

PROOFEX PGP

1. APPLICATION METHODOLOGY

Horizontal Application

Precautionary Measures

- Concrete shall be properly cured and dried. (Minimum 7 days for normal structural concrete and minimum 14 days for lightweight structural concrete).
- The substrate (PCC/Base material) shall be sound and rigid enough to take construction loads during application of membranes.
- Measures should be taken to ensure dewatering if water table is encountered (for underground structures)
- Measures should be taken to ensure that all surfaces are free from ice, frost or condensation.

Pre-treatment to substrate prior to Waterproofing Application of Main Items any were if necessary

- Treating the Cracks and damp areas by Injecting cement slurry mixed with expanding agent **Cebex 100** using pressure grouting pump with a pressure of 3 to 4 kg/sq.cm.
- Surface preparation by mechanical means to remove laitance, loose particles, which may hinder bond strength of the waterproofing system.
- Coving the junction of slab and vertical offsets with CM 1:3 mixed with **Nitobond SBR**-if necessary.

STANDARD METHODOLOGY APPLICABLE for laying and installing Proofex PGP- PVC Membrane

A. For Rafts and Base slabs (Horizontal application):

- PCC (substrate) shall be finished smooth and free from any projections.
- A layer of geotextile (200 GSM min) with a minimum overlap of 100mm shall be spread over the PCC (substrate).
- Membrane for rafts and base slabs shall be of loosely laid type, laid over the geotextile mat.
- A minimum overlap of 50mm (shall be increased as per vendor recommendation) shall be provided.
- All laps shall be sealed with a double seam continuous machine weld.
- The SupercastRearguard S-PVC for compartments shall be installed & welded to the membrane to form closed compartments of maximum 300 m² (however shall be reduced as per vendor recommendations).
- The arrangement of compartments shall be controlled by the membrane supplier prior to execution.

- Junction of Supercast Rearguard S-PVC shall be either prefabricated or welded as per vendor recommendation.
- The control & injection flanges shall be fixed with each compartment connected with a connecting pipe and terminated in an inspection box. The number of control and injection flanges for each compartment shall be as per vendor recommendation.
- A layer of geotextile (200 GSM min) with a minimum overlap of 100mm shall be spread over the PROOFEX PGP-PVC Membrane without covering the Supercast Rearguard S-PVC .
- A protection screed of 50mm shall be laid on the Geo textile in such a way that the Supercast Rearguard S-PVC were exposed all the time.
- Reinforcement shall be placed and concreting shall be carried out.
- **Reinjectable Hose Pipe:** At All Construction Joints : Providing and fixing Supercast Predimax Where shown on the contract documents, the reinjectable injection hose shall be made of a smooth finished, doublewalled PVC based hose with staggered openings. The reinjectable injection hose system shall allow injection of PU and epoxy resins, acrylate gels and cement suspensions.
- Termination shall be on the ground level using Aluminium strips or by welding PVC Supercast Rearguard S-PVC with PVC Flushing

Laying (Installation on Vertical surface for Both Side formwork)

- The outer formwork shall be placed in position.
- Supercast Rearguard S-PVC for construction joints/compartments shall be fixed (nailed) onto the inner face of the outer formwork. The maximum size of compartments shall be restricted to 300m²(however shall be reduced as per vendor recommendations).
- The arrangement of compartments shall be controlled in line with the vendor recommendation prior to execution.
- Junction of Supercast Rearguard S-PVC shall be either prefabricated or welded as per vendor recommendation.
- All control and injection flanges shall be fixed onto the inner face of the outer formwork. The minimum number of injection flange and their location within a compartment shall be as per vendor recommendation.
- Reinforcement and inner formwork shall be placed and concreting shall be carried out.
- The PROOFEX PGP-PVC membrane shall be fixed on the vertical surface of the concrete both by welding it to the compartment Supercast Rearguard S-PVC and (also) fusing it to the pre-installed PVC fixing disc.
- A minimum overlap of 50 mm (shall be increased as per vendor recommendation) shall be provided. Laps shall be sealed with a double seam continuous machine weld.
- A protection layer either with geotextile or dimple sheet or approved equivalent shall be laid over the PROOFEX PGP-PVC membrane prior to backfilling.

Laying (Installation on Vertical surface for One side formwork)

- Geotextile sheet (250 GSM-Min.) shall be fixed on the temporary construction pit supporting system such as contiguous piles etc.
- PVC fixing discs shall be fixed on to the geotextile sheet at a spacing matrix of 1m c/c (however the spacing shall be varied as per vendor recommendation).
- PROOFEX PGP-PVC membrane shall be fixed on to the vertical surface of geotextile sheet by fusing it to the pre-installed PVC fixing disc.
- Fixing PROOFEX PGP-PVC membranes permanently to the temporary pit supporting system shall be completely avoided. However temporary fixing can be done as per vendor recommendation.

- A minimum overlap of 50mm (shall be increased as per vendor recommendation) shall be adopted and shall be sealed using double seam continuous machine weld.
- Supercast Rearguard S-PVC for construction joints/ compartments shall be installed & welded to the membrane to form closed compartments of maximum 300 m² (however can be reduced as per vendor recommendations).
- The arrangement of compartments shall be controlled in line with the vendor recommendation prior to execution.
- Junction of Supercast Rear guard S shall be either prefabricated or welded as per vendor recommendation.
- All control and injection flanges shall be welded to the membrane of each compartment and shall be connected with a connecting pipe and terminated in a pre-installed inspection box. The minimum number of injection flange and their location within a compartment shall be as per vendor recommendation.
- A protection layer of geotextile or approved equivalent shall be fixed on the PROOFEX PGP-PVC membrane, without covering the Supercast Rear guard S.
- Reinforcement and the single-face formwork shall be placed and concreting shall be carried out.

- **Reinjectable Hose Pipe:** At All Construction Joints : Providing and fixing Supercast Predimax Where shown on the contract documents, the reinjectable injection hose shall be made of a smooth finished, doublewalled PVC based hose with staggered openings. The reinjectable injection hose system shall allow injection of PU and epoxy resins, acrylate gels and cement suspensions.
- Termination shall be on the ground level using Aluminium strips or by welding PVC Supercast Rearguard S-PVC with PVC Flushing.



Approval and variations

This method statement is offered by Fosroc as a “standard proposal” for the application of **Proofex PGP**. It remains the responsibility of the Engineer to determine the correct method for any given application. Where alternative methods are to be used, these must be submitted to Fosroc for approval, in writing, prior to commencement of any work. Fosroc will not accept responsibility or liability for variations to the above method statement under any other condition