



FACADESXi

WaterShield Xterior Insulation System

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FACADESXi XTERIOR INSULATION SYSTEM

CSI SECTION 07 24 00 EXTERIOR INSULATION FINISH SYSTEMS

This specification is to assist in correctly specifying the FACADESXi WaterShield Xterior Insulation System, products, and installation and should be used in conjunction with Assembly Details. The system includes Xi-WaterShield, vertical ribbons of adhesive, insulation board, reinforced polymer-modified base coat, optional primer, and acrylic finish.

The specifier MUST edit these specifications to fit the needs of each specific project and the design is the responsibility of the specifier to determine if a product is applicable. These specifications cover multiple options within the System. For assistance, contact your FacadesXi Technical Department.

FACADESXi Wall systems provide these specifications, Typical Assembly details, and product data sheets for use in the design of the project.

FACADESXi is not liable for any errors or omissions in design details, structure capability, attachment details, or shop drawings. See Full Disclaimer at end of the document.

Although not a part of the Xterior Insulation System, flashings and sealants are elements of all exterior wall assemblies and must be designed, integrated, and installed, in conjunction with the wall cladding to create an air and water-resistant assembly and a means for drainage of incidental moisture from within the system. All components within the assembly must be compatible with the EIF System materials.

Construction Types: I-V, Fire Rated, and Non-combustible, Commercial and Residential Non-combustible and Fire Rated construction: ensure that the system chosen has been tested and is compliant with the necessary tests for these assemblies

LIMITATIONS

- Watershield is UV Stable, however, it should not be left exposed for more than 6 months. The surface must be examined before installing any cladding and when using EIFS, if exposed for more than 30 days, the surface must be cleaned and dry.
- Ambient/surface temperature must remain above 40°F (4°C) during and until materials are dry, usually 24 hours.
- Select a finish coat color in relation to the overall project location in mind. It is generally recommended to select a finish color with a light reflectance value (LRV) of 20 percent or higher due to the EPS service temperature limitation of approximately 160 degrees F (71 degrees C).
- For use on vertical above-grade walls only or within the allowable slope and waterproof base coats.
- Where snow may occur, increase the distance required between grade and the stucco and increase the slope requirement of the Foam Shapes
- Maintenance is Required with periodic cleaning, and/or recoating to enhance the appearance.
- Always follow product data sheet information.

Notes to Specifier are in White Italics and should be deleted before publishing.

[Select or Delete] Assembly Options. Choose one and delete the remaining options. Delete the brackets and un-bold the selected option(s).

<Text> Include the appropriate information.

PART 1 - GENERAL

1.1 SECTION INCLUDES

- A. Materials and installation of WaterShield Xterior Insulation System including Xi-WaterShield Water & Air Barrier, Vertical ribbons of adhesive, continuous insulation, reinforced base coat [primer] and textured finish coat.

Xi-WaterShield Water Barrier also qualifies as an air barrier when installed per the instructions and continuously over the project.

1.2 RELATED SECTIONS

- A. Section 03 30 00 Cast in Place Concrete
- B. Section 04 20 00 Unit Masonry
- C. Section 06 11 00 Wood Framing
- D. Section 06 16 00 Sheathing
- B. Section 07 27 00 Air barriers
- C. Section 07 60 00 Flashing and Sheet Metal
- D. Section 07 90 00 Joint Protection
- E. Section 08 40 00 Entrances, storefronts, curtain walls
- F. Section 08 50 00 Windows
- G. Section 09 21 16 Gypsum Board Assemblies

1.3 REFERENCES

- A. ASTM
 - 1. B117 Test Method for Salt Spray (Fog) Testing
 - 2. C 297 Standard Test Method for Flatwise Tensile Strength of Sandwich Constructions
 - 3. C 578 Specification for Preformed, Cellular Polystyrene Thermal Insulation
 - 4. C1177 Specification for Glass Mat Gypsum for Use as Sheathing
 - 5. D226 Standard Specification for Asphalt-Saturated Organic Felt Used in Roofing and Waterproofing
 - 6. D 2247 Practice for Testing Water Resistance of Coatings in 100% Relative Humidity
 - 7. E84 Test Method for Surface Burning Characteristics of Building Material
 - 8. E 96 Test Methods for Water Vapor Transmission of Materials
 - 9. E119 Standard Test Methods for Fire Tests of Building Construction and Materials
 - 10. E330 Test Method for Structural Performance of Windows, Curtain Walls, and Doors by Uniform Static Air Pressure Difference
 - 11. E 331 Test Method for Water Penetration of Exterior Windows, Curtain Walls, and Doors by Uniform Static Air Pressure Difference
 - 12. E 2098 Test Method for Determining Tensile Breaking Strength of Glass Fiber Reinforcing Mesh for Use in Class PB Exterior Insulation and Finish System after Exposure to a Sodium Hydroxide Solution
 - 13. E 2134 Test Method for Evaluating the Tensile-Adhesion Performance of an Exterior Insulation and Finish System (EIFS)
 - 14. E 2178 Test Method for Air Permeance of Building Materials
 - 15. E 2273 Test Method for Determining the Drainage Efficiency of Exterior Insulation and Finish System (EIFS) Clad Wall Assemblies
 - 16. E 2357 Standard Test Method for Determining Air Leakage of Air Barrier Assemblies
 - 17. E2430 Standard Specification for Expanded Polystyrene ("EPS") Thermal Insulation Boards For Use in Exterior Insulation and Finish Systems ("EIFS")
 - 18. E 2485 Standard Test Method for Freeze/Thaw Resistance of Exterior Insulation and Finish Systems (EIFS) and Water Resistive Barrier Coatings

- 19. E 2486 Standard Test Method for Impact Resistance of Class PB and PI Exterior Insulation and Finish Systems (EIFS)
 - 20. E 2570 Test Method for Water-Resistive (WRB) Coatings used Under Exterior Insulation and Finish Systems (EIFS) or EIFS with Drainage
 - 21. G155 Standard Practice For Operating Xenon Arc Light Apparatus For Exposure Of Non-Metallic Materials
- B. APA**
- 1. Voluntary Product Standard: PS 1, Structural Plywood
 - 2. Voluntary Product Standard: PS 2, Performance Standard for Wood-Based Wood structural panels.
- C. NFPA**
- 1. NFPA285 Standard Fire Test Method for Evaluation of Fire Propagation Characteristics of Exterior Non-Load-Bearing Wall Assemblies Containing Combustible Components
 - 2. NFPA 268 Standard Test Method for Determining Ignitability of Exterior Wall Assemblies Using a Radiant Heat Energy Source
- D. International Code Council**
- 1. AC 235 Acceptance Criteria for EIFS Clad Drainage Wall Assemblies
 - 2. AC 212 Acceptance Criteria for Water Restive Coatings used as water-resistive barriers over exterior sheathing

1.4 SUBMITTALS

- A. Submit under the provisions of Section [01 33 00]**
- B. Product data on assembly materials, including specifications, assembly details, installation, and warranty information**
- C. Current Manufacturer's Code Evaluation Report**
- D. Shop drawings to be provided by the subcontractor.**
- E. Samples: two 6-inch by 6-inch finish coat samples per designers' request**
- F. Applicator's certificate**

1.5 DESIGN CRITERIA

- A. Structural**
- 1. Maximum deflection not to exceed $L / 240$ of the span under positive or negative design load.
 - 2. See Evaluation report for Wind Load testing.
 - 3. Wind Load Testing and Limitations: The WaterShield Xterior Insulation System has been tested in accordance with the code required ASTM E330 on various framing and substrates to determine the resistance to pull-off. Failure in an adhesively applied system always occurs within the sheathing to framing connection and not the adhesion of the system to the substrate. The framing/sheathing wall design should be based upon the structure and engineered with consideration of framing type, framing size, and sheathing attachment fastener spacing.
- B. Moisture/air control**
- 1. The exterior wall must be designed and installed to allow moisture to drain to the exterior in accordance with the International Building codes.
 - 2. Do not use vapor retarders on the interior side of the wall. Using vapor retarders on the exterior is the decision of the designer.
 - 3. Design flashing to direct water to the exterior, including above window and door heads, window, and door sills, at roof/ wall intersections, decks, Floor lines, high to low wall intersections, at the base of the wall, and where required by code and in the project details.
 - 4. When required design air leakage continuity transitions to other wall components, at all penetrations and wall connections.

- C. Impact**
 - 1. High or Ultra High impact resistance is recommended on wall areas subjected to pedestrian traffic or other exposure to impact up to a minimum height of 6 feet above grade.
 - 2. Impact areas other than Standard impact must be indicated on drawings.
- D. ColorSelectca t finish coat with a light reflectance value of 20 or greater. (The use of dark colors is not recommended over expanded polystyrene [EPS]. EPS has a service temperature limitation of approximately 165° F [74°C]).**
- E. Fire Rated Assemblies / Non-combustible Assembly: Ensure that the assembly complies with an associated UL assembly, Fire-rated assembly, Non- combustible, NFPA 285 tested, or listed in the code compliance report**
- F. Expansion Joints**
 - 1. The placement of the expansion joints is not the responsibility of the contractor. Designer to show placement on the project drawings.
 - 2. Minimum ½ inch joints (or as per the designer) are required at Penetrations through the EIFS such as windows, doors, electrical, mechanical
 - 3. Minimum ¾ inch joints (or as per the designer) are required at:
 - a. Building expansion joints
 - b. Wood floor lines where deflection is expected
 - c. At dissimilar materials or dissimilar walls
 - d. Changes in building height
- G. System Terminations**
 - 1. The System must be properly back-wrapped, prewrapped, or encased in approved vinyl trim accessories at all terminations.
 - 2. The System must be terminated above grade (generally 6 inches) and finished grade per the applicable building code allowance. See System Details
- H. Foam Shapes / Reveals**
 - 1. Horizontal/Sloped surfaces greater than 2 inches of Foam shapes must be coated with Xi - WaterLock
 - 2. Slope Minimums; Standing Snow areas – 6:12, No Standing Snow - 3:12
 - 3. Horizontal surfaces need more maintenance and design due to the higher probability of dirt gathering, increate heat, and weather exposure.
 - 4. Reveals must have a minimum of ¾ inch of flat insulation at the base of the reveal.

1.6 QUALITY ASSURANCE

- A. Manufacturer**
 - 1. All system components must be manufactured by or approved by FXI
 - 2. Code compliant and listed Exterior Insulation and Finish System
- B. Applicator**
 - 1. Listed by FACADESXi Wall Systems. Licensed, insured, and engaged in the application of EIFS and coatings for a minimum of 3 years and have completed 3 projects within the same scope of work.
 - 2. Employ mechanics who are skilled and experienced in EIFS applications and knowledgeable in the FACADESXi WaterShield Xterior Insulation System.
 - 3. Submit a current copy of the manufacturer's Contractor Certificate for the EIF system specified insulation board Manufacturer Qualifications:
 - 4. EPS Board molder must be listed by an approved listing agency
 - 5. EPS Board must be labeled in accordance with the FacadesXi Evaluation report requirements.
- C. Mock-Ups**
 - 1. Construct one sample panel<SIZE> in the field for each color and texture, using the same methods to be used in the actual construction. Maintain on Jobsite.
- D. Inspections: FACADESXi is not responsible for Third-Party inspections, if inspections are required, the owner must engage a third-party inspector.**

1.7 PERFORMANCE CRITERIA

A. Water & Air Barrier Coating

| TEST | METHOD | CRITERIA | RESULTS |
|--|-------------------------------------|--|--|
| Water-resistive barrier coatings used under EIFS and All Claddings | ASTM E2570 | International Building Code International Residential Code | Meets all performance requirements |
| Durability: Structural / Racking/ Restrained Environmental Conditioning / Water Penetration | ASTM E1233 ASTM E72 ASTM E331 | No water penetration after 15 min @ 137 Pa (2.86 psf) | Pass - gypsum sheathing No water penetration after 90 min @ 299 Pa (6.24 psf) |
| Freeze-Thaw | ASTM E2485 (Method B) | ASTM E2570/AC 212 No sign of deleterious effects after 10 cycles | Pass - Tested over exterior gypsum sheathing, ASTM C1177 glass-mat sheathing, cement board, OSB, plywood |
| Surface Burning | ASTM E84 | ASTM E2570/AC 212 Flame Spread < 25 Smoke Development < 450 | Meets Class A: Flame spread =15 Smoke developed = 95 |
| Tensile Bond | ASTM C297 | ASTM E2570/AC 212 Minimum 103 kPa (15 psi) | Pass - Tested over exterior gypsum sheathing, ASTM C1177 glass-mat sheathing, cement board, OSB, plywood, CMU; PVC and galvanized flashing |
| Water Resistance | ASTM D2247 | ASTM E2570/AC 212 No deleterious effects after a 14-day exposure | Pass - Tested over exterior gypsum sheathing, ASTM C1177 glass-mat sheathing, cement board, OSB, plywood |
| Water Vapor Transmission | ASTM E96 | ASTM E2570/AC 212, Report Value | |
| Weathering: UV Light Exposure, Accelerated Aging, Hydrostatic Pressure Test | ICC-ES AC-212 AATCC 127 | ASTM E2570/AC 212 No cracking or bond failure to the substrate No water penetration after 21.7 in (550 mm) water for 5 hours | Pass |

B. EIFS Clad Wall Assembly with Drainage – Physical and Structural

| TEST | METHOD | CRITERIA | RESULTS |
|------------------------|--------------------------|--|-----------------------------|
| Accelerated Weathering | ASTM G155 | No deleterious effects after 2000 hours. | Pass |
| Drainage Efficiency | ASTM E2273 | 90% Minimum | |
| Freeze-Thaw | ASTM C67, E2485 Method A | No deleterious effects after 60 cycles | Pass |
| Mildew Resistance | Mil Std 810B Method 508 | No fungus growth after 28 days | Pass |
| Salt Fog Resistance | ASTM B117 | No deleterious effects after 300 hours | Pass |
| Tensile Bond | ASTM C297/E2134 | Minimum 103 kPa (15 psi) | Pass, All listed substrates |
| Transverse Wind-load | ASTM E330 | | See Evaluation Report |
| Water Penetration | ASTM E 331 | No water penetration after | Pass, 6.24, etc. |

| | | | |
|------------------|-------------|--|------|
| | | 15 minutes @ 137 Pa (2.86 psf) | |
| Water Resistance | ASTM D 2247 | No deleterious effects after 14 days of exposure | Pass |

C. EIFS Clad Wall Assembly with Drainage – Fire Testing

| TEST | METHOD | CRITERIA | RESULTS |
|--|------------------------------|--|---|
| Fire Endurance | ASTM E119 | Maintain fire resistance of an existing rated assembly | See Evaluation Report |
| Intermediate Scale Multi-story Fire Test | NFPA 285 / UBC Standard 26-9 | 1. Resist flame propagation over the exterior surface 2. Resist vertical spread of flame 3. Resist vertical spread of flame over the interior surface from one story to the next 4. Resist lateral spread of flame from the compartment of fire origin to adjacent spaces | Met test criteria with 8" thick EPS insulation. |
| Radiant Heat Exposure | NFPA 268 | No ignition at 20 minutes | Met test criteria with 8" thick EPS insulation. |

D. Reinforcing Mesh

| TEST | METHOD | CRITERIA | RESULTS |
|---------------------------------------|------------|--|-----------------|
| Alkali Resistance of Reinforcing Mesh | ASTM E2098 | Greater than 120 pli (21 dN/CM) tensile strength | Pass (all mesh) |
| Xi-Mesh | ASTM E2486 | 25-49 inch-lbs. (2.8-5.6 j) | Pass |
| Xi-Mesh 6 | ASTM E2486 | 25-49 inch-lbs. (2.8-5.6 j) | Pass |
| Xi-Mesh 11 | ASTM E2486 | 50-89 inch-lbs. (5.7-10.1 j) | Pass |
| BearMat 15 / Xi-Mesh | ASTM E2486 | 90-150 inch-lbs. (10.2-17.0 j) | Pass |
| BearMat 20 / Xi-Mesh | ASTM E2486 | 150 inch-lbs. (17 j) | Pass |

1.8 DELIVERY/STORAGE/HANDLING

- A. Deliver, store, and handle products per product data and under Section []
- B. Deliver FACADESXi materials in original unopened packages with labels intact.
- C. Protect FACADESXi materials during transportation and installation to avoid physical damage.
- D. Protect Portland cement-based material (bag products) from moisture and humidity. Store undercover and off the ground in a dry location.
- E. Store FACADESXi materials in a cool, dry place, out of direct sunlight, protect from freezing.
- F. Store insulation boards in original packaging, flat and out of the heat and direct sunlight.

1.9 PROJECT CONDITIONS

- A. Ambient and surface temperature must be above 40 degrees F during application and for 24 hours after application of FACADESXi materials.
- B. Provide supplementary heat /shading for installation, if necessary, to maintain a minimum or maximum allowable temperatures.
- C. Prevent uneven or excessive evaporation of moisture from base coat during dry, hot weather. Do not install coatings in temperatures above 100 degrees F.
- D. Protect surrounding areas and adjacent surfaces from the application of materials.
- E. Separate the EPS insulation board from the interior of the building by a minimum 15-minute thermal barrier.

1.10 COORDINATION AND SCHEDULING

- A. A preconstruction meeting is recommended and should include the Manufacturer, the applicator, the owner, coordinating material representative, and [consultants] before the installation of the materials.
- B. Air and water seals between adjoining materials and FXI materials should be designed to maintain the continuity of the assembly.
- C. Coordinate and schedule installation of FACADESXi with related work; windows, doors, flashing, AC units, foundation waterproofing, roofing, trim, flashing, and joint sealers; to prevent water infiltration behind and the drainage of the system.
- D. Protect rough openings before installing windows, doors, and other penetrations are installed and coordinate the installation so that the water and air barrier remain continuous.
- E. Protect sheathing per industry and/or sheathing manufacturer's instructions.
- F. Install parapet cap/copings and sealant immediately after base coat finish has dried or if installing after finish coat has been installed, the room must be left to seal to the base coat.
- G. Attach other small penetrations through the system per application details and provide a watertight seal.
- H. Install window/door and large penetration head flashing immediately after windows and doors are installed.
- I. Install penetrations when possible, such as ducts and pipes, and seal at the water barrier layer to create a continuous water and air barrier

1.11 WARRANTY

- A. Provide FACADESXi Wall systems limited labor and material warranty under project provisions.
- B. Workmanship is not included in the warranty and if required must be provided by the installer.
- C. See FACADESXi Warranty Technical Document for specific warranties available.

PART 2 - PRODUCTS

2.1 MANUFACTURER

FACADESXi, 15262 Capital Port, San Antonio TX 78249 | [972.834.9070](tel:972.834.9070) / [1-833-899-0787](tel:1-833-899-0787) | www.FACADESXi.com

2.2 SYSTEM/MATERIALS

- A. **System:** WaterShield Xterior Insulation System: Xi-WaterShield, Vertical Ribbons of Adhesive, Insulation board, fiberglass mesh reinforced base coat, [primer], acrylic integrally colored finish coat.
- B. **Materials**
 - 1. All components of the system (including but not limited to: Water /Air barrier coating and accessories, adhesive, insulation board, reinforcing mesh, base coat, primer, and finish coat) must be supplied by FacadesXi or their authorized distributors.
 - 2. WaterShield Assembly
 - a. WaterShield – Liquid applied air/ water barrier
 - b. WaterShield Joint Mesh– Reinforcement for Watershield over joints and gaps
 - c. WaterShield - SAF Self Adhered Flashing peel and stick WaterShield Flashing Tape: Primer-Free peel and stick tape designed for use with stucco and EIFS systems The polyester fabric top layer provides an excellent bonding surface for cementitious and synthetic stucco coatings.
 - d. Xi-FlashFill: Gunnable or Trowelable waterproofing Sealant applied at 12 mils.
 - 3. Adhesive
 - a. Xi-Dry Acrylic Base Coat Dry polymer containing Portland cement mixed with water in the field.
 - b. Xi-Acrylic Base Coat: or 100% acrylic base coat mixed with Portland cement in the field.

4. Insulation Board
 - a. Expanded Polystyrene (EPS), Nominal 1.0 lb/ft³ (16 kg/m³) in compliance with ASTM C578 Type I /ASTM E2430.
 - b. Maximum Thickness allowed: 8"

Specifiers note: *The designer must select the appropriate meshes for the project. FacadesXi recommends using BearMat 15 or 20 in conjunction with Xi-Mesh for areas that could receive traffic or damage.*

5. Reinforcing Mesh
 - a. Xi-Mesh Standard Reinforcing Mesh: 4.2 oz/ yd² open weave glass fiber coated reinforcing mesh.
 - b. Xi-Mesh 6: 6 oz/ yd² open weave glass fiber coated reinforcing mesh for standard impact resistance
 - c. Xi-Mesh 12: 12 oz/ yd² open weave glass fiber coated reinforcing mesh for intermediate impact resistance
 - d. BearMat 15 / Xi-Mesh 4: 15 oz/ yd² open weave glass fiber coated reinforcing mesh for high impact resistance (must be used in conjunction with Xi-Mesh)
 - e. BearMat 20 / Xi-Mesh 4: 20 oz/ yd² open weave glass fiber coated reinforcing mesh for ultra-high impact resistance (must be used in conjunction with Xi-Mesh)
6. Base Coat:
 - a. Xi-WaterLock: Waterproof Base Coat for Sloped surfaces - acrylic-based, fiber-reinforced, waterproofer mixed with Portland cement in the field.
 - b. Xi-Acrylic Base Coat/Xi-Dry Acrylic Base Coat: 100% acrylic base coat mixed with Portland cement in the field or Dry polymer mix containing Portland cement mixed with water in the field.

Specifiers note: the use of primer will enhance the color uniformity of the acrylic finish coat, especially in hot weather.

7. [Xi-Primer] (OPTIONAL PER SPECIFIER): 100% Acrylic tintable primer]
8. Xi-Textured Acrylic Finish Coat
 - 1) 100% Acrylic polymer, dirt pick-up resistant textured finish coat water-based acrylic coating with integral color and texture.
 - 2) Color:
 - 3) Texture: Xi-Smooth, Xi- Ultra Fine Sand .75, Xi-Fine Sand 1.0, Xi-Medium Sand 1.25 Xi-Coarse Sand, Xi-Fine Swirl 1.5, Xi-Coarse Swirl 2.0

C. Accessory Materials

1. Backer Rod and Joint Sealants: Closed-cell back rod and sealant from the acceptable sealant list.

System materials may not be interchanged with other manufacturers materials unless explicitly allowed by FACADESXi. The System is tested over specific water barrier coatings and is not allowed to be installed over other water barrier coatings. The use of other materials will void the FACADESXi Warranty. The integration with other claddings and water barriers must be decided before installation. The WaterShield Material may be used behind any other cladding without disrupting the water/air barrier.

PART 3 - INSTALLATION/EXECUTION

3.1 EXAMINATION

- A. Unsatisfactory conditions shall be corrected before the installation of any FACADESXi System materials. The contractor must notify the general contractor and/or owner and /or architect of all discrepancies. Do not proceed with the water/air barrier until conditions are resolved.

- B. Verify the following:**
1. Substrate is allowable and code compliant and installed per the manufacturer or appropriate product installation instructions.
 2. Verify the deflection of the substrate does not exceed 1/240 times the span.
 3. Surfaces must be free of mildew, dirt, efflorescent, oils, damage deterioration, or any foreign materials.
 4. Verify substrate is flat within 1/4 in (6.4 mm) in an 8 ft (2.4 m).
 5. Surfaces must be free from excessive moisture; moisture content should be recorded before installation of the water barrier materials.
- C. Substrate**
- [½" minimum Exterior Glass mat gypsum Sheathing complying with ASTM C1177]
 - [½" minimum Exterior fiber reinforced cement sheathing complying with ASTM C1325]
 - [½" minimum APA Exposure 1 or exterior plywood (Grade C/D or better)]
 - [½" minimum APA Exposure I OSB] [Gypsum sheathing (ASTM C79/C1396)]
 - [Other substrates, or Painted as approved by FACADESXi]

32 PREPARATION

- A. Framing, Sheathing, Substrate**
1. Sheathing must be installed per the applicable manufacturer /industry standards.
 2. Wood sheathing must be gapped per the APA
 3. Screw / Nailheads must be flush with the face of the sheathing and not overdriven
- B. Flashing**
1. All rough openings, penetrations, balconies, and decks are flashed following the project details and in a matter to prevent water penetration. Head, jamb, and sills of all openings must be flashed in conjunction with the water /air barrier per project details to create positive drainage.
 2. Roof Flashing and Kick out Flashing must be installed per project design

Specifiers Note: Delete Products not specified in Section 2.0 Follow EIFS Installation Guide for full instructions.

33 APPLICATION

- A. Mixing**
1. Mix each product per the most current product datasheet.
 2. No additives are permitted to any components unless specifically approved by FXI.
- B. Air/Water Barrier**
1. Coordinate installation with all flashing, terminations, roofing, accessories, windows, other adjacent water barrier materials to provide an air/watertight assembly.
 2. Install WaterShield and WaterShield accessory products per the WaterShield Product datasheet and system details.
 3. Treat all Gaps, joints, corners, and dissimilar transitions with the appropriate Joint treatments to ensure a water and airtight assembly.
 4. After Flashings, window fins, and penetrations are installed, install Watershield transition treatment per project details to create a waterproof connection and positive drainage.
 5. Watershield Field Application: Install per the WaterShield Product datasheet and system details.
 6. The wet mil will be approximately 10-12 wet mils.
 - a. OSB/Plywood: Plywood/OSB surface may create imperfections in the WaterShield. The WaterShield must be reapplied in any areas that are not completely covered.
 - b. CMU: CMU will require more Watershield than other substrates or it may be skimmed out with Xi-Base or Xi-VersaBase.
 - c. Apply 2 coats, allowing the first coat to fully dry. It may require back rolling with a ¾" nap

roller for complete coverage without pinholes.

7. Transition between Water Resistant Barriers: When there is a transition between WaterShield and Non-FacadesXi materials, consult FacadesXi Technical Services. The adhesion between products is not always known and testing may be necessary.
8. Seal all penetrations at the WaterShield surface.
9. Wherever stater track or flashing exists a layer of WaterShield Joint tape embedded in Xi- WaterShield should lap equally over the legs to create a continuous water barrier layer with positive drainage

C. Backwrapping/Terminations

1. Insulation Boards must be completely encapsulated with Reinforced Base Coat (Backwrapped or Pre-wrapped) or starter Track.
2. Backwrap: Attach Detail Mesh at the perimeter of all openings, penetrations, and other system terminations onto the walls 2-1/2" and at a length that will extend onto the face of the insulation board 2-1/2". Mesh may be stapled or attached with Xi-Base and embedding the Detail Mesh.
3. Starter track: Not allowed at Window Heads on Non-combustible construction unless the boards have also been Pre-wrapped. Attach to the wall per the manufacturer's installation instructions.

D. Insulation Board

1. Begin at the base of the wall, using temporary support if necessary.
2. Offset panel joints Insulation board joints from sheathing board joints by 12 inches minimum.
3. Apply Mixed Basecoat to the back of the panels with the 1/2" x 1/2" x 1-1/2" spaced (min.) notched trowel with the ribbons of adhesive running vertically on the wall.
4. The ribbons should be created such that there is space between them after pressing into the Xi-WaterShield coated wall.
5. Immediately install the boards onto the wall. Do not allow the adhesive to skin over. Apply firm pressure and do not slide the boards into place (maintain drainage channels).
6. Boards must butt tightly to each other, do not allow base coat between the board joints.
7. Adhesion should be checked periodically.

E. Base Coat/ Reinforcing Mesh

1. Uniformly cover the entire foam board surface with the base coat to approximately 1/16" - 1/8" thick. With the flat edge of a stainless-steel trowel, embed reinforcing mesh into the base coat, from the center to the edges, wrapping it around the edges and system terminations and extending as far onto the structural elements as possible.
2. Use the mesh to gauge base coat thickness. The mesh-reinforced surface should be flat and smooth with no wrinkles. A damp, NOT WET, brush may be used on fresh or uncured base coat to maintain sharp edges of grooves or for smoothing trowel marks.
3. The thickness must be such that the mesh color is not visible at a minimum of 1/16". If color is visible a second layer of base coat can be applied.
4. Lap reinforcing mesh 2 1/2" minimum at edges.
5. Allow to dry (normally 8 hours)
6. Sloped Surfaces: Apply a layer of Xi-WaterLock over the reinforced base coat on sloped surfaces with a stainless steel trowel

F. Apply primer to the dried base coat per the product datasheet.

G. Apply Selected Finish coat per the product datasheet.

3.4 QUALITY CONTROL

A. The contractor is responsible for the proper application of the FACADESXi wall System products.

B. FacadesXi is not responsible for on-site inspections. If inspections are required, the owner must engage a third-party inspector.

3.5 CLEANING

- A. Clean under the provisions of Section [01 74 00]
- B. All excess materials must be removed from the project site per the project Provisions
- C. Clean adjacent surfaces of excess materials or debris.

3.6 PROTECTION

- A. Protect installed materials under provisions of Section [01 74 00]

END OF SECTION

Disclaimer prepared in good faith based on the information available at the time of publication.

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