

Stop hurricanepropelled debris in its tracks



**Dedicated to your Success** 



# **A Category 3 is coming.** What building panels do you want on your façade?

The devastating power of hurricanes has been demonstrated in shocking ways in recent years, as damage caused by windborne debris has destroyed countless commercial structures—shattering the lives and livelihoods of thousands of people.

But now there's a panel system that can stop hurricane-propelled debris in its tracks. *Without heavy backer materials.* 

New Reynobond with KEVLAR<sup>®</sup> panels combine all the weight and flexibility benefits and new, sustainable paint finishes of Reynobond with the impact-resistant strength that can only come from KEVLAR<sup>®</sup>.

## Lightweight. Flexible. And five times stronger than steel.

Celebrated around the world as the lifesaving material in bullet-resistant vests and body armor, DuPont<sup>™</sup> KEVLAR<sup>®</sup> is five times stronger than steel on an equal weight basis.

By adding a thin layer of KEVLAR<sup>®</sup> fabric to Reynobond's polyethylene core, Alcoa has created the only light, flexible aluminum composite panel that can withstand hurricane-propelled debris and similar types of impact.

#### **Miami-Dade County Approved**

Reynobond with KEVLAR<sup>®</sup> is the only standalone aluminum composite material that meets the stringent requirements of the Miami-Dade Building Code\*. Installed utilizing Alcoa-designed extrusions, it is engineered to sustain hurricane-force winds while passing small and large missile impact tests in Alcoa-sponsored trials. (Miami-Dade County, Florida NOA No 06-1025.03)

\* The Miami-Dade Building Code stipulates that panel systems withstand the impact of a 9-pound 2x4 timber traveling at 50 feet per second.

## Easy to use. Easy to maintain. Affordable to install.

Reynobond with KEVLAR® meets the most complex design specifications such as angles and curves, while offering the flat, smooth and consistent surface that can only come from aluminum composite material. And because it's available in standard Kynar®/PVDF resin-based paint systems with 20-year performance warranties, maintenance costs are lower than for concrete, brick and stucco.



Reynobond with KEVLAR<sup>®</sup> installed with the Alcoa-designed extrusions is the first and only aluminum composite panel system to eliminate the

need for protective backer materials such as plywood, steel or concrete. Panel

modules can be shop-fabricated and quickly installed onto structural steel studs on the jobsite. This not only decreases the material cost of installation but also reduces on-site labor requirements—leading to a faster installation with costs comparable to, and often less than, those of brick, EFIS and stucco.

## A flexible installation solution.

Designed to withstand hurricane-force winds as well as hurricane windborne debris, the Alcoa-designed extrusions can be fabricated into either a wet seal or aesthetic dry seal joint condition using the same extrusions. The system also allows the flexibility to adjust the joint width to the design specification.

Wet Seal Version	Joint Widths of 1/2" and 3/4" possible		
Dry Seal Version	Joint Widths of 3/4" and 1-1/2" possible Note: Dry Seal version requires a bead of caulk in the panel joint creases for Miami-Dade County Product Compliance. Please see the official product approval for details.		
Where to Purchase	The Alcoa-designed extrusions, approved by the Miami-Dade County Product Compliance Board for use in conjunction with Reynobond with KEVLAR <sup>®</sup> , are available for direct purchase from distributors. Please contact your Reynobond sales manager for details.		



## Reynobond<sup>®</sup> with KEVLAR<sup>®</sup> Production Information

Product Thickness	4 mm	
Product Core	Extruded polyethylene core and KEVLAR® fabric	
Available Widths	62" (1575 mm) / 50" (1270 mm)	
Available Lengths	48" – 243"	
Available Colors	All standard Reynobond colors are available. Custom colors available by inquiry.	
Minimum Quantity	10 panel minimum in conjunction with a production run of same color & width.	
System FAQs	• Reynobond with KEVLAR <sup>®</sup> is approved for large and small missile impact protection for	
	building surfaces below 30 feet in height as stipulated in the Miami-Dade County Building Code.	
	• Both standard Reynobond ACM and Reynobond with KEVLAR® are approved for applications	
	above 30 feet in height where small missile impact protection is required.	
	• For buildings requiring Miami-Dade County Building Code compliance, Reynobond with	
	KEVLAR® must be installed using the Alcoa-designed extrusions with proper fastening and	
	sealing as stipulated in the product approval. To view the animated installation sequence	
	of the panel system, please visit www.reynobond.com/kevlar.	
	• Reynobond with KEVLAR <sup>®</sup> can be used on the bottom two floors of a structure where	
	large missile impact protection is required, and matched with standard Reynobond on	
	upper floors where only small missile impact protection is required.	

#### **Applications**

	Reynobond with KEVLAR <sup>®</sup>	Alcoa-Designed Extrusions	Design Pressure
Façades < 30 feet in height			
Large Missile Impact Protection Required			
over Steel Stud Structure 16" on Center	Required	Required	Approved 120 psf
over Steel Stud Structure 24" on Center	Required	Required	Approved 90 psf
Façades > 30 feet in height			
Small Missile Impact Protection Required			
over Steel Stud Structure 16" on Center	Approved Use	Required	Approved 120 pst
over Steel Stud Structure 24" on Center	Approved Use	Required	Approved 90 psf

#### Visit www.reynobond.com/kevlar for:

- Engineering Properties
- Impact Test Footage
- Miami-Dade County Notice of Acceptance
- Application Charts and more

#### **Alcoa Architectural Products**

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