

**SECTION 07 27 19
WEATHER BARRIER**

PART 1 - GENERAL

1.1 SCOPE:

- A. Provide all of the labor, materials, equipment, and services required to furnish and install the weather barrier.

1.2 QUALITY ASSURANCE:

- A. Qualifications of installers:
 - 1. Provide at least one person who shall be present at all times during execution of the work of this Section and who shall be thoroughly trained and experienced in the materials and methods required and who shall direct the entire flashing installation.
 - 2. Provide the Architect with the name of responsible person and his job title.

1.3 SUBMITTALS:

- A. Prior to installation, submit to the Architect for review the following:
 - 1. Complete and fully descriptive manufacturer's literature which shall include installation instructions as applicable for this Project.
 - 2. A schedule of all locations where the Contractor proposes use of this product.
 - 3. Physical sample of the product intended to be installed.

1.4 PRODUCT HANDLING:

- A. Protection: Use all means necessary to protect weather barrier materials before, during and after installation and to protect the installed work and materials of all other Trades.
- B. Replacements: In the event of damage, immediately make all repairs and replacements necessary to the approval of the Architect and at no additional cost to the Owner.

PART 2 - PRODUCTS

2.1 WEATHER BARRIER:

- A. Product/manufacturer:
 - 1. Tyvek Commercial Wrap as manufactured by DuPont.
 - 2. Or an approved equal.
- B. Accessories:
 - 1. Tape: DuPont Contractor's Tape
 - 2. Nails (as recommended by manufacturer):
 - a. Non-corrosive with large heads or nails with plastic washer heads.
 - b. Non-corrosive screws with washers.
 - c. Non-corrosive staples (1" crown).

PART 3 - EXECUTION

3.01 INSTALLATION:

- A. Install weather barrier over exterior face of exterior wall substrate in accordance with manufacturer recommendations.
 - 1. Install weather barrier prior to installation of windows and doors.
 - 2. Start weather barrier installation at a building corner, leaving 6-12 inches of weather barrier extended beyond corner to overlap.
 - 3. Install weather barrier in a horizontal manner starting at the lower portion of the wall surface with subsequent layers installed in a shingling manner to overlap lower layers. Maintain weather barrier plumb and level.
 - 4. Sill Plate Interface: Extend lower edge of weather barrier over sill plate interface 3-6 inches. Secure to foundation with elastomeric sealant as recommended by weather barrier manufacturer.
 - 5. Window and Door Openings: Extend weather barrier completely over openings.
 - a. Overlap weather barrier
 - (1) Exterior corners: minimum 12 inches.
 - (2) Seams: minimum 6 inches.
 - 6. Weather Barrier Attachment: Attach weather barrier to studs through exterior sheathing. Secure using weather barrier manufacturer recommended fasteners, space 12-18 inches vertically on center along stud line, and 24 inch on center, maximum horizontally.
 - 7. Apply flashing to weather barrier membrane prior to installing cladding anchors.
 - 9. Seaming:
 - a. Seal seams of weather barrier with seam tape at all vertical and horizontal overlapping seams.
 - b. Seal any tears or cuts as recommended by weather barrier manufacturer.
 - 10. Opening preparation (flanged windows):
 - a. Cut weather barrier in a modified "I-cut" pattern.
 - b. Cut weather barrier horizontally along the bottom of the header.
 - c. Cut weather barrier vertically 2/3 of the way down from top center of window opening.
 - d. Cut weather barrier diagonally from bottom of center vertical cut to the left and right corners of the opening.
 - e. Fold side and bottom weather barrier flaps into window opening and fasten.
 - 11. Cut a head flap at 45-degree angle in the weather barrier at window head to expose 8 inches of sheathing. Temporarily secure weather barrier flap away from sheathing with tape.
 - 12. Flexible Flashing (type as recommended by the manufacturer):
 - a. Cut flexible flashing a minimum of 12 inches longer than width of sill rough opening.
 - b. Cover horizontal sill by aligning flexible flashing edge with inside edge of sill. Adhere to rough opening across sill and up jambs a minimum of 6 inches. Secure flashing tightly into corners by working in along the sill before adhering up the jambs.
 - c. Fan flexible flashing at bottom corners onto face of wall. Firmly press in place. Mechanically fasten fanned edges.
 - d. On exterior, apply continuous bead of sealant to wall or backside of window mounting flange across jambs and head. Do not apply sealant across sill.
 - e. Install window according to manufacturer's instructions.

- f. Apply strips of flashing at jam bs overlapping entire mounting flange. Extend jam b flashing 1-inch above top of rough opening and below bottom edge of sill flashing.
- g. Apply strip of flashing as head flashing overlapping the mounting flange. Head flashing should extend beyond outside edges of both jamb flashings.
- h. Position weather barrier head flap across head flashing. Adhere flashing over the 45- degree seam s.
- i. Tape head flap in accordance with manufacturer recommendations.
- j. On interior, install backer rod in joint between frame of window and flashed rough framing. Apply sealant around entire window to create air seal. Apply sealant in accordance with sealant manufacturer's instructions and ASTM C 1193.

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