The Valspar Corporation June 2015

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Product Guide Specification

Specifier Notes: This product guide specification is written according to the Construction Specifications Institute (CSI) 3-Part Format, including *MasterFormat, SectionFormat,* and *PageFormat,* as described in *The CSI Construction Specifications Practice Guide.*

This section must be carefully reviewed and edited by the Architect to meet the requirements of the project and local building code. Coordinate this section with other specification sections and the Drawings. Delete all “Specifier Notes” after editing this section.

Section numbers and titles are from *MasterFormat 2014 Update.*

1. 05 05 13

SHOP-APPLIED COATINGS FOR METAL

Specifier Notes: This section covers The Valspar Corporation shop-applied, architectural, coil and extrusion coating systems for steel and aluminum. Consult Valspar for assistance in editing this section for the specific application.

* 1. GENERAL
     1. SECTION INCLUDES
        1. Shop-Applied Architectural Coatings for Metal:

Specifier Notes: List the types of shop-applied architectural coatings for metal specified in this section. The list should match the article headings used in Part 2 – Products of this section.

* + - * 1. Shop-applied coil coating systems for steel sheet.
        2. Shop-applied coil coating systems for aluminum sheet.
        3. Shop-applied extrusion coating systems for aluminum extrusions and panels.
    1. RELATED REQUIREMENTS

Specifier Notes: List the section numbers and titles of the sections specifying the metal products to receive shop-applied coating systems.

* + - 1. Section \_\_\_\_\_\_\_\_ – \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
      2. Section \_\_\_\_\_\_\_\_ – \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
      3. Section \_\_\_\_\_\_\_\_ – \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
    1. REFERENCE STANDARDS

Specifier Notes: List reference standards used elsewhere in this section, complete with designations and titles. Delete reference standards not used in this section.

* + - 1. American Architectural Manufacturers Association (AAMA) (www.aamanet.org):
         1. AAMA 620 – Voluntary Specifications for High Performance Organic Coatings on Coil Coated Architectural Aluminum Substrates.
         2. AAMA 621 – Voluntary Specifications for High Performance Organic Coatings on Coil Coated Architectural Hot Dipped Galvanized (HDG) and Zinc-Aluminum Coated Steel Substrates.
         3. AAMA 2603 – Voluntary Specification, Performance Requirements and Test Procedures for Pigmented Organic Coatings on Aluminum Extrusions and Panels.
         4. AAMA 2604 – Voluntary Specification, Performance Requirements and Test Procedures for High Performance Organic Coatings on Aluminum Extrusions and Panels.
         5. AAMA 2605 – Voluntary Specification, Performance Requirements and Test Procedures for Superior Performing Organic Coatings on Aluminum Extrusions and Panels.
      2. ASTM International (ASTM) (www.astm.org):
         1. ASTM B 117 – Standard Practice for Operating Salt Spray (Fog) Apparatus.
         2. ASTM C 207 – Standard Specification for Hydrated Lime for Masonry Purposes.
         3. ASTM D 523 – Standard Test Method for Specular Gloss.
         4. ASTM D 714 – Standard Test Method for Evaluating Degree of Blistering of Paints.
         5. ASTM D 870 – Standard Practice for Testing Water Resistance of Coatings Using Water Immersion.
         6. ASTM D 968 – Standard Test Methods for Abrasion Resistance of Organic Coatings by Falling Abrasive.
         7. ASTM D 1654 – Standard Test Method for Evaluation of Painted or Coated Specimens Subjected to Corrosive Environments.
         8. ASTM D 2244 – Standard Practice for Calculation of Color Tolerances and Color Differences from Instrumentally Measured Color Coordinates.
         9. ASTM D 2247 – Standard Practice for Testing Water Resistance of Coatings in 100% Relative Humidity.
         10. ASTM D 2794 – Standard Test Method for Resistance of Organic Coatings to the Effects of Rapid Deformation (Impact).
         11. ASTM D 3359 – Standard Test Methods for Measuring Adhesion by Tape Test.
         12. ASTM D 3363 – Standard Test Method for Film Hardness by Pencil Test.
         13. ASTM D 4145 – Standard Test Method for Coating Flexibility of Prepainted Sheet.
         14. ASTM D 4214 – Standard Test Methods for Evaluating the Degree of Chalking of Exterior Paint Films.
         15. ASTM D 4585 / D 4585M – Standard Practice for Testing Water Resistance of Coatings Using Controlled Condensation.
         16. ASTM D 5402 – Standard Practice for Assessing the Solvent Resistance of Organic Coatings Using Solvent Rubs.
         17. ASTM D 6578 / D 6578M – Standard Practice for Determination of Graffiti Resistance.
         18. ASTM D 7091 – Standard Practice for Nondestructive Measurement of Dry Film Thickness of Nonmagnetic Coatings Applied to Ferrous Metals and Nonmagnetic, Nonconductive Coatings Applied to Non-Ferrous Metals.
         19. ASTM E 84 – Standard Test Method for Surface Burning Characteristics of Building Materials.
         20. ASTM E 1980 – Standard Practice for Calculating Solar Reflectance Index of Horizontal and Low-Sloped Opaque Surfaces.
         21. ASTM G 85 – Standard Practice for Modified Salt Spray (Fog) Testing.
      3. US Green Building Council (USGBC) (www.usgbc.org):
         1. LEED Green Building Rating System, NC (New Construction), Version 2009 and v4.
    1. COORDINATION
       1. Coordination of Shop-Applied Coating Systems:
          1. Coordinate submittal and selection procedures for metal products to receive shop-applied coating systems.
          2. Where products are indicated to match coatings selected for other products, adjust formulations as required to achieve match.
          3. Submit samples for verification, indicating compliance with matching requirements.
    2. SUBMITTALS

Specifier Notes: Edit submittal requirements as necessary. Delete submittals not required.

* + - 1. Comply with Section 01 33 00 – Submittal Procedures.
      2. Product Data: Submit manufacturer’s product data for each coating system specified, including:
         1. Type of coating system.
         2. Type of substrates.
         3. AAMA compliance.
         4. DFT of each coat.
         5. Total DFT.
         6. Physical properties.
         7. Application characteristics.
         8. Accelerated test data.
         9. Field performance.
      3. Samples: Submit manufacturer’s samples of each color and gloss specified for each coating system specified for:
         1. Selection.
         2. Verification on each specified metal substrate.
      4. Manufacturer’s Certification: Submit manufacturer’s certification that coating systems comply with specified requirements and are suitable for intended application.
      5. LEED Submittals:
         1. Product Test Reports for Credit SS 7.2: For metal roof panel coatings to document compliance with solar reflectance index requirement.
      6. Manufacturer’s Project References: Submit manufacturer’s list of recently completed shop-applied coating system projects, including project name and location, name of architect, type of metal products receiving shop-applied coating systems, and type and quantity of shop-applied coating systems furnished.
      7. Applicator’s Project References: Submit applicator’s list of recently completed shop-applied coating system projects, including project name and location, name of architect, type of metal products receiving shop-applied coating systems, and type and quantity of shop-applied coating systems applied.
      8. Cleaning and Maintenance Instructions: Submit manufacturer’s cleaning and maintenance instructions for shop-applied coating systems, including:
         1. Graffiti removal instructions.
      9. Warranty Documentation: Submit manufacturer’s standard warranty.
    1. QUALITY ASSURANCE
       1. Manufacturer’s Qualifications: Manufacturer regularly engaged, for minimum of 10 years, in the manufacturing of shop-applied coating systems of similar type to that specified.
       2. Applicator’s Qualifications:
          1. Applicator regularly engaged in application of shop-applied coating systems of similar type to that specified.
          2. Employ persons trained for application of shop-applied coating systems.
          3. Approved by manufacturer.
          4. Equipped, trained, and approved for application of shop-applied coating systems required for this Project.
          5. Approved to provide warranty specified in this section.
    2. DELIVERY, STORAGE, AND HANDLING
       1. Shop-Applied Coating Systems:
          1. Delivery Requirements: Deliver coating systems to applicator in manufacturer’s original, unopened containers and packaging, with labels clearly identifying:

Coating system name.

Manufacturer.

Color.

Weight.

Gallons.

Batch number.

* + - * 1. Storage and Handling Requirements:

Store and handle coating systems in accordance with manufacturer’s instructions.

Keep coating systems in manufacturer’s original, unopened containers and packaging until shop application.

Protect coating systems during storage, handling, and shop application to prevent contamination or damage.

* + - 1. Metal Products to Receive Shop-Applied Coating Systems:
         1. Delivery Requirements: Refer to sections specifying metal products to receive shop-applied coating systems.
         2. Storage and Handling Requirements:

Refer to sections specifying metal products to receive shop-applied coating systems.

Package and protect metal product finish during storage, handling, and installation.

Protect metal product finish from damage from standing water.

Protect metal product finish from contact with materials that could damage or adversely affect shop-applied coating systems.

Protect metal product finish with temporary protective coverings until after installation.

* + 1. WARRANTY
       1. Applicator’s Warranty:
          1. Applicator agrees to repair finish or replace coated metal products that demonstrate deterioration of shop-applied coating systems within warranty period.
          2. Exposed Coating Systems: Deterioration includes, but is not limited to:

Solid Colors: Color fading in excess of 5 delta E Hunter color units in accordance with ASTM D 2244, Appendix XI.1.

Peeling, checking, or cracking of coating adhesion to metal.

Chalking in excess of a No. 8 in accordance with ASTM D 4214, Method A.

Specifier Notes: Specify warranty period. Consult Valspar for information regarding warranty period.

* + - 1. Warranty Period: [10] [20] years from date of Substantial Completion.
  1. PRODUCTS
     1. MANUFACTURERS
        1. Manufacturer: The Valspar Corporation, Valspar Coil and Extrusion, PO Box 1461, Minneapolis, Minnesota 55440. Toll Free 888-306-2645. Website [www.valsparinspireme.com](http://www.valsparinspireme.com). Email inquiries@valsparinspireme.com

Specifier Notes: Specify if substitutions will be permitted.

* + - 1. Substitutions: [Not permitted] [In accordance with Division 1].
    1. APPLICATORS
       1. Approved Applicators: Shop-applied coating systems by applicators qualified as specified in the Quality Assurance article of this section.

Specifier Notes: Delete the following performance requirements if shop-applied coating systems are not to be applied to metal roof panels.

* + 1. PERFORMANCE REQUIREMENTS
       1. LEED:2009 - Solar Reflective Index (SRI): Provide metal roof panel coatings with SRI of not less than 78 for slopes of 2:12 (low slope) or less than 29 for slopes greater than 2:12 (steep slope) in accordance with ASTM E 1980.
          1. LEED v4: 82 initial SRI and 64 aged SRI for slopes 2:12 or less (low slope) and 39 initial SRI and 32 aged SRI for slopes greater than 2:12 (steep slope).
       2. Energy Star Compliance: Provide metal roof panel coatings identical to those listed on US Department of Energy's ENERGY STAR Roof Products Qualified Product List.
       3. CEC-Title 24 Compliance for Low-Slope: Provide metal roof panel coatings with aged SRI not less than 0.55 and emissivity not less than 0.75 with a SRI of 64.
    2. SHOP-APPLIED COIL COATING SYSTEMS FOR STEEL SHEET

Specifier Notes: Specify required shop-applied coil coating systems for steel sheet. Delete coating systems not required.

* + - 1. Shop-Applied, Fluoropolymer Coil Coating System for Steel Sheet: Valspar “Fluropon” coil coating system.
         1. Coating Type: 70 percent polyvinylidene fluoride (PVDF) fluoropolymer resin.
         2. Compliance: AAMA 621.
         3. Application Method: Shop-applied, reverse roll coat.
         4. Substrate: Pretreated hot-dip galvanized steel or Galvalume.
         5. Specular Gloss, ASTM D 523:

Standard Gloss: 20 to 35 units on a 60-degree meter.

Low Gloss: 8 to 15 units on a 60-degree meter.

Low Sheen: 10 units maximum on both a 60-degree meter and an 85-degree meter.

* + - * 1. Pencil Hardness, ASTM D 3363: HB to 2H.
        2. T-Bend, ASTM D 4145: 0T to 3T, no loss of adhesion.
        3. Cross Hatch Adhesion, ASTM D 3359: No loss of adhesion.
        4. Reverse Impact, ASTM D 2794: 3x metal thickness, no loss of adhesion.
        5. Humidity Resistance, ASTM D 2247, 100 percent relative humidity, 2,000 hours: No field blisters.
        6. Salt Spray Resistance, ASTM B 117, 1,000 hours: Creep from scribe less than or equal to 1/16 inch (2 mm), no field blisters.
        7. South Florida Exposure, ASTM D 2244 and D 4214, Method A:

Color: No more than 5 delta E Hunter color units at 20 years.

Chalk: Rating no less than 8 at 20 years.

Film Integrity: 20 years.

* + - * 1. Flame Test, ASTM E 84: Class A coating.
        2. Water Immersion, ASTM D 870, 500 hours, 100 degrees F: No loss of adhesion.
        3. Abrasion Resistance, ASTM D 968, Method A: 65, plus or minus 10 liters.
        4. Graffiti Resistance, ASTM D 6578 / D 6578M: Pass.
      1. Shop-Applied, Fluoropolymer Coil Coating System for Steel Sheet: Valspar “Fluropon Classic” coil coating system.
         1. Coating Type: 70 percent polyvinylidene fluoride (PVDF) fluoropolymer resin.
         2. Compliance: AAMA 621.
         3. Application Method: Shop-applied, reverse roll coat.
         4. Substrate: Pretreated hot-dip galvanized steel or Galvalume.
         5. Specular Gloss, ASTM D 523, 60 degrees: 25 to 40 units.
         6. Pencil Hardness, ASTM D 3363: HB to H.
         7. T-Bend, ASTM D 4145: 1T to 3T, no loss of adhesion.
         8. Cross Hatch Adhesion, ASTM D 3359: No loss of adhesion.
         9. Reverse Impact, ASTM D 2794: 3x metal thickness, no loss of adhesion.
         10. Humidity Resistance, ASTM D 2247, 100 percent relative humidity, 1,000 hours: No field blisters.
         11. Salt Spray Resistance, ASTM B 117, 1,000 hours: Creep from scribe less than or equal to 1/16 inch (2 mm), no blisters.
         12. Flame Test, ASTM E 84: Class A coating.
         13. Field Performance, ASTM D 4214, Method A:

Chalk: Rating no less than 8 at 20 years.

Film Integrity: 25 years.

* + - * 1. Abrasion Resistance, ASTM D 968, Method A: 65, plus or minus 10 liters.
        2. Graffiti Resistance, ASTM D 6578 / D 6578M: Pass.
      1. Shop-Applied, Fluoropolymer Coil Coating System for Steel Sheet: Valspar “Fluropon Classic II” coil coating system.
         1. Coating Type: 70 percent polyvinylidene fluoride (PVDF) fluoropolymer resin.
         2. Compliance: AAMA 621.
         3. Application Method: Shop-applied, reverse roll coat.
         4. Substrate: Pretreated hot-dip galvanized steel or Galvalume.
         5. Specular Gloss, ASTM D 523, 60 degrees: 10 to 25 units.
         6. Pencil Hardness, ASTM D 3363: HB to 2H.
         7. T-Bend, ASTM D 4145: 1T to 3T, no loss of adhesion.
         8. Cross Hatch Adhesion, ASTM D 3359: No loss of adhesion.
         9. Reverse Impact, ASTM D 2794: 3x metal thickness, no loss of adhesion.
         10. Humidity Resistance, ASTM D 2247, 100 percent relative humidity, 1,000 hours: No field blisters.
         11. Salt Spray Resistance, ASTM B 117, 1,000 hours: Creep from scribe less than or equal to 1/16 inch (2 mm), no blisters.
         12. Flame Test, ASTM E 84: Class A coating.
         13. Field Performance, ASTM D 4214, Method A:

Chalk: Rating no less than 8 at 20 years.

Film Integrity: 25 years.

* + - * 1. Abrasion Resistance, ASTM D 968, Method A: 65, plus or minus 10 liters.
        2. Graffiti Resistance, ASTM D 6578 / D 6578M: Pass.
      1. Shop-Applied, Fluoropolymer Coil Coating System for Steel Sheet: Valspar “Fluropon Premiere” coil coating system.
         1. Coating Type: 70 percent polyvinylidene fluoride (PVDF) fluoropolymer resin.
         2. Compliance: AAMA 621.
         3. Application Method: Shop-applied, reverse roll coat.
         4. Substrate: Pretreated hot-dip galvanized steel or Galvalume.
         5. Specular Gloss, ASTM D 523, 60 degrees: 25 to 40 units.
         6. Pencil Hardness, ASTM D 3363: HB to 2H.
         7. T-Bend, ASTM D 4145: 1T to 3T, no loss of adhesion.
         8. Cross Hatch Adhesion, ASTM D 3359: No loss of adhesion.
         9. Reverse Impact, ASTM D 2794: 3x metal thickness, no loss of adhesion.
         10. Humidity Resistance, ASTM D 2247, 100 percent relative humidity, 1,000 hours: No field blisters.
         11. Salt Spray Resistance, ASTM B 117, 1,000 hours: Creep from scribe less than or equal to 1/16 inch (2 mm), no blisters.
         12. South Florida Exposure, ASTM D 2244 and D 4214, Method A:

Color: No more than 5 delta E Hunter color units at 5 years.

Chalk: Rating no less than 8 at 20 years.

Film Integrity: 25 years.

* + - * 1. Flame Test, ASTM E 84: Class A coating.
        2. Abrasion Resistance, ASTM D 968, Method A: 65, plus or minus 10 liters.
        3. Graffiti Resistance, ASTM D 6578 / D 6578M: Pass.
      1. Shop-Applied, Fluoropolymer Coil Coating System for Steel Sheet: Valspar “Flurothane II” coil coating system.
         1. Coating Type: Urethane and 70 percent polyvinylidene fluoride (PVDF) fluoropolymer resin.
         2. Compliance: AAMA 621.
         3. Application Method: Shop-applied, reverse roll coat.
         4. Substrate: Pretreated hot-dip galvanized steel or Galvalume.
         5. Specular Gloss, ASTM D 523:

Standard Gloss: 20 to 35 units on a 60-degree meter.

Low Gloss: 8 to 15 units on a 60-degree meter.

Low Sheen: 10 units maximum on both a 60-degree meter and an 85-degree meter.

* + - * 1. Pencil Hardness, ASTM D 3363: HB to 2H.
        2. T-Bend, ASTM D 4145: 1T to 3T minimum, no loss of adhesion.
        3. Cross Hatch Adhesion, ASTM D 3359: No loss of adhesion.
        4. Reverse Impact, ASTM D 2794: 3x metal thickness, no loss of adhesion.
        5. Humidity Resistance, ASTM D 2247, 100 percent relative humidity, 2,000 hours: No field blisters.
        6. Salt Spray Resistance, ASTM B 117, 2,000 hours, hot-dip galvanized steel or Galvalume: Creep from scribe less than or equal to 1/16 inch (2 mm), no field blisters.
        7. South Florida Exposure, ASTM D 2244 and D 4214, Method A:

Color: No more than 5 delta E Hunter color units at 20 years.

Chalk: Rating no less than 8 at 20 years.

Film Integrity: No loss of adhesion at 25 years.

* + - * 1. Flame Test, ASTM E 84: Class A coating.
        2. Abrasion Resistance, ASTM D 968, Method A: 100, plus or minus 10 liters.
        3. Graffiti Resistance, ASTM D 6578 / D 6578M: Pass.
      1. Shop-Applied, Fluoropolymer Coil Coating System for Steel Sheet: Valspar “Flurothane Special” coil coating system.
         1. Coating Type: 70 percent polyvinylidene fluoride (PVDF) fluoropolymer resin.
         2. Compliance: AAMA 621.
         3. Application Method: Shop-applied, reverse roll coat.
         4. Substrate: Pretreated hot-dip galvanized steel or Galvalume.
         5. Specular Gloss, ASTM D 523:

Standard Gloss: 20 to 35 units on a 60-degree meter.

Low Gloss: 8 to 15 units on a 60-degree meter.

* + - * 1. Pencil Hardness, ASTM D 3363: HB to H.
        2. T-Bend, ASTM D 4145: 1T to 3T minimum, no loss of adhesion.
        3. Cross Hatch Adhesion, ASTM D 3359: No loss of adhesion.
        4. Reverse Impact, ASTM D 2794: 3x metal thickness, no cracking or loss of adhesion.
        5. Humidity Resistance, ASTM D 2247, 100 percent relative humidity, 1,500 hours: No field blisters.
        6. Salt Spray Resistance, ASTM B 117, 1,000 hours: Creep from scribe less than or equal to 1/8 inch (3 mm), no more than few No. 8 blisters.
        7. South Florida Exposure, ASTM D 2244 and D 4214, Method A, 20 years:

Color: No more than 5 delta E Hunter color units.

Chalk: Rating no less than No. 8.

Film Integrity: No blistering, peeling, or cracking.

* + - * 1. Flame Test, ASTM E 84: Class A coating.
        2. Graffiti Resistance, ASTM D 6578 / D 6578M: Pass.
    1. SHOP-APPLIED COIL COATING SYSTEMS FOR ALUMINUM SHEET

Specifier Notes: Specify required shop-applied coil coating systems for aluminum sheet. Delete coating systems not required.

* + - 1. Shop-Applied, Fluoropolymer Coil Coating System for Aluminum Sheet: Valspar “Fluropon” coil coating system.
         1. Coating Type: 70 percent polyvinylidene fluoride (PVDF) fluoropolymer resin.
         2. Compliance: AAMA 620.
         3. Application Method: Shop-applied, reverse roll coat.
         4. Substrate: Pretreated aluminum.
         5. Specular Gloss, ASTM D 523:

Standard Gloss: 20 to 35 units on a 60-degree meter.

Low Gloss: 8 to 15 units on a 60-degree meter.

Low Sheen: 10 units maximum on both a 60-degree meter and an 85-degree meter.

* + - * 1. Pencil Hardness, ASTM D 3363: HB to 2H.
        2. T-Bend, ASTM D 4145: 1T to 3T, no loss of adhesion.
        3. Cross Hatch Adhesion, ASTM D 3359: No loss of adhesion.
        4. Reverse Impact, ASTM D 2794: 1.5x metal thickness, no loss of adhesion.
        5. Humidity Resistance, ASTM D 2247, 100 percent relative humidity, 3,000 hours: No field blisters.
        6. Salt Spray Resistance, ASTM B 117, 3,000 hours: Creep from scribe less than or equal to 1/16 inch (2 mm), no field blisters.
        7. South Florida Exposure, ASTM D 2244 and D 4214, Method A:

Color: No more than 5 delta E Hunter color units at 20 years.

Chalk: Rating no less than 8 at 20 years.

Film Integrity: 20 years.

* + - * 1. Flame Test, ASTM E 84: Class A coating.
        2. Water Immersion, ASTM D 870, 500 hours, 100 degrees F: No loss of adhesion.
        3. Abrasion Resistance, ASTM D 968, Method A: 65, plus or minus 10 liters.
        4. Graffiti Resistance, ASTM D 6578 / D 6578M: Pass.
      1. Shop-Applied, Fluoropolymer Coil Coating System for Aluminum Sheet: Valspar “Fluropon Classic” coil coating system.
         1. Coating Type: 70 percent polyvinylidene fluoride (PVDF) fluoropolymer resin.
         2. Compliance: AAMA 620.
         3. Application Method: Shop-applied, reverse roll coat.
         4. Substrate: Pretreated aluminum.
         5. Specular Gloss, ASTM D 523, 60 degrees: 25 to 40 units.
         6. Pencil Hardness, ASTM D 3363: HB to H.
         7. T-Bend, ASTM D 4145: 1T to 3T, no loss of adhesion.
         8. Cross Hatch Adhesion, ASTM D 3359: No loss of adhesion.
         9. Reverse Impact, ASTM D 2794: 1.5x metal thickness, no loss of adhesion.
         10. Humidity Resistance, ASTM D 2247, 100 percent relative humidity, 2,000 hours: No field blisters.
         11. Salt Spray Resistance, ASTM B 117, 3,000 hours: Creep from scribe less than or equal to 1/16 inch (2 mm), no blisters.
         12. Flame Test, ASTM E 84: Class A coating.
         13. South Florida Exposure, ASTM D 4214, Method A:

Chalk: Rating no less than 8 at 20 years.

Film Integrity: 25 years.

* + - * 1. Abrasion Resistance, ASTM D 968, Method A: 65, plus or minus 10 liters.
        2. Graffiti Resistance, ASTM D 6578 / D 6578M: Pass.
      1. Shop-Applied, Fluoropolymer Coil Coating System for Aluminum Sheet: Valspar “Fluropon Classic II” coil coating system.
         1. Coating Type: 70 percent polyvinylidene fluoride (PVDF) fluoropolymer resin.
         2. Compliance: AAMA 620.
         3. Application Method: Shop-applied, reverse roll coat.
         4. Substrate: Pretreated aluminum.
         5. Specular Gloss, ASTM D 523, 60 degrees: 10 to 25 units.
         6. Pencil Hardness, ASTM D 3363: HB to 2H.
         7. T-Bend, ASTM D 4145: 1T to 2T, no loss of adhesion.
         8. Cross Hatch Adhesion, ASTM D 3359: No loss of adhesion.
         9. Reverse Impact, ASTM D 2794: 1.5x metal thickness, no loss of adhesion.
         10. Humidity Resistance, ASTM D 2247, 100 percent relative humidity, 3,000 hours: No field blisters.
         11. Salt Spray Resistance, ASTM B 117, 3,000 hours: Creep from scribe less than or equal to 1/16 inch (2 mm), no blisters.
         12. Flame Test, ASTM E 84: Class A coating.
         13. South Florida Exposure, ASTM D 4214, Method A:

Chalk: Rating no less than 8 at 20 years.

Film Integrity: 25 years.

* + - * 1. Abrasion Resistance, ASTM D 968, Method A: 65, plus or minus 10 liters.
        2. Graffiti Resistance, ASTM D 6578 / D 6578M: Pass.
      1. Shop-Applied, Fluoropolymer Coil Coating System for Aluminum Sheet: Valspar “Fluropon Premiere” coil coating system.
         1. Coating Type: 70 percent polyvinylidene fluoride (PVDF) fluoropolymer resin.
         2. Compliance: AAMA 620.
         3. Application Method: Shop-applied, reverse roll coat.
         4. Substrate: Pretreated aluminum.
         5. Specular Gloss, ASTM D 523, 60 degrees: 25 to 40 units.
         6. Pencil Hardness, ASTM D 3363: HB to 2H.
         7. T-Bend, ASTM D 4145: 1T to 3T, no loss of adhesion.
         8. Cross Hatch Adhesion, ASTM D 3359: No loss of adhesion.
         9. Reverse Impact, ASTM D 2794: 1.5x metal thickness, no loss of adhesion.
         10. Humidity Resistance, ASTM D 2247, 100 percent relative humidity, 2,000 hours: No field blisters.
         11. Salt Spray Resistance, ASTM B 117, 3,000 hours: Creep from scribe less than or equal to 1/16 inch (2 mm), no blisters.
         12. South Florida Exposure, ASTM D 2244 and D 4214, Method A:

Color: No more than 5 delta E Hunter color units at 5 years.

Chalk: Rating no less than 8 at 20 years.

Film Integrity: 25 years.

* + - * 1. Flame Test, ASTM E 84: Class A coating.
        2. Abrasion Resistance, ASTM D 968, Method A: 65, plus or minus 10 liters.
        3. Graffiti Resistance, ASTM D 6578 / D 6578M: Pass.
      1. Shop-Applied, Fluoropolymer Coil Coating System for Aluminum Sheet: Valspar “Flurothane II” coil coating system.
         1. Coating Type: Urethane and 70 percent polyvinylidene fluoride (PVDF) fluoropolymer resin.
         2. Compliance: AAMA 620.
         3. Application Method: Shop-applied, reverse roll coat.
         4. Substrate: Pretreated aluminum.
         5. Specular Gloss, ASTM D 523:

Standard Gloss: 20 to 35 units on a 60-degree meter.

Low Gloss: 8 to 15 units on a 60-degree meter.

Low Sheen: 10 units maximum on both a 60-degree meter and an 85-degree meter.

* + - * 1. Pencil Hardness, ASTM D 3363: HB to 2H.
        2. T-Bend, ASTM D 4145: 1T to 3T minimum, no loss of adhesion.
        3. Cross Hatch Adhesion, ASTM D 3359: No loss of adhesion.
        4. Reverse Impact, ASTM D 2794: 1.5x metal thickness, no loss of adhesion.
        5. Humidity Resistance, ASTM D 2247, 100 percent relative humidity, 2,000 hours: No field blisters.
        6. Salt Spray Resistance, ASTM B 117, 4,000 hours: No creep from scribe less than or equal to 1/16 inch (2 mm), no field blisters.
        7. South Florida Exposure, ASTM D 2244 and D 4214, Method A:

Color: No more than 5 delta E Hunter color units at 20 years.

Chalk: Rating no less than 8 at 20 years.

Film Integrity: No loss of adhesion at 25 years.

* + - * 1. Flame Test, ASTM E 84: Class A coating.
        2. Abrasion Resistance, ASTM D 968, Method A: 100, plus or minus 10 liters.
        3. Graffiti Resistance, ASTM D 6578 / D 6578M: Pass.
      1. Shop-Applied, Fluoropolymer Coil Coating System for Aluminum Sheet: Valspar “Flurothane Special” coil coating system.
         1. Coating Type: 70 percent polyvinylidene fluoride (PVDF) fluoropolymer resin.
         2. Compliance: AAMA 620.
         3. Application Method: Shop-applied, reverse roll coat.
         4. Substrate: Pretreated aluminum.
         5. Specular Gloss, ASTM D 523:

Standard Gloss: 20 to 35 units on a 60-degree meter.

Low Gloss: 8 to 15 units on a 60-degree meter.

* + - * 1. Pencil Hardness, ASTM D 3363: HB to H.
        2. T-Bend, ASTM D 4145: 1T to 3T minimum, no loss of adhesion.
        3. Cross Hatch Adhesion, ASTM D 3359: No loss of adhesion.
        4. Reverse Impact, ASTM D 2794: 1.5x metal thickness, no cracking or loss of adhesion.
        5. Humidity Resistance, ASTM D 2247, 100 percent relative humidity, 4,000 hours: No field blisters.
        6. Salt Spray Resistance, ASTM B 117, 4,000 hours: Creep from scribe less than or equal to 1/16 inch (2 mm), no more than few No. 8 blisters.
        7. South Florida Exposure, ASTM D 2244 and D 4214, Method A, 20 years:

Color: No more than 5 delta E Hunter color units.

Chalk: Rating no less than No. 8.

Film Integrity: No blistering, peeling, or cracking.

* + - * 1. Flame Test, ASTM E 84: Class A coating.
        2. Graffiti Resistance, ASTM D 6578 / D 6578M: Pass.
      1. Shop-Applied, Fluoropolymer Coil Coating System for Aluminum Sheet: Valspar “Valflon” coil coating system.
         1. Coating Type: 100 percent FEVE fluoropolymer-based resin.
         2. Compliance: AAMA 620.
         3. Application Method: Shop-applied, reverse roll coat.
         4. Substrate: Pretreated aluminum.
         5. Specular Gloss, ASTM D 523, 60 degrees: 30 to 70 units typical.
         6. Pencil Hardness, ASTM D 3363: F to H.
         7. T-Bend, ASTM D 4145: 2T, no cracking or loss of adhesion.
         8. Cross Hatch Adhesion, ASTM D 3359: No loss of adhesion.
         9. Reverse Impact, ASTM D 2794: 1.5x metal thickness, no loss of adhesion.
         10. Humidity Resistance, ASTM D 2247, 100 percent relative humidity, 3,000 hours: No field blisters.
         11. Salt Spray Resistance, ASTM B 117, 3,000 hours: Creep from scribe less than or equal to 1/8 inch (3 mm), no field blisters.
         12. South Florida Exposure, ASTM D 2244 and D 4214, Method A:

Color: No more than 5 delta E Hunter color units at 20 years.

Chalk: Rating no less than 8 at 20 years.

Film Integrity: 20 years.

* + - * 1. Flame Test, ASTM E 84: Class A coating.
        2. Abrasion Resistance, ASTM D 968, Method A: 40 liters.
        3. Graffiti Resistance, ASTM D 6578 / D 6578M: Pass.
    1. SHOP-APPLIED EXTRUSION COATING SYSTEMS FOR ALUMINUM EXTRUSIONS AND PANELS

Specifier Notes: Specify required shop-applied extrusion coating systems for aluminum extrusions and panels. Delete coating systems not required.

* + - 1. Shop-Applied, Fluoropolymer Extrusion Coating System for Aluminum Extrusions and Panels: Valspar “Acrodize” extrusion coating system.
         1. Coating Type: 50 percent polyvinylidene fluoride (PVDF) fluoropolymer resin.
         2. Compliance: AAMA 2604.
         3. Application Method: Shop-applied, conventional or electrostatic spray.
         4. Substrate: Pretreated aluminum.
         5. Specular Gloss, ASTM D 523, 60-degree head: 5 to 25 units.
         6. Pencil Hardness, ASTM D 3363: H minimum.
         7. Cross Hatch Adhesion: No loss of adhesion.
         8. Boiling Water, 1 hour: No loss of adhesion.
         9. Humidity Resistance, ASTM D 2247, 100 percent relative humidity, 3,000 hours, Field Rating: Less than or equal to 8, few blisters.
         10. Salt Spray Resistance, ASTM B 117, 3,000 hours:

Scribe Rating: 7, less than or equal to 1/16 inch (2 mm).

Field Rating: 8.

* + - * 1. Graffiti Resistance, ASTM D 6578 / D 6578M: Pass.
      1. Shop-Applied, Fluoropolymer Extrusion Coating System for Aluminum Extrusions and Panels: Valspar “Acroflur” extrusion coating system.
         1. Coating Type: 50 percent polyvinylidene fluoride (PVDF) fluoropolymer resin.
         2. Compliance: AAMA 2604.
         3. Application Method: Shop-applied, conventional or electrostatic spray.
         4. Substrate: Pretreated aluminum.
         5. Specular Gloss, ASTM D 523, 60-degree head: 25 to 35 units.
         6. Pencil Hardness, ASTM D 3363: H minimum.
         7. Cross Hatch Adhesion: No loss of adhesion.
         8. Humidity Resistance, ASTM D 2247, 100 percent relative humidity, 3,000 hours, Field Rating: Less than or equal to 8, few blisters.
         9. Salt Spray Resistance, ASTM B 117, 3,000 hours:

Scribe Rating: 7, less than or equal to 1/16 inch (2 mm).

Field Rating: 8.

* + - * 1. Graffiti Resistance, ASTM D 6578 / D 6578M: Pass.
      1. Shop-Applied, Acrylic Extrusion Coating System for Aluminum Extrusions and Panels: Valspar “Acropon” extrusion coating system.
         1. Coating Type: 80 percent acrylic resin.
         2. Compliance: AAMA 2605.
         3. Application Method: Shop-applied, conventional or electrostatic spray.
         4. Substrate: Pretreated aluminum.
         5. Specular Gloss, ASTM D 523, 60 degrees:

Gloss: 25 to 35 units.

Gloss: 65 to 75 units.

* + - * 1. Pencil Hardness, ASTM D 3363: H to 2H minimum.
        2. Solvent Resistance: 100 MEK double rubs.
        3. Mortar Resistance: No adhesion loss or visual change.
        4. Abrasion Resistance, ASTM D 968: Coefficient 40 liters/mil minimum.
        5. Adhesion, Wet and Dry: Cross hatch 5B, no adhesion loss.
        6. Chemical Resistance: Acid and alkaline resistant.
        7. Flame Spread, ASTM E 84: Class A coating.
        8. South Florida Exposure, ASTM D 2244 and D 4214, Method A, 10 years:

Color: No more than 5 delta E Hunter color units.

Chalk: Rating no less than 8 for colors and 6 for whites.

Gloss Retention: No less than 50 percent.

* + - * 1. Film Adhesion: Pass.
        2. Reverse Impact, ASTM D 2794: Pass.
        3. Cyclic Corrosion, ASTM G 85, Annex 5, 2,000 hours:

Creep: Rating 10, no tape off.

Edge Blisters: Horizontal rating 10, Vertical rating 8.

* + - * 1. Humidity Resistance, ASTM D 4585: 4,000 hours.
        2. Graffiti Resistance, ASTM D 6578 / D 6578M: Pass.
      1. Shop-Applied, Fluoropolymer Extrusion Coating System for Aluminum Extrusions and Panels: Valspar “Fluropon” extrusion coating system.
         1. Coating Type: 70 percent polyvinylidene fluoride (PVDF) fluoropolymer resin.
         2. Compliance: AAMA 2605.
         3. Application Method: Shop-applied, conventional or electrostatic spray.
         4. Substrate: Pretreated aluminum.
         5. Specular Gloss, ASTM D 523, 60 degrees: Typical 25 to 35 units, medium.
         6. Pencil Hardness, ASTM D 3363: F minimum.
         7. Film Adhesion: Pass.
         8. Impact Resistance: Pass.
         9. Abrasion Resistance, ASTM D 968: Pass.
         10. Chemical Resistance: Pass.
         11. Humidity Resistance, ASTM D 2247, 100 percent relative humidity, 4,000 hours: Rating 8, no more than a few field blisters, ASTM D 714, Figure No. 4.
         12. Prohesion, ASTM G 85, Annex 5, 2,000 hours:

Creep from scribe or edge no more than 1/16 inch (2 mm) Rating: 7.

Field Blister Rating: 8.

* + - * 1. Flame Test, ASTM E 84: Class A coating.
        2. South Florida Exposure, ASTM D 2244 and D 4214, Method A:

Color: No more than 5 delta E Hunter color units at 10 years.

Chalk: Rating no less than 8 at 10 years.

Gloss Retention: No less than 50 percent.

Erosion Resistance: Less than 10 percent.

* + - * 1. Graffiti Resistance, ASTM D 6578 / D 6578M: Pass.
      1. Shop-Applied, Fluoropolymer Extrusion Coating System for Aluminum Extrusions and Panels: Valspar “Fluropon Special” extrusion coating system.
         1. Coating Type: 70 percent polyvinylidene fluoride (PVDF) fluoropolymer resin.
         2. Compliance: AAMA 2605.
         3. Application Method: Shop-applied, conventional or electrostatic spray.
         4. Substrate: Pretreated aluminum.
         5. Specular Gloss, ASTM D 523, 60 degrees: Typical 25 to 35 units, medium.
         6. Pencil Hardness, ASTM D 3363: F minimum.
         7. Film Adhesion: Pass.
         8. Impact Resistance: Pass.
         9. Abrasion Resistance, ASTM D 968: Pass.
         10. Chemical Resistance: Pass.
         11. Humidity Resistance, ASTM D 2247, 100 percent relative humidity, 4,000 hours: Rating 8, no more than a few field blisters, ASTM D 714, Figure No. 4.
         12. Prohesion, ASTM G 85, Annex 5, 2,000 hours:

Creep from scribe or edge no more than 1/16 inch (2 mm) Rating: 7.

Field Blister Rating: 8.

* + - * 1. Flame Test, ASTM E 84: Class A coating.
        2. South Florida Exposure, ASTM D 2244 and D 4214, Method A:

Color: No more than 5 delta E Hunter color units at 10 years.

Chalk: Rating no less than 8 at 10 years.

Gloss Retention: No less than 50 percent.

Erosion Resistance: Less than 10 percent.

* + - * 1. Graffiti Resistance, ASTM D 6578 / D 6578M: Pass.
      1. Shop-Applied, Fluoropolymer Extrusion Coating System for Aluminum Extrusions and Panels: Valspar “Fluropon Classic II” extrusion coating system.
         1. Coating Type: 70 percent polyvinylidene fluoride (PVDF) fluoropolymer resin.
         2. Compliance: AAMA 2605.
         3. Application Method: Shop-applied, conventional or electrostatic spray.
         4. Substrate: Pretreated aluminum.
         5. Specular Gloss, ASTM D 523, 60 degrees: Typical 15 to 25 units, medium.
         6. Pencil Hardness, ASTM D 3363: F minimum.
         7. Film Adhesion: Pass.
         8. Impact Resistance: Pass.
         9. Abrasion Resistance, ASTM D 968, Method A: Pass.
         10. Chemical Resistance: Pass.
         11. Humidity Resistance, ASTM D 2247, 100 percent relative humidity, 4,000 hours: Rating 8, no more than a few field blisters, ASTM D 714, Figure No. 4.
         12. Cyclic Corrosion, ASTM G 85, Annex 5, 2,000 hours:

Scribe: Rating 7, 1/16 inch (2 mm).

Field: Rating 8.

* + - * 1. Flame Test, ASTM E 84: Class A coating.
        2. South Florida Exposure, ASTM D 2244 and D 4214, Method A:

Chalk: Rating no less than 8 at 10 years.

Gloss Retention: No less than 50 percent.

Erosion Resistance: Less than 10 percent.

* + - * 1. Graffiti Resistance, ASTM D 6578 / D 6578M: Pass.
      1. Shop-Applied, Fluoropolymer Extrusion Coating System for Aluminum Extrusions and Panels: Valspar “Fluropon Premiere” extrusion coating system.
         1. Coating Type: 70 percent polyvinylidene fluoride (PVDF) fluoropolymer resin.
         2. Compliance: AAMA 2605.
         3. Application Method: Shop-applied, conventional or electrostatic spray.
         4. Substrate: Pretreated aluminum.
         5. Specular Gloss, ASTM D 523, 60 degrees: 30 to 50 units.
         6. Pencil Hardness, ASTM D 3363: F minimum.
         7. Cross Hatch Adhesion: No loss of adhesion.
         8. Boiling Water, 1 hour: No loss of adhesion.
         9. Humidity Resistance, ASTM D 2247, 100 percent relative humidity, 4,000 hours: No field blisters or change in hardness.
         10. Prohesion, ASTM G 85, Annex 5, 2,000 hours:

Creep from scribe or edge no more than 1/16 inch (2 mm) Rating: 7.

Field Blister Rating: 8.

* + - * 1. Graffiti Resistance, ASTM D 6578 / D 6578M: Pass.
      1. Shop-Applied, Fluoropolymer Extrusion Coating System for Aluminum Extrusions and Panels: Valspar “Flurospar Classic II” extrusion coating system.
         1. Coating Type: 70 percent polyvinylidene fluoride (PVDF) fluoropolymer resin.
         2. Compliance: AAMA 2605.
         3. Application Method: Shop-applied, conventional or electrostatic spray.
         4. Substrate: Pretreated aluminum.

Specifier Notes: Consult Valspar for availability of lower sheen formulations than 25 to 35 at 60 degrees.

* + - * 1. Specular Gloss, ASTM D 523, 60 degrees: Typical 25 to 35 units.
        2. Pencil Hardness, ASTM D 3363: F to 2H.
        3. Film Adhesion: No loss of adhesion.
        4. Reverse Impact, ASTM D 2794: 1/10-inch deformation, no loss of adhesion.
        5. Flame Test, ASTM E 84: Class A coating.
        6. South Florida Exposure, ASTM D 2244 and D 4214, Method A, 10 years, 45 degrees:

Chalk: Rating no less than 8.

* + - * 1. Humidity Resistance, ASTM D 2247, 100 percent relative humidity, 95 degrees F, 4,000 hours: Rating 8, no more than few field blisters, ASTM D 714, Figure No. 4.
        2. Prohesion, ASTM G 85, Annex 5, 2,000 hours:

Creep from scribe or edge no more than 1/16 inch (2 mm) Rating: 7.

Field Blister Rating: 8.

* + - * 1. Graffiti Resistance, ASTM D 6578 / D 6578M: Pass.
      1. Shop-Applied, Fluoropolymer Extrusion Coating System for Aluminum Extrusions and Panels: Valspar “Flurospar” extrusion coating system.
         1. Coating Type: 70 percent polyvinylidene fluoride (PVDF) fluoropolymer resin.
         2. Compliance: AAMA 2605.
         3. Application Method: Shop-applied, conventional or electrostatic spray.
         4. Substrate: Pretreated aluminum.

Specifier Notes: Consult Valspar for availability of lower sheen formulations than 25 to 35 at 60 degrees.

* + - * 1. Specular Gloss, ASTM D 523, 60 degrees: Typical 25 to 35 units.
        2. Pencil Hardness, ASTM D 3363: H minimum.
        3. Film Adhesion: No loss of adhesion.
        4. Reverse Impact, ASTM D 2794: 1/10-inch deformation, no loss of adhesion.
        5. Flame Test, ASTM E 84: Class A coating.
        6. South Florida Exposure, ASTM D 2244 and D 4214, Method A, 10 years, 45 degrees:

Color: No more than 5 delta E Hunter color units.

Chalk: Rating no less than 8.

* + - * 1. Humidity Resistance, ASTM D 2247, 100 percent relative humidity, 95 degrees F, 4,000 hours: Rating 8, no more than few field blisters, ASTM D 714, Figure No. 4.
        2. Prohesion, ASTM G 85, Annex 5, 2,000 hours:

Creep from scribe or edge no more than 1/16 inch (2 mm) Rating: 7.

Field Blister Rating: 8.

* + - * 1. Graffiti Resistance, ASTM D 6578 / D 6578M: Pass.
      1. Shop-Applied, Acrylic/Fluoropolymer Extrusion Coating System for Aluminum Extrusions and Panels: Valspar “Nanodize II” extrusion coating system.
         1. Coating Type: 25 percent polyvinylidene fluoride (PVDF) fluoropolymer resin.
         2. Compliance: AAMA 2604.
         3. Application Method: Shop-applied, conventional or electrostatic spray.
         4. Substrate: Pretreated aluminum.
         5. Specular Gloss, ASTM D 523, 60 degrees: 5 to 20 units, matte finish.
         6. Pencil Hardness, ASTM D 3363: 2H minimum.
         7. Abrasion Resistance, ASTM D 968, Falling Sand, Abrasion Coefficient: 20 liters/mil minimum.
         8. Solvent Resistance, ASTM D 5402: 100 MEK double rubs.
         9. Adhesion, ASTM D 3359, Wet and Dry Crosshatch: No loss of adhesion.
         10. Chemical Resistance: Resistance to acids and alkali.
         11. Flame Spread, ASTM E 84: Class A coating.
         12. South Florida Exposure, ASTM D 2244 and D 4214, Method A, 5 years, 45 degrees: AAMA 2604.
         13. Graffiti Resistance, ASTM D 6578 / D 6578M: Pass.
      2. Shop-Applied, Polyester Extrusion Coating System for Aluminum Extrusions and Panels: Valspar “Super Dynapon” extrusion coating system.
         1. Coating Type: 75 percent high-molecular-weight (HMP) polyester resin.
         2. Compliance: AAMA 2604.
         3. Application Method: Shop-applied, conventional or electrostatic spray.
         4. Substrate: Pretreated aluminum.

Specifier Notes: Consult Valspar for availability of higher gloss formulations than 10 to 35 at 60 degrees.

* + - * 1. Specular Gloss, ASTM D 523, 60 degrees: 10 to 35 units.
        2. Pencil Hardness, ASTM D 3363: H to 3H.
        3. Film Adhesion: No loss of adhesion.
        4. Impact Resistance, Direct, ASTM D 2794: 1/10-inch deformation, no loss of adhesion.
        5. Flame Test, ASTM E 84: Class A coating.
        6. South Florida Exposure, ASTM D 2244 and D 4214, Method A, 5 years, 45 degrees:

Color: No more than 5 delta E Hunter color units.

Chalk: Rating no less than 8.

* + - * 1. Humidity Resistance, ASTM D 2247, 100 percent relative humidity, 95 degrees F, 3,000 hours: Rating 8, no more than few field blisters, ASTM D 714, Figure No. 4.
        2. Salt Spray Resistance, ASTM B 117, 3,000 hours:

Scribe: Rating 7, no more than 1/32 to 1/16 inch (1 to 2 mm).

Field Rating: 8.

* + - * 1. Graffiti Resistance, ASTM D 6578 / D 6578M: Pass.
      1. Shop-Applied, Fluoropolymer Extrusion Coating System for Aluminum Extrusions and Panels: Valspar “Fluropon Classic” extrusion coating system.
         1. Coating Type: 70 percent polyvinylidene fluoride (PVDF) fluoropolymer resin.
         2. Compliance: AAMA 2605.
         3. Application Method: Shop-applied, conventional or electrostatic spray.
         4. Substrate: Pretreated aluminum.
         5. Specular Gloss, ASTM D 523, 60 degrees: 30 to 50 units.
         6. Pencil Hardness, ASTM D 3363: F minimum.
         7. Cross Hatch Adhesion: No loss of adhesion.
         8. Boiling Water, 1 hour: No loss of adhesion.
         9. Humidity Resistance, ASTM D 2247, 100 percent relative humidity, 1,500 hours: No field blisters or change in hardness.
         10. Prohesion, ASTM G 85, Annex 5, 2,000 hours:

Creep from scribe or edge no more than 1/16 inch (2 mm) Rating: 7.

Field Blister Rating: 8.

* + - * 1. Graffiti Resistance, ASTM D 6578 / D 6578M: Pass.
      1. Shop-Applied, Fluoropolymer Extrusion Coating System for Aluminum Extrusions and Panels: Valspar “Flurocryl” extrusion coating system.
         1. Coating Type: Acrylic modified with polyvinylidene fluoride (PVDF) fluoropolymer resin.
         2. Compliance: AAMA 2603.
         3. Application Method: Shop-applied, conventional or electrostatic spray.
         4. Substrate: Pretreated aluminum.
         5. Specular Gloss, ASTM D 523, 60 degrees: 25 to 65 units.
         6. Pencil Hardness, ASTM D 3363: 2H to 4H.
         7. Cross Hatch Adhesion: No loss of adhesion.
         8. Humidity Resistance, ASTM D 2247, 100 percent relative humidity, 1,500 hours: Rating less than or equal to 8, few field blisters.
         9. Salt Spray Resistance, ASTM B 117, 1,500 hours:

Creep from Scribe: No more than 1/16 inch (2 mm).

Field Rating: 8.

* + - * 1. Graffiti Resistance, ASTM D 6578 / D 6578M: Pass.
      1. Shop-Applied, Fluoropolymer Extrusion Coating System for Aluminum Extrusions and Panels: Valspar “Polylure 1500” extrusion coating system.
         1. Coating Type: Polyester resin.
         2. Compliance: AAMA 2603.
         3. Application Method: Shop-applied, conventional or electrostatic spray.
         4. Substrate: Pretreated aluminum.
         5. Specular Gloss, ASTM D 523, 60 degrees: 15 to 90 units.
         6. Pencil Hardness, ASTM D 3363: H to 3H.
         7. Film Adhesion, AAMA 2603:

Wet: Acceptable.

Dry: Acceptable.

* + - * 1. Impact Resistance, Direct, AAMA 2603: Acceptable.
        2. Muriatic Acid Resistance, AAMA 2603: Acceptable.
        3. Mortar Resistance, ASTM C 207: Acceptable.
        4. Detergent Resistance, AAMA 2603: Acceptable.
        5. Humidity Resistance, ASTM D 2247 and D 714, 100 percent relative humidity, 100 degrees F, 1,500 hours: Acceptable.
        6. Salt Spray Resistance, ASTM B 117 and D 1654, 5 percent salt solution, 95 to 100 degrees , 1,500 hours: Acceptable.
        7. Graffiti Resistance, ASTM D 6578 / D 6578M: Pass.
    1. COATING SCHEDULE – SHOP-APPLIED COIL COATING SYSTEMS FOR STEEL SHEET

Specifier Notes: Specify coating schedule for the specified shop-applied coil coating systems for steel sheet. Delete coil coating systems not specified.

* + - 1. Shop-Applied, Fluoropolymer Coil Coating System for Steel Sheet: Valspar [“Fluropon”] [“Fluropon Classic”] [“Fluropon Classic II”] [“Fluropon Premiere”] [“Flurothane II”] [“Flurothane Special”] coil coating system.

Specifier Notes: Specify 2-coat or 3-coat system as applicable for the specified coating system.

* + - * 1. Dry Film Thickness (DFT), ASTM D 7091: [2-coat system] [3-coat system].

Specifier Notes: Specify mil thicknesses as applicable for the specified coating system. Delete clear topcoat if not part of coating system.

Primer: \_\_\_\_\_\_\_\_ mils.

Color Coat: \_\_\_\_\_\_\_\_ mils.

Clear Topcoat: \_\_\_\_\_\_\_\_ mils.

Total, Minimum: \_\_\_\_\_\_\_\_ mils.

Specifier Notes: Include list of metal products to receive shop-applied, fluoropolymer coil coating system for steel sheet.

* + - * 1. Metal Products to be Coated:

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

Specifier Notes: Specify the color of the coating by one of the following methods. Use the blank line to insert the name of the color, if specifying the color by name.

* + - * 1. Color: [Match custom sample] [Select from manufacturer’s full range] [Designated or scheduled] [\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_].

Specifier Notes: Specify the gloss of the coating by one of the following methods. Use the blank line to insert the gloss formulation, if different formulations are available.

* + - * 1. Gloss: [Match custom sample] [Select from manufacturer’s full range] [Designated or scheduled] [\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_].
      1. Pretreatment: Mechanically clean and chemically pretreat metal products in accordance with:
         1. Coating manufacturer’s instructions.
         2. AAMA 621.
      2. Coating System Application: Apply coating system in accordance with:
         1. Coating manufacturer’s instructions.
         2. AAMA 621.
    1. COATING SCHEDULE – SHOP-APPLIED COIL COATING SYSTEMS FOR ALUMINUM SHEET

Specifier Notes: Specify coating schedule for the specified shop-applied coil coating systems for aluminum sheet. Delete coil coating systems not specified.

* + - 1. Shop-Applied, Fluoropolymer Coil Coating System for Aluminum Sheet: Valspar [“Fluropon”] [“Fluropon Classic”] [“Fluropon Classic II”] [“Fluropon Premiere”] [“Flurothane II”] [“Flurothane Special”] [“Valflon”] coil coating system.

Specifier Notes: Specify 2-coat or 3-coat system as applicable for the specified coating system.

* + - * 1. Dry Film Thickness (DFT), ASTM D 7091: [2-coat system] [3-coat system].

Specifier Notes: Specify mil thicknesses as applicable for the specified coating system. Delete clear topcoat if not part of coating system.

Primer: \_\_\_\_\_\_\_\_ mils.

Color Coat: \_\_\_\_\_\_\_\_ mils.

Clear Topcoat: \_\_\_\_\_\_\_\_ mils.

Total, Minimum: \_\_\_\_\_\_\_\_ mils.

Specifier Notes: Include list of metal products to receive shop-applied, fluoropolymer coil coating system for aluminum sheet.

* + - * 1. Metal Products to be Coated:

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

Specifier Notes: Specify the color of the coating by one of the following methods. Use the blank line to insert the name of the color, if specifying the color by name.

* + - * 1. Color: [Match custom sample] [Select from manufacturer’s full range] [Designated or scheduled] [\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_].

Specifier Notes: Specify the gloss of the coating by one of the following methods. Use the blank line to insert the gloss formulation, if different formulations are available.

* + - * 1. Gloss: [Match custom sample] [Select from manufacturer’s full range] [Designated or scheduled] [\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_].
      1. Pretreatment: Mechanically clean and chemically pretreat metal products in accordance with:
         1. Coating manufacturer’s instructions.
         2. AAMA 620.
      2. Coating System Application: Apply coating system in accordance with:
         1. Coating manufacturer’s instructions.
         2. AAMA 620.
    1. COATING SCHEDULE – SHOP-APPLIED EXTRUSION COATING SYSTEMS FOR ALUMINUM EXTRUSIONS AND PANELS

Specifier Notes: Specify coating schedule for the specified shop-applied extrusion coating systems for aluminum extrusions and panels. Delete extrusion coating systems not specified.

* + - 1. Shop-Applied, Extrusion Coating System for Aluminum Extrusions and Panels: Valspar [“Acrodize”] [“Acroflur”] [“Acropon”] [“Fluropon”] [“Fluropon Special”] [“Fluropon Classic II”] [“Fluropon Premiere”] [“Flurospar Classic II”] [“Flurospar”] [“Nanodize II”] [“Super Dynapon”] [“Fluropon Classic”] [“Flurocryl”] [“Polylure 1500”] extrusion coating system.

Specifier Notes: Specify 1-coat, 2-coat, or 3-coat system as applicable for the specified coating system.

* + - * 1. Dry Film Thickness (DFT), ASTM D 7091: [1-coat system] [2-coat system] [3-coat system].

Specifier Notes: Specify mil thicknesses as applicable for the specified coating system. Delete clear topcoat if not part of coating system.

Primer: \_\_\_\_\_\_\_\_ mils.

Color Coat: \_\_\_\_\_\_\_\_ mils.

Clear Topcoat: \_\_\_\_\_\_\_\_ mils.

Total, Minimum: \_\_\_\_\_\_\_\_ mils.

Specifier Notes: Include list of metal products to receive shop-applied extrusion coating system for aluminum extrusions and panels.

* + - * 1. Metal Products to be Coated:

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

Specifier Notes: Specify the color of the coating by one of the following methods. Use the blank line to insert the name of the color, if specifying the color by name.

* + - * 1. Color: [Match custom sample] [Select from manufacturer’s full range] [Designated or scheduled] [\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_].

Specifier Notes: Specify the gloss of the coating by one of the following methods. Use the blank line to insert the gloss formulation, if different formulations are available.

* + - * 1. Gloss: [Match custom sample] [Select from manufacturer’s full range] [Designated or scheduled] [\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_].
      1. Pretreatment: Mechanically clean and chemically pretreat metal products in accordance with:
         1. Coating manufacturer’s instructions.

Specifier Notes: Specify AAMA 2603, AAMA 2604, or AAMA 2605 as applicable for the specified coating system.

* + - * 1. [AAMA 2603] [AAMA 2604] [AAMA 2605].
      1. Coating System Application: Apply coating system in accordance with:
         1. Coating manufacturer’s instructions.

Specifier Notes: Specify AAMA 2603, AAMA 2604, or AAMA 2605 as applicable for the specified coating system.

* + - * 1. [AAMA 2603] [AAMA 2604] [AAMA 2605].
  1. EXECUTION

Specifier Notes: Part 3 – Execution is not used in this specification section. There is no on-site work related to shop-applied coatings for metal.

Refer to the sections specifying the metal products to receive shop-applied coating systems for field touch-up of damaged coatings and removal of temporary protective coverings of the coatings.

(Not Used)

END OF SECTION