SECTION 09 67 00

FLUID APPLIED RESINOUS FLOORING

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\*\* NOTE TO SPECIFIER \*\* Rio Flooring Systems Inc.; Fluid Applied Flooring  
This section is based on the products of Rio Flooring Systems Inc., which is located at:2926 Chester Ave.Cleveland, OH 44114Toll Free Tel: 888-278-2183Email: [request info (info@riofloor.com )](https://arcat.com/rfi?action=email&company=Rio%252BFlooring%252BSystems%252BInc.&message=RE%253A%2520Spec%2520Question%2520(09670rio)%253A%2520&coid=53832&spec=09670rio&rep=&fax=)  
Web: <https://www.riofloor.com>   
 [ [Click Here](https://arcat.com/company/rio-flooring-systems-inc-53832) ] for additional information.  
Our family-owned American Factories have been designing and manufacturing Polymer Coatings for well over 100 years. This Legacy of expertise ensures consistent batches backed with unsurpassed quality and performance.  
From day one, we have always recognized the value of an experienced and driven Research and Development department. Our experienced chemists and engineers are always tasked to be on the cutting edge of Polymer Formulations. The end result is a modern product portfolio backed with 100 years of knowledge and process.

1. GENERAL
   1. SECTION INCLUDES

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

* + 1. Urethane flooring. (RIO-COAT UHW)
    2. Urethane cement flooring. (RIO-CRETE SF)
    3. Quartz urethane cement flooring. (RIO-CRETE SF)
    4. Vehicular traffic surfacing. (RIO-DECK EP/EB/TCA)
    5. Static dissipative flooring. (RIO-STAT EP)
  1. RELATED SECTIONS

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

* + 1. Section 03 30 00 - Cast-in-Place Concrete.
    2. 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 International (ASTM):
       1. ASTM C413 - Standard Test Method for Absorption of Chemical-Resistant Mortars.
       2. ASTM D635 - Standard Test Method for Rate of Burning and/or Extent and Time of Burning of Plastics in a Horizontal Position.
       3. ASTM D695 - Standard Test Method for Compressive Properties of Rigid Plastics.
       4. ASTM D2047 - Standard Test Method for Static Coefficient of Friction of Polish-Coated Flooring Surfaces as Measured by the James Machine.
       5. ASTM D2240 - Standard Test Method for Rubber Property-Durometer Hardness.
       6. ASTM D2244 - Standard Practice for Calculation of Color Tolerances and Color Differences from Instrumentally Measured Color Coordinates.
       7. ASTM D2370 - Standard Test Method for Tensile Properties of Organic Coatings.
       8. ASTM D3960 - Standard Practice for Determining Volatile Organic Compounds (VOC) Content of Paints and Related Coatings.
       9. ASTM D4060 - Standard Test Method for Abrasion Resistance of Organic Coatings by the Taber Abraser.
       10. ASTM D4366 - Standard Test Methods for Hardness of Organic Coatings by Pendulum Damping Tests.
       11. ASTM D4541 - Standard Test Method for Pull-Off Strength of Coatings Using Portable Adhesion Testers.
       12. ASTM D7234 - Standard Test Method for Pull-Off Adhesion Strength of Coatings on Concrete Using Portable Pull-Off Adhesion Testers.
       13. ASTM F1869 - Standard Test Method for Measuring Moisture Vapor Emission Rate of Concrete Subfloor Using Anhydrous Calcium Chloride.
       14. ASTM F2170 - Standard Test Method for Determining Relative Humidity in Concrete Floor Slabs Using in Situ Probes.
       15. ASTM F-150-89 - Standard Test Method for Electrical Resistance of Conductive and Static Dissipative Resilient Flooring.
       16. ASTM F3010 - Standard Practice for Two-Component Resin Based Membrane- Forming Moisture Mitigation Systems for Use Under Resilient Floor Coverings Materials to Fungi.
       17. ASTM G154 - Standard Practice for Operating Fluorescent Ultraviolet (UV) Lamp.
    2. California Department of Public Health (CDPH-CA):
       1. Section 01 35 00 - Special Procedures.
    3. Deutsches Institut fur Normung (DIN):
       1. DIN 53460 - Testing of Plastics; Determination of the Vicat Softening Temperature of Thermoplastics.
    4. International Concrete Repair Institute (ICRI):
       1. ICRI 310.2R - Selecting and Specifying Concrete Surface Preparation for Sealers, Coatings, Polymer Overlays, and Concrete Repair.
    5. Military Specifications (MIL):
       1. MIL-D-3134J - Deck Covering Materials.
    6. National Floor Safety Institute (NFSI):
       1. ANSI/NFSI B101.1 - Test Method for Measuring Wet SCOF of Common Hard-Surface Floor Materials.
  1. SUBMITTALS
     1. Submit under provisions of Section 01 30 00.
     2. In accordance with Division 01.
     3. Product Data:
        1. Manufacturer's data sheets on each product to be used.
        2. Preparation instructions and recommendations.
        3. Storage and handling requirements and recommendations.
        4. Typical installation methods.

\*\* NOTE TO SPECIFIER \*\* Delete if not applicable to product type.

* + 1. Verification Samples: Two representative units of each type, size, pattern, and color.
    2. Shop Drawings: Include details of materials, construction, and finish. Include relationship with adjacent construction.
    3. Manufacturer's Certification: Submit manufacturer's certification that materials comply with specified requirements and are suitable for intended application.
    4. Care and Maintenance Instructions: Submit manufacturer's care and maintenance instructions, including cleaning instructions.
  1. QUALITY ASSURANCE
     1. Installer Qualifications: Company specializing in performing Work of this section with minimum two years documented experience with projects of similar scope and complexity.
     2. Source Limitations: Provide each type of product from a single manufacturing source to ensure uniformity.

\*\* NOTE TO SPECIFIER \*\* Include mock-up if the project size or quality warrant the expense. The following is one example of how a mock-up 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: Construct a mock-up with actual materials in sufficient time for Architect's review and to not delay construction progress. Locate mock-up as acceptable to Architect and provide temporary foundations and support.
       1. The intent of a mock-up is to demonstrate quality of workmanship and visual appearance.
       2. If the mock-up is not acceptable, rebuild the mock-up until satisfactory results are achieved.
       3. Retain mock-up during construction as a standard for comparison with completed work.
       4. Do not alter or remove mock-up until work is completed or removal is authorized.
  1. PRE-INSTALLATION CONFERENCE
     1. Convene a conference approximately two weeks before scheduled commencement of the Work. Attendees shall include Architect, Contractor and trades involved. Agenda shall include schedule, responsibilities, critical path items and approvals.
  2. DELIVERY, STORAGE, AND HANDLING
     1. Delivery Requirements: Deliver materials to site in manufacturer's original, unopened containers and packaging, with labels clearly identifying product name, manufacturer, and batch number.
     2. Storage and Handling Requirements:
        1. Store and handle in strict compliance with manufacturer's written instructions and recommendations.
        2. Protect from damage due to weather, excessive temperature, and construction operations.
        3. Keep materials in manufacturer's original, unopened containers and packaging until application.
        4. Store materials in a clean, dry area indoors between 65 and 80 degrees F (18 and 27 degrees C).
        5. Store materials out of direct sunlight.
        6. Keep materials from freezing.
        7. Protect materials during storage, handling, and application to prevent contamination or damage.
  3. PROJECT CONDITIONS
     1. Apply flooring system under the following ambient conditions:
        1. Ambient and Concrete Floor Temperatures: Between 65 and 85 degrees F (18 and 29 degrees C).
        2. Material Temperature: Between 65 and 85 degrees F (18 and 29 degrees C).
        3. Relative Humidity: Maximum 80 percent.
        4. Dew Point: Floor temperature more than 5 degrees over dew point.
     2. Do not apply flooring system under ambient conditions outside manufacturer's limits.
  4. WARRANTY
     1. Manufacturer's standard limited warranty unless indicated otherwise.

1. PRODUCTS
   1. MANUFACTURERS
      1. Acceptable Manufacturer: Rio Flooring Systems Inc., which is located at:2926 Chester Ave.Cleveland, OH 44114Toll Free Tel: 888-278-2183Email: [request info (info@riofloor.com )](https://arcat.com/rfi?action=email&company=Rio%252BFlooring%252BSystems%252BInc.&message=RE%253A%2520Spec%2520Question%2520(09670rio)%253A%2520&coid=53832&spec=09670rio&rep=&fax=);Web: <https://www.riofloor.com>

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

* + 1. Requests for substitutions will be considered in accordance with the provisions of Section 01 60 00.

\*\* NOTE TO SPECIFIER \*\* Delete article if not required.

* 1. Urethane Flooring (RIO-COAT UHW)
     1. Moisture Mitigation Coat: Fluid-applied, modified epoxy moisture mitigation system for use in above and below grade vapor reducers.
        1. Basis of Design: RIO-COAT EVS; as manufactured by Rio Flooring Systems.
        2. Moisture Resistance, ASTM F2170:
           1. 15-Mil (0.30 mm) System over 28 day aged concrete: Up to 85 percent.
           2. 23-Mil (0.43 mm) System over 28 day aged concrete. Up to 99 percent.
        3. Indoor Air Emissions, CDPH-CA Section 01 35 00 - Special Procedures: Pass.
        4. Complies with SCAQMD VOC regulations and meets ASTM F3010.
        5. Alkali Resistance, ASTM D1308: Pass.
        6. Adhesion, ASTM D7234: Greater than 480 psi (3.31 MPa).
        7. Compressive Strength, ASTM D695: 12000 psi (82.74 MPa).
        8. Microbial Resistance, ASTM G21: Passes Rating 1.
        9. Tensile Elongation, ASTM D638: 2.7 percent.
        10. Tensile Strength, ASTM D638: 5600 psi (38.61 MPa).
        11. Volatile Organic Compounds (VOC), EPA Method 24: 0.00 g/L.
     2. Build Coat: High solids, two-component, neutral epoxy.
        1. Basis of Design: RIO-COAT EMP; as manufactured by Rio Flooring Systems.
        2. Solids Content - Parts A+B, ASTM D2369:
           1. Solids by Weight: 95.45.
           2. Solids Volume: 94.56.
        3. Abrasion Resistance, ASTM D4060: 83.1 mg loss.
        4. Coefficient of Friction (COF), ASTM D2047: 0.59 - 0.62.
        5. Adhesion to Concrete, ASTM D5441: 732 psi (4.48 MPa).
        6. Adhesion to Concrete, ASTM D7234: 450 psi (3.10 MPa).
        7. Compressive Strength, ASTM D695: 13500 psi (93.079 MPa).
        8. Tensile Strength, ASTM D2370: 8000 psi (55.158 MPa).
        9. Elongation, ASTM D2370: 5 percent.
        10. Shore D Hardness, ASTM D2240: 80-85 at 0 sec, 75-80 at 15 sec.
        11. Volatile Organic Compounds (VOC), ASTM C3960L: 49 g/L.
     3. Top Coat: High solids, three-component, aliphatic, moisture cure urethane with a clear satin finish.
        1. Basis of Design: RIO-COAT UHW; as manufactured by Rio Flooring Systems.
        2. Solids Content - Parts A+B+C, ASTM D2369:
           1. Solids by Weight: 94.02.
           2. Solids Volume: 92.57.
        3. Abrasion Resistance, ASTM D4060: 18 mg loss.
        4. Coefficient of Friction (COF), ASTM D2047: 0.63.
        5. Wet Static Coefficient of Friction, ANSI/NFSI B101.1: 0.94.
        6. Flammability, ASTM G154: 182 mm/min.
        7. Resistance to Yellowing, ASTM D2244: Increase of less than 10 yellowing units.
        8. Tensile Strength, 24 hours, Resin Only, ASTM D2370: 6250 psi (43,092 MPa).
        9. Elongation, Resin Only, ASTM D2370: 6 percent.
        10. Konig Hardness, (3 mil/76.2 micron film), ASTM D4366: 171.3.
        11. Water Absorption, 24-hour immersion, ASTM C413: 0.2 percent weight increase.
        12. Volatile Organic Compounds (VOC), ASTM C3960L: 6 g/L.
     4. Color and Finish:
        1. Color: To be selected from the manufacturer's current color offering.

\*\* NOTE TO SPECIFIER \*\* Delete finish options not required.

* + - 1. Finish: Gloss.
      2. Finish: Satin.

\*\* NOTE TO SPECIFIER \*\* Delete article if not required.

* 1. Concrete Floor Resurfacing (RIO-CRETE SL,SF,MF,HF,IF,TC,CB)
     1. Slurry Coat: A three-part, cementitious-polyurethane slurry system with aggregate broadcast, for resurfacing interior concrete floors in areas that require thermal shock resistance and slip resistance.
        1. Basis of Design: RIO-CRETE SF; as manufactured by Rio Flooring Systems.
        2. Compressive Strength, ASTM C579: 8200 psi (56.5 MPa).
        3. Tensile Strength. ASTM C307: 975 psi (6.72 MPa).
        4. Flexural Strength, ASTM C580: 2500 psi (19.99 MPa).
        5. Bond Strength, ASTM D4541: 100 percent.
        6. Impact Strength, ASTM D4226: Greater than 160 in-lb.
        7. Resistance to Fungi Growth, ASTM G21: Passes, Rating 1.
        8. Flammability, ASTM D635: Self-extinguishing.
        9. Volatile Organic Compounds (VOC), ASTM C3960L: 5 g/L.
     2. Aggregate: Clean, rounded, oven dried quartz sand supplied in pre-packaged bags and free of metallic or other impurities.
        1. Basis of Design: Q28 Aggregate; as manufactured by Rio Flooring Systems.
        2. Hardness: 6.5 MOH.

\*\* NOTE TO SPECIFIER \*\* Delete gradation option not required.

* + - 1. Gradation: 16-30 mesh sieve. For general use.
      2. Gradation: 20-40 mesh sieve. For pedestrian foot traffic.
    1. Top Coat: A two-component, high solids, thick coat polyaspartic coating.
       1. Basis of Design: RIO-COAT UPA; as manufactured by Rio Flooring Systems.
       2. Solids Content - Parts A+B, ASTM D1475:
          1. Solids by Weight: 91.59.
          2. Solids Volume: 91.47.
       3. Abrasion Resistance, ASTM D4060: 43 mg loss.
       4. Wet Static Coefficient of Friction, ANSI/NFSI B101.1: 0.99.
       5. Resistance to Yellowing, ASTM D2244: Increase of less than 20 yellowing units.
       6. Tensile Strength, ASTM D2370: 6913 psi (47.66 MPa).
       7. Elongation, ASTM D2370: 8 percent.
       8. Thermal Stability/Heat resistance, MIL-D-3134J Section 4.6.3: No slip, flow, softening or change in appearance.
          1. Water Absorption, 24-hour immersion, ASTM C413: 0.2 percent weight increase.
       9. Volatile Organic Compounds (VOC), ASTM C3960: 37 g/L.
    2. Color and Finish:
       1. Color: To be selected from the manufacturer's current color offering.

\*\* NOTE TO SPECIFIER \*\* Delete finish options not required.

* + - 1. Finish: High Gloss.
      2. Finish: Smooth.
      3. Finish: Satin.

\*\* NOTE TO SPECIFIER \*\* Delete article if not required

* 1. Vehicular Traffic Surfacing (RIO-DECK EP/EB/TCA)
     1. Base Coat: Two-component aromatic polyurethane primer.
        1. Basis of Design: RIO-DECK EP; as manufactured by Rio Flooring Systems.
        2. Pot Life: 15-20 minutes.
        3. Total Volume Solids: 100 percent.
        4. Volatile Organic Compounds (VOC), ASTM D2369: Less than 10 g/L.
        5. Tensile Strength, ASTM D412: 1320 psi (9.10 MPa)
        6. Elongation at Break, ASTM D412: 435 percent.
        7. Tear Resistance - Die C, ASTM D624: 218 pli.
        8. Hardness, ASTM D2240: 80 +/- 5 (Shore A).
     2. Intermediate Wear Coat: A solvent free, single component, liquid applied, water catalyzed, polyurethane elastomeric waterproofing base membrane.
        1. Basis of Design: RIO-DECK EB; as manufactured by Rio Flooring Systems.
        2. Total Volume Solids: 90 percent, +/- 2 percent.
        3. Volatile Organic Compounds (VOC), ASTM D2369: Less than 84 g/L.
        4. Tensile Strength, ASTM D412: 1200 psi +/- 150 psi(8.27 MPa +/-1 MPa)
        5. Elongation at Break, ASTM D412: 500 percent +/- 100 percent.
        6. Tear Resistance - Die C, ASTM D624: 170 +/-25 pli.
        7. Hardness, ASTM D2240: 60 +/- 5 (Shore A).

\*\* NOTE TO SPECIFIER \*\* Delete topcoat not required. Aliphatic is standard.

* + 1. Aliphatic Topcoat: Two-component aliphatic polyurethane top coat.
       1. Basis of Design: RIO-DECK TCA; as manufactured by Rio Flooring Systems.
       2. Total Volume Solids: 100 percent.
       3. Volatile Organic Compounds (VOC), ASTM D2369: Less than 10 g/L.
       4. Tensile Strength, ASTM D412: 2500 psi (17.23 MPa).
       5. Elongation at Break, ASTM D412: 400 percent.
       6. Tear Resistance - Die C, ASTM D624: 300 pli.
       7. Hardness, ASTM D2240: 85 +/- 5 (Shore A).
    2. Aromatic Topcoat: Aromatic polyurethane top coat.
       1. Basis of Design: RIO-DECK THS; as manufactured by Rio Flooring Systems.
       2. Pot Life: 15-20 minutes.
       3. Total Volume Solids: 100 percent.
       4. Volatile Organic Compounds (VOC), ASTM D2369: Less than 10 g/L.
       5. Tensile Strength, ASTM D412: 595 psi (4.10 MPa).
       6. Elongation at Break, ASTM D412: 205 percent.
       7. Tear Resistance - Die C, ASTM D624: 396 pli.
       8. Hardness, ASTM D2240: 80 +/- 5 (Shore A).
    3. Fabric Reinforcement:
       1. Basis of Design: RIO-DECK Flexitape; as manufactured by Rio Flooring Systems.

\*\* NOTE TO SPECIFIER \*\* Delete one of the two following aggregate paragraphs.

* + 1. Aggregate: Clean, rounded, oven dried quartz sand supplied in pre-packaged bags and free of metallic or other impurities.
       1. Basis of Design: Q28 Aggregate; as manufactured by Rio Flooring Systems.
       2. Hardness: 6.5 MOH.

\*\* NOTE TO SPECIFIER \*\* Delete gradation paragraphs not required.

* + - 1. Gradation: 16-30 mesh sieve. For general use.
      2. Gradation: 20-40 mesh sieve. For pedestrian foot traffic.

\*\* NOTE TO SPECIFIER \*\* Delete article if not required.

* 1. Static Dissipative Surfacing (RIO-STAT esd, usd)
     1. Substrate Primer: Two component semi-clear solvent-based epoxy primer with abrasion resistance and static dissipative properties.
        1. Basis of Design: RIO-STAT CONDUCTIVE PRIMER; as manufactured by Rio Flooring Systems.
        2. Electrical Resistance, ASTM F150-89:
           1. Location 1: 1.35e+5.
           2. Location 2: 1.45e+5.
           3. Location 3: 1.87e+5.
           4. Location 4: 2.12e+5.
        3. Body Voltage Generation, ESD STM 97.2: Less than 15 volts.
        4. Static Decay, MIL-STD-3010 4046: 0.01 seconds.
        5. Wet Static Coefficient of Friction, ANSI/NFSI B101.1: 0.85 (High Traction).
        6. Adhesion to Concrete, ASTM D4541: 325psi (2.24 MPa) at elcometer.
        7. Flexibility, ASTM D522: Pass at 1/4 inch (13mm).
        8. Compressive Strength, ASTM C579: 10,600 psi (73.08 MPa).
        9. Tensile Strength, ASTM D2370: 6,000 psi (41.36 MPa).
        10. Impact Resistance, ASTM 2794: 50 inch-lbs (5.65 Nm), direct and reverse.
        11. Shore D Hardness ASTM D2240: 72.
        12. Tensile Elongation, ASTM D2370: 5 percent.
        13. Abrasion Resistance, ASTM D4060: 31.6 mg loss.
        14. Water Absorption (24-hour immersion), ASTM C413: 0.2 percent weight increase.
        15. Indention, MIL-D3134: Pass.
        16. Volatile Organic Compounds (VOC), ASTM C3960: Less than 371 g/L.

\*\* NOTE TO SPECIFIER \*\* RIO-COAT EVS is an optional moisture mitigation component of the RIO-STAT flooring system. Delete if not required.

* + 1. Topcoat: When used in conjunction with primer, provides abrasion resistance, chemical resistance and static dissipative properties. The electro conductive ingredients used will not wear off and retain their conductive properties regardless of temperature or humidity.
       1. Basis of Design: RIO-STAT ANTI-STATIC HIGH BUILD EPOXY; as manufactured by Rio Flooring Systems.
       2. Electrical Resistance, ASTM F150-89:
          1. Location 1: 3.24e+6.
          2. Location 2: 5.36e+6.
          3. Location 3: 2.82e+6.
          4. Location 4: 4.14e+6.
       3. Body Voltage Generation, ESD STM 97.2: less than 15 volts.
       4. Static Decay, MIL-STD-3010 4046: 0.01 seconds.
       5. Gloss - 60 Degree, ASTM D523: Less than 50 at glossmeter
       6. Wet Static Coefficient of Friction, ANSI/NFSI B101.1: 0.85 (High Traction).
       7. Adhesion to Concrete, ASTM D4541: Greater than 400 psi (2.76 MPa).
       8. Flexibility, ASTM D522: Pass at 1/4 inch (13mm).
       9. Compressive Strength, ASTM C579: 10,600 psi (73.08 MPa).
       10. Tensile Strength, ASTM D2370: 6,000 psi (41.36 MPa).
       11. Impact Resistance, ASTM D2794: 80 inch-lbs (9.04 Nm), direct and reverse.
       12. Shore D Hardness ASTM D2240: 75.
       13. Tensile Elongation, ASTM D2370: 5 percent.
       14. Abrasion Resistance, ASTM D4060: 31.6 mg loss.
       15. Water Absorption (24-hour immersion), ASTM C413: 0.2 percent weight increase.
       16. Indention, MIL-D3134: Pass.
       17. Volatile Organic Compounds (VOC), ASTM C3960: Less than 31 g/l.
    2. Color and Finish:

\*\* NOTE TO SPECIFIER \*\* Delete color options not required.

* + - 1. Color: To be selected from the manufacturer's current color offering.

\*\* NOTE TO SPECIFIER \*\* Delete finish options not required.

* + - 1. Finish: High Gloss.
      2. Finish: Smooth.
      3. Finish: Satin.

1. EXECUTION
   1. EXAMINATION
      1. Do not begin installation until the substrates have been properly constructed and prepared.
      2. If substrate preparation is the responsibility of another installer, notify Architect in writing of unsatisfactory preparation before proceeding.
      3. Examine concrete surfaces to receive resinous system. Verify concrete is structurally sound.
      4. Moisture Testing of Concrete: Perform at least one of the following two tests to determine moisture in concrete. Type of test and frequency as recommended by manufacturer and installer.
         1. Calcium Chloride Test:
            1. Measure moisture vapor emission rate of concrete in accordance with ASTM F 1869.
            2. Application of resinous system shall start only if test results are below the following amount.

3 pounds per 1,000 sq ft over a 24 hour period.

12 pounds per 1,000 sq ft over a 24 hour period.

23 pounds per 1,000 sq ft over a 24 hour period.

* + - * 1. If test results are above limits, notify Architect and flooring manufacturer in writing.
      1. In-Situ Probe Test:
         1. Measure relative humidity in concrete in accordance with ASTM F 2170.
         2. Application of resinous system shall start only if test results are below the following percentage relative concrete humidity.

75 percent.

77 percent.

85 percent.

95 percent.

99 percent.

* + - * 1. If test results are above limits, notify Architect and manufacturer in writing.
      1. Do not begin preparation or installation until satisfactory moisture test results are achieved. Provide manufacturer's recommended moisture vapor control coating if required.
  1. PREPARATION
     1. Clean surfaces thoroughly prior to installation.
     2. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions.
     3. Surface Preparation:
        1. Prepare concrete surface in accordance with manufacturer's instructions.
        2. Remove dirt, dust, debris, oil, grease, curing agents, bond breakers, paint, coatings, sealers, silicones, and other surface contaminants which could adversely affect application of resinous system.
        3. Steel shot blast concrete to a minimum surface profile of ICRI 310.2R, CSP 5.
        4. Key-cut termination points with 1/4-inch (6-mm) by 1/4-inch (6-mm) cut.
        5. Patch depressions, divots, and cracks in concrete in accordance with manufacturer's instructions.
        6. Mechanically remove loose, delaminated, and damaged concrete and repair in accordance with manufacturer's instructions.
        7. Joints: Fill joints in accordance with RIO-COAT Polyurea per manufacturer's instructions.
  2. INSTALLATION
     1. Install resinous system in accordance with manufacturer's instructions and approved submittals at locations indicated on the Drawings.
     2. Ensure concrete is dry, clean, and prepared in accordance with manufacturer's instructions.
     3. Allow concrete to cure a minimum of 7 days before applying resinous system.
     4. Mixing:
        1. Mix material components together in accordance with manufacturer's instructions.
        2. Mix only enough material that can be applied within working time.
        3. Add and mix colorants with materials in accordance with manufacturer's instructions to achieve uniform color.
     5. Apply resinous system materials to obtain consistent mil thickness and smooth, uniform appearance and texture.
     6. Overlay: Apply overlay in accordance with manufacturer's instructions. Apply overlay to prepared concrete surface.
     7. Traction Aggregate: Broadcast traction aggregate in accordance with manufacturer's instructions. Broadcast traction aggregate into wet overlay.
     8. Cove:
        1. Apply cove primer and cove in accordance with manufacturer's instructions at locations indicated on the Drawings.
        2. Apply cove to height and shape as indicated on the Drawings.
        3. Apply cove to create seamless, smooth transition between flooring and walls.
     9. Seal Coat:
        1. Apply seal coat in accordance with manufacturer's instructions.
        2. Apply seal coat over traction aggregate.
  3. FIELD QUALITY CONTROL
     1. Field Inspection: Coordinate field inspection in accordance with appropriate sections in Division 01.

\*\* NOTE TO SPECIFIER \*\* Include if manufacturer provides field quality control with onsite personnel for instruction or supervision of product installation, application, erection, or construction. Delete if not required.

* + 1. Manufacturer's Services: Coordinate manufacturer's services in accordance with appropriate sections in Division 01.
  1. CLEANING AND PROTECTION
     1. Allow resinous system to dry in accordance with manufacturer's instructions before opening to traffic.
     2. Allow resinous system to dry a minimum of 1 week before cleaning by mechanical means.
     3. Protect completed resinous system from damage during construction.

END OF SECTION