

Architectural Paint Data Sheet



High-performance fluoropolymer resin-based coatings may be defined as a thin layer of plastic film containing resin, binder and pigments that is applied to the surface of an object to provide protection and a decorative organic coating. The exact composition of a particular paint coating is often complex and proprietary.

Fluoropolymer resin-based coatings provide protection against weathering, aging and pollution on buildings around the world. The capability of these coatings to deliver long-lasting durability is unmatched in the industry.

Linetec In-House Blending

The in-house blending laboratory allows Linetec to match colors and blend paints without having to wait for the paint suppliers to blend and deliver them to Linetec. Linetec's blending lab has six individual mix and match color systems, encompassing the three leading high-performance paint manufacturers, giving us the ability to meet or exceed all AAMA paint specifications: 2603, 2604 and 2605. Linetec's color intermix system holds over 50,000 unique colors in its database, with the ability to match almost any color in-house. This paint blending system give us the ability to fully control the color match, ensuring customers receive the best color consistency possible.

Paint Process

All Linetec facilities utilize advanced equipment and techniques. Our facilities have a thorough tracking system that allows us to monitor the progress of individual order through every step of order entry, receiving, processing and packaging, assuring that every order receives high visibility and individualized attention.

Unlike batch pretreatment systems that group your products together and immerse them into a static dip tank, Linetec utilizes a dynamic power spray pretreatment system. Your products are racked individually in the staging area and continue through the five stage 130-foot long power washer that cleans and treats them in accordance with AAMA & ASTM specifications.

- Stage 1 High temperature acid clean, etch and de-smut
- Stage 2 Ambient rinse
- Stage 3 Amorphous chromium phosphate conversion coat
- Stage 4 Ambient rinse
- Stage 5 Final rinse with R.O. water
- Dry Off Gas Convection Oven

Without a proper pretreatment, delamination will likely happen within the first year of installation. To prevent, and warranty against, this type of failure a chrome-type pretreatment is recommended.



Products are racked horizontally on a 960-foot long overhead conveyor that travels up to 24 feet per minute. All parts have unique racking methods based on the exposure of the material. Racking is a critical step in the process to ensure the automated spray bells and the painters can get good coverage in all exposed areas.

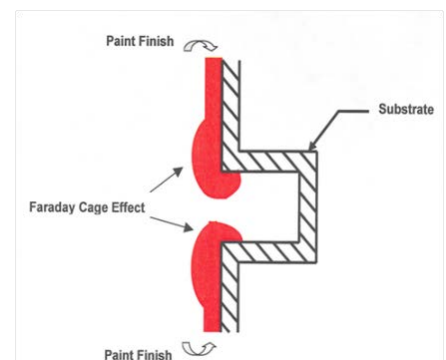
Linetec has five pairs of booths stationed online in the paint application process.

Booths 1 & 2 are used to apply the primer coat with electrostatic rotary atomizing bells.

Booths 3 & 4 are used to apply approximately 70% of our total coating. We have three automatic rotary atomization bells in each booth. Our state-of-the-art systems use horizontal and vertical electric eyes to control each bell's proximity to your product. This, coupled with the automatic color changes and versa view control panels that control all of the bell operations, provide Linetec the capability to apply the best finish in the industry. Our rotary atomization bells (automatic spray equipment) serve as our primary paint application as they provide the best flexibility, efficiency, and consistent quality possible.

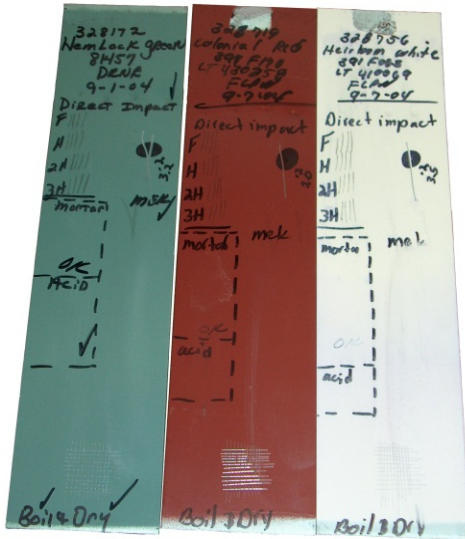
Booths 5 & 6 are manual electrostatic hand spray booths. The location of these booths behind our primary bell booths allow us to paint those areas the automatic equipment cannot reach. Our topcoat painters are skilled craftsmen.

Booth 7 & 8 are electrostatic bell booths configured the same as Booths 3 and 4 to give us the flexibility to paint many different types of profiles and meet the diverse requirements of our customers. Booths 9 & 10 are manual electrostatic and non-electrostatic hand spray booths. These booths are used to apply a clear coat when required, and also to give our applicators the ability to reinforce or "target shoot" those areas that are more difficult to paint because of recesses or areas affected by Faraday Cage.



Faraday Cage Effect

After emerging from the paint coating booths, your product is conveyed through a flash-off area and into our 200-foot long, four-stage gas powered convection oven.



QA Test Panels 1

After the paint has cured, material is inspected by our quality assurance team for color, gloss, mil thickness, appearance and multiple other performance specifications.

Architectural Paint Types

Linetec is a fully approved and licensed applicator of PPG, Valspar, Sherwin Williams and Akzo Nobel, the leading manufacturers of high-performance architectural fluoropolymer coatings, often referred to as Kynar 500® PVDF resin-based coating.

Linetec offers a variety of architectural paints including 70% PVDF resin-based coatings, which meets the AAMA 2605 specification, 50% PVDF resin-based coatings, which meet the AAMA 2604 specification and baked enamels which meet AAMA 2603.

Beyond the 2 & 3-coat standards, mica and metallic paint coatings available, Linetec also offers several unique finishing solutions that can be a distinctive design solution for your project. Linetec Specialty Finishes include: spattercoat, terra-cotta coatings, antimicrobial paint coatings, and NOVA effects finishes.

Strengths of High-Performance Paint Coatings

- Color Retention (UV resistance)
- Salt-spray resistance
- Vast array of color choices
- Paint protects and maintains the structural integrity of the aluminum
- Field touch-up / repainting capabilities
- Small-batch and custom color capabilities - fast and cost effective

Paint Warranties

While Linetec warranties finishes for a specified amount of years, many more years of service life should be expected. "Kynar 500®" PVDF resin-based finishes are tested in the most extreme conditions possible for adhesion, chalk, fade and gloss (the primary things warranted in a



South Florida Test Fence

paint finish.) The standard testing grounds are in south Florida where the sun, salt air and humidity are the most extreme in the country.

Projects painted by Linetec, utilizing liquid PVDF resin-based coatings, are warranted by the strength of both Linetec and the paint manufacturer. Linetec's documented testing allows us to offer warranties of 10 years, on high-performance (AAMA 2605) coatings, with confidence that your product will perform as intended.

In some cases, with prior approval and a minimal up-charge, Linetec can offer an extended warranty up to 20 years on AAMA 2605 coatings.

We warrant that the finish will not chip, crack, or peel (loss adhesion), chalk, or color change/fade.

AAMA Specifications

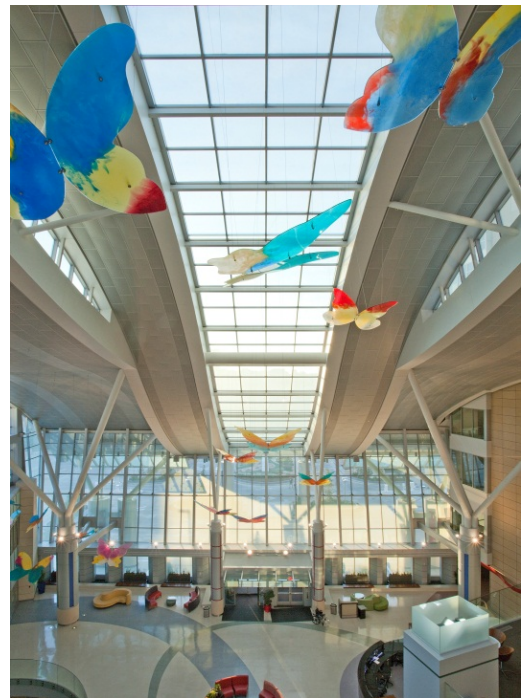
In order to ensure the paint performance expected for an architectural / commercial application, AAMA 2605 specification should be referenced along with the paint color.

Beyond the stringent standards and regulations, Linetec offers a [downloadable guide spec](#) with specifiable differences that contribute to a projects long life, durability and sustainability.

AAMA 2605 is the high-performance exterior specification. A paint meeting this specification would be a 70% fluoropolymer resin-based coating. These finishes exhibit outstanding resistance to humidity, color change, chalk, gloss loss and chemicals.

AAMA 2604 is an "intermediate" specification. A paint meeting this specification would be a 50% fluoropolymer. This finish will provide good color and gloss retention. It also will provide good hardness and abrasion resistance, good for high-traffic areas.

AAMA 2603 is typically an interior specification. These baked enamel coatings are harder than the fluoropolymer coatings and often are used for interior application where color retention is not required, they have poor resistance to color fading and chalking.



AAMA Specifications for Paint

Specification	2603	2604	2605
South Florida Weathering:			
Color retention	1 year: "slight" fade	5 yrs: Fade = 5 Delta E	10 yrs: Fade = 5 Delta E
Chalk resistance	1 year: "slight" chalk	5 yrs: Chalk = 8	10 yrs: Chalk = 8
Gloss retention	No specification	5 yrs: 30% retention	10 yrs: 50% retention
Erosion resistance	No specification	5 yrs: 10% loss	10 yrs: 10% loss
Dry film thickness	0.8 mils minimum	1.2 mils minimum	1.2 mils minimum
Pretreatment System:	Chrome or Chrome Free *	Chrome or Chrome Free *	Chrome or Chrome Free *
Accelerated Testing:			
Salt Spray	1,500 hours	3,000 hours	4,000 hours
Humidity	1,500 hours	3,000 hours	4,000 hours

Linetec is 100% compliant of all AAMA specifications. [AAMA's Certification Program Verified Components List](#) is a complete list of window and door component manufacturers who have submitted samples for testing and those samples were found to be in full compliance with the applicable specification.

For detailed spec information or to purchase AAMA specifications visit www.aamanet.org. All AAMA documents may be ordered through the Public Store



Proud Member

Linetec is a longstanding AAMA member. AAMA is the source of performance standards, product certification and educational programs for the fenestration industry.



For more information contact us at sales@linetec.com, www.linetec.com or 715-843-4100