the remaining release papers intact will make the flashing more rigid to help maneuver the flashing into the corners.

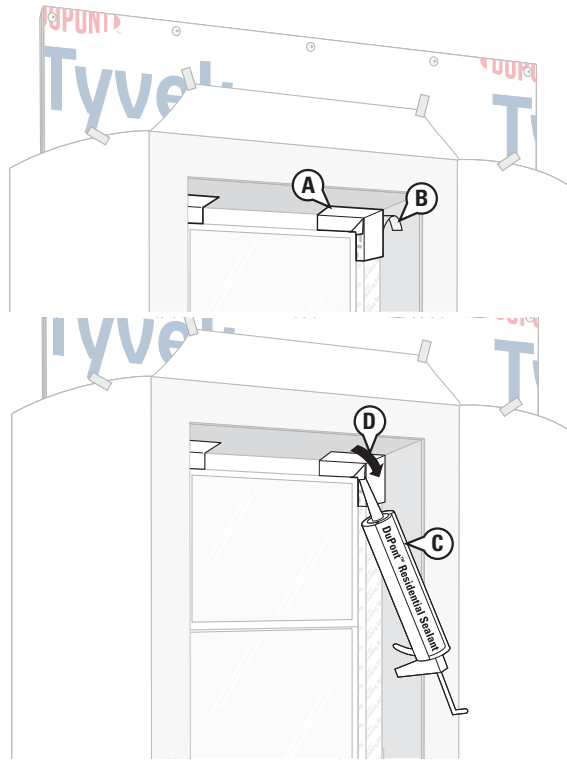
G. Once the butyl is adhered to the window flange, face of stud framing, and sill, remove the remaining release paper – leaving the release paper on the other 2" flap created in Step C. The flashing can now be adhered tightly into the inside corner created by the stud framing and jamb wall of the recess.

H. Remove the release paper from the second corner flap and adhere over the first flap.

I. Apply **DuPont™ Residential Sealant**, or recommended sealant, to the interfaces as shown.

J. Repeat Steps A through I for opposite jamb.

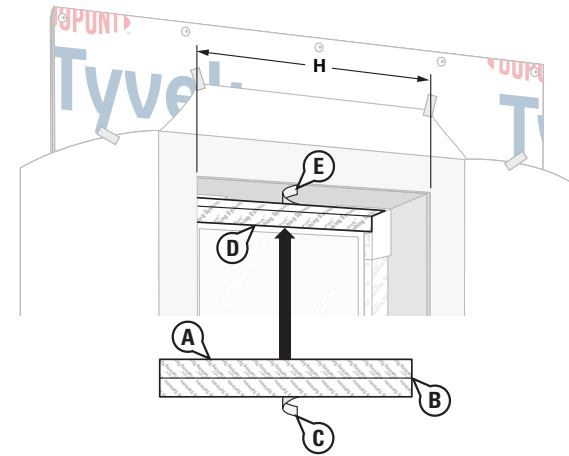
Installation Method 1: Depth of the Recess is Less Than 1/2 the Width of the Recess



STEP 8

Install **DuPont™ FlexWrap™** Recessed Window Corners at Head

- Install **FlexWrap™** Recessed Window Corners into the upper corner of the window rough opening with exposed butyl adhered onto the window flanges in a similar manner used for lower corner pieces (See Step 3).
- Remove remaining release paper and adhere exposed butyl onto head and jamb walls of recess.
- Place a bead of **DuPont™ Residential Sealant** or recommended sealant inside the corner flap behind the loose triangular flap of the corner piece.
- Press the loose triangular flap onto the sealant in the corner piece.
- Repeat Steps A through D for opposite corner.

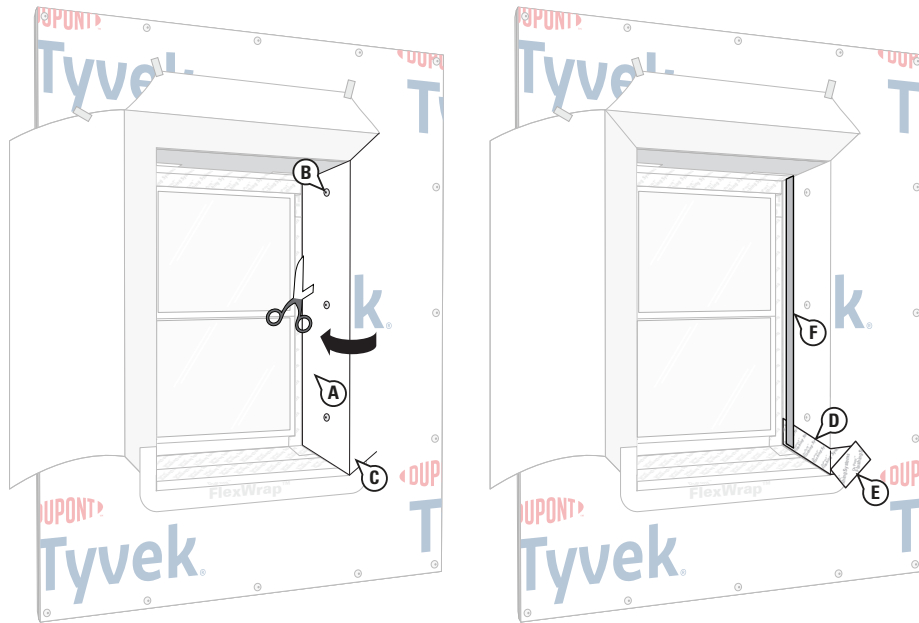


STEP 9

Install **DuPont™ Flashing Tape** at Head

- Cut a piece of **DuPont™ Flashing Tape** the length of the inner head rough opening "H". Use appropriate width of **DuPont™ Flashing Tape** to overlap window flange, adhere onto face of stud frame, and extend a minimum of 2" onto ceiling of recess.
- Fold lengthwise to create a sharp crease in the release paper that is aligned with the intersection of the face of the stud framing and ceiling of recess.
- Remove release paper by tearing along fold to expose butyl for installation onto the window flange and face of stud framing. Do not cut release paper with sharp object as this could result in damage to butyl and compromise protection provided by the **DuPont™ Flashing Tape**
- Adhere onto window flange and tightly into corner of intersection between face of stud framing and ceiling of recess.
- Remove remaining release paper and adhere onto ceiling of recess.

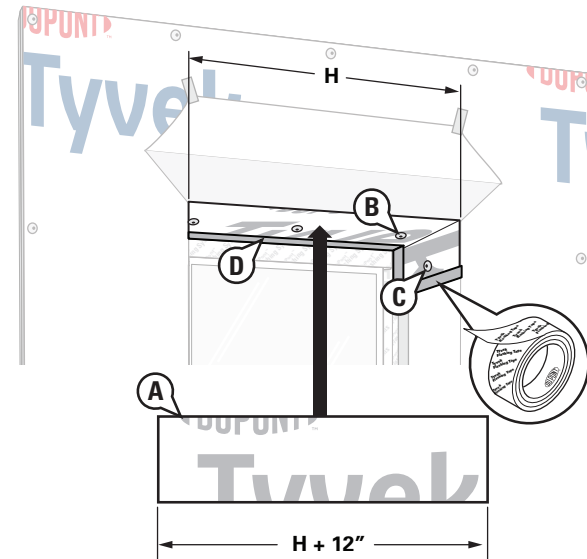
Installation Method 1: Depth of the Recess is Less Than 1/2 the Width of the Recess



STEP 10

Install Jamb Flaps onto Wall of Recess

- Trim bottom and side edges of jamb flap if necessary. Flap should overlap jamb flashing by 2" and to allow for sealing using **DuPont™ Tyvek® Tape**.
- Fasten **DuPont™ Tyvek® WRB** to jamb walls of recess. Do not fasten within 3" of vertical and horizontal borders of flap.
- Trim lower edges of jamb flaps to allow sealing at bottom of recess jamb walls.
- Install **DuPont™ Flashing Tape** along the bottom edges of flap inside recess and onto face of wall.
- Install **DuPont™ Flashing Tape** along the bottom angled cuts in in the **Tyvek® WRB** making sure to overlap with **DuPont™ Flashing Tape** at lower edges of flaps inside recess.
- Seal vertical edge of flap with **Tyvek® Tape**.
- Repeat Steps A through F for opposite jamb.

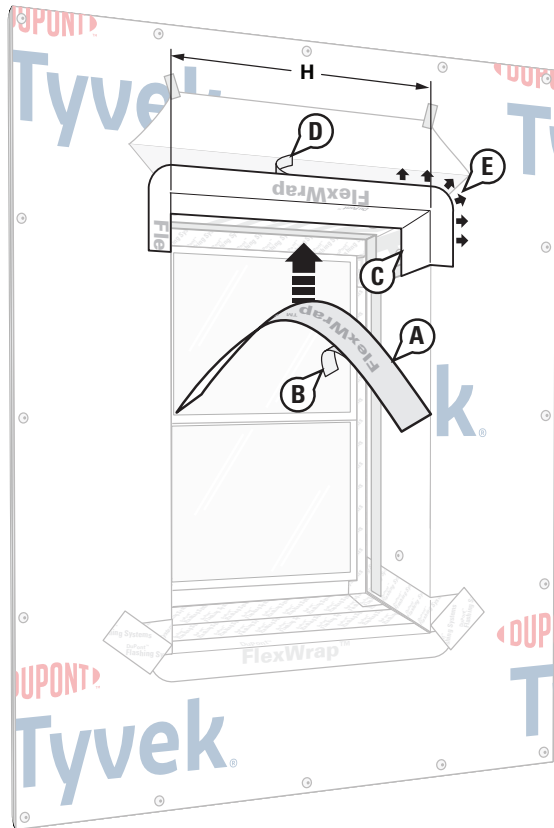


STEP 11

Install **Tyvek® WRB** at Recess Ceiling

- Cut a piece of **Tyvek® WRB** 12" longer than recess rough opening (H) and width 1-2" less than depth of the recess.
- Fasten at recess ceiling so outer edge is aligned with face of the wall and 6" overlaps onto jamb walls. Do not fasten within 3" of edges so **Tyvek® WRB** can be sealed to head flashing using **Tyvek® Tape** without fastener interference.
- Fasten at jamb walls of recess. Do not fasten within 3" of edges.
- Seal all inside edges using **Tyvek® Tape**.

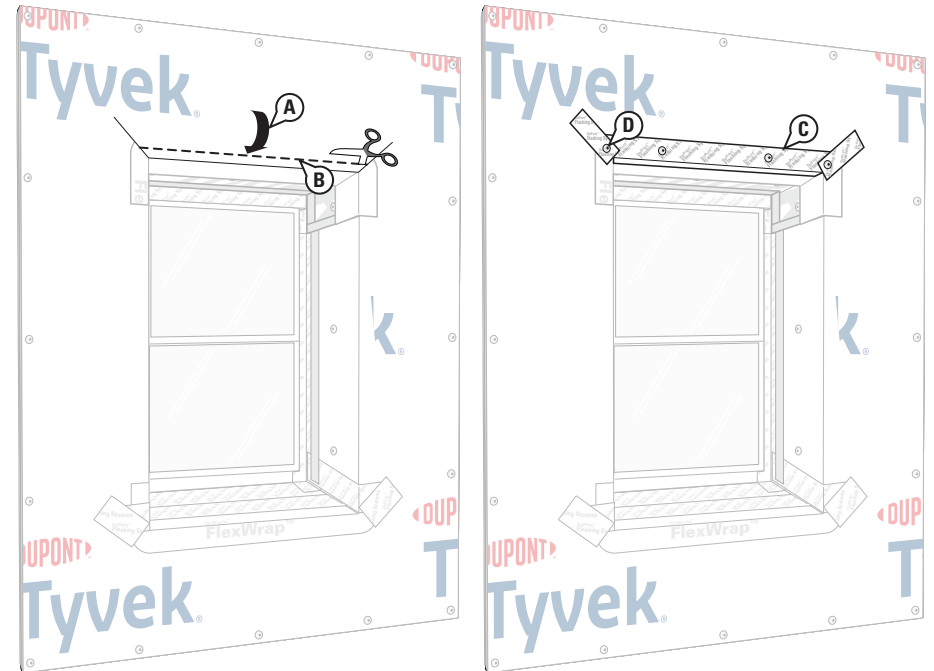
Installation Method 1: Depth of the Recess is Less Than 1/2 the Width of the Recess



STEP 12

Install **DuPont™ FlexWrap™** in Rough Opening at Head

- Cut **FlexWrap™** at least 12" longer than width of recess rough opening (H).
- Remove wide piece of release paper.
- Align the exposed butyl with the outside edge of the wall and adhere to the horizontal surface at inner ceiling of head recess and down inner jamb walls by 6".
- Remove narrow release paper.
- Fan out **FlexWrap™** at top corners of recess opening with minimum coverage of 2"-3" onto the face of wall.

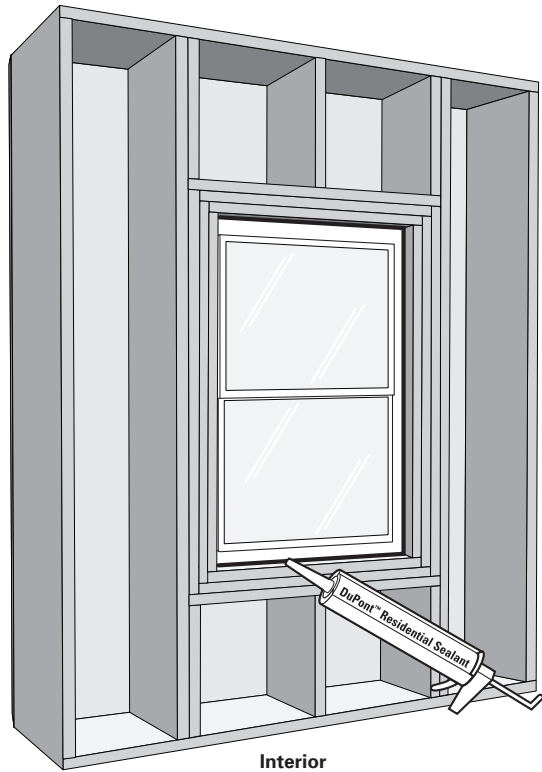


STEP 13

Secure Upper Flap

- Flip down upper flap of **DuPont™ Tyvek® WRB** so it lays flat across **FlexWrap™** at head of outer recess.
- Cut ~1" strip of the **Tyvek® WRB** at lower horizontal edge of head flap.
- Continuous tape seams as shown with **DuPont™ Flashing Tape**. Skip-taping at head is acceptable if an air barrier is not required or if additional drainage is desired.
- Install mechanical fasteners through the flashing at the head flap.

Installation Method 1: Depth of the Recess is Less Than 1/2 the Width of the Recess



STEP 14

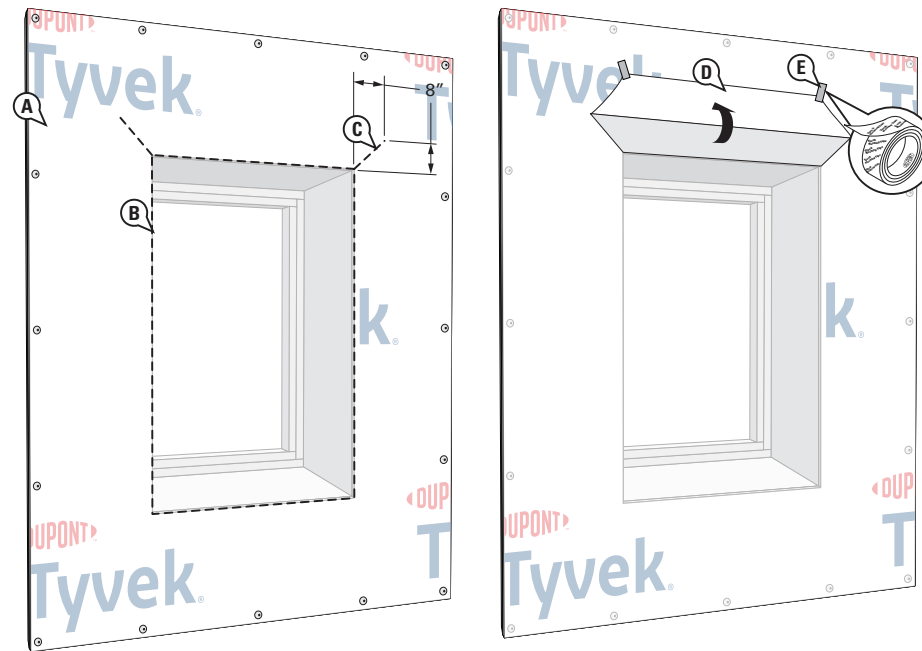
Seal Interior Opening

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 Dow™ **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.

Installation Method 2: Depth of the Recess is Greater Than 1/2 the Width of the Recess

This method must be used when the depth of the recess is greater than 1/2 the width of the recess which requires additional strips of **DuPont™ Tyvek® WRB** to cover jamb walls of the recess. If the depth of the recess is $<1/2$ the width of recess, Method 2 can be used as an optional method in place of Method 1.



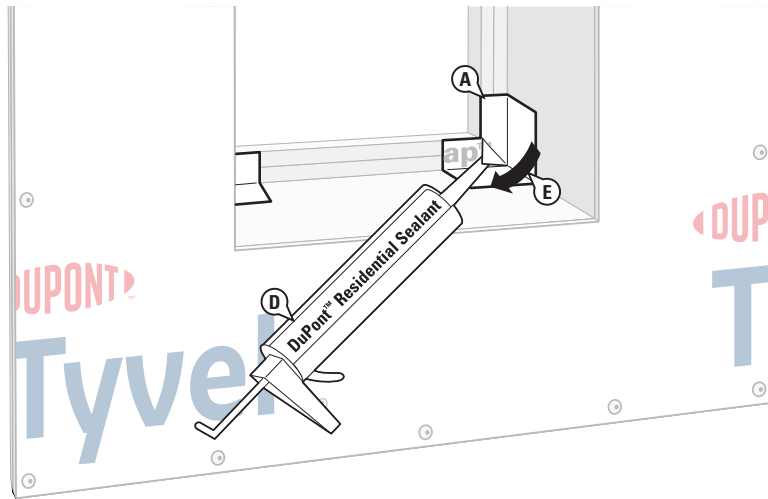
STEP 1

Prepare **Tyvek® WRB** Frame for Window Installation

- A. Wrap wall as shown in *DuPont™ Tyvek® Water-Resistive and Air Barriers Installation Guidelines for Buildings Less Than 5 Stories* that can be found at building.dupont.com. Do not install fasteners within 6" of the sills and jambs of the openings and within 9" of the head of the openings.
- B. Make a cut in the **Tyvek® WRB** along the perimeter of the rough opening. Ensure that the **Tyvek® WRB** is cut flush with the sheathing and is not wrapped into the rough opening.
- C. Cut two 45 degree slits extending a minimum of 8" up and away from the top corners of the rough opening. This will create a flap to expose sheathing or framing members to allow head flashing installation.
- D. Flip the head flap up to expose the sheathing and temporarily secure with **DuPont™ Tyvek® Tape**.
- E. Temporarily secure the **Tyvek® WRB** frame with **Tyvek® Tape** around rough opening before flashing is installed to help facilitate flashing installation.

Alternative Method to Secure Head Flap: In lieu of temporarily taping, the head flap can be tucked under the **Tyvek® WRB**.

Installation Method 2: Depth of the Recess is Greater Than 1/2 the Width of the Recess



STEP 2

Install **DuPont™ FlexWrap™** Recessed Window Corner at Sill

A. Place **FlexWrap™** Recessed Window Corner into corner of recess so exposed butyl is against face of recessed window frame and adhere.

NOTE: For double stud window frames, the **FlexWrap™** Recessed Window Corner should extend a minimum of 2" onto the face of the recessed window frame and cover the seams between the studs. For single stud window frames, the **FlexWrap™** Recessed Window Corner extending slightly beyond the face of the stud can be fully adhered into framing.

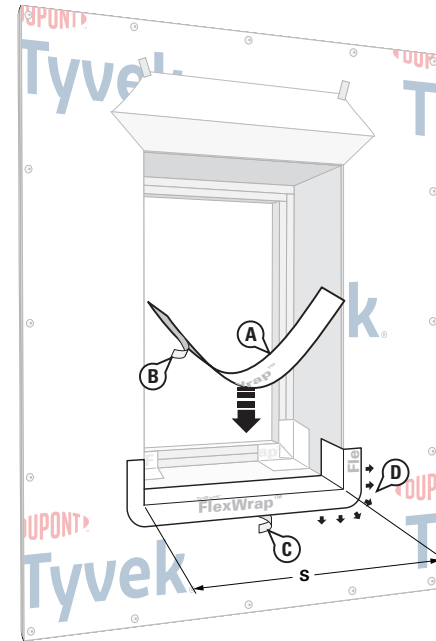
B. Remove remaining release paper.

C. Adhere exposed butyl to sill and jamb surfaces of recess.

D. Place a bead of **DuPont™ Residential Sealant** or recommended sealant behind the loose triangular flap within the **FlexWrap™** Recessed Window Corner.

E. Press down the loose triangular flap onto the sealant.

F. Repeat Steps A-E for opposite side.



STEP 3

A. Install **FlexWrap™** at Outer Sill of Recessed Opening

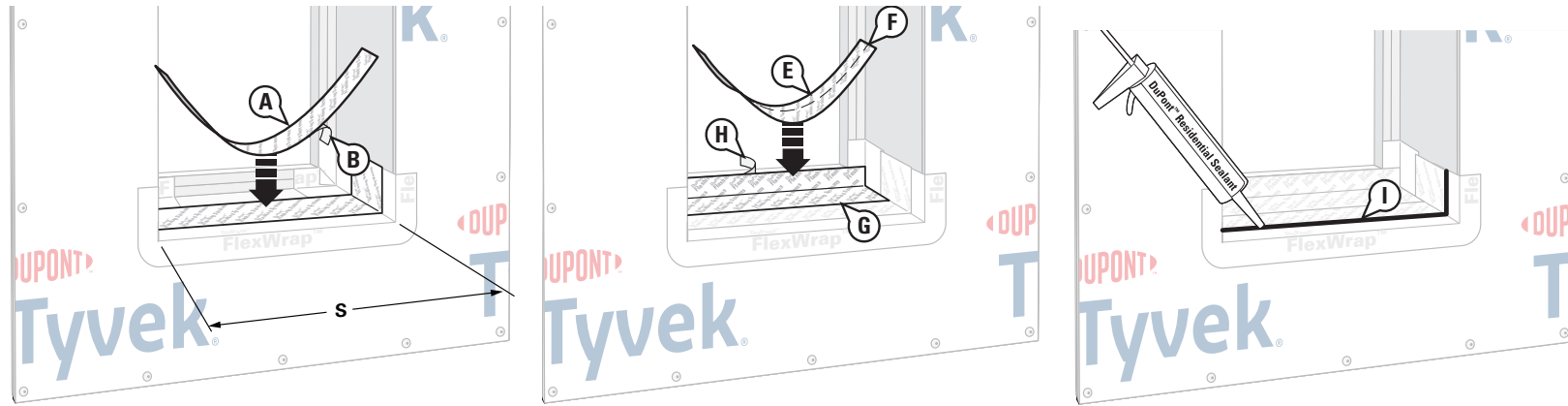
B. Cut **FlexWrap™** at least 12" LONGER than width of outer sill of recess (S).

C. Remove wide piece of release paper. Position on horizontal surface of outer 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 onto horizontal surface.

D. Remove narrow release paper.

E. Fan out **FlexWrap™** at bottom corners 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.

Installation Method 2: Depth of the Recess is Greater Than 1/2 the Width of the Recess



STEP 4

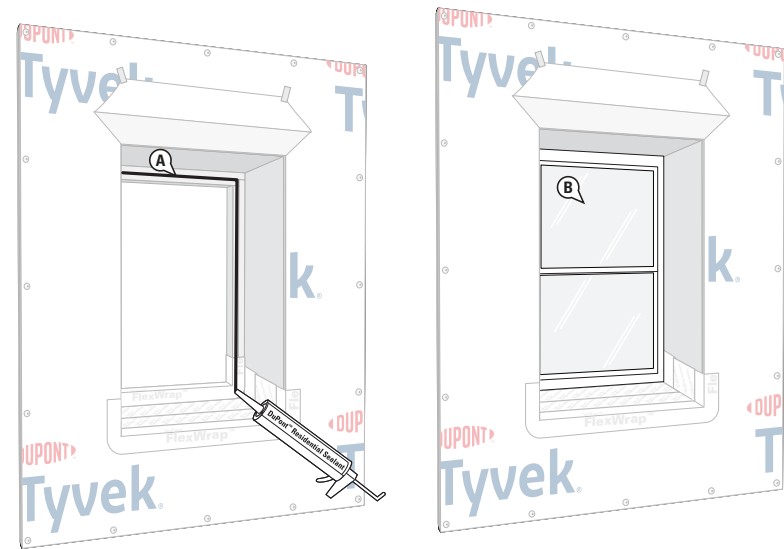
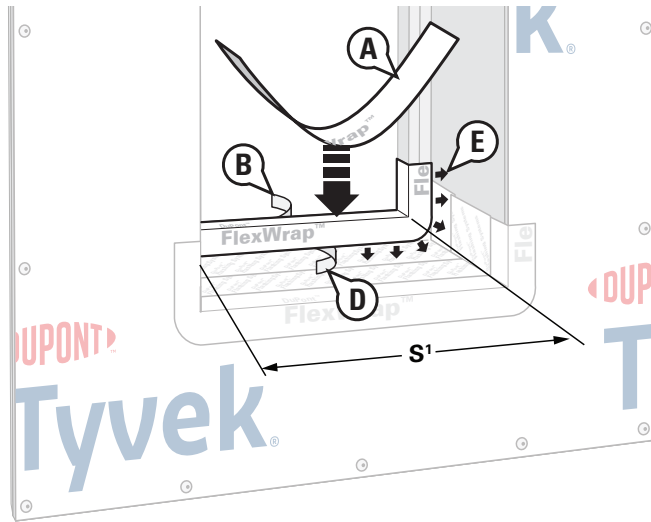
Install **DuPont™ Flashing Tape** at Sill of Recess

DuPont™ Flashing Tape will be used at the sill of the recess in this Step to overlap the **DuPont™ FlexWrap™** at the outer sill and extend onto the face of the stud framing at the inner window sill. The number of layers and product widths can be modified accordingly but all overlaps need to be a minimum of 2". All but the last layer of **DuPont™ Flashing Tape** will extend 6" min. up each side of the recess jamb walls. The last layer will be the width of the outer rough opening and will extend 2" min. onto the face of the stud framing at the sill of the window.

- Cut the first course of **DuPont™ Flashing Tape** 12" longer than outer sill (S).
- Remove the release paper and align on sill to overlap **FlexWrap™** by 2" and extend up each jamb wall of recess by 6". **DuPont™ Flashing Tape** should be installed tightly into the corner at the intersection of the recess sill and wall of recess.
NOTE: The **DuPont™ Flashing Tape** on the jamb walls will have an angled offset from the window framing in recesses that have a sloped sill.
- Adhere exposed butyl to sill and up jamb walls of recess.
- If necessary, repeat Step B with appropriate width of **DuPont™ Flashing Tape** to overlap the first layer of **DuPont™ Flashing Tape** by 2".

- Cut the last layer of **DuPont™ Flashing Tape** the length of the inner window sill (S), and use appropriate width for a minimum of 2" adhesion of butyl onto the face of the stud framing at the window sill maintaining a 2" overlap onto previous layer.
NOTE: This dimension will need to be adjusted if the side walls of the recess are tapered.
- Fold to create a sharp crease that is aligned with the intersection of the recessed sill and the face of the stud framing. Tear release paper at the fold so exposed butyl can be adhered onto sill of recess. Do not cut release paper with sharp object as this may damage the butyl and compromise protection provided by the **DuPont™ Flashing Tape**.
- Adhere exposed butyl on sill of recess and tight into the intersection of recessed sill and face of stud framing.
- Remove second release paper and adhere exposed butyl onto face of stud framing.
- Apply a continuous bead of **DuPont™ Residential Sealant** or recommended sealant along the face of the overlap between the **DuPont™ Flashing Tape** and the **FlexWrap™**.

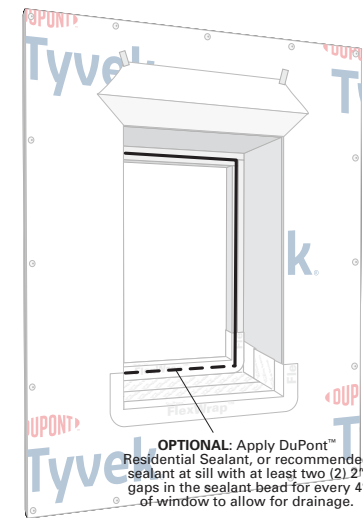
Installation Method 2: Depth of the Recess is Greater Than 1/2 the Width of the Recess



STEP 5

Install **DuPont™ FlexWrap™** in Rough Opening at Sill

- Cut **FlexWrap™** at least 12" LONGER than width of inner/recessed 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 framing.
- Remove wide piece of release paper.
- Position on horizontal surface of inner/recessed sill by aligning the inside edge of the narrow release paper with the face of the framing to ensure 2"- 3" of the **FlexWrap™** will be adhered to the face of the framing. Adhere into rough opening along sill and a minimum of 6" up each jamb.
- Remove narrow release paper.
- Fan out **FlexWrap™** at bottom corners onto face of recessed window framing. Coverage of **FlexWrap™** should be 2"- 3" onto the face of the window frame.

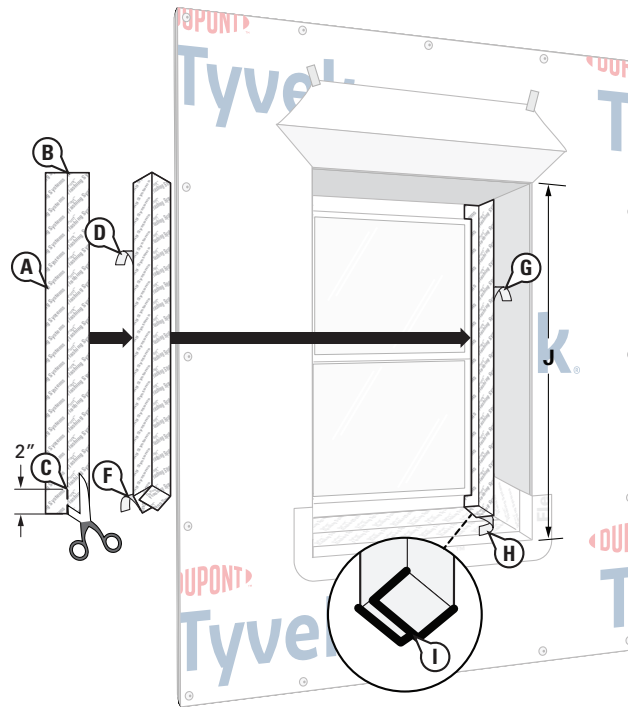


STEP 6

Install Window

- Apply **DuPont™ Residential Sealant** or recommended sealant on three sides of the face of the inner recess framing at jambs and head as shown below.
- Install window per window manufacturer's instructions.

Installation Method 2: Depth of the Recess is Greater Than 1/2 the Width of the Recess



STEP 7

Install **DuPont™ Flashing Tape** at Jamb

A. Cut a piece of **DuPont™ Flashing Tape** 2" LONGER than the length of the outer jamb (I).

NOTE: This dimension will need to be adjusted accordingly to accommodate the slope in the sill. Use appropriate width of **DuPont™ Flashing Tape** to overlap window flange, adhere onto face of stud frame, and extend a minimum of 2" onto jamb wall of recess.

B. Fold lengthwise to create a sharp crease in release paper that is aligned with the intersection of the face of the stud framing and jamb wall of recess.

C. Starting at the bottom, cut a 2" vertical slit in the **DuPont™ Flashing Tape** along the crease. This will be used to create the **DuPont™ Flashing Tape** corner in Steps F and H shown below.

D. Remove the first piece of release paper to expose the butyl that will be installed onto the window flange by tearing along the crease. Leave the release paper on the 2" flap created in Step C. Do not cut release paper with sharp object as this could result in damage to butyl and compromise protection provided by the **DuPont™ Flashing Tape**.

E. Starting at top corner of recess, adhere exposed butyl adhesive onto window flange and face of stud framing.

F. Remove the release paper from the corner flap in the **DuPont™ Flashing Tape**, created in Step C, and adhere the flap to the sill. **NOTE:** Keeping the remaining release papers intact will make the flashing more rigid to help maneuver the flashing into the corners.

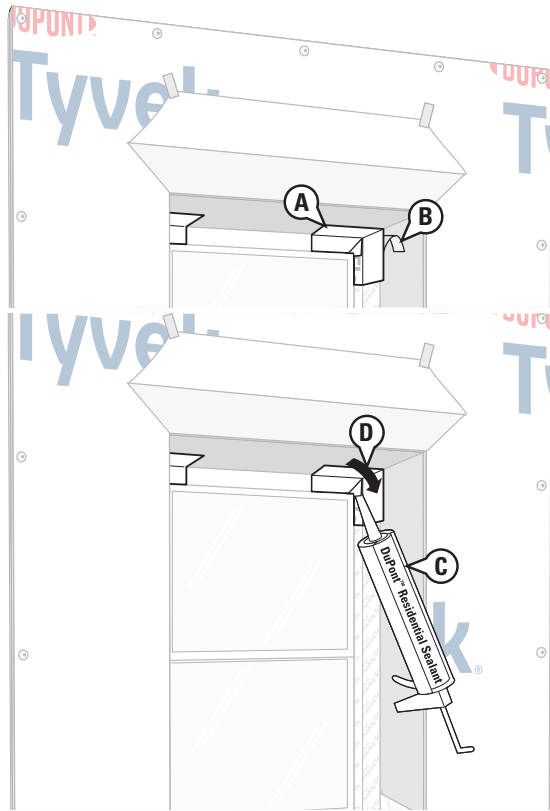
G. Once the butyl is adhered to the window flange, face of stud framing, and sill, remove the remaining release paper – leaving the release paper on the other 2" flap created in Step C. The flashing can now be adhered tightly into the inside corner created by the stud framing and jamb wall of the recess.

H. Remove the release paper from the second corner flap and adhere over the first flap.

I. Apply **DuPont™ Residential Sealant**, or recommended sealant, to the interfaces as shown.

J. Repeat Steps A through I for opposite jamb.

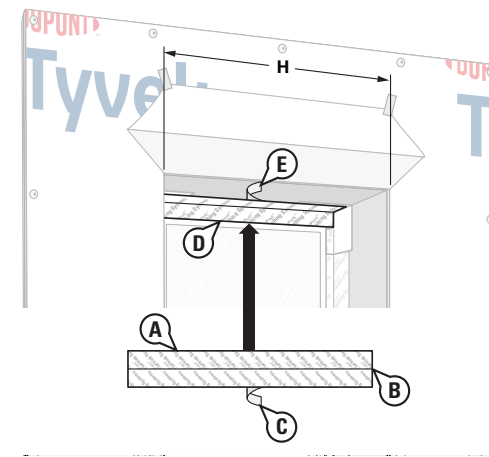
Installation Method 2: Depth of the Recess is Greater Than 1/2 the Width of the Recess



STEP 8

Install **DuPont™ FlexWrap™** Recessed Window Corners at Head

- Install **FlexWrap™** Recessed Window Corners into the upper corner of the window rough opening with exposed butyl adhered onto the window flanges in a similar manner used for lower corner pieces (See Step 3).
- Remove remaining release paper and adhere exposed butyl onto head and jamb walls of recess.
- Place a bead of **DuPont™ Residential Sealant** or recommended sealant inside the corner flap behind the loose triangular flap of the corner piece.
- Press the loose triangular flap onto the sealant in the corner piece.
- Repeat Steps A through D for opposite corner.

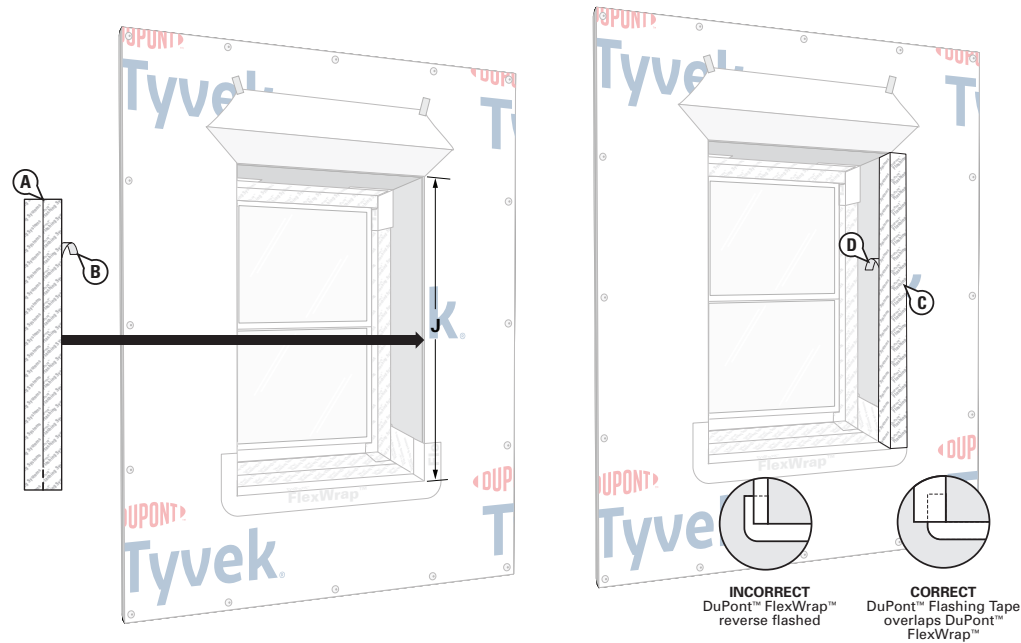


STEP 9

Install **DuPont™ Flashing Tape** at Head

- Cut a piece of **DuPont™ Flashing Tape** the length of the head rough opening "H". Use appropriate width of **DuPont™ Flashing Tape** to overlap window flange, adhere onto face of stud frame, and extend a minimum of 2" onto ceiling of recess.
- Fold lengthwise to create a sharp crease in the release paper that is aligned with the intersection of the face of the stud framing and ceiling of recess.
- Remove release paper by tearing along fold to expose butyl for installation onto the window flange and face of stud framing. Do not cut release paper with sharp object as this could result in damage to butyl and compromise protection provided by the **DuPont™ Flashing Tape**.
- Adhere onto window flange and tightly into corner of intersection between face of stud framing and ceiling of recess.
- Remove remaining release paper and adhere onto ceiling of recess.

Installation Method 2: Depth of the Recess is Greater Than 1/2 the Width of the Recess

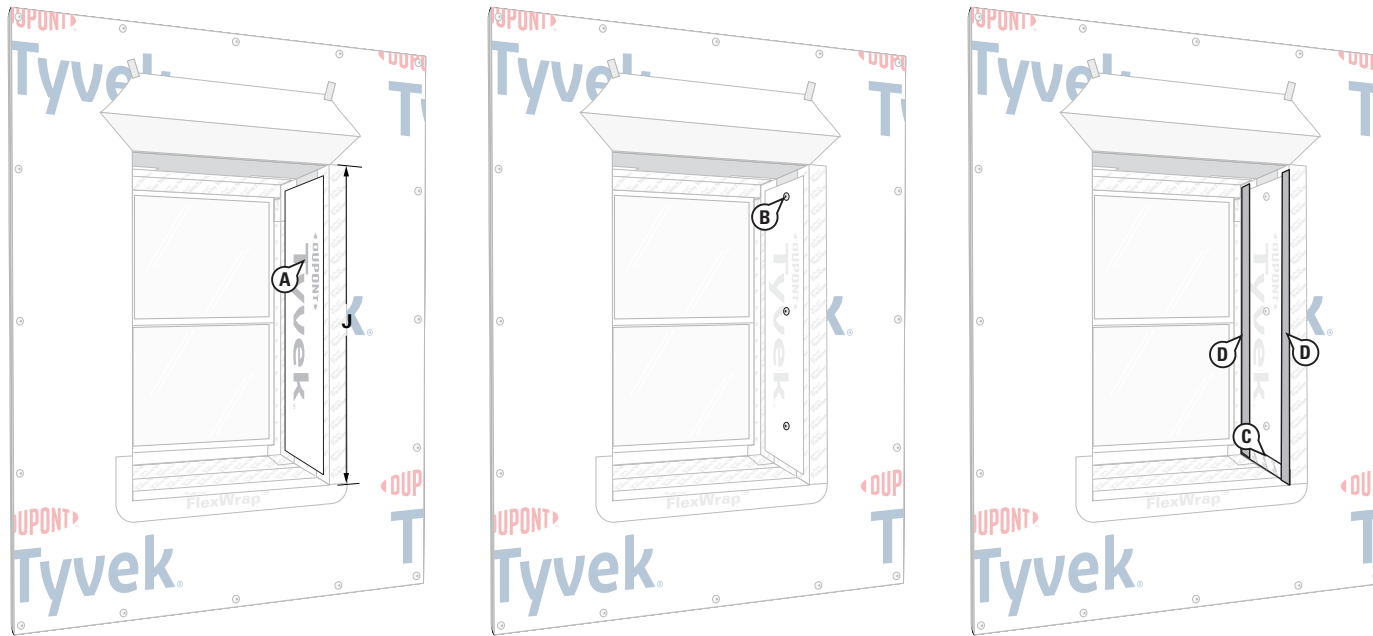


STEP 10

Install **DuPont™ Flashing Tape** at Outer Recess Jamb

- Cut a piece of **DuPont™ Flashing Tape** the length of the jamb rough opening (J) and fold lengthwise creating a sharp crease in the release paper.
- Remove one piece of release paper by tearing along the crease, but do not cut release paper with sharp object as this could result in damage to butyl and compromise protection provided by the **DuPont™ Flashing Tape**.
- Adhere exposed butyl onto face of wall so crease is aligned with edge of outer recess rough opening.
- Remove remaining release paper and adhere exposed butyl into rough opening of recess.
- Repeat Steps A-D on opposite side.

Installation Method 2: Depth of the Recess is Greater Than 1/2 the Width of the Recess



STEP 11

Install **DuPont™ Tyvek®** to Jamb Walls of Recess

A. Cut a piece of **DuPont™ Tyvek® WRB** for each recess jamb that is 2" less than the height (J) and 2–4" less than the depth of the rough opening.

NOTE: These dimensions will need to be adjusted accordingly to accommodate the slope of the recess sill.

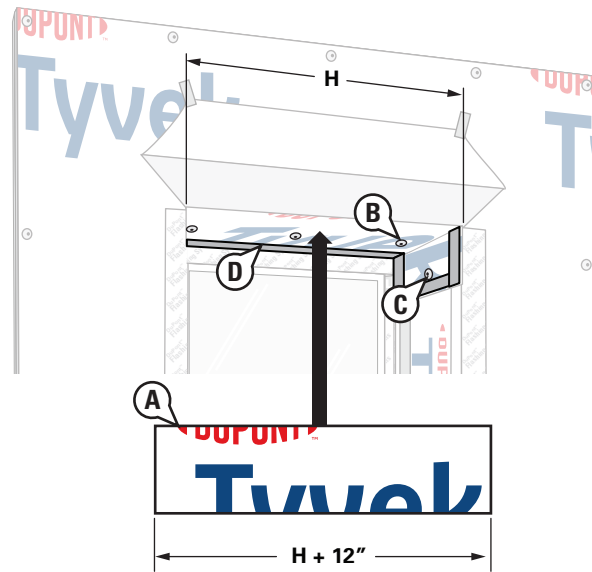
B. Align one piece of **Tyvek® WRB** with top of recess and centered on the vertical wall. Do not fasten within 3" of vertical and horizontal edges so **Tyvek® WRB** patch can be sealed to flashing using **DuPont™ Tyvek® Tape** without fastener interference.

C. Install **Flashing Tape** along the bottom of **Tyvek® WRB** inside recess.

D. Seal vertical edges of **Tyvek® WRB** using **Tyvek® Tape**.

E. Repeat on opposite side.

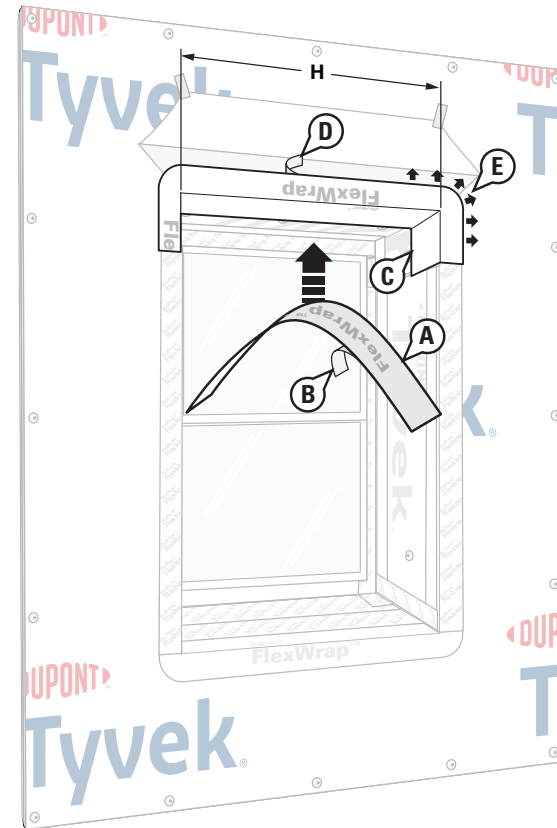
Installation Method 2: Depth of the Recess is Greater Than 1/2 the Width of the Recess



STEP 12

Install **DuPont™ Tyvek® WRB** Patch at Recess Ceiling

- A. Cut a piece of **Tyvek® WRB** 12" longer than the recess rough opening (H) and a width that is 1-2" less than depth of the recess.
- B. Fasten at recess ceiling so the outer edge is aligned with the face of the wall with a 6" overlap onto each jamb wall. Do not fasten within 3" of edges, so that the piece of **Tyvek® WRB** can be sealed to flashing using **DuPont™ Tyvek® Tape** without fastener interference.
- C. Seal all inside edges using **Tyvek® Tape**.

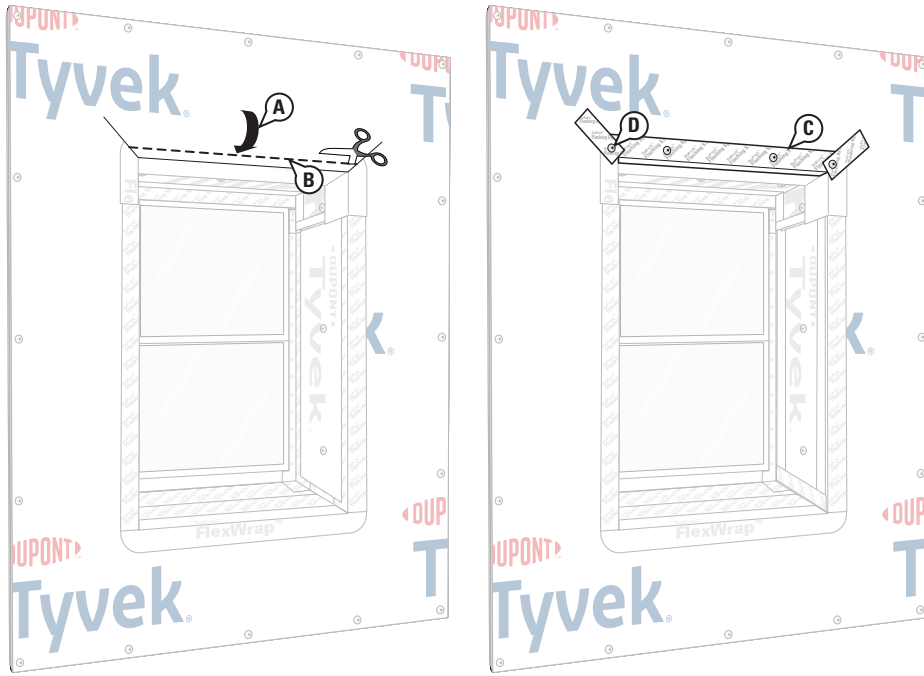


STEP 13

Install **DuPont™ FlexWrap™** Head of Outer Recess

- A. Cut **FlexWrap™** at least 12" longer than width of recess rough opening (H).
- B. Remove wide piece of release paper.
- C. Align the exposed butyl with the outside edge of the wall and adhere to the horizontal surface at inner ceiling of head recess and down inner jamb walls by 6".
- D. Remove narrow release paper.
- E. Fan out **FlexWrap™** at top corners of recess with minimum coverage of 2"- 3" onto the face of wall.

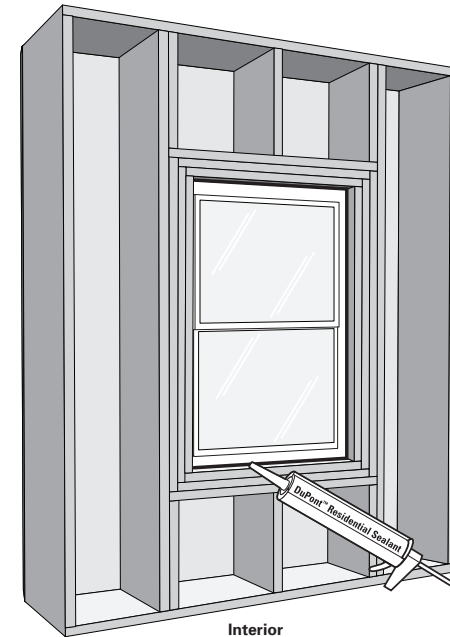
Installation Method 2: Depth of the Recess is Greater Than 1/2 the Width of the Recess



STEP 14

Secure Upper Flap

- Flip down upper flap of **DuPont™ Tyvek® WRB** so it lays flat across **DuPont™ FlexWrap™** at head of outer recess.
- Cut ~1" strip of the **Tyvek® WRB** at lower horizontal edge of head flap.
- Continuous tape seams as shown with **DuPont™ Flashing Tape**. Skip-taping at head is acceptable if an air barrier is not required or if additional drainage is desired.
- Install mechanical fasteners through the flashing at the head flap.



STEP 15

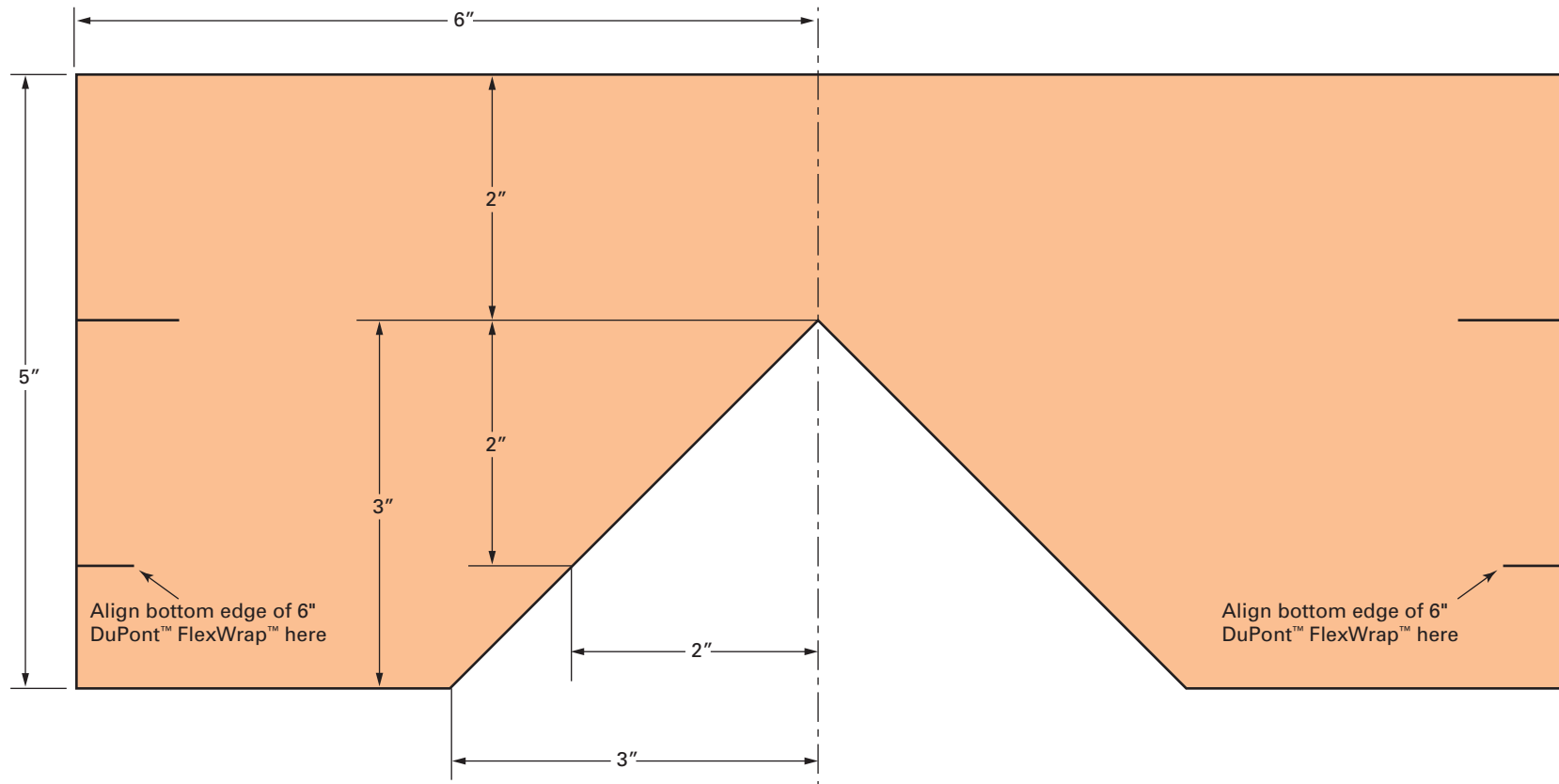
Seal Interior Opening

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 **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.

Corner Release Paper Removal Guide for Alternative Method described on page 7

Use the following guide to create a template to aid in removal of the release paper from the corner section only. This will assist in creating the 90° fold between the two release papers.



Align the bottom edge of 6" **DuPont™ FlexWrap™** with the the 2" marks (for up to 2" recess). Align the bottom edge of 9" **FlexWrap™** with the lower edge of the template (for recesses greater than 2").

For best results, create a reusable template using a piece of heavy/rigid plastic. The template can also be used as a guide when tearing the release paper. Otherwise, use the template to mark the release paper and then use a metal straight edge to assist in tearing the release paper. Do not cut the release paper with a knife or other sharp object as this could result in damage to the butyl and compromise protection provided by the **FlexWrap™** Recessed Window Corners.

Technical Specifications

DuPont Self-Adhered Flashing Products are made from a synthetic rubber adhesive and a laminate of polyethylene film, polypropylene film, elastic fiber, synthetic rubber adhesive, polyurethane adhesive, and a top sheet of flash spunbonded high density polyethylene fibers or polypropylene 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, **Great Stuff Pro™ Window & Door Polyurethane Foam Sealant** is combustible and will burn if exposed to open flame or sparks from high-energy 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™ polyurethane foam sealant and adhesive products contain isocyanate 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 or death.

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® WRBs**. Use of additives, coatings or cleansers on or in the facade system may impact the performance of **Tyvek® WRBs**. DuPont Performance Building Solutions 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 building.dupont.com