

# CEILCOTE® 682

*Glass reinforced, monolithic floor*

## DESCRIPTION:

The CEILCOTE® 682 floor system is a new concept in monolithic floor protection. It combines the use of advanced polymer technology and a unique physical structure that provides a system to meet the needs of the food and pharmaceutical industries. The CEILCOTE 682 floor system withstands spillage of all concentrations of caustic, many organic acids and solvents, and a wide range of mildly oxidizing inorganic acids.

The combination of fiberglass reinforcement in a very flexible resin matrix enables the CEILCOTE 682 floor system to withstand spillage of hot process liquids and steam cleaning indefinitely. The fiberglass reinforced base coat bridges most shrinkage cracks commonly found in concrete. With its unique curing system, the CEILCOTE 682 floor system will continue to cure in the presence of moisture. Its formulation is low odor.

## TYPICAL USES:

- Process floors.
- Floors exposed to steam cleaning.
- Pharmaceutical facilities.
- Food industry.

## ADVANTAGES:

- Chemical resistance.
- Withstands extreme thermal shock.
- Crack bridging capabilities.
- Easy to clean, stain resistant.
- Moisture tolerant cure.
- Cold temperature cure.
- Skid resistant/maintains cleanability.
- Minimum odor/toxicity.

## COLORS:

Available in gray, tile red and beige. Contact Master Builders for information on special colors.

## PHYSICAL PROPERTIES:

<b>Tensile Strength</b> ASTM C 307-83	4,750 psi (33 MPa)
<b>Compressive Strength</b> ASTM C 579-82	5,640 psi (39 MPa)
<b>Hardness (Shore D)</b>	73
<b>Thermal Shock</b> 183°F to 45°F (84°C to 7°C)	50 cycles, no failure
<b>Tabor Abrasion Factor</b> (CS17F Wheel, 1,000 gm wt., 1,000 revolutions)	37
<b>Continuous Service Temperature</b>	160°F (71°C)
<b>Maximum Intermittent Service Temperature</b>	212°F (100°C)
<b>Crack Bridging</b> 0 to 25 mils average (0 to 0.63 mm)	

## ACI Shrinkage Test

Filled System	No glass deflection
Resin System	No glass deflection

## Flash Points

(Pensky-Martens Closed Cup)	
CEILCOTE 682/683 Hardener	224°F (106°C)
CEILCOTE 680 PRIMER	204°F (95°C)
CEILCOTE 682/683 TOPCOAT	125°F (51°C)
CEILCOTE 682/683 GRIT COAT	30°F (-1°C)
T-471 Thinner	42°F (5°C)
CEILCOTE 682/683 GRIT COAT Hardener	79°F (26°C)
#9 Hardener	230°F (110°C)
CEILCOTE 682/683 FINISH COAT Component A	85°F (29°C)
CEILCOTE 682/683 FINISH COAT Component B	82°F (27°C)

## Shelf Life

Shelf life for material is one year minimum, if kept tightly sealed.

## COVERAGE:

- **CEILCOTE 680 PRIMER**  
(thinned with 30 fl. oz./gal T-471)  
For Concrete  
150 to 200 ft<sup>2</sup>/gal (3.7 to 4.9 m<sup>2</sup>/litre)
- **CEILCOTE 680 PRIMER as saturant**  
35 ft<sup>2</sup>/gal (.9 m<sup>2</sup>/litre)
- **CEILCOTE 682 TOPCOAT**  
80 to 100 ft<sup>2</sup>/unit (7.4 to 9.3 m<sup>2</sup>/unit) @ 50 units
- **CEILCOTE 682 GRIT COAT**  
180 to 220 ft<sup>2</sup>/unit (17 to 20 m<sup>2</sup>/unit) @ 8 mils wet
- **CEILCOTE 682 FINISH COAT**  
250 to 275 ft<sup>2</sup>/unit (23 to 26 m<sup>2</sup>/unit) @ 10 mils wet
- **GRIT**  
As needed to provide customer desired texture.

## PACKAGING:

- **CEILCOTE 680 PRIMER** 1 & 4 gal. units (3.79 & 15 litre)  
(CEILCOTE 680/68 BC Resin)
- **CEILCOTE 682 TOPCOAT** 4 gal. unit (15 litre)  
(CEILCOTE 682/683 TC Resin)
- **CEILCOTE 682 GRIT COAT** 1 gal. unit (3.79 litre)  
(CEILCOTE 682/683 GC Resin)
- **CEILCOTE 682 FINISH COAT** 1.5 gal. unit (5.68 litre)  
(CEILCOTE 682/683 FC Resin)
- **Grit # 1 & #2** 5 gal. Pail (18.93 litre)
- **T-471 Thinner** 1 gal. Pail (3.79 litre)

## MIXING RATIO:

Product	By Volume
• CEILCOTE 680 PRIMER	3 to 1
• CEILCOTE 682 TOPCOAT	3.25 to 1
• CEILCOTE 682 GRIT COAT	2 to 1
• CEILCOTE 682 FINISH COAT	3.5 to 1

## HANDLING PROPERTIES:

(Approximate Time)

### CEILCOTE 680 PRIMER

Working Time 1 to 2 hrs. @ 73°F (23°C)

### CEILCOTE 682 TOPCOAT

Working Time 50 min. @ 73°F (23°C)

### CEILCOTE 682 GRIT COAT

Working Time 60 min. @ 73°F (23°C)

### CEILCOTE 682 FINISH COAT

Working Time 60 min. @ 73°F (23°C)

## CURE TIME:

### CEILCOTE 680 PRIMER

& 1-1/2 oz. mat 16 hrs. @ 73°F (23°C)

### CEILCOTE 682 TOPCOAT

16 hrs. @ 73°F (23°C)

### CEILCOTE 682 GRIT COAT

Foot Traffic 16 hrs. @ 73°F (23°C)

Cart Traffic 24 hrs. @ 73°F (23°C)

### CEILCOTE 682 FINISH COAT

Foot Traffic 16 hrs. @ 73°F (23°C)

Cart Traffic 24 hrs. @ 73°F (23°C)

## LIMITATIONS:

Store materials at approximately 70°F (21°C) (a warm place in winter and cool place in summer) so materials will be easier to handle. Cracks and holes in concrete should be repaired prior to the application. The floor surface must be structurally sound, free from hydrostatic pressure, contaminants, curing compounds or other materials which will prevent adhesion.

## APPLICATION: (abbreviated)

### 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 or mold release agents, dust and must be dry at time of application. Reference ASTM D-4263 Moisture Test.

### Primers: (For Concrete)

- CEILCOTE 680 PRIMER
- CEILCOTE 680C (Conductive) PRIMER

Mix and apply primer per instructions.

### Placement:

1. Be certain the cured primer is clean and dust free.
2. If holes, honeycombs or irregularities are present, fill voids with a CEILCOTE 680 PRIMER and S-11 powder mix (7 to 9 lbs of S-11 to 1 gal [3.79 litre] of PRIMER). Let cure.

3. Mechanically mix CEILCOTE 680 PRIMER components individually (i.e. Part A, Part B) prior to blending together. After initial mixing, add CEILCOTE #9 Hardener to CEILCOTE 680 PRIMER Resin and mix for three to five additional minutes.
4. Roll out approximately 40 mils of resin and press 1 oz. mat into resin. Wet out mat with additional resin until mat is translucent. Use a ribbed roller to remove air from the mat. Let reinforcement cure.
5. Mix and apply 30 to 50 mils of CEILCOTE 682 TOPCOAT using a serrated squeegee. A spiked roller should be used on the surface, to remove any trapped air. Allow to cure.
6. Mix and roller apply CEILCOTE GRIT COAT or FINISH COAT. Allow to cure.

## CLEAN UP:

Clean tools and other equipment with T-410 Solvent, methyl ethyl ketone, toluene, xylene, lacquer thinner, etc., before CEILCOTE 682 Floor materials harden.

## SAFETY:

CEILCOTE 682/683 Floor System and product components have been formulated to optimize flooring characteristics 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 ensure product safety.

During application of CEILCOTE 682/683 Floor System 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 ensure 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 empty containers with residues. Observe safe storage practices by separating resins from hardeners, keeping solvents in a cool area free of source of ignition and by observing a special warning on RED and YELLOW labeled products. The RED label represents amine-type chemicals and the YELLOW label represents organic peroxide-type chemicals which should not be stored or mixed together because of the possible violent reaction between them.

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

For additional information, contact your local Master Builders representative.

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