

## Acrowall-CP

*2- and 3- coat impact-resistant stucco system*

### INTRODUCTION

This Specification has been assembled to enable the design professional to select or delete sections to suit the project requirements and is intended to be used in conjunction with Acrocrete<sup>®</sup> typical details, bulletins, etc.

Air seals at any joints/gaps between adjoining components (penetrations, etc.) are of primary importance to maintain continuity of the air barrier system and must be considered by the design professional in the overall wall assembly design.

This specification refers to applications on the following substrates: PermaBase brand cement board (or other ASTM C1325 Type A Exterior approved cement boards), poured concrete/unit masonry, Fiberock Aqua-Tough Sheathing, Dens-Glass Gold sheathing (ASTM C1177), gypsum sheathing (ASTM C79/C1396), Exposure 1 or exterior plywood sheathing (Grade C-D or better), Exposure 1 OSB.

### TECHNICAL SUPPORT

Consult the BASF Wall Systems Technical Services Department at 800-589-1336 for specific recommendations concerning all other applications. Consult the Acrocrete website, [www.acrocrete.com](http://www.acrocrete.com), for additional information about products and systems and for updated literature.

### PART 1 - GENERAL

#### 1.01 SECTION INCLUDES

- A. Refer to all drawings and other sections of this specification to determine the type and extent of work therein affecting the work of this section, whether or not such work is specifically mentioned herein.
- B. System description: Composite wall (and soffit) system consisting of ACROCRETE<sup>®</sup> STUCCOBASE<sup>™</sup>/STUCCOBASE PREMIX and finish coat.
- C. Acrocrete products are listed in this specification to establish a standard of quality. Any substitutions to this specification shall be submitted to and receive approval from the architect at least 10 days before bidding. Proof of equality shall be borne by the submitter.
- D. The system type shall be ACROWALL-CP system as manufactured by BASF Wall Systems, Jacksonville, Florida.

#### 1.02 RELATED SECTIONS

- A. Section 03300 Concrete
- B. Section 04200 Masonry
- C. Section 05400 Cold-formed metal framing: Light gauge load-bearing metal framing
- D. Section 06100 Rough carpentry: Wood framing
- E. Section 07900 Sealants
- F. Section 08000 Doors and windows
- G. Section 09100 Metal support systems
- H. Section 09110 Non-load-bearing wall framing: Non-load-bearing metal framing systems
- I. Section 09250 Gypsum substrates

#### 1.03 REFERENCES

- A. ASTM C150-99a Standard Specification for Portland Cement.
- B. ASTM C847-95 Standard Specification for Metal Lath.
- C. ASTM C926-98a Standard Specification for Application of Portland Cement-Based Plaster.
- D. ASTM C933-96a Standard Specification for Welded Wire Lath.
- E. ASTM C1032-96 Standard Specification for Woven Wire Plaster Base.
- F. ASTM C1063-99 Standard Specification for Installation of Lathing and Furring to Receive Interior and Exterior Portland Cement-Based Plaster.
- G. ICBO AC11 Cementitious Exterior Wall Coatings.

#### 1.04 SUBMITTALS

- A. Submit manufacturer's System Guide and product brochures with product specifications and installation requirements for each component of the ACROWALL-CP system.
- B. Samples:
  - 1. Submit a 18.8 cm x 18.8 cm (7" x 7") sample for each finish color and texture specified.

2. Each sample shall be prepared using the same tools and techniques as required for the actual application.
  3. An approved sample shall be available and maintained at the job site.
- C. Shop drawings:
1. The applicator shall prepare and submit schedules and complete shop drawings to the architect for approval.
  2. The drawings shall show all details, sizes, types, finishes, anchorage and sealant joints and other items as required or specified so that a proper evaluation can be made of the proposed materials and construction.

## 1.05 QUALITY ASSURANCE

- A. Qualifications:
1. The ACROWALL-CP system applicator shall provide satisfactory evidence of his qualifications to apply the ACROWALL-CP system.
  2. The Insulation board manufacturer must be approved by Acrocrete® to produce insulation board in accordance with Acrocrete® requirements. The insulation board shall be code approved by third party testing agency and labeled with the system manufacturer's pertinent information. Acrocrete EPS or approved equal.
- B. Plan review:
1. At the architect's discretion, Acrocrete shall review and comment regarding ACROWALL-CP system application and details prior to bidding.
  2. At the architect's discretion, Acrocrete shall perform a water vapor transmission analysis of a typical wall assembly with information provided by the architect/engineer.
- C. Pre-construction meeting:
- At the architect's discretion, a pre-construction meeting shall be conducted to review ACROWALL-CP system details and necessary coordination with other trades. Representatives shall be present from:
1. Architect.
  2. General contractor.
  3. Acrocrete applicator.
  4. Acrocrete manufacturer's representative.
  5. Other trades affected by applicator. (e.g., roofing contractor, window and glazing contractor, sealant contractor, etc.).
- D. Design and detailing an ACROWALL-CP system:
1. General
    - a. The system shall be installed in strict accordance with current recommended published details and product specifications from the system's manufacturer.
    - b. Sealants and closed cell backer rod as required at dissimilar materials and expansion joints within the ACROWALL-CP system shall provide a complete watertight system.
    - c. Minimum slope for all projections shall be 1:2 with a maximum length of 30.5 cm (12") [e.g. 15 cm in 30.5 cm (6" in 12")], unless other manufacturer-approved detailing is shown on the construction documents.
  2. Substrate systems
    - a. Deflection of the substrate systems shall not exceed L/360.
    - b. Acceptable substrates are water-resistant core exterior grade gypsum sheathing (ASTM C79/C1396), Dens-Glass Gold® sheathing (ASTM C1177), Fiberock Aqua-Tough Sheathing (ASTM C1278), Fiberboard ANSI/AHA A194-85, Exposure I or exterior plywood (grade C-D or better) or Exposure I OSB, PermaBase cement board, or other cement board complying with ASTM C1325 Type A Exterior, poured concrete, and masonry units.
    - c. Acceptable substrates must be securely fastened per manufacturer recommendations and applicable building code requirements.
    - d. Painted and otherwise coated surfaces of brick, unit masonry, stucco and concrete shall be inspected and prepared as approved by Acrocrete before application. Paint on surface consolidants or primers shall not be used to bond ACROWALL-CP system to painted surfaces.
    - e. Other substrates shall be approved by the system's manufacturer in writing prior to the application.
    - f. The applicator shall verify that the proposed substrate is acceptable prior to the ACROWALL-CP system installation.
    - g. The substrate systems shall be engineered with regard to structural performance by others.
  3. System joints
    - a. Expansion joints are required in the system where they exist in the substrate, where the system adjoins dissimilar construction, at changes in substrates and at floor lines in multilevel wood frame construction where substrates change and where structural movement is anticipated or as specified by the design professional
    - b. Control joints are required at a minimum of every 13.4 m<sup>2</sup> (144 ft<sup>2</sup>) and as specified by the design professional. The maximum uncontrolled length or width is 5.5 lineal meters (18 lineal feet) and a maximum uncontrolled length to ratio of 2 1/2 : 1.
    - c. Reference construction documents for specific locations.
    - d. Expansion/control joint selection, design and location is the responsibility of the design professional.
  4. Coordination with other trades
- Architect shall evaluate adjacent materials such as windows, doors, etc. for conformance to manufacturer's details. Adjacent trades shall provide scaled shop drawings for review.
- E. Evaluations, listings, and classifications
- The finish shall be tested as having a flame spread of less than or equal to 25.

## 1.06 DELIVERY, STORAGE AND HANDLING

- A. Deliver to the job site all materials in unopened, undamaged containers, clearly marked and identified with the system manufacturer's name and description of contents.

- B. Store materials inside, or under cover and off the ground and keep them dry, protected from the weather, direct sun light, surface contamination, damaging temperatures, damage from construction traffic and other causes.
- C. Stack insulation board flat, a minimum of 30.5 cm (12") above the ground, and protected from the sun.
- D. Store pail materials in temperatures not less than 4°C (104°F) or more than 43°C (110°F).

### 1.07 PROJECT/SITE CONDITIONS

- A. Existing conditions  
The contractor shall refer to Section 01010 for project requirements and this contractor's responsibility thereunder.
- B. Environmental requirements  
The contractor under this section shall verify site conditions to assure that the requirements of storage of materials and installation procedures conform to the system manufacturer's current product storage and application requirements as applicable to warranty conditions.
- C. Protection of work
  - 1. Protect surrounding areas and surfaces during the application of the system.
  - 2. The system shall be protected when work ceases for the day or when an area is completed so that water will not infiltrate behind the system or damage system materials.

### 1.08 SEQUENCING AND SCHEDULING

- A. Coordinate and schedule installation of ACROWALL-CP with related work of other sections
- B. Coordinate and schedule installation of trim, flashing, and joint sealers to prevent water infiltration behind the system.
- C. Coordinate and schedule installation of windows, doors, A/C units, air seals etc.

## PART 2 - PRODUCTS

### 2.01 MANUFACTURERS

All components of the ACROWALL-CP system shall be obtained from the system manufacturer or through an authorized distributor.

### 2.02 MATERIALS

- A. The system manufacturer's Insulation Board meeting or exceeding ASTM C578. Acrocrete® EPS or approved equal.
  - 1. Nominal 1.5 pcf aged expanded polystyrene.
  - 2. Flamespread and smoke development shall be 25 and 450 or less respectively per ASTM E84.
  - 3. Maximum size 61 cm x 2.44 m x 10 cm (2' x 8' x 1.5").
  - 4. Tongue and groove with 9.5 mm (3/8") high tongues and compatible grooves.]
- B. ACROBOND™: Surface applied bonding agent and additive for ACROCRETE® STUCCOBASE™/STUCCOBASE PREMIX.
- C. POLY 1: 100% acrylic stucco additive. **(Not for use with stucco plaster mixes that contain air entrainment agents.)**
- D. Metal lath, woven/welded wire or PermaLath™ 1000: (See also, *Acrocrete® Lath & Trim Accessories System Technical Bulletin*)
  - 1. Stucco System 2: 3/8"-1/2" thick stuccow
    - Minimum No. 20 gauge, 25.4 mm (1") galvanized steel, woven wire fabric is required. Other laths shall comply with ASTM C933-80 (welded) and ASTM C1032-86 (woven). The lath is self-furred or furred when applied over all substrates except unbacked polystyrene.
    - OR -
    - Expanded metal lath: The lath shall comply with ASTM C847-93. Furring and self-furring requirements shall be as set forth for wire-fabric lath. Minimum weight is 1.36 kg/m<sup>2</sup> (2.5 lb/yd<sup>2</sup>.) Other acceptable welded laths shall comply with ASTM C933-80 and other acceptable woven laths shall comply with ASTM C1032-86.
    - OR -
    - PermaLath™ 1000: Open weave, three dimensional, self-furred, nominal 1/8" thick glass fiber reinforcing lath
  - 2. Stucco System 3: 3/4"-7/8" thick stucco
    - Metal lath or woven/welded wire: (See also, *Acrocrete® Lath & Trim Accessories System Technical Bulletin*)
    - [Minimum No. 17 gauge, 25.4 mm (1") galvanized steel, woven wire fabric is required. Other laths shall comply with ASTM C933-80 (welded) and ASTM C1032-86 (woven). The lath is self-furred or furred when applied over all substrates except unbacked polystyrene.]
    - OR -
    - [Expanded metal lath: The lath shall comply with ASTM C847-93. Furring and self-furring requirements shall be as set forth for wire-fabric lath. Minimum weight is 1.85 kg/m<sup>2</sup> (3.4 lb/yd<sup>2</sup>) Other acceptable welded laths shall comply with ASTM C933-80 and other acceptable woven laths shall comply with ASTM C1032-86.]
    - OR -
    - PermaLath™ 1000: Open weave, three dimensional, self-furred, nominal 1/8" thick glass fiber reinforcing lath

- E. Plaster sand: Must be clean and free from deleterious amounts of loam, clay, silt, soluble salts and organic matter. Sampling and testing must comply with ASTM C144 or ASTM C897. Plaster sand must be graded within the following limits:

Percent retained by weight

Retained on	± 2 Percent	
U.S. Standard Sieve	Min.	Max.
No. 4	-	0
No. 8	0	10
No. 16	10	40
No. 30	30	65
No. 50	70	90
No. 100	95	100

- F. Water: Clean and potable without foreign matter.
- G. ACROCRETE® STUCCOBASE™: Factory-blended stucco mixture of Portland cement, reinforcing fibers, and proprietary ingredients; supplied by Acrocrete for scratch and brown coats.
- OR -
- G. ACROCRETE® STUCCOBASE™ PREMIX: Factory-blended mixture of Portland cement, reinforcing fibers, sand, and other proprietary ingredients.
- H. Acrocrete ACROBASE® 60 base coat or approved equal. 100% acrylic polymer base coat, site mixed with Portland cement. To attach and reinforce optional EPS shapes over face of dried ACROCRETE STUCCOBASE/STUCCOBASE PREMIX.
- OR -
- H. ACRODRY™ base coat: Dry-mix polymer adhesive and base coat containing Portland cement, and requiring only water for mixing.
- I. Reinforcing mesh: MIL-Y-1140G; balanced open weave, glass fiber reinforcing mesh; twisted multi-end strands for compatibility with Acrocrete lamina components. Acromesh™ 4: Standard weight for use with ACROBASE® 60 base coat in reinforcing optional EPS shapes.
- J. ACROPRIMER™: 100% acrylic-based primer for stucco.
- K. Finish: Factory-mixed formulation of 100% acrylic polymers and aggregate, integrally pigmented and formulated for specific textures. Acrocrete ACROTEX™ finishes or approved equal. Texture shall be <\_\_\_\_\_>.
- L. ACROFLEX® finish: Elastomeric factory-mixed formulation of 100% acrylic polymers and aggregate, integrally pigmented and formulated for specific textures. Acrocrete ACROFLEX® finish or approved equal. Texture shall be <\_\_\_\_\_>.

## 2.03 ACCESSORIES

- A. A secondary weather barrier must be installed over sheathed substrates and wrapped into rough openings prior to installation of the ACROWALL-CP system. Suitable secondary weather barriers include minimum grade D building paper complying with federal specifications UUB 790a or asphalt-saturated rag felt complying with UL standard number 55-A or other code-recognized equivalent. One layer of Grade D 60 minute paper with one layer of EPS or extruded polystyrene with tongue and groove edges or two layers Grade D 60 minute paper are required by Uniform Building Code (UBC) for wood-based sheathings. Suitable materials for wrapping into rough openings include: ACROFLASH™: 30-mil thick, self-sealing, self-healing rubberized asphalt laminated to a polyester fabric.
- B. Fasteners: Comply with ASTM C1063 for type and size required to hold materials securely in place.
- C. Trim: Casing bead, corner bead, expansion joint and weep screed accessories shall meet the requirements of ASTM C1063. Accessories shall be vinyl, meeting ASTM D1784, galvanized, meeting ASTM A525 and ASTM A526, or zinc meeting ASTM B69. Zinc accessories are recommended where highly humid or salt-laden service conditions exist.

## PART 3 - EXECUTION

### 3.01 EXAMINATION

- A. Installer shall examine substrates to determine if they are in satisfactory condition to receive the ACROWALL-CP system. A satisfactory substrate is one that complies section 1.4.4. B of this specification with requirements including installation tolerance of 6.4 mm in 3 m (1/4" in 10') (min) and of the sections in which the substrate and related work are specified. Installer shall submit a written report listing conditions detrimental to performance of work of this section. Do not proceed with installation of system until unsatisfactory conditions have been corrected.
- B. Verify concrete/unit masonry is free of dust, dirt, grease, oils, laitance, efflorescence, biological residue, existing paint or coatings, curing compounds, form release agents, or any other contaminants which might affect the bond of ACROCRETE® STUCCOBASE™. Masonry walls should be properly cured to full load bearing capacity, laid true, and with joints tooled. Properly prepared concrete will have an open texture similar to fine grit sandpaper.
- C. Wrap the secondary weather barrier into rough openings (doors, windows, etc.) to increase the level of protection to the building frame and interior.
- D. Verify lath is installed in accordance with ASTM C1063 and all local building codes.
- F. Unsatisfactory conditions shall be reported to the general contractor and corrected before application of the ACROWALL-CP system.

### 3.02 PREPARATION

- A. At the architect's discretion, installer, system manufacturer's representative, installer of substrate material and other trades whose work affects the ACROWALL-CP system shall meet at project site to review procedures and time schedule proposed for installation of the system and coordination with related work.
- B. Comply with acrocrete's current published instructions for installation of ACROWALL-CP system as applicable to each type of substrate indicated.

### 3.03 MIXING

General: No additives are permitted unless specified in product mixing instructions. Close containers when not in use. Prepare in a container that is clean and free of foreign substances. Do not use a container which has contained or been cleaned with a petroleum-based product. Clean tools with soap and water immediately after use.

- A. Acrylic additive  
Mix POLY 1 with clean potable water in a ratio of from 1:1 to 1:3.
  - B. Stucco base coat: ACROCRETE STUCCOBASE™
    - 1. Use mixer which is clean and free of foreign substances.
    - 2. Add 18.9–22.7 liters (5–6 gallons) of clean potable water or POLY 1, mixed at a 4:1 or 5:1 ratio, to mixer per one bag of ACROCRETE STUCCOBASE.
    - 3. Add one bag of ACROCRETE STUCCOBASE.
    - 4. Add one half 45.4–54.4 kg (100–120 lbs) of the required plaster sand (ASTM C144 or ASTM C897).
    - 5. Mix for 3–4 minutes at normal mixing speed while adding the remainder 45.4–54.4 kg (100–120 lbs) of the plaster sand. Allow material to set for 2–4 minutes, then remix adding water to achieve desired consistency.  
**Note: Continuous mixing may cause excessive air entrainment.**

- OR -

  - B. Stucco base coat: ACROCRETE® STUCCOBASE™ PREMIX
    - 1. Use mixer which is clean and free of foreign substances.
    - 2. Add 7.6–9.5 liters (2–2.5 gallons) of clean potable water to mixer.
    - 3. Slowly add one bag of ACROCRETE STUCCOBASE PREMIX.
    - 4. Mix for one minute at normal mixing speed. Allow material to set for 2–4 minutes with mixing blades at rest. Then re-mix, adding water to achieve desired consistency. Desired consistency varies with type of application (trowel or gun), Substrate (paper-backed lath or block) and whether the stucco is applied to a wall or a ceiling.  
**Note: Continuous mixing may cause excessive air entrainment.**
  - C. Acrocrete® base coat
    - 1. Adhesive/base coat: ACROBASE® 60 base coat
      - a. Mix base coat with a paddle and drill to a homogeneous consistency, before adding Portland cement.
      - b. Mix one part (by weight) Portland cement with one part base coat. Add Portland cement in small increments, thoroughly mixing to a homogeneous consistency after each additional increment.
      - c. Clean, potable water may be added to adjust workability.

- OR -

  - 1. Adhesive/base coat: ACRODRY™ base coat
    - a. Prepare each bag in a 19-liter (5-gallon) container which is clean and free of foreign substances. Do not use a container which has contained or been cleaned with a petroleum-based product.
    - b. Fill the container with approximately 5.6 liters (1.4 gallons) of clean, potable water.
    - c. Add ACRODRY base coat in small increments, mixing after each addition.
    - d. Mix the contents of the ACRODRY base coat pail with a low speed drill and paddle mixer until thoroughly blended.
    - e. Additional ACRODRY base coat or water may be added to adjust workability.
    - f. Let stand for 5 to 10 minutes, then remix and retemper before use.
    - g. Additives are not permitted.
    - h. Close container when not in use.
    - i. Clean tools with soap and water immediately after use.
- D. Acrocrete [ACROTEx™] [ACROFLEX®] [ACROPRIMER™]
  - 1. Thoroughly mix the factory-prepared material with a mixer to a homogeneous consistency.
  - 2. A small amount of clean, potable water may be added to adjust workability.
  - 3. Additives are not permitted.
  - 4. Close container when not in use.
  - 5. Clean tools with soap and water immediately after use.

### 3.04 APPLICATION

General: Apply ACROWALL-CP materials in accordance with Acrocrete Specifications.

- A. Apply ACROBOND® substrate bonding agent (required for non-insulated concrete/unit masonry substrates) as per Specifications to areas that will receive STUCCOBASE™ mixture within 12 hours.
- B. [Secondary moisture protection barrier (Not required on unit masonry/non-insulated concrete substrates surfaces to receive the ACROCRETE STUCCOBASE™).]
  - 1. Install according to the secondary moisture protection barrier manufacturer's specifications and applicable building code requirements.
  - 2. The secondary moisture protection barrier shall be free of any damage such as holes or breaks, and must be applied to all surfaces to receive the ACROCRETE STUCCOBASE.
  - 3. Wrap the secondary moisture protection barrier into rough openings (doors, windows, etc.) to increase the level of protection to the building frame and interior.
  - 4. Coordinate work with other trades to assure proper sequencing, detailing and installation of materials.]
  - 5. Expanded polystyrene insulation board (Optional)  
The expanded polystyrene insulation board (2' x 8' nominal 1.5 PCF density, tongue and groove) shall be placed horizontally with the tongue facing upward and temporarily held in place with galvanized staples, roofing nails or (metal framing) self tapping screws.

- C. Apply to approved substrates in accordance with manufacturer's instruction and government code requirements.
- D. Lath:
- Woven/welded wire
1. Wire or lath shall be applied with minimum 25 mm (1") end laps and side laps.
  2. Furring crimps shall occur at maximum 152 mm (6") intervals each way. Furring crimps shall provide a minimum 3.2 mm (1/8") clearance from the substrate after installation.]
- OR -
- Metal lath
1. The metal lath shall be applied with minimum 13 mm (1/2") side laps and 25 mm (1") end laps.
  2. When end laps occur between supports, lace or wire ties the ends of the sheets with 1.2 mm (0.0475") galvanized annealed steel wire.]
  3. Refer to ASTM C1063 for additional information.
  4. Corrosion-resistant fasteners for lath attachment shall penetrate a minimum of 25 mm (1") into wood framing.
  5. Apply the system over steel framing [minimum No. 20 gauge, 0.912 mm (0.0359") thick]. Lath is secured to framing using No.8-18, S-12, pan head, self-tapping screws spaced a maximum of 152.4 mm (6 inches) vertical on center to studs.]
- OR -
- PERMALATH™ 1000
1. Apply PERMALATH 1000 over substrate with minimum 3" overlap at vertical and horizontal edges and overlap on flange of trim accessories. PERMALATH 1000 can be applied horizontally or vertically and should be applied such that it is flat and free of ripples, wrinkles, etc. Fastener System: type appropriate for application and substrate, as recommended by BASF Wall Systems
  2. PERMALATH 1000 Fasteners: ULP-302 or Lath Plate Mechanical Fastening Systems by Wind-Lock Corp.
    - a. Masonry: masonry type [M] expansion fastener with ULP 302 (1 3/4") diameter washer; or lath plates 25 mm (1") minimum penetration into masonry. Fastener spacing 6" o.c. vertically and 16" o.c. horizontally.
    - b. Light Gauge Steel Framing/Furring (20 Gauge): light metal type [LM] bugle head screws with ULP 302 (1 3/4") diameter washer or lath plates 16 mm (5/8") minimum penetration into framing 6" o.c. vertically and 16" o.c. horizontally.
    - c. Heavy Gauge Steel Framing (20 to 12 Gauge maximum): metal type [S] bugle head screws with ULP 302 (1 3/4") diameter washer or lath plates; 16 mm (5/8") minimum penetration into framing 6" o.c. vertically and 16" o.c. horizontally.
    - d. Wood framing: wood type [W] bugle head screws with ULP 302 (1 3/4") diameter washer or lath plates; 16 mm (5/8") minimum penetration into framing or min. 16 gauge wire staples with minimum 3/4" crown and minimum 3/4" penetration into framing.

**NOTE: Supplemental fasteners, in the framing or sheathing, can be used to secure the PERMALATH 1000 prior to application of STUCCOBASE™. Fastening systems/tools for staples are available through Senco (<http://www.senco.com>) and other manufacturers.**
- E. Trim junction
1. When two pieces of trim abut:
    - a. Set intersection of trim in a minimum 100 mm (4") bed of acceptable low module trim sealant.
    - b. Allow 3–5 mm (1/8"–3/16") gap between the abutting trim pieces. Do not overlap trim.
    - c. Attach the trim in accordance with manufacturer's specifications. True expansion joints must be fastened to the structural substrate.
  2. When two or more pieces of trim intersect:
    - a. The vertical trim piece shall be continuous with all horizontal pieces.
    - b. Miter all corners at intersections of trim.
    - c. Set intersection of trim in a minimum 100 mm (4") bed of acceptable low module trim sealant.
    - d. Allow 3–5 mm (1/8"–3/16") gap between the intersecting trim pieces. Do not overlap the trim.
    - e. Attach the trim in accordance with manufacturers' specifications. True expansion joints must be fastened to the structural substrate.

**NOTE: Control joints are recommended at a minimum of every 13.4 m<sup>2</sup> (144 ft<sup>2</sup>) and as specified by the design professional. The maximum uncontrolled length or width is 5.5 lineal meters (18 lineal feet) and a maximum uncontrolled length to ratio of 2 1/2 : 1.**
  3. Application over open framing
    - a. The weather-resistive membrane is placed over open wood or steel framing spaced a maximum of 610 mm (24") on center. Wall bracing, in accordance with the applicable code, shall be installed. Square wall corners and parapet corners, metal corner reinforcement are optional. The expanded polystyrene insulation board [610 mm x 2438 mm (2' x 8') tongue-and-groove] shall be placed horizontally with the tongue facing upward and temporarily held in place with galvanized staples or roofing nails. Self-tapping screws shall be used to temporarily fasten the board to metal framing. Vertical butt joints shall be staggered a minimum of one framing space from the adjacent courses and occur directly over framing.
    - b. The lath shall be applied tightly over the insulation board and shall be fastened through the board to wood framing with minimum 50 mm long (2"), No. 11 gauge [3.75 mm (0.148") shaft diameter, 11.1 mm (0.438") head diameter], galvanized roofing nails or No. 16 gauge [1.59 mm (0.0625") shaft diameter] galvanized staples spaced a maximum of 152.4 mm (6") on center with a minimum 25.4 mm (1") penetration into the wood framing. Staples shall have a minimum 13 mm (1/2") crown width. Stapling shall be utilized only in wood species having a minimum specific gravity of 0.42. The lath shall be fastened to all steel framing members [minimum No. 20 gauge, 0.912 mm (0.0359") thick] using No. 8-18, S-12, panhead, self-tapping screws spaced a maximum of 15 cm (6") on center to all framing. The screws shall penetrate framing at least 6.35 mm (1/4"). The wire lath shall be applied with minimum 25.4 mm (1") end laps.

**NOTE: PermaLath 1000 is not to be used over open framing.**
- F. ACROCRETE® STUCCOBASE™/STUCCOBASE PREMIX base coat: ACROWALL-CP system 2 Application (3/8"–1/2" thickness)
1. Following surface preparation and installation of the lath and accessories apply the ACROCRETE STUCCOBASE/STUCCOBASE PREMIX mixture to a thickness of 3/8" to 1/2", completely embedding the lath.

2. Use rod and darby to level the applied base coat without exposing the lath.
  3. After initial set begins, trowel or float out imperfections, voids or holes.
  4. At subcontractor's option, the double back method of application, whereby the first and second coats are applied and cured as one system, may be used. If this system is used, the second coat (brown) should be applied as soon as the first coat is rigid.
  5. Damp cure for at least 48 hours by lightly and evenly fogging the surface with water at least twice a day. Direct sunlight, hot temperatures, low humidity and windy conditions may make additional fogging necessary.
  6. Allow ACROCRETE® STUCCOBASE™/STUCCOBASE PREMIX to cure a minimum of 6 days prior to application of EPS insulation board shapes or primer and finish coat application.
- OR -
- F. ACROCRETE® STUCCOBASE™/STUCCOBASE PREMIX base coat: ACROWALL-CP system 3 Application (3/4"–7/8" thickness)
    1. Total thickness of base coats must meet code requirements for fire rated construction.
    2. Nominal plaster base coat thickness:
      - a. First coat "scratch": 3/8"–1/2"
      - b. Second coat "brown": 3/8"–1/2"
    3. Apply ACROCRETE STUCCOBASE™/STUCCOBASE PREMIX mixture with sufficient force to develop full adhesion between ACROCRETE STUCCOBASE™/STUCCOBASE PREMIX mixture and the substrate.
    4. Apply first coat to completely embed lath. Cross rake slightly to provide key for second brown coat. Coat must be uniform in thickness.
    5. Apply second brown coat to provide the required total thickness. Coat must be uniform in thickness. Rod off to desired thickness, leveled with screeds, to provide a true, flat plane. Follow this by wood floating or darbying the surface. Fill all voids and dress surface for acrylic finish.
    6. Damp cure for at least 48 hours by lightly and evenly fogging the surface with water a least twice a day. Direct sunlight, hot temperatures, low humidity and wind may make additional fogging necessary.
    7. Allow base coat to cure a minimum of 6 days prior to application of EPS insulation board shapes or primer and finish coat application.
  - G. Adhesively attach EPS insulation board shapes over cured stucco using Acrocrete ACROBASE® 60 base coat and ensure EPS is completely encapsulated in base coat and reinforcing mesh. Mesh must be completely embedded in wet base coat so that no mesh color is visible. reinforcing mesh from EPS shapes should extend a minimum of 6" onto stucco base coat. base coat should be feathered out onto ACROCRETE STUCCOBASE™/STUCCOBASE PREMIX.
  - H. Acrocrete ACROPRIMER™
    1. Apply ACROPRIMER to the ACROCRETE STUCCOBASE™/STUCCOBASE PREMIX with a sprayer, 10 mm (3/8") nap roller, or good-quality latex paint brush at a rate of approximately 4.3–6.7 m<sup>2</sup> per liter (175–275 ft<sup>2</sup> per gallon).
    2. ACROPRIMER shall be dry to the touch before proceeding to the Acrocrete finish coat application.
  - I. Acrocrete® finish coat  
 [ACROTEx] [ACROFLEX®]: [S05] [S10] [S15] [S20] [T15] [T20]
    1. Apply finish directly to the ACROCRETE STUCCOBASE™/STUCCOBASE PREMIX or ACROPRIMER™ with a clean stainless steel trowel.
    2. Apply and level finish during same operation to minimum obtainable thickness consistent with uniform coverage.
    3. Maintain a wet edge on finish by applying and texturing continually over the wall surface.
    4. Work finish to corners, joints, or natural breaks and do not allow material to set up within an uninterrupted wall area.
    5. Float finish to achieve final texture.

### 3.05 CLEANING

- A. Clean work under provisions of Section [01700] [ ].
- B. Clean adjacent surfaces and remove excess material, droppings, and debris.

### 3.06 PROTECTION

Protect finished work under provisions of Section [01500] [ ].

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## RESIDENTIAL POLICY

On one and two-family residential framed construction, BASF Wall Systems requires that the wall system selected be one that includes provisions for management of incidental moisture. The choices include water-managed EIFS, Acrowall-CP, and Acrowall-CBS. Acrowall Surfacing Systems for insulating concrete forms are also acceptable. There are no exceptions to this policy. Under no circumstances will BASF Wall Systems warrant the use of any other system on this type of construction without expressed written permission from BASF Wall Systems [Residential construction using EIFS on masonry (CMU) or poured concrete does not require the additional water management provisions described above.]

Consult BASF Wall Systems' Technical Services Department for specific recommendations concerning all other applications. Consult the Acrocrete web-site, [www.acrocrete.com](http://www.acrocrete.com) for additional information about products and systems and for updated literature.

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