Acrowall-ES
Class PB Exterior Insulation and Finish System providing a primary moisture barrier and optional secondary air/water-resistive barrier
AcroWall ES

DESCRIPTION
Acrowall-ES is an Exterior Insulation and Finish System (EIFS) that provides a durable weather-resistant primary barrier. The system offers design flexibility, aesthetic appeal and energy savings. Integrated system components include adhesive, EPS insulation board, reinforced base coat and 100% acrylic polymer finish. Finishes are available in a limitless color selection and offer performance enhancement options, including increased resistance to dirt pick-up and mildew.

Other systems options include: air/water-resistive, protection against high impact and specialty finishes that create stone-like, metallic or mottled stucco appearances.

Acrowall-ES has passed rigorous tests including Full-Scale Fire, Wind-Load, Wind-Driven Rain, and Large and Small Missiles.

Acrowall-ES features easy installation, proven durability and low maintenance.

Apply the system directly to the following acceptable sheathing:
- ASTM C1177 type sheathings, including DensGlass™ exterior sheathing, eXP™ sheathing, GlasRoc® sheathing, Securock™ glassmat sheathing and Fiberock Aqua-Tough™ sheathing
- PermaBase™ cement-board by National Gypsum and other cement-boards (ASTM C1325 Type A Exterior)
- Untreated Exposure I or exterior plywood sheathing (grade C-D or better)
- Untreated Exposure I OSB
- Gypsum sheathing (ASTM C79/ASTM C1396).

USES
New or retrofit commercial and institutional construction such as hotels, hospitals, retail, schools, multi-family apartments and condominiums, and government facilities. Acrowall-ES can be panelized to expedite year-round construction.

ADVANTAGES
- Cost-effective
- Ability to achieve any architectural style with unlimited design options
- Economical architectural detailing
- Seamless exterior blanket of insulation provides high R values, lowers heating and cooling costs
- Multiple options for impact resistance improve functional design, ease of maintenance
- Choice of cementitious and non-cementitious systems
- Plaster trims/accessories are not required for installation
- Wide selection of finish textures, 48 Standard Colors and unlimited custom colors

DESIGN CONSIDERATIONS
Expansion Joints
Required in the following locations:
- Where movement is anticipated (e.g., floor lines, canopies, carpports, porte-cochères, etc.)
- Where EIFS meets dissimilar materials (e.g., windows, doors, transitions to brick or other siding)
- Where substrate materials change
- At floor lines in wood frame construction where movement or cross grain shrinkage is anticipated
- At structural or existing expansion joints
- Minimum expansion joint size: 13 mm (1/2") or 4 times anticipated movement. Minimum 19 mm (3/4") expansion joint required for structural movement.

Horizontal Applications
Minimum slope: 1:2 with maximum width of 30.5 cm (12") [e.g. 15 cm in 30.5 cm (6" in 12") width].

Substrate
- Maximum substrate design deflection is L/240.
- Consult the framing and sheathing manufacturer for design and application considerations.

Sealants, Backer Rod, Flashing
- Approved sealant installed with approved backer rod or bond breaker tape shall be used at all transitions between EIFS and other structural elements such as windows, doors, vents, penetrations, transitions to dissimilar elements, etc.
- Flashing at windows, doors, chimneys, transitions between EIFS and roof and at other points specified shall be installed in accordance with component manufacturer’s instructions.

General
- The design wind-load shall not exceed the system’s allowable wind-load as stated in applicable code reports.
- Details shall conform with Acrocrete’s recommendations and shall be consistent with the project requirements.
- Acrowall-ES is not designed for horizontal applications.
- Use high impact mesh for ground floor applications in high traffic areas.
- Consult the framing and sheathing manufacturer for design and application considerations.
- Limit the use of dark colors to bands. Heat build up behind dark colors can adversely affect the performance of EPS insulation. Use of colors with a light reflectance value of less than 20% require the approval of BASF Wall Systems’ Technical Department.
- Do not use below grade; system must terminate a minimum of eight inches above grade.
BEST PRACTICES FOR INSTALLERS

General
- All flashing should be installed per codes prior to the installation of ACROWALL-ES.
- A mock-up of the ACROWALL-ES system showing all components should be prepared using the same tools and skills that will be used in actual construction, and the sample should be kept at the jobsite during construction.
- Pail components must be kept at a minimum of 4°C (40°F) (10°C/50°F for ALUMINA, AURORA STONE, AURORA TC-100 Finishes) during shipping and storage. A minimum temperature of 4°C (40°F) (10°C/50°F for ALUMINA, AURORA STONE, AURORA TC-100 Finishes) is required during application of all components and until completely dried.
- Protect dry (bagged) products from moisture. EPS insulation boards should be stored flat, out of direct sunlight.
- No additives are permitted to any components.
- Follow the application instructions for each component.
- Expansion joints are required: where ACROWALL-ES meets other materials; where substrate materials change; at floor lines in wood frame construction where movement or cross grain shrinkage are anticipated; and anywhere else that movement is anticipated. Expansion joints should be a minimum of 1/2" or four times the anticipated movement as determined by a design professional.
- All substrates must be clean, dry and sound without planar irregularities greater than 1/4" in 10'.

Insulation Boards
- If using optional ACROSTOP T or ACROSTOP R fluid-applied air/water-resistive barrier, refer to the product bulletin and technical bulletins for application instructions.
- All system terminations and penetrations must be back-wrapped with mesh and base coat.
- EPS board size is limited to 2' x 4'. The thickness of the board must be 3/4" to 4". The minimum thickness of EPS at any point on the wall cannot be less than 3/4". Consider this when installing reveals.
- Do not break reinforcing mesh in the reveal; offset 4–6" minimum.
- Do not align reveals with insulation board joints; offset 4–6” minimum.
- Offset from sheathing joints by a minimum of 16". Offset from corners of doors, windows and other penetrations by a minimum of 4".
- Stagger joints in a running bond pattern offset a minimum of 24".
- Interlock corners.
- Prior to installation of the base coat, entire EPS covered wall must be completely rasped to remove high and low spots and to remove dust from the surface of the EPS.
- To avoid waste or insufficient adhesion, use the proper sized notched trowel to apply adhesive to back of insulation boards.
- If using mechanical fasteners, use only those specified by BASF Wall Systems and install according to specifications. Do not overdrive mechanical fasteners. They should recess only 1/16" from surface.
- Always fill voids in insulation layer greater than 1/16" with slivers of insulation and not with base coat or other materials.

Reinforced Base Coat
- If mechanical fasteners were used to attach insulation, pre-spot each washer head with base coat.
- ACROMESH 4 Reinforcing Mesh/INTERMEDIATE 6/INTERMEDIATE 12 must overlap a minimum of 2 1/2".
- STRONG 15/HI-IMPACT 20 mesh must not overlap; butt edges together. After STRONG 15/HI-IMPACT 20 mesh are embedded in base coat, a second layer of ACROMESH 4/INTERMEDIATE 6/INTERMEDIATE 12 and base coat must cover that layer.
- Install “butterflies” of standard mesh at corners of all windows, doors and other penetrations.
- Install a second layer of Reinforcing Mesh a minimum of 4" on both sides of inside and outside corners.
- Mesh color should never be visible through the base coat.
- Special shapes must also be reinforced with base coat and reinforcing mesh.
- Always maintain a minimum slope of 1:2 up to a maximum width of 12".
- Protect work from precipitation for a minimum of 24 hours.
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Finish
• Use only stainless steel trowels.
• Avoid working in direct sunlight.
• Finishes should be applied with adequate man power, tools and staging to keep a wet edge.
• A primer tinted to the color of the finish is recommended prior to application of rilled finishes.
• Do not run finish into joints.
• Do not quit in the middle of a wall; run to natural breaks.
• Do not use different batches of finish on the same elevation.
• Protect from precipitation for a minimum of 24 hours.
• Use only sealants that are acceptable for use with this system. Acceptable sealants and backer rods or bond breakers must be installed at all transitions between this system and other wall assembly elements such as windows, doors, vents, transitions to dissimilar materials, A/C cases, and other penetrations.
• Do not apply finish over sealants.

LIMITATIONS
Not for use on one- and two-family wood framed residential construction.

KEY UPGRADES AVAILABLE:
System upgrades can include the addition of a ACROSTOP T or ACROSTOP R as a secondary air and water-resistive barrier, high-impact resistant reinforcing mesh, specialty finishes, silicone enhanced textured finishes to improve dirt pick up and mildew resistance, and tinted primers to enhance final aesthetics.

TECHNICAL SUPPORT
For answers to questions or specific recommendations about this assembly, please consult our website at www.acrocrete.basf.com or contact our Technical Services Department: Toll-free 800-589-1336.

HEALTH & SAFETY
Follow good safety and industrial hygiene practices during handling and installing products and systems. Take necessary precautions and wear the appropriate personal protective equipment as needed. Read material safety data sheets and related literature on products before specification and/or installation.

WARRANTY
Refer to the Acrocrete EIFS, Air/Water-Resistive Barrier and Coating Warranty Schedule for specific information about this product/system.

BASF warrants this product to be free from manufacturing defects and to meet the technical properties on the current Product Bulletin, if used as directed within shelf life. Satisfactory results depend not only on quality products but also upon many factors beyond our control. BASF MAKES NO OTHER WARRANTY OR GUARANTEE, EXPRESS OR IMPLIED, INCLUDING WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE WITH RESPECT TO ITS PRODUCTS. The sole and exclusive remedy of Purchaser for any claim concerning this product, including but not limited to, claims alleging breach of warranty, negligence, strict liability or otherwise, is shipment to purchaser of product equal to the amount of product that fails to meet this warranty or refund of the original purchase price of product that fails to meet this warranty, at the sole option of BASF. In the absence of an extended warranty issued by BASF, any claims concerning this product must be received in writing within one (1) year from the date of shipment and any claims not presented within that period are waived by Purchaser. BASF WILL NOT BE RESPONSIBLE FOR ANY SPECIAL, INCIDENTAL, CONSEQUENTIAL (INCLUDING LOST PROFITS) OR PUNITIVE DAMAGES OF ANY KIND.

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