SECTION 09 96 00

HIGH PERFORMANCE COATINGS (LEED v2009)

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\*\* NOTE TO SPECIFIER \*\* TNEMEC Company Inc.; High performance coating products.  
This section is based on the products of TNEMEC Company Inc., which is located at:  
6800 Corporate Dr.  
Kansas City, MO 64120-1372  
Toll Free Tel: 800-863-6321  
Tel: 816-483-3400  
Fax: 816-483-3969  
Email: [request info (ist@tnemec.com)](http://admin.arcat.com/users.pl?action=UserEmail&company=TNEMEC+Company+Inc.&coid=36075&rep=&fax=816-483-3969&message=RE:%20Spec%20Question%20(09960tne):%20%20&mf=)  
Web: [www.tnemec.com](http://www.tnemec.com)   
 [ [Click Here](http://www.arcat.com/arcatcos/cos36/arc36075.html) ] for additional information.  
Established in 1921, Tnemec Company is one of the largest privately held companies in the United States specializing in industrial coatings for new construction and maintenance. Tnemec manufactures more than one hundred industrial and architectural coatings from premium epoxies and polyurethanes to specialized fluoropolymer and new generation polymer products formulated specifically for extreme durability, enduring performance and enhanced aesthetics. Tnemec maintains its strengths through innovative and creative research and development for superior performance and leading technology in the paint and coatings industry.  
Tnemec's product line provides coating protection for a number of different industries including water storage tanks, water and wastewater treatment, specialty architectural, industrial and processing/manufacturing.  
Tnemec has a worldwide reputation among Specifiers and Contractors for consistently producing high quality industrial coatings that are used on everything from water tanks to large stadiums. Tnemec also features the most knowledgeable sales representatives in the coatings industry who provide support and industry expertise from start to finish.  
This Specification includes Products complying with USGBC LEED - NC Version 2009. Contact manufacturer for a listing with product data of specified coatings, including printed statement of VOC content and emissions compliance.

1. GENERAL
   1. SECTION INCLUDES

\*\* NOTE TO SPECIFIER \*\* Delete items below not required for project.

* + 1. Exterior Substrates:
       1. Steel Structures
       2. Miscellaneous and Ornamental Metals
       3. Galvanized and Non-Ferrous Metals
       4. Concrete, Brick and Concrete Masonry Units (CMU)
    2. Interior Substrates:
       1. Concrete, Vertical and Horizontal Surfaces
       2. Concrete Masonry Units (CMU).
       3. Concrete Floors
       4. Steel Structures
       5. Galvanized and Non-Ferrous Metals
       6. Cement Board, Gypsum Board & Cement Plaster
  1. RELATED SECTIONS

\*\* NOTE TO SPECIFIER \*\* Delete any sections below not relevant to this project; add others as required.

* + 1. Section 01 40 00 - Quality Requirements.
    2. Division 5 - Shop Applied Coatings for Metals for shop priming of metal substrates with primers specified in this Section.
    3. Section 09 90 00 - Painting and Coating.
    4. Section 09 90 00 - Painting and Coating.
  1. REFERENCES

\*\* NOTE TO SPECIFIER \*\* Delete references from the list below that are not actually required by the text of the edited section.

* + 1. ASTM B 117 - Standard Practice for Operating Salt Spray (Fog) Apparatus
    2. ASTM D 2247 - Standard Practice for Testing Water Resistance of Coatings in 100% Relative Humidity
    3. ASTM D 3359 - Standard Test Method for Film Hardness by Pencil Test
    4. ASTM D 3363 - Standard Test Method for Film Hardness by Pencil Test
    5. ASTM D 4060 - Standard Test Method for Abrasion Resistance of Organic Coatings by the Taber Abrader
    6. ASTM D 4263 - Standard Test Method for Indicating Moisture in Concrete by the Plastic Sheet Method
    7. ASTM D 4541 - Standard Test Method for Pull-Off Strength of Coatings Using Portable Adhesion Testers
    8. ASTM D 6386 - Preparation of Zinc (Hot-Dip Galvanized) Coated Iron and Steel Product and Hardware Surfaces for Painting.
    9. ASTM F 1869 - Standard Test Method for Measuring Moisture Vapor Emission Rate of Concrete Subfloor Using Anhydrous Calcium Chloride.
    10. ASTM F 2170 - Standard Test Method for Determining Relative Humidity in Concrete Floor Slabs Using in situ Probes
    11. ICRI Guide No. 03732 - Selecting and Specifying Concrete Surface Preparation for Sealers, Coatings and Polymer Overlays.
    12. SSPC-SP 3 - Power Tool Cleaning.
    13. SSPC-SP 6/NACE 3 - Commercial Blast Cleaning.
    14. SSPC-SP10/NASE 2 - Near White Blast Cleaning
    15. SSPC-SP 13/NACE 6 - Surface Preparation of Concrete.
    16. SSPC-PA2 - Measurement of Dry Coating with Magnetic Gauges
    17. U.S. Green Building Council, LEED Building Design & Construction (BD+C) 2009 (Version 3.0).
    18. Green Seal GC-03, GS-11
  1. SUBMITTALS
     1. Submit under provisions of Section 01 30 00 - Administrative Requirements.
     2. Product Data: Manufacturer's data sheets on each product to be used, including:
        1. Preparation instructions and recommendations.
        2. Storage and handling requirements and recommendations.
        3. Application instructions.
        4. Manufacturer's Safety Data Sheets.
     3. Shop Drawings: Submit a complete schedule of products proposed for use, including identifying product names and catalog numbers.
        1. Arrange in same format as Finish Schedule.
        2. Include applicable manufacturer's data and recommendations.

\*\* NOTE TO SPECIFIER \*\* Delete selection samples if colors have already been selected.

* + 1. Selection Samples: For each finish product specified, two complete sets of color chips representing manufacturer's full range of available colors and patterns.
    2. Verification Samples: For each finish product specified, two samples, minimum size 3 inches by 4 inches (76 mm by 102 mm) representing actual product, color, and patterns.
    3. Manufacturer's Certificates: Certify products meet or exceed specified requirements and are suitable for intended application.
    4. LEED Submittals: Provide documentation of how the requirements of Credit will be met:
       1. LEED 209: For Indoor Environmental Quality (EQ) Credit 4.2, provide manufacturers' product data for specified coatings, including printed statement of VOC content.
    5. Closeout Submittals: Provide manufacturer's maintenance instructions that include recommendations for periodic cleaning and maintenance of coatings specified.
  1. QUALITY ASSURANCE
     1. Manufacturer Qualifications: Provide all products from a single manufacturer specializing in manufacture of high-performance epoxy coatings with a minimum of 10 years' experience.
        1. Materials shall be standard products of a single manufacturer.
        2. Secondary materials shall be specifically recommended by coating system manufacturer to ensure compatibility of systems.
     2. Applicator Qualifications: A firm documented experienced applying paints and coatings similar in material, design, and extent to those indicated for this project, whose work has resulted in applications with a record of successful in-service performance.
     3. Regulatory Requirements: Conform to all applicable codes and ordinances for flame, fuel, smoke and volatile organic compounds (VOC) ratings requirements for finishes at time of application.

\*\* NOTE TO SPECIFIER \*\* Include a mock-up if the project size and/or quality warrant taking such a precaution. The following is one example of how a mock-up on a large project might be specified. When deciding on the extent of the mock-up, consider all the major different types of work on the project.

* + 1. Mock-Up: Provide a mock-up for evaluation of surface preparation techniques and application workmanship.
       1. Located in areas designated by Architect.
       2. Prepare a surface preparation mock-up of each surface condition anticipated for the project.
       3. Prepare a 10 foot by 10 foot (3.05 m by 3.05 m) mock-up for each coating system specified using same materials, tools, equipment, and procedures intended for actual surface preparation and application.
       4. Do not proceed with remaining work until workmanship, color, and sheen are approved by Architect.
       5. Refinish mock-up area as required to produce acceptable work.
       6. Retain mock-ups to establish intended standards by which surface preparation and coating systems will be judged.

\*\* NOTE TO SPECIFIER \*\* Include pre-application meeting if the project size and/or quality warrant taking such a precaution. Delete if not required

* + 1. Pre-Application Meeting:
       1. Convene a pre-application meeting two weeks before the start of application of floor coating system.
       2. Require attendance of parties directly affecting work of this section, including the Contractor, Architect, Owner's Representative, coating applicator, and a representative of coating material manufacturer.
       3. Topics to be discussed at meeting shall include:
          1. Review of Contract Documents and accepted shop drawings and deviations or differences resolved.
          2. Review environmental conditions, surface conditions, surface preparation, application procedures, and protection after application.
          3. Review the surface preparation, application, cleaning, protection and coordination with other work.
          4. Establish areas on-site available for use as storage areas and working area.
          5. Review project schedule, and the work that should be completed before coating application.
       4. Submit a written meeting report documenting the items discussed with copies to all parties attending within 3 days following the meeting.
  1. DELIVERY, STORAGE, AND HANDLING
     1. Delivery: Deliver materials to site in manufacturer's original, unopened containers and packaging, with manufacturer's labels clearly identifying product name and manufacturer and the following:
        1. Manufacturer and Coating or material name.
        2. Color name and number.
        3. Batch or lot number.
        4. Date of manufacture.
        5. Mixing and thinning instructions.
     2. Store materials in accordance with the manufacturers instructions.
        1. Store materials in dry, enclosed area with adequate protection from moisture.
        2. Keep containers sealed until ready for use.
        3. At all times, coatings shall be protected from freezing.
     3. Store and dispose of solvent-based materials, and materials used with solvent-based materials, in accordance with requirements of local authorities having jurisdiction.
     4. Handling: Protect materials during handling and application to prevent damage or contamination
  2. SEQUENCING
     1. Ensure that products of this section are supplied to affected trades in time to prevent interruption of construction progress.
  3. PROJECT CONDITIONS
     1. Maintain environmental conditions (temperature, humidity, and ventilation) within limits recommended by manufacturer for optimum results. Do not install products under environmental conditions outside manufacturer's absolute limits.
     2. Provide ventilation during coating evaporation stage in confined or enclosed areas in accordance with manufacturer's instructions.
     3. Schedule coating work to avoid excessive dust and airborne contaminants. Protect work areas from excessive dust and airborne contaminants during coating application and curing.
  4. COORDINATION
     1. Coordinate Work with other operations to avoid damage to installed materials

1. PRODUCTS
   1. MANUFACTURERS
      1. Acceptable Manufacturer: TNEMEC Company Inc., which is located at: 6800 Corporate Dr.; Kansas City, MO 64120-1372; Toll Free Tel: 800-863-6321; Tel: 816-483-3400; Fax: 816-483-3969; Email: [request info (ist@tnemec.com)](http://admin.arcat.com/users.pl?action=UserEmail&company=TNEMEC+Company+Inc.&coid=36075&rep=&fax=816-483-3969&message=RE:%20Spec%20Question%20(09960tne):%20%20&mf=); Web: [www.tnemec.com](http://www.tnemec.com)

\*\* NOTE TO SPECIFIER \*\* Delete one of the following two paragraphs; coordinate with requirements of Division 1 section on product options and substitutions.

* + 1. Substitutions: Not permitted.
    2. Requests for substitutions will be considered in accordance with provisions of Section 01 60 00 - Product Requirements.
  1. 1.6MATERIALS - GENERAL REQUIREMENTS
     1. Requirements: USGBC LEED - NC Version 2009.
        1. Paints and coatings used on the interior of the building (defined as inside of the weatherproofing system and applied on-site) shall comply with the following criteria:
           1. Coating Type: VOC weight in grams/liter of product minus water
           2. Non-flat: 150 g/L
           3. Flat: 50 g/L
           4. Primers: 150 g/L
           5. Rust Inhibitive over Ferrous Substrates: 250 g/L
           6. Floor Coatings: 100 g/L
           7. Waterproofing Sealers: 250 g/L
           8. Sealers: all other sealers: 200 g/L
        2. Architectural paints, coatings and primers applied to interior walls and ceilings: Do not exceed the VOC content limits established in Green Seal Standard GS-11, Paints, First Edition, May 20, 1993.
        3. Anti-corrosive and anti-rust paints applied to interior ferrous metal substrates: Do not exceed the VOC content limit of 250 g/L established in Green Seal Standard GC-03, Anti-Corrosive Paints, Second Edition, January 7, 1997.
        4. Clear wood finishes, floor coatings, stains, and shellacs applied to interior elements: Do not exceed the VOC content limits established in South Coast Air Quality Management District (SCAQMD) Rule 1113, Architectural Coatings, rules in effect on July 1, 2006.
     2. Interior Performance Requirements: All Interior Coatings: Supply certified test reports verifying product performance according to the following requirements:
        1. Abrasion:
           1. Method: ASTM D 4060, CS-17 Wheel, 1,000 grams load.
        2. Adhesion:
           1. Method: ASTM D 4541
           2. Method ASTM D 3359 (Method B, Crosshatch)
        3. Fresh Water:
           1. Method: Coating system applied to SSPC-SP10 cleaned hot-rolled steel, cured 7 days prior to testing and immersed in aerated tap water at 77 degrees F.
        4. Salt Spray:
           1. Method: ASTM B 117 applied to SSPC-SP10 cleaned hot-rolled steel
     3. Exterior Performance Requirements: All Exterior Coatings: Supply certified test reports verifying product performance according to the following requirements:
        1. Abrasion:
           1. Method: ASTM D 4060, CS-17 Wheel, 1,000 grams load
        2. Adhesion:
           1. Method: ASTM D 4541
           2. Method: ASTM D 3359 (Method B)
        3. Exterior Exposure:
           1. Method: Exposed at 45 degrees facing ocean
           2. Location: Atlantic Seacoast - 80-foot fence
        4. Fresh Water: (Where Applicable)
           1. Method: Coating system applied to sandblasted steel panels, cured for 7 days at 77 degrees F and immersed in tap water at 77 degrees F.
        5. Hardness:
           1. Method: ASTM D 3363 (Pencil)
        6. Humidity:
           1. Method: ASTM D 2247
        7. Salt Spray (Fog):
           1. Method: ASTM B 117
        8. Graffiti Resistance (Where Applicable):
           1. Method: The following graffiti materials applied to coating and allowed to dry for 7 days: acrylic, epoxy-ester and alkyd spray paints, crayon, lipstick, shoe polish, ball point and Markette marker. Removal first attempted with xylene, if graffiti remained then methyl ethyl ketone (MEK) was tried; if graffiti remained, spray pack Vandal Mark Remover was used.
           2. Requirement: Complete and easy removal of listed media using xylene or methyl ethyl ketone (MEK), and no dulling of the surface. Metallic zinc dust content by weight in the dry film.
        9. Metallic zinc dust content by weight in the dry film.
        10. Consumer Product Safety Act Regulations Part 1303.

\*\* NOTE TO SPECIFIER \*\* Edit the following General paragraphs as required and applicable to project LEED 2009 requirements. Coordinate project locations for applicable regional credits. Delete the paragraphs that are not applicable. Note that, depending upon the color of the primer/intermediate coat or method of application, additional finish coats may be required to achieve recommended film thickness and/or hiding.

* 1. COATING SYSTEMS FOR STEEL, BAR JOIST, HANDRAILS, MISCELLANEOUS METALS INTERIOR

\*\* NOTE TO SPECIFIER \*\* Coordinate surface preparation and shop primer with the appropriate Metal Section in Division 5.

* + 1. Shop Primer, Interior Exposed, Concealed:
       1. System Type: Inorganic Water-Based Epoxy Primer.
       2. Surface Preparation: SSPC-SP6/NACE 3
       3. Primer (Shop): Tnemec; Series 27WB Typoxy, DFT 4.0 to 6.0 mils (100 to 150 microns).
       4. Total DFT: 4.0 to 6.0 mils (100 to 150 microns).

\*\* NOTE TO SPECIFIER \*\* Select color paragraph required and delete the one not required.

* + - 1. Color:
         1. As selected by Architect from manufacturer's standard colors.
         2. As indicated on the Drawings.
    1. Extended Field Exposure of Shop Primer and/or Moderate Conditions:
       1. System Type: Epoxy/Acrylic
       2. Surface Preparation: SSPC-SP 6/NACE 3.
       3. Shop Primer: Tnemec; Series 66HS Hi-Build Epoxoline, DFT 3.0 to 5.0 mils (75 to 130 microns).
       4. First Coat:

\*\* NOTE TO SPECIFIER \*\* Select finish paragraph required and delete the one not required.

* + - * 1. Tnemec; Series 1028 Enduratone (semi-gloss), DFT 2.0 to 3.0 mils (50 to 75 microns).
        2. Tnemec; Series 1029 Enduratone (low semi-gloss), DFT 2.0 to 3.0 mils (50 to 75 microns).
      1. Finish Coat:

\*\* NOTE TO SPECIFIER \*\* Select finish coat paragraph required and delete the one not required.

* + - * 1. Tnemec; Series 1028 Enduratone (semi-gloss), DFT 2.0 to 3.0 mils (50 to 75 microns).
        2. Tnemec; Series 1029 Enduratone (low semi-gloss), DFT 2.0 to 3.0 mils (50 to 75 microns).
      1. Total DFT: 7.0 to 11.0 mils (175 to 280 microns).

\*\* NOTE TO SPECIFIER \*\* Select color paragraph required and delete the one not required.

* + - 1. Color:
         1. As selected by Architect from manufacturer's standard colors.
         2. As indicated on the Drawings.
    1. Interior Wet and/or Chemical Exposure, Physical Abuse: Handrails, Structural Steel, Miscellaneous Metals
       1. System Type: Epoxy.
       2. Surface Preparation: SSPC-SP 6/NACE 3.
       3. Shop Primer:
          1. Tnemec; Series 66HS Hi-Build Epoxoline, DFT 3.0 to 5.0 mils (75 to 130 microns).
       4. Finish Coat: (Field)
          1. Tnemec; Series 66HS Hi-Build Epoxoline, DFT 4.0 to 6.0 mils (100 to 150 microns).
       5. Total DFT: 7.0 to 11.0 mils (175 to 280 microns).

\*\* NOTE TO SPECIFIER \*\* Select color paragraph required and delete the one not required.

* + - 1. Color:
         1. As selected by Architect from manufacturer's standard colors.
         2. As indicated on the Drawings.
    1. Natatorium, Structural Steel and Bar Joists
       1. System Type: Zinc Rich Urethane/Acrylic
       2. Surface Preparation (Shop): SSPC-SP6/NACE 3.
       3. Shop Application:
          1. Primer: Tnemec; Series 94-H20 Hydro-Zinc, DFT 2.5 to 3.5 mils (65 to 90 microns).
          2. Finish Coat: Tnemec; Series 115 Uni-Bond DF, DFT 2.5 to 3.5 mils (65 to 90 microns). Apply finish coat to steel and joist surfaces that will be concealed after erection, such as, top flange or steel to be embedded in concrete and masonry.
       4. Field Application:
          1. First Coat (Field): Tnemec; Series 115 Uni-Bond DF, DFT 2.5 to 3.5 mils (65 to 90 microns).
          2. Finish Coat (Field): Tnemec; Series 115 Uni-Bond DF (eggshell), DFT 2.5 to 3.5 mils (65 to 90 microns).
       5. Total DFT: 7.5 to 10.5 mils (190 to 270 microns).

\*\* NOTE TO SPECIFIER \*\* Select color paragraph required and delete the one not required.

* + - 1. Color:
         1. As selected by Architect from manufacturer's standard colors.
         2. As indicated on the Drawings.
  1. COATING SYSTEMS FOR SHOP PRIMED STEEL TRIM, DOORS, WINDOWS - INTERIOR & EXTERIOR
     1. Dry/Moderate:
        1. System Type: Epoxy/Acrylic
        2. Surface Preparation: SSPC-SP 6/NACE 3.
        3. Shop Primer: Tnemec; Series 66HS Hi-Build Epoxoline, DFT 3.0 to 5.0 mils (75 to 130 microns).
        4. First Coat: (Field)

\*\* NOTE TO SPECIFIER \*\* Select finish paragraph required and delete the one not required.

* + - * 1. Tnemec; Series 1028 Enduratone (gloss), DFT 2.0 to 3.0 mils (50 to 75 microns).
        2. Tnemec; Series 1029 Enduratone (low semi-gloss), DFT 2.0 to 3.0 mils (50 to 75 microns).
      1. Finish Coat: (Field)

\*\* NOTE TO SPECIFIER \*\* Select finish coat paragraph required and delete the one not required.

* + - * 1. Tnemec; Series 1028 Enduratone (gloss), DFT 2.0 to 3.0 mils (50 to 75 microns).
        2. Tnemec; Series 1029 Enduratone (low semi-gloss), DFT 2.0 to 3.0 mils (50 to 75 microns).
      1. Total DFT: 7.0 to 11.0 mils (175 to 280 microns).

\*\* NOTE TO SPECIFIER \*\* Select color paragraph required and delete the one not required.

* + - 1. Color:
         1. As selected by Architect from manufacturer's standard colors.
         2. As indicated on the Drawings.
    1. Dry to Wet/Moderate to Severe:
       1. System Type: Zinc Rich/Epoxy/Urethane
       2. Surface Preparation: SSPC-SP 6/NACE 3.
          1. Shop Primer: Tnemec; Series 94-H20 Hydro-Zinc, DFT 2.5 to 3.5 mils (65 to 90 microns).
       3. Intermediate Coat: (Field)
          1. Tnemec; Series 66HS Hi-Build Epoxoline, DFT 2.0 to 3.0 mils (50 to 75 microns).
       4. Finish Coat: (Field)

\*\* NOTE TO SPECIFIER \*\* Select finish coat paragraph required and delete the one not required.

* + - * 1. Tnemec; Series 740 UVX or Tnemec; Series 1080 Endura-Shield (gloss), DFT 2.0 to 3.0 mils (50 to 75 microns).
        2. Tnemec; Series 750 UVX or Tnemec; Series 1081 Endura-Shield (semi-gloss), DFT 2.0 to 3.0 mils (50 to 75 microns).
      1. Total DFT: 6.5 to 9.5 mils (165 to 241 microns).

\*\* NOTE TO SPECIFIER \*\* Select color paragraph required and delete the one not required.

* + - 1. Color:
         1. As selected by Architect from manufacturer's standard colors.
         2. As indicated on the Drawings.

\*\* NOTE TO SPECIFIER \*\* Coordinate surface preparation and shop primer with the appropriate Metal Section in Division 5.

* 1. COATING SYSTEMS FOR STEEL - EXTERIOR
     1. Atmospheric, Aggressive Corrosion, Coastal, UV Exposure, Chemical, Physical Abuse: Parking Garage Structures, Exterior Handrails, Ornamental & Miscellaneous Metals, and Canopy Steel.
        1. System Type: Zinc/Epoxy/Waterborne Urethane.
        2. Surface Preparation: SSPC-SP 6/NACE 3.
        3. Shop Primer:
           1. Tnemec; Series 94-H20 Hydro-Zinc, DFT 2.5 to 3.5 mils (65 to 90 microns).
        4. Intermediate Coat:
           1. Tnemec; Series 66HS Hi-Build Epoxoline, DFT 2.0 to 3.0 mils (50 to 75 microns).
        5. Finish Coat:

\*\* NOTE TO SPECIFIER \*\* Select finish coat paragraph required and delete the one not required.

* + - * 1. Tnemec; Series 740 UVX or Tnemec; Series 1080 Endura-Shield (gloss), DFT 2.0 to 3.0 mils (50 to 75 microns).
        2. Tnemec; Series 750 UVX or Tnemec; Series 1081 Endura-Shield (semi-gloss), DFT 2.0 to 3.0 mils (50 to 75 microns).
      1. Total DFT: 6.5 to 9.5 mils (165 to 240 microns).

\*\* NOTE TO SPECIFIER \*\* Select color paragraph required and delete the one not required.

* + - 1. Color:
         1. As selected by Architect from manufacturer's standard colors.
         2. As indicated on the Drawings.
    1. Exterior Exposed Steel (Overcoat):
       1. System Type: Acrylic/Polyurethane or Polycarbamide.
       2. Surface Preparation: SSPC-SP 6/NACE 3.
       3. Primer:
          1. Tnemec; Series 118 Uni-Bond Mastic, DFT 6.0 to 8.0 mils (150 to 205 microns).
       4. Finish Coat:

\*\* NOTE TO SPECIFIER \*\* Select finish coat paragraph required and delete the one not required.

* + - * 1. Tnemec; Series 740 UVX (gloss), DFT 2.0 to 3.0 mils ((50 to 75 microns).
        2. Tnemec, Series 750 UVX (semi-gloss), DFT 2.0 to 3.0 mils (50 to 75 microns).
      1. Total DFT: 8.0 to 11.0 mils (200 to 280 microns).

\*\* NOTE TO SPECIFIER \*\* Select color paragraph required and delete the one not required.

* + - 1. Color:
         1. As selected by Architect from manufacturer's standard colors.
         2. As indicated on the Drawings.
  1. COATING SYSTEMS FOR CONCRETE AND MASONRY - INTERIOR

\*\* NOTE TO SPECIFIER \*\* Film thickness for coatings applied to concrete and concrete masonry units cannot be accurately measured and have been calculated from the square foot per gallon application rate. Coverage may vary depending on density of the substrate. Additional coats may be required to achieve recommended film thickness and/or hiding.

* + 1. Moderate/Dry Conditions
       1. System Type: (Acrylic/Acrylic)
       2. Surface Preparation:
          1. Concrete: SSPC-SP 13/NACE 6.
       3. Filler/Surfacer (Dense CMU):

\*\* NOTE TO SPECIFIER \*\* Block filler is optional. Note that Haydite and lightweight block will require a filler/surfacer to provide a smooth, pinhole-free surface. Delete paragraph if not required.

* + - * 1. CMU - Tnemec; Series 130 Envirofill, 85 to 115 square feet per gallon.
        2. CMU - Tnemec, Series 1254 EpoxoBlock WB, 100 to 150 square feet per gallon.
      1. Primer Coat:
         1. Tnemec; Series 1026 Enduratone, DFT 2.0 to 3.0 mils (50 to 75 microns).
      2. Finish Coat:
         1. Tnemec; Series 1026 Enduratone (matte), DFT 2.0 to 3.0 mils (50 to 75 microns).
      3. Total DFT: 4.0 to 6.0mils (100 to 150 microns) over block filler.

\*\* NOTE TO SPECIFIER \*\* Select color paragraph required and delete the one not required.

* + - 1. Color:
         1. As selected by Architect from manufacturer's standard colors.
         2. As indicated on the Drawings.
    1. Moderate/Dry Conditions, Physical Contact and/or Abuse:
       1. System Type: (Epoxy/Epoxy/Urethane)
       2. Surface Preparation:
          1. Concrete: SSPC-SP 13/NACE 6.
       3. Filler/Surfacer: (Dense CMU)

\*\* NOTE TO SPECIFIER \*\* Block filler is optional. Note that Haydite and lightweight block will require a filler/surfacer to provide a smooth, pinhole-free surface. Delete paragraph if not required.

* + - * 1. CMU - Tnemec; Series 130 Envirofill, 85 to 115 square feet per gallon.
        2. CMU - Tnemec, Series 1254 EpoxoBlock WB, 100 to 150 square feet per gallon.
      1. Primer Coat:
         1. Tnemec; Series 280 Tneme-Glaze, DFT 6.0 to 8.0 mils (150 to 205 microns).
      2. Intermediate:
         1. Tnemec; Series 297 Enviro-Glaze, DFT 2.0 to 3.0 mils (50 to 75 microns).
      3. Finish Coat:
         1. Tnemec; Series 297 Enviro-Glaze (gloss), DFT 2.0 to 3.0 mils (50 to 75 microns).
      4. Total DFT: 10.0 to 14.0 mils (250 to 360 microns) over block filler.

\*\* NOTE TO SPECIFIER \*\* Select color paragraph required and delete the one not required.

* + - 1. Color:
         1. As selected by Architect from manufacturer's standard colors.
         2. As indicated on the Drawings.
    1. Moderate to Severe Conditions, Physical Contact and/or Abuse, Public Areas or Preparation Areas Frequently Cleaned or Wet.
       1. System Type: 100 percent solids epoxy.
       2. Surface Preparation: SSPC-SP 13/NACE 6.
          1. Concrete: Abrasive blast.

\*\* NOTE TO SPECIFIER \*\* Block filler is optional. Note that Haydite and lightweight block will require a filler/surfacer to provide a smooth, pinhole-free surface. Delete paragraph if not required.

* + - 1. Block Filler - CMU Only (Dense CMU): Tnemec; Series 130 Envirofill, 85 to 115 square feet per gallon.
      2. First Coat:
         1. Tnemec; Series 280 Tneme-Glaze, DFT 6.0 to 8.0 mils (150 to 205 microns).
      3. Finish Coat:
         1. Tnemec; Series 280 Tneme-Glaze (gloss), DFT 6.0 to 8.0 mils (150 to 205 microns).

\*\* NOTE TO SPECIFIER \*\* Select color paragraph required and delete the one not required.

* + - 1. Color:
         1. As selected by Architect from manufacturer's standard colors.
         2. As indicated on the Drawings.
    1. Severe, Physical Contact, Wet, Bathrooms, Showers:
       1. System Type: Spray-On Epoxy Fiber Glass.
       2. Surface Preparation: SSPC-SP 13/NACE 6. Abrasive blast.
          1. Concrete: Abrasive blast.
       3. Primer/Surfacer:

\*\* NOTE TO SPECIFIER \*\* Block filler is optional. Note that Haydite and lightweight block will require a filler/surfacer to provide a smooth, pinhole-free surface. Delete paragraph if not required.

* + - * 1. Concrete - Tnemec; Series 201 Epoxoprime, DFT 6.0 to 8.0 mils (150 to 205 microns).
        2. CMU - Tnemec; Series 130 Envirofill 85 to 115 square feet per gallon.
      1. Intermediate Coat:
         1. Tnemec; Series 270 Stranlok, DFT 25.0 to 40.0 mils (635 to 1020 microns).
      2. Finish Coat: (Sand entire surface to remove any protruding fiberglass strands).
         1. Tnemec; Series 280 Tneme-Glaze (gloss), DFT 6.0 to 8.0 mils (150 to 205 microns).
      3. Total DFT: 37.0 to 56.0 mils (900 to 1430 microns).

\*\* NOTE TO SPECIFIER \*\* Select color paragraph required and delete the one not required.

* + - 1. Color:
         1. As selected by Architect from manufacturer's standard colors.
         2. As indicated on the Drawings.
    1. Severe, Physical Contact, Wet, Bathrooms, Showers:
       1. System Type: Matte Lay-up/Epoxy Fiber Glass.
       2. Surface Preparation: SSPC-SP 13/NACE 6. Abrasive blast.
          1. Concrete: Abrasive blast.
       3. Primer/Block filler Coat:

\*\* NOTE TO SPECIFIER \*\* Block filler is optional. Note that Haydite and lightweight block will require a filler/surfacer to provide a smooth, pinhole-free surface. Delete paragraph if not required.

* + - * 1. Tnemec; Series 201 Epoxoprime, DFT 6.0 to 8.0 mils (150 to 205 microns) (Concrete).
        2. Tnemec; Series 215 Surfacing Epoxy 40 to 50 square feet per gallon (CMU Only: to fill porosity and mortar joints).
      1. Intermediate Coat:
         1. Tnemec; Series 273 Stranlok ML, DFT 12.0 to 16.0 mils (305 to 410 microns).
         2. Tnemec; Series 273-0273C Glass Mat, lay mat into wet film.
      2. Saturate Coat:
         1. Tnemec; Series 280 Tneme-Glaze, DFT 12.0 to 16.0 mils (305 to 410 microns).
      3. Finish Coat:
         1. Tnemec; Series 280 Tneme-Glaze (gloss). DFT 6.0 to 8.0 mils (150 to 205 microns).
      4. Total DFT: 37.0 to 56.0 mils (900 to 1430 microns).

\*\* NOTE TO SPECIFIER \*\* Select color paragraph required and delete the one not required.

* + - 1. Color:
         1. As selected by Architect from manufacturer's standard colors.
         2. As indicated on the Drawings.
    1. Parking Garage Ceiling and Walls
       1. System Type: Water Based Epoxy/Modified Waterborne Acrylate.
       2. Surface Preparation: SSPC-SP 13/NACE 6.
          1. Concrete: Abrasive Blast

\*\* NOTE TO SPECIFIER \*\* Block filler is optional. Note that Haydite and lightweight block will require a filler/surfacer to provide a smooth, pinhole-free surface. Delete paragraph if not required.

* + - 1. Block Filler:
         1. Tnemec; Series 130 Envirofill, 85 to 115 square feet per gallon (CMU Only).
      2. Primer Coat:
         1. Tnemec; Series 156 Enviro-Crete, DFT 4.0 to 8.0 mils (100 to 205 microns).
      3. Finish Coat:
         1. Tnemec; Series 156 Enviro-Crete, DFT 4.0 to 8.0 mils (100 to 205 microns).
      4. Total DFT
         1. Tnemec; Series 156 Enviro-Crete (smooth/matte), 8.0 to 16.0 mils (200 to 410 microns) over block filler.

\*\* NOTE TO SPECIFIER \*\* Select color paragraph required and delete the one not required.

* + - 1. Color:
         1. As selected by Architect from manufacturer's standard colors.
         2. As indicated on the Drawings.
  1. COATING SYSTEMS FOR CONCRETE AND MASONRY EXTERIOR

\*\* NOTE TO SPECIFIER \*\* Film thickness for coatings applied to concrete and concrete masonry units cannot be accurately measured and have been calculated from the square foot per gallon application rate. Coverage may vary depending on density of the substrate. Additional coats may be required to achieve recommended film thickness and/or hiding.

* + 1. Mild to Severe Exposure
       1. System Type: Water-Based Modified Acrylate.
       2. Surface Preparation: SSPC-SP13/NACE 6, Clean and Dry.

\*\* NOTE TO SPECIFIER \*\* Block filler is optional. Note that Haydite and lightweight block will require a filler/surfacer to provide a smooth, pinhole-free surface. Delete paragraph if not required.

* + - 1. Block Filler; Series 130 Envirofill 85 to 115 square feet per gallon.
      2. Primer:
         1. Series 156 Enviro-Crete, DFT 4.0 to 8.0 mils (100 to 205 microns).
         2. Series 157 Enviro-Crete, DFT 6.0 to 9.0 mils (150 to 230 microns).
      3. Finish Coat:
         1. Series 156 Enviro-Crete (smooth/matte), DFT 4.0 to 8.0 mils (100 to 205 microns).
         2. Series 157 Enviro-Crete (sand texture/matte), DFT 6.0 to 9.0 mils (150 to 230 microns).
      4. Total DFT:
         1. Series 156 Enviro-Crete (smooth/matte), DFT 8.0 to 16.0 mils (205 to 410 microns) over block filler
         2. Series 157 Enviro-Crete (sand texture), DFT 12.0 to 18.0 mils (300 to 460 mils) over block filler.

\*\* NOTE TO SPECIFIER \*\* Select color paragraph required and delete the one not required.

* + - 1. Color:
         1. As selected by Architect from manufacturer's standard colors.
         2. As indicated on the Drawings.
  1. COATING SYSTEMS FOR CONCRETE FLOORS
     1. Moderate Service and Traffic:
        1. System Type: 100% Solids Epoxy.
        2. Surface Preparation: SSPC-SP 13/NACE 6. Shot blast or mechanically abrade.
        3. Primer:
           1. Tnemec; Series 201 Epoxoprime, DFT 10.0 to 12.0 mils (250 to 305 microns).
        4. Intermediate Coat:

\*\* NOTE TO SPECIFIER \*\* Select Intermediate coat paragraph required and delete the one not required.

* + - * 1. Tnemec; Series 280 Tneme-Glaze, DFT 6.0 to 8.0 mils (150 to 205 microns).
        2. Tnemec; Series 281 Tneme-Glaze (gloss), DFT 6.0 to 8.0 mils (150 to 205 microns).
      1. Finish Coat:

\*\* NOTE TO SPECIFIER \*\* Select finish coat paragraph required and delete the one not required.

* + - * 1. Tnemec; Series 280 Tneme-Glaze (gloss/orange peel), DFT 6.0 to 8.0 mils (150 to 205 microns).
        2. Tnemec; Series 281 Tneme-Glaze, DFT 6.0 to 8.0 mils (150 to 205 microns).
      1. Total DFT: 22.0 to 28.0 mils (550 to 715 microns).

\*\* NOTE TO SPECIFIER \*\* Select color paragraph required and delete the one not required.

* + - 1. Color:
         1. As selected by Architect from manufacturer's standard colors.
         2. As indicated on the Drawings.
    1. Moderate to Heavy Service, Areas Frequently Wet:
       1. System Type: Aggregate-filled epoxy laminate.
       2. Surface Preparation: SSPC-SP 13/NACE 6. Shot blast or mechanically abrade.
       3. Primer:

\*\* NOTE TO SPECIFIER \*\* Slurry-broadcast application requires Series 201 Epoxoprime as the primer. Standard double broadcast application is self-priming.

* + - * 1. Tnemec; Series 201 Epoxoprime, DFT 6.0 to 8.0 mils (150 to 205 microns).
      1. Intermediate Coat:
         1. Tnemec; Series 237 Power-Tread, double broadcast, DFT 1/8 inch (125 mils or 3,176 microns).
      2. Finish Coat:
         1. Tnemec; Series 280 Tneme-Glaze (gloss/orange peel), DFT 8.0 to 12.0 mils (200 to 305 microns).
      3. Total DFT: 1/8 inch Nominal Thickness system

\*\* NOTE TO SPECIFIER \*\* Select color paragraph required and delete the one not required.

* + - 1. Color:
         1. As selected by Architect from manufacturer's standard colors.
         2. As indicated on the Drawings.
    1. Moderate Service, Wet Areas, Decorative, Locker Rooms:
       1. System Type: Ceramic-filled epoxy laminate.
       2. Surface Preparation: SSPC-SP 13/NACE 6. Shot blast or mechanically abrade.
       3. Primer:
          1. Tnemec; Series 201 Epoxoprime DFT 6.0 to 8.0 mils (150 to 205 microns).
       4. Intermediate Coat:

\*\* NOTE TO SPECIFIER \*\* Select Intermediate coat required and delete the one not required.

* + - * 1. Tnemec; Series 222-Colored Quartz Deco-Tread, double broadcast, DFT 1/8 inch (125 mils or 3,176 microns ) (3 mm).
        2. Tnemec; Series 224 Deco-Flake, double broadcast, DFT 1/8 inch (125 mils or 3,176 microns) (3 mm).

\*\* NOTE TO SPECIFIER \*\* Select Intermediate color paragraph required and delete the one not required.

* + - 1. Intermediate Color:
      2. As selected by Architect from manufacturer's standard colors
      3. As indicated on the Drawings.
      4. Finish Coat:
         1. Tnemec; Series 284 Deco-Clear (clear), DFT 8.0 to 10.0 mils (205 to 250 microns).
      5. Total DFT: 1/8 inch nominal thickness system

\*\* NOTE TO SPECIFIER \*\* Select color paragraph required and delete the one not required.

* + - 1. Color: Colored Quartz and Clear.
         1. As selected by Architect from manufacturer's standard colors.
         2. As indicated on the Drawings.
  1. COATING SYSTEMS FOR CONCRETE - SWIMMING POOLS
     1. Swimming Pools, Immersion:
        1. System Type: Epoxy.
        2. Surface Preparation: SSPC-SP 13/NACE 6. Abrasive Blast.
        3. Primer:
           1. Tnemec; Series 66HS Hi-Build Epoxoline, DFT 3.0 to 5.0 mils (75 to 130 microns).
        4. Finish Coat
           1. Tnemec; Series 66HS Hi-Build Epoxoline (satin), DFT 3.0 to 5.0 mils (75 to 130 microns).
        5. Total DFT: 6.0 to 10.0 mils (150 to 255 microns)

\*\* NOTE TO SPECIFIER \*\* Select color paragraph required and delete the one not required.

* + - 1. Color:
         1. As selected by Architect from manufacturer's standard colors.
         2. As indicated on the Drawings.
    1. Swimming Pools, Ceiling
       1. System Type: Epoxy.
       2. Surface Preparation: SSPC-SP 13/NACE 6. Abrasive Blast.
       3. Primer:
          1. Tnemec; Series 66HS Hi-Build Epoxoline, DFT 3.0 to 5.0 mils (75 to 130 microns).
       4. Finish Coat
          1. Tnemec; Series 66HS Hi-Build Epoxoline (satin), DFT 3.0 to 5.0 mils (75 to 130 microns).
       5. Total DFT: 6.0 to 10.0 mils (150 to 255 microns).

\*\* NOTE TO SPECIFIER \*\* Select color paragraph required and delete the one not required.

* + - 1. Color:
         1. As selected by Architect from manufacturer's standard colors.
         2. As indicated on the Drawings.
  1. COATING SYSTEMS FOR STUCCO AND CEMENTITIOUS MATERlALS
     1. Exterior Exposure:
        1. System Type: Modified Waterborne Acrylate.
        2. Surface Preparation: Clean and dry.
        3. Primer:

\*\* NOTE TO SPECIFIER \*\* Select primer paragraph required and delete the one not required.

* + - * 1. Tnemec; Series 156 Enviro-Crete, DFT 4.0 to 8.0 mils (100 to 205 microns).
        2. Tnemec; Series 157 Enviro-Crete, DFT 6.0 to 9.0 mils (150 to 230 microns).
      1. Finish Coat:

\*\* NOTE TO SPECIFIER \*\* Select finish paragraph required and delete the one not required.

* + - * 1. Tnemec; Series 156 Enviro-Crete (smooth/matte), DFT 4.0 to 8.0 mils (100 to 205 microns).
        2. Tnemec; Series 157 Enviro-Crete (sand texture), DFT 6.0 to 9.0 mils (150 to 230 microns)
      1. Total DFT:

\*\* NOTE TO SPECIFIER \*\* Select DFT paragraph required and delete the one not required.

* + - * 1. Tnemec; Series 156 Enviro-Crete (smooth/matte), DFT 8.0 to 16.0 mils (205 to 410 microns).
        2. Tnemec; Series 157 Enviro-Crete (sand texture), DFT 12.0 to 18.0 mils (300 to 460 microns).

\*\* NOTE TO SPECIFIER \*\* Select color paragraph required and delete the one not required.

* + - 1. Color:
         1. As selected by Architect from manufacturer's standard colors.
         2. As indicated on the Drawings.

\*\* NOTE TO SPECIFIER \*\* Contact Tnemec Technical Services or Tnemec representative for surface preparation of non-ferrous metals or questions on galvanized steel. Specify systems required for the specific application. Delete paragraphs not required.

* 1. COATING SYSTEMS FOR GALVANIZED STEEL AND NON-FERROUS METAL - INTERIOR
     1. Overhead Deck, Ductwork, Conduit, Dry: Moderate to Severe, Damp: Natatoriums, Warehouses.
        1. System Type: Self Cross-linking Hydrophobic Acrylic.
        2. Surface Preparation: ASTM D 6386 Abrasive Blast or Zinc Phosphate Treatment for Galvanized Steel.
        3. Primer: Must be applied within one hour after surface preparation
        4. Primer:
           1. Tnemec; Series 115 Uni-Bond DF, DFT 2.0 to 3.0 mils (50 to 75 microns).
        5. Finish Coat:
           1. Tnemec; Series 115 Uni-Bond DF(eggshell), DFT 2.0 to 3.0 mils (50 to 75 microns).
        6. Total DFT: 4.0 to 6.0 mils (100 to 150 microns).

\*\* NOTE TO SPECIFIER \*\* Select color paragraph required and delete the one not required.

* + - 1. Color:
         1. As selected by Architect from manufacturer's standard colors.
         2. As indicated on the Drawings.

\*\* NOTE TO SPECIFIER \*\* Contact Tnemec Technical Services or Tnemec representative for surface preparation of non-ferrous metals or questions on galvanized steel. Specify systems required for the specific application. Delete paragraphs not required.

* 1. COATING SYSTEMS FOR GALVANIZED STEEL AND NONFERROUS METALINTERIOR OR EXTERIOR
     1. Moderate Conditions and/or UV Exposure:
        1. System Type: Polyamidoamine Epoxy/Waterborne Urethane.
        2. Surface Preparation: ASTM D 6386 Abrasive Blast or Zinc Phosphate Treatment for Galvanized Steel.
        3. Primer: Must be applied within one hour after surface preparation.
           1. Tnemec; Series 66HS Hi-Build Epoxoline, DFT 3.0 to 5.0 mils (75 to 125 microns).
        4. Finish Coat:

\*\* NOTE TO SPECIFIER \*\* Select finish paragraph required and delete the one not required.

* + - * 1. Tnemec; Series 740 UVX or Tnemec; Series 1080 Endura-Shield (gloss), DFT 2.0 to 3.0 mils (50 to 75 microns).
        2. Tnemec; Series 750 UVX or Tnemec; Series 1081 Endura-Shield (semi-gloss), DFT 2.0 to 3.0 mils (50 to 75 microns).
      1. Total DFT: 5.0 to 8.0 mils (125 to 205 microns).

\*\* NOTE TO SPECIFIER \*\* Select color paragraph required and delete the one not required.

* + - 1. Color:
         1. As selected by Architect from manufacturer's standard colors.
         2. As indicated on the Drawings.
  1. COATING SYSTEMS FOR CEMENT BOARD, GYPSUM BOARD AND CEMENT PLASTERINTERIOR
     1. Dry/Moderate/Scrubbable:
        1. System Type: Waterborne Epoxy-Amine Adduct/Ceramic-Modified Waterborne Aliphatic Polyurethane.
        2. Surface Preparation: Clean and Dry
        3. Primer:
           1. Tnemec; Series 287 Enviro-Glaze, DFT 2.0 to 3.0 mils (50 to 75 microns).
        4. Intermediate Coat:
           1. Tnemec; Series 287 Enviro-Glaze, DFT 2.0 to 3.0 mils (50 to 75 microns).
        5. Finish Coat:
           1. Tnemec; Series 297 Enviro-Glaze (gloss), DFT 2.0 to 3.0 mils (50 to 75 microns).
        6. Total DFT: 6.0 to 9.0 mils (150 to 230 microns)

\*\* NOTE TO SPECIFIER \*\* Select color paragraph required and delete the one not required.

* + - 1. Color:
         1. As selected by Architect from manufacturer's standard colors.
         2. As indicated on the Drawings.
    1. Wet, Moderate, Severe:
       1. System Type: 100% Solids Amine Epoxy.
       2. Surface Preparation: Clean and dry.
       3. Primer:
          1. Tnemec; Series 201 Epoxoprime, DFT 2.0 to 4.0 mils (50 to 100 microns). (Two coats required on gypsum board)
       4. Intermediate Coat:
          1. Tnemec; Series 280 Tneme-Glaze, DFT 2.0 to 4.0 mils (50 to 100 microns).
       5. Finish Coat:
          1. Tnemec; Series 280 Tneme-Glaze, DFT 2.0 to 4.0 mils (50 to 100 microns).
       6. Total DFT: 6.0 to 12.0 mils (150 to 300 microns) or 8.0 to 16.0 (205 to 410 microns) for Gypsum Board.

\*\* NOTE TO SPECIFIER \*\* Select color paragraph required and delete the one not required.

* + - 1. Color:
         1. As selected by Architect from manufacturer's standard colors.
         2. As indicated on the Drawings.
    1. Severe, Physical Contact, Wet, Bathrooms, Showers:
       1. System Type: Matte Lay-up/Epoxy Fiber Glass.
       2. Surface Preparation: Clean and dry.
       3. Joints: Finish and feather using Tnemec; Series 215 Surfacing Epoxy per manufacturer's recommendations.
       4. Primer Coat:
          1. Tnemec; Series 201 Epoxoprime, DFT 6.0 to 8.0 mils (150 to 205 microns)
       5. Intermediate Coat:
          1. Tnemec; Series 273 Stranlok ML, DFT 12.0 to 16.0 mils (300 to 410 microns).
          2. Tnemec; Series 273-0273C Glass Mat, lay mat into wet film.
       6. Saturate Coat:
          1. Tnemec; Series 280 Tneme-Glaze, DFT 12.0 to 16.0 mils (300 to 410 microns).
       7. Finish Coat:
          1. Tnemec; Series 280 Tneme-Glaze (gloss), DFT 6.0 to 8.0 mils (150 to 205 microns).
       8. Total DFT: 37.0 to 56.0 mils (900 to 1,410 microns).

\*\* NOTE TO SPECIFIER \*\* Select color paragraph required and delete the one not required.

* + - 1. Color:
         1. As selected by Architect from manufacturer's standard colors.
         2. As indicated on the Drawings.

1. EXECUTION
   1. EXAMINATION
      1. Do not begin installation until substrates have been properly prepared.
      2. Verify substrate surfaces are ready to receive work as instructed by coating manufacturer. Obtain and follow manufacturer's instructions for examination and testing of substrates.
      3. If substrate preparation is the responsibility of another installer, notify Architect of unsatisfactory preparation before proceeding.
   2. PREPARATION

\*\* NOTE TO SPECIFIER \*\* Surface preparation will vary depending on the substrate, exposure conditions, and coating system to be applied. Consult Tnemec for additional information. Include the substrates required and delete those not required.

* + 1. General: Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions.
    2. Surface Preparation Of Steel
       1. Prepare steel surfaces in accordance with manufacturer's instructions.
       2. Fabrication Defects:
          1. Correct steel and fabrication defects revealed by surface preparation.
          2. Remove weld spatter and slag.
          3. Round sharp edges and corners of welds to a smooth contour.
          4. Smooth weld undercuts and recesses.
          5. Grind down porous welds to pinhole-free metal.
          6. Remove weld flux from surface.
       3. Ensure surfaces are dry.
       4. Remove visible oil, grease, dirt, dust, mill scale, rust, paint, oxides, corrosion products, and other foreign matter in accordance with SSPC-SP 6/NACE 3, unless otherwise specified.
       5. Abrasive Blast-Cleaned Surfaces: Coat abrasive blast-cleaned surfaces with primer before visible rust forms on surface. Do not leave blast-cleaned surfaces uncoated for more than 8 hours.
       6. Shop Primer: Prepare shop primer to receive field coat in accordance with manufacturer's instructions.
    3. Surface Preparation Of Concrete And Masonry
       1. Prepare concrete surfaces in accordance with manufacturer's instructions, SSPC-SP 13/NACE 6, and ICRI 03732.
       2. Concrete Masonry Units: Allow concrete and mortar to cure 28 days. Surfaces must be clean, dry, and free of oil, grease and other contaminants. Level protrusions and mortar spatter. Voids and other defects should be filled with recommended filler or surfacer.
       3. Ensure surfaces are clean, dry, and free of oil, grease, dirt, dust, and other contaminants.
       4. Test concrete for moisture in accordance with ASTM D 4263 and F 1869.
       5. Allow concrete and mortar to cure for a minimum of 28 days before coating.
       6. Level protrusions and mortar spatter.
    4. Surface Preparation Of Wood
       1. Ensure wood surfaces are clean and dry, and free of dust, dirt and other contaminants.
       2. Remove surface deposits, sap or pitch by scraping and wiping clean with rags dampened with mineral spirits or VM&P Naphtha.
       3. Seal knots and pitch pockets with shellac reduced with equal parts of shellac thinner (denatured alcohol) before priming.
       4. Sand rough spots with the grain, starting with medium grit sandpaper and finishing with fine grit. Remove sanding dust.
       5. After the prime coat is dry, fill cracks and holes with a suitable compound that is compatible with the substrate and coating. When filler is hard, sand flush with the surface using the fine grit sand paper.
       6. Sand lightly between coats with fine grit, open-coat sandpaper.
    5. Surface Preparation Of Stucco And Plaster
       1. Prepare stucco and plaster surfaces in accordance with manufacturer's instructions.
       2. Ensure surfaces are clean, dry, and free of oil, grease, dirt, dust, and other contaminants.
       3. Allow stucco and plaster to cure and dry out for a minimum of 14 days before coating.
       4. Do not coat over stucco or plaster containing free water, lime, or other soluble alkaline salts.
       5. Remove plaster nibs and other protrusions.
       6. Patch voids and cracks with approved materials and after dry, sand flush with surface
    6. Surface Preparation Of Galvanized Steel And Nonferrous Metal
       1. Prepare galvanized steel per SSPC-SP16.
       2. Prepare nonferrous metal surfaces in accordance with manufacturer's instructions. Surface preparation recommendations will vary depending on substrate and exposure conditions.
    7. Surface Preparation Of Gypsum Board
       1. Prepare gypsum board surfaces in accordance with manufacturer's instructions.
       2. Ensure surfaces are clean, dry, and free of oil, grease, dirt, dust, and other contaminants.
       3. Sand joint compound smooth and feather edge.
       4. Avoid heavy sanding of adjacent gypsum board surfaces, which will raise nap of paper covering.
       5. Do not apply putty, patching pencils, caulking, or masking tape to gypsum board surfaces to be painted.
       6. Lightly scuff-sand tape joints after priming to remove raised paper nap. Do not sand through primer.
  1. APPLICATION
     1. Apply coatings in accordance with manufacturer's instructions.
     2. Mix and thin coatings, including multi-component materials, in accordance with manufacturer's instructions.
     3. Keep containers closed when not in use to avoid contamination.
     4. Do not use mixed coatings beyond pot life limits.
     5. Use application equipment, tools, pressure settings, and techniques in accordance with manufacturer's instructions.
     6. Uniformly apply coatings at spreading rate required to achieve specified DFT.
     7. Apply coatings to be free of film characteristics or defects that would adversely affect performance or appearance of coating systems.
     8. Apply primer as recommended for the application. Components shall be pre-mixed, blended, and applied according to manufacturer's directions.
     9. Components for subsequent coats shall be mixed and applied in strict accordance with manufacturer's directions.
  2. FIELD QUALITY CONTROL

\*\* NOTE TO SPECIFIER \*\* Specify inspector's services and manufacturer's field services for field quality control as required for the specific application. Delete if inspection is not required.

* + 1. Inspector's Services: Coordinate with Independent Inspection Services provided by the Owner as specified in Section 01 45 16.13 - Contractor Quality Control. Services include:
       1. Coordinate with coating manufacturer's technical service department or independent sales representative for current technical data and instructions.
       2. Verify suitability of moisture vapor emission rate of concrete floor surfaces.
       3. Verify coatings and other materials are as specified.
       4. Verify surface preparation and application is as specified.
       5. Verify DFT of each coat and total DFT of each coating system specified using wet film and dry film gauges.
       6. Coating Defects: Check coatings for film characteristics or defects that would adversely affect performance or appearance of coating systems.
       7. Report:
          1. Submit daily written reports describing inspections made and actions taken to correct non-conforming work.
          2. Report non-conforming work not corrected.
          3. Submit copies of report to Architect and Contractor.
    2. Coating manufacturer's representative to verify that installation is in conformance to the manufacturer's recommendations.
  1. CLEANING
     1. Remove temporary coverings and protection of surrounding areas and surfaces.
  2. REPAIR
     1. Materials and Surfaces Not Scheduled to be Coated: Repair or replace damaged materials and surfaces not scheduled to be coated.
     2. Damaged Coatings: Touch-up or repair of damaged coatings. Touch-up of minor damage shall be acceptable where result is not visibly different from adjacent surfaces. Recoat entire surface where touch-up result is visibly different, either in sheen, texture, or color.
     3. Coating Defects: Repair in accordance with manufacturer's instructions coatings that exhibit film characteristics or defects that would adversely affect performance or appearance of coating systems.
  3. PROTECTION
     1. Protect installed products until completion of project.
     2. Touch-up, repair or replace damaged products before Substantial Completion.
     3. Immediately remove coatings that fall on surrounding areas and surfaces not scheduled to be coated.
     4. Protect installed products until completion of project.
     5. Touch-up, repair or replace damaged products before Substantial Completion.
     6. Remove temporary coverings and protection of surrounding areas and surfaces.
  4. SCHEDULES

\*\* NOTE TO SPECIFIER \*\* Retain Paragraph below if required to suit project requirements. Identify products by name on the Drawings or use this paragraph to define the location of each type of material to be used. The following are some examples of schedule references. Edit as required to suit project or delete and identify products on the Drawings.

* + 1. :
    2. :

END OF SECTION