

Understanding the Comparison of FEVE & PVDF Coatings

Performance & Application Comparison

Features	FEVE (Fluoropolymer)	PVDF (Fluoropolymer)
Available Colors	Wide range of solid mica finishes	Wide range of solid mica finishes
Available Gloss Ranges & Finishes	Matte & Texture (5%-25% gloss*) *ZPS recommended*	Matte only, typically 25% to 35% gloss
Third-party Certifications	Qualicoat Class-3 AAMA2605 test reports	AAMA2605 test reports
Warranty (decorative)	Up to 25 years	Up to 25 years
Repair and Maintenance	Liquid repair coatings available to match original	Liquid repair coatings available to match original
Metal Pretreatment	Non-tox environmentally safe non-chromate based systems	Traditionally chromate based systems
Solvent Content	0%	Up to ≈ 65%
VOC Emissions	Solvent Free-Zero	Typically 60%-70% VOC
Green/Sustainability	Superior	Good
Number of Coats Req'd.	1	2-4 (typically 2)
Tolerance	Wider application tolerance at ambient temperature	Depends on control of ambient temperature & solvent content
Custom Sample Color Matching	≈ 2-4 Weeks	≈ 2-4 Weeks

What is FEVE?

FEVE (Fluoroethylene Vinyl Ether) is a premium high-performance coating for architectural metals, that delivers superior UV resistance, weather durability, and long-lasting color protection — making it ideal for exterior metal panels.



AAMA 2605

FEVE meets AAMA 2605 specifications.

What is PVDF?

PVDF (Polyvinylidene Fluoride) is a premium high-performance coating for architectural metals, offering excellent UV resistance, durability, and long-lasting color protection against chalking, fading, and corrosion.



AAMA 2605

PVDF meets AAMA 2605 specifications.

Key Differences:

Durability: FEVE offers exceptional abrasion and scratch resistance, making it ideal for high-traffic areas.

Application: The main difference between PVDF and FEVE is simply how they are delivered to the material. The ZPS aluminum panel would be considered the material substrate.

Legacy vs. Innovation:

- PVDF = Aesthetic with proven reliability.
- FEVE = Next-generation flexibility and aesthetics.

What are VOC's?

VOCs (Volatile Organic Compounds) are carbon-based chemicals that easily evaporate into the air, contributing to pollution and potential health risks.

How are they measured?

VOCs are generally calculated as the weight of volatile compounds that evaporate, divided by the volume of coating/product.

Why Do VOCs Matter?

- **Health:** High VOC levels can cause irritation, headaches, or respiratory issues.
- **Environment:** VOCs contribute to smog and ozone formation.
- **Regulation:** Agencies like the EPA and SCAQMD set strict VOC limits.
- **Sustainability:** Green building programs (e.g., LEED) reward low-VOC materials.