

EUCOTHANE

Two component, solvent based, polyester aliphatic urethane coating, offering good chemical resistance along with excellent abrasion resistance, flexibility, and color stability

Note: The paragraphs below are meant to be incorporated into Parts 2 and 3 of a standard CSI 3 Part Format specification, the General Structural Notes, or directly onto the plans. They must be carefully reviewed by a qualified design professional and edited to meet the requirements of the project and governing building codes. Coordinate with other specification sections and drawings. In no case shall these Guide Specifications be considered to be Contract Documents or serve as installation instructions for the product being discussed. In any cases of discrepancy the manufacturer's most recently published data sheet shall take precedent.

PART 1 GENERAL

{Note to Specifier: Insert the following paragraph and sub paragraphs as required for your project. Euclid's recommended products are shown in italics. More info can be found on these products at www.euclidchemical.com or by clicking on the product links.}

1.01 RELATED WORK:

- A. Joint Fillers – [Eucolastic](#), [Tammsflex](#), [Dural 340](#), [Qwikjoint UVR](#)
- B. Concrete Repair:
 - 1. Vertical and Overhead: [Euco V-100](#), [Tamms Structural Mortar](#)
 - 2. Horizontal: [Express Repair](#), [VersaSpeed](#)
 - 3. Form and Pour: [Eucocrete](#)
- C. Crack Repair/Injection: [Dural 452 LV](#), [Dural Fast Set Epoxy Gel](#)
- D. Bonding Agents: [Duralprep A.C.](#), [Dural 452 MV](#)
- E. Waterproofing/Dampproofing : [Tamoseal](#), [Vandex Super](#), [Hey'Di K-11](#), [Vandex BB75](#)
- F. Architectural Coatings: [Tammscoat](#), [Tammolastic](#)
- G. Anti-Graffiti Coatings: AG 100, [AG-400](#),
- H. Traffic Deck Coatings: [Tammsdeck](#), [Flexdeck](#)
- I. Decorative Floor Coatings: [Duraltex](#)
- J. Epoxy Chemical Resistant Coatings: [Duralkote 240](#), [Duralkote 500](#), [Duraltex 1705/07](#), [Duraltex 1805/07](#)
- K. Penetrating Water Repellents:
 - 1. Horizontal and Vertical: [Baracade WB 244](#), [Baracade 100C](#), [Baracade Silane 40 IPA](#)
 - 2. Vertical: [Chemstop WB Regular/Heavy Duty](#)
- L. Penetrating Epoxy Sealer: [Euco #512 VOX Epoxy Sealer](#)
- M. Cathodic Protection: [Sentinel Galvanic Anodes](#)
- N. Moisture Mitigation System: [Dural AquaTight WB](#)

1.02 QUALITY ASSURANCE

- A. Obtain primary resinous flooring materials, including primers, from resinous flooring manufacturer. Obtain secondary materials including aggregates, sheet flashings, joint

sealants, and substrate repair materials of type and from source recommended by resinous flooring manufacturer.

1. Resinous flooring manufacturer shall have ISO 9001 Quality Certification.

B. Resinous Flooring Mock-Up:

1. Prior to commencing resinous flooring application, prepare a minimum **<<insert size>>** full scale, reference mock-up of each type, **[and][color][and][texture]** of resinous flooring surface for approval by Owner. Said reference mock-up shall be constructed in location designated by owner/architect, using the same equipment, tools and methods for installing all materials as will be used for the remaining work to be performed.
2. Once accepted by owner or owner's representative, mock-up is to remain, and is to be protected from damage. It shall become the standard for acceptance of color and texture for resinous flooring applications.
3. When Architect determines that mockup does not meet requirements, demolish and remove it from the site and cast another until the mockup is accepted.

1.03 PROJECT CONDITIONS

- A. Environmental Limitations: Apply resinous flooring within the range of ambient and substrate temperatures recommended in writing by manufacturer. Do not apply resinous flooring to damp or wet substrates, when temperatures are below 50 deg F (5 deg C), or when temperatures are less than 5 deg F (-15 deg C) above dew point.
1. Coordinate flooring work with other trades to ensure adequate illumination, ventilation, and dust free environment during application and curing of flooring.

B. Conditions for Concrete

{Note to Specifier: New concrete slabs on grade to receive resinous floor coating should be poured over heavy duty, uninterrupted, properly installed, vapor barrier.}

{Note to Specifier: : Moisture retaining cover cure is to be removed after seven days to allow the concrete to air dry prior to flooring installation.}

1. New concrete shall be cured a minimum of 7 days, and in place a minimum 28 days before proceeding.
2. Any cementitious repair mortars must have a full 7-day cure prior to coating.
3. Do not apply resinous floor coatings if there is excessive moisture in the concrete or if the moisture vapor emission rate (MVER) is high.
 - a. Prior to application of resinous coating, perform either of these tests: ASTM F2170 - Standard Test Method for Determining Relative Humidity in Concrete Floor Slabs Using In-Situ Probes, or ASTM F1869 - Standard Test Method for Measuring Moisture Vapor Emission Rate of Concrete Subfloor Using Anhydrous Calcium Chloride. If the relative humidity is 70% or greater, or the MVER is 3 lbs/1000 ft² /24 hrs

or greater notify Architect in writing and contact manufacturer for recommendations.

4. Examination:
 - a) Prior to commencement of resinous floor system application examine substrates, with Applicator present, for compliance with requirements and for other conditions affecting performance of resinous flooring.
 - b) For the record, prepare written report, endorsed by Applicator, listing conditions detrimental to performance.
 - c) Verify compatibility with and suitability of substrates.
 - d) Contractor must report, in writing, surfaces left in improper condition by other trades. Application of coating indicates acceptance of surfaces and conditions.

PART 2.0 PRODUCT

2.01 RESINOUS FLOOR SYSTEM

- A. Primer:
 1. 100% Solids Epoxy Primer: Two component, 100% solids epoxy, penetrating primer with maximum mixed viscosity of 500 cps and tack free time of 3 to 4 hours at 75 degrees F. 50% relative humidity.
 2. Product:
 - a) Euclid Chemical Company (The); Dural Epoxy Primer,
- B. Urethane Floor Coating: (2) component, solvent based, polyester aliphatic urethane coating with the following characteristics;
 1. Minimum Solids Content: 54%
 2. VOC Content: 350 g/l
 3. Taber Abrasion CS17 Wheel, 1000 g load, 500 cycles; 22 mg loss (maximum)
 4. Mixed Viscosity: 200 to 600 cps @ 75 deg F.
 5. Product:
 - a) Euclid Chemical Company (The); Eucothane, www.euclidchemical.com
 - b) Color: **[To be chosen from manufactures list of standard colors][Clear Gloss][Clear Satin][Light Gray][Concrete Gray][Dark Gray][Tile Red][Tan][White]**

PART 3.0 EXECUTION

3.01 SURFACE PREPARATION

- A. Clean and mechanically prepare substrates according to manufacturer's written recommendations to produce clean, sound, dust-free, dry, absorptive substrate free of grease, oils, curing compounds and other contaminants which may interfere with bond of resinous flooring. Surface profile should be equal to CSP 2 to 5 in accordance with ICRI Guideline 310.2.

{Note to specifier: The strength of the prepared concrete surface can be tested. Insert the following sub paragraph if quantitative results are required.}

1. [Following surface preparation the cleaned concrete floor shall be tested for compliance with the following:]
 - a. [Minimum surface tensile strength of 250 psi when tested with a “Elcometer” or similar pull tester per ASTM C 1583.]
2. Begin resinous flooring application only after minimum concrete curing and drying period recommended by resinous flooring manufacturer has passed, after unsatisfactory conditions have been corrected, and after surfaces are dry
- B. Prepare vertical and horizontal surfaces at terminations and penetrations through resinous flooring and at expansion joints, drains, and sleeves according to manufacturer’s written recommendations
- C. Mask adjoining surfaces not receiving resinous flooring, drains, and other substrate penetrations to prevent spillage, leaking, and migration of coatings.

3.02 RESINOUS FLOOR SYSTEM APPLICATION:

- A. Resinous Floor System Monolithic Coating Application:
 1. Mechanical Mixing- Coating and primers shall be thoroughly mixed with a mechanical drill with a manufacturer approved mixing blade. Premix individual components separately per manufacturer’s recommendations then combine materials and mix per manufacturers recommendations. Bottom and sides of container may be scraped during mixing but shall not be scraped once mixing has ceased. Do not aerate material.
 2. Primer Application: Apply a uniform application of properly mixed, clear, resinous floor system primer to properly prepared substrate per manufacturer’s recommendations. Allow 6 to 8 hours for prime coat to become tack free, but no longer than 18 hours before proceeding.
 3. Urethane Floor Coating: Apply uniform application of properly mixed urethane floor coating to floor per manufacturer’s written recommendations at recommended coverage rates. Allow 4 to 6 hours for first coat to become tack free, but no more than 18 hours before applying additional coats. [Repeat for second coat.]

{Note to Specifier: Where an anti-skid surface is desired, broadcast approximately 0.5 to 1.0 lbs/ft² (2.4 to 4.9 kg/m² of clean, dry aggregate into the first coat. When the first coat has cured, sweep off excess aggregate. Proceed with the second coat of Eucothane to seal the surface.

{Note to Specifier: Depending on the specific project, correct implementation of other application details, such as floor terminations, floor/drain detail, etc. may be required. For further information contact Euclid Chemical Technical Support at (800) 321-7628.}

3.03 CURING AND PROTECTING

- A. Prevent contamination and damage during application and curing stages.
- B. Protect resinous flooring from damage and wear during remainder of construction period.

END SECTION