



HUNTER

# HUNTER XCI VP-SA WRB

## Vapor Permeable Self-Adhering Air and Water Resistive Barrier

TECHNICAL DATA SHEET

Xci VP-SA WRB is a composite membrane designed for use in above-grade wall assemblies to function as a weather resistive barrier. The specially engineered breathable, polyester film is fully coated on one side with a permeable, acrylic adhesive protected with a silicone release liner. Xci VP-SA WRB is compatible with Hunter Xci polyiso products, the Xci AEGIS Wall System™, and other building materials such as gypsum sheathing, concrete, and CMU.

### FEATURES AND BENEFITS

- NFPA 285 Approved WRB
- Fully-adhered membrane prevents water migration and air infiltration versus mechanically attached barriers
- Breathable membrane allows passage of water vapor
- Lightweight, self-adhering rolls allow for fast, easy installation
- Printed facer provides easy product identification
- No spray equipment or mil-thickness measurements required



### PROJECT CONDITIONS

Building codes and project specifications require continuity of air barrier installation. It is the installer's responsibility to understand the extent and sequencing of air barrier installation on the project. Do not proceed with installation until substrate and project conditions conform to requirements specified in this document. All surfaces accepting Xci VP-SA WRB shall be clean, dry, and of sound condition. Verify that wall assemblies are dried in, such that water intrusion will not occur from above, behind or around the membrane installation. Manage construction-generated moisture by ventilating and dehumidifying the interior. Gaps and cracks exceeding 1/4" in width shall be filled with materials and technique approved by Hunter Panels.

### PACKAGING

Product	Size
Xci VP-SA WRB Full Rolls	48" X 100' roll, 1 roll/box
Xci VP-SA WRB Slit Rolls	4" X 100' roll, 6 rolls/carton 9" X 100' roll, 2 rolls/carton 12" X 100' roll, 2 rolls/carton

Substrate	Preparation	Precautions	Adhesive/Primer
Foam Sheathing	Flush at joints, free of sharp protrusions, secured appropriately, free of moisture and mechanical damage, primer dried completely	Fill joints greater than 1/4"	CAV-GRIP is recommended for all installations, required for installations below 40F and warranted AEGIS Wall Systems
Wood Products		Wood moisture content less than 20% prior to WRB install	
Gypsum Sheathing		Extra time for primer to dry	
Concrete		Cured for 7 days minimum	
CMU		Cured mortar joints for 3 days minimum	

## INSTALLATION

Install Xci VP-SA WRB in horizontal rows (preferred) or in vertical runs. Wipe dust or debris from film side of product with a clean, dry rag to assist in forming tight laps. Avoid forming wrinkles and air pockets. Press membrane firmly to substrate with a J-roller, especially at laps, corners and terminations. Overlap adjoining pieces of Xci VP-SA WRB a minimum of 3". Use Xci VP-SA WRB strips for detailing. Sequence the installation to provide shingled laps. Membrane shall bear minimum 3" onto each side of transitions such as joints, angle changes and substrate changes. Membrane shall bear 6" minimum onto adjacent membrane systems such as foundation waterproofing or roofing. Install self-adhered flashing details directly to substrate, not to Xci VP-SA WRB. Use self-adhered flashings to wrap window openings, to treat pipe/duct penetrations and to cover expansion joints as shown in Xci VP-SA WRB details. Seal termination of Xci VP-SA WRB onto self-adhered flashings with approved termination sealant. Self-adhered flashings and termination sealants such as Aluma-Grip 701, Dow Corning 758, and Pecora AVB Silicone Sealant are compatible with Xci VP-SA WRB. Dusty conditions and installation temperatures below 40°F may require prepping laps with a contact adhesive such as CAV-GRIP.

## REPAIR AND PROTECTION

Repair damage to barrier by removing loosely adhered material and re-covering with Xci VP-SA WRB patch, extending beyond the damage by at least 6" in all directions. Where repair patch is to be installed, clean debris from surfaces of the old Xci VP-SA WRB and prepare with a contact adhesive such as CAVGRIP. Seal terminations of repair patch with approved flashing or termination sealant. If multiple sheets are used in repair/re-cover, offset seams of new installation from underlying Xci VP-SA WRB by 12" minimum. Xci VP-SA WRB is not intended for permanent outdoor exposure and should be covered as soon as possible after installation, not to exceed 180 days.

## LIMITATIONS

- Do not allow any sealants or liquid membranes to contact Xci VP-SA WRB except Aluma-Grip 701, Pecora AVB Silicone Sealant, Dow Corning 758 or other product approved by Hunter Panels
- Do not proceed with installation unless ambient and substrate temperature are 20°F or above
- For exterior use only; will not perform as a water resistive barrier in negative side applications
- Do not install below grade, or in areas where ponding water is expected
- Not intended for traffic resistance or as a wearing surface
- Do not install on roofs
- Do not install over un-cured sealants
- 180 day max. UV exposure prior to cladding installation
- Not compatible with impermeable solvent based adhesives

## STORAGE

Store Xci VP-SA WRB in a protected area below 90°F. In cold weather, condition rolls to 50°F or warmer to facilitate use. Shelf life in original, un-opened packaging is 1 year.

## TYPICAL PHYSICAL PROPERTY DATA

Physical Property	Test Method	Results
Peel Adhesion	ASTM D903	5 pli typical value applied over DensGlass with recommended primer
Pull-off Adhesion	ASTM D4541, modified 3.75" wood puck	>16 PSI on CMU Dens-Glass and OSB (AF from Primer)
Tear Initiation and Propagation	ASTM D4073	>30 lbf
Surface Burning	ASTM E84	Flame Spread Index - 10 Smoke Spread Index - 5
Water Penetration	ASTM E331	Passes 10 PSF after 15 minutes
Heat Release Measured by Cone Calorimeter	ASTM E1354	Effective Heat of Combustion: 16.82 MJ/kg Peak Heat Release Rate: 83 kW/m <sup>2</sup> Total Heat Release: 6.1 MJ/m <sup>2</sup>
Nominal Thickness	ASTM D1177	0.023 inch (23 mils)
Tensile Strength	ASTM D882	Minimum 40 lbf/in width
Lap Peel Strength	ASTM D1876	1.0 lbf/in width, minimum
Water Resistance to Hydrostatic Pressure	AATCC-127-03, mod. 22" [55 cm] column of water for 5 hours	No leaking through membrane or 2" bonded lap
	ICC-ES AC-38	Pass
Water Vapor Permeance of membrane	ASTM E96 B (Water Method) ASTM E96 A (Desiccant Method)	10.53 perms, minimum 9.05 perms, minimum
Water Vapor Permeance of Contact Adhesive <sup>†</sup>	ASTM E96B (water method)	15 Perms, minimum
Air Permeance	ASTM E2178	<=0.001 L/s*m <sup>2</sup> @ 75 Pa [0.0002 CFM/ft <sup>2</sup> @ 1.57 PSM]
Low Temp Flexibility	ASTM D1970 180° bend over 1" mandrel	No cracking at -20°F
Application Temperature	-	20°F to 180°F

<sup>†</sup>Applied on exterior side of DensGlass Gold. Bare substrate measured 29.75 Perms.



CONTINUOUS INSULATION

15 Franklin Street ■ Portland, Maine 04101 ■ 888.746.1114 ■ info@hpanels.com ■ www.hunterpanels.com



HUNTER

# XCI VP-SA WRB

## Exterior Wall Applications

### INSTALLATION GUIDE

#### COORDINATION

- Pre-construction meeting shall cover all decisions pertaining to design so that a continuous weather resistant barrier is achieved across the assembly.
- Review submittals, surface preparation, installation procedures, special details, sequence of construction, responsibilities, mock-up requirements, inspection, testing, and repair procedures.
- Mock-up shall establish procedures and workmanship that must be maintained during installation.
- Review adjacent construction materials such as windows, doors, ducts, and other penetrations for conformance to manufacturer's application instructions.
- Sequence and schedule installation of flashing and sealant to prevent damage and water infiltration.

#### SUBSTRATE

- Ensure all substrates are installed in accordance with manufacturer specifications. All sheathing fasteners shall be installed in accordance with the manufacturer's instructions. All masonry joints shall be struck flush with the CMU.
- Substrate shall be dry, clean, sound, and free of dust, dirt, residue and all other surface contaminants.
- Verify substrate is flat, free of fins and planar irregularities that could damage Xci VP-SA WRB.
- Gaps and cracks exceeding 1/4" across shall be filled with materials and techniques approved by Hunter Xci.
- Prevent the accumulation of water infiltration behind the substrate.
- Xci VP-SA WRB is not intended for use below grade or on surfaces subject to continuous or intermittent immersion in water or hydrostatic pressure.
- Unsatisfactory conditions shall be reported and corrected prior to application of Hunter Xci materials.

#### PROJECT/SITE CONDITIONS

- Xci VP-SA WRB can be applied in ambient and substrate temperatures down to 20°F; CAV-GRIP is recommended for all Xci VP-SA WRB installations and is required for installations below 40°F.
- CAV-GRIP is required for all warranted AEGIS Wall System installations in any temperature.
- Do not apply Xci VP-SA WRB and associated materials to damp or frozen surfaces.
- Do not apply Xci VP-SA WRB in rain or if rain is expected during application time.
- Xci VP-SA WRB is not intended for permanent outdoor exposure and should be covered as soon as possible after installation, not to exceed 180 days.

#### DELIVERY, STORAGE AND HANDLING

- Deliver Xci VP-SA WRB in original unopened packages.
- Protect Xci VP-SA WRB during transportation, storage, and installation to avoid physical damage.
- Store Xci VP-SA WRB rolls on end and do not double stack pallets.
- Store Xci VP-SA WRB in a cool, dry place protected from freezing, extreme heat, and direct sunlight.

#### APPLICATION

- Protect surrounding areas and surfaces from damage during application of Xci VP-SA WRB.
- Overlap adjoining pieces of Xci VP-SA WRB by a minimum of 3 inches. Sequence installation to provide shingled laps.
- Xci VP-SA WRB shall bear a minimum of 3 inches onto each side of transitions such as joints, angle changes, and substrate changes.
- Xci VP-SA WRB shall bear a minimum of 6 inches onto adjacent membrane systems such as foundation waterproofing or roofing.
- Press membrane firmly to substrate with a J-roller, especially at laps, corners, and terminations.
- Protect finished work at end of each day to prevent moisture intrusion or damage.
- Ensure a continuous WRB is achieved across the building envelope.
- Verify all materials are installed in accordance with manufacturer's published literature and local code requirements.

#### APPROVED ACCESSORIES

##### Detail Flashings

- Xci VP-SA WRB
- Xci Aluma-Grip 701
- Xci FlexShield™ Sill Flashing

##### Contact Adhesive

- CAV-GRIP

##### Silicone Sealant

- Dow-Corning 758
- Pecora AVB
- GE SilPruf

##### Polyurethane Foam Sealant

- Great Stuff Pro
- Froth Pack
- FOMO Foam Sealant
- Others as approved by Hunter Xci

### CONTINUOUS INSULATION

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SECTION 07 27 13

XCI VAPOR PERMEABLE SELF-ADHERED AIR AND WATER RESISTIVE MEMBRANE

This specification is based on the Xci wall products of Hunter Panels, located at:

15 Franklin Street  
Portland, Maine 04101  
Phone: (207) 761-5678  
Toll Free: (888) 746-1114  
Fax: (877) 775-1769  
E-mail: info@hpanels.com  
Internet: www.hunterpanels.com

Hunter Panels has been an industry leader in Polyiso insulation for over 20 years. Hunter's Xci insulation products and accessories are designed for use in commercial and residential wall applications to provide "ci" continuous insulation as well as weather resistive barrier performance within the building envelope.

This specification includes Xci VP-SA WRB, a self-adhering vapor permeable membrane designed to perform as an air and water resistive barrier in wall assemblies, meeting the requirements of ASTM E2357. Xci VP-SA WRB is compatible with Hunter Xci polyiso products, the Xci AEGIS Wall System, and other materials such as gypsum sheathing, wood substrates, and concrete. Xci VP-SA WRB can be used in numerous NFPA 285 compliant assemblies.

Follow the instructions listed in the **\*\* NOTES TO SPECIFIER \*\*** included throughout the specification. Edit carefully to suit project requirements. Modify as necessary and delete paragraphs that are not applicable.

**PART 1 GENERAL**

1.1 SECTION INCLUDES

- A. A 23 mil thickness self-adhered vapor-permeable membrane for use as an air and water resistive barrier in exterior walls.
- B. Weather resistive barrier assembly providing weather resistant coverage at conditions such as joints between building materials, joints at windows and service openings, mechanical/electrical/fastener penetrations, transition to barrier at roof, below grade, or other adjacent system.
- C. Flexible weather resistive barrier accommodates designed movement at expansion and control joints.

**\*\* NOTE TO SPECIFIER \*\*** Delete any paragraphs below not applicable to project

## 1.2 RELATED SECTIONS

- A. Section 03 30 00 - Cast-In-Place Concrete [NOTE TO SPECIFIER: Require that backup concrete be free of fins, protrusions and large holes]
- B. Section 04 20 00 - Unit Masonry [NOTE TO SPECIFIER: When concrete masonry unit (CMU) block walls are to receive Barrier materials it is critical to address surface preparation issues in this section. It is strongly suggested to cut and paste text located in 3.2 A of this document into Section 04 20 00. The masonry trade must be made aware that this is a critical element for the self-adhering Barrier material. The performance of the Barrier material is directly related to the substrate over which it will be applied.]
- C. Section 07 13 00 - Sheet Waterproofing
- D. Section 07 14 00 – Fluid-Applied Waterproofing
- E. Section 07 11 00 – Damp Proofing.
- F. Section 07 21 00 - Thermal Insulation
- G. Section 07 62 00 - Sheet Metal Flashing and Trim: Metal through-wall flashings
- H. Section 07 65 00 – Flexible Flashings: Self-adhering and EPDM through-wall flashing
- I. Section 07 90 00 - Joint Protection: Joint sealant materials and installation.
- J. Section 08 12 00 - Metal Door Frames
- K. Section 08 43 00 – Storefronts
- L. Section 08 44 00 – Curtain Wall and Glazed Assemblies
- M. Section 08 51 00 - Metal Windows
- N. Section 09 29 00 - Gypsum Sheathing: Gypsum sheathing over metal studs.

**\*\* NOTE TO SPECIFIER \*\*** Delete references from the list below that are not actually required by the text of the edited section; add others as required.

## 1.3 REFERENCES AND STANDARDS

- A. American Association of Textile Chemists and Colorists (AATCC) Test Method 127. "Water Resistance – Hydrostatic Pressure Test"
- B. American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) Standard 90.1-2010 "Energy Standard for Buildings Except Low-Rise Residential Buildings"
- C. ASTM C 920 Standard Specification for Elastomeric Joint Sealants
- D. ASTM D 882 Standard Test Methods for Vulcanized Rubber and Thermoplastic Elastomers – Tension
- E. ASTM D 903 Standard Test Method for Peel or Stripping Strength of Adhesive Bonds
- F. ASTM D 1876 Standard Test Method for Peel Resistance of Adhesive

- G. ASTM D 4541 Standard Test Method for Pull-Off Strength of Coatings Using Portable Adhesion Testers
- H. ASTM E 84 Standard Test Method for Surface Burning Characteristics of Building Materials
- I. ASTM E 96 Standard Test Methods for Water Vapor Transmission of Materials.
- J. ASTM E 154 Standard Test Methods for Water Vapor Retarders used in Contact with Earth under Concrete Slabs, on Walls or as Ground Cover
- K. ASTM E 783 Standard Test Method for Field Measurement of Air Leakage Through Installed Exterior Windows and Doors
- L. ASTM E 1105 Standard Test Method for Field Determination of Water Penetration of Installed Exterior Windows, Skylights, Doors, and Curtain Walls by Uniform or Cyclic Static Air Pressure Difference.
- M. ASTM E 1354 Standard Test Method for Heat and Visible Smoke Release Rates for Materials and Products Using an Oxygen Consumption Calorimeter
- N. ASTM E 2178 Standard Test Method for Air Permeance of Building Materials
- O. ASTM E 2357 Standard Test Method for Determining Air Leakage of Air Barrier Assemblies
- P. National Fire Protection Association (NFPA) 285 Standard Fire Test Method for Evaluation of Fire Propagation Characteristics of Exterior Non-Load-Bearing Wall Assemblies Containing Combustible Components
- Q. International Code Council Evaluation Services (ICC-ES) Acceptance Criteria for Water Resistive Barriers AC-38, Approved January 2013

#### 1.4 PERFORMANCE REQUIREMENTS

- A. Installed product and accessories shall exhibit an air leakage rate, infiltration and exfiltration modes, measured after pressure cycling, not to exceed 0.2 L/s\*m<sup>2</sup> at 75 Pa (0.040 CFM/ft<sup>2</sup> at 1.57 PSF) according to ASTM E 2357.
- B. Product shall meet the water vapor transmission requirement for Grade D sheet water resistive barriers: minimum 35 g/m<sup>2</sup>/24h (5 perms), tested to ASTM E 96 desiccant method (A), ICC-ES AC-38, Table 1
- C. For Type I, II, III and IV construction: Installed product and accessories shall be tested to NFPA 285 and pass in wall assemblies of the Project or shall pass by engineering judgement.
- D. Installed product and accessories shall have an upper service temperature limit of 180°F or higher.
- E. Manufacturer shall provide product and accessories which have a minimum installation temperature of 25°F or lower.

- F. Product shall be a nominal 0.023 inch (23 mils) thickness composite membrane consisting of an engineered fabric laminated at full coverage with a permeable pressure-sensitive adhesive.

- G. Product shall meet the following requirements:

REQUIREMENT	RESULT	TEST METHOD
Air Permeance	Not more than 0.02 L/s*m <sup>2</sup> at 75 Pa (0.004 CFM/ft <sup>2</sup> at 1.57 PSF)	ASTM E-2178
Tensile Strength	Not less than 40 lb <sub>r</sub> per inch	ASTM D-882
Peel Adhesion	Not less than 5 lb <sub>r</sub> per inch on glass mat faced gypsum sheathing with approved surface preparation	ASTM D 903
Tear Initiation and Propagation	Not less than 30 lb <sub>r</sub> , machine direction and cross direction	ASTM D 4073
Low Temperature Flexibility	No cracking at minus 20 degrees F, 1 inch mandrel	ASTM D 1970
Water Resistance	Membrane specimen including a lap shall resist a 55 cm (22 inch) column of water for 5 hours, no leaking or wet through.	AATCC-127, modified static head generated with 5" diameter PVC pipe sealed to specimen
Pull Adhesion	Not less than 16 lb <sub>r</sub> per square inch (or report value at substrate failure) on glass-faced gypsum sheathing and concrete masonry unit, substrate prepared with contact adhesive	ASTM D 4541, modified 4 inch puck
Lap Adhesion	Not less than 1 lb <sub>r</sub> per inch of width	ASTM D 1876
Water Vapor Permeance	Minimum 5 Perms	ASTM E-96, Method A
	Minimum 10 Perms	ASTM E-96, Method B
Surface Burning Characteristics.	Flame Spread Index: Not more than 25 Smoke Generation Index: Not more than 450	ASTM E 84, sample tested at full coverage, cement board substrate, including surface preparation
Measurement of Heat Release Rate by Cone Calorimeter	Effective Heat of Combustion of 17 MJ/kg or less Peak heat release rate of 183 kW/m <sup>2</sup> or less Total heat release rate of 6.1 MJ/m <sup>2</sup> or less	ASTM E 1354, membrane applied to glass-faced gypsum sheathing, including surface preparation. 50 kW/m <sup>2</sup> heat flux.

**SPECIFIER INSTRUCTIONS** - Delete sections below not relevant to this project; add others as required.

1.5 SUBMITTALS

- A. Provide submittals in accordance with [\[Section 01 33 00\]](#)
- B. At bid submission, provide evidence to the Architect of installer qualification by the air & water resistive barrier manufacturer.

- C. Shop drawings showing locations and extent of air & water resistive barrier and details of all typical conditions.
- D. Vertical and lateral fire propagation evaluation of the Project's exterior wall assemblies containing the product, submit documentation of one of the following:
  - 1. NFPA 285 test and pass
  - 2. NFPA 285 pass through engineering judgement
  - 3. Exemption from the NFPA 285 requirement.
- E. Manufacturer's technical data sheets and material safety data sheets for product and accessories.
- F. Manufacturer's installation instructions.
- G. Sample of product and transition membrane, minimum 2 inch by 3 inch size.

## 1.6 QUALITY ASSURANCE

- A. Installer Qualifications: Shall be experienced in applying the same or similar materials.
- B. Single-Source Responsibility: Obtain product and accessories from single manufacturer.
- C. Product and Accessories shall comply with all state and local regulations controlling use of volatile organic compounds (VOCs).
- D. Comply with the provisions of the Owner's building envelope commissioning program in accordance with [\[Section 01 91 15\]](#)
- E. Pre-Installation Meeting: Convene minimum one week prior to commencing Work of this Section, in accordance with Section 01 31 19 - Project Meetings.
- F. Field-Constructed Mock-Ups: Prior to installation on Project, apply Product and Accessories on mock-up to verify details under shop drawing submittals, to demonstrate tie-ins with adjoining construction and other termination conditions and to become familiar with properties of materials in application:

**[NOTE TO SPECIFIER: incorporate sub paragraph 1 or 2 into Paragraph F]**

- 1. Apply in field-constructed mockups of assemblies as specified in [\[Section 01 43 39 – Mockups\]](#)
  - 2. Construct typical exterior wall panel incorporating back-up wall, cladding, window and doorframe and sill, insulation, flashing, [\[building corner condition,\]](#) [\[junction with roof system\]](#) [\[foundation wall\]](#) [\[and\]](#) [\[typical penetrations and gaps\]](#); illustrating interface of materials and seals
- G. Test mock-up in accordance with Section [\[01 43 00 – Quality Assurance\]](#) and test in accordance with ASTM E 783 and ASTM E1105 for air and water infiltration
- H. Cooperate and coordinate with the Owner's inspection and testing agency. Do not cover any installed Product unless it has been inspected, tested and approved.

## 1.7 DELIVERY, STORAGE, AND HANDLING



- A. Deliver materials to project site in original packages with seals unbroken, labeled with manufacturer's name, product, lot number and directions for storage.
- B. Store materials in their original undamaged packages in a clean, dry, protected location and within temperature range required by manufacturer.

## 1.8 SEQUENCING

- A. Wall substrates shall be in place, effectively enclosing interior space before proceeding with product installation
- B. Seal penetrations made through installed product according to manufacturer's instructions and drawings.
- C. Seal fenestration to product with detail membrane, transition membrane, silicone sealant or polyurethane foam sealant according to Project drawings
- D. Through-wall flashing may be installed before or after product. Seal termination of through-wall flashing to product according product manufacturer's instructions.
- E. Sequence Work to enable air barrier continuity at wall-to-foundation, shelf angle, wall-to-roof, fenestration, different wall assemblies and other conditions providing challenges to air barrier continuity.
- F. Sequence work to ensure cladding is installed after product. Product is not meant for permanent outdoor exposure.

## 1.9 PROJECT CONDITIONS

- A. Do not apply product or accessories during rain or accumulating snowfall.
- B. Apply product and accessories within approved ambient and substrate temperature range stated in manufacturer's literature.
- C. Do not apply product or accessories over incompatible materials.
- D. Observe safety and environmental measures indicated in manufacturer's MSDS, and mandated by federal, state and local regulations.

## PART 2 PRODUCTS

### 2.1 WEATHER RESISTIVE BARRIER

- A. Basis of Design: Xci VP-SA WRB: Vapor permeable self-adhering weather resistive barrier by Hunter Panels, 15 Franklin Street, Portland, Maine 04101. Phone: (207) 761-5678 or (888) 746-1114. Fax: (877) 775-1769. E-mail: [info@hpanels.com](mailto:info@hpanels.com).

**\*\* NOTE TO SPECIFIER \*\*** Delete one of the following two paragraphs; coordinate with requirements of Division 1 section on product options and substitutions.

- B. Substitutions: Not permitted.

- C. Requests for substitutions will be considered in accordance with provisions of Section 01600.

## 2.2 ACCESSORIES

- A. Detail Flashing:
  - 1. Xci VP-SA WRB
  - 2. Xci Aluma-Grip 701
- B. Contact Adhesive: Preparing surfaces accepting barrier membrane
  - 1. CAV-GRIP
- C. Window Flashing
  - 1. Xci FlexFlash SA
  - 2. Xci VP-SA WRB
- D. Silicone Sealant: Sealing fenestration to barrier material, surface defects, and penetrations.
  - 1. Dow-Corning 758
  - 2. Pecora AVB
  - 3. GE Silpruf
  - 4. Others as approved by Hunter Panels
- G. Polyurethane Foam Sealant: Sealing gaps around fenestrations and other penetrations
  - 1. Great Stuff Pro
  - 2. Froth Pack
  - 3. FOMO Foam Sealant
  - 4. Others as approved by Hunter Panels
- H. Insulation Adhesive: If needed to bond Xci polyiso insulation to barrier membrane
  - 1. CAV-GRIP

## PART 3 EXECUTION

### 3.1 EXAMINATION

- A. Examine substrates, areas, and conditions affecting installation of the weather resistive barrier and accessory products for compliance with requirements. Verify that surfaces and conditions are suitable prior to commencing Work of this section. Do not proceed with installation until unsatisfactory conditions have been corrected.
- B. Verify that wall assemblies are dried in, such that water intrusion will not occur from above, behind or around the barrier installation.
- C. Concrete shall be cured for a minimum of seven days. It shall be smooth, with sharp protrusions such as form joints ground flush. Honeycomb and holes/cracks exceeding  $\frac{1}{4}$  inch across shall be filled with grout or mortar.
- D. Surfaces shall be sound, dry and free of oil, grease, dirt, excess mortar or other contaminants.
- E. Surfaces shall be supported and flush at joints without large voids or sharp protrusions.
- F. Mortar joints shall be struck flush and shall be free of voids exceeding  $\frac{1}{4}$  inch across. Mortar droppings shall be removed from brick ties and all other surfaces accepting air barrier.

- G. Sheathing boards shall be flush at joints and securely fastened to the structure in accordance with the sheathing manufacturer's requirements. Sheathing boards shall be repaired or replaced if inspection reveals moisture damage, mechanical damage or if sheathing boards have exceeded the exposure duration or exposure conditions as required by the sheathing manufacturer.
- H. Plywood, OSB, lumber or pressure-treated wood moisture content, measured with a wood moisture meter in the core of the substrate, shall be below 20%.
- I. Inform Architect [Consultant] [Owner] in writing of:
  - 1. Cracks in concrete and masonry.
  - 2. Gaps or obstructions such as steel beams, angles, plates and projections which cannot be spanned or covered by Product or Accessories.
  - 3. Anticipated problems applying Product and Accessories over substrate.

### 3.2 SURFACE PREPARATION

[NOTE TO SPECIFIER: Incorporate Paragraph A and its sub-paragraphs into Section 04 20 00 - Unit Masonry]

- A. [Note to Mason: This project will have self-adhering Air and Water Resistive Barrier material applied to the cavity side of the CMU. Special attention and care must be taken to provide a smooth, filled surface to receive the membrane. The care is necessary to insure the design performance of the selected materials.] Concrete masonry unit (CMU) wall shall be prepared as follows to accept the barrier:
  - 1. Surfaces shall be free of contaminants such as grease, oil and wax on surfaces to receive membrane
  - 2. CMU surfaces shall be free from projections.
  - 3. Strike all mortar joints flush to the face of the concrete block.
  - 4. Fill all voids and holes greater than ¼ inch across at any point with mortar, sealant or other approved fill material.
  - 5. Surface irregularities exceeding ¼ inch in height or sharp to touch shall be ground flush or made smooth.
  - 6. Fill around all penetrations with mortar, sealant or other approved fill material and strike flush.
  - 7. If the surfaces cannot be made smooth to the satisfaction of the Architect, it will be the responsibility of the trade to alternatively apply a parge coat (typically one part cement to three parts sand) over the entire surface to receive the barrier membrane.
  - 8. Remove mortar droppings on brick ties, shelf angles, brick shelves or other horizontal obstructions.
- B. Fill cracks, gaps and joints exceeding ¼ inch width with fill compound or polyurethane sealant.
- C. Fill rough gaps around pipe, conduit and similar penetrations with mortar, non-shrink grout, fill compound or polyurethane foam sealant shaved flush.
- D. Apply a ¾ inch cant of fill compound at the intersection of the base of the wall and the footing.

### 3.3 INSTALLATION

- A. Apply product over opaque wall surfaces as indicated in Project drawings.
- B. Allow sealants used during surface preparation to cure fully before applying product.

- C. Apply CAV-GRIP to all surfaces accepting product, according to manufacturer's instructions. CAV-GRIP is recommended for all Xci VP-SA WRB installations and is required for all installations below 40°F. CAV-GRIP is required for all warranted AEGIS Wall System installations in any temperature.
- D. Apply product to prepared surfaces according to manufacturer's instructions and drawings.
- E. Sequence installation to provide shingled laps. Lap neighboring sheets 3 inches minimum.
- F. Install detail flashing or transition membrane according to manufacturer's drawings and instructions at expansion joints, seismic joints, mechanical/electrical penetrations and similar conditions.
- G. Install detail mastic or silicone sealant covering non-water shedding laps, penetrations and similar surface defects.

### 3.4 REPAIR AND PROTECTION

- A. Protect from damage during application and remainder of construction period.
- B. Inspect and make necessary repairs before covering. Repair or replace damaged material according to Manufacturer's instructions and drawings.
- C. Product and accessories are not designed for permanent exposure. Cover with insulation or exterior cladding as soon as schedule allows.
- D. Product is not intended for permanent outdoor exposure and should be covered as soon as possible after installation, not to exceed 180 days.

### 3.5 WASTE MANAGEMENT AND DISPOSAL

- A. Separate and recycle waste materials in accordance with [\[Section 01 74 19 – Construction Waste Management and Disposal\]](#), and with the Waste Reduction Work Plan.
- B. Place materials defined as hazardous or toxic waste in designated containers.
- C. Ensure emptied containers are stored safely for disposal away from children.

END OF SECTION