



2049 S.W. Poma Drive
Palm City, FL 34990

Office (772) 283-0099

CGC 1514264

Fax (772) 283-7540

SECTION 05720 Aluminum Handrails and Railings: Sample Specifications

2.06 ALUMINUM FINISHES

- A.** E.S.P. applied (1) coat Super-durable Polyester thermosetting resin over pre-treatment bond coating. Aluminum shall be cleaned using a (6) stage non-chrome conversion pre-treatment process. 1.) Product shall be pre-treated utilizing a concentrated heated acidic cleaner to clean, degrease, de-smut, deoxidize and etch the surface. 2.) Product shall then be sprayed with a less concentrated acidic cleaner to further de-smut and etch the surface. 3.) Product shall then be sprayed and rinsed with water treated through a reverse osmosis, ultraviolet, multi-stage filtration process. 4.) Product will continue to be rinsed of impurities with water treated through a reverse osmosis, ultraviolet, multi-stage filtration process. 5.) En-route to the final non-chrome sealer, the product shall be misted with pure water treated through a reverse osmosis, ultraviolet, multi-stage filtration process to prevent from drying prior to application of seal coat. 6.) Product shall then be treated with a non-chrome (titanium & zirconium) conversion coating to seal and eliminate oxidation. Paint to be 1.5 - 3 mils. Paint shall be baked on at 392 degrees for a minimum duration of 15 minutes. Paint to be Tiger Drylac "Series 38" Super-durable Polyester thermosetting resin or equal.
- i.** Powder coatings available in POMA CONSTRUCTION CORP. standard colors and manufacturers standard colors.
 - ii.** Tiger Drylac "Series 38" system or equal meet **AAMA 2604** specifications and have a 5 year durability rating for projects located (5) miles or more from coastal regions. Projects located within (5) miles from coastlines shall carry a (1) yr durability rating.
- B.** E.S.P. applied (2) coat Super-durable Polyester thermosetting resin over pre-treatment bond coating and base prime coat. Aluminum shall be cleaned using a (6) stage non-chrome conversion pre-treatment process. 1.) Product shall be pre-treated utilizing a concentrated heated acidic cleaner to clean, degrease, de-smut, deoxidize and etch the surface. 2.) Product shall then be sprayed with a less concentrated acidic cleaner to further de-smut and etch the surface. 3.) Product shall then be sprayed and rinsed with water treated through a reverse osmosis, ultraviolet, multi-stage filtration process. 4.) Product will continue to be rinsed of impurities with water treated through a reverse osmosis, ultraviolet, multi-stage filtration process. 5.) En-route to the final non-chrome sealer, the product shall be misted with pure water treated through a reverse osmosis, ultraviolet, multi-stage filtration process to prevent from drying prior to application of seal coat. 6.) Product shall then be treated with a non-chrome (titanium & zirconium) conversion coating to seal and eliminate oxidation. Prime coat to be applied between 1.5-3 mils and Paint between 1.5-3 mils. Prime coat to be Tiger Drylac "Dryprotector 69/7000" or equal. Prime coat shall be half cured prior to application of top coat. Paint shall be baked on at 392 degrees for a minimum duration of 15 minutes. Paint to be Tiger Drylac "Series 38" Superdurable Polyester thermosetting resin with or equal.
- i.** Powder coatings available in POMA CONSTRUCTION CORP. standard colors and manufacturers standard colors.
 - ii.** Tiger Drylac "Series 38" system with "Dryprotector 69/7000" or equal meet **AAMA 2604/05** specifications and have a 10 year durability rating for projects located (5) miles or more from coastal regions. Projects located within (5) miles from coastlines shall carry a (5) yr durability rating.

- C. E.S.P. applied High Performance Fluoropolymer Polyvinylidene Fluoride (pvdf) "Kynar" finish. Aluminum railings shall be cleaned with inhibited chemicals and the surface shall be chemically converted to amorphous chromium phosphate to conform with ASTM d 1730. Type b, method 5, prior to coating. Apply manufacturers 2-coat thermocured system composed of specially formulated inhibited primer and fluoropolymer color coat with color coat containing not less than 70% (pvdf) resin by weight. Paint to have 1.0 -1.2 mils dry film thickness. Paint shall be baked on at 475 degrees for a duration of 10 minutes. Substrate temperature shall reach 450 degrees for a duration of 5 minutes. Paint to be "PPG'S" Duranar High Performance (pvdf) system or equal.
 - i. High Performance Fluoropolymer (pvdf) "kynar" finishes are available in POMA CONSTRUCTION CORP. standard colors and manufacturers standard colors. Paint to be "PPG'S" Duranar High Performance (pvdf) system or equal which meet **AAMA 2604/05** specifications and have a 5 year durability rating.

- D. E.S.P. applied High Performance Fluoropolymer Polyvinylidene Fluoride (pvdf) "Kynar" finish with XL coating. Aluminum railings shall be cleaned with inhibited chemicals and the surface shall be chemically converted to amorphous chromium phosphate to conform with ASTM d 1730. Type b, method 5, prior to coating. Apply manufacturer's standard 3-coat thermocured system composed of specially formulated inhibited primer, fluoropolymer color coat and fluoropolymer top coat with color coat and top coat containing not less than 70% (pvdf) resin by weight. Paint to have 1.6 -1.8 mils dry film thickness. Paint shall be baked on at 475 degrees for duration of 10 minutes. Substrate temperature shall reach 450 degrees for duration of 5 minutes. Paint to be "PPG'S" Duranar High Performance (pvdf) system with XL coating or equal.
 - i. High Performance Fluoropolymer (pvdf) "Kynar" with XL coating are available in POMA CONSTRUCTION CORP. standard colors and manufacturers standard colors. Paint to be "PPG'S" Duranar High Performance (pvdf) system with XL coating or equal which meet & exceed **AAMA 2605** specifications and have a 10 year durability rating.

- E. Upon request five, ten and (in certain geographical locations) 15 year warranties are obtainable at additional costs. Additionally, custom colors are obtainable at additional costs.