

Description

The CEILCOTE SF Corocrete system is a 100% solids, solvent free, specialized chemical resistant polymer formulation, designed for use as a long-lasting floor system. It provides a tough, durable surface for high traffic areas.

CEILCOTE SF Corocrete system protects industrial floors from the abuses of traffic or spillage from a wide range of chemicals and harsh cleaning operations. It has been designed for hand or power trowel, broadcast or slurry broadcast application.

Typical Uses

- Process floors
- Loading/unloading areas
- Heavy (steel wheel) traffic areas

Advantages

- Good chemical resistance
- Fast production rates
- Ease of application
- Low odor
- 100% solids
- Hand or power troweled, broadcast or slurry broadcast
- Impact and abrasion resistant
- Moisture tolerant cure

Color

Light Gray, Medium Gray, Dark Gray, Beige, Tile Red and Clear

Chemical Resistance

Information on the chemical resistance properties will be furnished on request.

Substrate

Refer to Ceilcote concrete specification CPT-1.

Surface Preparation

Concrete – Abrasive blasting or scarification to remove laitance and surface contaminants is recommended. Concrete must be thoroughly cured, free of oils, curing solutions and mold release agents, dust and must be dry at time of application. Use ASTM D 4263 (plastic sheet test method) to ensure concrete is moisture free. If moisture is detected, re-test until dry.

Application

The flooring system consists of a primer, a troweled or broadcast base coat, multiple grout coats and an optional topcoat.

Mixing Ratio	By Volume
<u>CEILCOTE 680 Primer*</u>	
680 Primer Resin	3
#9 Hardener	1
<u>CEILCOTE SF Corocrete**</u>	
SF Corocrete Resin	3
#17 Hardener	1
Corocrete Aggregate	2 bags/1.2 gal
<u>Ceilcote 664 Ceilgard***</u>	
664 Ceilgard Resin	2
#15 Hardener	1

***When dry priming is required use CEILCOTE 680 Primer or CEILCOTE SF Corocrete Clear. Dry priming is required for extremely porous concrete, where potential contamination of prepared concrete by process liquids is possible or when applied in direct sunlight. Other Ceilcote epoxy primers may be used depending on surface or environmental conditions. Consult Ceilcote. To wet prime, use CEILCOTE SF Corocrete resin and hardener.**

****For use as body and grout coats only.**

*****Can use CEILCOTE 660 HV Corocrete, CEILCOTE 664 Ceilgard or CEILCOTE 600 Flakeline as an alternate Top Coat. See individual technical data sheets.**

Placement

1. Mechanically premix CEILCOTE SF Corocrete components individually prior to blending together. After initial mixing, add #17 Hardener to CEILCOTE SF Corocrete Resin liquid and mix for three to five additional minutes.
2. Pour contents into a paddle-type mortar mixer (5 Horse-power is recommended).
3. Add 2 (50 lb. (23kg) bags) of Corocrete aggregate to 1.2 gallons of resin and hardener to the mixer while engaged. When broadcasting use 40 to 60 mesh, locally sourced sand at approximately ½ lb per ft² per lift.
4. After the last bag of aggregate is added, mix at least 30 to 60 seconds more or until all dry pockets are wet out.
5. Discharge into a sturdy wheelbarrow.
6. Apply mixture to freshly primed surface while the primer is still wet.
7. Trowel to desired thickness using a good quality finishing trowel. Allow to cure.



8. Apply 1 to 2 coats of grout coat as needed. Allow to cure.
 9. If a smooth finish is desired apply Top Coat (10 to 12 mils (250-275 microns) per coat).***
- Note:** May also be broadcast or slurry broadcast applied. See Installation Procedure.

Thinning

None required. Do not thin

Handling Properties

All times are approximate

Working Time

	680 Primer	SF Corocrete	664 Ceilgard
50°F (10°C)	60 min.	4 hrs.	95 min.
70°F (21°C)	45 min.	1 hr.	35 min.
90°F (32°C)	20 min.	30 min	15 min.

Recoat

	680 Primer	SF Corocrete	664 Ceilgard
50°F (10°C)	5 hrs	10 hrs	20 hrs
70°F (21°C)	2 hrs	5 hrs	16 hrs
90°F (32°C)	1 hrs	3 hrs	8 hrs

Time to Place in Service

	Traffic	Traffic with LTC	Cure Time
50°F (10°C)	2 days	36 hrs	10 days
70°F (21°C)	12 hrs	10 hrs	5 days
90°F (32°C)	6 hrs	5 hrs	72 hrs

To speed cure (approximately 20%) use 2-4 fluid oz of LTC Accelerator per gal of 680 Primer, SF Corocrete or 664 Ceilgard

Coverage

680 Primer	150-200 ft ² /gal (3.7-4.9 m ² /liter)
As Primer	150-200 ft ² /gal (3.7-4.9 m ² /liter)
Troweled @ 1/4" *	40-45 ft ² /gal (.98-1.1 m ² /liter)
*Coverage with (2) grout coats	25 ft ² /gal (.61 m ² /liter)
Broadcast @ 1/16	80-100 ft ² /gal (1.9-2.4 m ² /liter)
1 st grout coat	100 ft ² /gal (2.4 m ² /liter)
2 nd grout coat	150 ft ² /gal (3.7 m ² /liter)
664 Ceilgard	140-160 ft ² /gal (3.4-3.9m ² /liter)

Packaging

The following standard packages are available:

CEILCOTE 680 Primer	1, 4, 40 gal units (3.79, 15.14, 151.4 liter units)
CEILCOTE SF Corocrete	4, 20, 66 gal units (15.14, 75.7, 249.81 liter units)
CEILCOTE 664 Ceilgard	1, 3, 15 & 90 gal units (3.79, 11.35, 56.77, 340.6 liter units)

Corocrete Aggregate

50 lb. (23kg) bag

Storage

Store in a cool, dry and covered location away from fire hazards and direct sunlight. Minimum shelf life at 70°F (21°C) for products indicated below:

CEILCOTE 680 Primer	18 months
CEILCOTE SF Corocrete	18 months
Corocrete Aggregate	indefinite if kept dry

The packing drums are to be kept tightly sealed and are to be resealed each time materials have been removed. All liquid products are to be stored in a frost-free place. Low temperatures may effect ease of application.

Safety

Store in cool, dry area [50°- 90° F (10° - 32° C)] away from direct sunlight, flame or other hazards. CEILCOTE SF Corocrete contains epoxy resins and a polyamine catalyst.

The product's components have been formulated to optimize physical characteristics such as filling capacity, abrasion, moisture and chemical resistance while minimizing hazardous physical and health factors encountered during application. A concerted effort is made to be aware of the latest chemical toxicological information and to apply this knowledge in a responsible manner to insure product safety.

During application of CEILCOTE SF Corocrete materials, always wear gloves and appropriate work clothing to minimize contact. Ventilation is required with special consideration for enclosed or confined areas. Air movement must be designed to insure turnover at all locations in work area and adjacent areas to avoid buildup of heavy vapors. Use caution when handling flammable liquids, eliminate sources of ignition from work area and containers with residues.

Observe safe storage practices by separating resins from hardeners, by keeping solvents in a cool area, free of sources of ignitions.

Product Material Safety Data Sheets are available and should be consulted when handling products. These products are for industrial and professional use only; application directions must be followed.

Maintenance

Periodically inspect the applied material and repair localized areas as needed. Consult your CEILCOTE representative for additional information.

Technical and Physical Data

	Test Standard	Unit	Value
Generic Type			Epoxy
Viscosity - mixed	ASTM D 2393	cps	500 @ 77 °F
Compressive Strength Filled Broadcast	ASTM C 579-75	psi)	11,000-11,500 10,000-11,000
Tensile Strength	ASTM C 307-77	psi (MPa)	2,000 - 2,600 (14 - 18)
Tensile Elongation (binder only)	ASTM D 638	%	1.8
Absorption	ASTM C 413-80	%	.056
Flexural Strength	ASTM C 580-74	psi (MPa)	3,500 - 5,500 (20 - 34)
Flexural Modulus	ASTM C 580-74	psi (GPa)	2.0 - 2.5 x 10 ⁶ (27 - 33)
Shrinkage	ASTM D 2566-79	in/in	.0007
Density	ASTM D 792-66	lbs/ft ³ (kg/m ³)	187 (3,000)
Coefficient of Expansion	ASTM C 531	in/in/F	1.88 x 10 ⁻⁵
Service Temperature Limits	Occasional Splash/Spill/Rinse Frequent Splash/Spill/Rinse	°F (°C)	250 (121) 170 (77)
Tabor Abrasion	ASTM D-4060, CS 17 wheels, 1000 gm, 1000 cycles	mg	150
Volatile Organic Compounds	EPA Method 24	lbs/gal (g/l)	0.578 (69.33)
Flash Point	Pensky-Martens Closed Cup	°F (°C)	
680 Primer Resin			205 (95)
#9 Hardener			228 (109)
SF Resin			200 (93)
#17 Hardener			242 (117)
664 Ceilgard Resin			>200 (>93..3)
#15 Hardener			>200 (>93..3)

Important Note

The information in this data sheet is not intended to be exhaustive; any person using the product for any purpose other than that specifically recommended in this data sheet without first obtaining written confirmation from us as to the suitability of the product for the intended purpose does so at their own risk. All advice given or statements made about the product (whether in this data sheet or otherwise) is correct to the best of our knowledge but we have no control over the quality or the condition of the substrate or the many factors affecting the use and application of the product. Therefore, unless we specifically agree in writing to do so, we do not accept any liability at all for the performance of the product or for (subject to law) any loss or damage arising out of the use of the product. WE HEREBY DISCLAIM ANY WARRANTIES OR REPRESENTATIONS, EXPRESS OR IMPLIED, BY OPERATION OF LAW OR OTHERWISE, INCLUDING, WITHOUT LIMITATION, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. All products supplied and technical advice given are subject to our Conditions of Sale. You should request a copy of this document and review it carefully. The information contained in this data sheet is liable to modification from time to time in the light of experience and our policy of continuous development. It is the user's responsibility to check with their local International Paint representative that this data sheet is current prior to using the product.

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