

# FACADESTHREE Xi-SERIES THREE COAT STUCCO ASSEMBLY



## SYSTEM DESCRIPTION

FacadesThree-Xi Series is a tested and engineered Three Coat stucco wall assembly with continuous Xterior Insulation. In addition to enhancing a building's energy efficiency, Xi may help lower condensation within the building envelope.

### Optional Advantages Upgrades

- Watershield-Xi Water and Air barrier for superior water and air barrier protection with single source warranty
- Drainage Mat for superior Drainage Efficiency
- Fracture Stop: Decrease the appearance of hairline cracks in the stucco surface.
- Strength Advantage: Xi-Admix
- Consistency Enhancement: Xi-Alkali Resistant Primer
- Elastomeric finish coat bridges hairline cracks

## COMPONENTS

### ① Substrate

*With code compliant lath & water resistive barrier*

- ASTM C1177 glass mat faced sheathing
- ASTM C79/C1396 exterior gypsum sheathing
- ASTM C1325 Type A Exterior cement-board
- Exposure I or exterior plywood sheathing (grade C-D or better)
- Exposure I OSB
- Poured concrete/unit masonry/brick
- Open Framing ( $\frac{3}{8}$ " thickness Only)
- Continuous Insulation

### ② Code Compliant Water Resistive Barrier / Means of Drainage

- International Building Code
  - One layer of No.15 asphalt felt, complying with ASTM D226 for Type 1 felt.
  - Wood Based Sheathing: Water resistant barrier with water resistance complying with ASTM E2556, Type II
- International Residential Code (2015/2018)
  - One layer of No. 15 asphalt felt complying with ASTM D226 for Type 1 felt
  - Wood Based Sheathing: water resistance equal to or greater than that of 60-minute Grade D paper
- Code complaint sheet good with a current code Evaluation Report
- Code compliant Air/Water Barrier Coating with a current code Evaluation Report
- See Specifications for Drainage Options

### ③ Xi Continuous Insulation

- Expanded Polystyrene • Extruded Polystyrene • Polyisocyanurate • Mineral Wool

### ④ Code compliant lath

- Metal Lath • Plastic Lath • Woven Wire

### ⑤ FacadesThree Scratch and Brown

- FacadesThree Concentrate: pre-mixed ASTM C926 code compliant stucco base coat consisting of portland cement, fibers and additives, mixed with water and sand.
- FacadesThree Sanded: pre-mixed ASTM C926 code compliant stucco base coat consisting of portland cement, sand, fibers and additives mixed only with water in the field.

### ⑥ Primer (Optional per specification) – for decreased efflorescence and highest finish coat aesthetic performance.

- Xi-Alkali Resistant Primer

### ⑦ Finish Coat – Integrally colored and textured. Unlimited color selection, dirt pick up resistant

- Xi-Textured Acrylic Finish • Xi- Elastomeric Finish

*Consult system specifications for exact component options.*

## USES

Exterior, interior, high impact requirement, new, retrofit, residential, multi-family, commercial, panelized, institutional, hotels, hospitals, retail centers, schools, condominiums, and government facilities

## COMPLIANCE APPROVALS

FacadesThree is installed as a One Coat  $\frac{3}{8}$ " thick code compliant assembly or as a traditional scratch & brown stucco complying with ASTM C926 when installed in compliance with the International Building Code/International Residential Code.

Complies with Chapters 14 and 25 of the IBC and Chapter 7 of the IRC.

Non-combustible and Fire resistant assemblies are available when stucco is installed at  $\frac{7}{8}$ " thick.

## ADVANTAGES

- Factory prepared mixed stucco base for consistent field quality control.
- Impact and puncture resistant.
- Highest quality acrylic and elastomeric finishes.
- EPS shapes for architectural details.
- Reduced Labor.
- Shorter construction schedule.
- Lower Cladding Weight for decreased structural requirements.
- Non-combustible and Fire resistant assemblies are available.
- Continuous insulation for Energy Efficiency and R Value.

## DESIGN CONSIDERATIONS

- All products must be installed in accordance with current Evaluation Report.
- Maximum allowable deflection  $L/360$ .
- The design wind load shall be determined by the Evaluation Report or per the structural engineer.
- Load roofs and install interior gypsum prior to installation of the stucco.
- Wood-based sheathing should be gapped 1/8-inch.
- All penetrations shall be properly treated, flashed and/or sealed using approved installation designed for water drainage to the exterior of the wall.
- Control joint placement is every 144 ft<sup>2</sup>.
- Expansion joints are per project design.
- Expansion joints should be installed at floor line, dissimilar substrates, and through wall expansion joints. Final expansion and control joint design and location are the responsibility of the design professional.
- Sealant joints shall be detailed and installed per sealant manufacturer's recommendations.
- Slope is required on all horizontal surfaces greater than 1".

## LIMITATIONS

- Framed walls must terminate stucco a minimum of 4-inches above grade, 2- inches above finished grade, or as specified by local code.
- Moist curing must be provided per specifications.
- Ambient and surface temperature must remain above 40°F (4°C) during and for 24-hours after set has occurred.
- Protect applied product from inclement weather until dry.
- Efflorescence is a natural occurrence when using cement based products subject to exterior or wet environments.
- No additives are permitted to any components unless specifically approved by FXI.
- Follow the application instructions for each component.
- Cracking will occur in portland cement stucco. This statement is true of any Portland cement based product and is not a defect of the product. Cracking can be minimized by following best practices in the FacadesOne Stucco Handbook; including proper installation of lath, proper use of control and expansion joints, proper sand selection, proper proportioning of stucco mix, avoiding the use of excess water, moist curing of the stucco after it has been applied, and proper sequencing of construction to avoid stresses in the freshly placed stucco.
- For use on vertical above grade walls only.
- Dark colors may show efflorescence more easily and imperfection in the stucco base coat compared to light colors.
- Maintenance Required: periodic cleaning, repair of cracks and impact damage if they occur, recoating to enhance appearance of weathered finish.

This system bulletin is not to be used as an application guide, See System specifications, details, Design Handbook and product datasheets for specific installation information.