



DuPont™ Tyvek® ThermaWrap™ R5.0 Installation Guidelines when Residing

VERSION 08/14

DuPont™
Tyvek®
ThermaWrap™ R5.0

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Applicable Products

Insulating Air and Water-Resistive Barrier

PRODUCT	DIMENSIONS	AREA
DuPont™ Tyvek® ThermaWrap™ R5.0	4 ft x 40 ft	160 sq ft

Flashing Products

PRODUCT	DIMENSIONS	AREA
DuPont™ FlexWrap™ NF	6 in x 75 ft 9 in x 75 ft	37.50 sq ft 56.20 sq ft
DuPont™ StraightFlash™	4 in x 75 ft 9 in x 75 ft	25 sq ft 56.25 sq ft
DuPont™ StraightFlash™ VF	6 in x 75 ft	37.5 sq ft
DuPont™ Flashing Tape	4 in x 75 ft 6 in x 75 ft 9 in x 75 ft	18.75 sq ft 37.50 sq ft 56.25 sq ft

Recommended Installation Accessories

PRODUCT	TYPE/DIMENSIONS	QUANTITY
DuPont™ Tyvek® HomeWrap®	3 ft x 100 ft	300 sq ft
DuPont™ Tyvek® Tape	2 in Bulk Pack 3 in Bulk Pack	36 rolls/case 24 rolls/case
DuPont™ Tyvek® Wrap Caps for Stinger Cap Stapler	16 gauge; available in 7/8", 1-1/4", and 1-1/2" lengths	2000 per box
DuPont™ Wrap Cap Nails	1" electro-galvanized ring shank nail	2000 per box
Other manufacturers' cap staples and cap nails	3/4" minimum length	
DuPont™ Adhesive/Primer		
DuPont™ Window and Door Foam		
DuPont™ Residential Sealant		
DuPont™ Insulated Batten	3 in x 4 ft	24/box
DuPont™ Insulated Batten CT	5.8 in x 4 ft	11/box

DuPont™ Tyvek® ThermaWrap™ R5.0 Installation Guidelines when Residing

DuPont™ Recommended Tools*

Stinger CS150 Cap Stapler

Stinger CN100 Cap Nailer

Vinyl Installation Spacer

KAI 7000 Series shears

Olfa 60mm rotary cutter

Standard carpet knife

WrapShear by Maimin.

*Use or 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 see reside and consumer warranty requirements for DuPont™ Tyvek® ThermaWrap™ R5.0 at www.weatherization.tyvek.com.

Code Requirements

Check local codes related to reside and remodel projects.

DuPont™ Tyvek® ThermaWrap™ R5.0 meets ICC-ES AC-308 Water-Resistive and Air-Barrier Requirements. ICC-ES Evaluation Report ESR 3545.

DuPont™ Tyvek® ThermaWrap™ R5.0 provides continuous exterior insulation when installed as directed.

See DuPont™ Tyvek® ThermaWrap™ R5.0 Physical Properties Data Sheet and Insulation Fact Sheet for additional information.

Precautions and Special Considerations

This document is intended to provide general guidance only. Each residing project is unique. The installer is responsible for implementing proper air and water management details. DuPont™ Tyvek® ThermaWrap™ R5.0 must be installed over a clean smooth surface AFTER the existing siding is removed.

DuPont™ Tyvek® ThermaWrap™ R5.0 is NOT intended for the following types of construction

- Open stud construction
- Wet applied finishes such as stucco and manufactured stone veneer.

DuPont™ Tyvek® ThermaWrap™ R5.0 must be installed as an air barrier to maintain its R-value which requires sealing of all seams and edges.

DuPont strongly recommends removing/replacing windows along with the siding to ensure proper water management. When windows and doors are removed, refer to DuPont™ Tyvek® ThermaWrap™ 5.0 Installation Guidelines for New Residential Single Family Houses for proper termination and flashing around windows and doors.

- Not removing the existing windows and doors will adversely impact the water management performance of the wall since it is not practical to properly integrate windows and doors with the Tyvek® layer of the DuPont™ Tyvek® ThermaWrap™ R5.0.
- Not removing the existing windows may change the appearance of the home. Windows and doors may be recessed because of the thickness of the DuPont™ Tyvek® ThermaWrap™ R5.0 and any installed rain screen.
- If windows and doors are not removed, care must be taken not to damage the existing window components (such as frames, flanges, glazing, etc.) while installing DuPont™ Tyvek® ThermaWrap™ R5.0 and accessories around existing windows and doors.

If DuPont™ Tyvek® ThermaWrap™ R5.0 is installed only on a portion of the home, improvements to the energy efficiency of the home will be limited.

There will be a 1-1/2" space between the sheathing and cladding due to the thickness of the DuPont™ Tyvek® ThermaWrap™ R5.0. Areas of the home such as top and bottom of walls, windows, doors, and penetrations will be bumped out 1-1/2" to provide a nail base for cladding and trim. Some penetrations such as hose bibs, meter panels, piping, cables, etc, may need to be replaced or modified. **Special attention must be given to gable ends where there may be minimal roof overhangs due to the bump-out.**

Air sealing the entire house may affect ventilation and indoor air quality. Refer to ASHRAE 62.2 Ventilation and Acceptable IAQ in Low-rise Residential Buildings or local codes for or appropriate ventilation specifications.

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Contractors performing renovation, repair and painting projects that disturb lead-based paint in homes, child care facilities, and schools built before 1978 must be certified and must follow specific work practices to prevent lead contamination. For more information see the EPA lead hazard information pamphlet <http://www.epa.gov/lead/pubs/renovaterightbrochure.pdf> Renovate Right: Important Lead Hazard Information for Families, Child Care Providers, and Schools.

The use of asbestos house siding in new construction was discontinued in the late 1970s/early 1980s, but it is still present in many older homes. If residing results in the disturbance of asbestos siding, follow safety and environmental exposure practices, including waste disposal, specified in federal and local regulations.

General Instructions

DuPont™ Tyvek® ThermaWrap™ R5.0 Installation

- The most effective installation of DuPont™ Tyvek® ThermaWrap™ R5.0 on a reside or remodel project is when the windows and doors are removed.
- All insulation edges must butt tightly against one another to help maintain continuous insulation.

A feature of the DuPont™ Tyvek® ThermaWrap™ R5.0 is that the insulating fibers can be torn vertically. This eliminates the need for cutting the fibers in such areas as flap creation and window opening preparation.

During installation of DuPont™ Tyvek® ThermaWrap™ R5.0, an uninsulated Tyvek® flap may be required to ensure shingling for proper water management. To create a flap, separate the insulation from the Tyvek® membrane a minimum of 6". Fold back the Tyvek® layer. Cut or tear to remove the insulation. Do not damage the Tyvek® layer.

It may not be necessary to install DuPont™ Tyvek® ThermaWrap™ R5.0 on gable ends to meet energy codes. If DuPont™ Tyvek® ThermaWrap™ R5.0 is not installed on the gables, use Tyvek® HomeWrap®. Additional furring may be required in order for all cladding to be on the same plane. Check local building codes for additional information.

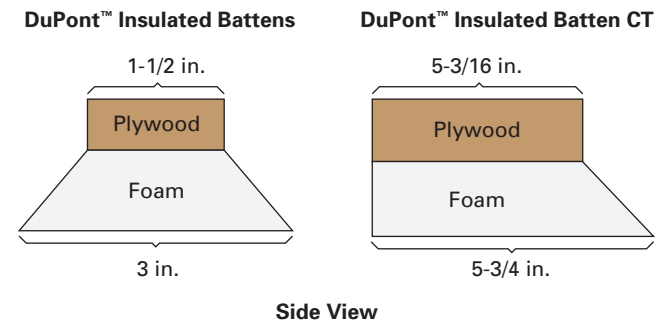
It is essential to maintain the continuity of the water-resistive barrier from top to bottom including proper shingling with sufficient lapping. Continue wrapping all the way up the structure, overlapping the previous layer of DuPont™ Tyvek® ThermaWrap™ R5.0 top sheet by a minimum of 6".

Lap DuPont™ Tyvek® ThermaWrap™ R5.0 top sheet over all flashing (e.g. step flashing, wall to roof intersections and through wall flashings).

DuPont™ Insulated Batten

For optimal thermal performance, the DuPont™ Insulated Batten and the DuPont™ Insulated Batten CT are to be installed into framing members. The DuPont™ Insulated Batten CT is designed to be used as a nail base at all inside and outside corners, around windows and doors, penetrations, wall to roof intersections and at areas on the structure where cladding accessories such as shutters and decorative trim are installed.

- The foam portion of the battens is to be installed against the wood sheathing.
- The DuPont™ Insulated Batten CT can be ripped if the full width is not required.
- For use with lap siding, see page 12.



DuPont Flashing Systems Installation

DuPont™ 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 a J-roller or firm hand pressure.

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

Sealants

If a sealant other than DuPont™ Residential Sealant is used, apply per manufacturers' guidelines.

DuPont assumes no liability in use of non DuPont products; installers need to evaluate suitability of these products in their end-use applications. Review the sealant manufacturers' literature or label to confirm that the product used has the chemical and adhesive properties necessary for use with DuPont™ Tyvek® air and water barriers and DuPont flashing materials. Refer to *Chemical Compatibility of Representative Building Sealants* (K-27282) for more information about chemical compatibility

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

Preparation

STEP 1

Siding Removal

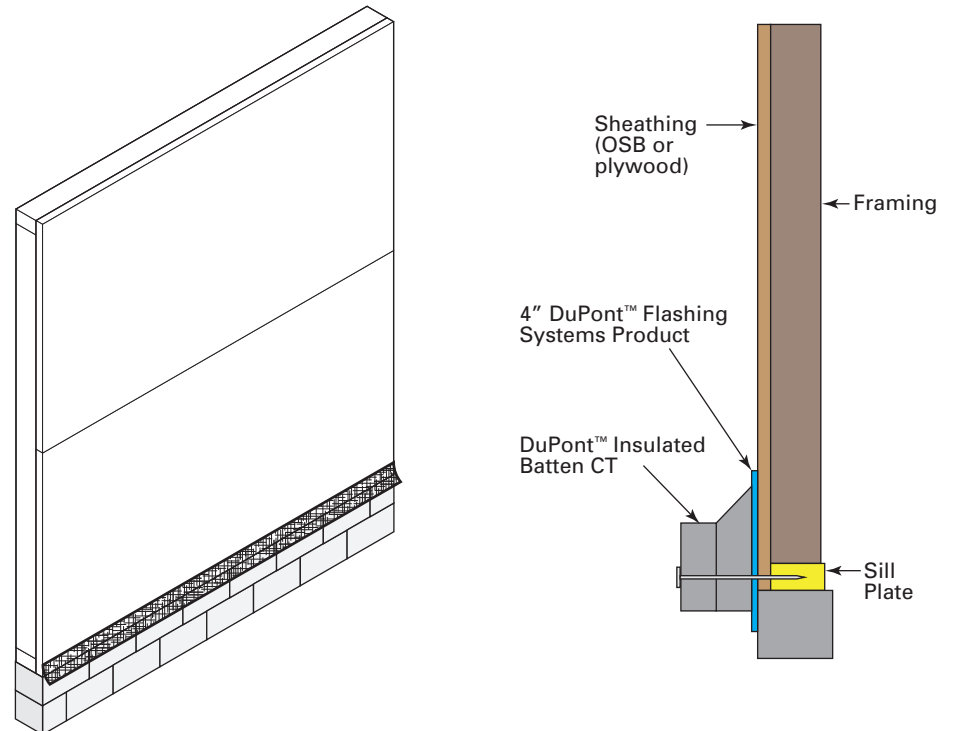
Carefully remove existing siding. Determine if there is an existing water-resistive barrier (WRB) in good condition and properly integrated with window flashing at the window sill. If an acceptable WRB exists, remove existing WRB except for 12"–18" around all windows and doors.

Inspect all the elements of the wall (including structural components, sheathing, metal flashing, etc.) for water damage and structural integrity. Replace or repair any damage to the components. The source of damage must also be remediated.

STEP 2

Bottom of Wall Preparation

Along the sill plate, install a min. 4" wide piece of DuPont™ Flashing System product around the perimeter of the home. 1" should extend on to the foundation. For added support for a cladding starter strip, install a nominal 2" thick bump-out. For optimal thermal performance, the DuPont™ Insulated Batten CT is recommended. The square edge should be directed to the bottom of the wall. Standard 2 x 3's and 2 x 4's are acceptable. DuPont recommends the installation of termination accessories along the sill plate and at roof to wall intersections. Fasteners must penetrate framing member a min. 1". If an accessory is not used, proceed to step 4.

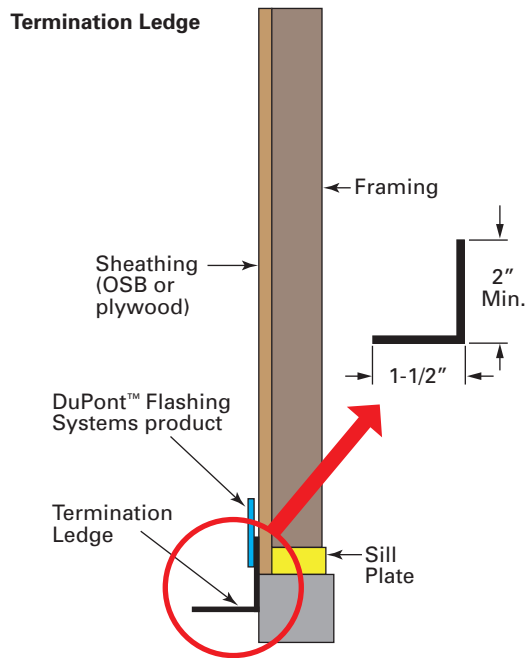


DuPont™ Tyvek® ThermaWrap™ R5.0 Installation Guidelines when Residing

STEP 2 (CONTINUED)

Termination Ledge

Must be wide enough to protect bottom edge of Tyvek® ThermaWrap™ R5.0.
Termination Ledge will not provide support for cladding starter strip.

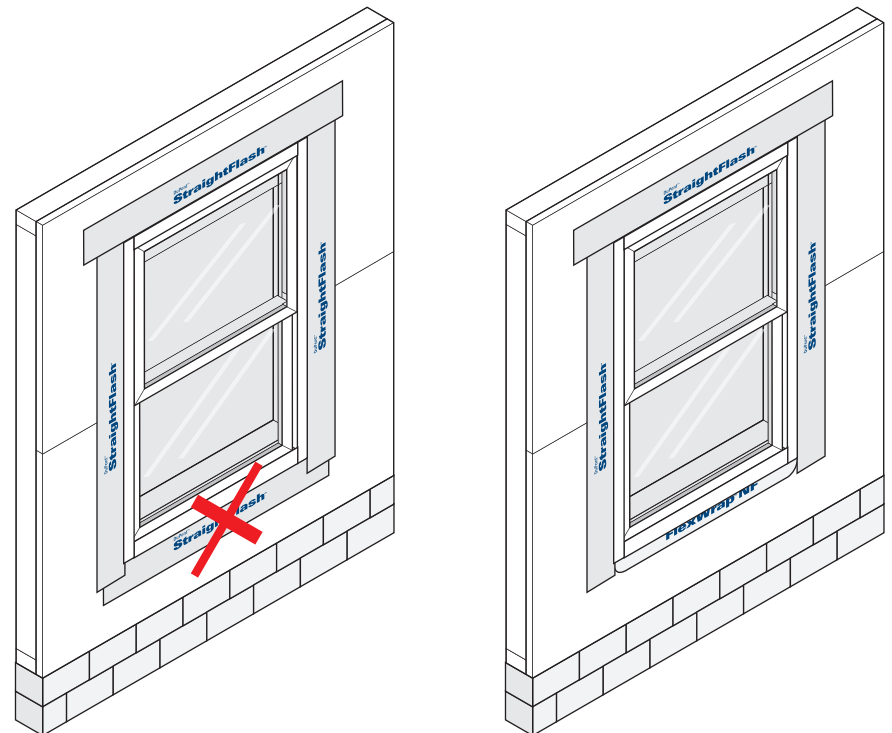


STEP 3

If an acceptable water-resistive barrier (WRB) and window flashings are in place, install bump-out frames around all windows and doors per Step 3. If a WRB and flashing are NOT in place, see the *DuPont™ Tyvek® ThermaWrap™ R5.0 Termination Detail* on page 11.

Never apply self-adhered flashing over the bottom sill of the window. This will block drainage of any water that has intruded into the window opening.

Existing Water Resistive Barrier and Window Sill Flashing.



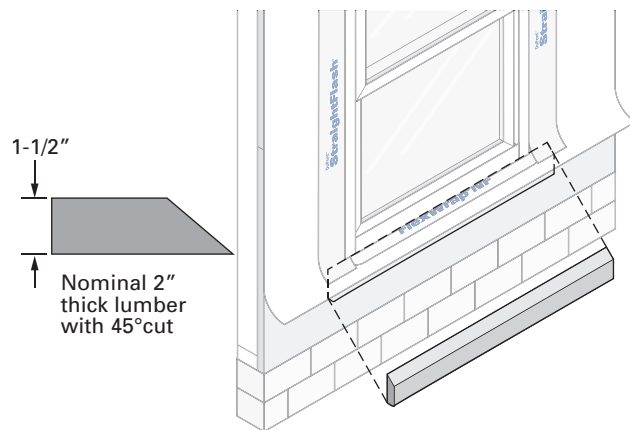
DuPont™ Tyvek® ThermaWrap™ R5.0 Installation Guidelines when Residing

STEP 4

Install a bump-out frame around all windows and door openings before installing DuPont™ Tyvek® ThermaWrap™ R5.0. For optimal thermal performance, the DuPont™ Insulated Batten CT is recommended. Standard nominal 2" thick lumber such as a 2 x 4 is acceptable although wider. Bump-out frames may be required to accommodate window and door trim. The sill piece should extend to the outside edge of the jamb pieces. The jamb pieces should extend to the top of the rough opening and the head piece should extend to the outside edge of the jamb pieces.

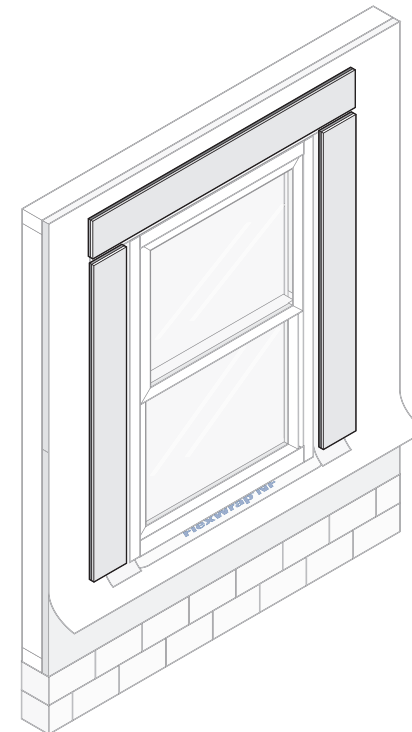
Install the sill portion of the bump-out frame behind the existing WRB. If using the DuPont™ Insulated Batten CT, install the chamfer towards the window opening. If a nominal 2" thick piece of lumber is being used, it's recommended that a 45° chamfer be cut along the edge being installed toward the window opening. The chamfer should butt against the window flange.

Each batten is to be secured into the stud using a min. 3" long framing nail. Secure each batten 2" from each end and every 10"–12" in the field. Install bump-out frame fasteners 2" from the inner edge of the bump-out frame in order to avoid potential damage to the window flange.



STEP 5

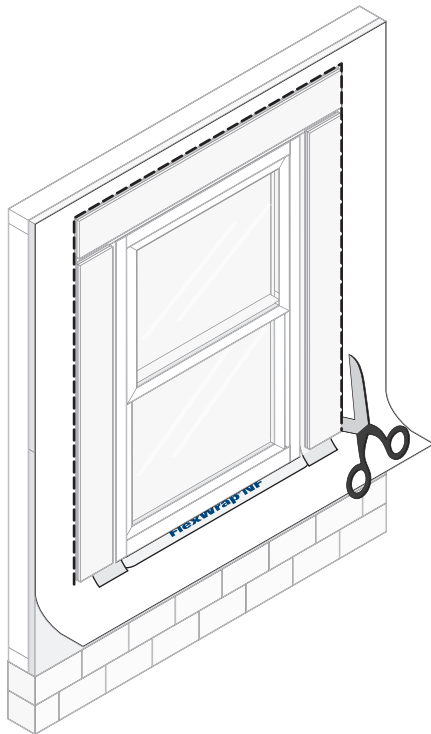
Continue to install the bump-out frame at the jambs and head of the window. Install the DuPont™ Insulated Battens CT's with the edge of the batten flush with the outside edge of the window flange



DuPont™ Tyvek® ThermaWrap™ R5.0 Installation Guidelines when Residing

STEP 6

Trim WRB to the edge of the bump-out frame along the head and jambs. This will leave an apron at the sill extending to the outside of the bump-out frame.



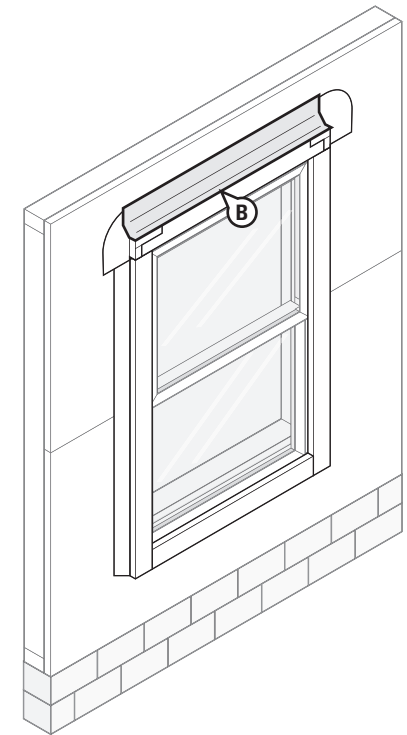
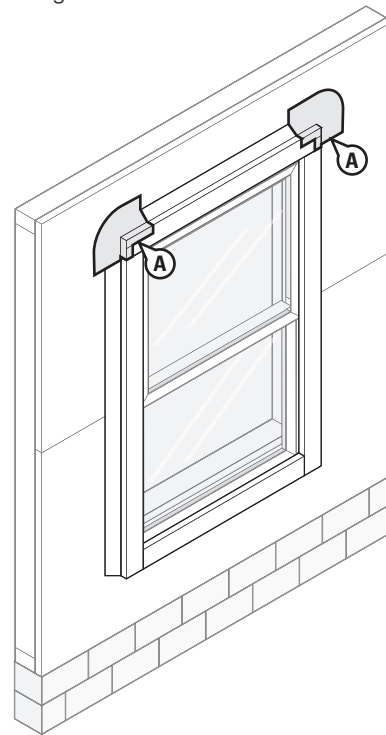
STEP 7

- Install a 4" x 4" piece of DuPont™ FlexWrap™ NF at both upper corners of the bump-out frame. Install 2-3 inches on the wood sheathing and ensure the DuPont™ FlexWrap™ NF extends to the edge or overlaps on to the face of the bump-out frame.
- Install DuPont™ Flashing Systems product at the intersection of the wood sheathing and DuPont™ Insulated Batten CT at all windows. Cut a piece the width of the DuPont™ Insulated Batten CT.

NOTE: DuPont™ Flashing Systems Product must protect the foam and wood edge of the DuPont™ Insulated Batten CT.

For round top windows, use DuPont™ FlexWrap™ NF. Install 2-3 inches on the wood sheathing and continue along the top edge of bump-out frame.

OPTION: Use a wider DuPont™ Flashing Systems product to integrate with window flashing.

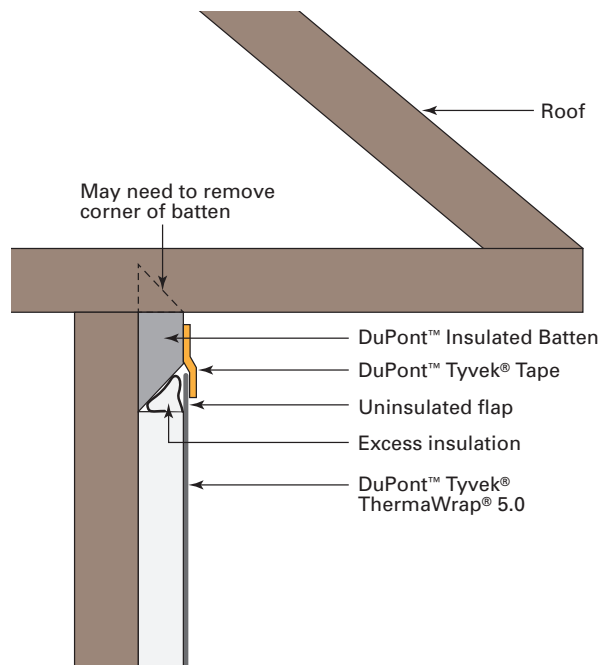


Top of Wall Details

Common Truss

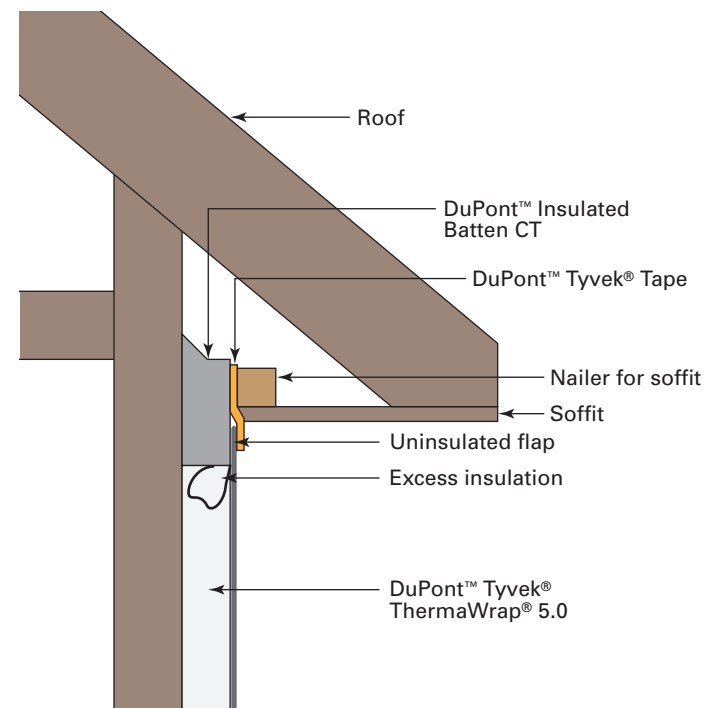
Before the installation of the DuPont™ Tyvek® ThermaWrap™ R5.0, install a bump out at the top of the wall. For optimal thermal performance, a DuPont™ Insulated Batten or DuPont™ Insulated Batten CT is recommended. A standard nominal 2" thick lumber such as a 2x4 is acceptable.

DuPont™ Tyvek® ThermaWrap™ R5.0 should overlap batten 1-2" at the top. At the overlap, separate Tyvek® from insulation to create a flap. Tuck excess insulation along the bottom edge of the batten. Secure flap with cap fastener and Tyvek® Tape or a DuPont™ Flashing System product.



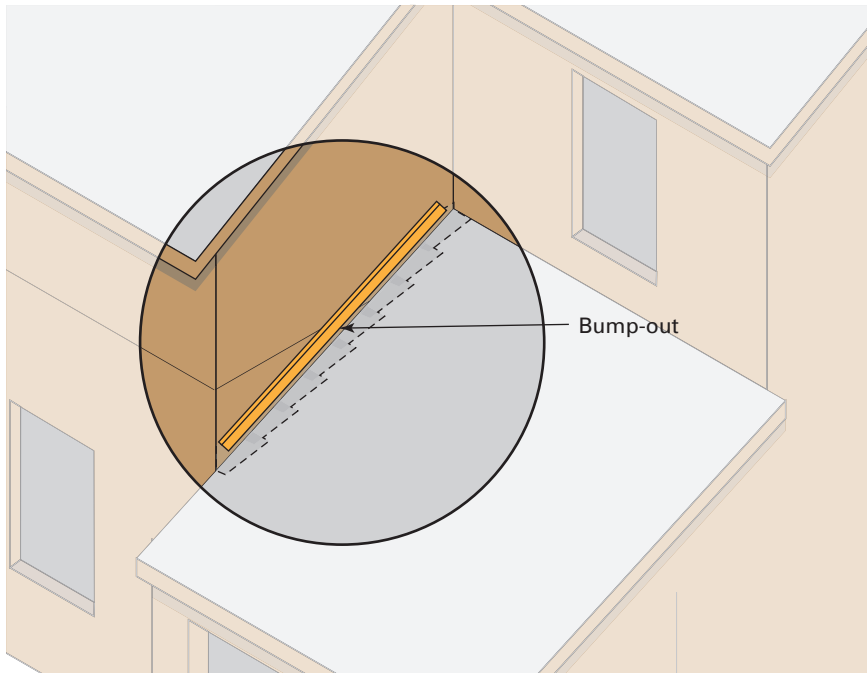
Raised Heel Truss

Before the installation of the DuPont™ Tyvek® ThermaWrap™ R5.0, install a bump out at the top of the wall. For optimal thermal performance, a DuPont™ Insulated Batten or DuPont™ Insulated Batten CT is recommended. A standard nominal 2" thick lumber such as a 2x 4 is acceptable. The batten should be installed to accommodate soffit installation. DuPont™ Tyvek® ThermaWrap™ R5.0 should overlap the batten at the top 1-2". At the overlap, separate Tyvek® from insulation to create a flap. Tuck excess insulation along the bottom edge of the batten. Secure flap with cap fastener and DuPont™ Tyvek® Tape or a DuPont™ Flashing Systems product.



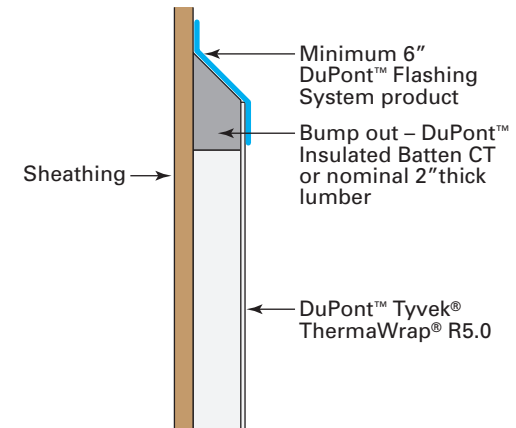
Wall to Roof Intersections

Bump-out should be installed after step flashing. Bump-out must be installed a minimum of 2" above the roof surface. For optimal thermal performance, the DuPont™ Insulated Batten CT is recommended. The square edge should be directed to the bottom of the wall. Standard 2 x 3's and 2 x 4's are acceptable. See page 15 for proper termination of Tyvek® ThermaWrap™ R5.0 at base of wall.



DuPont™ Tyvek® ThermaWrap™ R5.0 Termination Detail

This detail can be used below windows and doors, wall to roof intersections, top of wall, cladding transitions, etc.



DuPont™ Tyvek® ThermaWrap™ R5.0 Installation Guidelines when Residing

DuPont™ Insulated Batten and DuPont™ Insulated Batten CT Installation

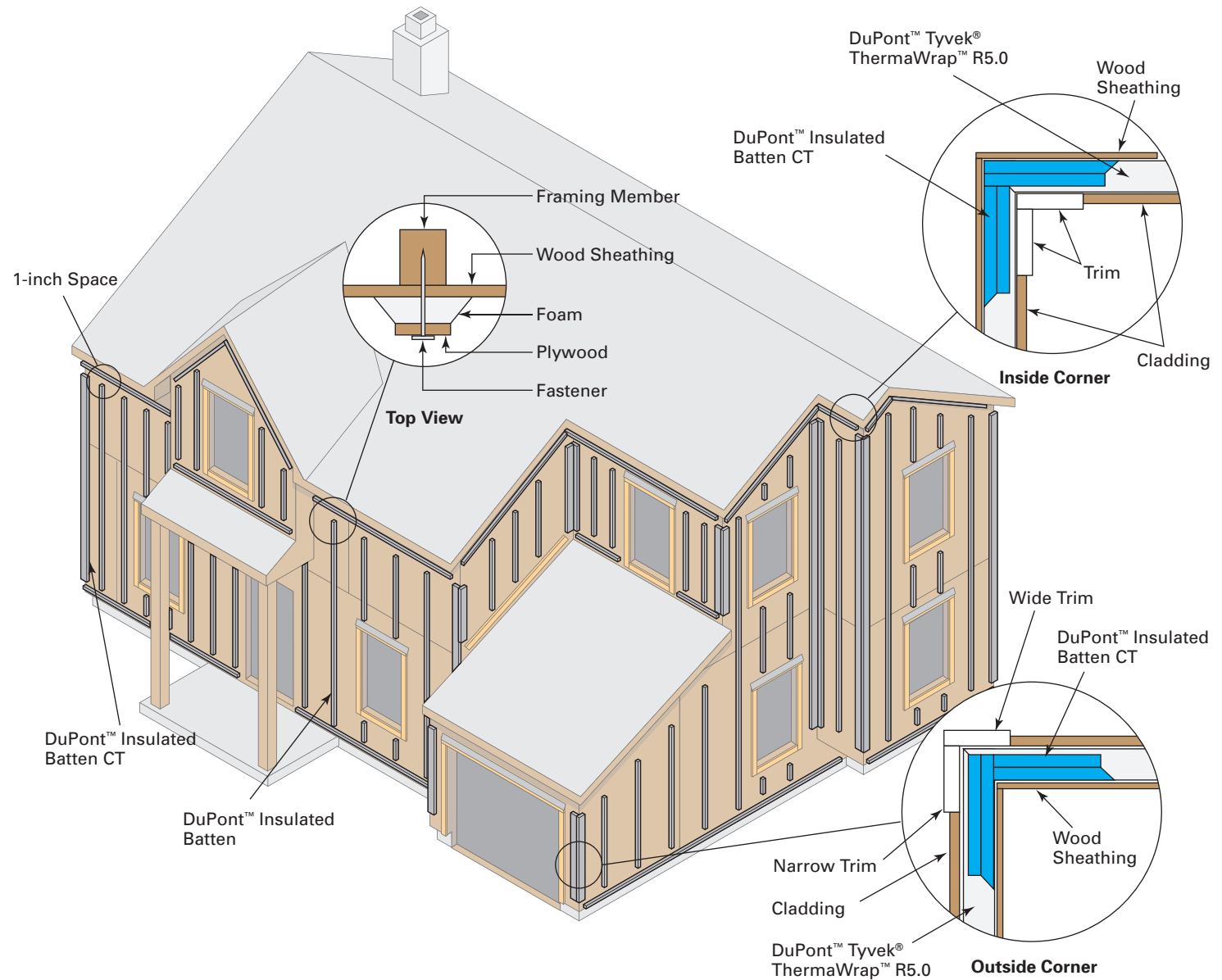
The DuPont™ Insulated Batten CT is recommended for optimal thermal performance on all inside and outside corners, bottom and top of wall, penetrations, etc. Nominal 2" thick lumber can be used.

Vinyl siding does not require the DuPont™ Insulated Batten. Depending on trim and accessories, it may require the DuPont™ Insulated Batten CT at top and bottom of walls, around windows, doors and penetrations.

For all types of lap siding including fiber cement and wood, install the DuPont™ Insulated Batten and the DuPont™ Insulated Batten CT on the walls. Each batten is to be secured into framing members using a min. 3" long framing nail. Secure each batten 2" from each end and every 10-12" in the field.

NOTE: It's important to position the DuPont™ Insulated Batten CTs on inside and outside corners so they provide support for the trim and still provide a nail base for the cladding.

Leave 1" gap between the top of the battens and any bump-out at the top of the wall.



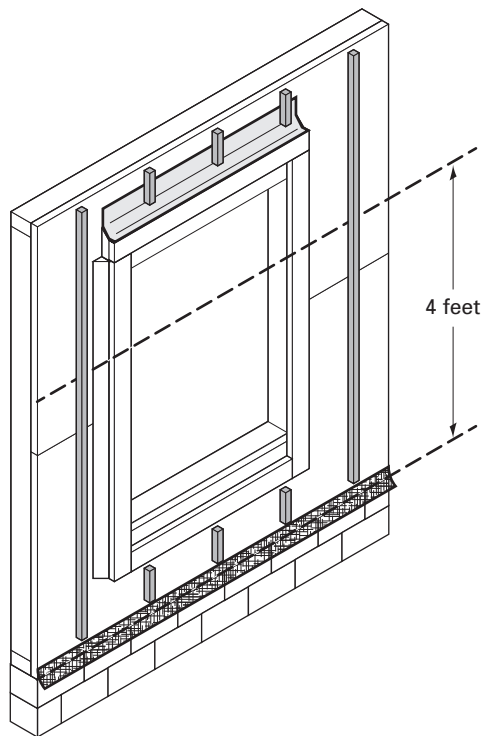
Installation

STEP 1

Using a chalk line, create a guide for installing the first course of DuPont™ Tyvek® ThermaWrap™ R5.0.

- If using a DuPont™ Insulated Batten CT or nominal 2" wood bump-out, create a line around the building 4 ft. above the top of the bump-out.
- If using the termination ledge, create a line around the building 4 ft. above the bottom edge of the strip.
- If a bottom detail is not used, the line should be 47" above the bottom of the sill plate.

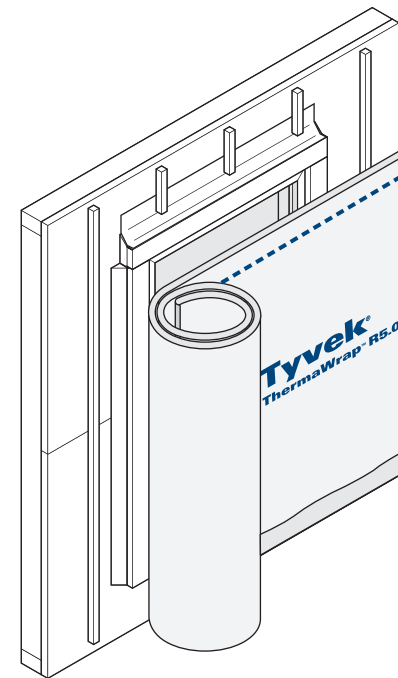
NOTE: The DuPont Insulated Batten shown in this diagram is not required for vinyl siding.



STEP 2

Start at the bottom of the structure to ensure proper shingling throughout the installation. Proper shingling is required to shed water and to prevent water from entering the wall system.

Starting at a corner of the building, align the vertical edge of insulation with the edge of the building and begin unrolling Tyvek® ThermaWrap™ R5.0 from right to left. Ensure insulation material is against the wall sheathing. Do not secure the 6" Tyvek® flap at the beginning of the roll. Use the chalk line on the wall as a guide for the top edge. Unroll directly over window and door openings. **DO NOT INSTALL INSULATION UPSIDE DOWN. DO NOT STRETCH OR PULL MATERIAL TIGHT AGAINST WALL SHEATHING INCLUDING INSIDE AND OUTSIDE CORNERS.** Tension on the Tyvek® ThermaWrap™ R5.0 will reduce the thickness and R-value.



DuPont™ Tyvek® ThermaWrap™ R5.0 Installation Guidelines when Residing

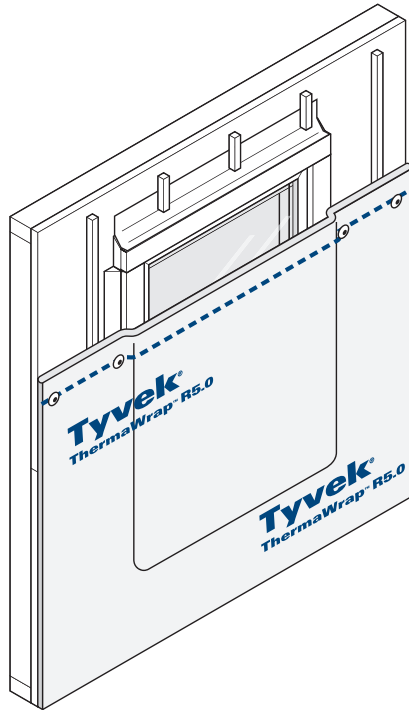
STEP 3

Along the top edge of the roll, there is an area for fastening. On the dashed line, attach the DuPont™ Tyvek® ThermaWrap™ R5.0 every 16" using:

- DuPont™ Tyvek® Wrap Cap Staples for Stinger
- DuPont™ Tyvek® Wrap Cap nails for Stinger or DuPont recommended cap fastener

NOTE: Do not fasten within 9" of bump-outs. If used, fasten onto DuPont™ Insulated Batten.

NOTE: The DuPont™ Insulated Batten shown in this diagram is not required for vinyl siding.



STEP 4

Install first roll of Tyvek® ThermaWrap™ R5.0. Continue around the structure installing the next roll making sure the vertical edge of the insulation butts against the vertical edge of the previous roll.

STEP 5

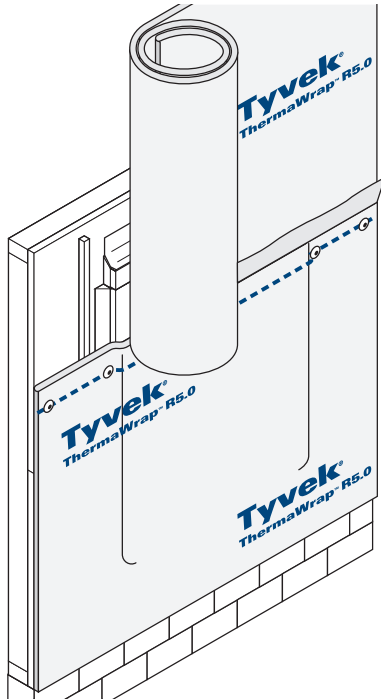
Continue to unroll the product around the structure until the first course is complete. Cut the Tyvek® ThermaWrap™ R5.0 1-1/2" beyond corner of the structure.

DuPont™ Tyvek® ThermaWrap™ R5.0 Installation Guidelines when Residing

STEP 6

Install the next and subsequent courses the same as the first. Ensure the bottom edge of the insulation butts against the top edge of the prior course.

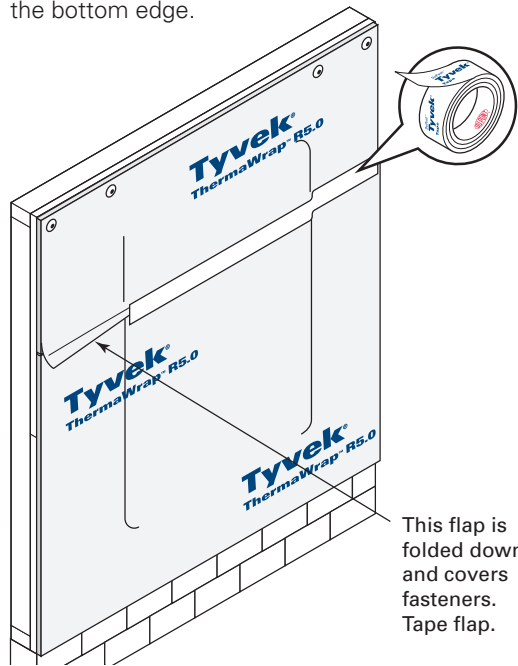
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DuPont™ Tyvek® ThermaWrap™ R5.0 Installation Guidelines when Residing

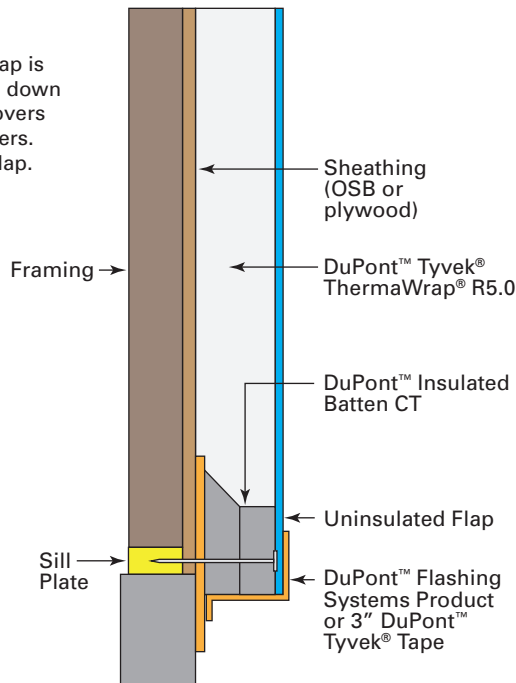
STEP 7

Fold horizontal and vertical flaps and tape all seams with 2" DuPont™ Tyvek® Tape. Seal the bottom edge.



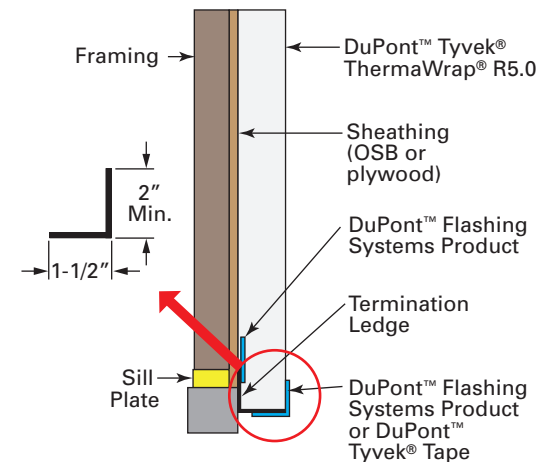
This flap is folded down and covers fasteners. Tape flap.

- If using a DuPont™ Insulated Batten CT or nominal 2" bump-out at the base of the wall, terminate the bottom uninsulated Tyvek® flap. Trim the flap flush with the bottom edge of the DuPont™ Insulated Batten CT. Secure the flap with 3" DuPont™ Tyvek® Tape or a DuPont™ Flashing Systems product. The DuPont™ Flashing Systems product or the 3" DuPont™ Tyvek® Tape must terminate on the DuPont™ Flashing Systems product secured to the wall and foundation.



- If using the termination ledge, remove the uninsulated Tyvek® flap at the bottom and secure to the termination strip with a DuPont™ Flashing Systems product or DuPont™ Tyvek® Tape.

Termination Ledge

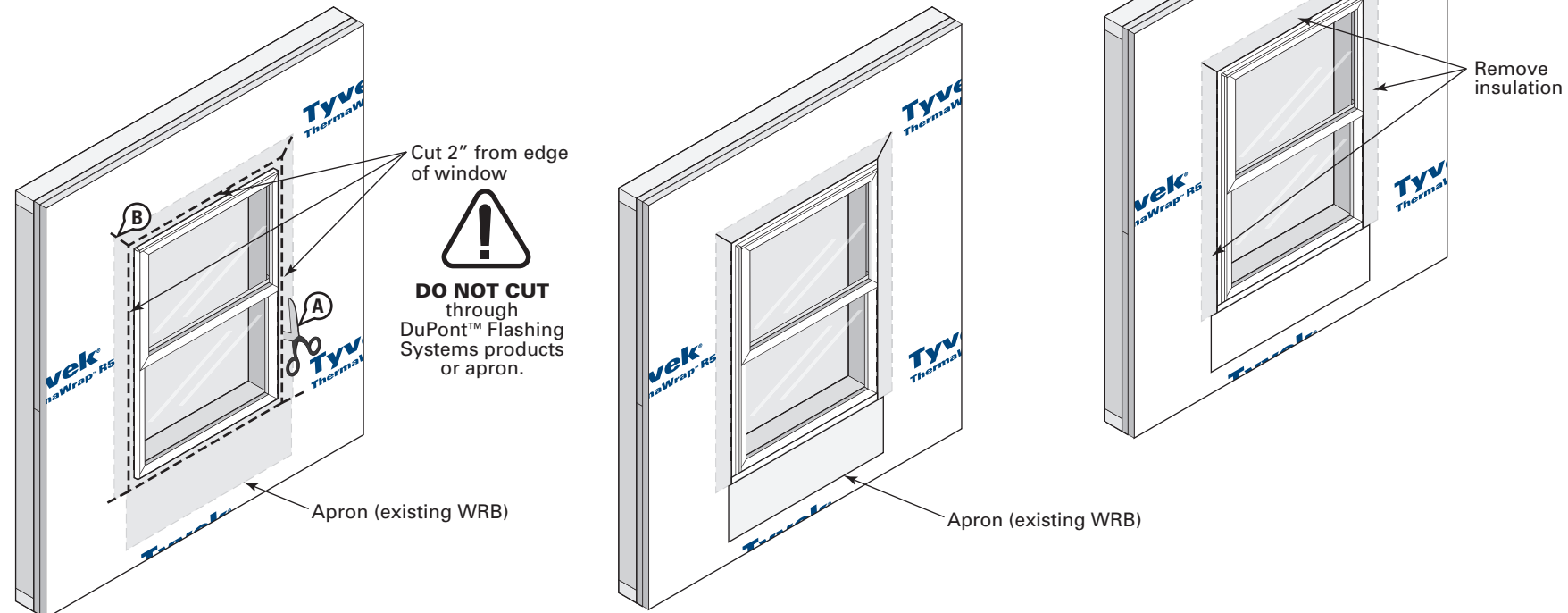


- If a termination accessory is not used, seal the flap at the bottom of the wall with a DuPont™ Flashing Systems product, DuPont™ Tyvek® Tape, or DuPont™ Residential sealant. The uninsulated Tyvek® flap should cover the bottom edge of insulation before turning down onto the foundation.

Wall Terminations including Windows and Doors

STEP 1

- A. After installing DuPont™ Tyvek® ThermaWrap™ R5.0, use shears to cut as shown to expose window. At the jambs and head, cut around the perimeter of the window 2" from the edge. Do not cut around the outside edge of the bump-out frame. Make a cut the width of the apron along the bottom edge of the bump-out frame. **Do not cut or damage the existing WRB apron.** Pull apron to the outside of the DuPont™ Tyvek® ThermaWrap™ R5.0.
- B. Make two 45 degree cuts extending from the corner of the window head up and away from the window opening. This will create a flap above the rough opening and expose the bump-out frame.



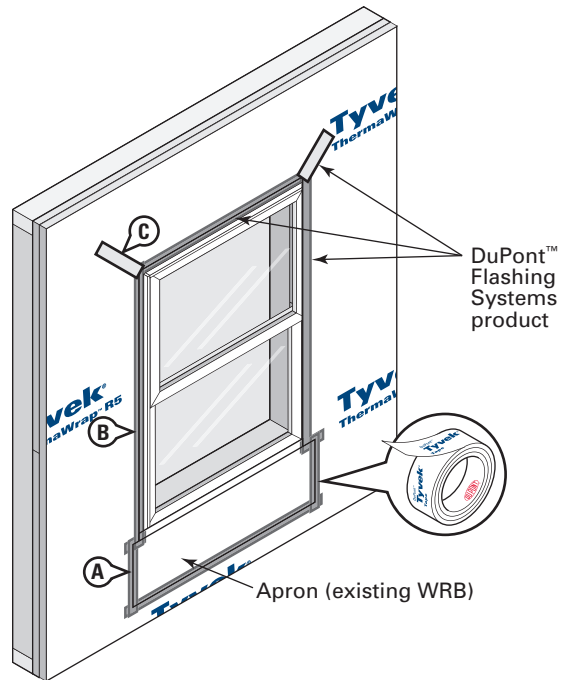
STEP 2

Remove insulation that overlaps bump-out frame at the head and jambs. Separate the insulation from the Tyvek® layer. At the jambs, tear the insulation along the outside edge of the bump-out frame. At the head, cut the insulation along the top edge of the bump-out frame.

DuPont™ Tyvek® ThermaWrap™ R5.0 Installation Guidelines when Residing

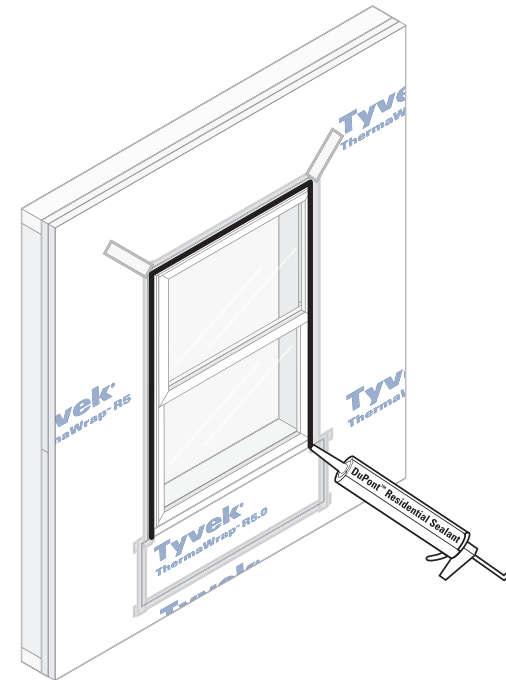
STEP 3

- A. Starting at the bottom of the apron, tape all sides of the apron using DuPont™ Tyvek® Tape.
- B. Using a minimum of 4" DuPont™ Flashing Systems product, apply flashing onto the bump out frame at the jamba and head. Ensure the edge of the flashing aligns with the inside edge of the bump-out frame and a minimum of 2" overlap with the Tyvek® layer
- C. Secure 45° cuts with minimum of 4" DuPont™ Flashing Systems product.



STEP 4

Apply DuPont™ Residential Sealant , or other sealant, on three sides(jamba and head) as shown.

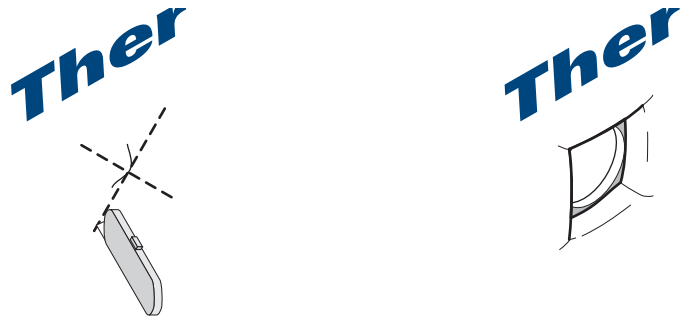


Flashing Pipe Penetrations

Drilling through DuPont™ Tyvek® ThermaWrap™ R5.0 will damage the insulation. Use appropriate size boxes to compensate for the thickness of the DuPont™ Tyvek® ThermaWrap™ R5.0

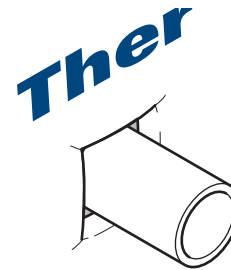
STEP 1

Make a small cut in the Tyvek® ThermaWrap™ R5.0.
Expose wall sheathing and drill hole for pipe.



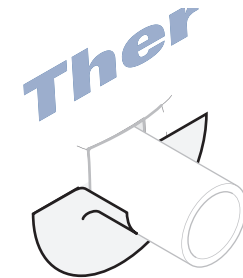
STEP 2

Install pipe and trim Tyvek® ThermaWrap™ R5.0 around the perimeter.



STEP 3

Install DuPont™ Tyvek® FlexWrap® NF starting with a piece at the bottom



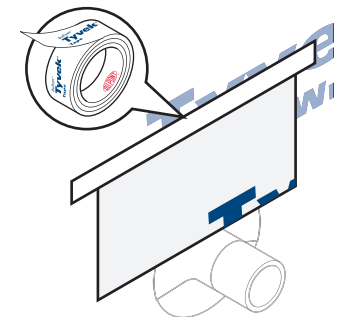
STEP 4

Install a second piece of DuPont™ Tyvek® FlexWrap® NF at the top ensuring it overlaps the bottom piece a minimum of 2”.



STEP 5

Tape a piece of DuPont™ Tyvek® over the DuPont™ FlexWrap™

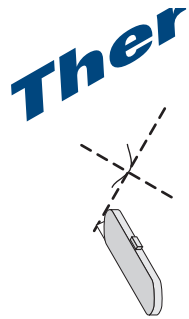


Flashing Electrical Box

NOTE: Different size electrical box or extensions may be required to compensate for thickness of Tyvek® ThermaWrap™ R5.0

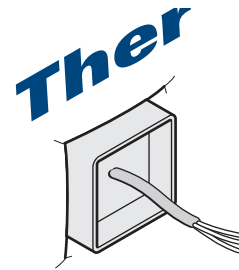
STEP 1

Make a small cut in the Tyvek® ThermaWrap™ R5.0. Expose sheathing and drill hole for wire.



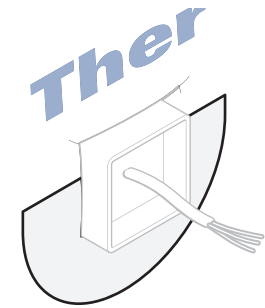
STEP 2

Pull wire through insulation and box. Secure box to the exterior of the structure.



STEP 3

Install DuPont™ Tyvek® FlexWrap® NF starting with a piece at the bottom.



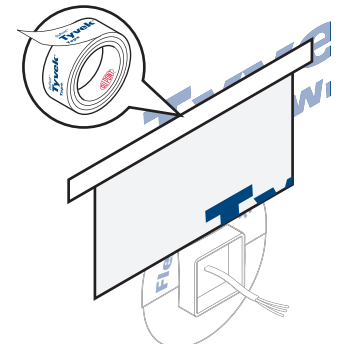
STEP 4

Install a piece of DuPont™ Tyvek® FlexWrap® NF at the top ensuring it overlaps the bottom piece a minimum of 2".



STEP 5

Tape a piece of DuPont™ Tyvek® WRB over the DuPont™ FlexWrap™

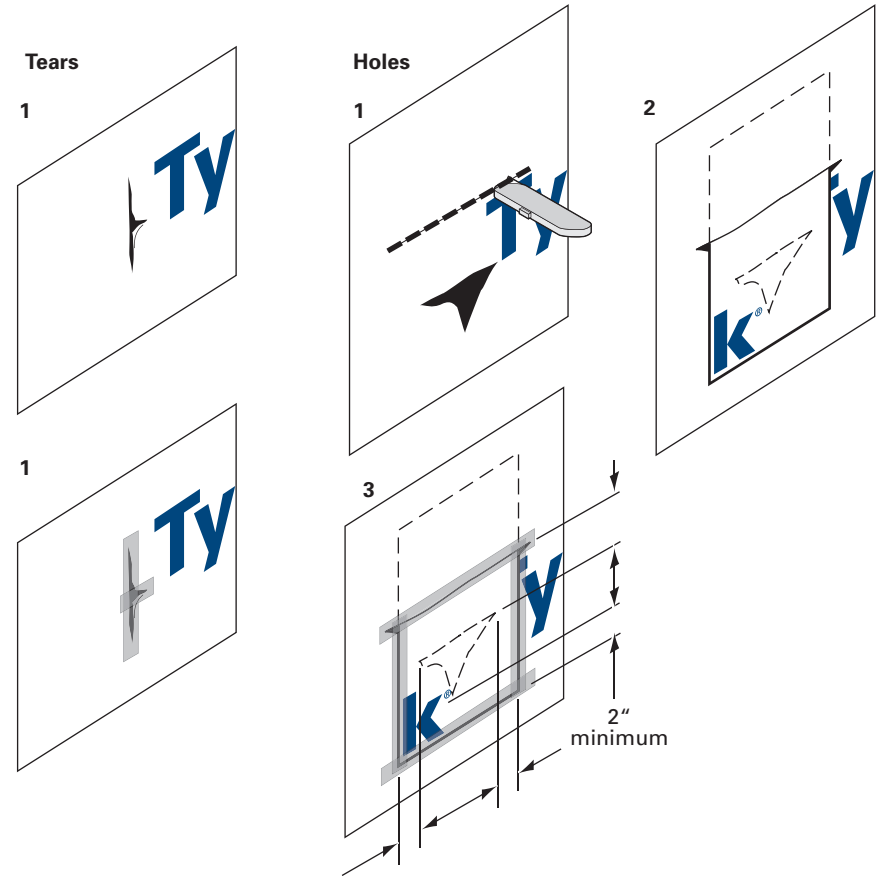


Handling Tears and Holes

During the course of installing Tyvek® ThermaWrap™ R5.0, minor tears may occur. Be sure to tape all tears. Tears can easily be covered with DuPont™ Tyvek® Tape (2" or 3") or DuPont™ Flashing Systems Products.

Larger holes (greater than 1") may require cutting a piece of DuPont™ Tyvek® water-resistant barrier (WRB) to cover the hole, maintaining proper shingling. Replace any missing insulation with a piece of Tyvek® ThermaWrap™ R5.0 insulation, by removing it from the Tyvek® top sheet.

Cut a slit 2" above the hole and extending a minimum of 2" on each side of the hole. Measure and cut a piece of DuPont™ Tyvek® WRB to fit into the slit and cover the hole. Tuck the cut piece of DuPont™ Tyvek® WRB into the slit. Tape along the perimeter by starting at the bottom of the patch, shingling upper tape over bottom tape.



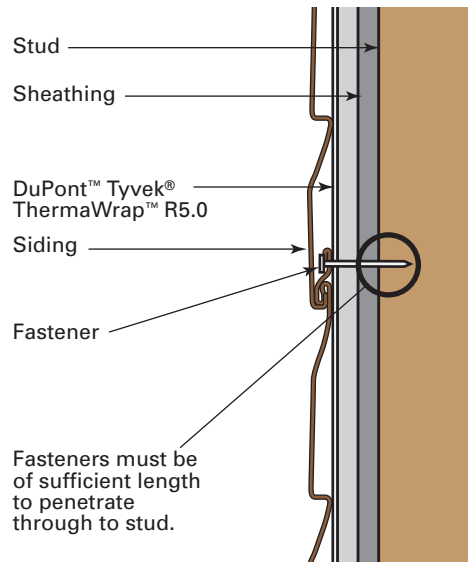
Cladding Installation

Vinyl Siding

Install cladding per manufactures guidelines and code requirements. Additional blocking may be required around windows and doors to accommodate cladding accessories and trim.

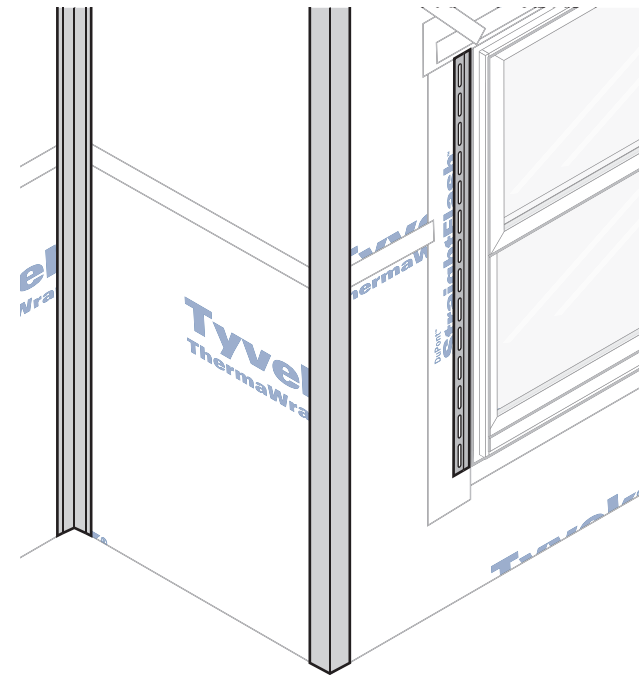
When installing cladding fasteners, do not compress the DuPont™ Tyvek® ThermaWrap™ R5.0. Compressing the product will reduce the thermal resistance. Use installation jig to help control depth of fastener.

Fasteners must be 1-1/2" longer to compensate for the thickness of the Tyvek® ThermaWrap™ R5.0 and to meet the required penetration into the structural member. 3" fastener is recommended.



STEP 1

Install trim around windows, door, penetrations, inside and outside corners, gables, etc.



DuPont™ Tyvek® ThermaWrap™ R5.0 Installation Guidelines when Residing

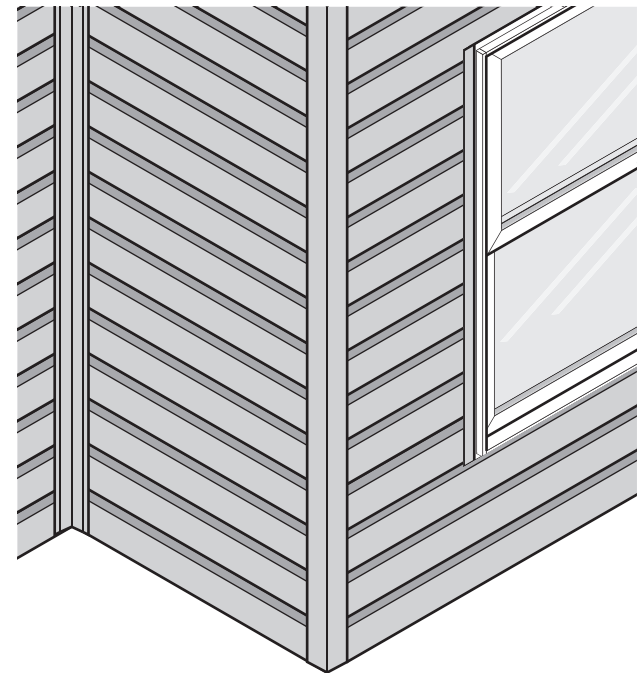
STEP 2

Install starter strip at base of wall. If termination strip is not used, be sure to not compress the DuPont™ Tyvek® ThermaWrap™ R5.0.



STEP 3

Install cladding. Do not compress DuPont™ Tyvek® ThermaWrap™ R5.0.



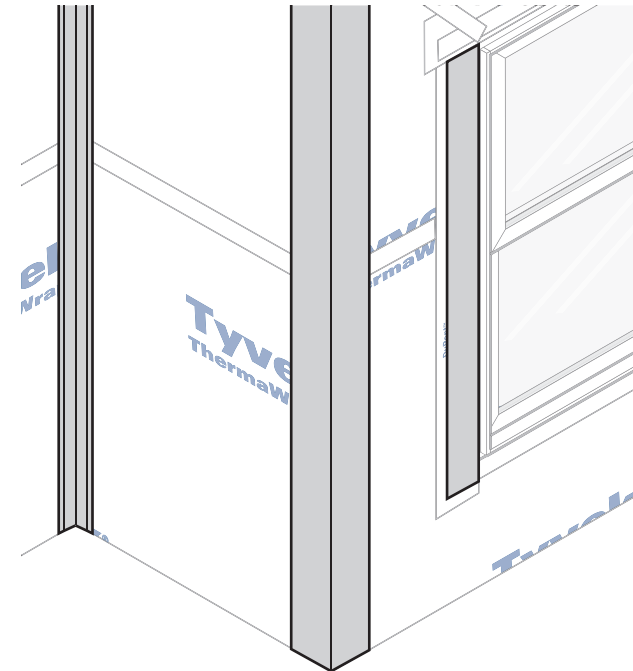
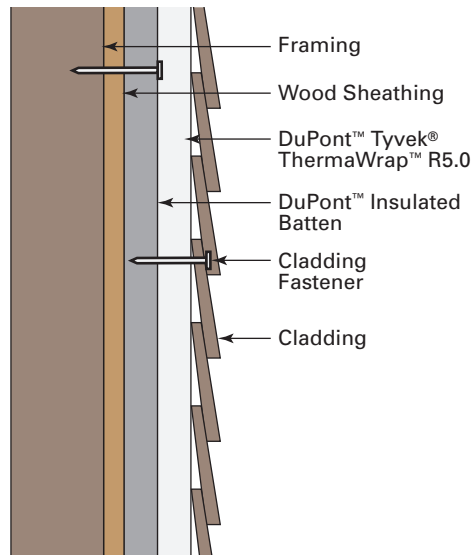
DuPont™ Tyvek® ThermaWrap™ R5.0 Installation Guidelines when Residing

Lap Siding

Install cladding per manufacturers guidelines and code requirements. Fasteners must fully embed the plywood portion of the DuPont™ Insulated Batten.

STEP 1

Install trim around windows, door, penetrations, inside and outside corners, gables, etc.



DuPont™ Tyvek® ThermaWrap™ R5.0 Installation Guidelines when Residing

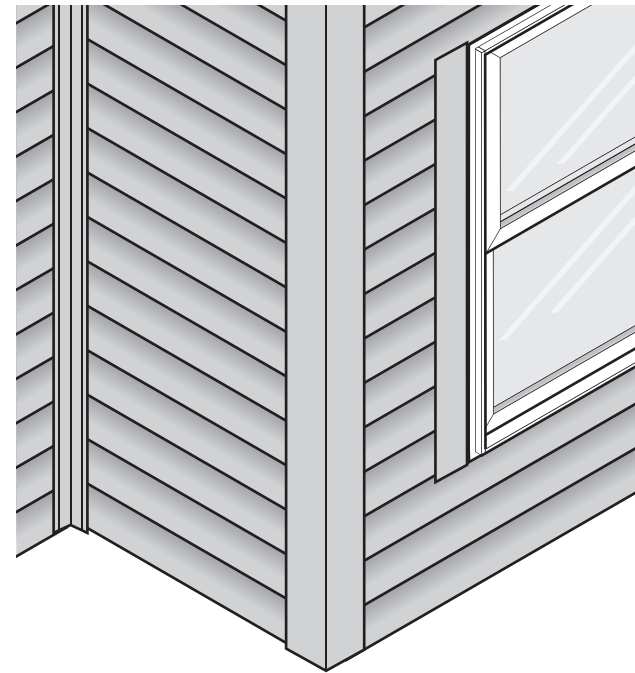
STEP 2

Install starter strip at base of wall. Secure strip into bottom of wall bump-out or DuPont™ Insulated Batten.



STEP 3

Install cladding. Fasteners must be installed into DuPont™ Insulated batten and DuPont™ Insulated Batten CT.



Cladding Considerations

Water-resistive barrier performance is dependent upon the ability of the facade to drain. The following must be considered for specific facades.

Vinyl Siding

Vinyl Siding is installed directly over DuPont™ Tyvek® WRBs. Vinyl siding shall be installed in accordance with manufacturer's instructions, industry standards and applicable codes, including ASTM D4756-06 Standard Practice for Installation of Rigid Poly(Vinyl Chloride) (PVC) Siding and Soffit. In high wind areas at gable end walls, FEMA recommends vinyl siding be installed over wood sheathing rather than over plastic foam sheathing.

Wood Siding

DuPont™ Tyvek® ThermaWrap™ R5.0 and wood siding shall be installed according to manufacturer's instructions, industry standards and applicable codes. As recommended by the Western Cedar Lumber Association and U.S. Forest Product Laboratory, wood siding should be primed on all six sides before installation. Other recommendations that should be followed to minimize potential problems are:

- Use thicker siding patterns in widths of 8 inches or less. Thick, and narrow siding is more stable than thinner, wider patterns and better able to resist dimensional changes.
- Proper priming is essential.
- Use light color finish coats to maximize heat reflection and reduce dimensional movement.

Fiber Cement Siding

DuPont™ Tyvek® ThermaWrap™ R5.0 and fiber cement siding shall be installed according to manufacturer's instructions, industry standards and applicable codes.

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® ThermaWrap™ R5.0 be covered within four 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™ Flashing Systems products be covered within four months (120 days) of installation.

Warning

DuPont™ Tyvek® air and water barriers are slippery and should not be used in any application where it will be walked on. In addition, because they are slippery, DuPont recommends using kickjacks or scaffolding 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 a flame and other high heat sources. DuPont™ Tyvek® products will melt at 275°F (135°C); if the temperature of DuPont™ Tyvek® products 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™ Flashing Systems products will melt at temperatures greater than 250°F (121°C). DuPont™ Flashing Systems products are combustible and should be protected from flames and other high heat sources. DuPont™ Flashing Systems 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® ThermaWrap™ R5.0 is 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® products. Use of additives, coatings or cleansers on or in the facade system may impact the performance of DuPont™ Tyvek® ThermaWrap™ R5.0. DuPont™ Tyvek® Weatherization Systems products are to be used as outlined in this installation guideline. DuPont™ Flashing Systems products should only be used to seal penetrations and flash openings in houses or buildings. DuPont™ Flashing Systems 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 WRB and exterior sheathing, high quality windows and doors, and appropriate flashing materials paying attention to proper installation of each component.

DuPont believes this information to be reliable and accurate. This 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 on each project.

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.

R-value

The higher the R-value, the greater the insulating power. Ask your seller for the fact sheet on R-values. DuPont™ Tyvek® ThermaWrap™ R5.0 uses a blanket insulation made of polyester and polyolefin fibers and will produce an R5.0 insulating value at a thickness of 1.5 inches.

For more information about DuPont Weatherization Systems, please call 1-800-44-Tyvek or visit us at www.thermawrap5.tyvek.com



Tyvek.