



Finished to Last: The Advantage Behind Euroline's Coating Standard

Euroline Steel Windows and Doors are protected by a multi-step finishing system designed to preserve both performance and appearance over time. Each component begins with white-metal sandblasting followed by thermal-sprayed zinc metalizing, where molten zinc is applied directly to the steel to create a chemical bond and provide anodic corrosion protection beneath the paint system. For projects near the ocean or other high-corrosion environments, Euroline offers a zinc-aluminum alloy metalizing option that provides enhanced resistance to salt exposure. This protective layer is invisible once finished but plays a critical role in extending the life of the product and protecting the steel beneath the surface.

After metalizing, components are carefully prepared and coated using the Matthews Paint architectural finishing system, a high-performance coating widely used for demanding exterior applications. A two-coat epoxy primer and two-coat Urethane topcoat provide long-term durability, color stability, and a refined architectural sheen. Each part is allowed to properly cure and is inspected for finish consistency, thickness, and adhesion, ensuring every Euroline product delivers the lasting beauty, craftsmanship, and reliability expected in luxury residential construction.



Coating & Finish Process

A beautiful finish should also be a durable one. Every Euroline window and door is protected through a multi-step coating system designed to maximize adhesion, corrosion resistance, and long-term performance.

1. **Surface Preparation Steel** components are sandblasted to a NACE 1 / SSPC-SP5 white-metal finish, removing contaminants and creating the ideal surface profile for coating adhesion. Surface cleanliness and profiles are verified prior to coating.
2. **Thermal Spray Zinc Metalizing** Using oxy/fuel thermal spray metalizing guns, molten zinc is applied directly to the steel substrate, creating a strong chemical bond and anodic rust protection. This process extends product longevity while providing a superior surface profile for paint adhesion without the heat distortion, vent holes, or surface inconsistencies associated with hot-dip galvanizing.

Coastal Protection Option:

For coastal or high-corrosion environments, Euroline offers an 85% zinc / 15% aluminum alloy wire, providing enhanced corrosion resistance in chloride-rich environments. Metalizing thickness is applied at 1.5–3.5 mil average thickness and verified.

3. **Straightening & Fitment Control** Components are inspected and straightened to ensure parts are true, plumb, and level, supporting proper assembly and glass fitment.
4. **Pre-Paint Preparation & Sealing** Parts are prepared according to documented work instructions and sealed using PPG Top Gun 200XI Siliconized Acrylic Sealant.
5. **Matthews Paint System Application** Euroline uses the Matthews Paint architectural coating system, recognized for durability, color stability, and exterior performance. Paint is mixed per manufacturer requirements and applied using a 3M™ Performance Spray Gun.

The coating system includes:

- Two coats epoxy primer
- Two coats Urethane topcoat
- Required dry time between coats
- 48-hour cure period

This multi-layer system protects the steel while maintaining a refined architectural finish.

6. **Quality Control & Verification** All items are inspected to ensure a consistent, durable finish before production continues.

Finished components are inspected to Euroline standards, including:

- Gloss meter sheen verification
- Film thickness measurement (DeFelsko gauge)
- Cross-hatch adhesion testing



Why Coating Method Matters on Complex Steel Profiles

Geometry and film build control

Steel windows have complex profiles — thin sight lines, intricate corners, welds, and deep recesses. Liquid paint atomizes and flows into these areas uniformly. Powder coating relies on electrostatic attraction and oven cure, which can cause uneven film build on sharp edges (the "Faraday cage" effect) and thin coverage on internal corners — exactly where corrosion starts.

Thinner, more precise coatings

Liquid paint can be applied at tighter mil thicknesses, which matters on architectural steel where tolerances are tight and hardware fits must be exact. Powder adds more mass and can affect how sashes, hinges, and hardware seat.

Adhesion over complex substrates

High-quality steel windows go through multi-stage pretreatment (Euroline uses a zinc phosphate coating). Liquid primers are formulated to bond intimately with these pretreatments and provide a corrosion-inhibiting base layer — something that's harder to replicate reliably with powder on thin architectural sections.

Color consistency and finish quality

Liquid coatings offer superior UV and chalk resistance over decades, which is critical for luxury architectural applications. They also give finishers finer control over sheen level and color matching, which matters when you're coordinating finishes across windows, doors, hardware, and adjacent materials.

Repair and touch-up

If a liquid-painted frame is scratched or damaged on a job site, it can be touched up in the field with a matched liquid product. Powder coating can't be meaningfully repaired in the field — it requires returning to a coating shop.