

# CEMTEC CONGUARD 100S

## WEATHER PROOFING SILOXANE SEALER



### DESCRIPTION

**CEMTEC CONGUARD 100S** is a deep penetrating liquid designed to protect concrete structures, decks, pavements and surfaces against the adverse effects of salt contamination, moisture and weathering. CEMTEC CONGUARD 100 S reacts chemically with the concrete surface to provide a highly effective chloride screen and water barrier. In addition to its ease of application, CEMTEC CONGUARD 100S has the added versatility of being suitable for use on both new and old concrete surfaces.

### FEATURES & BENEFITS

- Provides an efficient, continuous chloride barrier
- Blocks pores and capillaries for outstanding water repellency
- May be applied to new, cured concrete or old concrete
- Extremely high alkali resistance
- Dries to form a tack-free and skid-resistant surface
- Suitable for use over dry or damp (not saturated) concrete
- Full protection in one treatment, but may be reapplied later at any time
- Provides a low cost protection system over the life of a structure
- Protects reinforcing steel against the corrosive effects of surface absorbed chlorides and moisture
- Renders new concrete virtually free of surface scaling
- Retards deterioration of existing, distressed structures

### BASIC USES

- Parking structures
- Lane barriers
- Ramps
- Bridges
- Marine platforms
- Auto/truck repair bays
- Exterior concrete surfaces

### TECHNICAL INFORMATION

#### Typical Engineering Data

The following results were developed under laboratory conditions.

Drying Time for foot traffic	:@ 4-6 hrs
for wheel traffic	:@ 10-12 hrs
Type	:Siloxane based
Flash Point	:44°C
Shelf life	:12 months in warehouse conditions.
Solvent	: Mineral spirits

#### Test specimens

4,000 psi (27.6 MPa)  
5.25% air entrainment  
results

#### NCHRP #244 Test Method

3"(76mm)x6" (152mm)  
cylinders 15% NaCl solution,  
21 day

Water gain	Chloride Screened	Repelency Factor	
2.80%	-	-	
0.212%	96%	92%	
% weight gain	water repellency Factor	50 Cycles	125 Cycles
4.85%	-	4 moderate to severe	5 severe scaling
0.364%	92%	0-no scaling	0-no scaling

### SPECIFICATIONS / COMPLIANCES

CEMTEC CONGUARD 100 S will function as a 96% chloride screen when tested by NCHRP #244 criteria for Northern and Southern exposure.

### DIRECTIONS FOR USE

#### Surface Preparation, New Concrete

Surfaces should be well cured using water, wet burlap, polyethylene or KUREKOTE DR curing membrane. Surfaces must be free of all dirt and debris. All joint sealants and caulks should be in place before applying CEMTEC CONGUARD 100S. When using KUREKOTE DR, a high pressure water blast or clean-up with an aggressive scrubber is required at 45 days or longer after application. The concrete surface should be dry for at least 24 hours for maximum penetration and best results.

<b>COVERAGE</b>	<b>Concrete Surface</b>	<b>Application Rate</b>	Exact coverage rates are a function of surface porosity and density. For exterior concrete with a textured finish, a coverage rate of 1.8 to 3.0 m <sup>2</sup> / liter is required to achieve NCHRP #244 results. Higher coverage rates may be used depending on surface porosity and desired level of protection.
	Troweled Smooth	3.0-3.7 m <sup>2</sup> /liter	
	Broomed Textured	1.8-3.0 m <sup>2</sup> /liter	
<b>PACKAGING</b>	Available in 210 Ltr drums and 20 Liter pails.		
<b>COLOR</b>	Contact CMCI tech dept.		

## Old Concrete

Remove all foreign substances that could prevent absorption-dirt, dust, tar, oil, etc. Pressure wash with water and cleaners where appropriate. Membranes of any kind must be removed.

## Mixing

CEMTEC CONGUARD 100 S is a one component material and should be used directly from the container.

## PLACEMENT

### Horizontal Surfaces

Flood surface using low pressure sprayer, roller, brush or broom. Broom or squeegee material around for even distribution. Let the surface absorb the CEMTEC CONGUARD 100S solution and follow immediately with a second application before the surface dries. Redistribute any puddles or free-standing CEMTEC CONGUARD 100 S .

### Vertical Surfaces

Apply by spray, roller or brush in two applications from the bottom up. Be sure to apply "wet-on-wet" as described for horizontal surfaces. To apply the sealer to concrete, use a 'pump-up' low pressure sprayer for best results. A short nap roller or lambs wool applicator may also be used.

## CLEAN-UP

Use mineral spirits, xylene or CEMTEC SOLVENT to clean tools and equipment.

## PRECAUTIONS / LIMITATIONS

- Do not dilute CEMTEC CONGUARD 100 S with solvents or thinners.
- Do not use over saturated surfaces or curing membranes
- If HVAC intake ducts will distribute solvent odor into adjoining occupied areas of the building, these should be closed in the application area
- All joint sealants and caulks should be in place before applying CEMTEC CONGUARD 100 S .
- When a curing compound is required use only KUREKOTE DR dissipating resin curing compound.
- Gelation will occur if the material is exposed to moisture
- Solvents in CEMTEC CONGUARD 100 S are flammable, keep away from heat, sparks, open flame, or lighted cigarettes. Use explosion - proof application equipments.

### Quality Statement

CMCI manufactures its products at their manufacturing facility in Saudi Arabia as per the Quality Procedures certified to conform with quality Management System described in ISO 9000 series

CMCI provides a comprehensive technical support system for its full range of high performance construction products CMCI also offers full technical field support to consultants, Architects, contractors, applicators and End Users.

The Technical Specification information and recommendations given are based on the current technical knowledge and the user or his representative is recommended to check the suitability of the product CMCI reserves the right to amend the technical characteristic of the product as part of ongoing research and development. As the work execution is beyond the direct and continuous control of CMCI no warranty and or responsibility is assumed on the performance of work completion executed with use of our products.

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