**HYDROGAP™ DRAINABLE HOUSEWRAP**

**PART 1 GENERAL**

1.1 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 five components.

1. Weather barrier membrane (Benjamin Obdyke HydroGap® Drainable Housewrap)
2. Seam Tape (Benjamin Obdyke HydroFlash® GP 2.3”, HydroFlash® UV+ 2.3” Sealing Tape)
3. Flashing (Benjamin Obdyke HydroFlash® UV+ Self-Adhered Flashing, HydroFlash® LA liquid applied flashing, or HydroFlash® GP Self-Adhered Flashing)
4. Fasteners
5. Adhesive/Sealant (per “Approved Compatible Products” list for HydroGap Drainable Housewrap
	1. REFERENCES
6. ASTM International

ASTM D5034; Test Method for Dry Tensile Strength

ASTM E84; Test Method for Surface Burning Characteristics of Building Materials

ASTM E96; Test Method for Water Vapor Transmission of Materials

ASTM E2178; Test Method for Air Permeance of Building Materials

ASTM E2273; Test Method for Determining the Drainage Efficiency of Exterior Insulation and Finish Systems (EIFS) Clad Wall Assemblies

1. AATCC – American Association of Textile Chemists and Colorists

Test Method 127 Water Resistance: Hydrostatic Pressure Test

1.3 SUBMITTALS

1. Refer to Section [01 33 00 Submittal Procedures] [insert section number and title].
2. Product Data: Submit manufacturer current technical literature for each component.
3. Samples: Weather Barrier membrane, minimum 8-1/2 inches by 11 inch.
4. Quality Assurance Submittals

*Specifier Note: Article below should include statements of prerequisites, standards, limitations and criteria that establish an overall level of quality for products and workmanship for this section. Coordinate article below with Division 1 Quality Assurance Section.*

1.4 QUALITY ASSURANCE

1. Installer Qualifications: Utilize an installer having demonstrated experience on projects of similar size and complexity.

*Specifier Note: Retain paragraph below if mock-up is required.*

1. Mock-Ups: [Specify requirements for mock-up.].
	1. Subject to acceptance by owner, mock-up may be retained as part of finish work.
	2. If mock-up is not retained, remove and properly dispose of mock-up.

*Specifier Note: Retain paragraph below if pre-installation meeting is required.*

1. Pre-installation Meetings: [Specify requirements for meeting.].

*Specifier Note: Article below should include specific protection and environmental conditions required during storage. Coordinate article below with Division 1 Product Requirements Section.*

1.5 DELIVERY, STORAGE & HANDLING

1. General: Comply with Division 1 Product Requirement Section.
2. Delivery: Deliver materials in manufacturer’s original, unopened, undamaged containers with identification labels intact.
3. Storage and Protection: Store materials protected from exposure to harmful environmental conditions and at temperature and humidity conditions recommended by the manufacturer.

*Specifier Note: Coordinate article below with Conditions of the Contract and with Division 1 Closeout Submittals (Warranty) Section. Use this article to require special or extended warranty or bond covering the work of this section.*

1.6 WARRANTY

1. Project Warranty: Refer to Conditions of the Contract for project warranty provisions.
2. Manufacturer’s Warranty: Submit, for Owner’s acceptance, manufacturer’s standard warranty document executed by authorized company official. Manufacturer’s warranty is in addition to, and not a limitation of, other rights Owner may have under contract documents.

*Specifier Note: Coordinate subparagraph below with manufacturer’s warranty requirements.*

1. Warranty Period: 15 years, beginning with date of substantial completion and adherence to manufacturer’s installation instructions.
2. Enhanced Warranty Option: 20 years, covering product and labor. HydroGap 20 year system warranty requires: HydroGap® Drainable Housewrap, HydroFlash® for windows and other penetration flashing, and cap fasteners. Optionally, use HydroCorner in addition to HydroFlash to protect window sill. If taping housewrap seams, HydroFlash 2.3” width (or greater) must be used. Taping of house wrap seams not required for 15 or 20 year warranty per installation guidelines.

**PART 2 PRODUCTS**

*Specifier Note: Retain article below for proprietary method specification. Add product attributes and performance characteristics, material standards and descriptions as applicable. Use of such phrases as “or equal” or “or approved equal” or similar phrases may cause ambiguity in specifications. Such phrases require verification (procedural, legal and regulatory) and assignment of responsibility for determining “or equal” products.*

2.1 WEATHER RESISTIVE BARRIER

*Specifier Note: Retain or delete paragraph(s) below per project requirements and specifier’s practice.*

1. Manufacturer: Benjamin Obdyke Incorporated.
2. Contact: 400 Babylon Road, Suite A, Horsham, PA 19044; Telephone: (800) 523-5261; Fax: (215) 672-3731; E-mail: TechSupport@obdyke.com; website: [www.benjaminobdyke.com](http://www.benjaminobdyke.com).)
3. Proprietary Products/Systems: Weather Resistive Barrier, including the following:
4. HydroGap™ Drainable Housewrap General Characteristics
	* 1. Description: tri-laminate substrate (2 layers of nonwoven with water-holdout film layer in between) with 1mm thermopolyolefin (TPO) spacers adhered to it to allow for a drainage gap.
		2. Material: Polypropylene
		3. Width: 5 ft (1.52 m).
		4. Length: 100 ft (30.48 m).
		5. Thickness: 0.05 inches (1.3 mm).
		6. Weight: 17 lbs/roll
		7. Spacer Design: 175 spacers per sq. ft.
5. HydroGap™ Drainable Housewrap Performance Characteristics
	* 1. Air Penetration: 0.0082 L/(sm2) at 75 psi, when tested in accordance with ASTM E2178.
		2. Water Vapor Transmission: 16.1 perms, when tested in accordance with ASTM E 96, Method A.
		3. Water Penetration Resistance: 55 cm for 5 hours when tested in accordance with AATCC Test Method 127.
		4. Tensile Strength: 58.0 MD, 50.6 CD, when tested in accordance with ASTM D5034.
		5. Surface Burning Characteristics: Class A, when tested in accordance with ASTM E84. Flame Spread: 0, Smoke Developed: 75.
		6. Drainage Efficiency 96%, when tested in accordance with ASTM E2273.

*Specifier Note: Edit Article below to suit project requirements. If substitutions are permitted, edit text below. Add text to refer to Division 1 Project Requirements (Product Substitutions Procedures) Section.*

2.2 PRODUCT SUBSTITUTIONS

1. Substitutions: No substitutions permitted.

*Specifier Note: Specify subordinate or secondary items that aid and assist primary products specified above or are necessary for preparation or installation of those items.*

2.3 ACCESSORIES

1. Provide the following accessories:
2. Taping of housewrap seams is not required. If taping seams, HydroFlash® GP 2.3 in must be used.
	1. HydroFlash® GP 2.3 in Characteristics:
		1. Description: specially-formulated self-adhered flashing for HydroGap Drainable Housewrap.
		2. Material: polypropylene film with aggressive synthetic adhesive.
		3. Width: 2.3 inches
		4. Length: 82 feet (25 m)
		5. Thickness: 14 mil (355.6 microns)
	2. Manufacturer: [Acceptable to manufacturer of HydroGap Drainable Housewrap] [Benjamin Obdyke].
3. Flashing Option 1: HydroFlash® UV+ Self-Adhered Flashing
	1. HydroFlash® UV+ Self-Adhered Flashing Characteristics:
		1. Description: specially-formulated self-adhered flashing for Benjamin Obdyke water resistive barriers. Continuous, breathable acrylic adhesive
		2. Vapor permeable: 4 perms
		3. UV Rating: 365 days before cladding application
		4. Material: black, unprinted polypropylene nonwoven film with acrylic adhesive.
		5. Width:[ 4; 6; 9] inches (101.6; 152.4; 228.6 mm)
		6. Length: 82 feet (25 m)
		7. Thickness: 16 mil (406.4 microns)
4. Flashing Option 2: [HydroFlash® LA Liquid Applied Flashing]
	1. HydroFlash® Liquid Applied Flashing Characteristics:
		1. Description: specially-formulated liquid applied flashing for Benjamin Obdyke water resistive barriers.
		2. Material: STPU compound
		3. Cured Thickness: 20-40 mils
		4. Vapor permeable: 4 perms
5. Flashing Option 3: [HydroFlash® GP Self-Adhered Flashing]
	1. HydroFlash® Self-Adhered Flashing Characteristics:
		1. Description: specially-formulated self-adhered flashing for HydroGap Drainable Housewrap.
		2. Material: polyethylene film with acrylic adhesive.
		3. Width:[4; 6; 9] inches (101.6; 152.4; 228.6 mm)
		4. Length: 82 feet (25 m)
		5. Thickness: 14 mil (355.6 microns)
6. Sill Flashing:
7. Benjamin Obdyke HydroCorner™ rigid sill corner flashing and HydroFlash Self Adhered Flashing [6”, 9”] or
8. [Acceptable to manufacturer of HydroGap Drainable Housewrap] [Benjamin Obdyke].
9. Fasteners:
	1. [Acceptable to manufacturer of HydroGap Drainable Housewrap] [Benjamin Obdyke].
10. Adhesives/Sealants:
	1. [Acceptable to manufacturer of HydroGap Drainable Housewrap] [Benjamin Obdyke].

**PART 3 EXECUTION**

*Specifier Note: Revise article below to suit project requirements and specifier’s practice.*

3.1 MANUFACTURER’S INSTRUCTIONS

1. Comply with the instructions and recommendations of the manufacturer.

*Specifier Note: Specify actions to physically determine that conditions are acceptable to receive primary products of the section.*

3.2 EXAMINATION

1. Site Verification of Conditions:
	1. Verify that site conditions are acceptable for installation of housewrap.
	2. Do not proceed with installation of housewrap until unacceptable conditions are corrected.

*Specifier Note: Coordinate article below with manufacturer’s recommended installation requirements.*

3.3 INSTALLATION

1. Basic Installation

3.4 PROTECTION

1. Protect installed work from damage due to subsequent construction activity on the site.

**END OF SECTION**