

## APPLICATION REPORT

### **FLOOR AND FOUNDATION COATING OF PUMP HOUSE AREA**

 **vedanta** | **sterlite copper**  
transforming elements



**AT**  
**VEDANTA LIMITED**  
**(FORMERLY KNOWN AS SESA STERLITE LIMITED)**  
**UNIT: STERLITE COPPER, WORKS: 1/1/2, CHINHPADA,**  
**SILVASSA (UT OF DADRA & NAGAR HAVELI)-396 230**

**INTRODUCTION:-**

DIFFCOR division of DIFFUSION ENGINEERS LIMITED successfully completed job work for floor and Foundation coating of PUMP HOUSE AREA. This job work was carried out for our customer VEDANTA LIMITED, SILVASSA. Our customer was facing the problem of floor damages due to spillages of water on floor. Coating was done with DIFF FLOOR PRIME, DIFF FLOOR SCREED & DIFF FLOOR TOP.

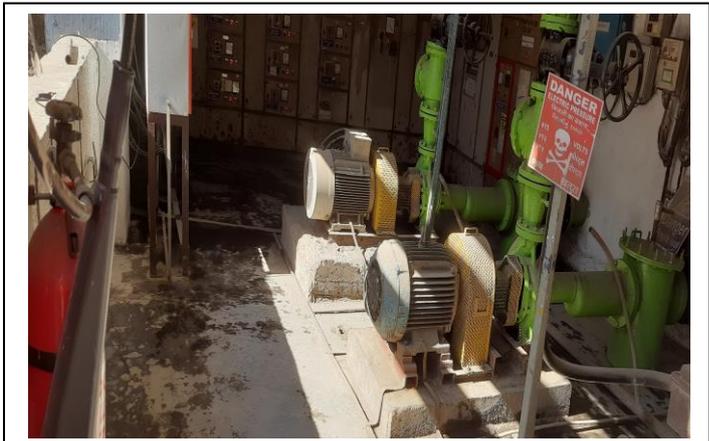
Concrete can be very porous so water, oils, acid and chemicals can penetrate the pores and attack the integrity of the slab. The surface of concrete can also be worn down by physical impact and abrasion. Water can sometimes penetrate concrete, freeze and expand inside it when the temperature drops, and ultimately weaken the concrete from within. In addition, if the concrete has reinforcing steel bar (rebar) to impart additional strength and other properties, the rebar can corrode contributing to the deterioration of the concrete.



*Pump house floor and foundation area*

**PROBLEMS:-**

The floor is exposed to sever water and oil leakage media. The water spillages are damage the floor and foundation. In spite of foundation being designed with any superior grade of concrete, pore formation is inherent property of concrete. Irregular maintenance of area, large number of pits and cavities are formed in which water and oil is regularly soaked resulting to the floor damage. As a result of bad construction of floor it has irregular slopes and also at some areas steel bars can be easily seen on the floor. This porosity in concrete is making it vulnerable for corrosion.



*Floor damage by water spillage on pump house area*

**PRODUCT RECOMMENDED:-**

**1. DIFF-FLOOR PRIME:**

DIFF-FLOOR PRIME is a low viscous a two-component, penetrating epoxy primer used to prime concrete surfaces. It is commonly utilized as part of a complete flooring system.

**2. DIFF-FLOOR SCREED:**

DIFF-FLOOR SCREED is high solid heavy duty polymeric resin for mortar screed and metal surfaces has been specially developed for providing high strength to floor. DIFF-FLOOR SCREED is three component system, providing heavy duty flooring and has high mechanical strength, anti-skidding, non dusting and chemical resistance properties.

**3. DIFF-FLOOR TOP:**

DIFF-FLOOR TOP is a medium-solids, self leveling epoxy protective coating for tough industrial environments Floors. Especially formulated with blend of penetrates and surface tension-control agents for concrete surface to solve, chemical spillage, floor with trolley and racks movements, The DIFF FLOOR TOP is a tough, durable coating with excellent resistance to weather, moisture & industrial environment. DIFF-FLOOR TOP with special preparation is durable anti-slip protection in a variety of industrial settings, and for every maintenance coating job.

**APPLICATION PROCEDURED:-**

**A.SURFACE PREPARATION:-**

1. Before application of any kind of coating surface preparation is must to activate the base metal so that coating will have better bonding.
2. Initially cleaning will be done by chipping out all the deposition of oil & dust from the surface.
3. Floor was chemically cleaned by our specially developed cleaning agent, detergent and water wash.
4. After manual cleaning, surface was cleaned by wire brush and grinding to remove all the loose particles.



*Surface Preparation done by cleaning agent, wire brush & grinder*

## B.PRODUCT APPLICATION:-

1. After surface preparation First coat of priming was done by **DIFF FLOOR PRIME** on to the prepared dry concrete floor.



*Application of DIFF-FLOOR PRIME as a Primer coat*

2. After priming coat done, second coat of **DIFF-FLOOR SCREED** was coated resulting in the floor coating with improved surface level and also resulting in filling up of pits.



*Application of DIFF-FLOOR SCREED as an Intermediate coat*

3. Top coat of **DIFF-FLOOR TOP** was given as to tough, durable and anti-slip coating with excellent resistance against acid, moisture and chemical fumes.





*Application of DIFF-FLOOR TOP as a Top coat*

**BENEFITS OF COATING:-**

- *Seamless, Smooth, tough, durable & Non-porous Surface Finish.*
- *Protect Floor from Acid, sulfate, water chemicals & oil Penetration.*
- *Excellent Acid/Alkali, Wear & Abrasion Resistant Properties of floor.*
- *Easy to repair & Maintenance of coating.*
- *Easy to Clean coating floor area.*

**ACKNOWLEDGEMENT:-**

**SITE ENGINEER:-**

Mr. Ashish Ganvir (Sr. Technical Officer)

**AREA ENGINEER:-**

Mr. Dileep Singh (Sales Engineer)

Mr. Siddharth singh (Area Manager)

**APPLICATION TEAM:-**

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