Informational Guide Specification

DuPont™ Tyvek® StuccoWrapWrap® Air Barrier/Weather Resistant Barrier

Section 07270

PART 1 GENERAL

1.01 Summary:

A. Includes but not limited to:
Furnish and install air barrier/weather resistant barrier over exterior of wall sheathing at all locations regardless of whether or not indicated on drawings to protect exterior sheathing and interior walls.

1.02 Related Sections

A. Section 05400 – Cold Formed Metal Framing
B. Section 06160 – Sheathing
C. Section 07240 – Exterior Insulation and Finish Systems (EIFS)
D. Section 07610 – Flashing and Sheet Metal

1.2 References:

A. American Society for Testing and Materials
B. Technical Association of the Pulp and Paper Industry
C. American Association of Textile Chemists and Colorists

1.3 Submittals:

A. General: Submit each item in this Article according to the conditions of the Contract and Division I Specifications Sections.
B. Product Data: Submit product specifications, technical data and installation instructions of manufacturer equaling or exceeding those specified.

1.4 Quality Assurance

A. Qualifications:
1. Installer with successful experience in the installation of air barrier/secondary weather resistant barriers.

B. Install job mock-up using specified air barrier/secondary weather resistant barrier with system of fastening and taping seams as per manufacturer's instructions. Obtain architect's approval of system for appearance and workmanship standard.

PART 2 – PRODUCTS

2.1 Manufacturers

A. Acceptable Manufacturer:

DuPont Weatherization Systems
4417 Lancaster Pike
Building 728

Contact:
800-448-9835

2.2 Materials

A. **DuPont™ Tyvek® StuccoWrap®**: A flash spunbonded olefin , non-woven, non-perforated secondary weather resistant barrier.

B. Performance Characteristics

1. AATCC–127, Water Penetration Resistance, exceeded at 210
2. TAPPI T–460, Gurley Hill (sec/100cc) Air infiltration at 300 seconds
3. ASTM E 96 Method B(g/m2–24hr.)Water vapor transmission of 350
4. TAPPI T-41D, Basis weight of 2.1oz/yd
5. ASTM E96 Method B, Water Vapor Transmission, 50 perms
6. ASTM E1677, Air Retarder Material Standard Specification, Type I air barrier

C. Sealing Tape/Fasteners

1. **DuPont™ Tyvek® Tape**, DuPont Weatherization Systems.
2. For steel frame construction: **DuPont™ Tyvek® Wrap Cap Screws**, DuPont Weatherization Systems. 1 5/8" rust resistant screws with 2" diameter plastic cap
3. For wood frame construction: **DuPont™ Tyvek® Wrap Caps**, DuPont Weatherization Systems. Nails with large heads or plastic washers.
4. Caulks and Sealants: polyurethane or elastomeric sealants
    1. Available Products:
        a. OSI® Quad Pro-Series®, solvent release butyl rubber sealant
        b. DAP® Dynaflex 230™
        c. Other products as approved and recommended by air barrier/weather resistant barrier manufacturer.

PART 3 - EXECUTION

3.01 Installation

A. A. Install Air Barrier over exterior side of exteriror wall sheathing.

1. Install Air Barrier after sheathing is installed and before windows and doors are installed. Install with drainage plane surface pattern in vertical position for proper draining. Install lower level barrier prior to upper layers to ensure proper shingling of layers.
2. Overlap Air Barrier at corners of building by a minimum of 12 inches.
3. Overlap Air Barrier vertical seams by a minimum of 6 inches.
4. Ensure barrier is plum and level with foundation, and unroll extending Air Barrier over window and door openings.
5. Ensure barrier is applied over back edge of weep screed for proper water drainage.
6. Attach Air Barrier to wood, insulated sheathing board or exterior gypsum with plastic cap nails every 12" to 18" on vertical stud line with wood stud framing, and screws with washers to metal stud framing. When attaching to masonry, use adhesive recommended by manufacturer.
7. Prepare window and door rough openings as follows:

a. Prepare each window rough opening by cutting a modified “I” pattern in the Air Barrier.
    1. Horizontally cut Air Barrier along bottom of header.
    2. Vertically cut Air Barrier down the center of window openings from the top of the window opening down to 2/3 of the way to the bottom of the window openings.
    3. Diagonally cut Air Barrier from the bottom of the vertical cut to the left and right corners of opening.
    4. Fold side and bottom flaps into window opening and fasten every 6 inches. Trim off excess.
b. Prepare each rough door opening by cutting a standard “I” pattern in the Air Barrier.
    1. Horizontally cut Air Barrier along bottom of door frame header and along top of sill.
    2. Vertically cut Air Barrier down the center of door openings from the top of the door opening (header) down to the bottom of the door opening (sill).
    3. Fold side flaps inside around door openings and fasten every 6 inches. Trim off excess.

8. Tape all horizontal and vertical seam of Air Barrier with DuPont™ Tyvek® Tape.
9. Seal all tears and cuts in Air Barrier with DuPont™ Tyvek® Tape.

End of Section