

ALUCOBOND

# Product Brochure



Crystal City, VA  
ALUCOBOND PLUS: Rusted Metal, Dusty  
Charcoal II, Steel City Silver Mica  
© Sam Kittner



## Who We Are

As an industry leader, ALUCOBOND® brand aluminum composite material (ACM) has been a trusted architectural cladding for over 50 years. Sought after for its outstanding product attributes such as flatness, formability, durability, and ease of fabrication, ALUCOBOND products allow architects and fabricators to bring distinctive and exciting visions to life. PLUS, our fire retardant core has been developed exclusively to allow architects and designers to meet today's fire performance requirements set by the International Building Code (IBC) while using ACM as the material of choice.

Made in the USA, ALUCOBOND is manufactured by 3A Composites USA in a range of sizes and trend-forward colors and finishes, both stock and custom. Our array of options lend to creating inspiring architectural concepts and influential brand assets. Our Brand Identity Program offers dedicated support for stakeholder communications, expertise in color selection, specification support, a trusted fabricator network worldwide, and longevity in product and life cycle.

3A Composites USA is committed to maximizing the life of our products through adherence to ISO standards. In the production of ALUCOBOND PLUS, strenuous efforts have been implemented to reduce energy and water consumption, increase productivity, reduce waste and therefore significantly reducing CO<sub>2</sub> emissions on a continual basis.

Learn how ALUCOBOND has been *giving shape to great ideas* by leading the world in design innovation, and continually adapting to the needs of the growing architectural community.

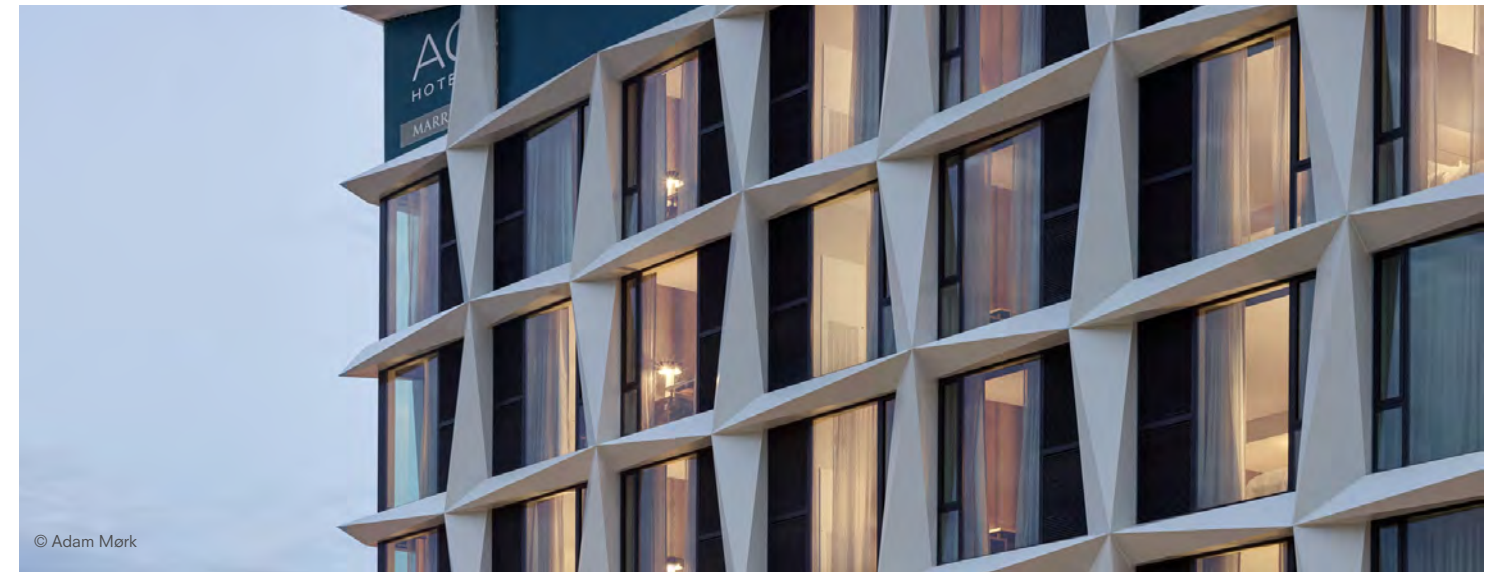


Novel South Capitol, Washington, DC © Robert Umenhofer Photography



Great Northern Way Pavilion, photo courtesy of Keith Panel Systems

## ALUCOBOND Products



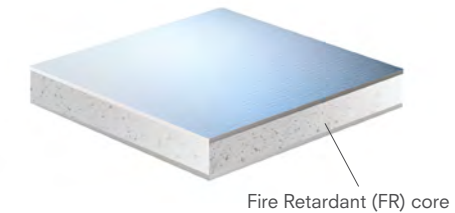
© Adam Mark

### ALUCOBOND Product Properties and Benefits:

- Flatness and Rigidity
- Lightweight
- Durability
- Custom color capabilities
- Formability
- Ease of fabrication
- Perforation capabilities
- 89 stocked ACM colors
- Complementary flat aluminum sheet colors
- Can provide contribution toward LEED points
- 100% recyclable
- Zero VOC's emitted in use
- EPD in compliance with International ISO Standards

### ALUCOBOND® PLUS

4mm ACM comprised of two sheets of smooth .020" aluminum thermobonded to a solid, fire retardant core. Developed exclusively to meet fire performance requirements while providing the benefits & versatility of ACM.



#### Product Properties

Thickness of aluminum skin	0.020" (nominal)
Product thickness	0.157" (4mm nominal)
Weight	1.56 lb/ft <sup>2</sup>
Standard sheet dimension*	62" x 196"
Maximum width**	62"
Maximum length**	400"

### ALUCOBOND® AXCENT™

A solid .040" flat aluminum sheet that offers the perfect complement to ALUCOBOND PLUS. AXCENT is excellent for columns, parapet caps, canopies, soffits, and trim.



#### Product Properties

Product thickness	0.040" (nominal)
Weight	0.56 lb/ft <sup>2</sup>
Standard width	48"
Standard length	120"

\* Exceptions to standard dimensions include mirror, print, and others. Refer to product range table on next page.  
\*\* Sheets will be fabricated to meet custom panel sizes within product range above.



## Colors & Finishes

ALUCOBOND is available in a wide-range of trend forward colors & finishes. Scan or click the QR code to explore the colors in each Collection.

### The Classic Collection



Color plays an integral role in the architectural environment; the timeless palette in our Classic Collection reflects your passion for what's possible. From classic neutrals to biophilic hues, this line offers a wide range of options to help you give shape to great ideas.

### The Spectra Collection



To add a dynamic element of fascination and movement to any architectural facade, these transitional finishes celebrate the natural color shifts that occur in the world around us – from raw natural elements to the glowing luster and sheen found in modern alloys and luxury finishes.

### The Natural Collection

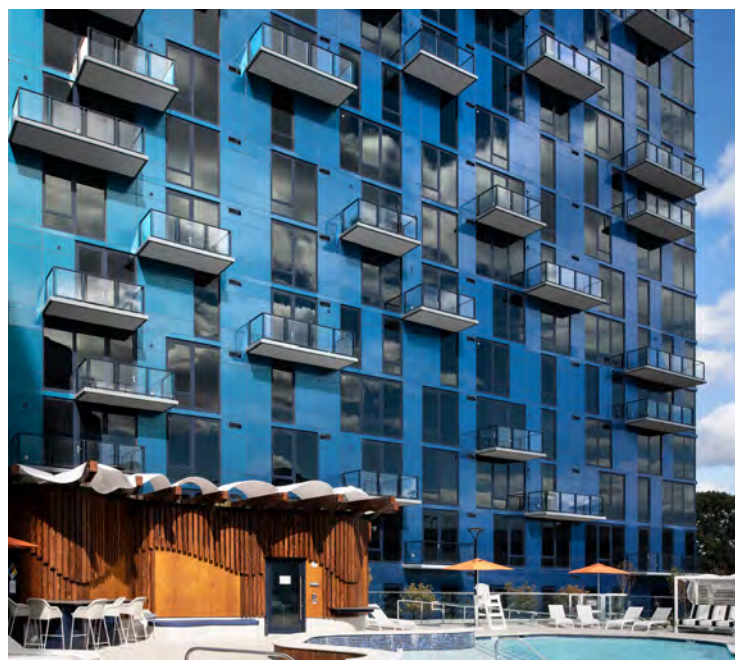


Biophilic design conceptualizes space in a way that acknowledges the human need to connect with nature. The finishes in the Natural Collection amplify the organic beauty and character of different elements & materials found in the world around us.

### The Anodized Collection



In addition to the strength and high-quality appearance that come standard with our collections, this line uses the anodizing process to enhance the intrinsic clarity and beauty of aluminum while creating a harder, smoother, more durable surface.



Arya Peachtree, Atlanta, GA, photo courtesy of MillerClapperton (above)  
St. Cloud Technical & Community College, MN © Joe Crimmings (top left)  
Exo Apartments, Reston, VA © Mark Kempf (lower left)



The Stack in Deep Ellum, Dallas, TX





## Standard Product Range

ALUCOBOND PLUS				
Thickness	4mm			
Width	40"	49.2"	50"	62"
Length	196"	146"	196"	196"
<b>Solids</b>	○		○	●
<b>Micas / Metallics</b>	○		○	●
<b>Color-Changing</b>	○		○	●
<b>Textured</b>	○		○	●
<b>Reflective</b>		●		
<b>Anodized</b>				● <sup>1</sup>
<b>Brushed</b>			○	●
<b>Prints</b>			●	

ALUCOBOND AXCENT	
Thickness	0.040"
Sheet Size	48" x 120"
<b>Solids</b>	●*
<b>Micas / Metallics</b>	●*
<b>Color-Changing</b>	○
<b>Textured</b>	○

● - Stocked ○ - On Request

\* - Most solid, mica & metallic finishes are stocked, however some are considered "made-to-order" & subject to 2000 sf minimum & lead times. Please reference the ALUCOBOND AXCENT color chart for more details.

● - Stocked ○ - On Request <sup>1</sup> - Anodized finishes are only available in 60"W x 198"L

## Paint Finishes

ALUCOBOND PVDF finishes are coated in accordance with AAMA 2605 signifying the highest performance exterior finish standard in the industry. AAMA 2605 finishes have the best chalk, humidity, and color change performance. Backed by ALUCOBOND's 20-year warranty, SMP finishes meet AAMA 2604. ALUCOBOND is backed by its 50+ year history and competitive (proven) Warranty coverage.

**PVDF (Polyvinylidene Fluoride)** Two coat PVDF paint systems are applied to solid & mica finishes which are coil-coated over a pre-treated aluminum substrate with a primer & color coat at a nominal 1.0 mil thickness. When a two coat PVDF system is used, the primer allows bonding & color consistency in the color coat to show, in lieu of having the underlying metal affect color consistency. Note, the pre-treatment is not considered one of the paint "coats." Three coat systems are solid & metallic finishes which are coil-coated over a pre-treated aluminum substrate with a primer, color coat, & clear coat at a nominal 1.5 mil thickness. The clear coat protects the aluminum flake from oxidizing & adds increased weatherability & protection.

**PVDF/FEVE** Finish consists of 2 coats of PVDF & a clear coat of FEVE. On our Spectra finishes, the FEVE coat provides a higher gloss level & depending on the viewing angle, different wave-lengths of light are reflected, resulting in an ever-changing color gradient with iridescent highlights.



Highlands Oncology Springdale, © Photos courtesy of Ace Glass Construction Corp./Ace Glass Manufacturing Corp.

**SMP (Silicone Modified Polyester)** Paint systems are a blend of polyester & silicon intermediates. SMP coatings deliver an excellent balance of exterior gloss, and color retention with resistance to stains, chalking, ultraviolet radiation, weather and humidity.

**FEVE (Fluoropolymer Based)** A transparent top coat is applied to the coil protecting the surface from the elements & preserves the aesthetic of the bare finish. Various tints can be applied to broaden the color palette & add to the aesthetics of a project.

For warranty information please [contact](#) your local ALUCOBOND Sales Manager.



## Applications

### Exterior Cladding

- ALUCOBOND's flatness, rigidity, lightweight and formability support a plethora of design intents
- Our versatility of stocking colors & finishes gives designers the freedom to mix finishes without sacrificing budget
- ALUCOBOND can withstand weather conditions while maintaining its aesthetic long-term

Esperanza Brighton Park Health Center, © Joe Crimmings (below)  
Purdue University Northwest Bioscience Innovation Building, © Mark Kempf (right)



### Soffit / Canopy

- The flatness, lightweight and rigidity of ALUCOBOND PLUS panels make it a great option for soffit and canopy applications
- ALUCOBOND AXCENT can be roll formed or pressed to add strength and create interlocking joints
- ALUCOBOND PLUS and ALUCOBOND AXCENT can also be easily ventilated to increase airflow, easily cut for lighting or signage elements, and can be curved along rounded faces
- AXCENT is available in a wide range of colors complementary to PLUS

Jolly Road Blue Bell, © Don Pearce Photographer, Inc. (top right)  
SHI International: Garza Office Building (bottom right) photography courtesy of White Construction Company



### Curtainwall and Sun Shades

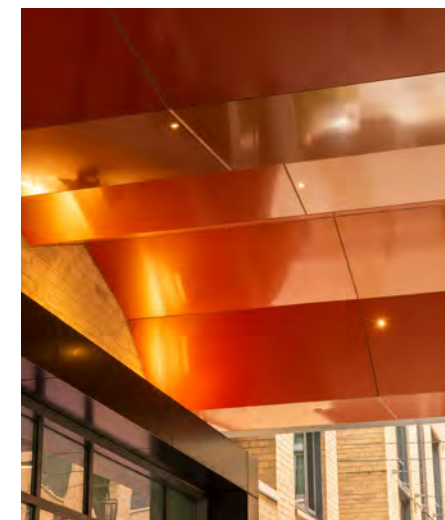
With a Class A Fire Rating, ALUCOBOND PLUS fire-retardant (FR) ACM panels are ideal for curtainwall applications and offer a variety of benefits:

- Panels are available with one side or both sides finished
- Fins can be custom designed to complement the exterior cladding and reduce solar gain
- Provides continual color flow from curtainwall to vertical ALUCOBOND panels
- Replaces glass to enhance the design aesthetic, reduce project costs
- Used in curtainwall systems that utilize structural silicone, structural tapes or pressure plate
- May be used in spandrel applications to create a unique and exciting facade

### Ceilings

- Class A fire rating makes ALUCOBOND panels appropriate for interior and exterior uses
- Custom designs can allow for back panel illumination and creative ceiling concepts
- Color-shifting finishes from the Spectra Collection are popular for dynamic ceiling applications

Novel South Capitol, © Robert Umenhofer (left)  
HSBC Centre, © Mike Chorley Photography (right)



### Interiors

- Seamless transition from exterior facade to interior design
- Dynamic color palette of 89 stock colors & finishes
- Ability to create unique customizable shapes
- Biophilic hues effortlessly complement surroundings
- Large flat panels inspire clean design
- Custom color capabilities
- Create striking modern designs
- May be used for wall cladding, feature wall, beam wrap, baffles, stairway, architectural ceiling, column cover, entry way, mechanical covering, and more

Houston Center - Lobby Renovation (right) @ Peter Molick



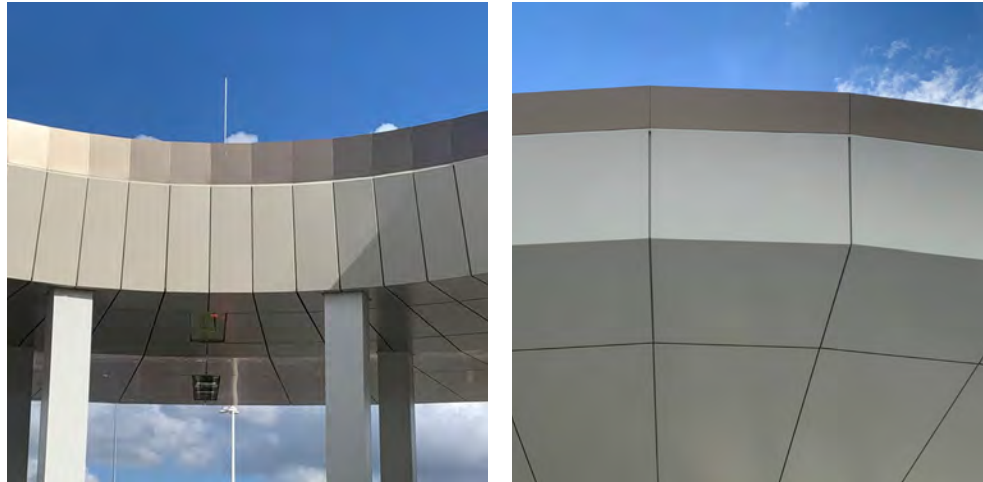


## Applications

### Flashing / Parapet Cap

- ALUCOBOND AXCENT is easily formed in a variety of machines to create the perfect cap
- ALUCOBOND AXCENT is available in a wide range of colors complementary to ALUCOBOND PLUS

METRO Northwest Transit Center (right)



### Perforation

- ALUCOBOND PLUS can be used to transform the exterior facade with perforated designs allowing for more light and creative intent
- Custom perforation designs enables new aesthetic possibilities
- Both faces of the panel can be finished with long lasting exterior coatings

Goldhauben-Webe, © Amari (right)



### Column Covers

- ALUCOBOND PLUS can be easily formed via routing or rolling, making for an ideal column cover
- Tight radii can be achieved and weather tightness can be maintained with sealed joints

SHI International Garza Office Building, courtesy of White Construction Company

## Testing & Certifications

### N. AMERICAN BUILDING CODE ACCEPTANCE

- IBC
- Miami-Dade County, Florida
- National Building Code of Canada
- State of Florida
- City of Los Angeles, California

### SUSTAINABILITY DESIGN

- LEED 3
- LEED v4.0 and 4.1
  - LCA Industry Standard
  - EPD Industry Standard

### ACCEPTED EVALUATION REPORTS

- ICC-ES: 1185
- Florida Product Approval: FL29842
- Miami Dade County NOA: 15-0923.03
- Los Angeles Research Report: 24868
- Underwriters Laboratory: 19980

### WALL ASSEMBLY FIRE TESTING

- CAN / ULC S134\*
- NFPA 285\*

\*Results are based upon tests made with ALUCOBOND PLUS panels in specific wall assemblies. For more information about assemblies that have been tested, please contact technical support: Thomas.Rogers@3acomposites.com

## Facade Systems

### Exterior Systems

#### Wet Seal Systems

The Rout and Return Wet System uses a primary silicone sealant for air and water barrier, along with a simple clip design. These systems are economical, and are recommended for use on sloping walls.

#### DBVR Systems

The drain-back ventilated rainscreen system using ACM protects the wall of the building from high and rapid temperature changes. The system is designed to block nearly all moisture, however, when water does enter the cavity it will drain through the designed weep holes or will dry naturally via the airflow of the cavity.

#### PER Systems

The pressure equalized rainscreen system creates pressure equilibrium between the cavity and the outside wind force. This prevents any capillary movement of water into the cavity. This design requires the air and vapor barrier to absorb the windload.

### Interior Systems

#### Face Fastened

A Face Fastened system eliminates the need for routing panels, and can provide a clean aesthetic when using fasteners that are painted to match ALUCOBOND panels.

#### Edge Capture

Edge Capture systems allow for the least amount of preparation of the ALUCOBOND panels, and can be a great option for feature walls or decoration.

#### Tape

Taped systems have long been used in both the exterior and interior markets. Tape systems involve shop application of hanging extrusions which are then hung onto pre-placed clips or rails. Manufacturers such as 3M and Tesa, have numerous products that have been successfully used in hanging ACM all over the world.



# Sustainability

3A Composites USA's integrated management system provides us with an important framework for implementing sustainability initiatives in our business operations. The main constituents of our integrated management system are the areas of safety, health, environment, energy and quality.

“Significant efforts to reduce energy and water consumption, increase productivity, cut down waste and therefore significantly reduce CO<sub>2</sub> emissions are made on a continuous basis.”

## Energy Reduction

Efficient handling of energy sources can have a major impact on reducing CO<sub>2</sub>, a key consideration at 3A Composites USA. This is why we have set up an energy management system in accordance with ISO 14001, with the goal of improving efficiency and reducing waste.

## Life Cycle

ALUCOBOND material does not have to be replaced several times during the lifecycle of a building. This characteristic has a very positive effect on the life cycle assessment (LCA) of a building. A plethora of applications allow architects to offer inspiring and innovative designs while meeting the standards of sustainable planning.

## Recycling

ALUCOBOND can be easily and homogeneously dismantled and returned to the reusable material cycle. ALUCOBOND is 100 % recyclable, i.e. the core materials and aluminum skins are returned to the material cycle and used to produce new material. It is the high material value of aluminum which provides the most important recycling impetus for the economy. Aluminum is recyclable to an unlimited extent without losing its characteristics.

## VOC and SVOC Emissions

ALUCOBOND PLUS panels are coil-coated in a factory that captures and destroys volatile organic compounds (VOC's). This process is accomplished using a regenerative thermal oxidizer in our facility's paint line. By removing VOC's in the factory, there is no need for field coating and accompanying VOC's.

## LEED Certification

Since LEED's introduction in 1998 it has become the most recognizable green building program in the world. LEED focuses on constructing buildings that have minimal impact on the environment during construction, occupation and reclamation, and recognizes that utilizing recycled materials is an important part of minimizing environmental impact.

The recycled aluminum content of ALUCOBOND PLUS and available EPD can provide contribution toward earning LEED points. This recognition is the driving force for using ALUCOBOND PLUS material.



Confidential Commercial Building in Crystal City, VA  
LEED Platinum Certified  
© Sam Kittner





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