



FACADESXi

Xi-Coating Systems

DAFS- LiteCon by Aircrete

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FACADESXi DIRECT APPLIED (DAFS) – LITECON BY AIRCRETE

CSI SECTION 07 24 23 - Direct-Applied Finish System

This specification is to assist in correctly specifying the FACADESXi Direct Applied over Aircrete Specification (DAFS-AIRCRETE), products and installation and should be used in conjunction with Project Details. The assembly includes a reinforced base coat, optional primer and acrylic finish over code compliant water resistive barrier and means of drainage.

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.

FACADESXi Wall systems provides these specifications, 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 document.

Although not a part of the Assembly, 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. DAFS assemblies must be designed to allow water to drain to the exterior.

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

- The system is generally recommended for low rise construction and commercial construction less than 5 stories. See wind load data and verify requirements.
- Minor crack is possible at board joints.
- Ghosting of fasteners is possible during certain temperatures and humidity.
- The Aircrete Cladding surface must be in plane for the for best aesthetics. Outside of the limitations may cause visible irregularities in the finished wall surface. Heavy texture finishes and or 2 layers of base coat will minimize these effects. The base coat cannot be used in thicker applications to level out the Aircrete.
- For use on vertical above grade services. Do not use below grade or horizontally.
- Control joints and expansion joints are required by LiteCon USA
- Where snow may occur, increase the distance required between grade and the Aircrete and increase the slope requirement of the Foam Shapes.
- Maintenance is Required with periodic cleaning, repair of cracks and impact damage, if they occur, and/or recoating to enhance appearance of weathered finish.
- Dark colors show more imperfections in the board surface compared to light colors. With Foam Shapes, select a color with a light reflectance value (LRV) of 20 percent or higher. EPS has a service temperature limitation of approximately 160 degrees F (71 degrees C).

Contact FACADESXi technical services to assist in appropriate product selection.

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.

Primer is an Optional Layer that will enhance the color uniformity of the acrylic finish coat, especially in hot weather.

PART 1 - GENERAL

1.1 SECTION INCLUDES

- A. **Materials and installation of an exterior DAFS assembly including: optional surface sealer, reinforced base coat , [primer] and 100% acrylic textured finish coat.**

1.2 RELATED SECTIONS

- A. Section 06 11 00 Wood Framing
- B. Section 06 16 00 Sheathing
- C. Section 07 27 00 Air barriers
- D. Section 07 60 00 Flashing and Sheet Metal
- E. Section 07 90 00 Joint Protection
- F. Section 08 40 00 Entrances, storefronts, curtain walls
- G. Section 08 50 00 Windows

1.3 REFERENCES

- A. **ASTM**
 - 1. E84 Test for surface burning characteristics of building materials.
 - 2. E84 Test Method for Surface Burning Characteristics of Building Material
 - 3. E119 Standard Test Methods for Fire Tests of Building Construction and Materials
 - 4. G155 Standard Practice For Operating Xenon Arc Light Apparatus For Exposure Of Non-Metallic Materials
 - 5. B117 Test Method for Salt Spray (Fog) Testing.
 - 6. D2247 Practice for Testing Water Resistance of Coatings in 100% Relative Humidity.

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 Cement Board Manufacturer's Code Evaluation Report**
- D. **Shop drawings to be provided by the subcontractor.**
- E. **Samples: two 6 inches by 6-inch finish coat sample per designers' request**

1.5 DESIGN CRITERIA

- A. **Moisture / air control**
 - 1. **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.

B. System Joints

1. Expansion joints are required per project design.

C. DAFS installation

1. DAFS is not to be used below grade or on walls with negative water pressure.
2. DAFS should be used on vertical walls only.

1.6 QUALITY ASSURANCE

A. Manufacturer

1. Coating products have been installed for over 20 years on over 10 million square feet.

B. Applicator

1. Listed by FACADESXi Wall Systems. Licensed, insured and engaged in application of coatings for a minimum of 3 years.
2. Employ mechanics who are skilled and experienced in Coatings applications and knowledgeable in the FACADESXi Coatings and Aircrete board installation.

C. Conform to all applicable building code requirements.

D. 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.

E. Third party inspection where required by code or contract documents, are to be contracted by the owner. Inspections are not performed by the coating's manufacturer.

1.7 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 under cover and off the ground in a dry location.

E. Store FACADESXi materials in cool, dry place, out of direct sunlight, protect from freezing.

F. Store insulation boards in original packaging, flat and out of heat and direct sunlight.

1.8 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 minimum or maximum allowable temperatures.

C. Do not install coatings in temperatures above 100 F.

D. Protect surrounding areas and adjacent surfaces from application of materials.

1.9 COORDINATION AND SCHEDULING

A. Interior drywall, all floor, roof construction and other work that imposes dead loads on the walls should be completed prior to the DAFS to prevent excessive deflection and help prevent cracking at the board joints.

B. 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.

C. Protect sheathing per industry and/or sheathing manufacturer's instructions.

- D. Install sealant immediately after base coat has dried, do not install sealant to finish coat.
- E. Attach penetrations through the Cement Board per FacadesXi Details.

1.10 WARRANTY

- A. Provide FACADESXi limited material warranty under project provisions. This Assembly is warranted for materials only of the Base Coat, reinforcing mesh and finish coat. For a full Assembly Warranty - See WaterShield-CB.
- B. See Facade Warranty Technical Document for specific warranties available.

PART 2 - PRODUCTS

2.1 MANUFACTURER

FACADESXi, 15262 Capital Port, San Antonio TX 78249 | 833.899.0787 | 972.834.9070 | www.FACADESXi.com

2.2 SYSTEM/MATERIALS

- A. System: DAFS-AIRCRETE: primer/sealer, fiberglass mesh reinforced base coat] [primer], acrylic integrally colored finish coat.
- B. Materials
 - 1. Water / Air Resistive Barrier/ Means of Drainage
 - a. See Section [_____]
 - 2. AirCrete Cladding
 - a. Light weight cladding panels 2' x 4' or 2' x 7'
 - b. Installed per Litecon installation instructions
 - 3. Surface Sealer/Primer
 - a. Xi-Akali Resistant Primer: 100% Acrylic tintable primer
 - b. Xi-Enhanced Sealer: 100% Acrylic surface sealer
 - 4. Coating / Lamina
 - a. Base Coat: (choose one)
[Xi-Acrylic Base Coat: 100% acrylic base coat mixed with Portland cement in the field.](#)
 - b. Reinforcing Mesh: (choose one)
[\[Xi-Mesh Standard Reinforcing Mesh: Min. 4.2 oz/ yd² open weave glass fiber coated reinforcing mesh.\]](#)
[\[Xi-Mesh 6: 6 oz/ yd² open weave glass fiber coated reinforcing mesh.\]](#)
 - 5. Foam Shapes
 - a. Insulation board: Expanded Polystyrene (EPS), Nominal 1.0 lb/ft³ (16 kg/m³) in compliance with ASTM C578 Type I /ASTM E2430.
 - b. Foam shape thickness for Non-combustible construction is limited to 4" in thickness.
 - c. Base Coat:
 - 1) [Xi-WaterLock: Waterproof Base Coat for Sloped surfaces - acrylic-based, fiber-reinforced, waterproofer mixed with Portland cement in the field.](#)
 - 2) [Xi-Acrylic Base Coat: 100% acrylic base coat mixed with Portland cement in the field.](#)
 - d. Reinforcing Mesh: [Facades Xi-Mesh Standard Reinforcing Mesh: 4.2 oz/ yd² open weave glass fiber coated reinforcing mesh.](#)

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

6. [Xi-Primer (OPTIONAL PER SPECIFIER): 100% Acrylic tintable primer]
7. Xi-Textured Acrylic Finish Coat
 - a. 100% Acrylic polymer, Dirt Pick up resistant textured finish coat water based acrylic coating with integral color and texture
 - b. Color:
 - c. Texture: Xi-Smooth, XI- Ultra Fine Sand .75 Xi-Fine Sand 1.0 Xi-Medium Sand 1.25 Xi Coarse Sand 1.5 Xi-Fine Swirl 1.5 Xi- Coarse Swirl 2.0

PART 3 - INSTALLATION/EXECUTION

3.1 EXAMINATION

- A. **Verify the following:**
 1. Substrate is allowable and code compliant.
 2. Surfaces must be free of mildew, dirt, efflorescent, oils, damage deterioration or any foreign materials.
 3. Surfaces must be free from excessive moisture; moisture content should be recorded before installation of the water barrier materials.
 4. Holes in the AAC should be filled with the manufacturers specified product
 5. Openings, Roofs, terminations have been properly flashed.
- B. **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 water/air barrier until conditions are resolved.**

3.2 APPLICATION

- A. **Mixing**
 1. Mix each product in accordance with the most current product datasheet.
 2. No additives are permitted to any components unless specifically approved by FXI.
- B. **Board Coatings**
 1. Surface Suction
 - a. Start with wetting down the surface before applying the base coat and ensure that the material will hold enough water to dry slowly and not crack. If wetting is not enough, coat the Aircrete panels with primer or sealer before installing base coat.
 2. Apply mixed Xi-Base coat to the entire surface with a stainless-steel trowel to a minimum thickness of 1/16" thick. A double pass may be necessary depending on the surface of the AAC.
 3. Immediately embedded Xi-Mesh into the wet base coat and trowel it from the center to the edges completely encapsulating the mesh.
 4. Lap a minimum of 2-1/2" at fiberglass mesh edges and over accessory products and ensure that the reinforcing mesh is continuous at corners, free of wrinkles and no mesh color is visible. It is possible that some texture may be seen through the base coat, if the texture cannot be felt.
 5. If required to achieve a minimum 1/16" total base coat thickness, a second layer of base coat should be installed after the first coat has dried such that it is not damaged during the second application (typically 8-10 hours).
 6. Double wrap all inside and outside corners with Xi-Mesh. If no accessory corner bead is being used.

- 7. Allow the base coat to completely dry before installation of the primer/finish coat.
- C. Apply primer to the base coat per the product datasheet.
- D. Apply Selected Finish coat per the product datasheet.

3.3 QUALITY CONTROL

- A. The contractor is responsible for the proper application of the FACADESXi 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 siter 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.

All information contained in this specification conforms to standard detail and product recommendations for the installation of FACADESXi products and should be used for guidance only. There may be additional information and/or equivalent means of installation that are not referenced in FACADESXi's specifications. All FACADESXi products shall be installed in accordance with FACADESXi product datasheets and all applicable building codes and industry standard practices.

The design, engineering and final details incorporating any FACADESXi product are the sole responsibility of the project design professional. FACADESXi is not responsible for determining the acceptability and/or applicability of any FACADESXi product for any specific project or condition. FACADESXi disclaims all liability for improper installation, workmanship, or design by a third-party. EXCEPT FOR ANY EXPRESS REPRESENTATIONS AND WARRANTIES BY FACADESXi, ALL IMPLIED WARRANTIES OF ANY KIND, INCLUDING BUT NOT LIMITED TO WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR COMPLIANCE WITH LAWS OR GOVERNMENT RULES OR REGULATIONS APPLICABLE TO THE PROJECT, ARE HEREBY DISCLAIMED.

FACADESXi's website should always be consulted for the latest version of any details, specifications and/or product information. Contact FACADESXi for any technical assistance.

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