

# CEMTEC A-I WHITE P.U.

## LIQUID APPLIED WATER PROOFING MEMBRANE

**CEMTEC A-I WHITE P.U.** is a one component liquid cold applied waterproofing membrane based on polyurethane resin. It is primarily designed to give superior water proofing protection to virtually all substrates. It reacts with moisture in the atmosphere and forms an impervious, rubberized membrane that resists water, oil, fuel and other common air pollutants. It is an advanced state-of-art waterproofing system and offers tangible, cost-saving benefits over conventional sheet-type and bitumen based systems.

### ADVANTAGES

- Easy to apply, simple by brush, roller or spray. Eliminates the use of adhesives, sealing tapes, blow torches, heating kettles commonly associated with sheet-type or bitumen based system. No need for highly skilled laborers.
- Does not create mess or objectionable odor like bitumen based materials.
- Provides a seamless (no joint) waterproofing unlike sheet type membranes whose application is susceptible to water leak coming from the seams.
- No waste and cuttings
- Resists deterioration from salts, acids, oil, alkali solutions, gasoline and bacteria.
- Adheres tenaciously to any substrate and remains flexible under extreme of temperature; will not crack or become brittle with age.
- Versatile, nonflammable and non-toxic.
- Due to efficiency in application, labor cost is reduced and results in shorter completion time of construction.
- Comes in handy 20 ltr pails unlike bulky sheet type membranes.

### INSTALLATION

The surfaces which are to be coated with **CEMTEC A-I WHITE P.U.** should be free from all foreign matter, dirt, dust, paint, oil, grease, etc. All surfaces have to be dry and sound. Cracks should be repaired with Latex Modified Repair Compounds. All laitance should be removed prior to application. For application over G.I. Sheeting, ensure all rust and corrosion is totally removed and all joints should be secured and fixed.

If the substrate exhibit high porosity on the use of **CEMTEC A-I WHITE P.U.** primer should be introduced. The mixing ratio is (3) three part **CEMTEC A-I WHITE P.U.** and (1) one part Xylene (Thinner) by volume.

### APPLICATION

**CEMTEC A-I WHITE P.U.** should be applied at the rate of 1 m<sup>2</sup> per liter. Consumption of the coating depends on the surface profile. If a primer is required, it should be applied at a thickness of approx. 300 micron and the top coat of approx. 700 micron. If primer is not necessary, apply two (2) coat at 500 micron per coat.

Application can be by airless spray, brush, or short hair rollers. Airless spray equipments should have 30 to 1 ratio. Graco King Spray Equipment is recommended.

For application over polyurethane foam insulation, **CEMTEC A-I WHITE P.U.** should be applied within FORTY EIGHT (48) hours of the polyurethane foam insulation being applied.

Allow 24 hours curing time between coats.

### CLEANING

Clean all equipment with Xylene or MEK

### CAUTION

DO NOT USE **CEMTEC A-I WHITE P.U.** on wet or unprepared surfaces. Solvents in Cemtec A-1White PU are flammable. Keep away from heat, sparks, open flame or cigarettes. Use explosion-proof application equipments.

If the relative humidity is less than 50% please contact CMCI - Technical Department.

### RECOMMENDED USES

**CEMTEC A-I WHITE P.U.** is widely utilized to waterproof concrete substrates, G.I. Sheeting, external plywood, light weight concrete substrates. If **CEMTEC A-I WHITE P.U.** is exposed to direct sunlight, it may change its colour to pale yellow due to the aromatic nature of the material.

For exposed application, it is recommended that **CEMTEC A-I WHITE P.U.** should be used as a base coat at a thickness of 500 micron DFT followed by a top coat of CEMTEC ALIPHATIC PU. applied at a thickness of 350 micron. The total system should have a minimum thickness of 850 DFT.

### MAINTENANCE

If **CEMTEC A-I WHITE P.U.** is damaged, it can be repaired by cleaning the surface with MEK and removing the defective section and re-apply **CEMTEC A-I WHITE P.U.**

### PACKING

20 liter pail.

## **PHYSICAL PROPERTIES**

<b>PROPERTIES</b>	<b>RESULTS</b>	<b>TEST METHOD</b>
Tensile Strength	245 p.s.i.	ASTM D 412
Elongation	600%	ASTM D 412
Low Temperature Flexibility		
Cracking	None	ASTM D 836
Shore A Hardness	45	ASTM D 2240
Moisture Vapour Transmission	2.5 grains/hr/sq.ft.	ASTM D 1653
In Service Temperature		
20 hours at 70° C		
Cracking	None	
Shrinkage	None	
Decrease in Elongation	None	
20 hours at 120° C		
Cracking	None	
Shrinkage	None	
Decrease in Elongation	5%	
Salt Spray Resistance, 300 hours		ASTM B 117
Corrosion	None	
Chemical Resistance, % wt. change		ASTM D 471
Water	5.1	
10% NaCl	0.9	
5% NaOH	1.0	
5% H <sub>2</sub> SO <sub>4</sub>	4.1	
5% HCl	4.7	

## **LIMITATIONS**

- Not Recommended to be exposed to direct sunlight
- Open only the required amount of material that can be used. The material will harden/cure in the container if not used.
- If R.H. is less than 50% contact CMCI Technical Dept.
- Solvents in **CEMTEC A-I WHITE P.U.** are flammable. Keep away from heat, sparks, open flame or lighted cigarettes. Use explosion-proof application equipments.

### **QUALITY STATEMENT**

CMCI manufacture 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 recommendation 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 guaranty and or responsibility is assumed on the performance of work completion executed with use of our products.