

SECTION 05080

FACTORY-APPLIED METAL COATING SYSTEM

PART GENERAL

SECTION INCLUDES

Factory-applied metal coating system.

RELATED SECTIONS

- Section 02890 - Traffic Sign and Signals.
- Section 05520 - Handrails and Railings.
- Section 05580 - Formed Metal Fabrications.
- Section 05700 - Ornamental Metal.
- Section 07410 - Metal Roof and Wall Panels.
- Section 07600 - Flashing and Sheet Metal.
- Section 07700 - Roof Specialties and Accessories.
- Section 08120 - Aluminum Doors and Frames.
- Section 08400 - Entrances and Storefronts.
- Section 08500 - Windows.
- Section 08600 - Skylights.
- Section 08910 - Metal-Framed Curtain Wall.
- Section 10200 - Louvers and Vents.
- Section 10430 - Exterior Signage.
- Section _____ - _____.

REFERENCES

AAMA 605.2 - High Performance Organic Coatings on Architectural Aluminum Extrusions and Panels.

ASCA '96 - Voluntary Specification for Superior Performance of Organic Coatings on Architectural Aluminum, Curtainwall, Extrusions, and Miscellaneous Aluminum Components.

ASTM B 117 - Practice for Operating Salt Spray (Fog) Apparatus.

ASTM B 244 - Measurement of Thickness of Anodic Coatings on Aluminum and of Other Nonconductive Coatings on Nonmagnetic Basis Metals with Eddy-Current Instruments.

ASTM D 523 - Test Method for Specular Gloss.

ASTM D 968 - Test Methods for Abrasion Resistance of Organic Coatings by Falling Abrasive.

ASTM D 1308 - Test Method for Effect of Household Chemicals on Clear and Pigmented Organic Finishes.

ASTM D 1654 - Test Method for Evaluation of Painted or Coated Specimens Subjected to Corrosive Environments.

ASTM D 2244 - Test Method for Calculation of Color Differences from Instrumentally Measured Color Coordinates.

ASTM D 2247 - Practice for Testing Water Resistance of Coatings in 100 Percent Relative Humidity.

ASTM D 2248 - Practice for Detergent Resistance of Organic Finishes.

ASTM D 2794 - Test Method for Resistance of Organic Coatings to the Effects of Rapid Deformation (Impact).

ASTM D 3359 - Test Methods for Measuring Adhesion by Tape Test.

ASTM D 3363 - Test Method for Film Hardness by Pencil Test.

ASTM D 4214 - Test Methods for Evaluating Degree of Chalking of Exterior Paint Films.

SUBMITTALS

Submit under provisions of Section 01300.

Certification: Letter from coating licensee that specified coating contains KYNAR 500(R) resin manufactured by Elf Atochem North America, Inc.

WARRANTY

PART PRODUCTS

MANUFACTURERS

Acceptable Resin Manufacturer: Elf Atochem North America, Inc., 2000 Market Street, Philadelphia, PA 19103-3222; ASD. Tel: (800) KYNAR 500 (800-596-2750), Fax: (215) 419-7497.

Acceptable Coating Formulator: Licensee of Elf Atochem North America, Inc.

Akzo Nobel Coatings, Inc. - Trinar.

Lilly Industries - Nubelar.

Morton International - Fluroceran.

PPG Industries, Inc. - Duranar.

The Valspar Corporation - Fluropon.

Requests for substitutions will be considered in accordance with provisions of Section 01600.

Substitutions: Not permitted.

Provide all factory-applied metal coatings from a single formulator.

MATERIALS

Primary Coating: Dispersion coating based on a minimum of 70 percent by weight of KYNAR 500(R) resin, formulated with solvents and high quality pigments, meeting or exceeding the following performance requirements:

ASCA '96/AAMA 605.2: Meet or exceed physical test performance criteria for high-performance organic coatings on architectural extrusions and panels.

Specular Gloss: Medium Gloss (ASTM D 523).

Dry Film Hardness: Meeting or exceeding ASTM D 3363.

Dry Film Adhesion: No adhesion loss (ASTM D 3359).
Wet Film Adhesion: No adhesion loss (ASTM D 3359).
Boiling Water Adhesion: No adhesion loss (ASTM D 3359).
Impact Resistance: No cracking or adhesion loss (ASTM D 2794).
Abrasion Resistance: Meeting or exceeding ASTM D 968.
Muriatic Acid Resistance: No effect (ASTM D 1308).
Mortar Resistance: No effect.
Nitric Acid Resistance: Meets or exceeds specification.
Detergent Resistance: No effect (ASTM D 2248).
Humidity Resistance: Meeting or exceeding ASTM D 2247 and B 117.
Salt Spray Resistance: Meeting or exceeding ASTM D 1654.
South Florida Weathering Exposure: Meets or exceeds specification.
Color Retention: Meeting or exceeding ASTM D 2244.
Chalk Resistance: Meeting or exceeding ASTM D 4214.
Gloss Retention: Meeting or exceeding ASTM D 523.
Erosion Resistance: Meeting or exceeding ASTM B 244.
Color: _____.
Texture: _____.

PART EXECUTION

PREPARATION

Clean, pre-treat, and prime substrates according to specifications of licensed formulator.

APPLICATION

Factory-apply and oven bake primary coating.

Total Overall Dry Film Thickness of 2-Coat System (including Primer): 0.8 to 1.3 mils (20.3 to 33 micrometers).

Total Overall Dry Film Thickness of 2-Coat System (including Primer): _____ mils.

Factory-apply and oven bake 3-coat system.

Total Overall Dry Film Thickness of Coating System (including Primer): _____ mils.

Factory-apply and oven bake 4-coat system.

Total Overall Dry Film Thickness of Coating System
(including Primer): _____ mils.

Spray apply and oven bake primary coating to the
following surfaces:

Aluminum surfaces: _____
_____.

END OF SECTION