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New Era Construction Chemicals



**ANALYSIS REPORT FOR
STRUCTURAL RESTORATION
AT
LIFE INSURANCE CORPORATION BUILDING
PARAMAKUDI**



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ANALYSIS:

The Site conditions were studied along with the reports and feed backs received from your end regarding waterproofing treatment and slabs restoration efforts made so far and the following are our observations.



- ❖ The bonding between the plastering and RCC columns are weak as shown in the picture. It is due to the corrosion of the rebar.



- ❖ In many areas the spalling in the columns are visible where major portion of the rods has been rusted. A closer view of the column is shown in the adjacent picture.

- ❖ Dampness has been identified from various places due to the cracks found near beams and brick work joints.



The pictures show the dampness in the walls and ceiling areas. The cracks near the beam area are also clearly visible.





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- ❖ Dampness is found in the rear because of water seepage from outlet pipes provided from the toilet.



- ❖ In many places cracks are visibly seen inside and outside the building.



the roof slabs and inverted beams in the roof.



- ❖ Water leakages are found in many places due to the cracks in



- ❖ It is very much essential that the rectifications be carried out using recommended construction chemicals.



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DETAILED SPECIFICATION:

(a) Water Proofing Treatment:

- ❖ Dismantling the existing mortar toppings to expose the virgin concrete surface. Cleaning the surface to be free of dust, loose particles and atmospheric deposits.
- ❖ The concrete surface shall be wetted thoroughly and ensuring that there is no water puddle. Two coats of **TEC^R WAVE 2000** – Water proofing membrane coating shall be provided by brush, as per the application specifications. (The product literature is enclosed)
- ❖ After the completion of curing and rectification if any over the treated area shall be provided with a bond coat of **TEC^R BOND SBR SUPER** admixed with cement shall be provided.
- ❖ Over the still tacky and green bonding coat screeding shall be carried out with 6mm downgrade chips in mix 1:2:4 admixed with **TEC^R MIX 550**. The screed surface has to be finished properly with trowel to provide proper slopes to ensure proper out flow of rainwater.
- ❖ The treated area has to be cured properly for 7 days.

(b) Spalling Rectifications for walls and Roof areas:

- ❖ Dismantling debonded areas, cleaning the debris up to a lead of 50mts.
- ❖ Cleaning the ceiling surface to be free of dust and loose particles.
- ❖ Cleaning the rebar's to be free of rusted scales and providing one coat of **TEC^R BEAT ZR** and allowing to dry.
- ❖ Wetting the chipped of surface and providing one bond coat of **TEC^R BOND SBR SUPER**.
- ❖ While the bond coat is still tacky, Re-plastering in CM 1:4 should be carried out and finished with wooden float.
- ❖ One curing coat of **TEC^R CURE WB** shall be applied over the plastering to ensure perfect curing.

(c) Spalling Rectifications for columns:

- ❖ Dismantling debonded areas, cleaning the debris up to a lead of 50mts.
- ❖ Cleaning the ceiling surface to be free of dust and loose particles.
- ❖ Cleaning the rebar's to be free of rusted scales and providing one coat of **TEC^R BEAT ZR** and allowing to dry.
- ❖ Wetting the chipped of surface and providing one bond coat of **TEC^R BOND SBR SUPER**.
- ❖ Pour **TEC^R GROUT MC** after providing proper shuttering.

NOTE: The specifications have been developed based on assumed conditions and mild alterations may be required at times.