

## Application :

SI FLEX-SEAL 8000 is suitable for smooth concrete, screed, mastic asphalt, plaster, gypsum board and masonry surface etc. It can be apply by soft brush, roller, and spray or by trowel when smooth finish is required.

- Minimum two coats are recommended, for satisfactory and the period of re-coating interval after 1st coat are complete dried.
- The second coat must be applied perpendicular to the first coat, to be achieving complete waterproofing.
- For large area SI FLEX-SEAL 8000 can be also sprayed, being the recommended nozzle size of 3-4 mm and spraying pressure between 3.5 and 5.0 bars. When sprayed, it is recommended to finish the fresh layer with a broom in order to make sure that the whole surface is covered completely.
- Minimum two coats are recommended, for satisfactory and the period of re-coating interval after 1st coat are complete dried.
- The second coat must be applied perpendicular to the first coat, to be achieving complete waterproofing.
- For concrete joints and cracks have been repaired and sealed, SI FLEX-SEAL 8000 will be applied with a fiber mesh 40-60 g/m<sup>2</sup>, place the mesh on the first layer of SI FLEX-SEAL 8000

## Application conditions :

Optimum application temperature range is from 5 °C to 30 °C. Do not apply below 5 °C. Do not apply on frozen surfaces or if rain is expected.

## Cleaning :

All the tools must be cleaned with water after use. Once it cures, material can only be removed by mechanical methods.

## Important indications :

- Do not add water, sand, cement, additives or any other compounds it may leads to damage your product quality.
- Do not apply on dusty, frozen on frosted surfaces.
- Do not apply any humid area or bad weather like possibility of raining.
- Do not apply other surface which is not specified in this technical data sheet, or consult our technical department.

## COLD APPLIED FAST DRYING PRIMER FOR GENERAL PURPOSES ASTM SI FLEX-SEAL 8000

	Name of test	Result	Test method
1	Component "A"	Powder form	---
2	Component "B"	Milky white liquid	---
3	Color	Gray/white	---
4	Density of Component "A"	1.45	---
	Density of Component "B"	1.05	---
	Mixed density of Component "A+B"	1.65	---
5	Application temperature	(+5 °C to 60 °C )	---
6	Water permeability @5 bars.	Nil	BS EN 12390
7	Water vapor transmission	0.02 g/m <sup>2</sup> at 28 d	ASTM E 96
8	Adhesion to concrete	2.0N/mm <sup>2</sup> at 28 d	ASTM D 4541
	Adhesion to steel panel	1.75 N/mm <sup>2</sup>	---
9	Tensile strength	4.2 N/mm <sup>2</sup>	ASTM D-412
10	Elongation , at break	>130%	ASTM D-412
11	Resistance to co2 diffusion	dcO <sub>2</sub> =0.43*10 <sup>-7</sup> m/s R=346 m(R>50m)	---
12	Resistance to water vapor diffusion	dH <sub>2</sub> O=0.131*10 <sup>-4</sup> m/s S=1.9m	---
13	Resistance to sulfates	pass	ASTM C 1012
14	Resistance to fire	Class A1	BS EN-998-1
15	Flame spread index (FSI)	15	ASTM E 84
16	Smoke developed index (SDI)	20	ASTM E 84

NOTE : THE ABOVE SHOWN TECHNICAL DATA ARE RESULTS OBTAINED IN LABORATORY AND EXTRA DETAILS CAN BE PROVIDED UPON REQUEST. IN ACCORDANCE TO ASTM AND UEAtc STANDARDS RESULTS ARE SUBJECTED TO A VARIATION OF 20 % .

# SI FLEX-SEAL 8000

صناعة  
سعودية  
MADE IN KSA



### Introduction :

SI FLEX-SEAL8000 is two compound elastic, high flexible polymers modified cementitious waterproof coating that requires only mixing to form of the ideal waterproofing surface. Component A is a mortar based on mixture of cement, sand, additives. Once applied and cured SI FLEX-SEAL8000 provide non toxic, highly flexible and waterproof coating with very high adhesion on those common substrates use in construction such as concrete, natural and artificial stone, bricks, concrete blocks, etc. it protects from UV, Cold or rapid changes in temperature, which can be applied with a soft brush, roller, trowel or spray .

### Advantages :

- Easily to apply by brush, roller, or by spray or trowel applied product. It is resist from UV radiation.
- Provides a fully-flexible coating which ensures complete waterproofing even in the most severe conditions, as high negative hydrostatic pressure.
- A fully cured membrane of 1 to 2mm thickness is vapor permeable and allows the substrates to breath.
- Excellent protection for concrete, being a CO<sub>2</sub> and chloride (Cl<sup>-</sup>) barrier and thereby preventing carbonation and electrochemical corrosion.
- Resists the negative hydrostatic pressure from ground water when it is used in underground interior applications.
- Environmentally friendly, long lasting than other coating, avoiding maintenance cost.
- Non toxic and chloride free. Suitable for contact with potable water.
- Bonding well to damp substrates without priming.
- Excellent bonding strength of porous and non-porous surface.

### Surface Preparation :

Surface preparation is a very vital issue and this influences the integrity of the waterproofing system. Hence, care must be exercised when the preparation is done.

#### Concrete Surface :-

- The entire surface must be clean, sound and fine pored. It must be free from grease, Dust, cracks and ridges.
- Remove all the loose material by using a wire brush or treatment of broom.
- Remove all sand, Dust, and free from oil and grease.
- Surface should be free from grease, oil, and other contaminated substance, etc. which should be removed by high water pressure blasting.
- Make sure all the surface must be cured by tap water before application of SI FLEX-SEAL8000 for better bonding to the substrate.

#### Old Concrete Surface :-

- From the old surface, all the loose material must be removed and cleaned.
- Grease, oil, and other contaminated substance, etc. which should be removed by high water pressure blasting.
- Before treatment of broom treating that cleaned surface with the suitable fungicide.
- All crack, leakage must repair by the cement sand mortar, cold mastic or sealant joint.
- Make sure all the surface must be cured by tap water before application of SI FLEX-SEAL8000 for better bonding to the substrate.

### Use :

SI FLEX-SEAL8000 can apply for waterproofing water structures, exterior basement wall, balconies, Kitchen, Bathrooms, under tile floors, Ground sewage, sewage treatment ,plants, swimming pools, foundations, water tank, exposed and decoupled roofs, sealing of expansion and backing to marble and granite to prevent water ingress and surface staining, to protect from carbonation and chloride attack, etc.

- Waterproofing of below-grade structures surface such as brick, concrete tiles, concrete surfaces, lining for retaining structures / swimming pools, sea water structures.
- Waterproofing and protection of concrete against carbonation chloride attack.

### Mixing :

SI FLEX-SEAL8000 having two compounds part A" waterproof powder and part B" liquid acrylic co-polymers both products part "A" and part "B" are allow to be mixed at the job site.

- Pour the entire liquid polymer component into a clean container and add powder component gradually while mixing with a low speed mixing with the speed of (400-600 rpm) stirrer until a lump free mass is achieved.
- Minimum (2-3) minutes are requiring for stirrer until a uniform consistency is achieved.
- Do not add water and keep liquid/powder ratio as the package supplied.
- Depending on existing temperature and relative humidity, pot life expected will be between 30 minutes and one hour.

### Consumption:

per layer, achieving 2 SI FLEX-SEAL8000 is applied in two layers of approximately of 1.0-1.5 kg/m<sup>2</sup> consumption depends on porosity and texture of the a total consumption of 2.0-3.0 kg/m<sup>2</sup> surface, a preliminary test on site is recommended to determine consumption exactly.

**SI FLEX-SEAL 8000**

