

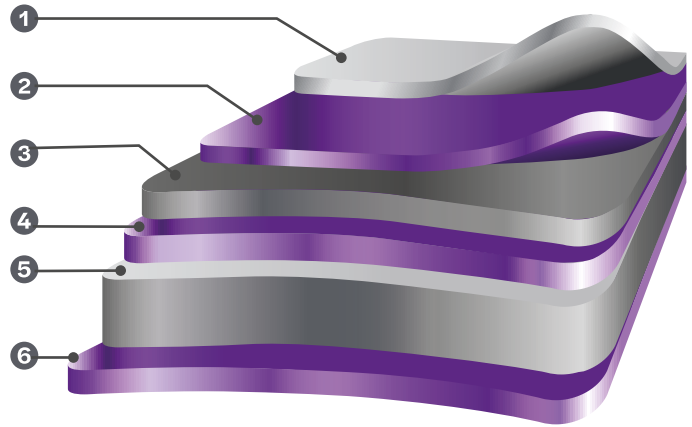
# Technical

## Manual

## Product Composition

### TYPICAL COMPOSITION

- ① Protective Film
- ② Clear Coating Finish Dependent
- ③ PVDF Colored Coating
- ④ Primer Coating
- ⑤ 3mm Aluminum
- ⑥ Chromate Conversion Coating



The material is rigid, resistant to blows, breakage and pressure, and has high bending, buckling and breaking strengths.

## Product Weight

Weight		
<b>Vitraplate</b>	3mm (1/8")	1.78 lb/ft <sup>2</sup> [8.7 kg/m <sup>2</sup> ]

## Product Tolerances

<b>Width</b>	(+1/2" / -1/8")
<b>Length</b>	(+2" / -0)
<b>Thickness</b>	+ - 0.18mm
<b>Bow</b>	Max 0.5% of length and/or width
<b>Squareness</b>	Max 0.196" (4.97mm)
<b>Surface Defects</b>	The surface shall not have any irregularities such as dents, scratches and other imperfections in accordance with our quality assurance.

## Panel Sizes

Dimensions	
<b>Width</b>	Standard: 48", 60", 62" (1219mm, 1524mm, 1574mm)
<b>Length</b>	Standard: 122", 146", 196" (3099mm, 3708mm, 4980mm)

## Technical Data

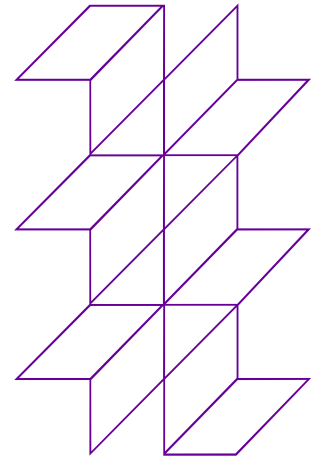
Standards	Description	Test Standard	Result
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### PROPERTIES

ASTM E136	Fire Performance of 3003 Aluminum	$\Delta T < 86^{\circ}\text{F}$	PASS
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### THERMAL PERFORMANCE

ASTM D696	Coefficient of Linear Expansion	$13.8 \times 10^{-6} \text{ in/in/}^{\circ}\text{F}$ (Aluminum)	
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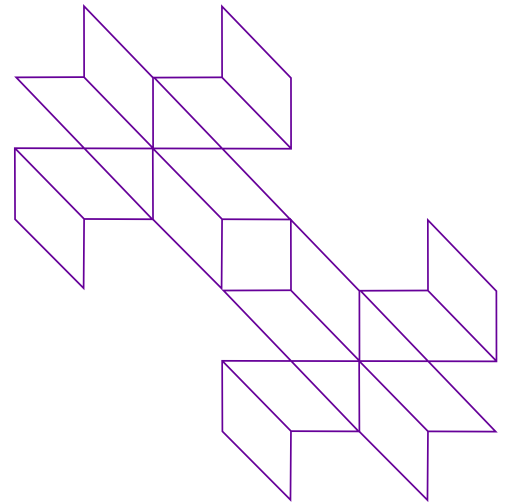
## Technical Data – AMMA 2605 Standard PVDF Coating

PVDF Coating	Descriptions	Test	Test Result
ASTM B117	Salt Spray Resistance	5% salt fog at 95°F	Passes 4000 hrs. Less than 1/16" avg creepage from scribe. None or few #8 blisters
ASTM D523	Specular Gloss Test	Standard @ 60°	Varies per finish
ASTM D1308	Alkali Test	10%, 25% NaOH, 1hr	No Effect
ASTM D714	Blistering of Paint Test	100% Relative Humidity @ 95°F	Passes 4000 hrs.
ASTM D2244	Exterior Exposure	10 years @ 45° South Florida	PASS - Max. 5 fade
ASTM D2247	Water Resistance	100% Relative Humidity @ 95°F	No #8 blisters
ASTM D2794	Reverse Impact	1.5 x metal thickness (Aluminum)	No cracking or adhesion loss
ASTM D3359	Adhesion	Reverse impact 1/16" crosshatch	No adhesion loss
ASTM D3363	Film Hardness	Pencil Test F - 2H	PASS
ASTM D4145	Prepainted Metal Coating Flexibility	T - Bend	0 - 2 T - Bend, No pick off
ASTM D4214	Chalk Resistance	10 years @ 45° South Florida	Pass - Max. 8 Chalk

## Quality Control

Our dedication to fulfilling our customer’s expectations is reflected in our superior quality control system, beginning at the point of specification and continuing through to delivery of our guaranteed products. All activities are carried out in a manner that:

- uses the framework of ISO9000 Quality Standards to verify the quality of our systems
- ensures that our products and services are of the highest standards
- create continuous improvements to our product through the application of the best quality practices.



## System-Tested Solutions

Complies to AAMA 508 and 509 when installed with Arrowhead and meets the test protocols TAS201, 202, and 203 in accordance with the Florida building code for the high velocity hurricane zone and Miami Dade County requirements.

AAMA 508 PRESSURE EQUALIZED ARROWHEAD RAIN SCREEN			
Standard	Test	Test Standard	Result
ASTM E283	Air Leakage of Test Buck (without panel system installed)	0.11 cfm/ft <sup>2</sup> min. 0.13 cfm/ft <sup>2</sup> max.	PASS
ASTM E1233	Cyclic Static Air Pressure Differential (pressure cycling)	Cycle Time Lag 0.08 sec max. Cycle Pressure Difference 12.5 psf max.	PASS
			PASS
ASTM E331	Static Water Penetration	3.20 ft <sup>2</sup>	PASS
AAMA 501.1	Dynamic Water Penetration	3.20 ft <sup>2</sup>	PASS
ASTM E330	Uniform Load Deflection and Uniform Load Structural	L/175 of Stiffener Length	PASS

AAMA 509 DRAINED AND BACK VENTILATED ARROWHEAD RAIN SCREEN			
Standard	Test	Lean Results	Flex Results
ASTM E283	Air Leakage	V1	V3
ASTM E331	Static Water Penetration	W1	W1
AAMA 501.1	Dynamic Water Penetration		

## Warranty

A product warranty of up 20 years is provided when installed by a licenced installer. An MCM coating warranty is issued on a project specific basis and is available up to 30 years per Fairview architectural approval.



It is the responsibility of the Architect, Building Owner, General Contractor, Installer or Fabricator to ensure that the appropriate tests have been carried out on the final assembly and that the materials meet the national, regional and local building codes and regulations. As the supplier, Fairview can only offer test reports for Vitraplate and any tested wall assembly. Fairview is not responsible for determining if a variation in the wall assembly will meet the test standards.

Technical Data contained in this document is accurate at the time of writing 03/01/2020. In the event more information is required please contact the Fairview office on 860-242-2711 or email: [helpdesk@fairview-na.com](mailto:helpdesk@fairview-na.com)

