DuPont™ Self-Adhered Flashing Systems Installation Guidelines

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

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

REVISION 5/16
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Applicable Products

DuPont™ Self-Adhered Flashing Systems Products

<table>
<thead>
<tr>
<th>PRODUCT</th>
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<tbody>
<tr>
<td>DuPont™ FlexWrap™ NF</td>
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<tr>
<td></td>
<td>9 in</td>
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<tr>
<td>DuPont™ StraightFlash™</td>
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<td>DuPont™ StraightFlash™VF</td>
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<td>DuPont™ Flashing Tape</td>
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Water-Resistive Barriers (WRB)

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<tr>
<th>PRODUCT</th>
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<tbody>
<tr>
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DuPont™ Self-Adhered Flashing Systems Installation Guidelines

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

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<tr>
<td>DuPont™ Tyvek® Tape</td>
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<td>DuPont™ Tyvek® Wrap Cap Fasteners or recommended fastening system</td>
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<td>DuPont™ Window &amp; Door Foam</td>
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<tr>
<td>DuPont™ Residential Sealant, or other recommended sealant</td>
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<td>DuPont™ Adhesive/Primer</td>
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<td>Brushes for Surface Preparation</td>
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<tr>
<td>J-Roller</td>
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*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


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

General Instructions

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

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

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

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

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

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

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

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

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

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

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

Avoid placing DuPont™ Tyvek® Wrap Cap Fasteners where flashing or DuPont™ Tyvek® Tape will be installed; however, DuPont™ Tyvek® Wrap Cap Fasteners can be applied over the flashing.
Adverse weather conditions or cold temperatures may require use of a primer to promote adhesion of DuPont™ self-adhered flashing products to most common building materials. Concrete, masonry, and fiber-faced exterior gypsum board require the use of DuPont™ Adhesive/Primer.

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

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

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

- When installed properly, DuPont™ StraightFlash™, DuPont™ FlexWrap™ NF, and DuPont™ Flashing Tape provide nail sealability at window/door openings to help protect critical window-wall interfaces. Metal sill pan flashing may be used, but must not replace flexible sill flashing that provides nail sealability.

- DuPont™ self-adhered flashing systems products comply with AAMA 711-13, Voluntary Specification for Self Adhering Flashing Used for Installation of Exterior Wall Fenestration Products, which has a modified version of ASTM D 1970 that is more representative for vertical wall applications.

- Direct water onto an acceptable air and water barrier drainage plane with an unobstructed path to the exterior of the wall. Provide a drainage path for any water intrusion through the window/door attachment system that collects at the sill.

- Properly integrate flashing with acceptable DuPont™ Tyvek® WRB in accordance with the details in this installation guideline. DuPont™ self-adhered flashing systems products must be applied with a minimum 2” lap onto the WRB.

- DuPont requires that DuPont™ FlexWrap™ NF and StraightFlash™ be covered within nine months (270 days) of installation. DuPont requires that DuPont™ Flashing Tape be covered within four months (120 days) of installation.

- Ensure that window / door and flashing system design takes into account common factors that will impact performance, such as:
  - Climate considerations: Rainfall, Wind, Temperature (hot / cold cycles), Humidity
  - Building design: Window / Wall Design (overhangs, recessed openings, 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.
Integral Flanged Window BEFORE DuPont™ Tyvek® WRB is Installed

This method applies to the following products:
- DuPont™ StraightFlash™, DuPont™ FlexWrap™ NF, and DuPont™ Flashing Tape

**STEP 1 – FOR RECTANGULAR WINDOWS**

A. Attach apron made of DuPont™ Tyvek® WRB under sill. Apron should extend at least 10” beyond sides of rough opening jambs (or to first stud in open stud construction), and far enough below the rough opening to overlap the sill plate or the DuPont™ Tyvek® WRB below. The top of the apron should be securely attached to the wall and the bottom of the apron should be left unsecured so it can overlap the DuPont™ Tyvek® WRB which will be installed after the window.

B. Cut DuPont™ FlexWrap™ NF at least 12” LONGER than width of sill rough opening (S).

C. Remove wide piece of release paper, cover horizontal sill by aligning inside edge of sill, and adhere into rough opening across sill and up jambs (min. 6” on each side).

D. Remove second release paper.

E. Fan out DuPont™ FlexWrap™ NF at bottom corners onto the face of the wall. Coverage of DuPont™ FlexWrap™ NF should be 2” to 3” onto the face of the wall.
**STEP 2**

A. Apply DuPont™ Residential Sealant, or recommended sealant on three sides (jambs and head) as shown below. If sealant is applied to the sill, ensure that there are at least two (2) 2” gaps in the sealant bead for every 4’ of window to allow for drainage.

**STEP 3 - FOR RECTANGULAR WINDOWS**

A. Install window according to manufacturer’s instructions.

B. Cut two pieces of DuPont™ StraightFlash™, DuPont™ FlexWrap™ NF, or DuPont™ Flashing Tape for jamb flashing extending 1” above window head flange and below bottom edge of sill flashing. Remove release paper and press tightly along sides of window frame.

C. Cut a piece of DuPont™ StraightFlash™, DuPont™ FlexWrap™ NF, or DuPont™ Flashing Tape for head flashing long enough to extends beyond outer edges of jamb flashings. Remove release paper and install completely covering flange and adhering to exposed sheathing or framing members.

**NOTE:** Ensure proper shingling. DuPont™ StraightFlash™, DuPont™ Flashing Tape, or DuPont™ FlexWrap™ NF at jambs must overlap the DuPont™ FlexWrap™ NF at the sill and adhere to the DuPont™ Tyvek® WRB below the sill.
STEP 4 – FOR ROUNDTOP WINDOWS

NOTE: Follow rectangular window instructions (Steps 1 through 3B) for proper installation of sill and jamb flashing prior to head flashing installation.

A. Cut DuPont™ FlexWrap™ NF head flashing at least 12” LONGER than the arc length (H) of roundtop window.

B. Remove both release papers and install to conform around top of window, covering entire mounting flange and adhering to exposed sheathing or framing members. Head flashing should overlap jamb flashings by at least 6”.

STEP 5

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 and Door Foam or recommended foam. The seal created by the sealant (and backer rod as necessary) or foam will also serve as a back dam. DuPont™ Residential Sealant should be tooled flat to allow the natural curing process to create a concave shape. Be sure that the sealant penetrates the grooves of the DuPont™ FlexWrap NF™ around the sill.

NOTE: Installations that specify a window/door design rating of DP45 or greater require extra precautions. See General Instructions for performance requirements exceeding this design rating.
**STEP 6**
After installing the DuPont™ Tyvek® WRB, cut as shown to expose window and apron. (Refer to the DuPont™ Tyvek® Water-Resistive and Air Barriers Installation Guidelines to install the DuPont™ Tyvek® WRB properly).

**DO NOT CUT THROUGH THE DUPONT™ FLASHING SYSTEMS PRODUCTS OR APRON.**

**STEP 7**
Final Step
A. Tape seams as shown. **DO NOT TAPE** at bottom of window. At the head, continuous tape seams as shown with DuPont™ Tyvek® Tape. Skip-taping at the head is acceptable if an air barrier is not required or if additional drainage is desired.

B. Lap bottom of apron and DuPont™ Tyvek® WRB over building materials below for proper shingling.
**ALTERNATE TAPE DETAIL**

Place a continuous bead of DuPont™ Residential Sealant, or recommended sealant, around the jamb and head flashing under the DuPont™ Tyvek® WRB. Press the DuPont™ Tyvek® WRB securely into the sealant.

Rectangular Window

Round-top Window
Integral Flanged Door BEFORE DuPont™ Tyvek® WRB is Installed

This method can be used for doors with field applied flanges. This installation guideline is intended for doors installed above grade and/or with wood floor construction. This method applies to the following products:

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

**STEP 1**

A. Attach apron made of DuPont™ Tyvek® WRB under sill. Apron should extend at least 10” beyond sides of rough opening jambs (or to first stud in open stud construction), and far enough below the rough opening to overlap the sill plate or the DuPont™ Tyvek® WRB below. The top of the apron should be securely attached to the wall and the bottom of the apron should be left unsecured so it can overlap the DuPont™ Tyvek® WRB which will be installed after the door.
STEP 2  
Preparation of sill flashing:
A. Cut 9” DuPont™ FlexWrap™ NF at least 12” LONGER than the width of the sill (S).
B. 9” DuPont™ FlexWrap™ NF has perforated release paper to help with the formation of a back dam. To ensure that the perforation tears cleanly, fold the perforation 180° and crease the flashing.
C. Remove the two widest pieces of release paper leaving the narrowest release paper on the flashing. When the finished floor is applied, the remaining release paper can be removed and the back dam can be completed.

STEP 3  
A. Install the sill flashing as indicated so the section with the release paper still attached extends past the door threshold on the inside. When the narrow release paper is removed, the remaining section of DuPont™ FlexWrap™ NF can be used to form a back dam.
OPTION: Create back dam by folding back narrow section of DuPont™ FlexWrap™ NF. Some flooring cannot accommodate a back dam. In that case fold the back dam on top of DuPont™ FlexWrap™ NF in the sill. The door will be installed on top of the fold to create a back dam (see Side View Detail below).
STEP 4
A. Fan out DuPont™ FlexWrap™ NF at bottom corners onto the face of the wall. Coverage of DuPont™ FlexWrap™ NF should be 2” to 3” onto the face of the wall.

STEP 5
Apply DuPont™ Residential Sealant, or recommended sealant, on three sides (jambs and head) as shown below. If sealant is applied to the sill, ensure that there are at least two (2) 2” gaps in the sealant bead for every 4’ of window to allow for drainage.
**STEP 6 (OPTIONAL - HIGH PRESSURE SKIRT)**

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

A. Create the high pressure skirt by cutting a piece of DuPont™ Tyvek® WRB 1” wider than the width of door opening and approximately 10” in depth.

B. Cut a piece of DuPont™ StraightFlash™ or DuPont™ Flashing Tape to the same width as the skirt. Remove release paper and adhere 2” of the exposed butyl to the DuPont™ Tyvek® WRB.

C. The skirt may be made with DuPont™ StraightFlash™, DuPont™ Flashing Tape, or DuPont™ StraightFlash™ VF.

Attach remaining exposed butyl to underside of door
STEP 7

A. **OPTIONAL:** Adhere high pressure skirt to bottom of threshold of the door.

B. Install door according to manufacturer’s instructions.

C. Cut two pieces of DuPont™ StraightFlash™, DuPont™ FlexWrap™ NF, or DuPont™ Flashing Tape for jamb flashing extending 1” above door head flange and below bottom edge of high pressure skirt. Remove release paper and press tightly along sides of door frame.

D. Cut a piece of DuPont™ StraightFlash™, DuPont™ FlexWrap™ NF or DuPont™ Flashing Tape for head flashing long enough to extend beyond outer edges of jamb flashings. Remove release paper and install completely covering mounting flange and adhering to exposed sheathing or framing members.

**NOTE:** Ensure proper shingling. DuPont™ StraightFlash™, DuPont™ Flashing Tape, or DuPont™ FlexWrap™ NF at jambs must overlap the DuPont™ FlexWrap™ NF at the sill and adhere to the DuPont™ Tyvek® WRB below the sill.
STEP 8
After installing the DuPont™ Tyvek® WRB, cut as shown to expose door and apron. (Refer to the DuPont™ Tyvek® Water-Resistive and Air Barriers Installation Guidelines to install the DuPont™ Tyvek® WRB properly).

**DO NOT CUT THROUGH THE DUPONT™ FLASHING SYSTEMS PRODUCTS OR APRON.**

STEP 9
A. Tape seams as shown. **DO NOT TAPE** at bottom of window. At the head, continuous tape seams as shown with DuPont™ Tyvek® Tape. Skip-taping at the head is acceptable if an air barrier is not required or if additional drainage is desired.

B. Lap bottom of apron and the DuPont™ Tyvek® WRB over building materials below for proper shingling.
ALTERNATE TAPE DETAIL
Place a continuous bead of DuPont™ Residential Sealant, or recommended sealant, around the jamb and head flashing under the DuPont™ Tyvek® WRB. Press the DuPont™ Tyvek® WRB securely into the sealant.

STEP 10
Final Step
A. When the interior flooring is ready to install, remove release paper and use Folding Option One or Two (shown below) to form back dam.
B. Install DuPont™ Residential Sealant, or recommended sealant, (and backer rod as necessary) around the door opening at the interior. It is also acceptable to use DuPont™ Window & Door Foam or recommended foam. The seal created by the sealant (and backer rod as necessary) or foam will also serve as a back dam. DuPont™ Residential Sealant should be tooled flat to allow the natural curing process to create a concave shape. Be sure that the sealant penetrates the grooves of the DuPont™ FlexWrap™ NF around the sill.

NOTE: Installations that specify a window/door design rating of DP45 or greater require extra precautions. See General Instructions for performance requirements exceeding this design rating.
Brick Mold Window BEFORE DuPont™ Tyvek® WRB Is Installed
This installation guide can also be used for windows with field applied nailing fins and non-flanged windows.

This method applies to the following products:
• DuPont™ StraightFlash™, DuPont™ FlexWrap™ NF, and DuPont™ Flashing Tape

**STEP 1 – FOR RECTANGULAR WINDOWS**
A. Attach apron made of DuPont™ Tyvek® WRB under sill. Apron should extend at least 10” beyond sides of rough opening jambs (or to first stud in open stud construction), and far enough below the rough opening to overlap the sill plate or the DuPont™ Tyvek® WRB below. The top of the apron should be securely attached to the wall and the bottom of the apron should be left unsecured so it can overlap the DuPont™ Tyvek® WRB which will be installed after the window.

B. Cut DuPont™ FlexWrap™ NF at least 12” longer than width of sill rough opening (S).

C. Remove first piece of release paper, cover horizontal sill by aligning inside edge of sill, and adhere into rough opening across sill and up jambs (min. 6” on each side).

D. Remove second release paper.

E. Fan out DuPont™ FlexWrap™ NF at bottom corners onto the face of the wall. Coverage of DuPont™ FlexWrap™ NF should be 2” to 3” onto the face of the wall.
**STEP 2**

A. Prepare head flashing by cutting a piece of DuPont™ StraightFlash™ VF at least twelve (12) inches LONGER than the head length.

B. Break the perforated release paper on one side of the head flashing by folding it back and forth upon itself.

C. Center the DuPont™ StraightFlash™ VF along the length of the window head and position so that it contacts the window frame and interior side of the brick mold or flange. Remove the outer release paper and adhere the flashing to the window frame. Use the inner release paper to form a tight seal in the corner.

D. Remove the inner release paper and adhere the flashing to the back of the brick mold or flange.

E. Beginning at the junction of the jamb and the head, and away from the corner, cut DuPont™ StraightFlash™ VF at a 45° angle.

F. Fold the newly created flaps down against the brick mold or flange.

G. Fold remaining head flashing flaps down onto the jamb.
**STEP 3**

A. Prepare jamb flashing by cutting a piece of DuPont™ StraightFlash™ VF at least six (6) inches LONGER than the jamb.

B. Break the perforated release paper on one side of the jamb flashing by folding it back and forth upon itself.

C. Position so that the DuPont™ StraightFlash™ VF contacts the window frame and interior side of the brick mold or flange. Ensure that the jamb flashing is positioned 1-1/2 inch below the top edge of the head flashing. **Jamb flashing adhesive must come in contact with head flashing adhesive and overlap one inch.**

D. Remove the outer release paper and adhere the flashing to the window frame. Use the inner release paper to form a tight seal in the corner.

E. Remove the inner release paper and adhere the flashing to the back of the brick mold or flange.

F. Repeat on opposite jamb.
**STEP 4**

A. Beginning at the junction of the jamb and the head, and away from the corner, cut the DuPont™ StraightFlash™ VF at a 45° angle. Repeat the procedure at the junction of the sill and jambs.

B. Fold cut jamb flashing parallel to the window frame so that the jamb flashing lies flat.

C. Fold the newly created jamb flashing flaps down at the corners and adhere to the window frame.
**STEP 5**
A. If sealant is applied to the sill, ensure that there are at least two (2) 2" gaps in the sealant bead to allow for drainage for every 4’ of window using DuPont™ Residential Sealant, or recommended sealant.
B. Install window according to manufacturer’s installation instructions.
C. Remove the remaining release paper from the DuPont™ StraightFlash™ VF jamb flashing and press firmly to adhere it to the exterior sheathing or framing members.
D. Remove the release paper at the head and adhere it to the exterior sheathing or framing members.

**STEP 6 (OPTIONAL)**
A. Cover exposed butyl with DuPont™ StraightFlash™, DuPont™ Flashing Tape or DuPont™ Tyvek® Tape.
B. Cut a piece of metal or vinyl drip cap slightly longer than the width of the window and place a bead of DuPont™ Residential Sealant, or recommended sealant, on the rear side. Install the drip cap tight against brick mold and cover the top edge with DuPont™ StraightFlash™ or DuPont™ Flashing Tape.

**NOTE:** Do not reverse shingle. DuPont™ StraightFlash™ must overlap DuPont™ FlexWrap™ NF and adhere to the substrate.
**STEP 7**
Install DuPont™ Residential Sealant, or recommended sealant, (and backer rod as necessary) around the window opening at the interior. It is also acceptable to use DuPont™ Window & Door Foam or recommended foam. The seal created by the sealant (and backer rod as necessary) or foam will also serve as a back dam. DuPont™ Residential Sealant should be tooled flat to allow the natural curing process to create a concave shape. Be sure that the sealant penetrates the grooves of the DuPont™ FlexWrap™ NF around the sill.

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

**STEP 8**
After installing the DuPont™ Tyvek® WRB, cut as shown to expose window and apron. (Refer to the DuPont™ Tyvek® Water-Resistive and Air Barriers Installation Guidelines to install the DuPont™ Tyvek® WRB properly).

DO NOT CUT THROUGH THE DUPONT™ FLASHING SYSTEMS PRODUCTS OR APRON.
STEP 9
Final Step

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

B. Lap bottom of apron and DuPont™ Tyvek® WRB over building materials below for proper shingling.

ALTERNATE TAPE DETAIL

Place a continuous bead of DuPont™ Residential Sealant, or recommended sealant, around the jamb and head flashing under the DuPont™ Tyvek® WRB. Press the DuPont™ Tyvek® WRB securely into the sealant.
Brick Mold Door BEFORE DuPont™ Tyvek® WRB Is Installed

This installation guide is intended for doors installed above grade and with wood floor construction. This method applies to the following products:

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

**STEP 1**

Attach apron made of DuPont™ Tyvek® WRB under sill (S). Apron should extend at least 10” beyond sides of rough opening jambs (or to first stud in open stud construction), and far enough below the rough opening to overlap the sill plate or the DuPont™ Tyvek® WRB below. The top of the apron should be securely attached to the wall and the bottom of the apron should be left unsecured so it can overlap the DuPont™ Tyvek® WRB which will be installed after the door.
STEP 2
Preparation of sill flashing:
A. Cut 9” DuPont™ FlexWrap™ NF at least 12” LONGER than the width of the sill (S).
B. 9” DuPont™ FlexWrap™ NF has perforated release paper to help with the formation of a back dam. To ensure that the perforation tears cleanly, fold the perforation 180° and crease the flashing.
C. Remove the widest pieces of release paper leaving the narrowest release paper on the flashing. When the finished floor is applied, the release paper can be removed and the back dam can be completed.

6-inch for 2x4-inch studs
9-inch for 2x6-inch studs

Peel Off 2-pieces of Backing

Fold at perforation

Perforation
STEP 3 (OPTIONAL BACK DAM)
Install the sill flashing as indicated so the section with the release paper still attached extends past the door threshold on the inside. When the 1” of release paper is removed, the remaining section of DuPont™ FlexWrap™ NF can be used to form a back dam.

OPTION 2: Create back dam by folding back narrow section of DuPont™ FlexWrap™ NF:
Some flooring cannot accommodate a back dam. In that case fold the 1” back dam on top of DuPont™ FlexWrap™ NF in the sill. The door will be installed on top of the fold to create a back dam.
**STEP 4**

A. Fan out DuPont™ FlexWrap™ NF at bottom corners onto the face of the wall. Coverage of DuPont™ FlexWrap™ NF should be 2” to 3” onto the face of the wall.
STEP 5 (FOR BRICK MOLD DOORS)
A. Prepare head flashing by cutting a piece of DuPont™ StraightFlash™ VF at least twelve (12) inches LONGER than the head length.
B. Break the perforated release paper on one edge of the head flashing by folding it back and forth upon itself.
C. Center the DuPont™ StraightFlash™ VF along the length of the door head and position so that it contacts the door frame and interior side of the brick mold or flange. Remove the outer release paper and adhere the flashing to the door frame. Use the inner release paper to form a tight seal in the corner.
D. Remove the inner release paper and adhere the flashing to the back of the brick mold or flange.
E. At the corner of the door frame, cut the DuPont™ StraightFlash™ VF at a 45° angle.
F. Fold the newly created flashing flap down flat against the brick mold or flange.
G. Fold remaining head flashing flaps down onto the jamb frame.
**STEP 6**

A. Prepare jamb flashing by cutting a piece of DuPont™ StraightFlash™ VF at least six (6) inches longer than the jamb.

B. Break the perforated release paper on one side of the jamb flashing by folding it back and forth upon itself.

C. Position so that DuPont™ StraightFlash™ VF contacts the door frame and interior side of the brick mold or flange. Ensure that the jamb flashing is positioned 1-1/2 inch below the top edge of the head flashing. **Jamb flashing adhesive must come in contact with head flashing adhesive by one inch.**

D. Remove the outer release paper and adhere the flashing to the door frame. Use the inner release paper to form a tight seal in the corner.

E. Remove the inner release paper and adhere the flashing to the back of the brick mold or flange.

F. Repeat on opposite jamb.

**STEP 7**

A. Beginning at the junction of the jamb and head and beginning at the junction of the jamb and sill, and away from the corner, cut the DuPont™ StraightFlash™ VF along both corners at a 45° angle.

B. Fold newly created flaps down flat against the head flashing.

C. Fold newly created flaps down onto the head and sill of door frame.
FOR BRICK MOLD

STEP 8 (OPTIONAL - HIGH PRESSURE SKIRT)
For extreme weather conditions, performance requirements exceeding ASTM E1677, or window/door design ratings of DP45 or greater, see General Instructions.
A. Create the high pressure skirt by cutting a piece of DuPont™ Tyvek® WRB 1” wider than the width of the door opening and approximately 10” in height.
B. Cut a piece of DuPont™ StraightFlash™ VF to the same width of skirt. Remove release paper from one side of DuPont™ StraightFlash™ VF and adhere to DuPont™ Tyvek® WRB. The skirt may be made with DuPont™ StraightFlash™ VF, DuPont™ StraightFlash™ or DuPont™ Flashing Tape.
C. Remove the release paper from the other side of DuPont™ StraightFlash™ VF and adhere the butyl adhesive at the sill skirt to the underside of the door threshold behind the jamb flashing.
D. Secure edges of the optional skirt with two 4” pieces of DuPont™ StraightFlash™ or DuPont™ Flashing Tape.
E. Tape the bottom of the optional skirt to allow for drainage and to minimize wind damage during construction.
F. If sealant is applied to the sill, insure (2) 2” gaps to allow for drainage for every 4’ of door using DuPont™ Residential Sealant or recommended sealant.
**STEP 9**

A. Install door according to manufacturer’s installation instructions.

B. Remove the remaining release paper from the DuPont™ StraightFlash™ VF jamb flashing and press firmly to adhere it to the exterior sheathing or framing members.

C. Remove the release paper at the head and adhere it to the exterior sheathing or framing members.

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

**STEP 10 (OPTIONAL)**

A. Cut a piece of metal or vinyl drip cap slightly longer than the width of the door and place a bead of DuPont™ Residential Sealant, or recommended sealant, on the rear side. Install the drip cap tight against the door head and cover the top edge with DuPont™ StraightFlash™ or DuPont™ Flashing Tape.
**STEP 11**
After installing the DuPont™ Tyvek® WRB, cut as shown to expose door and apron. (Refer to the DuPont™ Tyvek® Water-Resistive and Barriers Installation Guidelines to install the DuPont™ Tyvek® WRB properly).

**DO NOT CUT THROUGH THE DUPONT™ FLASHING SYSTEMS PRODUCTS OR APRON.**

**STEP 12**
A. Tape seams as shown, **DO NOT TAPE** at bottom of window. At the head, continuous tape seams as shown with DuPont™ Tyvek® Tape. Skip-taping at the head is acceptable if an air barrier is not required or if additional drainage is desired.  
B. Lap bottom of apron and the DuPont™ Tyvek® WRB over building materials below for proper shingling.
ALTERNATE TAPE DETAIL
Place a continuous bead of DuPont™ Residential Sealant, or recommended sealant, around the jamb and head flashing under the DuPont™ Tyvek® WRB. Press the DuPont™ Tyvek® WRB securely into the sealant.

STEP 13
Final Step
A. When the interior flooring is ready to install, remove release paper and use Folding Option One or Two to form back dam.
B. Install DuPont™ Residential Sealant, or recommended sealant, and (and backer rod as necessary) around the window opening at the interior. It is also acceptable to use DuPont™ Window & Door Foam or recommended foam. The seal created by the sealant (and backer rod as necessary) or foam will also serve as a back dam. DuPont™ Residential Sealant should be tooled flat to allow the natural curing process to create a concave shape. Be sure that the sealant penetrates the grooves of the DuPont™ FlexWrap™ NF around the sill.

NOTE: Installations that specify a window/door design rating of DP45 or greater require extra precautions. See General Instructions for performance requirements exceeding this design rating.
Field Applied Flanged Window DuPont™ Tyvek® WRB Is Installed
This method applies to the following products:
• DuPont™ StraightFlash™, DuPont™ StraightFlash™ VF, DuPont™ FlexWrap™ NF and DuPont™ Flashing Tape

STEP 1
A. Attach apron made of DuPont™ Tyvek® WRB under sill (S). Apron should extend at least 10” beyond sides of rough opening jambs (or to first stud in open stud construction), and far enough below the rough opening to overlap the sill plate or the DuPont™ Tyvek® WRB below. The top of the apron should be securely attached to the wall and the bottom of the apron should be left unsecured so it can overlap the DuPont™ Tyvek® WRB which will be installed after the window.
B. Cut DuPont™ FlexWrap™ NF at least 12” longer than width of sill rough opening (S).
C. Remove first piece of release paper, cover horizontal sill by aligning inside edge of sill, and adhere into rough opening across sill and up jambs (min. 6” on each side).
D. Remove second release paper.
E. Fan out DuPont™ FlexWrap™ NF at bottom corners onto the face of the wall. Coverage of DuPont™ FlexWrap™ NF should be 2” to 3” onto the face of the wall.
DuPont™ Self-Adhered Flashing Systems Installation Guidelines

STEP 2
A. Apply field applied flanges in the correct shingling fashion per manufacturer’s installation instructions. **DO NOT REVERSE SHINGLE**.
B. Cut four 3” x 3” pieces of DuPont™ FlexWrap™ NF.
C. Apply DuPont™ FlexWrap™ NF patches to back of flange corners before applying DuPont™ StraightFlash™ VF.
D. Staple patches in corners and secure to wooden head and jambs.
STEP 3
A. Prepare head flashing by cutting a piece of DuPont™ StraightFlash™ VF at least twelve (12) inches LONGER than the head length.
B. Break the perforated release paper on one side of the head flashing by folding it back and forth upon itself.
C. Center the DuPont™ StraightFlash™ VF along the length of the window head and position so that it contacts the window frame and interior side of the brick mold or flange. Remove the outer release paper and adhere the flashing to the window frame. Use the inner release paper to form a tight seal in the corner.
D. Remove the inner release paper and adhere the flashing to the back of the brick mold or flange.
E. Beginning at the junction of the jamb and the head, and away from the corner, cut DuPont™ StraightFlash™ VF at a 45° angle.
F. Fold the newly created flaps down against the brick mold or flange.
G. Fold remaining head flashing flaps down onto the jamb.
STEP 4
A. Prepare jamb flashing by cutting a piece of DuPont™ StraightFlash™ VF at least six (6) inches LONGER than the jamb.
B. Break the perforated release paper on one side of the jamb flashing by folding it back and forth upon itself.
C. Position so that the DuPont™ StraightFlash™ VF contacts the window frame and interior side of the brick mold or flange. Ensure that the jamb flashing is positioned 1-1/2 inch below the top edge of the head flashing. **Jamb flashing adhesive must come in contact with head flashing adhesive and overlap one inch.**
D. Remove the outer release paper and adhere the flashing to the window frame. Use the inner release paper to form a tight seal in the corner.
E. Remove the inner release paper and adhere the flashing to the back of the brick mold or flange.
F. Repeat on opposite jamb.

\[\text{Make sure the adhesive on these pieces will overlap.}\]

\[1-1/2''\]

\[\text{Window Interior}\]

\[\text{Window Interior}\]

\[\text{Window Interior}\]
**STEP 5**

A. Beginning at the junction of the jamb and head, and away from the corner, cut the DuPont™ Straightflash™ VF at a 45° angle. Repeat the procedure at the junction of the sill and jamb.

B. Fold cut jamb flashing parallel to the window frame so that the jamb flashing lies flat.

C. Fold remaining jamb flashing flaps down at all corners and adhere to the window frame.

**STEP 6**

A. If sealant is applied to the sill, ensure that there are at least two (2) 2” gaps in the sealant bead to allow for drainage for every 4’ of window using DuPont™ Residential Sealant or recommended sealant.

B. Install window according to manufacturer’s installation instructions.

C. Remove the remaining release paper from the DuPont™ StraightFlash™ VF jamb flashing and press firmly to adhere it to the exterior sheathing or framing members.

D. Remove the release paper at the head and adhere it to the exterior sheathing or framing members.
STEP 6A (OPTIONAL)
A. Cover exposed butyl with DuPont™ StraightFlash™, DuPont™ Flashing Tape or DuPont™ Tyvek® Tape.
B. Cut a piece of metal or vinyl drip cap slightly longer than the width of the window and place a bead of DuPont™ Residential Sealant, or recommended sealant, on the rear side. Install the drip cap tight against brick mold and cover the top edge with DuPont™ StraightFlash™ or DuPont™ Flashing Tape.

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

STEP 7
Install DuPont™ Residential Sealant, or recommended sealant, (and backer rod as necessary) around the window opening at the interior. It is also acceptable to use DuPont™ Window & Door Foam or recommended foam. The seal created by the sealant (and backer rod as necessary) or foam will also serve as a back dam. DuPont™ Residential Sealant should be tooled flat to allow the natural curing process to create a concave shape. Be sure that the sealant penetrates the grooves of the DuPont™ FlexWrap™ NF around the sill.

NOTE: Installations that specify a window/door design rating of DP45 or greater require extra precautions. See General Instructions for performance requirements exceeding this design rating.
**STEP 8**
After installing the DuPont™ Tyvek® WRB, cut as shown to expose door and apron. (Refer to the DuPont™ Tyvek® Water-Resistant Barriers Installation Guidelines to install the DuPont™ Tyvek® WRB properly). **DO NOT CUT THROUGH THE DUPONT™ FLASHING SYSTEMS PRODUCTS OR APRON.**

![Side View Detail Diagram]

**STEP 9**
Final Step
A. Tape seams as shown. **DO NOT TAPE** at bottom of window. At the head, continuous tape seams as shown with DuPont™ Tyvek® Tape. Skip-taping at the head is acceptable if an air barrier is not required or if additional drainage is desired.

B. Lap bottom of apron and DuPont™ Tyvek® WRB over building materials below for proper shingling.
ALTERNATE TAPE DETAIL
Place a continuous bead of DuPont™ Residential Sealant, or recommended sealant, around the jamb and head flashing under the DuPont™ Tyvek® WRB. Press the DuPont™ Tyvek® WRB securely into the sealant.
Field Applied Flanged Door BEFORE DuPont™ Tyvek® WRB Is Installed

This installation guide is intended for doors installed above grade and with wood floor construction. This method applies to the following products:

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

**STEP 1**

Attach apron made of DuPont™ Tyvek® WRB under sill (S). Apron should extend at least 10” beyond sides of rough opening jambs (or to first stud in open stud construction), and far enough below the rough opening to overlap the sill plate or the DuPont™ Tyvek® WRB below. The top of the apron should be securely attached to the wall and the bottom of the apron should be left unsecured so it can overlap the DuPont™ Tyvek® WRB which will be installed after the door.
STEP 2
Preparation of sill flashing:
A. Cut piece of DuPont™ FlexWrap™ NF at least 12” LONGER than the width of the sill (S).
B. 9” DuPont™ FlexWrap™ NF has perforated release paper to help with the formation of a back dam. To ensure that the perforation tears cleanly, fold the perforation 180° and crease the flashing.
C. Remove the two widest pieces of release paper leaving the narrowest release paper on the flashing. When the finished floor is applied, the release paper can be removed and the back dam can be completed.
STEP 3 (OPTIONAL BACKDAM)
Install the sill flashing as indicated so the section with the release paper still attached extends past the door threshold on the inside. When the narrow release paper is removed, the remaining section of DuPont™ FlexWrap™ NF can be used to form a back dam.

OPTION 2: Create back dam by folding back narrow section of DuPont™ FlexWrap™ NF: Some flooring cannot accommodate a back dam. In that case fold the 1” back dam on top of DuPont™ FlexWrap™ NF in the sill. The door will be installed on top of the 1” fold to create a back dam.
STEP 4
A. Fan out DuPont™ FlexWrap™ NF at bottom corners onto the face of the wall.
    Coverage of DuPont™ FlexWrap™ NF should be 2” to 3” onto the face of the wall.
STEP 5 (FOR FIELD APPLIED FLANGED DOORS ONLY)
NOTE: This step is not required for Brick Mold Doors
A. Apply field applied flanges in the correct shingling fashion per manufacturer’s installation instructions. **DO NOT REVERSE SHINGLE.**
B. Cut four 3” x 3” pieces of DuPont™ FlexWrap™ NF.
C. Apply DuPont™ FlexWrap™ NF patches to back of flange corners before applying DuPont™ StraightFlash™ VF.
D. Staple patches in corners and secure to wooden head and jambs.
STEP 6 (FOR FIELD APPLIED DOORS)
A. Prepare head flashing by cutting a piece of DuPont™ StraightFlash™ VF at least twelve (12) inches LONGER than the head length.
B. Break the scored release paper on one edge of the head flashing by folding it back and forth upon itself.
C. Center the DuPont™ StraightFlash™ VF along the length of the door head and position so that it contacts the door frame and interior side of the brick mold or flange. Remove the outer release paper and adhere the flashing to the door frame. Use the inner release paper to form a tight seal in the corner.
D. Remove the inner release paper and adhere the flashing to the back of the brick mold or flange.
E. At the corner of the door frame, cut the DuPont™ StraightFlash™ VF at a 45° angle.
F. Fold the newly created flashing flap down flat against the brick mold or flange.
G. Fold remaining head flashing flaps down onto the jamb frame.
**STEP 7**
A. Prepare jamb flashing by cutting a piece of DuPont™ StraightFlash™ VF at least six (6) inches LONGER than the jamb.
B. Break the perforated release paper on one side of the jamb flashing by folding it back and forth upon itself.
C. Position so that DuPont™ StraightFlash™ VF contacts the door frame and interior side of the brick mold or flange. Ensure that the jamb flashing is positioned 1-1/2 inch below the top edge of the head flashing. **Jamb flashing adhesive must come in contact with head flashing adhesive by one inch.**
D. Remove the outer release paper and adhere the flashing to the door frame. Use the inner release paper to form a tight seal in the corner.
E. Remove the inner release paper and adhere the flashing to the back of the brick mold or flange.
F. Repeat on opposite jamb.

**STEP 8**
A. Beginning at the junction of the jamb and head and beginning at the junction of the jamb and sill, and away from the corner, cut the DuPont™ StraightFlash™ VF along both corners at a 45° angle.
B. Fold newly created flaps down flat against the head flashing.
C. Fold newly created flaps down onto the head and sill of door frame.
FOR BRICK MOLD, FIELD APPLIED AND NON-FLANGED DOORS

STEP 9 (OPTIONAL) - HIGH PRESSURE SKIRT

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

A. Create the high pressure skirt by cutting a piece of DuPont™ Tyvek® WRB 1” wider than the width of door opening and approximately 10” in height.

B. Cut a piece of DuPont™ StraightFlash™ VF to the same width of skirt. Remove release paper from one side of DuPont™ StraightFlash™ VF and adhere to DuPont™ Tyvek® WRB. The skirt may be made with DuPont™ StraightFlash™ VF, DuPont™ StraightFlash™ or DuPont™ Flashing Tape.

C. Remove the release paper from the other side of DuPont™ StraightFlash™ VF and adhere the butyl adhesive at the sill skirt to the underside of the door threshold behind the jamb flashing.

D. Secure edges of the optional skirt with two 4” pieces of DuPont™ StraightFlash™ or DuPont™ Flashing Tape.

E. Tape the bottom of the optional skirt to allow for drainage and to minimize wind damage during construction.

F. If sealant is applied to the sill, insure (2) 2” gaps to allow for drainage for every 4’ of door using DuPont™ Residential Sealant or recommended sealant.
**STEP 10**

A. Install door according to manufacturer’s installation instructions.

B. Remove the remaining release paper from the DuPont™ StraightFlash™ VF jamb flashing and press firmly to adhere it to the exterior sheathing or framing members.

C. Remove the release paper at the head and adhere it to the exterior sheathing or framing members.

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

**STEP 11 (OPTIONAL)**

A. Cut a piece of metal or vinyl drip cap slightly longer than the width of the door and place a bead of DuPont™ Residential Sealant, or recommended sealant, on the rear side. Install the drip cap tight against the door head and cover the top edge with DuPont™ StraightFlash™ or DuPont™ Flashing Tape.
**STEP 12**
After installing the DuPont™ Tyvek® WRB, cut as shown to expose door and apron. (Refer to the DuPont™ Tyvek® Water-Resistive Barriers Installation Guidelines to install the DuPont™ Tyvek® WRB properly).

**DO NOT CUT THROUGH THE DUPONT™ FLASHING SYSTEMS PRODUCTS OR APRON.**

**STEP 13**
A. Tape seams as shown. **DO NOT TAPE** at bottom of window. At the head, continuous tape seams as shown with DuPont™ Tyvek® Tape. Skip-taping at the head is acceptable if an air barrier is not required or if additional drainage is desired.

B. Lap bottom of apron and the DuPont™ Tyvek® WRB over building materials below for proper shingling.
**ALTERNATE TAPE DETAIL**

Place a continuous bead of DuPont™ Residential Sealant, or recommended sealant, around the jamb and head flashing under the DuPont™ Tyvek® WRB. Press the DuPont™ Tyvek® WRB securely into the sealant.

**STEP 14**

**Final Step**

A. When the interior flooring is ready to install, remove release paper and use Folding Option One or Two to form back dam.

B. Install DuPont™ Residential Sealant, or recommended sealant, (and backer rod as necessary) around the window opening at the interior. It is also acceptable to use DuPont™ Window & Door Foam or recommended foam. The seal created by the sealant (and backer rod as necessary) or foam will also serve as a back dam. DuPont™ Residential Sealant should be tooled flat to allow the natural curing process to create a concave shape. Be sure that the sealant penetrates the grooves of the DuPont™ FlexWrap™ NF around the sill.

**NOTE:** Installations that specify a window/door design rating of DP45 or greater require extra precautions. See General Instructions for performance requirements exceeding this design rating.
Non-Flanged Window BEFORE DuPont™ Tyvek® WRB Is Installed

This method applies to the following products:
- DuPont™ StraightFlash™, DuPont™ StraightFlash™ VF, DuPont™ FlexWrap™ NF, and DuPont™ Flashing Tape

**STEP 1**

A. Attach apron made of DuPont™ Tyvek® WRB under sill. Apron should extend at least 10” beyond sides of rough opening jambs (or to first stud in open stud construction), and far enough below the rough opening to overlap the sill plate or the DuPont™ Tyvek® WRB below. The top of the apron should be securely attached to the wall and the bottom of the apron should be left unsecured so it can overlap the DuPont™ Tyvek® WRB which will be installed after the window.

B. Cut DuPont™ FlexWrap™ NF at least 12” longer than width of sill rough opening (S).

C. Remove first piece of release paper, cover horizontal sill by aligning inside edge of sill, and adhere into rough opening across sill and up jambs (min. 6” on each side).

D. Remove second release paper.

E. Fan out DuPont™ FlexWrap™ NF at bottom corners onto the face of the wall. Coverage of DuPont™ FlexWrap™ NF should be 2” to 3” onto the face of the wall.
### A. FOR NON-FLANGED WINDOWS ONLY

**STEP 2**

A. Prepare head flashing by cutting a piece of DuPont™ StraightFlash™ VF at least twelve (12) inches LONGER than the head length.

B. Remove the release paper from one side of DuPont™ StraightFlash™VF.

C. Center the DuPont™ StraightFlash™VF along the length of the window and position so that it contacts the window frame.

D. At the exterior corners where the window/head frame meets the jamb frame, make 45° cuts into the flashing at each and away from the header.

E. Fold the newly created flash flap down in the vertical direction parallel to the window frame.

F. Fold the flashing flaps down and adhere them to the window frame.

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**Diagram:**

- **Window Interior**
- **Non-Flanged Window**
- **Butyl**
- **Perforated Release Paper**

**VIEW A-A**
STEP 3
A. Prepare jamb flashing by cutting a piece of DuPont™ StraightFlash™ VF at least six (6) inches LONGER than the jamb length. 
B. Remove the release paper from one side of DuPont™ StraightFlash™ VF. 
C. Position the DuPont™ StraightFlash™ VF so that it contacts the window frame up to the exterior face of the window. Ensure that the jamb flashing is positioned 1-1/2 inches below top of head flashing. **Jamb flashing adhesive must come in contact with head flashing adhesive and overlap by one inch.** 
D. Repeat on opposite jamb.
**STEP 4**

A. At the exterior corner of the window, where the window head frame meets the jamb frame, make 45° cuts in the flashing at each end up and away from the head and down away at the sill.

B. Fold the jamb flashing pieces parallel to window. Fold newly created flaps to the jamb frame.

C. Repeat on opposite jamb.

D. Cut four 3” x 3” pieces of DuPont™ FlexWrap™ NF and add patches to corners of the window. Staple to wooden frame for non-flanged windows.
STEP 5
A. If sealant is applied to the sill, ensure that there are at least two (2) 2” gaps in the sealant bead to allow for drainage for every 4’ of window using DuPont™ Residential Sealant or recommended sealant.
B. Install window according to manufacturer’s installation instructions.
C. Remove the remaining release paper from the DuPont™ StraightFlash™ VF jamb flashing and press firmly to adhere it to the exterior sheathing or framing members.
D. Remove the release paper at the head and adhere it to the exterior sheathing or framing members.

STEP 6 (OPTIONAL)
A. Cover exposed butyl with DuPont™ StraightFlash™, DuPont™ Flashing Tape or DuPont™ Tyvek® Tape.
B. Cut a piece of metal or vinyl drip cap slightly longer than the width of the window and place a bead of DuPont™ Residential Sealant, or recommended sealant, on the rear side. Install the drip cap tight against brick mold and cover the top edge with DuPont™ StraightFlash™ or DuPont™ Flashing Tape.

NOTE: Do not reverse shingle. DuPont™ StraightFlash™ must overlap DuPont™ FlexWrap™ NF and adhere to the substrate.
**STEP 7**
Install DuPont™ Residential Sealant, or recommended sealant, (and backer rod as necessary) around the window opening at the interior. It is also acceptable to use DuPont™ Window & Door Foam or recommended foam. The seal created by the sealant (and backer rod as necessary) or foam will also serve as a back dam. DuPont™ Residential Sealant should be tooled flat to allow the natural curing process to create a concave shape. Be sure that the sealant penetrates the grooves of the DuPont™ FlexWrap™ NF around the sill.

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

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**STEP 8**
After installing the DuPont™ Tyvek® WRB, cut as shown to expose window and apron. (Refer to the DuPont™ Tyvek® Water-Resistive Barriers Installation Guidelines to install the DuPont™ Tyvek® WRB properly).

**DO NOT CUT THROUGH THE DUPONT™ FLASHING SYSTEMS PRODUCTS OR APRON.**
**STEP 9**
Final Step

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

B. Lap bottom of apron and DuPont™ Tyvek® WRB over building materials below for proper shingling.

**ALTERNATE TAPE DETAIL**
Place a continuous bead of DuPont™ Residential Sealant, or recommended sealant, around the jamb and head flashing under the DuPont™ Tyvek® WRB. Press the DuPont™ Tyvek® WRB securely into the sealant.
Non-Flanged Door BEFORE DuPont™ Tyvek® WRB Is Installed
This installation guide is intended for doors installed above grade and with wood floor construction.
This method applies to the following products:
- DuPont™ StraightFlash™, DuPont™ StraightFlash™ VF, DuPont™ FlexWrap™ NF, and DuPont™ Flashing Tape

STEP 1
Attach apron made of DuPont™ Tyvek® WRB under sill (S). Apron should extend at least 10” beyond sides of rough opening jambs (or to first stud in open stud construction), and far enough below the rough opening to overlap the sill plate or the DuPont™ Tyvek® WRB below. The top of the apron should be securely attached to the wall and the bottom of the apron should be left unsecured so it can overlap the DuPont™ Tyvek® WRB which will be installed after the door.
**STEP 2**

Preparation of sill flashing:

A. Cut 9” DuPont™ FlexWrap™ NF at least 12” **LONGER** than the width of the sill (S).

B. 9” DuPont™ FlexWrap™ NF has perforated release paper to help with the formation of a back dam. To ensure that the perforation tears cleanly, fold the perforation 180° and crease the flashing.

C. Remove the two widest pieces of release paper leaving the narrowest release paper on the flashing. When the finished floor is applied, the release paper can be removed and the back dam can be completed.
**STEP 3 (OPTIONAL BACK DAM)**

Install the sill flashing as indicated so the section with the release paper still attached extends past the door threshold on the inside. When the narrow release paper is removed, the remaining section of DuPont™ FlexWrap™ NF can be used to form a back dam.

**OPTION 2: Create back dam by folding back narrow section of DuPont™ FlexWrap™ NF:**

Some flooring cannot accommodate a back dam. In that case fold the back dam on top of DuPont™ FlexWrap™ NF in the sill. Door will be installed on top of the 1" fold to create a back dam (see Side View Detail below).
STEP 4
A. Fan out DuPont™ FlexWrap™ NF at bottom corners onto the face of the wall. Coverage of DuPont™ FlexWrap™ NF should be 2” to 3” onto the face of the wall.

A. FOR NON-FLANGED DOORS ONLY

STEP 5
A. Prepare head flashing by cutting a piece of DuPont™ StraightFlash™ VF at least twelve (12) inches LONGER than the head length.
B. Remove the release paper from one side of DuPont™ StraightFlash™ VF.
C. Center the DuPont™ StraightFlash™ VF along the length of the door and position so that it contacts the door frame.
D. Beginning at the junction of the jamb and head and away from the corners cut the DuPont™ StraightFlash™ VF along the corner at a 45° angle.
E. Fold the newly created flashing flaps down parallel to the door frame.
F. Fold remaining head flashing onto to the jamb.
STEP 6
A. Prepare jamb flashing by cutting a piece of DuPont™ StraightFlash™ VF at least six (6) inches LONGER than the jamb length.
B. Remove the release paper from one side of DuPont™ StraightFlash™ VF.
C. Position so that the DuPont™ StraightFlash™ VF contacts the door frame up to the exterior face of the door. Ensure that the jamb flashing is positioned 1-1/2 inches below top of head flashing. **Jamb flashing adhesive must come in contact with head flashing adhesive and overlap by one inch.**
D. Repeat on opposite jamb.

STEP 7
A. Beginning at the junction of the jamb and head and at the sill and jamb and away from the corners, cut the DuPont™ StraightFlash™ VF along the corners at a 45° angle and fold it over flat to adhere it against the head flashing.
B. Fold newly created flap down parallel to the door frame.
C. Fold flashing flaps to the door frame and adhere.
D. Repeat on opposite jamb.
E. Cut two 3” x 3 DuPont™ FlexWrap™ NF squares and add patches to corner of the door. Staple patches in corners to secure the wooden head and jambs.
FOR NON-FLANGED DOORS

STEP 8 (OPTIONAL - HIGH PRESSURE SKIRT)

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

A. Create the high pressure skirt by cutting a piece of DuPont™ Tyvek® WRB 1” wider than the width of the door opening and approximately 10” in height.

B. Cut a piece of DuPont™ StraightFlash™ VF to the same width of skirt. Remove release paper from one side of DuPont™ StraightFlash™ VF and adhere to the DuPont™ Tyvek® WRB. The skirt may be made with DuPont™ StraightFlash™ VF, DuPont™ StraightFlash™ or DuPont™ Flashing Tape.

C. Remove the release paper from the other side of DuPont™ StraightFlash™ VF and adhere the butyl adhesive at the sill skirt to the underside of the door threshold behind the jamb flashing.

D. Secure edges of the optional skirt with two 4” pieces of DuPont™ StraightFlash™ or DuPont™ Flashing Tape.

E. Tape the bottom of the optional skirt to allow for drainage and to minimize wind damage during construction.

F. If sealant is applied to the sill, insure (2) 2” gaps to allow for drainage for every 4’ of door using DuPont™ Residential Sealant or recommended sealant.
STEP 9
A. Install door according to manufacturer’s installation instructions.
B. Remove the remaining release paper from the DuPont™ StraightFlash™ VF jamb flashing and press firmly to adhere it to the DuPont™ Tyvek® WRB.
C. Remove the release paper at the head and adhere it to the exterior sheathing or framing members.
OPTIONAL: Cover exposed butyl with DuPont™ StraightFlash™, DuPont™ Flashing Tape or DuPont™ Tyvek® Tape.

STEP 10 (OPTIONAL - RECOMMENDED BEST PRACTICE)
A. Cut a piece of metal or vinyl drip cap slightly longer than the width of the door and place a bead of DuPont™ Residential Sealant, or recommended sealant, on the rear side. Install the drip cap tight against the door head and cover the top edge with DuPont™ StraightFlash™ or DuPont™ Flashing Tape.
STEP 11
After installing the DuPont™ Tyvek® WRB, cut as shown to expose door and apron. (Refer to the DuPont™ Tyvek® Water-Resistive Barriers Installation Guidelines to install the DuPont™ Tyvek® WRB properly).

DO NOT CUT THROUGH THE DUPONT™ FLASHING SYSTEMS PRODUCTS OR APRON.

STEP 12
A. Tape seams as shown. DO NOT TAPE at bottom of window. At the head, continuous tape seams as shown with DuPont™ Tyvek® Tape. Skip-taping at the head is acceptable if an air barrier is not required or if additional drainage is desired.

B. Lap bottom of apron and the DuPont™ Tyvek® WRB over building materials below for proper shingling.
**ALTERNATE TAPE DETAIL**

Place a continuous bead of DuPont™ Residential Sealant, or recommended sealant, around the jamb and head flashing under the DuPont™ Tyvek® WRB. Press the DuPont™ Tyvek® WRB securely into the sealant.

**STEP 13**

**Final Step**

A. When the interior flooring is ready to install, remove release paper and use Folding Option One or Two to form back dam.

B. Install DuPont™ Residential Sealant, or recommended sealant, (and backer rod as necessary) around the window opening at the interior. It is also acceptable to use DuPont™ Window & Door Foam or recommended foam. The seal created by the sealant (and backer rod as necessary) or foam will also serve as a back dam. DuPont™ Residential Sealant should be tooled flat to allow the natural curing process to create a concave shape. Be sure that the sealant penetrates the grooves of the DuPont™ FlexWrap™ NF around the sill.

**NOTE:** Installations that specify a window/door design rating of DP45 or greater require extra precautions. See General Instructions for performance requirements exceeding this design rating.
Alternate Head Detail for Air Barrier Installations (Integral, Flanged, Brick Mold, Field Applied and Non-Flanged Windows and Doors)

**METHOD MODIFIED FULL AIR BARRIER HEAD DETAIL FOR DRAINAGE**

**STEP 1**
A. Apply a continuous bead of DuPont™ Residential Sealant, or recommended sealant, around jambs and head, angle the sealant to create a 4” peak.

**STEP 2**
A. Cut a piece of DuPont™ Tyvek® WRB that overlaps the window opening by 18”.
B. Press the cut piece of DuPont™ Tyvek® WRB into the sealant, maintaining an 18” overlap on all sides of the opening, and attach with fasteners.
C. Cut opening as shown ensuring an 18” overlap of DuPont™ Tyvek® WRB.
**STEP 3**
A. Fold head and jamb flaps into rough opening.
B. Secure flaps to inside wall framing using staples. Cut off excess flaps if desired.

**STEP 4**
A. Install DuPont™ FlexWrap™ NF at the sill.
B. Install a minimum of 12” DuPont™ FlexWrap™ NF corners at the head.
   A longer piece of DuPont™ 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 5**

A. Apply DuPont™ Residential Sealant, or recommended sealant, on three sides (jambs and head) as shown below. If sealant is applied to the sill, ensure that there are at least two (2) 2” gaps in the sealant bead for every 4’ of window to allow for drainage.

B. Install window according to manufacturer’s instructions.

C. Cut two pieces of DuPont™ StraightFlash™, DuPont™ FlexWrap™ NF or DuPont™ Flashing Tape for jamb flashing extending 1” above window head flange and below bottom edge of sill flashing. Remove release paper and press tightly along sides of window frame.

D. Cut a piece of DuPont™ StraightFlash™, DuPont™ FlexWrap™ NF 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.

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

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**STEP 6**

Install DuPont™ Residential Sealant, or recommended sealant, (and backer rod as necessary) around the window opening at the interior. It is also acceptable to use DuPont™ Window & Door Foam or recommended foam. The seal created by the sealant (and backer rod as necessary) or foam will also serve as a back dam. DuPont™ Residential Sealing should be tooled flat to allow the natural curing process to create a concave shape. Be sure that the sealant penetrates the grooves of the DuPont™ FlexWrap NF™ around the sill.

**NOTE:** Installations that specify a window/door design rating of DP45 or greater require extra precautions. See General Instructions for performance requirements exceeding this design rating.
**STEP 7**
After installing the DuPont™ Tyvek® WRB, cut as shown to expose 1” of flashing around the window frame as shown. (Refer to the DuPont™ Tyvek® Water-Resistive and Air Barriers Installation Guidelines to install the DuPont™ Tyvek® WRB properly).

DO NOT CUT THROUGH THE DUPTONTM FLASHING SYSTEMS PRODUCTS OR APRON.

**STEP 8**
Final Step
A. Tape seams as shown. DO NOT TAPE at bottom of window. At the head, continuous tape seams as shown with DuPont™ Tyvek® Tape. Skip-taping at the head is acceptable if an air barrier is not required or if additional drainage is desired.

B. Lap bottom of apron and DuPont™ Tyvek® WRB over building materials below for proper shingling.
**ALTERNATE TAPE DETAIL**

Place a continuous bead of DuPont™ Residential Sealant, or recommended sealant, around the jamb and head flashing under the DuPont™ Tyvek® WRB. Press the DuPont™ Tyvek® WRB securely into the sealant.
**STEP 1**
A. Prepare DuPont™ Tyvek® WRB apron and fasten as shown.
B. Install continuous bead of DuPont™ Residential Sealant, or recommended sealant, around jambs and head. Angle the sealant to create a 4” peak.

**STEP 2**
A. Install DuPont™ Tyvek® WRB pieces, wrapping the DuPont™ Tyvek® WRB in and around the studs in at the jamb and head, pressing the pieces of DuPont™ Tyvek® WRB into the sealant. Staple DuPont™ Tyvek® WRB to inside framing to secure.
**STEP 3**

A. Cut DuPont™ FlexWrap™ NF at least 12” LONGER than width of the sill rough opening. Remove the first piece of release paper, cover the sill by aligning the DuPont™ FlexWrap™ NF to the inside edge of sill, and adhere into rough opening along sill and up jambs (min. 6” on each side). Remove second release paper. Fan out DuPont™ FlexWrap™ NF at bottom corners onto the face of wall. Coverage of DuPont™ FlexWrap™ NF should be 2” to 3” onto the face of the wall.

B. Apply a minimum of 12” length of DuPont™ FlexWrap™ NF at each corner of the head, going 6” down the jamb and at least 6” on the head as shown.

**STEP 4**

A. Apply DuPont™ Residential Sealant, or recommended sealant, on three sides (jambs and head) as shown below. If sealant is applied to the sill, ensure that there are at least two (2) 2” gaps in the sealant bead for every 4’ of window to allow for drainage.

B. Install window according to manufacturer’s instructions.

C. Cut two pieces of DuPont™ StraightFlash™, DuPont™ FlexWrap™ NF or DuPont™ Flashing Tape for jamb flashing extending 1” above window head flange and below bottom edge of sill flashing. Remove release paper and press tightly along sides of window frame.

D. Cut a piece of DuPont™ StraightFlash™, DuPont™ FlexWrap™ NF or DuPont™ Flashing Tape for head flashing long enough to extend beyond outer edges of jamb flashings. Remove release paper and install completely covering mounting flange and adhering to the DuPont™ Tyvek® WRB pieces.

**NOTE:** Ensure proper shingling. DuPont™ StraightFlash™ or DuPont™ Flashing Tape must overlap DuPont™ FlexWrap™ NF and adhere to the DuPont™ Tyvek® WRB.
**STEP 5**
Install DuPont™ Residential Sealant, or recommended sealant, (and backer rod as necessary) around the window opening at the interior. It is also acceptable to use DuPont™ Window & Door Foam or recommended foam. The seal created by the sealant (and backer rod as necessary) or foam will also serve as a back dam. DuPont™ Residential Sealant should be tooled flat to allow the natural curing process to create a concave shape. Be sure that the sealant penetrates the grooves of the DuPont™ FlexWrap™ NF around the sill.

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

**STEP 6**
A. After installing the DuPont™ Tyvel® WRB, cut as shown to expose 1" of flashing around the window frame and apron. (Refer to the DuPont™ Tyvek® Water-Resistive and Air Barriers Installation Guidelines to install the DuPont™ Tyvek® WRB properly).

**DO NOT CUT THROUGH THE DUPONT™ FLASHING SYSTEMS PRODUCTS OR APRON.**
STEP 7
Final Step

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

B. Lap bottom of apron and DuPont™ Tyvek® WRB over building materials below for proper shingling.
Technical Specifications

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

DuPont™ self-adhered flashing products are made from a synthetic rubber adhesive and a laminate of polyethylene film, 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™ NF, and StraightFlash™ be covered within nine months (270 days) of installation. DuPont requires that DuPont™ Flashing Tape be covered within four months (120 days) of installation.

Warning

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

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

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

Note

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

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

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

This information is not intended to be used by others for advertising, promotion, or other publication for commercial purposes.
For more information about DuPont Weatherization Systems, please call 1-800-44-Tyvek or visit us at www.weatherization.tyvek.com