



TEMPER-CRETE[™] URETHANE CEMENT SLB







TEMPER-CRETE SLB SUBMITTAL PACKAGE

DIVISION 09 – FINISHES
SECTION 09 67 23 RESINOUS FLOORING

TABLE OF CONTENTS

System Brochure	3-5
System Specification Sheet	6-12
CSI Specification	13-18
Color Charts	19-21
Sample Warranty	22-23
General Maintenance	24-26
Architectural Details	27-37





SYSTEM BROCHURE



TEMPER-CRETE™









ABOUT TEMPER-CRETE

Westcoat's Temper-Crete System is a one-step flooring system and a cost-effective option when thermal and shock resistance are required. This urethane cement system is monolithic, flowable, and installed with limited downtime. Offering attributes such as excellent impact, chemical, heat, and steam resistant qualities, Temper-Crete is designed for areas with heavy foot and moderate wheel traffic. Ideal for commercial kitchens, restaurants, warehouses, breweries, wineries, chemical processing plants, food processing plants, and pharmaceutical facilities.tt



ULTRA-TOUGH. PROTECTIVE.

- Thermal Shock Resistant
- High Compressive Strength
- USDA/FDA/ADA Compliant
- High Build
- Chemical Resistant
- Self-Priming
- Fast Turnaround
- Decorative Options



FOR PROFESSIONAL USE ONLY.











Explore Temper-Crete Self Leveling Options

Temper-Crete SL System features 100% solids, self-priming, integrally colored, moisture tolerant, matte finish, self-leveling, high-yield, urethane cement coating. It is designed for areas with heavy foot and moderate wheel traffic and can be installed from 1/8 to 1/4 inch thick. Temper-Crete SL is thermal shock resistant, does not require a topcoat, and is ideal for food and beverage industries, manufacturing, storage, and warehouses.

Temper-Crete SLB System takes all of the qualities of SL and adds a slip-resistant silica sand broadcast and pigmented finish. A variety of Westcoat's pigmented topcoats can be utilized depending on the demand of the space, including a UV-resistant urethane cement topcoat. Temper-Crete SLB is ideal for use in kitchens, manufacturing, warehouses, food services, breweries, wineries, distilleries, and automotive manufacturing.

Temper-Crete SLC System builds upon the basic SL system and features an optional integral colored urethane cement base, a decorative color chip broadcast using TC-60 Color Chips, and is sealed with EC-36 100% Solids Epoxy and EC-95G Gloss Polyurethane Topcoat. Temper-Crete SLC is ideal for use in laboratories, pharmaceutical spaces, retail, classrooms, hallways, and lobbies.

Temper-Crete SLQ System takes SL's qualities and features an optional integral colored urethane cement base, a decorative quartz sand broadcast using TC-65 Quartz Sand, and is sealed with EC-36 100% Solids Epoxy and EC-95G Gloss Polyurethane Topcoat. Temper-Crete SLQ offers a decorative and slip-resistant finish that is ideal for use in kitchens, restrooms, veterinary offices, and kennels.















SYSTEM SPECIFICATION SHEET



westcoat SPECIALTY COATING SYSTEMS

SYSTEM SPECIFICATION



Temper-Crete™ SLB

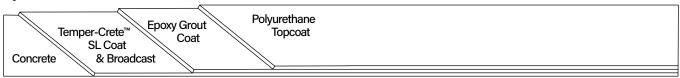
Description

Westcoat's Temper-Crete™ SLB System is a monolithic, flowable, urethane cement that can be installed with limited downtime. The Temper-Crete™ SLB System has excellent impact and chemical resistant qualities. The Temper-Crete™ SLB System features an optional integral colored urethane cement base, with silica sand broadcast and is sealed with Westcoat's EC-36 100% Solids Epoxy and EC-95G Gloss Polyurethane Topcoat, to provide a pigmented finish. It is designed for areas with heavy foot and moderate wheel traffic.

Uses

Temper-Crete™ SLB System is used to create a heavy duty, industrial, seamless floor in service areas, where a high-build, self-leveling and fast turnaround floor system is required. The Temper-Crete™ SLB System is ideal for breweries, wineries, distilleries, food processing, kitchens, warehouses, manufacturing areas and areas with high traffic.

System Overview



System Data				
Coverages	Temper-Crete [™] SL Coat 40-45 ft² at 1/8 inch per batch 20-22.5 ft² at 1/4 inch per batch	Broadcast Coat 0.8-1.0 lbs per ft ²	Epoxy Grout Coat 100-160 ft² per gal	Polyurethane Topcoat 275-350 ft² per gal
Components	EC-24 Temper-Crete [™] Urethan TC-24 Temper-Crete [™] SL Cem EC-36 100% Solids Epoxy CA-36 Epoxy Color Pack EC-95G Gloss Polyurethane To	<u>ent</u>	Shelf Life Clear - 2 years Pigmented - 6 6 months 2 years 1 year 3 years	

Advantages

USDA/FDA/ADA Compliant • Thermal Shock Resistant • Low Odor • High Compressive Strength • High Build • Abrasion Resistant • Chemical Resistant • Heat Resistant

Inspection

Temper-Crete™ SLB should only be applied directly to prepared concrete. Do not apply Temper-Crete™ SLB over existing coatings, tile, wood, etc. Concrete must be clean, dry and free of grease, paint, oil, dust, curing agents or any foreign material that will prevent proper adhesion. Any laitance or weak layers of concrete should be removed, prior to application. The concrete should be at least 3,500 PSI, porous and able to absorb water. A minimum of 14 days curing time is required on all concrete. Do not apply over damp or water-soaked concrete.







SYSTEM SPECIFICATION



Temper-Crete™ SLB

Preparation

Pre-cut and clean all cracks and joints with a concrete diamond blade to at least ¼ x ¼ inch. Anchor grooves/keyways should be cut six inches from all free edges, walls, perimeter, drains and both sides of joints. Anchor keyways should be cut to a depth and width two times the thickness of the Temper-Crete™ SLB floor. Prepare concrete to a profile equal to CSP 3-5 as specified by ICRI. Methods may vary according to the condition and hardness of the concrete. When preparing the surface use caution when shot blasting, scarifying too aggressively or grinding too smooth. Do not feather edge the Temper-Crete™ SLB System. Always terminate into an anchor groove/keyway.

Moisture

All concrete should be tested for moisture before applying a seamless coating. Temper-Crete SLB (at a minimum 3/16", broadcast finish at 1/4") is suitable for moisture vapor transmission up to 20 lbs/1000 square feet (ASTM F1869) or 99% relative humidity (RH) (ASTM F2170). When applying at 1/6", moisture limits are up to 15 lbs/1000 square feet (ASTM F1869) or 95% relative humidity (RH) (ASTM F2170).

Crack Treatment

Cracks, spawls and other imperfections in the substrate can be prefilled by mixing one kit of EC-24 Temper-Crete™ Urethane and one bag of TC-24 Temper-Crete™ Cement. Pre-mix EC-24 parts A and B individually. In a clean vessel, mix the entire contents of EC-24 parts A and B together for 30 seconds with a mechanical mixer. Slowly add one bag of TC-24 Cement and thoroughly mix the materials until a homogeneous mix is attained (~60 seconds), while being sure to scrape the sides of the vessel while mixing. Trowel the mixture into the voids and allow patching to dry for ~8-10 hours at 72F degrees before coating. This remedial approach to patch cracks is not guaranteed and it should be noted that when the substrate moves, it could likely crack the Temper-Crete™ SLB System.

Joints

Moving expansion joints should be honored. Identify and tag joints before applying Temper-Crete™ SLB, using pins or concrete nails. Once the Temper-Crete™ SLB System has dried, cut through the system and fill with the appropriate joint filling material.

Primer (Optional)

Priming the substrate is not normally required, but due to variances in concrete, surface profile and desired finish, priming may be needed to help stabilize the substrate and ensure a more uniform finish. All materials should be conditioned at 60-75F degrees for a minimum of 24 hours, before use. Pre-mix EC-24 Temper-Crete™ Urethane parts A and B individually. In a clean vessel, mix the entire contents of EC-24 part A and B together for 30 seconds with a mechanical mixer. Slowly add one bag of TC-74 Temper-Crete™ Primer & Topcoat Cement and thoroughly mix the materials until a homogeneous mix is attained (~60 seconds), while being sure to scrape the sides of the vessel while mixing. Apply the mixture onto the surface at a rate of ~120-150 square feet per mix using a 1/8 inch notched trowel or squeegee and back roll with a 3/8 inch nap roller cover. Primer should be applied into anchor grooves/keyways, but brushed out to prevent from filling. Allow primer to dry for ~8-10 hours at 72F degrees, before proceeding with the Temper-Crete™ SL Coat.





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SYSTEM SPECIFICATION



Temper-Crete[™] SLB

Temper-Crete™ SL Coat and Broadcast Coat

The Temper-Crete™ SL Coat can be applied from ½ inch to ¼ inch thickness, on level or surfaces that have up to a 2% slope. All materials should be conditioned at 60-75F degrees for a minimum of 24 hours, before use. When applying Temper-Crete™ in temperatures below 60F degrees or when the material has not been properly conditioned, the overall flow, leveling and finish will be greatly affected. Pre-mix EC-24 Temper-Crete™ Urethane parts A and B individually. This mix will not fit in a five gallon mixing vessel. In a clean vessel, mix the entire contents of EC-24 part A and B together for 30 seconds with a mechanical mixer. Slowly add one bag of TC-24 Temper-Crete™ SL Cement and thoroughly mix the materials until a homogeneous mix is attained (~60 seconds), while being sure to scrape the sides of the vessel while mixing. Failure to properly mix materials may result in an inconsistent finish and can affect how the material flows and performs.

After mixing, immediately pour the material onto the surface and spread using a gauge rake. Repeat and be sure that the mixes are poured directly into the wet edge. It is recommended to have multiple mixing buckets in use, to reduce timing between mixes. After the material has been placed with the gauge rake, use an 18 inch pin roller to roll the entire floor and then crosshatch or cross roll. Pin rolling will help reduce entrapped air and will help remove pour lines. Pin rolling must be completed immediately after placing material, to reduce the chance of roller marks (~5 minutes at 72F degrees). Be sure to periodically change roller covers to ensure that curing material does not come in contact with uncured material. It is important to apply the material in an expeditious manner, always keeping a wet edge. Each mix will cover approximately 40-45 square feet at ½ inch and 20-22.5 square feet at ¼ inch.

After placing and pin rolling the Temper-Crete™ SL Coat as described above, allow the Temper-Crete™ SL Coat to sit for ~6-10 minutes at 72F degrees before proceeding with the broadcast. Broadcasting too early may result in entrapped air and may yield an irregular surface, while broadcasting too late may result in poor adhesion of the aggregate. Broadcast 30 mesh silica sand to refusal (~0.8 - 1.0 pounds per square foot) by broadcasting the material up into the air, allowing the aggregate to evenly disperse and fall into the wet Temper-Crete™ SL Coat. Careful and even placement of the silica sand will help prevent displacement and ensure more even coverage. Ensure that no bare spots are evident and do not pin roll material once broadcast. An additional broadcast may be needed if broadcast coat was uneven. Utilize EC-36 for any additional broadcast coats and refer to the mixing instructions in the "Epoxy Grout Coat" section below. Allow the Temper-Crete™ SL Coat and Broadcast to dry for ~8-10 hours at 72F degrees. Colder temperatures will prolong dry times. After the Temper-Crete™ SL Coat and Broadcast is dry, sweep up excess silica sand and vacuum the floor clean.

Epoxy Grout Coat

Premix each component separately. For tinting with CA-36 Epoxy Color Pack, add one 32 fluid ounce unit of CA-36 per 3-gallon kit of EC-36 Epoxy. For color consistency, boxing is recommended when multiple batches of CA-36 are present. Mix the entire contents of CA-36 into the EC-36 Part A and mix thoroughly, before combining the Part B. Add the EC-36 Part B into the same container. Mix thoroughly with a low speed (400-600 rpm) drill motor for 3-4 minutes. Make sure to scrape the sides and bottom of the container during mixing. After mixing is completed, promptly remove material from container, as epoxy will begin to generate heat. Spread immediately onto the floor with a squeegee and back roll with an 18 inch, 3/8 inch high quality, non-shedding roller, at a rate of 100-160 square feet per gallon.

Allow the EC-36 to dry for a minimum of 8-10 hours (at 72F degrees) before applying the EC-95G Polyurethane Topcoat, but no later than 24 hours. If applying the EC-95 beyond the 24-hour recoat window, the surface will need to be abraded and solvent wiped, prior to application.







SYSTEM SPECIFICATION



Temper-Crete™ SLB

Polyurethane Topcoat

Premix each component separately. For color consistency, box all part A's. In a clean bucket, mix 2 parts A with 1 part B (by volume) of EC-95G. Mix thoroughly with a low speed (400-600 rpm) drill motor for 3-4 minutes. Make sure to scrape the sides and bottom of the container during mixing. After mixing is completed, remove material from container and spread using a squeegee. Back roll with a 3/8" high quality, non-shedding, solvent resistant roller cover, at a rate of 275-350 square feet per gallon. Apply quickly and do not over roll, as product will begin to "tack-up" as the air begins to cure it.

Dry Time

You may re-coat as soon as the surface is dry to the touch (~4 to 6 hours at 72F degrees), but no later than 24 hours. Light foot traffic may be permitted in 12 hours, normal traffic in 24 hours and vehicular and heavy traffic in 72 hours. All times based on an average temperature of 72F degrees and 50% humidity. Dry times may increase slightly when solvent is added. Colder temperatures will prolong dry times.

Optional Materials

Accelerator

 CA-24 Temper-Crete™ Accelerator can be added to the EC-24 to reduce dry times for the Primer and Temper-Crete™ SL Coat applications. Refer to the CA-24 Product Specification Sheet for more information.

Topcoats

- Temper-Crete Topcoat: EC-28 Temper-Crete UV Topcoat Urethane & TC-78 Temper-Crete UV Topcoat
 Cement can be used over the silica sand broadcast, in lieu of EC-36 and EC-95, when a UV resistant,
 urethane cement topcoat is required.
- EC-34 Epoxy Topcoat may be used in lieu of EC-36, when a factory tinted, 100% solids, epoxy topcoat is desired.
- EC-40 Antimicrobial Epoxy may be applied over the Broadcast Coat, in lieu of the EC-36 and EC-95, when an antimicrobial finish is required.
- EC-50 Novolac may be applied over the Broadcast Coat, in lieu of the EC-36 and EC-95, when extreme chemical or heat conditions are a concern.
- EC-102 Polyaspartic may be applied over the Broadcast Coat, in lieu of the EC-36 and EC-95, when a fast-drying polyaspartic finish is required.

Skid Resistance

- CA-33 Aluminum Oxide can be used for skid resistance in heavy traffic areas.
- * Please refer to Product and System Specification Sheets for additional information.

Clean Up

Uncured material can be removed with an environmentally-safe solvent. If cured, material can only be removed mechanically.







SYSTEM SPECIFICATION



Temper-Crete™ SLB

Maintenance

Interior Floors can be mopped & scrubbed daily using a neutral pH cleaner. Standard floor degreasers may be used as needed. Floors can be cleaned with a low PSI pressure washer as needed. Be sure to test any cleaning agents and methods in an inconspicuous area. For more information on floor care & maintenance, please refer to the General Maintenance sheet. The Temper-Crete™ SLB System should be inspected for wear every 2 to 4 years. The system should be maintained every 3 to 5 years depending upon traffic. If re-coating of the floor is required due to wear or abrasion, you will need to clean and degrease the surface, then lightly abrade, and reapply the topcoat. In most cases, you will need to clean the surface with a solvent, such as acetone and thin the new topcoat as well. A primer may be required. Contact Westcoat or your applicator for details.

Health Precautions

Inhalation of vapor or mist can cause headache, nausea, irritation of nose, throat and lungs. Prolonged or repeated skin contact can cause slight skin irritation. All products have the potential of causing skin irritations or allergic reactions. Cements contain silicas; dust mask or respirator should be used when mixing, sanding or grinding. Be careful not to get on skin, clothes or in eyes. Glove and respirators are strongly recommended. Avoid breathing vapors. If splashed in the eye, flush with warm water and contact a physician if blurring persists.

Extinguish all pilot lights and sources of ignition, such as electrical motors. Be sure to have adequate cross ventilation prior to installing.

Limitations

- This system is designed for professional use only, by experienced applicators.
- Read Product Specification Sheets for every product you will be using before beginning the project.
- Be sure to do adequate surface preparation.
- Avoid application while ambient and substrate temperatures are climbing, as pinholes may appear.
- Be sure to measure and mix properly. Do not overmix material.
- For interior use only.
- May be slippery when wet.
- Do not thin the EC-24 Temper-Crete™ Urethane or adjust the mix ratio of EC-24 to cement.
- Do not apply to damp or wet surfaces.
- Be aware of the pot life of mixed material. Once materials are combined, immediately remove mix from mixing vessel.
- Do not apply in temperatures below 50°F or temperatures above 85°F. Hot or Cold weather will effect dry times.
- Do not apply material in direct sunlight. This can cause early surface dry, which can cause the surface to expand and crack.
- Material will discolor in time. Ultraviolet and some artificial lights may cause floors to discolor faster.
- Approval and verification of proposed colors, textures and slip resistance is recommended.
- Do not allow Westcoat products to freeze.
- Do not apply the Temper-Crete[™] SLB System if the concrete substrate has ASR (Alkali Silica Reaction) or is susceptible to ASR.
- The Temper-Crete™ SLB System follows the overall lay of the existing substrate and the finished floor may reflect conditions of the existing substrate. These conditions include, but are not limited to, a "wavy" appearance or transitions between slabs.







Temper-Crete[™] SLB

Slip Precaution

Westcoat Specialty Coatings Systems highly recommends the use of a slip-resistant additive to all coatings/systems that may be exposed to wet, oily, greasy or slippery conditions. It is the end user's responsibility to provide a flooring system that meets current safety standards. Westcoat and its distributors will not be responsible for injury incurred during a slip and fall incident. For the current coefficient of friction requirements, please consult your local building codes.

Test Data

Chemical Resistance - EC-95 Polyurethane

Chemical Resistance	Clear & Pigmented
Muriatic Acid (31.5% HCL)	5
Sulfuric Acid (50% H2SO4)	5
Sulfuric Acid (93% H2SO4)	1
Nitric Acid (10% HNO3)	5
Sodium Hydroxide (50% NaOH)	5
Bleach (sodium hypochlorite)	5
Vinegar (3-5% acetic acid)	5
Transmission Fluid	5
Gasoline	5
Brake Fluid	5
409 Surface Cleaner	5
Pine Sol Solution	5
Blood & Body Fluids	5
Iodine Solution	5
Mustard	5/5s
Ketchup	5/5
Red Wine	5/5
Skydrol	5
Acetone	5
Methyl Ethyl Ketone (MEK)	5
Xylene	5
Ethanol	5
Methanol	5

Key: 5 = Best (no effect)

4 = Softens (recovers)

3 = Softens (no recovery)

2 = Blistered (no recovery)

1 = Worst Destroyed s = With Stain

* Contact time > 5 hrs = 1

Technical Data

Dry Times (at 72F Degrees)		Result		
Dry to Touch		8-10 hours		
Light Foot Traffic	ffic		12 hours	
Normal Traffic		24 hours		
Vehicular and Heavy Traffic		72 hours		
Full Service			3-5 days	
Physical Property	Test N	lethod	Result	
Tensile Strength	ASTM	C-307	3,100 psi	
Tensile Modulus	ASTM	I D638	300,000 psi	
Compressive Strength	ASTM	C-579	11,200 psi	
Hardness Shore D	ASTM	D2240	84	
Flexural Strength	ASTM	l C580	6,100 psi	
Abrasion Resistance	ASTM	D4060	34 mg. loss	
Adhesion to Concrete	ASTM D4541		Concrete Fails	
Impact Resistance	ASTM D-2794		>160 in/lbs	
Flammability	ASTM E-648		Class 1	
Water Absorption	ASTM C-413		<0.1%	
Service Temperature	-		-40°F min - 250°F Max	
Resistance to Fungi Growth	ASTM G21 Rated 0 (no growth		Rated 0 (no growth)	
Resistance to Mold Growth	ASTM	D3273	Rated 10 (highest resistance)	







CSI SPECIFICATION

MADE IN THE USA | SINCE 1981

4007 Lockridge Street • San Diego, CA 92102 800.250.4519 • westcoat.com

SECTION 09 67 23 RESINOUS FLOORING TEMPER-CRETE SLB SYSTEM SELF-LEVELING URETHANE CEMENT FLOORING

PART 1 GENERAL

1.1 SUMMARY

A. Section includes: Provide a complete Urethane cement floor system for interior concrete surfaces that meet the requirements for specific use indicated in the contract documents. Include all applicable substrate testing, surface preparation, and detail work.

1.2 RELATED SECTIONS

- A. Section 03 30 00 Cast-In-Place Concrete
- B. Section 03 39 00 Concrete Curing

1.3 SYSTEM DESCRIPTION

- A. The scope of work shall entail substrate preparation, the provision and application of a self-leveling, seamless urethane cement with aggregate broadcast with topcoat.
- B. The overall system will feature the desired color and nominal thickness between 3/16" and 5/16", as specified by the owner. The specified system will be applied to the prepared area(s) as indicted in the plans and per the manufacturer's recommendations.
- C. Cove base (as required) should be installed as indicated on the plans and per the manufacturer's recommendations, unless otherwise noted.

1.4 SUBMITTALS

- A. Product Data: Submit latest version of manufacturer's product and system data, including physical properties, color charts, representing manufacturer's full range of colors, textures and thicknesses.
- B. Manufacturer's Safety Data Sheets (SDS) for each product that
- C. Selection Samples: For the proposed system, provide two sets of samples of a minimum 3"x3", representing the color, texture, thickness and general appearance of the system subject to normal tolerances.

1.5 QUALITY ASSURANCE

- A. All materials used in the resinous floor system shall be manufactured and provided by a single manufacturer to ensure compatibility and proper bonding.
- B. Use adequate numbers of skilled workmen thoroughly trained and experienced in the necessary crafts and completely familiar with the specified requirements and methods needed for proper performance of the work of this section.
- C. Applicator shall have a minimum of 3 years' experience installing resinous flooring coatings similar to that which is required for this project and who is acceptable to the manufacturer.
 - 1. Applicator shall designate a single individual as project foreman who shall be on site at all times during installation.
 - Applicator must show and have QCA Qualified Contractor/Applicator paperwork from the manufacturer of the coating system, as required to obtain a long-term jobsite specific warranty.
- D. Convene a pre-application meeting before the start of application of coating system. Require attendance of parties directly affecting work of this section, including: Architect, contractor,

applicator, and authorized representative of the coating system manufacturer and interfacing trades. Review the following:

- 1. Drawings and specifications affecting work of this section.
- 2. Protection of adjacent surfaces.
- 3. Surface preparation and substrate conditions.
- 4. Application.
- 5. Field quality control.
- 6. Protection of coating system.
- 7. Repair of coating system.
- 8. Coordination with other work.
- E. No requests for substitutions shall be considered that would alter the general type of the specified system.

1.6 DELIVERY, STORAGE & HANDLING

- A. Delivery: Materials shall be delivered to the job site in sealed, undamaged containers. Each container shall be clearly marked with manufacturer's label showing type of material, color, and lot number.
- B. Storage:
 - 1. Store all materials in a clean, dry place.
 - 2. Materials should be stored between 60-75°F. Do not store in direct sunlight or high heat.
 - 3. Do not allow any material to freeze.
 - 4. Safety Data Sheets (SDS) for all products and materials shall be kept on site.
- C. Handling: Handle products carefully to avoid damage to the containers. Read all labels, production specification sheets, system specification sheets and Safety Data Sheets (SDS) prior to use.

1.7 ENVIRONMENTAL CONDITIONS

- A. Site Requirements
 - 1. Maintain environmental conditions (temperature, humidity, and ventilation) within the limits recommended by the manufacturer.
 - 2. Concrete should be tested for moisture before applying a seamless coating. Temper-Crete SLB (at a minimum 3/16", broadcast at ¼") is suitable for moisture vapor transmission up to 20 lbs./1000 square feet (ASTM F1869) or 99% relative humidity (RH) (ASTM F2170).
 - 3. Concrete must be at least 3500 psi.
 - 4. Concrete must be cured for a minimum of 14 days before coating is applied.
 - 5. Schedule coating work to avoid excessive dust and airborne contaminates. Protect work areas from excessive dust and airborne contaminates during coating application.
 - 6. Before any work is started, the applicator shall examine all surfaces for any deficiencies. Should any deficiencies exist, the architect, owner or general contractor shall be notified in writing and any corrections necessary shall be made.
 - 7. The applicator shall provide sufficient lighting during the prep and installation of the system, equivalent to the final lighting.
- B. Requirements for new concrete that will be coated with urethane cement.
 - All concrete shall be moisture cured for at least 7 days and have fully cured for a minimum of 14 days, in accordance with ACI-308 prior to the application of the system and pending moisture testing.
 - 2. Concrete should have a flat rubbed finish, float or light steel trowel finish. Hard steel trowel finishes are not required or advisable.
 - 3. Sealers and or curing agents are not to be used.
 - All concrete surfaces that are on grade shall, should be constructed with a vapor barrier to
 protect against the effects of vapor transmission and the concerns with delamination of the
 system.

PART 2 PRODUCTS

2.1 FLOORING

- A. As a basis of design: Westcoat Temper-Crete SLB System, self-leveling urethane cement flooring system (no substitutions will be accepted).
 - System Materials:
 - a. Resin & Hardener: EC-24 Temper-Crete Urethane
 - b. Cement: TC-24 Temper-Crete SL Cement
 - d. Broadcasted Aggregate: 30 Mesh Silica Sand (By others)
 - e. Epoxy Grout Coat: EC-36 100% Solids Epoxy & CA-36 Epoxy Color Pack
 - f. Polyurethane Topcoat: EC-95G Polyurethane Topcoat

Optional Materials:

- a. Topcoats:
 - EC-28 Temper-Crete UV Topcoat Urethane and TC-78 Temper-Crete UV Topcoat Cement may be used over the silica sand broadcast, in lieu of EC-36 and EC-95, when a UV resistant, urethane cement topcoat is required.
 - EC-34 Epoxy Topcoat may be used over the silica sand broadcast, in lieu of EC-36 and CA-36, when a factory tinted, 100% solids epoxy is required.
 - EC-40 Antimicrobial Epoxy may be used over the silica sand broadcast, in lieu of the EC-36 and EC-95, when an antimicrobial, 100% solids epoxy is required.
 - EC-50 Novolac may be used over the silica sand broadcast, in lieu of EC-36 and EC-95, when extreme chemical exposure is a concern.
 - EC-102 Polyaspartic may be used over the silica sand broadcast, in lieu of EC-36 and EC-95, when a fast-drying polyaspartic finish is required.
- b. Skid Resistance
 - CA-33 Aluminum Oxide can be used for skid resistance in heavy traffic areas.

2.2 MANUFACTURERS

A. Approved manufacturer: Westcoat Specialty Coatings; 4007 Lockridge Street, San Diego, CA 92102. Telephone 800-250-4519. Fax 619-262-8606. Website: www.westcoat.com.

2.3 PRODUCT REQUIREMENTS

- A. Temper-Crete System
 - 1. Adhesion to Concrete: ASTM D4541, concrete fails.
 - 2. Compressive Strength: ASTM C-579, 11,200 psi.
 - 3. Tensile Strength: ASTM C-307, 3,100 psi.
 - 4. Flexural Strength: ASTM C-580, 6,100 psi.
 - 5. Impact Resistance: ASTM D-2794, >160 in/lbs.
 - 6. Hardness: ASTM D-2240, Shore D, 84.
 - 7. Flammability: ASTM E-648, Class I.
 - 8. Water Absorption: ASTM C-413, <0.1%.
 - 9. Abrasion Resistance: ASTM D-4060, 34 mg loss.
 - 10. Resistance to Fungi Growth: ASTM G21, Rated 0 (no growth).
 - 11. Resistance to Mold Growth: ASTM D-3273, Rated 10 (highest resistance).

PART 3 EXECUTION

3.1 EXAMINATION

- A. Verification of Conditions.
 - Inspect all surfaces to receive urethane cement flooring. Verify that surfaces are dry, clean, and free of contaminates that would prevent Temper-Crete from properly adhering to the surface and that the substrate is satisfactory for installation and complies with requirements specified.

- 2. Conduct calcium chloride testing according to ASTM F1869.
- 3. Conduct surface profile inspection according to ICRI Technical Guideline No.03732.
- 4. Before starting work report in writing to the authority having jurisdiction any unsatisfactory conditions.

3.2 PREPARATION

A. General

- 1. All concrete substrates shall be clean, dry and free of grease, paint, oil, dust, curing agents or any foreign material that will prevent proper adhesion. Any laitance or weak layers of concrete shall be removed prior to application.
- 2. Moisture Testing: All concrete should be tested for moisture before applying a seamless coating.
 - a. Perform relative humidity test in accordance with ASTM F2170. If relative humidity (RH) exceeds 99%, contact the manufacturer before application.
 - b. Perform moisture vapor emission rate measurement in accordance with ASTM F1869. If vapor drive exceeds 20 lbs./1,000 sq. ft./24 hrs., contact the manufacturer before application.
- 3. Mechanical Surface Preparation
 - a. Prepare surfaces using methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions.
 - b. Create a surface profile of CSP 3-5 as described by the International Concrete Repair Institute (IRCI).
 - c. Anchor grooves/keyways should be cut six inches from all free edges, walls, perimeters, drains and both sides of joints.
 - d. Cracks, spawls and other imperfections in the substrate should be treated per manufactures recommendations.
 - e. Joints: Moving expansion joints should be honored and treated per manufactures recommendations.
 - f. Clean Surfaces thoroughly prior to installation.

3.3 APPLICATION

- A. Install coatings in accordance with the most up-to-date manufacturer's instructions.
- B. Mix multi-component materials in accordance with manufacturer's instructions.
- C. Use application equipment, tools, and techniques in accordance with manufacturer's instructions.
- D. Uniformly apply coatings at spread rates and in number of coats to achieve specified mil thickness recommended by the manufacturer.
 - Install integral cove base where indicated on the contract drawings and according to manufacturer's instructions.
 - 2. All terminations, transitions and details such as: drains, walls and doorways shall be treated per the manufacturer's recommendations.
- E. Adhere to all limitations, instructions, and cautions for resinous coatings as stated in the manufacturer's published literature.

3.5 FIELD QUALITY CONTROL

- A. Verify coatings and other materials are as specified.
- B. Verify coverage rates of the system as work progresses. Areas found not to meet the required thickness shall receive additional material until specified thickness is attained.
- C. Manufacturer's representative shall provide technical assistance and guidance for surface preparation and application of coating systems.

3.6 PROTECTION AND CLEAN-UP

- A. Light foot traffic should be permitted after 18 hours. Heavy traffic and exposure to moisture and chemicals should be permitted after 72 hours. .
- B. Protect finished surfaces of coating system from damage during construction.
- C. Touch-up, repair or replace damaged flooring system after substantial completion.

 Clean area and remove all debris upon completion of work. Dispose of empty containers properly according to current Local, State and Federal regulations.

3.7 MAINTENANCE

A. Contractor shall provide to owner, maintenance and cleaning instructions for the floor system upon completion of work. Owner is required to clean and maintain the surfaces to maintain manufacturer's warranty.

END OF SECTION

This guide specification has been prepared by Westcoat Specialty Coating Systems to assist design professionals in developing a project specific specification. This guide is a template that must be reviewed and adapted by specifiers to comply with project requirements. This guide specification is not to be copied directly into a project specification manual without review.





COLOR CHARTS



TEMPER-CRETE

Deep Tan I 27
Tile Red I 34
Pewter Gray I 12
Cape Cod Gray I 41
Concrete Grow L 52

Concrete Gray I 52



Color will vary between products and sheens. This chart is for reference only.

Please request an actual color sample or apply sample on site before beginning any project.





INDUSTRIAL TOPCOATS EPOXIES, URETHANES, POLYASPARTICS



- * Also available in White | 00
- * Custom color matching also available in EC-11, EC-12, EC-34, EC-95 and EC-102 with a 20 gallon minimum and \$250.00 color matching fee.



Color will vary between products and sheens. This chart is for reference only. Please request an actual color sample or apply sample on site before beginning any project.





SAMPLE WARRANTY





WARRANTY

WESTCOAT TEMPER-CRETE MATERIAL WARRANTY

Subject to the conditions, limitations and requirements set forth below, Westcoat warrants the Westcoat Temper-Crete materials to be free of defects in the material for a period of one (I) year from the date of original purchase of the materials provided that the materials are installed by a factory trained state-licensed contractor enrolled in the Westcoat QCA program and subject to all terms and conditions set forth below. Westcoat disclaims any warranty for the labor or installation of the Temper-Crete materials.

If the Westcoat Temper-Crete materials fail due to defects within the warranty period, Westcoat, in its sole discretion, will either provide replacement materials for the defective Temper-Crete materials or reimburse the original purchaser in an amount not to exceed the original cost of the materials. Westcoat shall in no way be responsible or liable for any labor costs or any incidental or consequential damages, including without limitation, economic losses, lost profits, business interruption, loss of use, contribution, indemnity or other losses arising from the use of the Temper-Crete materials.

This warranty does not apply to and Westcoat has no responsibility or liability for: (1) moisture rising from the substrate and/or efflorescence; (2) cracks due to movement of substrate; (3) surfaces other than 3500 psi concrete; (4) waterproofing of any sort (5) repairs and/or maintenance of the finish coat, (6) loss of gloss, fading, and cleaning (7) sloping.

This warranty is limited to the original purchases and is non-transferable. This warranty is void if the Temper-Crete materials are: applied to the top of OSB; not properly maintained; not installed pursuant to the current system information sheet; and/or applied at any area that is not built in accordance with applicable building codes. The warranty is also void if all of the materials are not purchased from an authorized distributor of Westcoat.

THIS MATERIAL WARRANTY AND THE REMEDIES PROVIDED HEREUNDER ARE EXCLUSIVE AND GIVEN IN LIEU OF ALL OTHER WARRANTIES (WHETHER WRITTEN, ORAL, IMPLIED OR STATUTORY). THERE ARE NO OTHER WARRANTIES, EITHER EXPRESSED OR IMPLIED, INCLUDING BUT NOT LIMITED TO, WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, THAT EXTEND BEYOND THAT SPECIFICALLY DESCRIBED HEREIN. PURCHASER'S SOLE AND EXCLUSIVE REMEDY AGAINST THE MANUFACTURERS OF WESTCOAT, INCLUDING CLAIMS BASED UPON THE MANUFACTURER'S NEGLIGENCE OR STRICT LIABILITY, SHALL BE LIMITED SOLELY TO THE REPLACEMENT OF ANY DEFECTIVE TEMPER-CRETE MATERIAL OR A PAYMENT BY THE MANUFACTURER IN AN AMOUNT EQUAL TO THE COST OF THE ORIGINAL TEMPER-CRETE MATERIAL.

The Westcoat Temper-Crete SLB, SLC, SLQ, RTB, RTC, RTQ systems require a maintenance topcoat specified by a factory representative, every two to four years (depending on ultraviolet exposure and/or traffic) as determined by a factory representative or authorized inspector.

Inspections are required one year after installation and every two years thereafter by a factory authorized representative. The record of the inspection must be kept in writing and entitlement to the benefits of this warranty require the purchaser to show proof of purchase of the materials and the record of inspection(s).

All claims arising from any defect in the Temper-Crete materials or under this Warranty shall be made, in writing, to Westcoat within ninety (90) days of the discovery of the alleged defect and within the time period of this warranty. Upon notification, Westcoat shall have the right to inspect and determine course of repair. The absence of a written claim within this time period shall constitute a waiver of all claims, rights and damages against Westcoat, and its affiliates. This warranty shall not toll or extend any statute of limitation applicable to a claim of negligence, breach of contract or strict liability against Westcoat.

Any and all disputes, claims or damages arising out of the use of Temper-Crete materials or this Warranty shall be arbitrated in the County of San Diego, State of California, utilizing the services of a neutral dispute resolution service upon which the purchaser and Westcoat agree, or if they cannot agree, utilizing the services of the American Arbitration Association. The purchaser and Westcoat hereby waive any right they may have to have a jury decide any dispute.







GENERAL MAINTENANCE





CARE & MAINTENANCE

INTERIOR COATINGS

Westcoat interior coating systems (including systems such as Thin Film, Grind and Seal, Dubro Quartz, etc.) offer durable, high-performance, long lasting surfaces that are designed to provide years of service against normal wear and usage. Seamless flooring allows for greater ease of cleaning, compared to traditional resilient flooring, due to the absence of cracks, seams, and crevices that can trap dirt and contaminants. To extend the service life of your Westcoat system, it is recommended to implement a routine cleaning regimen and have periodic inspections. This information is a basic guideline only.

Routine Cleaning

All coating systems require maintenance and upkeep to ensure continued performance and to maximize the life of the system. Maintenance methods may vary depending on the system, texture, topcoat or sealer, environment conditions, slope, drainage, volume and type of traffic, and use of space.

Ensure that the coating surface is free from debris, such as sand, gravel, metals, or other abrasives that can result in premature wear of the topcoat or sealer. Grease, oils, and other contaminants should be removed promptly to maintain the surface. Establish a routine maintenance schedule for all flooring systems. Be sure to test all cleaning agents in an unnoticeable area to ensure compatibility. Refer to the manufacturer's instructions and dilution rates for all cleaning agents. Routine cleaning can be achieved by using a mild cleaning solution, such as "Simple Green", neutral pH detergent, or soap. Be sure to use clean mops and change out cleaning solution regularly. Utilize a brush, broom, or mechanical scrubber to help agitate and loosen up dirt and debris, especially on textured floors. Ensure that the surface is rinsed with clean water thoroughly. Do not allow cleaning agents to dry on the surface. Buildup of residue or other foreign elements can make cleaning more difficult and can also negatively affect the slip-resistance of the surface.

Floor auto-scrubbing machines can be used for larger areas. Avoid using abrasive pads or brushes and use long, soft brushes. Do not allow buildup of residue or other foreign materials, as this can result in a surface that is slippery when wet. Do not use metal-based or coarse brushes, as they may damage the surface.

Wax and Floor Finishes

Westcoat interior coating systems do not typically require a wax or a floor finish material. That said, in some cases where heavy traffic is present or where you may desire to enhance the finish, a standard, commercial floor finish that is intended for use with resinous materials can be applied. Prior to application, ensure that the surface is clean and free from any debris or wax. Apply and







CARE & MAINTENANCE

INTERIOR COATINGS

maintain wax or floor finish per the manufacturer 's guidelines. Wax or floor finishes will need to be completely removed prior to reseal application.

Maintenance and Inspections

All interior coating systems should be periodically inspected and regularly maintained by a Westcoat Qualified Contractor Applicator (QCA). Inspections are required one year after installation and every two years thereafter by a factory authorized representative. After 3-5 years, a "reseal" (thorough cleaning and reapplication of Westcoat topcoat/sealer) may be required. Existing sealer or coating should be abraded and wiped with solvent before application of topcoat or sealer. Some topcoats and sealers may require additional preparation prior to recoating. Should damage occur, be sure to contact the original Westcoat applicator to inspect and repair the coating system immediately.

Best Practices

- Do not expose the coating surface to traffic, moisture, or chemical agents until system is fully cured.
- Immediately clean up and rinse off any chemical solutions that may stain or damage the surface.
- Do not subject the floor coating system to chemicals that it is not compatible or resistant to.
- Avoid dragging metal, concrete, pallets, or other types of objects with sharp edges across the floor.
- Rolling loads with steel casters can potentially damage the surface and should be avoided.
- Avoid ponding or standing water by ensuring that positive drainage is present before applying the floor coating system.
- Water should not be allowed to enter the flooring system through penetrations, joints, or edges.
- Furniture should have protective coasters or pads to prevent from indentations or damage.
- Tape and other adhesives should not be applied to finished floors as, this may damage the surface.

Any information provided by Westcoat Specialty Coating Systems is for general purposes only. Nothing presented by Westcoat Specialty Coating Systems constitutes design advice or a recommendation specific to a particular situation. Westcoat Specialty Coating Systems directs you to consult with the appropriate qualified design professional to ensure any product or information meets the requirements for the specific intended use, and complies with all building plans, specifications, codes or regulations. Westcoat Specialty Coating Systems expressly and specifically disclaims responsibility for any damages arising from the use of any information, and each recipient of this information agrees that there is no express or implied warranty, including any implied warranty of merchantability or fitness for a particular purpose, arising from any information provided by Westcoat Specialty Coating Systems.







ARCHITECTURAL DETAILS

- ① Concrete Substrate
- 2 Temper-Crete Primer (Optional)
- 3 Temper-Crete Coat
- (4) 30 Mesh Silica Sand
- (5) EC-36 100% Solids Epoxy with CA-36 Epoxy Color Pack
- © EC-95G Gloss Polyurethane Topcoat

- Concrete must be a minimum 3,000 PSI.
- Concrete must be cured for a minimum 14 days.
- Temper-Crete (at a minimum 3/16", broadcast at 1/4") is suitable for moisture vapor transmission up to 20 lbs/1000 square feet (ASTM F1869) or 99% relative humidity (RH) (ASTM F2170).
- Concrete should be prepared to a profile equal to ICRI CSP 3-5.
- Refer to current system specifications.
- Refer to local building codes and standards.

All details are for reference only and should be evaluated by architect. These details are not a substitute for specifications or plans. Architect, consultant or similar professional should review prior to applications.

TEMPER-CRETE SLB - SYSTEM OVERVIEW

DIVISION 09 67 23 RESINOUS FLOORING

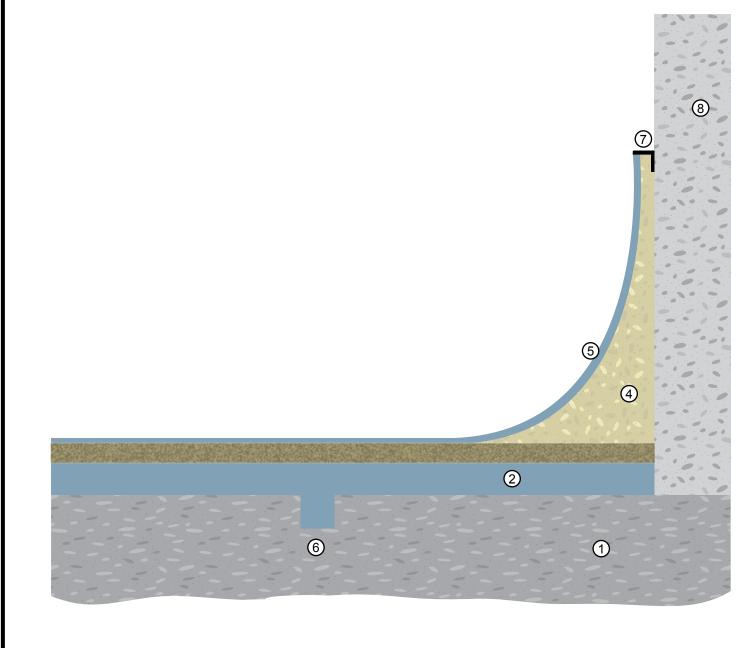
REV. 1/16/24 TC

SCALE: NTS



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SPECIALTY COATING SYSTEMS



- (1) Concrete Substrate
- 2 Temper-Crete Coat
- 3 Broadcast Coat (Silica Sand or TC-65 Quartz Sand)
- (Silica Sand or TC-65 Quartz Sand)
- Sesinous Topcoat
- 6 Anchor Groove/Keyway
- 7 Cove Cap (Plastic or Zinc)
- (8) Wall

- •Concrete must be a minimum 3,500 PSI.
- •Concrete must be cured for a minimum 14 days.
- •Concrete should be prepared to a profile equal to ICRI CSP 3-5.
- •Refer to local building codes and standards.
- •Refer to all Product and System Specifications for additional information.

All details are for reference only and should be evaluated by architect. These details are not a substitute for specifications or plans. Architect, consultant or similar professional should review prior to applications.

REV.3/12/24 TC

TEMPER-CRETE SLB | RTB | SLQ | RTQ - EPOXY COVE

DIVISION 09 67 23 Resinous Flooring

SCALE: NTS



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SPECIALTY COATING SYSTEMS

KEYNOTES

- (1) Concrete Substrate
- (2) Temper-Crete Coat
- (3) Rigid Patching Material
- (4) Anchor Keyway

- •Concrete must be a minimum 3,500 PSI.
- •Concrete must be cured for a minimum 14 days.
- •Control joint should be cut down ~1/3 the depth of the substrate.
- •Concrete should be prepared to a profile equal to ICRI CSP 3-5.
- •Refer to local building codes and standards.
- •Refer to all Product and System Specifications for additional information.

REV. 6-2-22 TC

TEMPER-CRETE - CONTROL JOINT (NO MOVEMENT)

DIVISION 09 67 23 Resinous Flooring

SCALE: NTS



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SPECIALTY COATING SYSTEMS

KEYNOTES

- (1) Concrete Substrate
- (2) Temper-Crete Coat
- (3) Flexible Joint Sealant
- (4) Anchor Keyway

- •Concrete must be a minimum 3,500 PSI.
- •Concrete must be cured for a minimum 14 days.
- •Control joint should be cut down ~1/3 the depth of the substrate.
- •Concrete should be prepared to a profile equal to ICRI CSP 3-6.
- •Refer to local building codes and standards.
- •Refer to all Product and System Specifications for additional information.

REV. 1/20/19 TC

TEMPER-CRETE - CONTROL JOINT (MOVEMENT)

DIVISION 09 67 23 Resinous Flooring

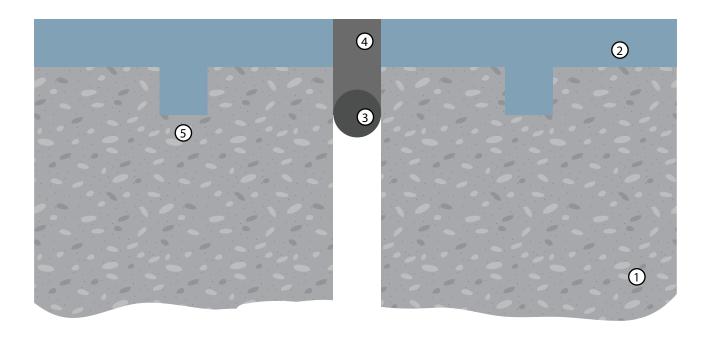
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SPECIALTY COATING SYSTEMS

- (1) Concrete Substrate
- 2 Temper-Crete Coat
- 3 Backer Rod
- (4) Joint Sealant
- (5) Anchor Keyway



- •Concrete must be a minimum 3,500 PSI.
- •Concrete must be cured for a minimum 14 days.
- •Concrete should be prepared to a profile equal to ICRI CSP 3-5.
- •Refer to local building codes and standards.
- •Refer to all Product and System Specifications for additional information.

REV. 6-2-22 TC

TEMPER-CRETE - EXPANSION JOINT

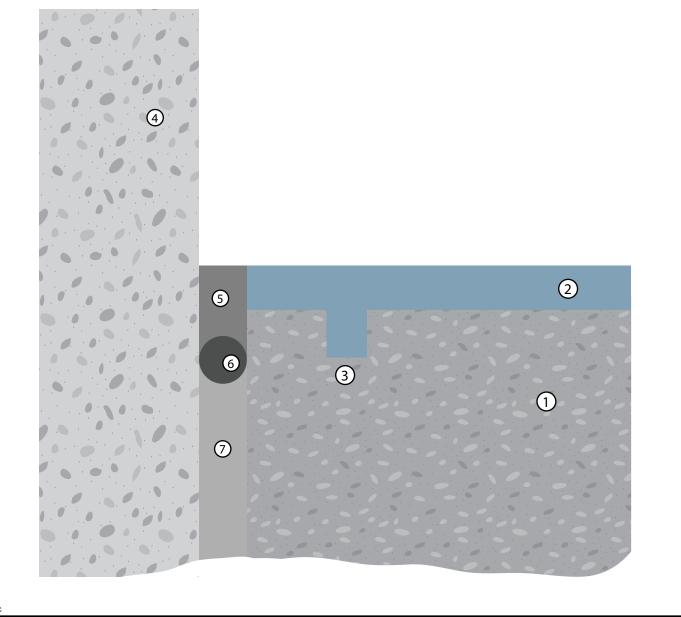
DIVISION 09 67 23 Resinous Flooring

SCALE: NTS



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SPECIALTY COATING SYSTEMS



- (1) Concrete Substrate
- 2 Temper-Crete Coat
- 3 Anchor Keyway
- (4) Wall
- (5) Backer Rod
- (6) Flexible Joint Sealant
- (7) Existing Isolation Joint Material

- •Concrete must be a minimum 3,500 PSI.
- •Concrete must be cured for a minimum 14 days.
- •Concrete should be prepared to a profile equal to ICRI CSP 3-5.
- •Refer to local building codes and standards.
- •Refer to all Product and System Specifications for additional information.

REV. 6-2-22 TC

TEMPER-CRETE - ISOLATION JOINT

DIVISION 09 67 23 Resinous Flooring

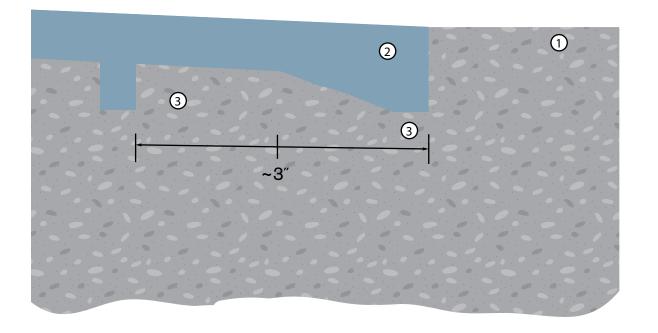
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SPECIALTY COATING SYSTEMS

- 1 Existing Flooring
- 2 Temper-Crete Coat
- 3 Anchor Keyway



- •Make ~3/8" saw cut adjacent to existing flooring for termination of Temper-Crete Coat.
- •Concrete must be a minimum 3,500 PSI.
- •Concrete must be cured for a minimum 14 days.
- •Concrete should be prepared to a profile equal to ICRI CSP 3-5.
- •Refer to local building codes and standards.
- •Refer to all Product and System Specifications for additional information.

REV. 1/20/19 TC

TEMPER-CRETE - KEYED EDGE TERMINATION

DIVISION 09 67 23 Resinous Flooring

SCALE: As Noted



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SPECIALTY COATING SYSTEMS

(1)REV. 6-2-22 TC TEMPER-CRETE - PIPE/DUCT PENETRATION THROUGH FLOOR

KEYNOTES

- (1) Concrete Substrate
- 2 Temper-Crete Coat
- 3 Anchor Keyway
- (4) Pipe/Duct
- (5) Backer Rod
- 6 Joint Filler

- •Concrete must be a minimum 3,500 PSI.
- •Concrete must be cured for a minimum 14 days.
- •Concrete should be prepared to a profile equal to ICRI CSP 3-5.
- •Refer to local building codes and standards.
- •Refer to all Product and System Specifications for additional information.

DIVISION 09 67 23 Resinous Flooring

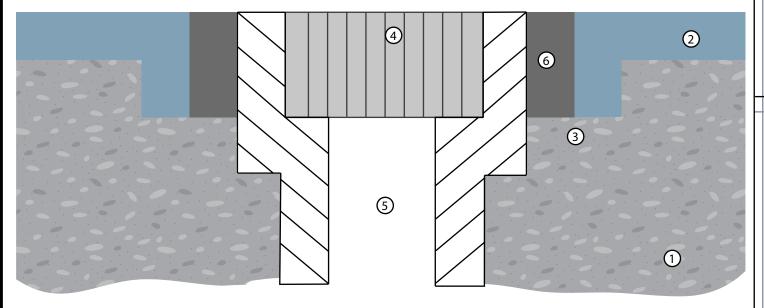
SCALE: NTS



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SPECIALTY COATING SYSTEMS

- (1) Concrete Substrate
- (2) Temper-Crete Coat
- (3) Anchor Groove/Keyway
- 4 Drain Cover
- (5) Drain Trench
- (6) Joint Sealant



- •Concrete must be a minimum 3,500 PSI.
- •Concrete must be cured for a minimum 14 days.
- •Concrete should be prepared to a profile equal to ICRI CSP 3-5.
- •Refer to local building codes and standards.
- •Refer to all Product and System Specifications for additional information.

REV. 6-2-22 TC

TEMPER-CRETE - TRENCH DRAIN TERMINATION

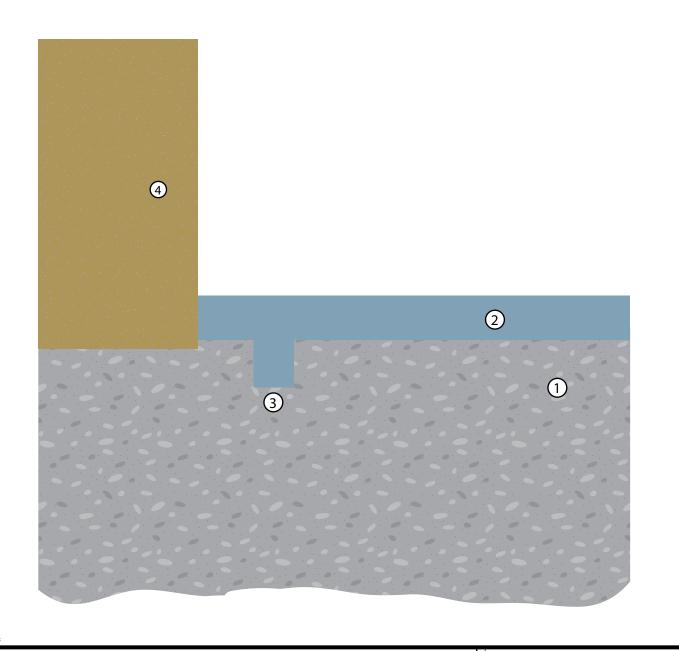
DIVISION 09 67 23 Resinous Flooring

SCALE: NTS



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SPECIALTY COATING SYSTEMS



- (1) Concrete Substrate
- (2) Temper-Crete Coat
- 3 Anchor Keyway
- 4 Wall

- •Concrete must be a minimum 3,500 PSI.
- •Concrete must be cured for a minimum 14 days.
- •Concrete should be prepared to a profile equal to ICRI CSP 3-5.
- •Refer to local building codes and standards.
- •Refer to all Product and System Specifications for additional information.

REV. 6-2-22 TC

TEMPER-CRETE - WALL TERMINATION

DIVISION 09 67 23 Resinous Flooring

SCALE: NTS



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SPECIALTY COATING SYSTEMS