
Product Guide Specification

SECTION 072500 WATER RESISTIVE BARRIERS and SECTION 072700 AIR BARRIERS

VAPOR PERMEABLE AIR AND WATER-RESISTIVE BARRIERS FOR MECHANICAL ATTACHMENT

PART 1 - GENERAL

1.1 SECTION INCLUDES

- A. Water Resistive Barriers
 - 1. HomeGuard® Housewrap
 - 2. HomeGuard® TITAN Housewrap
- B. Water Resistive Barriers and Air Barriers (both)
 - 1. HomeGuard® TITAN Drainage Housewrap HP
- C. Seam Tape (HomeGuard® Seam Tape)
- D. Flashings
 - 1. HomeGuard® RA-Plus (rubberized asphalt flashing)
 - 2. HomeGuard® Arctic-Flash (acrylic hot melt adhesive flashing)
 - 3. HomeGuard® Flexible Butyl Flashing (butyl rubber adhesive flashing)
 - 4. Titan Butyl Flashing
- E. Fasteners

1.2 REFERENCES

Specifier note: List the test methods referenced in this section. Include complete designations and titles.

- A. ASR D882: Standard Test Method for Tensile Properties of Thin Plastic Sheeting.
- B. D 5733: Test Method for Tearing Strength of Nonwoven Fabrics by the Trapezoid Procedure
- C. D5034: Standard Test Method for Breaking Strength and Elongation of Textile Fabrics (Grab Test).
- D. AATCC-127: Water Resistance: Hydrostatic Pressure Test
- E. ASR D779: Standard Test Method for Water Resistance of Paper, Paperboard, and Other Sheet Materials by the Dry Indicator Method
- F. ASR D1777: Standard Test Method for Thickness of Textile Materials.
- G. ASR D3776: Standard Test Method for Mass per Unit Area (Weight) of Fabric.
- H. ASR E84: Standard Test Method for Surface Burning Characteristics of Building Materials.
- I. ASR E96: Standard Test Method for Water Vapor Transmission of Materials.
- J. ASR E283: Standard Test Method for Determining Rate of Air Leakage through Exterior Windows, Curtain Walls, and Doors under Specified Pressure Differences across the Specimen.
- K. ASR E330: Standard Test Method for Structural Performance of Exterior Windows, Doors, Skylights and Curtain Walls by Uniform Static Air Pressure Difference.
- L. ASR E331: Standard Test Method for Water Penetration of Exterior Windows, Skylights, Doors and Curtain Walls by Uniform Static Air Pressure Difference.
- M. ASR E2178: Standard Test Method for Air Permeance of Building Materials.
- N. TAPPI T 460: Air Resistance of Paper

- O. ASR E2273: Standard Test Method for Determining the Drainage Efficiency of Exterior Insulation and Finish Systems (EIFS) Clad Wall Assemblies

1.3 SUBMITTALS

- A. Submit in accordance with Section 01330 – Submittal Procedures.
- B. Product Data: Submit manufacturer's product data and installation instructions.
- C. Samples: Submit samples of the appropriate HomeGuard® Building Wrap
- D. Manufacturer's Certification: Submit a statement from the manufacturer certifying that the product complies with code requirements and product data sheet specifications and is suitable for the intended application.

1.4 QUALITY ASSURANCE

- A. Code Compliance
 - 1. 2003, 2006 and 2009 International Building Code® (IBC)
 - 2. 2003, 2006 and 2009 International Residential Code® (IRC)
 - 3. 2003, 2006 and 2009 International Energy Conservation Code® (IECC)
 - 4. 1999 BOCA National Building Code® (BNBC)
 - 5. 1999 Standard Building Code® (SBC)
 - 6. 1997 Uniform Building Code® (UBC)
 - 7. See Intertek-ETL Code Compliance Research Report No. CCRR-1092
 - 8. Oregon Residential Specialty Code (ORSC 703.1.1, Exception 1)

1.5 DELIVERY, STORAGE, AND HANDLING

- A. Deliver materials to the project site in with product labels clearly identifying the manufacturer's name, product, date of manufacture, and directions for storage.
- B. Store materials in a clean and dry location protected from direct sunlight. Follow manufacturer's instructions for storage. Protect from exposure to flame or other ignition sources.
- C. Handle materials in accordance with Manufacturer's requirements to protect from damage during handling, installation and exposure prior to installation of cladding.

1.6 PROJECT SITE CONDITIONS

- A. Do not install material on substrates that are damp, wet, frozen or frost covered. Allow wet surfaces to dry prior to installing the wrap. Follow the manufacturer's installation instructions.
- B. Ultra-violet exposure. Do not expose the wrap to sunlight and other sources of ultra-violet light longer than recommended by the Manufacturer.

PRODUCTS

2.0 MANUFACTURER

- A. HomeGuard® Building Products, Inc., 5430 Shawland Road, Jacksonville, FL 32254
Phone: (904) 240-1382 Fax: (866) 337-4016 www.HomeGuardHousewrap.com

2.1 MATERIALS

A. HomeGuard® Housewrap (Water Resistive Barrier)

1. Description: Flexible water resistive barriers for exterior walls
2. Material: Coated woven polyolefin fabric with micro perforations
3. Code compliance:
 - a. CCRR-1092, Intertek ETL AC38, Acceptance Criteria for Water Resistive Barriers
 - b. HUD/FHA UU-B-790A, Equivalent to Grade D Building Paper (Per CCRR-1092)
 - c. ASTM D 226, Type I (Per CCRR-1092)
 - d. CCMC 13424-R Sheathing Membrane, Breather-Type
4. Material Properties
 - a. Thickness: ASTM D1777: 0.004 inch (0.11 mm)
 - b. Weight: ASTM D3776: 13.3 pounds per 1000 square feet (65 g/m²)
 - c. Water Resistance, ASTM D779 > 10 minutes
 - d. Water Vapor Permeance, ASTM E96, Desiccant Method: 12 perms
 - e. Water Vapor Permeance, ASTM E96, Water Method: 11 perms
 - f. Water Vapor Transmission Rate, ASTM E96, Desiccant Method: 83 g/m²-day
 - g. Water Vapor Transmission Rate, ASTM E96, Water Method: 77 g/m²-day
 - h. Tensile Strength, ASTM D882, MD 52 lb/in, CD 30 lb/in
 - i. Breaking Strength (Grab Tensile), ASTM D5034: MD 119 lbs, CD 50 lbs
 - j. Air Porosity, TAPPI T-460: ~ 20 sec
 - k. Fire characteristics:
ASTM E84: Class A, Flame Spread <25, Smoke Developed <450
 - l. UV Exposure Rating: 6 months
 - m. Color: White

B. HomeGuard® TITAN Drainage Wrap HP (Air and Water Resistive Barrier)

1. Description: Flexible air barrier and water resistive barrier for exterior walls with an ASTM E-2273 drainage feature
2. Material: Polyethylene nonwoven fabric laminated to a microporous film
3. Code Compliance:
 - a. CCRR-1092, ICC-ES AC38, Acceptance Criteria for Water Resistive Barriers, plus Air Barrier criteria
 - b. HUD/FHA UU-B-790A, Equivalent to Grade D Building Paper (Per CCRR-1092)
 - c. ASTM D 226, Type I (Per CCRR-1092)
 - d. AC235, ICC-ES Acceptance Criteria for EIFS Clad Drainage Wall Assemblies
4. Material Properties
 - a. Thickness: ASR D1777: 0.010 inch (0.254 mm)
 - b. Weight: ASTM D3776: 20.07 pounds per 1000 square feet (98 g/m²)
 - c. Water Vapor Permeance, ASTM E96, Desiccant Method: 60 perms
 - d. Water Vapor Permeance, ASTM E96, Water Method: 64 perms
 - e. Water Vapor Transmission Rate, ASTM E96, Desiccant Method: 424 g/m²-day
 - f. Water Vapor Transmission Rate, ASTM E96, Water Method: 448 g/m²-day
 - g. Water Resistance: AATCC-127, > 250 cm water column
 - h. Trapezoidal Tearing Strength, ASTM D4533: MD 12 lb/in, CD 10 lb/in
 - i. Breaking Strength (Grab Tensile), ASTM D5034: MD 48 lbs, CD 39 lbs
 - j. Air Permeance, ASTM E2178: 0.0001 cfm/ft² @ 1.57 psf, <0.001 L/s-m² @ 75 Pa
 - k. Air Porosity, TAPPI T-460: > 1000 sec

- l. Drainage Efficiency: ASTM E2273: > 93%
- m. Fire characteristics:
ASTM E84: Class A, Flame Spread <25, Smoke Developed <450
- n. UV Exposure Rating: 120 days
- o. Color: White

2.2 ACCESSORIES

- A. Fasteners: Steel Frame Construction: 1 ¼" (32 mm) or 2" (50 mm) self-tapping screws with gasketed metal washers or 1 ¼" (32 mm) or 2" (50 mm) plastic capped screws
- B. Fasteners: Wood Frame Construction: Staples or ring shank nails with 1" (25 mm) plastic caps. Fasteners must penetrate a minimum of 3/4 inch (19mm) into the underlying substrate or framing.
- C. Seam Tape: HomeGuard® Seam Tape, 2-inch (51 mm) width, or 3-inch width
- D. Self-adhered Flashing: HomeGuard® RA-Plus, HomeGuard® Arctic-Flash Flashing, HomeGuard® Flexible Butyl Flashing, or Titan Butyl Flashing

PART-3 EXECUTION

3.1 EXAMINATION

Examine areas where HomeGuard® Wraps will be installed. Notify architect of any conditions that would adversely affect installation or wrap performance. Do not proceed with installation until all unsatisfactory conditions are corrected.

3.2 SURFACE PREPARATION

Verify that surfaces are clean, dry, sound and flat. Ensure that surfaces are free of protrusions or foreign materials that could damage the wrap.

3.3 INSTALLATION

Note 1: Building wrap is intended for installation on vertical walls. Do not use building wrap at non-vertical conditions where roofing membranes would be required.

Note 2: Contact HomeGuard® Building Products for any special installation details not covered below.

1. Install building wrap over an approved exterior sheathing in "shingle-lap" fashion, with upper courses lapped over lower courses by at least 2 inches. Install with Printing Side "Out" for all housewrap installations. Drainage Wrap functional surface is printed side and must face "out" during installation.
2. Start the installation from 2" below the bottom sill plate of the wall. Extend the wrap 12 inches past any inside or outside corner of a wall. Vertical seams created by ending one roll and beginning another should have an overlap of at least 6 inches.
3. Attach the building wrap so that it is flat and tight. Start with lower course, two to three feet from the corner and continue fastening as you move around the building.
4. Fasteners must penetrate the stud or nail base material by a minimum of ¾ inch. Install recommended fasteners using the spacing outlined below.

Wind Speed (MPH)	Pressure psf	Maximum Vertical spacing at stud	
		16" on center	24" on center
185	85	5"	3"
165	70	6"	4"
145	55	7"	5.5"
125	40	10"	7"
105	25	17"	11"
85	20	21"	14"

5. Use HomeGuard® Seam Tape to seal all horizontal and vertical seams and to repair all tears and cuts.
6. Prepare each window and door opening by making an inverted Y cut in the housewrap at the rough opening. Cut the wrap straight across at the top of the opening. Fold the flaps in through the opening at the two sides and the sill, fastening them inside with staples about every six inches. When windows are installed make cuts in the wrap at 45° angles above and outboard of the top of the opening to create a header flap. Fold the flap material above the rough opening and temporarily attach the flap to expose the underlying sheathing. This will allow for installation of the head flashing material, which will then be covered by the wrap when it is folded down and the diagonal cuts are taped. If windows are already in place, trim the wrap as close to the window perimeter as possible and tape or flash the window perimeter. Use of window flashing materials is required as described in the International Residential Code. Check local building codes to determine window flashing requirements. Refer to HomeGuard's flashing installation instructions for additional details.
7. In order to protect the integrity of the drainage plane, it is important that the installation of the wrap be continuous throughout the wall system. Careful consideration must be given to all wall/foundation and wall/roof interfaces – as well as installation around all penetrations. Additional areas where attention should be focused include through-wall flashing, concrete cantilever, and concrete column, shelf angle and parapet wall conditions. For specific installation details, please consult your licensed design professional.

3.4 PROTECTION

Protect the installed wrap from damage during and after installation until covered by the exterior cladding material.

END OF SECTION