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Product and System Specifications
DuPont™ Tyvek® HomeWrap®

Specifier Note: The purpose of this guide specification is to assist the specifier in correctly specifying weather barrier products and execution. The specifier needs to edit the guide specifications to fit the needs of specific projects. Contact a DuPont™ Tyvek® Specialist to assist in appropriate product selections. Throughout the guide specification, there are Specifier notes to assist in editing of the file.

References have been made within the text of the specification to CSI MasterFormat 2018 Section numbers and titles. The specifier needs to coordinate these numbers and titles with sections included for the specific project. Brackets [ ]; "AND/OR"; and "OR" have been used to indicate when a selection is required.

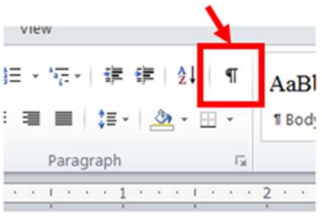
This guide is for applications using a non-woven, spunbonded polyolefin sheet air and moisture barrier assembly. This barrier is non-perforated, without visible holes or voids, designed to help stop the passage of bulk water and airflow movement, yet it is vapor permeable. This barrier assembly offers a balance of properties and protection for the building envelope by providing a lightweight barrier that will resist wind, water, abrasion, tearing, puncturing, and UV exposure for up to 4 months.

This weather barrier is acceptable for use behind traditional brick veneer, vinyl and wood siding applications in buildings less than 5 stories and low-rise multi-family residential buildings less than 6 stories. For applications beyond four stories, or where performance specifications exceed ASTM E 1677 or where a commercial warranty is required, DuPont™ Tyvek® CommercialWrap® is recommended.

This weather barrier is specifically for above grade, vertical wall surfaces where the wall assembly may consist of any of the following: exterior gypsum sheathing, exterior plywood sheathing, oriented strand board (OSB) sheathing and masonry.

It is the recommendation and the preferred application for the weather barrier to be installed prior to the installation of the windows and doors. In cases where conditions require installation of weather barrier after window installation or non-flanged windows are used, contact a DuPont™ Tyvek® Specialist for assistance and recommendations.

SECTION 07 25 00
WEATHER BARRIERS
DuPont™ Tyvek® HomeWrap®

TIPS: To view non-printing **Editor's Notes** that provide guidance for editing, click on MasterWorks/Single-File Formatting/Toggle/Editor's Notes. To read **detailed research, technical information about products and materials, and coordination checklists**, click on MasterWorks/Supporting Information.	Toggle the "Paragraph" button on the Home tab to see Specifier notes. 

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

A. Section Includes:

(Specifier Note: "Weather barrier assembly" has been used throughout the document. A weather barrier is a weather-resistant membrane for vertical building envelope protection that will maintain air/moisture resistance while maintaining moisture-vapor permeability. The assembly consists of the following four components.)

1. Weather Barrier Membrane (DuPont™ Tyvek® HomeWrap®)
2. Seam Tape (DuPont™ Tyvek® Tape)
3. Self-Adhered Flashing (DuPont™ FlexWrap™ NF, DuPont ™ FlexWrap ™ EZ, DuPont™ StraightFlash™, DuPont™ StraightFlash™ VF, and/or DuPont™ Flashing Tape)
4. Weather Barrier Accessories - Fasteners (DuPont™ Tyvek® Wrap Caps)

B. Related Requirements:

1. Section 042000 "Unit Masonry" for masonry ties and flashing installation.
2. Section 042613 "Masonry Veneer" for masonry ties and flashing installation.
3. Section 044200 "Exterior Stone Cladding" for stone masonry ties and flashing installation.

4. Section 044313.13 "Anchored Stone Masonry Veneer" for stone masonry ties and flashing installation.
5. Section 044313.16 "Adhered Stone Masonry Veneer" for stone masonry ties and flashing installation.
6. Section 047200 "Cast Stone Masonry" for stone masonry ties and flashing installation.
7. Section 072100 "Thermal Insulation" for installation of exterior insulation.
8. Section 072413 "Polymer-Based Exterior Insulation and Finish System (EIFS)" for installation of exterior insulation and finish system.
9. Section 072419 "Water-Drainage Exterior Insulation and Finish System (EIFS)" for installation of exterior insulation and finish system.
10. Section 074624 "Wood Shingle and Shake Siding" for installation of wood shingle and shake siding.
11. Section 074646 "Fiber-Cement Siding" for installation of fiber-cement board siding.
12. Section 092400 "Cement Plastering" for installation of stucco.
13. Section <**Insert Section number and title**> for <**insert material or product to be installed and that requires coordination**>.

1.3 PREINSTALLATION MEETINGS

A. Preinstallation Conference: Conduct conference at [**Project site**] <**Insert location**>.

1. Meet with Owner, Architect, Manufacturer's Certified Installer, [**weather barrier manufacturer's designated field representative**,] and installers of work that interfaces with or affects weather barrier.
2. Review methods and procedures related to weather barrier installation, including manufacturer's written instructions.
3. Review and finalize construction, and verify availability of materials, Installer's personnel, equipment, and facilities needed to make progress and avoid delays.
4. Examine substrate conditions and finishes for compliance with requirements.
5. Review flashings, special weather barrier details, weather barrier penetrations, and condition of other construction that affects weather barrier.
6. Review weather barrier manufacturer's Project Registration and Observation process.
7. Review Construction Indoor Air Quality Management Plan "Moisture Protection for Absorbent Materials."
8. Review temporary protection requirements for weather barrier during and after installation.

1.4 REFERENCES

A. ASTM International
1. ASTM C920; Standard Specification for Elastomeric Joint Sealants
2. ASTM C1193; Standard Guide for Use of Joint Sealants
3. ASTM D882; Test Method for Tensile Properties of Thin Plastic Sheeting
4. ASTM D1117; Standard Guide for Evaluating Non-woven Fabrics
5. ASTM E84; Test Method for Surface Burning Characteristics of Building Materials
6. ASTM E96; Test Method for Water Vapor Transmission of Materials
7. ASTM E1677; Specification for Air Barrier Material or System for Low-Rise Framed Building Walls
8. ASTM E2178; Test Method for Air Permeance of Building Materials

B. AATCC – American Association of Textile Chemists and Colorists
1. Test Method 127 Water Resistance: Hydrostatic Pressure Test

C. TAPPI

1. Test Method T-410; Grams of Paper and Paperboard (Weight per Unit Area)
2. Test Method T-460; Air Resistance (Gurley Hill Method)

1.5 ACTION SUBMITTALS

A. Refer to Section [**01 33 00 Submittal Procedures**] [**Insert section number and title**].

B. Product Data: Submit manufacturer current technical literature for each component.

1. For weather barrier, include data on air and water-vapor permeance based on testing in accordance with referenced standards.

C. Sustainable Design Submittals:

(Specifier Note: The use of a weather barrier as part of an assembly to reduce air infiltration may assist in achieving points for USGBC LEED® Certified Projects or an ENERGY STAR® label for new homes or home improvements. Contact a DuPont™ Tyvek® Specialist for assistance.)

1. Test Reports: Envelope testing and verification of the following:

   a. Water-Spray Test.
   b. Air Infiltration Test.
   c. Water Penetration Test.

2. Product Data: Including the following information:

   a. Provide Health Product Declarations (HPDs) or list of weather barrier ingredients by name and Chemical Abstract Service (CAS) registry number or Proprietary Ingredients hazards associated with LT-1/LT-P1 down to 0.1 percent (1000 ppm).
   b. Provide Environmental Product Declarations (EPDs)
   c. Provide SDS (formerly MSDS), Article Information Sheet, third-party certifications, or product technical data confirming that systems meet or exceed emissions guidelines for volatile organic compounds (VOCs) and hazardous air pollutants (HAPs), as follows:

      1) Commercial weather barrier complies with California Department of Public Health (CDPH) Standard.
      2) Adhesives and sealants wet-applied onsite are to meet/exceed VOC content requirements for wet-applied products and comply with SCAQMD Rule 1168.
      3) Flashing systems comply with SCAQMD Rule 1168 on VOC limits.

D. Shop Drawings: Show details of weather barrier at terminations, openings, and penetrations. Show details of flexible flashing applications.

1.6 INFORMATIONAL SUBMITTALS

A. Evaluation Report: For [**weather barrier**], from ICC-ES.

B. AAMA Verified Component Listing status for [**flexible flashings**].

C. Manufacturer's Instructions: For installation of each product specified.

D. Samples: Weather Barrier membrane, minimum 8-1/2 inches by 11 inch.

E. Qualification Data: For Installer [**and**] [**laboratory mockup testing agency**] [**field testing agency**].

F. Sample Warranty: For manufacturer's warranty.

(Specifier Note: See the DuPont website for more information on residential warranties.)

G. Reports: Field test and inspection reports.

H. Installer's weather barrier manufacturer-training certificate.

I. Closeout Submittals
1. Refer to Section [**01 78 00 Closeout Submittals**] [**insert section number and title**].

1.7 QUALITY ASSURANCE

A. Installer Qualifications: A qualified firm that is certified by weather barrier system manufacturer to install manufacturer's product in accordance with manufacturer's installation guidelines and recommendations.

B. Mockups: Build mockups to set quality standards for materials and execution.

1. Build integrated mockups of exterior wall assembly [**as shown on Drawings**] [**150 sq. ft. (14 sq. m)**] <**Insert area or dimensions**>, incorporating backup wall construction, external cladding, window, storefront, door frame and sill, insulation, ties and other penetrations, and flashing to demonstrate surface preparation, crack and joint treatment, application of weather barriers, and sealing of gaps, terminations, and penetrations of air-barrier assembly.

    a. Include junction with roofing membrane [**building corner condition,**] [**and**] [**foundation wall intersection**] [**fenestration and wall interface**].
    b. If Architect determines mockups do not comply with requirements, reconstruct mockups and apply weather barrier until mockups are approved.

2. Approval of mockups does not constitute approval of deviations from the Contract Documents contained in mockups unless Architect specifically approves such deviations in writing.

C. Manufacturer's Field Service: Register project with weather barrier manufacturer prior to installation of weather barrier and comply with weather barrier manufacturer's Project registration and observation process.

D. Source Limitations: Provide weather barrier and accessory materials produced by single manufacturer.

1.8 DELIVERY, STORAGE, AND HANDLING

A. Refer to Section [01 60 00 Product Requirements] [insert section number and title].

B. Deliver weather barrier materials and components in manufacturer's original, unopened, undamaged containers with identification labels intact.

C. Store weather barrier materials as recommended by system manufacturer. Do not store near heat source or open flame.

1.9 SCHEDULING

(Specifier Note: The preferred order of installation for DuPont™ Tyvek® HomeWrap® is prior to the installation of windows and doors.)

A. Review requirements for sequencing of installation of weather barrier assembly with installation of windows, doors, louvers and flashings to provide a weather-tight barrier assembly.

1.10 WARRANTY

(Specifier Note: Warranty for DuPont™ HomeWrap® Based upon the document *"DuPont™ Weatherization Products 10-Year Limited Builder Warranty for Buildings Less than 5 Stories and Low-Rise Multi-Family Residential Buildings Less than 6 Stories"*.

Choose either "Manufacturer's Product Warranty" or "Manufacturer's Product and Labor Warranty" below based on desired Warranty coverage. For specific details for DuPont™ Tyvek® weatherization product warranties, see http://dupontspecs.tyvek.com..)

A. Manufacturer's Product Warranty: To repair or replace weather barrier product that fails in materials within specified warranty period when all terms of Warranty are met.

1. Warranty Period: 10 years from date of purchase.

B. Manufacturer's Product and Labor Warranty: Manufacturer agrees to repair or replace weather barrier that fails in materials within specified warranty period, including removal and replacement of affected construction up to manufacturer's limits when all terms of Warranty are met.

1. Warranty Period: 10 years from date of purchase.

PART 2 - PRODUCTS

(Specifier Note: Product Information is proprietary to DuPont™ Tyvek® HomeWrap®. If additional products are required for competitive procurement, contact DuPont for assistance.)

2.1 MANUFACTURERS

A. DuPont Performance Building Solutions; 200 Powder Mill Road, DuPont Experimental Station 356 Wilmington, Delaware 19803; 1-800-448-9835; building.dupont.com

2.2 PERFORMANCE REQUIREMENTS

A. General Performance: Installed weather barrier and accessories shall withstand specified wind pressures, liquid water penetration, and water vapor pressures, without failure due to defective manufacture of products.

2.3 WEATHER BARRIER

A. Basis of Design: spunbonded polyolefin, non-woven, non-perforated, weather barrier is based upon DuPont™ Tyvek® HomeWrap® and related assembly components.

B. Performance Characteristics:
1. Air Penetration Resistance: <0.004 cfm/ft^2 at 1.57 psf, when tested in accordance with ASTM E2178.
2. Type I Air Barrier Material when tested in accordance with ASTM E1677.
3. Type II Water Resistive Barrier when tested in accordance with ASTM E2556
4. Water Vapor Transmission: 56 perms, when tested in accordance with ASTM E96-05, Method A.
5. Water Penetration Resistance: 250 cm when tested in accordance with AATCC Test Method 127.
6. Basis Weight: 1.8 oz/yd^2, when tested in accordance with TAPPI Test Method T-410.
7. Air Resistance: 1200 seconds, when tested in accordance with TAPPI Test Method T-460.
8. Breaking Strength: 30/30 lbs/in., when tested in accordance with ASTM D882.
9. Tear Resistance: 8/6 lbs, when tested in accordance with ASTM D1117.
10. Surface Burning Characteristics: Class A, when tested in accordance with ASTM E84. Flame Spread: 15, Smoke Developed: 15.

2.4 WEATHER BARRIER FLASHING

(Specifier Note: Flashing is dependent upon construction conditions. DELETE flashing products that are unnecessary and inappropriate for specific project.)

Products covered below: DuPont™ FlexWrap™ NF, DuPont™ FlexWrap™ EZ, DuPont™ StraightFlash™, DuPont™ StraightFlash™ VF, DuPont™ Flashing Tape.)

A. Conformable Weather Barrier Flashing: Composite flashing material composed of micro-creped, polyethylene laminate with a 100 percent butyl-based adhesive layer; AAMA 711 Class A (no primer), Level 3 thermal exposure, 176 deg F (80 deg C) for 7 days.

1. Basis-of-Design Product: Subject to compliance with requirements, provide DuPont Safety & Construction: DuPont de Nemours, Inc.; **DuPont™ FlexWrap™ NF** or comparable product by one of the following:

a. <**Insert manufacturer's name**>.

2. Conformability: Able to create a seamless sill pan extending up the jambs without cuts, patches, or fasteners.
3. Water Penetration: No leakage at 15 psf (720 Pa) per ASTM E 331.
4. Low Temperature Adhesion: Exceeds minimum value of 1.5 lb./in. (0.26N/mm) at 25 degrees F (minus 4 deg C) as Class A (without primer use).
5. Adhesion After Water Immersion: Exceeds minimum value of 1.5 lb./in. (0.26N/mm), after AAMA 800, Sections 2.4.1.3.1/2.4.1.4.3, Test B.

B. Conformable Weather Barrier Flashing for Sealing Penetrations: Composite flashing material composed of micro-creped, polyethylene laminate with a 100 percent butyl-based adhesive layer; AAMA 711 Class A (no primer), Level 3 thermal exposure, 176 deg F (80 deg C) for 7 days.

1. Basis-of-Design Product: Subject to compliance with requirements, provide DuPont Safety & Construction: DuPont de Nemours, Inc.; **DuPont™ FlexWrap™ EZ** or comparable product by one of the following:

   a. <**Insert manufacturer's name**>.

2. Conformability: Able to create a continuous watertight seal around penetrations from weather barrier to penetration without cuts, patches, or fasteners.
3. Water Penetration: No leakage at 15 psf (720 Pa) per ASTM E 331.
4. Low Temperature Adhesion: Exceeds minimum value of 1.5 lb./in. (0.26N/mm) at 25 degrees F (minus 4 deg C) as Class A (without primer use).
5. Adhesion After Water Immersion: Exceeds minimum value of 1.5 lb./in. (0.26N/mm), after AAMA 800, Sections 2.4.1.3.1/2.4.1.4.3, Test B.

C. Strip Flashing: Composite flashing material composed of spunbonded polyethylene laminate with 100 percent butyl-based, adhesive layer; AAMA 711, Class A (no primer), Level 3 thermal exposure, 176 deg F (80 deg C) for 7 days.

1. Basis-of-Design Product: Subject to compliance with requirements, provide DuPont Safety & Construction: DuPont de Nemours, Inc.; **DuPont™ StraightFlash™** or comparable product by one of the following:

   a. <**Insert manufacturer's name**>.

2. Water Penetration: No leakage at 15 psf (720 Pa) per ASTM E 331.
3. Low Temperature Adhesion: Exceeds minimum value of 1.5 lb./in. (0.26N/mm) at 25 deg F (minus 4 deg C) as Class A without primer use.
4. Adhesion After Water Immersion: Exceeds minimum value of 1.5 lb./in. (0.26N/mm), after AAMA 800, Sections 2.4.1.3.1/2.4.1.4.3, Test B.

D. Strip Flashing: Composite flashing material composed of spunbonded polyethylene laminate with 100 percent butyl-based, **dual-sided**, adhesive layer; AAMA 711, Class A (no primer), Level 3 thermal exposure, 176 deg F (80 deg C) for 7 days.

1. Basis-of-Design Product: Subject to compliance with requirements, provide DuPont Safety & Construction: DuPont de Nemours, Inc.; **DuPont™ StraightFlash™ VF** or comparable product by one of the following:

   a. <**Insert manufacturer's name**>.

2. Water Penetration: No leakage at 6.24 psf (300 Pa) per ASTM E 331.
3. Low Temperature Adhesion: Exceeds minimum value of 1.5 lb./in. (0.26N/mm) at 25 deg F (minus 4 deg C) as Class A without primer use.
4. Adhesion After Water Immersion: Exceeds minimum value of 1.5 lb./in. (0.26N/mm), after AAMA 800, Sections 2.4.1.3.1/2.4.1.4.3, Test B.

E. Strip Flashing: Composite flashing material composed of **polypropylene** laminate with 100 percent butyl-based, adhesive layer; AAMA 711, Class A (no primer), Level 3 thermal exposure, 176 deg F (80 deg C) for 7 days.

1. Basis-of-Design Product: Subject to compliance with requirements, provide DuPont Safety & Construction: DuPont de Nemours, Inc.; **DuPont™ Flashing Tape** or comparable product by one of the following:

   a. <**Insert manufacturer's name**>.

2. Water Penetration: No leakage at 6.24 psf (300 Pa) per ASTM E 331.
3. Low Temperature Adhesion: Exceeds minimum value of 1.5 lb./in. (0.26N/mm) at 25 deg F (minus 4 deg C) as Class A without primer use.

2.5 WEATHER BARRIER ACCESSORIES

A. Building Wrap Seam Tape: **[2] [or] [3]** inch wide, Pressure-sensitive plastic tape recommended by weather barrier manufacturer for sealing joints and penetrations in building wrap.

1. Basis-of-Design Product: DuPont Safety & Construction: DuPont de Nemours, Inc.; **DuPont™ Tyvek® Tape**.

B. Fasteners with Self-Gasketing Washers: Building wrap manufacturer's recommended pneumatically or hand-applied fasteners with [**1-inch- (25-mm-)**] [**2-inch- (50-mm-)**] diameter, high-density polyethylene cap washers with UV inhibitors.

(Specifier Note: Fasteners are dependent upon substrate construction. More than one type of fastener may be required on a single project.)

1. Basis-of-Design Product: DuPont Safety & Construction: DuPont de Nemours, Inc.; **DuPont™ Tyvek® Wrap Caps**.

C. Sealants

(Specifier Note: Sealants compatible with weather barrier assembly may be specified in this section or in Division 07 sealants section. DELETE paragraphs 2 and 3 when sealants are specified in Division 07.)

1. Refer to Section [07 92 00 Joint Sealants] [insert section number and title].

OR

2. Provide sealants that comply with ASTM C 920, elastomeric polymer sealant to maintain watertight conditions.

(Specifier Note: Sealant products listed below have been tested for compatibility and intermittent contact with DuPont weather barrier materials. EDIT for specific project as appropriate when sealants are specified within this section.)

3. Products:
   a. **DuPont™ Residential Sealant**
   b. Sealants recommended by the weather barrier manufacturer

D. Insulating Foam Sealant: one component, expanding, low pressure-build, flexible polyurethane foam.

1. Basis-of-Design Product: DuPont Safety & Construction: DuPont de Nemours, Inc.; **DuPont™ Great Stuff Pro™ Window & Door Polyurethane Foam Sealant**.

E. Primer for Flashings: Synthetic rubber-based product; spray applied. Strengthen adhesive bond at low temperature applications between weather products such as self-adhered flashing products, commercial building wraps, and common building sheathing materials.

1. Basis-of-Design Product: DuPont Safety & Construction: DuPont de Nemours, Inc., **DuPont™ Adhesive/Primer**.
2. Peel Adhesion Test: Passes in accordance with ASTM D 3330, Test Method F, for the following.
   a. Peel Angles: 0, 25, 72, and 180 degrees.
   b. Substrates: Concrete masonry units (CMU), exterior gypsum sheathing, oriented strand board (OSB), aluminum, and vinyl.
3. Chemical Compatibility: Pass; AAMA 713.
4. Flame Spread Index: 5; ASTM E 84.
5. Smoke Development Index: 0; ASTM E 84.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine substrates, with Installer present, for compliance with requirements.

B. Verify that substrate and surface conditions are in accordance with commercial weather barrier manufacturer recommendations prior to installation.

1. Verify that rough sill framing for doors and windows is sloped downwards towards the exterior and is level across width of the opening.

C. Verify that surfaces to receive weather barrier flashing are clean, dry, and free of frost.

D. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 PREPARATION

A. Direct water onto an acceptable weather barrier drainage plane with an unobstructed path to exterior of wall.

1. Provide a drainage path for water intrusion through window and door attachment system that collects at window and door sills and directs water to the exterior or weather barrier.

3.3 WEATHER BARRIER INSTALLATION

(Specifier Note: It is the recommendation and the preferred application for the weather barrier to be installed prior to the installation of the windows and doors. In cases where conditions require installation of the weather barrier after the window installation or use of non-flanged or brick mold windows, contact a DuPont™ Tyvek® Specialist for assistance and recommendations.)

A. General: Comply with weather barrier manufacturer's written instructions and warranty requirements.

B. Cover exposed exterior surface of sheathing with weather barrier securely fastened to structure per manufacturer's written instructions immediately after sheathing is installed.

1. Maintain continuity of air and water barrier assemblies.
2. Start weather barrier installation at a building corner, leaving 12 inches (300 mm) of weather barrier extended beyond corner to overlap.
3. Install weather barrier horizontally starting at lower portion of wall surface. Extend bottom roll edge over sill plate 1" minimum. For air barrier installations, seal weather barrier along bottom edge with sealant or tape. Shingle weather barrier over back edge of through-wall flashings and seal weather barrier with building wrap tape. Ensure weeps are not blocked.
4. Provide minimum 6 inches (150 mm) overlap at horizontal- and vertical-wrap seams in a shingle manner to maintain continuous downward drainage plane and air and water barrier.

C. Seams: Seal seams with building wrap tape per manufacturer's recommended installation instructions.

1. Shiplap horizontal seams in weather barrier to facilitate proper drainage.

D. Fasteners: Use weather barrier manufacturer's recommended fasteners to secure weather barrier and install fasteners according weather barrier manufacturer's installation guidelines.

(Specifier Note: Attachment method is dependent upon substrate construction.)

(Specifier Note: Cladding anchors, supports and fasteners will likely be specified in the Section including the cladding. COORDINATE the inclusion of the following paragraph in the appropriate specification section. With weather barrier manufacturer's approval, cladding anchors can be used to fasten the weather barrier.)

1. Do not use temporary fasteners to permanently attach weather barrier.
2. Do not place fasteners with gasketing washers where weather barrier flashing will be installed.
3. Install fasteners with gasketing washers through flashing where recommended by manufacturer.

E. Openings: Completely cover openings with weather barrier, and then cut weather barrier membrane at openings according to weather barrier manufacturer's installation guidelines.

(Specifier Note: Opening preparation and flashing installation is dependent upon the construction of the opening and construction of the window. DELETE execution requirements that are not appropriate for specific project. COORDINATE proper design and detailing at windows, doors and other openings or intersections for proper flashing in accordance with window manufacturer guidelines, industry standards and best flashing and waterproofing practices.)

1. Provide head and jamb flaps and seam overlaps to maintain continuous drainage.
2. Repair damage to weather barrier using method recommended by weather barrier manufacturer.
3. Install flashing according to weather barrier manufacturer's installation guidelines.

3.4 WEATHER BARRIER FLASHING

A. Installation: Remove wrinkles and bubbles, reposition weather barrier as necessary to produce a uniform, smooth surface.

1. Ensure that ambient and substrate surface temperatures are acceptable in accordance with manufacturer instructions and recommendations.
2. Wipe surfaces to remove moisture, dirt, grease and other debris that could interfere with adhesion.
3. Apply weather barrier manufacturer's recommended primer over concrete, masonry, and glass-mat gypsum wall sheathing substrates to receive weather barrier flashing.
4. Lap weather barrier flashing a minimum of 2 inches (50 mm) onto weather barrier.
5. Apply pressure over entire surface using roller or firm hand pressure

B. Rough Openings: Shiplap flashing with weather barrier in a shingle manner to maintain a continuous downward drainage plane and air and water barrier in accordance with manufacturer's written instructions.

(Specifier Note: DuPont recommends the use of the 6-inch wide DuPont™ FlexWrap™ NF with 2 by 4 framing and 9-inch wide DuPont™ FlexWrap™ NF with 2 by 6 framing.)

1. Apply [**6-inch- (150-mm-)**] [**9-inch- (230-mm-)**] wide conformable weather barrier flashing at door and window sills.
2. Ensure that sill flashing does not slope to the interior.
3. Install backer rod in joint between frame of opening product and flashed rough opening on the interior.
4. Apply sealant or closed-cell polyurethane foam insulation around entire opening/fenestration product to create air seal around interior perimeter of window openings in accordance with weather barrier manufacturer's instructions.
5. Around door and window openings, apply butyl-based flashing to flaps of weather barrier per manufacturer's instructions.
6. Seal building wrap head flap of the windows.

C. Penetrations: Seal weather barrier around each penetration with weather barrier manufacturer's recommended self-adhered flashing product. Integrate products with flanges into the weather barrier.

D. Terminations: Provide minimum 2 inches (50 mm) overlap using strip flashing on adjoining roof and base of wall systems to maintain continuous downward drainage plane.

1. Secure weather barrier with fasteners and weather-barrier flashing.

(Specifier Note: Retain "Flashing Patches" paragraph below for high performance installations where performance requirements exceed those established by ASTM E1677. Otherwise, delete this paragraph. Coordinate with "Performance Requirements". Article in Part 2.)

E. Flashing Patches: Apply weather barrier manufacturer's recommended weather barrier flashing patches behind fastening plates, such as brick-tie base plates, metal-flashing clips, and metal channels.

3.5 FIELD QUALITY CONTROL

A. Manufacturer's Field Service: Engage a factory-authorized service representative to train installers and observe subject test-wall areas and installations.

B. Testing Agency: [**Owner will engage**] [**Engage**] a qualified third-party testing agency to perform tests and inspections.

C. Field Quality Control Testing: Perform the following test on [**representative areas of structural-sealant-glazed curtain walls**] [**mockups**] <**Insert requirements**>.
   1. Water Penetration: ASTM E 1105 as specified by Testing Agency. No water penetration shall occur as defined in ASTM E 1105.
      a. Perform specified number of tests in each test area and at various stages of completion as directed by Architect.

D. Prepare test and inspection reports.

3.6 CLEANING

A. Immediately remove release paper and scrap from work area and dispose of material in accordance with requirements of **[Section 017300 "Execution."] [Section 017419 "Construction Waste Management and Disposal."] [Section 017300 "Execution" and Section 017419 "Construction Waste Management and Disposal."]**

3.7 PROTECTION

A. Protect installed weather barrier from the following:

   1. Damage from cladding, structure, or a component of the structure (e.g., window, door, or wall system).
   2. Contamination from building site chemicals, premature deterioration of building materials, or nonstandard use or application of products.

3. Foreign objects or agents, including the use of materials incompatible with weather barrier products.
4. UV exposure in excess of products' stated limits.

END OF SECTION

DISCLAIMER:

DuPont Performance Building Solutions Guide Specifications have been written as an aid to the professionally qualified specifier and design professional. The use of this guideline specification requires the sole professional judgment and expertise of the qualified specifier and design professional to adapt the information to the specific needs for the building owner and the project, to coordinate with their construction document process, and to meet all the applicable building codes, regulations and laws. DUPONT EXPRESSLY DISCLAIMS ANY WARRANTY, EXPRESSED OR IMPLIED, INCLUDING THE WARRANTY OF MERCHANTABILITY OR FITNESS FOR PARTICULAR PURPOSE OF THIS PRODUCT FOR THE PROJECT.

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Please contact your local DuPont™ Tyvek® Specialist at 1-800-448-9835 or visit building.dupont.com.