SECTION 03 53 00

CONCRETE FLOORING OVERLAY

Display hidden notes to specifier. (Don't know how? [Click Here](http://www.arcat.com/sd/display_hidden_notes.shtml))

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\*\* NOTE TO SPECIFIER \*\* Couture Concrete Systems ; Concrete resurfacing and topping products.  
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This section is based on the products of Couture Concrete Systems , which is located at:  
11490 N.W. 20th Ct.  
Plantation, FL 33323  
Tel: 954-916-7900  
Fax: 954-916-8434  
Email: [request info (info@coutureconcretesystems.com)](http://admin.arcat.com/users.pl?action=UserEmail&company=Couture+Concrete+Systems+&coid=50604&rep=&fax=954-916-8434&message=RE:%20Spec%20Question%20(03530cou):%20%20&mf=)  
Web: [coutureconcretesystems.com](http://coutureconcretesystems.com)   
 [ [Click Here](http://www.arcat.com/arcatcos/cos50/arc50604.html) ] for additional information.  
Couture Concrete Systems' Concretetivity is a cementitious topping that can be applied at 3/8-inch to 2-inch thicknesses. As our premier product Concretetivity was and is primarily used to achieve amazing looks in overlayed polished concrete flooring. But the applications and looks that can be achieved don't stop there. Concretivity replaces the need for multiple products to create stunning concrete countertops, unique concrete staircases, and vertical polish concrete applications. The versatility of Concretetivity is that one product can be troweled, burnished, stamped, stained, inlayed or imbedded, textured and/or polished. It is available in gray or white, works indoors or out, and can be integrally colored for additional decorative effects.  
For over 2 decades, Concretetivity has been showcased in private residences, restaurants, retail stores, airports, offices and residential spaces. Couture Concrete Systems was featured at the 2012 and 2014 Concrete Decor Show, and the company and its products have been featured in both consumer and trade show publications.

1. GENERAL
   1. SECTION INCLUDES

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

* + 1. Cement Based Overlay
  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 12 36 13 - Concrete Countertops.
    3. Section 03 35 00 - Concrete Finishing.
    4. Section 09 67 13 - Elastomeric Liquid Flooring.
  1. REFERENCES

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

* + 1. US Green Building Council.
  1. DESIGN / PERFORMANCE REQUIREMENTS
     1. Couture Concrete System products are provided as ready mix pre-package goods that require minimal mixing and are ready to use as packaged to achieve consistent surfacing when mixed as directed.
     2. Couture Concrete Systems will provide independent laboratory test results from test samples randomly taken during production and will provide an un-opened prepackaged container for independent lab testing if requested.
  2. 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. Installation methods.
     3. Shop Drawings: Submit shop drawings including installation details of flooring including locations of floor penetrations, drains, and control and expansion joints prior to job start.

\*\* 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 6 inches (150 mm) square, representing actual product, color, and pattern.
    3. Manufacturer's Certificates: Certify products meet or exceed specified requirements.
    4. Closeout Submittals: Provide manufacturer's maintenance instructions that include recommendations for periodic cleaning and maintenance.
  1. QUALITY ASSURANCE
     1. Manufacturer Qualifications: Manufacturer: Company specializing in manufacturing products specified in this section with minimum ten years documented experience.
     2. Installer Qualifications: Company specializing in performing Work of this section with minimum three years documented experience and licensed in writing by Couture Concrete Systems, LLC.

\*\* 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. Finish areas designated by Architect.
       2. Do not proceed with remaining work until workmanship, color, and sheen are approved by Architect.
       3. Refinish mock-up area as required to produce acceptable work.
       4. Accepted mock-ups shall be comparison standard for remaining Work
  1. PRE-INSTALLATION MEETINGS
     1. Convene minimum one week prior to commencing Work of this section.
     2. Review installation procedures and coordination required with related Work.
     3. Inspect and make notes of job conditions prior to installation:
        1. Record minutes of the conference and provide copies to all parties present.
        2. Identify all outstanding issues in writing designating the responsible party for follow-up action and the timetable for completion.
        3. Installation of flooring system shall not begin until all outstanding issues are resolved to the satisfaction of the Architect.
  2. DELIVERY, STORAGE, AND HANDLING
     1. Deliver and store products under cover in manufacturer's unopened and sealed packaging protected from extreme weather until ready for installation.
     2. Liquid products shall be protected from freezing temperatures until mixed.
     3. Store and dispose of solvent-based materials, and materials used with solvent-based materials, in accordance with requirements of local authorities having jurisdiction.
  3. SEQUENCING
     1. Ensure that locating templates and other information required for installation of products of this section are furnished to affected trades in time to prevent interruption of construction progress.
     2. Ensure that products of this section are supplied to affected trades in time to prevent interruption of construction progress.
  4. 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. Apply only when the surface temperature is at least 50 degrees F and rising with no risk of rain until the surface is completely cured and dried. Do not apply when the suface temperature exceed 90 degrees F.
  5. WARRANTY
     1. Provide with the manufacturer's 2 year limited product warranty.

1. PRODUCTS
   1. MANUFACTURERS
      1. Acceptable Manufacturer: Couture Concrete Systems , which is located at: 11490 N.W. 20th Ct.; Plantation, FL 33323; Tel: 954-916-7900; Fax: 954-916-8434; Email: [request info (info@coutureconcretesystems.com)](http://admin.arcat.com/users.pl?action=UserEmail&company=Couture+Concrete+Systems+&coid=50604&rep=&fax=954-916-8434&message=RE:%20Spec%20Question%20(03530cou):%20%20&mf=); Web: [coutureconcretesystems.com](http://coutureconcretesystems.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.

\*\* NOTE TO SPECIFIER \*\* Concretetivity's overlay gives worn concrete a face lift regardless of the condition of the substrate. You can create unique and custom looks to meet your interior and exterior needs. Installation of overlays is not limited to concrete surfaces. Concretetivity can be applied at 3/8 inch to 2 inches in thickness that can be troweled, burnished, polished or textured to give each application a custom concrete floors, walls, countertops or stair cases. The Portland cement used in the mix is either gray or white. A white Portland cement should be used for pastel or vivid coloring and a gray based Portland cement should be used for darker coloring.

* 1. CEMENT BASED OVERLAY
     1. Concretetivity: Concretetivity is a bag mix cement-based, polymer modified overlayment system.
        1. Concretetivity's polymer modified formula develops high adhesive strength on properly prepared sub-flooring. Designed to take the measuring and guess work out of the formula - everything is divisible by 8 so you never have to make more than you need.
           1. Polymer: Couture Jug O' Polymer.
           2. Plasticizer: As recommended by the manufacturer.
           3. Densifiers: As recommended by the manufacturer.
           4. Sealers: As recommended by the manufacturer.
        2. May be used over concrete, wood, steel or polystyrene foam and readily accepts decorative applications like stains, dyes, integral coloring, polishing, or stamping.
           1. Creates a true concrete surface (not sandy or plastic)
           2. Applied at only 3/8 inch to 2 inches thickness.
           3. Superior bonding to substrate surfaces.
           4. Compressive strength, 8,000 psi in 28 days.
        3. Moisture Barrier:
           1. Two part epoxy as supplied by the manufacturer.
        4. Finish:

\*\* NOTE TO SPECIFIER \*\* Select the finish required and delete those not required. Integral color are recommended for most surfaces, however stains or dyes can also be used to provide more translucent finishes. Contact the manufacturer for additional information.

* + - * 1. Troweled, burnished and polished.
        2. Integrally colors.
        3. Chemicals stains (acid stains), dyes or water based stains.
      1. Integral Colors:

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

* + - * 1. Natural Gray Concrete.
        2. Natural White Concrete.
        3. 301 West Texas Dust
        4. 302 West Texas Dust Dark
        5. 306 Smokey Moss
        6. 310 Inner Oyster
        7. 311 Ultra White
        8. 317 Be Black
        9. 321 Icy Gray
        10. 323 Barbs Grate
        11. 325 Simply Gray
        12. 327 Cool Gray
        13. 329 Well Done Inlet
        14. 342 Palm Beach Bay
        15. 344 Gabby's Bahama
        16. 347 Jupiter In-Kline
        17. 349 Santa Fe Sun
        18. 351 Ice Brown
        19. 355 Maebeige
        20. 358 Star Brown
        21. 366 Redkin
        22. 369 Clearly Clay
        23. 371 Simply Blue
        24. 372 Marine Blue
        25. 374 Seascape Teal
        26. 376 Green Teal
        27. 377 Blue Teal
        28. 378 Splash
  1. MIXING
     1. Concretetivity is Pre-Mixed. Use mortar mixer to ensure through mixing.
        1. Add dry premixed mortar to mixer.
        2. Dilute Couture polymer with water 6 to 1.
        3. Place 6 gallons of mix together with 6 bags of mix to the mixer. Also add color if specified.
        4. Add plasticizer if required.
        5. Continue mixing for 2 to 5 minutes unyil mix and color is consistant.

1. EXECUTION
   1. EXAMINATION
      1. Do not begin installation until substrates have been properly prepared.
      2. Verify that existing surfaces are structurally sound and have prepared to have adequate porosity to provide a co-adhesive bond and are clean and free of any surface contamination that may create a bond breaker.
      3. If substrate preparation is the responsibility of another installer, notify Architect of unsatisfactory preparation before proceeding.
   2. PREPARATION
      1. Clean surfaces thoroughly prior to installation.
      2. Cleanout and repair all expansion and control joints. Repair all large cracks and broken concrete.
      3. Existing expansion joints shall be maintained during placement of the new surfacing. Add additional expansion/control joints as needed to relieve stress on any substantial existing cracking.
      4. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions.
   3. INSTALLATION CONCRETETIVITY CEMENT BASED OVERLAY
      1. Install in accordance with manufacturer's instructions.
      2. Moisture Barrier:
         1. After the floor has been cleaned and prepped, mix Part A and Part B in accordance with the manufacturers instructions. Do not mix to much at a time to avoid material from setting up prior to application.
         2. Pour epoxy mix onto the floor using a watering bucket, following with a roller to spread the epoxy evenly over the surface.
         3. Use a 2 inch paint brush to cut in around the perimeter edges.
         4. After epoxy is down and prior to cure apply rice rock to improve adhesion of the subsequent overlayment.
         5. Once the surface has be covered allow a minimum of 4 to 8 hours for the epoxy to fully set.
         6. Immediately prior to overlayment application spray a thin coat of bonding agent recommended by the manufacturer mixed with two parts of water.

\*\* NOTE TO SPECIFIER \*\* Select one of the three following paragraphs for the finish required and delete those not required.

* + 1. Overlayment Application with Hard Troweled Polished Surface:
       1. Pour Mix so that a wet edge can be maintained between expansion/control joints.
       2. Use a gauge rake to achieve the required thickness. Must be applies at a thickness of 3/8 inch minimum to 2 inches maximum.
       3. Make sure that mix is delivered as an even flow to avoid cold joints in the surface.
       4. Allow the overlayment to rest until it can support the pan float on the troweling machine.
       5. When the floor hardens to the point of the trowel blades, remove the pan from the machine.
       6. Run a pattern with the troweling blades and rotate the pattern and continue the flattening of the overlayment.
       7. Continue to hard trowel the surface until burnished.
       8. Detail the edges as the work progresses using conventional hand tools.
    2. Overlayment Application with Exposed Polished Surface:
       1. Pour Mix so that a wet edge can be maintained between expansion/control joints.
       2. Use a gauge rake to achieve the required thickness. Must be applies at a thickness of 3/8 inch minimum to 2 inches maximum.
       3. Make sure that mix is delivered as an even flow to avoid cold joints in the surface.
       4. Allow the overlayment to rest until it can support the pan float on the troweling machine.
       5. When the floor hardens to the point of the trowel blades, remove the pan from e the machine.
       6. Run a pattern with the troweling blades and rotate the pattern and continue the flattening of the overlayment.
       7. Continue to hard trowel the surface until burnished.
       8. Detail the edges as the work progresses using conventional hand tools.
    3. Overlayment Application with Stamped Surface:
       1. Pour Mix so that a wet edge can be maintained between expansion/control joints.
       2. Use a gauge rake to achieve the required thickness. Must be applies at a thickness of 3/8 inch minimum to 2 inches maximum.
       3. Make sure that mix is delivered as an even flow to avoid cold joints in the surface.
       4. Allow the overlayment to rest until it can support the pan float on the troweling machine.
       5. Apply stamps, texture to affect pattern desired. Use release agents.
       6. When the floor hardens to the point of the trowel blades, remove the pan from the machine.
       7. Run a pattern with the troweling blades and rotate the pattern and continue the flattening of the overlayment.
       8. Continue to hard trowel the surface until burnished.
       9. Detail the edges as the work progresses using conventional hand tools.

\*\* NOTE TO SPECIFIER \*\* Select the following paragraphs for the polished surfaces if required and delete if not required.

* + 1. Polished Surface: Allow concrete to rest a minimum of 12 hours.
       1. Densifier:
          1. Breakdown the densifier 3 to 1 and spray on the floor surface.
          2. Use a micro fiber applicator to spread densifier evenly to avoid puddling.
       2. Polishing:
          1. Apply sanding screen to floor buffer using a 220 screen attached to a vacuum to reduce dusting. Run a pattern using the 220 screen.
          2. Continue using a 320 screen attached to a vacuum to reduce dusting. Run a pattern using the 320 screen in an opposite pattern to the 220 screen.
          3. Apply a 400 twister pad on the floor buffer with the vacuum still attached. Run a pattern using the 400 twister pad in the opposite direction as the 320 screen.
          4. Apply a 800 twister pad on the floor buffer with the vacuum still attached. Run a pattern using the 800 twister pad in the opposite direction as the 400 screen.

\*\* NOTE TO SPECIFIER \*\* Select the following paragraphs if required and delete if not required.

* 1. CONTROL JOINTS
     1. Saw cut control joints as soon as the surface permits the weight of the saw without causing surface edges to ravel. If the topping is placed over exiting concrete cut the joints through the topping and into the joints of the substrate concrete.
     2. After toping has fully cured, fill joint wells with a two-component, polyurea control joint filler, according to manufacturer's recommendations.
  2. CLEANING
     1. Clean entire floor and adjacent surfaces as recommended by the manufacturer.
  3. PROTECTION
     1. Protect installed products until completion of project.
     2. Touch-up, repair or replace damaged products before Substantial Completion.

END OF SECTION