



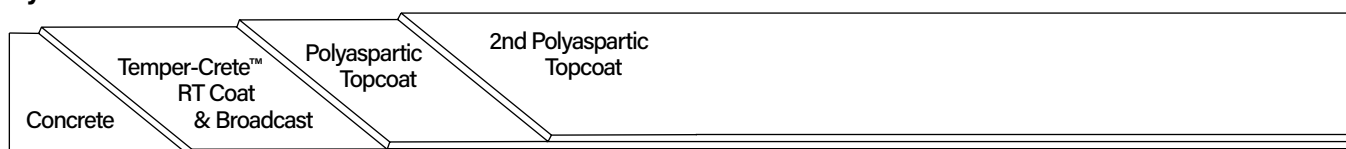
## Description

Westcoat's Temper-Crete™ RTB System is a rake-trowel grade, monolithic, flowable, self-priming, urethane cement that can be installed with limited downtime. The Temper-Crete™ RTB System has excellent impact, chemical and thermal shock resistant qualities. The Temper-Crete™ RTB System features an optional integral colored urethane cement base and can offer a variety of decorative and performance-based finishes and can be sealed with a variety of Westcoat Topcoats depending on the desired application.

## Uses

Temper-Crete™ RTB 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™ RTB System is ideal for commercial kitchens, restaurants, warehouses, food and beverage manufacturing, chemical processing plants, food processing plants and pharmaceutical facilities.

## System Overview



## System Data

Coverages	Temper-Crete™ RT Coat	Broadcast Coat	Polyaspartic Topcoat (1st Coat)	Polyaspartic Topcoat (2nd Coat)
	43-46 ft <sup>2</sup> at 3/16 inch per batch 28-31 ft <sup>2</sup> at 1/4 inch per batch	0.8-1.0 lbs per ft <sup>2</sup>	200-250 ft <sup>2</sup> per gal	200-400 ft <sup>2</sup> per gal
Components	<a href="#">EC-24 Temper-Crete™ Urethane</a>  <a href="#">TC-75 Temper-Crete™ RT Cement</a> <a href="#">TC-65 Quartz Sand</a> <a href="#">EC-102 Polyaspartic</a>		<b>Shelf Life</b> Clear - 2 years Pigmented - 6 months 6 months N/A 2 years	

## Advantages

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

## Inspection

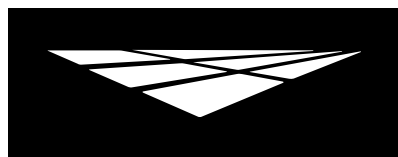
Temper-Crete™ RTB should only be applied directly to prepared concrete. Do not apply Temper-Crete™ RTB over existing coatings, tile, wood, etc. Concrete must be clean, dry and free of grease, paint, oil, dust, curing agents or any foreign material that will prevent proper adhesion. Any laitance or weak 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.

DISCLAIMER: PURCHASER'S SOLE AND EXCLUSIVE REMEDY AGAINST THE MANUFACTURER OF WESTCOAT, SHALL BE LIMITED SOLELY TO THE REPLACEMENT OF ANY DEFECTIVE MATERIAL OR A PAYMENT BY THE MANUFACTURER IN AN AMOUNT EQUAL TO THE COST OF THE ORIGINAL MATERIAL.



4007 Lockridge St • San Diego, CA 92102  
800-250-4519 • Fax 619-255-7187 • westcoat.com

1 of 6  
Temper-Crete™ RTB 6/23



**westcoat**<sup>®</sup>  
SPECIALTY COATING SYSTEMS

**SYSTEM  
SPECIFICATION**

**EC**

**EPOXY COAT**  
DURABLE RESINS & HARDENERS

## **Temper-Crete™ RTB**

### **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™ RTB 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™ RTB System. Always terminate into an anchor groove/keyway.

### **Moisture**

All concrete should be tested for moisture before applying a seamless coating. If moisture emissions exceed 15 lbs/1000 square feet (ASTM F1869) or if the relative humidity (RH) exceeds 95% (ASTM F2170), contact the manufacturer before application.

### **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™ RTB System.

### **Joints**

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

### **Primer (Optional)**

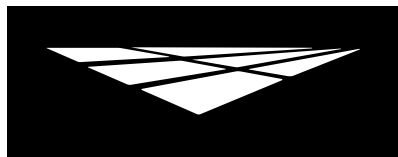
Priming the substrate is not normally required, but due to variances in concrete, surface profile and desired finish, priming may be needed to help stabilize the substrate and ensure a more uniform finish. All materials should be conditioned at 60-75F degrees for a minimum of 24 hours, before use. Pre-mix 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 ⅝ inch notched trowel or squeegee and back roll with a ¾ 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™ RT Coat.

DISCLAIMER: PURCHASER'S SOLE AND EXCLUSIVE REMEDY AGAINST THE MANUFACTURER OF WESTCOAT, SHALL BE LIMITED SOLELY TO THE REPLACEMENT OF ANY DEFECTIVE MATERIAL OR A PAYMENT BY THE MANUFACTURER IN AN AMOUNT EQUAL TO THE COST OF THE ORIGINAL MATERIAL.



4007 Lockridge St • San Diego, CA 92102  
800-250-4519 • Fax 619-255-7187 • westcoat.com

2 of 6  
Temper-Crete™ RTB 6/23



**westcoat®**  
SPECIALTY COATING SYSTEMS

**SYSTEM  
SPECIFICATION**

**EC**

**EPOXY COAT**  
DURABLE RESINS & HARDENERS

## **Temper-Crete™ RTB**

### **Temper-Crete™ RT Coat and Broadcast Coat**

The Temper-Crete™ RT Coat can be applied from  $\frac{3}{16}$  inch to  $\frac{1}{4}$  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. 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-75 Temper-Crete™ RT 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 43-46 square feet at  $\frac{3}{16}$  inch and 28-31 square feet at  $\frac{1}{4}$  inch.

After placing and pin rolling the Temper-Crete™ RT Coat as described above, allow the Temper-Crete™ RT Coat to sit for ~12-15 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 TC-65 Quartz 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™ RT Coat. Careful and even placement of the TC-65 will help prevent displacement and ensure more even coverage. Ensure that no bare spots are evident and do not pin roll material once broadcast. Allow the Temper-Crete™ RT Coat and Broadcast to dry for ~24 hours at 72F degrees. Colder temperatures will prolong dry times. After the Temper-Crete™ RT Coat and Broadcast is dry, sweep up excess TC-65 Quartz Sand and vacuum the floor clean.

### **Polyaspartic Topcoat**

For best results, it is recommended to apply two coats of EC-102 Polyaspartic. Combine 1 part A, with 1 part B of EC-102 and mix thoroughly with a low speed drill motor for 2-3 minutes. Pour immediately onto the floor and spread the material using a squeegee or trowel. Use a  $\frac{3}{8}$  inch nap, non-shedding roller cover and backroll the material in both directions. Coverage should be around 200-250 square feet per gallon on the first coat and between 200-400 square feet per gallon on the second coat.

DISCLAIMER: PURCHASER'S SOLE AND EXCLUSIVE REMEDY AGAINST THE MANUFACTURER OF WESTCOAT, SHALL BE LIMITED SOLELY TO THE REPLACEMENT OF ANY DEFECTIVE MATERIAL OR A PAYMENT BY THE MANUFACTURER IN AN AMOUNT EQUAL TO THE COST OF THE ORIGINAL MATERIAL.



4007 Lockridge St • San Diego, CA 92102  
800-250-4519 • Fax 619-255-7187 • westcoat.com

3 of 6  
Temper-Crete™ RTB 6/23

	<b>westcoat®</b> SPECIALTY COATING SYSTEMS	<b>SYSTEM SPECIFICATION</b>
<b>EC</b>	<b>EPOXY COAT</b> DURABLE RESINS & HARDENERS	<b>Temper-Crete™ RTB</b>

### Dry Time

You may re-coat the EC-102 as soon as the surface is dry to the touch (~3 to 5 hours at 72F degrees), but no later than 24 hours. Light foot traffic may be permitted in 8 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™ RT Coat applications. Refer to the CA-24 Product Specification Sheet for more information.

#### Broadcast Aggregates

- #30 Silica Sand may be used in lieu of TC-65 Quartz Sand, when a decorative quartz sand finish is not required.

#### Topcoats

- For maximum thermal shock resistance or when a urethane cement topcoat is required, Temper-Crete™ UV Topcoat may be applied over the Broadcast coat, in lieu of the Polyaspartic Topcoat. The Temper-Crete™ Topcoat consists of EC-28, TC-78 and CA-28. Please refer to the EC-28 Product Specification Sheet for application instructions on this option.
- EC-50 Novolac may be applied over the Broadcast Coat, in lieu of the Polyaspartic Topcoat, when extreme chemical or heat conditions are a concern.
- EC-34, EC-36 or EC-32 Epoxy Topcoat may be applied over the Broadcast Coat, in lieu of the Polyaspartic Topcoat, when a 100% Solids Epoxy Topcoat is desired.

#### Skid Resistance

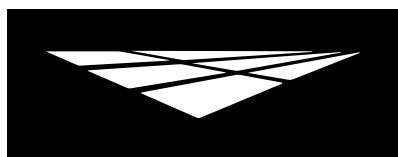
- CA-33 Aluminum Oxide can be used for skid resistance in heavy traffic areas.

\* 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.

DISCLAIMER: PURCHASER'S SOLE AND EXCLUSIVE REMEDY AGAINST THE MANUFACTURER OF WESTCOAT, SHALL BE LIMITED SOLELY TO THE REPLACEMENT OF ANY DEFECTIVE MATERIAL OR A PAYMENT BY THE MANUFACTURER IN AN AMOUNT EQUAL TO THE COST OF THE ORIGINAL MATERIAL.



**westcoat**<sup>®</sup>  
SPECIALTY COATING SYSTEMS

**SYSTEM  
SPECIFICATION**

**EC**

**EPOXY COAT**  
DURABLE RESINS & HARDENERS

## **Temper-Crete™ RTB**

### **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 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™ RTB System if the concrete substrate has ASR (Alkali Silica Reaction) or is susceptible to ASR.
- The Temper-Crete™ RTB 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.

### **Slip Precaution**

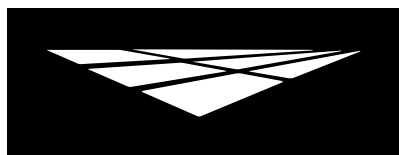
Westcoat Specialty Coatings Systems highly recommends the use of a slip-resistant additive to all coatings/systems that may be exposed to wet, oily, greasy or slippery conditions. It is the end user's responsibility to provide a flooring system that meets current safety standards. Westcoat and its distributors 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.

DISCLAIMER: PURCHASER'S SOLE AND EXCLUSIVE REMEDY AGAINST THE MANUFACTURER OF WESTCOAT, SHALL BE LIMITED SOLELY TO THE REPLACEMENT OF ANY DEFECTIVE MATERIAL OR A PAYMENT BY THE MANUFACTURER IN AN AMOUNT EQUAL TO THE COST OF THE ORIGINAL MATERIAL.



4007 Lockridge St • San Diego, CA 92102  
800-250-4519 • Fax 619-255-7187 • westcoat.com

5 of 6  
Temper-Crete™ RTB 6/23



**westcoat**<sup>®</sup>  
SPECIALTY COATING SYSTEMS

**SYSTEM  
SPECIFICATION**

**EC**

**EPOXY COAT**  
DURABLE RESINS & HARDENERS

## Temper-Crete™ RTB

### Test Data

#### Chemical Resistance - EC-102 Polyaspartic

Chemical Resistance	Clear & Pigmented
Muriatic Acid (31.5% HCL)	5
Sulfuric Acid (50% H <sub>2</sub> SO <sub>4</sub> )	5
Sulfuric Acid (93% H <sub>2</sub> SO <sub>4</sub> )	1
Nitric Acid (10% HNO <sub>3</sub> )	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
Ketchup	5/5
Red Wine	5/5
Acetone	4
Methyl Ethyl Ketone (MEK)	4
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

#### Physical Properties

EC-24 Temper-Crete™ Urethane Shelf Life	Clear - 2 years Pigmented - 6 months
---	---

#### Technical Data

Tack Free over concrete @72°F	2.5 hr.
Foot Traffic over concrete @72°F	8 hr.
Wheel Traffic	72 hr.
Pot Life (Gel Time) 150gm @72°F	5-10 min.
Adhesion to Concrete (ASTM D4541)	concrete fails
Compressive Strength (ASTM C-579)	5,901 psi
Tensile Strength (ASTM C-307)	1000 psi
Flexural Strength (ASTM C-580)	2,100 psi
Impact Resistance (ASTM D-2794)	>160 in./lbs
Hardness (ASTM D-2240, Shore D)	78
Flammability (ASTM E-648)	Class 1
Water Absorption (ASTM C-413)	<0.1%
VOC Content (ASTM D-2369, Method E)	12 g/l
Service Temperature	-40°F min - 250°F Max
Softening Point	266°F
Slip Resistance	-
Coefficient of Thermal Expansion	0.9x10 in./in./°F
Abrasion Resistance CS-17 Wheel 1,000 Cycles (ASTM D4060)	0.07 gm loss
Resistance to Fungi Growth (ASTM G21)	Rated 0 (no growth)
Resistance to Mold Growth (ASTM D3273)	Rated 10 (highest resistance)

\* Values based on standard Temper-Crete™ mix will vary according to final use. For EC-102 Technical Data, please refer to the EC-102 Product Specification Sheet.

DISCLAIMER: PURCHASER'S SOLE AND EXCLUSIVE REMEDY AGAINST THE MANUFACTURER OF WESTCOAT, SHALL BE LIMITED SOLELY TO THE REPLACEMENT OF ANY DEFECTIVE MATERIAL OR A PAYMENT BY THE MANUFACTURER IN AN AMOUNT EQUAL TO THE COST OF THE ORIGINAL MATERIAL.



4007 Lockridge St • San Diego, CA 92102  
800-250-4519 • Fax 619-255-7187 • westcoat.com

6 of 6  
Temper-Crete™ RTB 6/23