ركن الشهد للخدمات الفنية ش.ذ.م.م

Rukn Al Shahad

Technical Services L.L.C.

THE COMPLETE WATER PROOFING SOLUTIONS, GRP LINING AND CRACK INJECTION SYSTEM

+971 54 335 3399 info@ruknalshahad.com Dubai - U.A.E

INDUSTRIAL

COMMERCIAL

RESIDENTIAL

INFRASTRUCTURE

CONTENTS

1 INTRODUCTION

INTRODUCTION

A major dealer and service provider of waterproofing system. We engaged in all types of water proofing, floor coating, GRP Lamination, Light weight foam concrete, roof combo system, and crack injection system. Our mission is to be an innovative and driven by performance to giving clients with Timely delivery of projects.While pursuing the path of excellence, The Company provides one point.Contact to clients through integration of Multi technical expertise in jobs co-ordination and project Management services.

We have highly skilled and professional teams to accomplish the projects in time with complete satisfactions of our clients in all aspects.This is of fundamental importance for the continuous our success of our organization. We are focused to consolidate our Position in future.

It strives to offer innovative qualitative services of the entire field that lead to growth. And surpass to its expansion for complete satisfaction of its potential client and external Business Relationship. We are committed to provide the highly qualitative professional services.

VISION, MISSION & CORE VALUES

OUR MISSION

Create a customer centric organization, hire the best talent for the business and use innovation and creativity through value engineering & technology to provide cost effective solutions to our client.

- Revisit our processes, so that we optimize our key resources and deliver the projects and services as per specification, cost and time by doing it “Right the first time, on time and every time.”

- Create an entrepreneurial culture wherein we allow innovation and deliver value to our clients and retain the competitive edge as a long term sustainable “partnering” relationship with our key clients.

- Evolve a well defined corporate social responsibility structure and also ensure safe practices within our business.

- Do business in an ethical way with the highest level of integrity and professionalism.

To be amongst most preferred waterproofing, industrial coating and allied services in the market segments we operate in UAE by financial year 2019-2020

OUR CORE VALUES

- Commitment to suppliers & clients as partners to our business.
- Doing it right first time, on time and every time.
- Collaborative to personal & professional development and safety, security and well being of our employees.
- Doing business with honesty, integrity and in an ethical manner.

QUALITY ASSURANCE POLICY

QUALITY ASSURANCE POLICY

Rukn Al Shahad Technical Services LLC guarantees our customers the highest quality in every aspect of every project.

- From the products to the services — ensuring complete customer satisfaction.
- Delivering high-quality services is the core foundation of our quality policy.
- We are committed to total quality management, and any customer dealing with Rukn Al Shahad Technical Services LLC can be fully confident that everything we deliver meets stringent and well-applied standards.
- We adhere to international standards of waterproofing applications as per NRCA guidelines.
- We are committed to achieving the highest quality standards through our HSE and Quality Management System.

HEALTHY & SAFETY POLICY

HEALTHY & SAFETY POLICY

The management of **Rukn Al Shahad** is responsible for the health and safety of their employees. The management is committed to the protection of the environment at all workplaces and will ensure that no environmental harm is created by the activities of the company. The management will ensure safe working places and safe operating conditions with safe plant, equipment, and safe vehicles. The management will ensure that it complies with the laws and statutes of the UAE, wherever they are applicable to the company's activities.

Rukn Al Shahad believes in giving equal importance to safety as is given to Quality, Productivity, and Economy. It firmly believes that by taking proper preventive action through training and educating all employees in HSE matters, and by creating safety awareness among employees, accidents can be prevented. To achieve these objectives, the management has assigned HSE responsibilities to all its employees at different levels. These form part of this manual which is issued as a guide to safe practices and will help the concerned personnel in creating a safe and healthy working environment.

GENERAL SAFETY RULES FOR ALL EMPLOYEES

All employees shall abide by the following safety rules.

- Report unsafe conditions to your immediate supervisor.
- Promptly report all injuries to you immediate supervisor.
- Use eye and face protection where there is a danger from flying objects or particles, such as when grinding, chipping, burning and welding etc.
- Use ear protection where necessary.
- Dress properly, Wear appropriate work clothes and personal protective equipment like glove, shoe or boots. Loose clothing and jewelry should not be worn.
- Properly care for and be responsible for all personal protective equipment issued to you.
- Do not operate machinery if are not authorized to do so.
- Do not operate any machine unless all guards and safety devices are in place and machine is in proper operating condition.

- Keep all tools in safe working condition. Do not use defective tools or equipment, report any defective tools or equipment to your immediate supervisor promptly. Use proper tools for the proper purpose. Be alert, and never stand under overhead loads.
- Do not leave materials in aisles, walkways, roads or other means of access.
- Practice good house keeping at all times.
- Do not stand moving equipment.
- Being under the influence of intoxicating beverages or illegal drugs while on the job is prohibited.
- All posted safety rules must be obeyed.
- Horseplay causes accidents and will not be tolerated.
- Know your emergency evacuation procedure.
- Know where the first aid facility is available and who the first aiders are.
- Do not use compressed air for cleaning your dress or body parts

If any doubt on any matter, check with your immediate supervisor. Violations of any these rules will result in immediate disciplinary action.

LICENCES & APPROVALS

حكومة دبي
GOVERNMENT OF DUBAI

DUBAI
للاقتصاد والسياحة
Economy and Tourism

رخصة تجارية
Commercial License

License Details / تفاصيل الرخصة

License No.		1149189	رقم الرخصة
Company Name	RUKN ALSHAHAD TECHNICAL SERVICES L.L.C	ركن الشهد للخدمات الفنية ش.ذ.م.م	اسم الشركة
Business Name	RUKN ALSHAHAD TECHNICAL SERVICES L.L.C	ركن الشهد للخدمات الفنية ش.ذ.م.م	الاسم التجاري
License Category	Dep. of Economic Development	دائرة التنمية الاقتصادية	فئة الرخصة
Legal Type	Limited Liability Company - Single Owner(LLC - SO)	شركة ذات مسؤولية محدودة - الشخص الواحد (ش	الشكل القانوني
Expiry Date 07/02/2026	تاريخ الإنتهاء	Issue Date 08/02/2023	تاريخ الإصدار
D&B D-U-N-S ® No	الرقم العالمي	Main License No. 1149189	رقم الرخصة الام
Register No. 2537276	رقم السجل التجاري	DCCI No. 603628	عضوية الغرفة

Attention
Refer to remarks

License Members / الاطراف

Share / الحصص	Role / الصفة	Nationality / الجنسية	Name / الإسم	No./رقم الشخص
100.00%	Shares Owner / مالك حصص	India / الهند	محمد شريف شاه حميد شاه حميد MOHAMED SHERIFF SAHUL HAMEED SAHUL HAMEED	720824
	Manager / مدير	India / الهند	محمد شريف شاه حميد شاه حميد MOHAMED SHERIFF SAHUL HAMEED SAHUL HAMEED	720824

الانتباه
يرجى الرجوع إلى الملاحظات

Print Date 22/03/2025 15:49 تاريخ الطباعة Receipt No. رقم الإيصال

يمكنك الآن تجديد رخصتك التجارية من خلال الرسائل النصية القصيرة. أرسل رقم الرخصة إلى 6969 (دو/ اتصالات) للحصول على اذن الدفع.

Now you can renew your trade license by sending a text message (SMS). Send your trade license number to 6969 (Du / Etisalat) to receive payment voucher.

Get FREE access to Zoho One for the first year
احصل على زوهو ون مجانًا للسنة الأولى
Zoho.com/det

الإمارات
THE EMIRATES

وثيقة إلكترونية معتمدة وصادرة بدون توقيع من دائرة الاقتصاد والسياحة في دبي .لمراجعة صحة البيانات الواردة في الرخصة يرجى مسح رمز الاستجابة السريعة

This is a certified e-document issued without signature by the department of Economy and Tourism .Kindly scan the QR Code to verify the certificate

OUR FACILITIES

EQUIPMENT LIST

S.No.	Description	Qty
1.	Light weight Foam Concrete Machine	2
2.	Generator	2
3.	PU Spray machine	3
4.	Drilling Machine	6
5.	Back Flasher (Fire Arrester)	30
6.	Grinding Machine	4
7.	Injection machine	4
8.	Poly Propylene Torch	30
9.	Silicon Gun	10
10.	Blower	6
11.	HILTI(JACKHAMER)	2

ACTIVITIES

WATERPROOFING SYSTEM FOR WET AREA

SCOPE OF WORK:

This specification includes water proofing to wet area like bathrooms,Kitchen, toilet, balconies, planter and laundry area etc..

MATERIALS:

The waterproofing materials shall be liquid applied or torch applied membrane. Liquid applied system shall be polyurethane or SBS bitumen base single component Highly durable liquid waterproofing membrane with good elasticity. Which cures to a tough rubber like finish with tenacious adhesion.

SUBSTRATE:

The water proofing system shall be installed over dry, smooth and clean concrete floors. It shall be smooth plastered using SBS concrete additive. A sand cement mortar angle fillet shall be formed at the corner and around pipe penetrations such for Smooth termination of the membrane.

INSTALLATION (LIQUID MEMBRANE):

Apply a full coat concrete primer prepared surface and minimum 50 mm above Finished floor level on the plastered wall. If liquid applied membrane is specified, The substrate shall be prepared and Liquid applied coating shall be brush applied at the rate 1.5 kg/m2.

At all corners and pipe penetrations Polyester should be reinforced between 2 coats. Water test shall be carried out by temporary blocking, the outlets, for a period of 24 hours.

Any leakage found shall be rectified and immediately after water test, it shall protect with Polythene sheet and protection screed. If it is sunken slab, it shall be filled with light weight foam concrete as specified by consultants. Care shall be taken while Laying mortars, tile and toilet fixtures, and any damage if occurred to the installed membrane Shall be immediately notified to the water proofing contractor.

WATERPROOFING SYSTEM FOR SUSPENDED SLABS & ROOFS

1. MEMBRANE SYSTEM:

1.1 The water proofing of suspended floors and roofs to structures involved the use of an overall impervious membrane to carry away surface watered seepage through the finishes to the gallery's and outfalls.

1.2 The critical nature of the water proofing on suspended or elevated slabs requires that particular attention be pointed to the following points the surface to be waterproofed must give adequate falls to drainage points either by slabs to falls or screed falls.

The waterproofing around galleys should be detailed to provided drainage at the both surface and membrane level particularly attention should be paid to the correct positioning and detailing of expansion joints to allow them to occur at the highest point of the fall.

Its Essential that up stands be provided at joints to create a completely waterproof tray on each side with parapet flashing or traditional metal counter flashing. Particular attention should be paid to the termination of the membrane at the up stands, parapet and around opening.

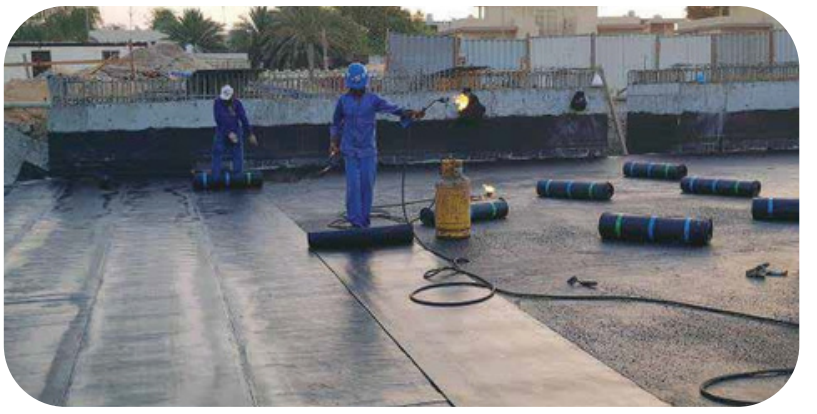
1.3 The membrane should be protected immediately against damage, ultra violet Degradation and the temperature extremes with one of the following materials:

A) **Parapet flashing surface mounted counter flashing.**

B) **Insulation boards for inverted or protected membrane roof, Or other approved protection.**

MEMBRANE SYSTEM

PRIMER APPLICATION



2. MEMBRANE APPLICATION SPECIFICATION

2.1 SURFACE PREPARATION:

The concrete surface to be water proofed should be even and smooth. All sharp protection and arises caused by formwork ETC, should be scabbed back to give Rounded corners.

Surface concrete to be dry and brushed free of any loose stones, dirt ETC before applying a single coat of primer with a roller or brush, which is should be dry prior to the application one layer of membrane primer must not be poured on to the surface and care must be taken to avoid pounding in depression given an approximate coverage on concrete of 10-12m2/liter. All internal angles to be formed with 40x 40mm sand cement fillet.

2.2 APPLICATION:

The laying of the membrane should commence from the lowest point when laid On surface sand cement fillet to facilitate dressing the membrane at these points.

2.3 UPSTANDS:

Where the membrane is to be terminated at upstands a chase should be provided of Dimension 20x20mm The membrane should be dressed in to the chase and securely fixed with tantalized timber batten and pointed immediately with mineral flashing strip, parapet flashing with a metal counter flashing strip.

2.4 DRAINAGE & PIPES:

Details of the termination of the membrane at drainage galleys, gargoyles, up stands and expansion joints shall be carried out strictly in accordance with details shown the working drawing.

2.5 INSPECTION:

Immediately prior to covering the Membrane careful inspection shall be made for accidental damage and any damage areas shall be cleaned and patched with additional.

2.6 PRECAUTIONS:

No storage of material or trafficking by other trades shall take place on area water proofed with membrane until subsequent protective materials have been laid.

ACRYLIC BASED WATER PROOFING

Conservation Technology Acrylic Roof System is designed to permanently water-proof new or existing roofs with drainage, including roofs with low slopes and complicated flashings. The system consists two principal components: a premium elastomeric liquid acrylic coating and a polyesters reinforcing fabric.

The fabric is embedded between multiple layers of the coating to create a seamless, reinforced flexible membrane that can last indefinitely with minimal maintenance. Flashings are simply painted place and become an integral part of the membrane. It is suitable for any climate. It is environmentally friendly and affordable. Acrylic membranes bond to almost anything.

COMBO SYSTEM

The Combo Roofing system consists of multiple layers. Each layer has a distin-guished purpose of its own and is thus mandatory for the 100% efficiency of the system. The following step – by – step segregated representation of the system with reference to the function of each layer.

SURFACE PREPARATION

The surface of strata to be waterproofing must be free from all kinds of oils & chemicals. After making sure that the horizontal surfaces, edges & Corners are clean the skirting area is protected by using polythene sheet so as to keep it from being pitted by the jet of the sprayer.

POLYURETHANE FOAM

The polyurethane foam is prepared by the mixing of polyol with isocyanate in the foam machine. This mixture is then sprayed onto the surface layer after layer until the desired thickness is obtained. A minimum setting period is maintained between the layers so as to get maximum bonding between them. It is very delicate process and requires skilled labour.

PROTECTION LAYERS

The insulating properties of the foam can be compromised by moisture vapour. The coating needs to be able to protect the foam from a build- up of this vapour, so that it won't reach the dew point. Another major hindrance to the PU Foam is the U.V Rays from the sunlight. In Order to Outgrow from these problems, the following protective coating are provided.

RUBBERIZED COATING

The rubberized coating assists the foam at the time of expansion and contraction with respect to atmospheric temperature change and keeps it from damages due to elongation.

PROTECTION SCREED

This is the rigid protective course that keeps the underlying layers from direct exposure to atmospheric & climatic factors and also from direct loads that may occur due to overlying structures or any kind of possible traffic. It also helps in attaining the right amount of slopping for the roof. The Joint between the compartments are packed using Back- Up Roads and the voids are sealed using joint sealants thoroughly as these joints are one of the major points of weakness in the protection layer.

WEATHER COATING

This is the final most layer applied to the system. It consists of liquid coating comprising of materials which safeguard the underlying layers from the harmful U.V Rays and heat Sun. This layer is responsible for avoiding the cracking of the screed due to thermal expansions and contractions.

FINISHING WORKS

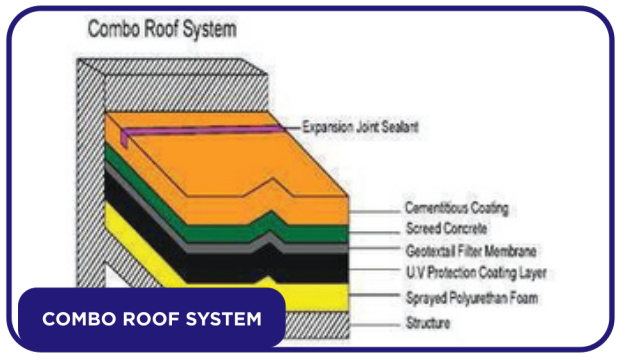
ANGLE FILLET

The corners at the meeting point of the horizontal and vertical surfaces are always identified as weak – sports in waterproofing. Water may seep downwards through these points. In order to avoid this weakness in the structure we make angle fillets. They also help in providing good runoff water flow in roofs. Apart from that it ensures that ne weak corners are formed during weather coating.

JOINT SEALANT AND SPEC CORD

The joints lefts unattended after the removal of the top edges of filler board are also accounted as weak sports. They allow water seepages as well as affect the integrity of the surface and the slopping. These joints are packed with spec cords and then the remaining space is sealed tight using joint sealants. It may have done before or after the top coat as per the site specification.

COMBO SYSTEM



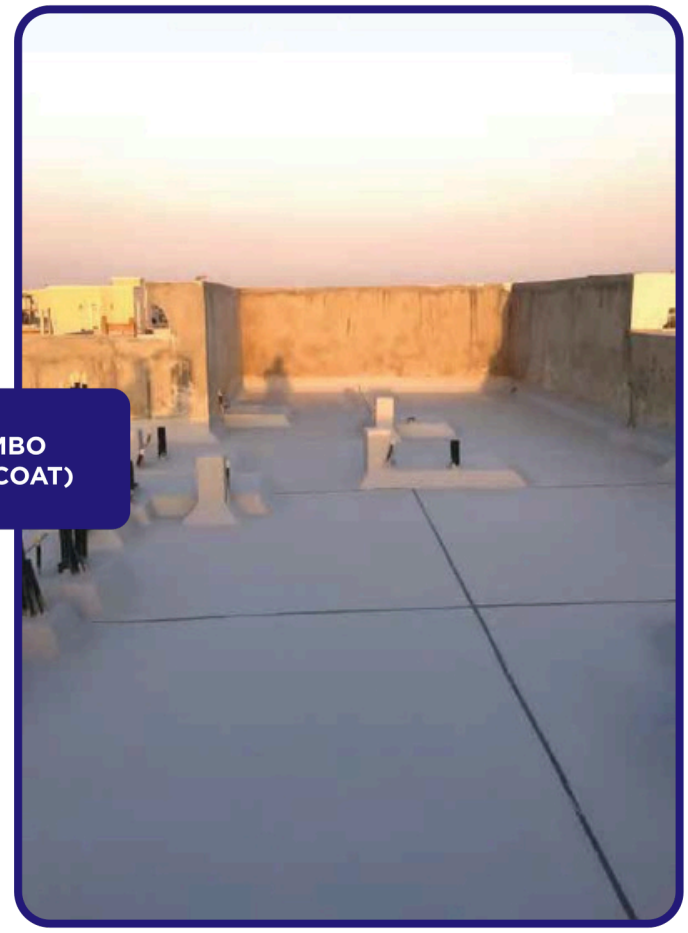
COMBO ROOF SYSTEM

PU APPLICATION

SCREED

LIQUID COATING

COMBO
(TOP COAT)



SUBSTRUCTURE WATER PROOFING SYSTEM

METHOD APPLICATION FOR PRIMER

- The surface must be thoroughly cleaned and all dust, dirt, loose materials, oil or grease substance removed. Use an air compressor in case of too much dirt, otherwise brooms and scrapper would be suitable enough.
- Concrete must be completely cured and dried to receive the primer.

  Apply one coat of primer using a roller brush/rubber brush/ airless spray etc. at the rate of 0.3 ltr/sqm (approx.)
- Allow 8-12 hours to dry.

METHOD APPLICATION OF THE MEMBRANE

GENERAL INSTRUCTIONS

- Store the materials in a dry and shaped place. The rolls should not be staked but kept in an upright position.
- Ensure that the surface temperature where the membrane will be applied is kept within the temperature range of +10 to +45°C.

REQUIRED EQUIPMENTS

- Protective clothing Gloves face mask, overall, and goggles
- Flame torch and LPG cylinder
- Cutting Knife
- Brush/ roller
- Steel scrapper
- Cotton waste
- Solvent cleaner
- Measuring tape

APPLICATION INSTRUCTIONS

Application of membranes should be avoided in case of extreme weather conditions like sand storm or rain. The ambient temperature during application should be between 4°C and 45°C.

- The substrate must be free of all dirt, oil grease and loosely adhering particles and made absolutely dry. And dew settled or concrete dampness should be thoroughly cleaned using a dry cloth. Honeycomb and spalled concrete is to be repaired and all nail heads and protrusions that are likely to puncture the membranes must be removed.

- Internal corners should have a 45-degree fillet. Place a 200mm wide stripe of the membrane centered along the corners as a reinforcing strip. External corners should have a 20mm chamfer. Place a 200mm wide strip of the membrane centered along the edges as a reinforcing strip.

PRIMING

- All concrete surfaces will then be primed at the rate of 0.3 litre per sqm. The primer has to be touchdry prior to the application of the waterproof membrane.

APPLICATION- HORIZONTAL AREAS

- Unroll the full roll of SBS membrane and align it for torching.
- Once the roll is properly aligned, roll back the membrane and start torching the underside of the roll as soon as bitumen starts melting, Press the membrane from the top so that it sticks to the concrete surface. The process of torching and unrolling is to be done simultaneously.
- Provide a lap of 100mm overlap on the sides of adjoining sheets. Overlap should be heated from the top and resealed with trowel to ensure seam integrity.
- All instead areas of membrane should be protected as soon as the membrane has been laid. A 50mm thick protective screed is to be laid on top of the applied membrane which will be extended up to the end of blinding. Wherever vertical walls are joining with the horizontal surface, a 200 gauge Polythene sheets shall be laid before the screed is laid. The polythene sheet and the screed should be removed prior to the commencement of the vertical waterproofing and a cement /sand motor angle fillet is to be provided.

APPLICATION- VERTICAL AREAS

- Provide a 200 mm wide reinforcing strip of Awazel over the fillet.
- Apply a 1m wide Awazel membrane in vertical longitudinally over the vertical areas starting forms the bottom of the raft.
- Install the membrane in vertical direction preferably till the top of the ground level, so that necessary joints are avoided which tend to be the weak spots for the water leakage.
- The membrane will be finished on the top by trucking into groove cut in the concrete and sealed with bitumen mastic.

MEMBRANE AROUND PIPES

A Cement sand fillet (50mmx50mm) is to be provided all around the pipe. A 400mm wide reinforcing strip will be laid after applying the primer. The joints of the membrane with the pipe will be sealed.

METHOD OF APPLICATION FOR P. BOARD

Asphaltic protection boards is to be used to protect the membrane from any puncture due to ongoing site activities or at the time of backfilling. Protection board can be fixed in place by using a twin side adhesive strip, contact adhesive or by torching.

FIXING BY TORCH

Torch the button of the protection board until the asphalt starts melting softly. Press the board immediately onto the substrate. Supports/ props can be used to keep the boards in the place till the bond is strong enough to hold the board on place.




GRP LINING

METHOD OF STATEMENT FOR GRP LINING (THICKNESS 3,4 & 6mm)

STEP 1: SURFACE PREPARATION

A. GRINDING

After concrete is done, many irregularities on the surface remain. If lamination is carried out in such surfaces, finishing on the outer surface will be inferior. Hence, surface grinding of PVC has to be done. This removes all irregularities and surface becomes the linear. Moreover, the grinded surface has porosity which will ensure a strong bonding with resin.

B. DUST REMOVAL

After grinding PVC powder and debris accumulate. This has to be removed as it gets entrapped between the lining and the surface. The PVC surface is cleaned properly and it is ensured that no impurities are entrapped.

STEP 2: LAMINATION

Process of lamination for open areas after the surface preparation and removal of dust, firstcoat of the resin applied on the PVC coating. Care is taken to see that the resin fills all voids of the PVC surface so as to avoid the information of air bubbles. One coat resin is applied on the PVC surface.

Then first trailed layer of ECR type glass fiber is placed on the resin applied surface. A wooden roller used to apply resin on the mat. Second layer of glass fiber is placed over the first layer with resin applied over it.

Metallic roller is used to impregnate and remove any air entrapment. Sufficient time is allowed for successive glass fiber impregnation to avoid peak exothermal heat. Successive layer is applied on the already impregnated with thickness condition for better bonding between layers. This procedure is repeated until required Thickness is achieved.

The resin rich layer of issue mat is applied for good surface finish. finally top coat will be applied on the cured laminate. A final layer of gel coat with paraffin wax then applied and allowed to cure completely.

STEP 3: CLEANING

During the lamination, many raw materials are used the site is cleaned properly and wastages are disposed before handing over for visual inspection of the lamination.

GRP LINING – TECHNICAL DATA SHEET

1. Scope of Work

This specification covers the supply and installation of Glass Reinforced Plastic (GRP) lining for concrete tanks, sumps, pits and floors, in thickness 3, 4 and 6 mm, to provide a durable, chemical-resistant and waterproof protective layer.

2. Materials

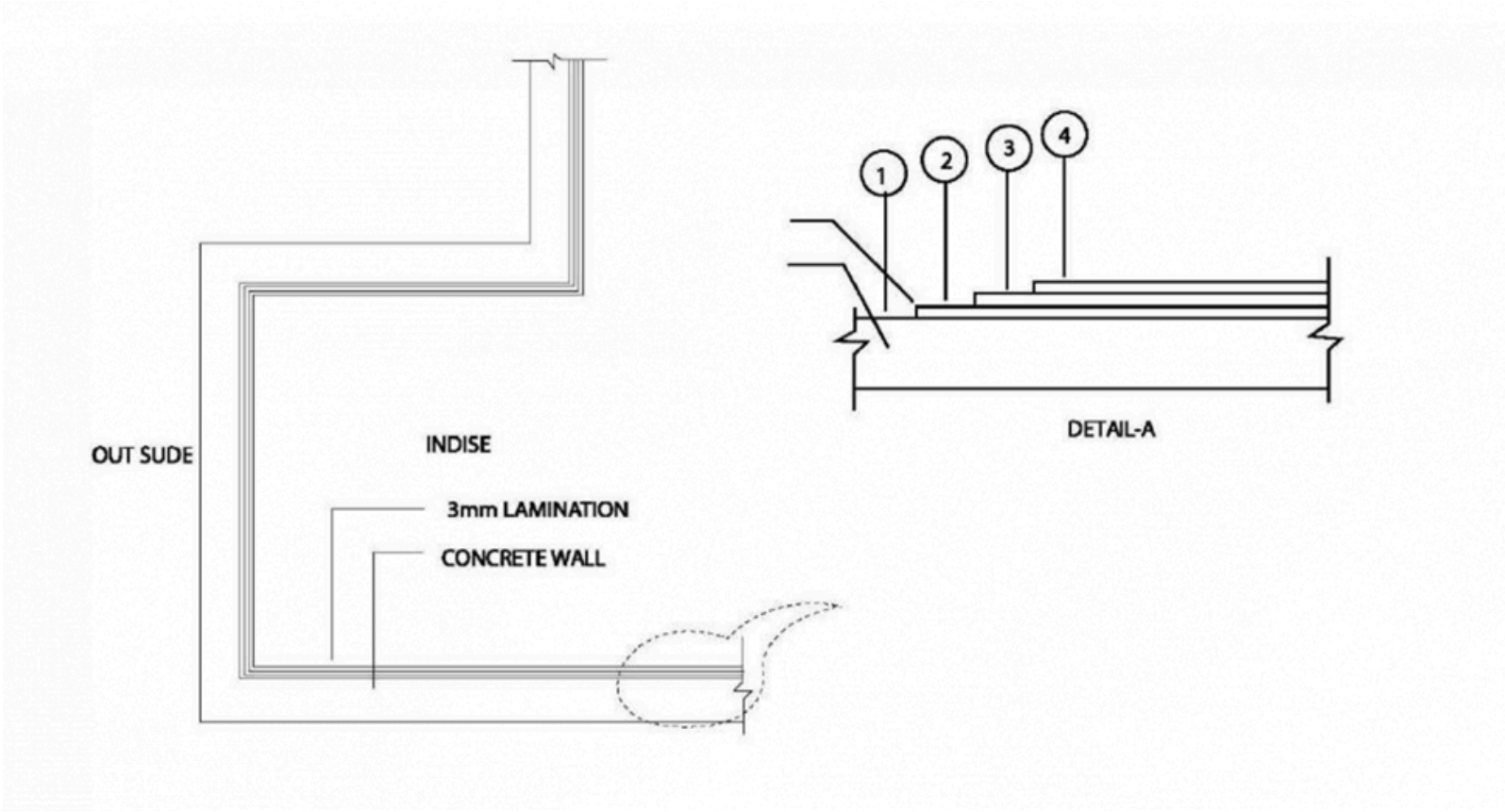
- GRP laminate made of E-glass / E-CR glass fibre and polyester or vinyl ester resin
- Glass content approx. 35–60% by weight
- Resin-rich inner barrier coat and gelcoat finish for chemical and UV resistance
- Nominal laminate thickness: 3, 4 or 6 mm as per drawings

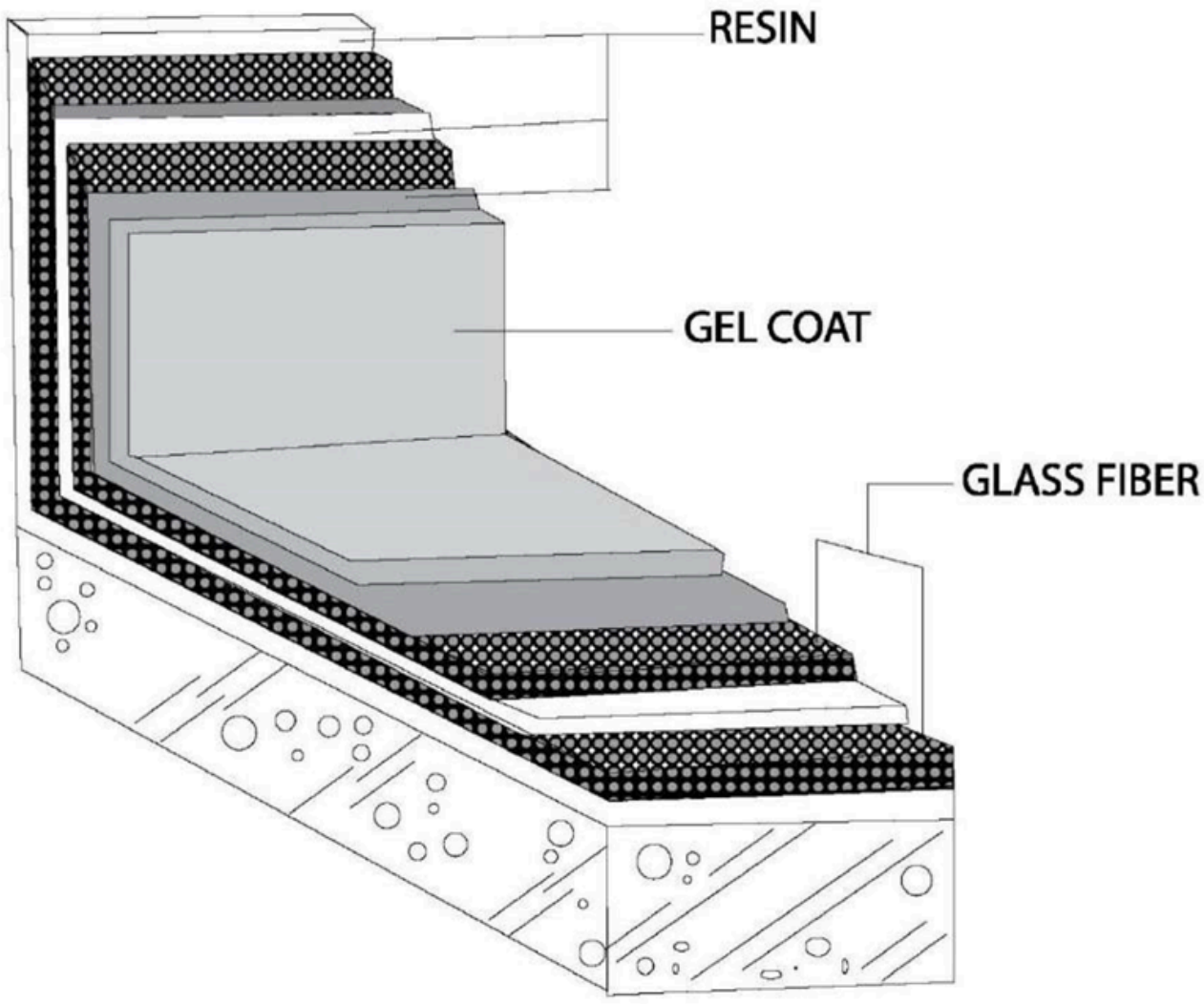
3. Technical Properties

- Density: 1.4 – 1.7 kg/dm³
- Tensile strength: 120 – 170 MPa
- Flexural strength: 250 – 300 MPa
- Water absorption: ≤ 1%
- Service temperature: –40°C to +120°C
- Thermal conductivity: approx. 0.2 W/mK

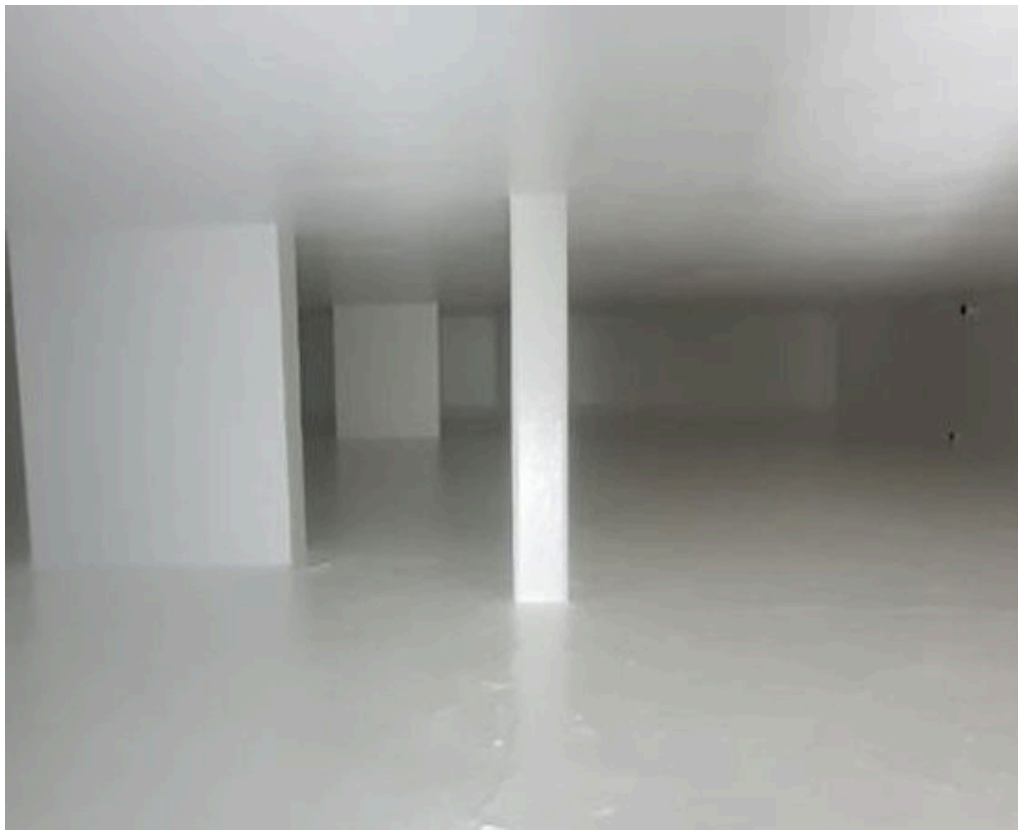
4. Advantages

- High strength-to-weight ratio
- Excellent corrosion and waterproofing performance
- Non-conductive and good thermal insulation
- Long service life and low maintenance


1
2
3
4
DETAIL-A
OUT SUDE
INDISE
3mm LAMINATION
CONCRETE WALL


RESIN
GEL COAT
GLASS FIBER


Ruknalshahad



CRACK INJECTION SYSTEM

GENERALS

1. SCOPE

This method of statement covers the preparation, mixing and injection of polyurethane Resin into cracks in concrete.

2. ADDITIONAL INFORMATION

The method of statement should be read in conjunction the relevant technical Data sheets, materials safety data sheets and the manufacturers latest published Literature.

3. APPLICATORS

Only applicators trained and certified by the manufacturer as being competent to Execute such work as described in section 01.shall be employed.

4. EQUIPMENTS

The equipment to be used for the application shall be in good working order Complying with the manufacturers recommendations with regard capacity. Output and general specifications.

5. EQUIPMENT LIST

1. I No slow speed heavy duty drill 14 mm dia masonry bit.
2. 1 no mixing paddle for above.
3. Single component injection machine.
4. 2 no small pointing trowels.
5. 1 steel float.
6. 2 no scrappers.
7. 2 no wire brushes.
8. 1 no cold steel chisel.
9. 2 no 250 mm x 20 mm spatulas.
10. I no hammer or mallet.
11. Sufficient 14 mm dia bore packers for the application

6. SERVICES

1. Adequate supply of clean fresh water
2. Clean, oil free compressed air
3. Electricity supply.

7. MATERIALS

1 All materials shall be of approved quality and fit for purpose whether Forming part of the permanent or temporary works.

2 All material shall be stored in secure area and protected from weather condition.

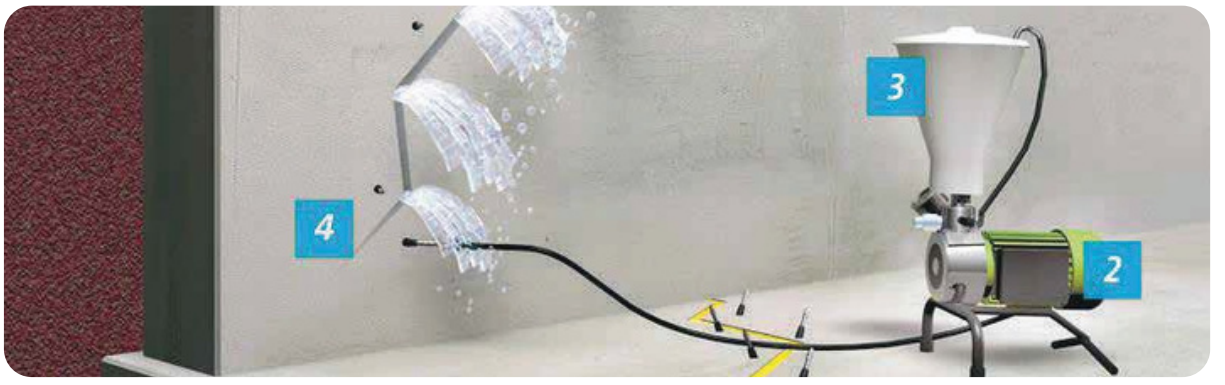
3 Sufficient cleaning solvent and surface sealer shall be available onsite to carry out the scheduled work.

8. WORK SCHEDULE

The applicator shall meet with main contractor and the client or his representative to agree a schedule of work. Minimizes disturbance to other trades and operations and allows unhindered and safe access to the area to injected. The cracks to be injected are to be indicated by the Client or his representative.

9. SURFACE PREPARATION

Surface of the construction joint shall be sealed using by fast setting cementitious mortar applied with trowel or spatula. The resin is applied to seal the crack/ joint and prevent injected material from flowing out in an uncontrolled manner.



10. INJECTION PROCEDURE

a. Drill holes, at an angle of 45 degrees to the surface, in such a manner and depth that the hole intersects and goes through the crack.

b.The hole spacing is equal to the depth of the element being injected and are located alternately either side of the crack the drilled holes are flushed out with compressed or cleaned by water.

c. The bore packer is inserted and tightened to effectively seal the hole. The injection pump should be located in a secure and safe area as close to the crack as possible. The pressures and working condition of the pump shall be checked for compliance with the manufacturers and material supplier recommendation and specifications.

d. The resin components are mixed thoroughly with a slow speed drill fitted with a mixing paddle. When thoroughly and homogenously mixed the resin is poured into the reservoir, the pump is then started and resin pumped to the nozzle until the flow is continuous i.e without air bubbles.

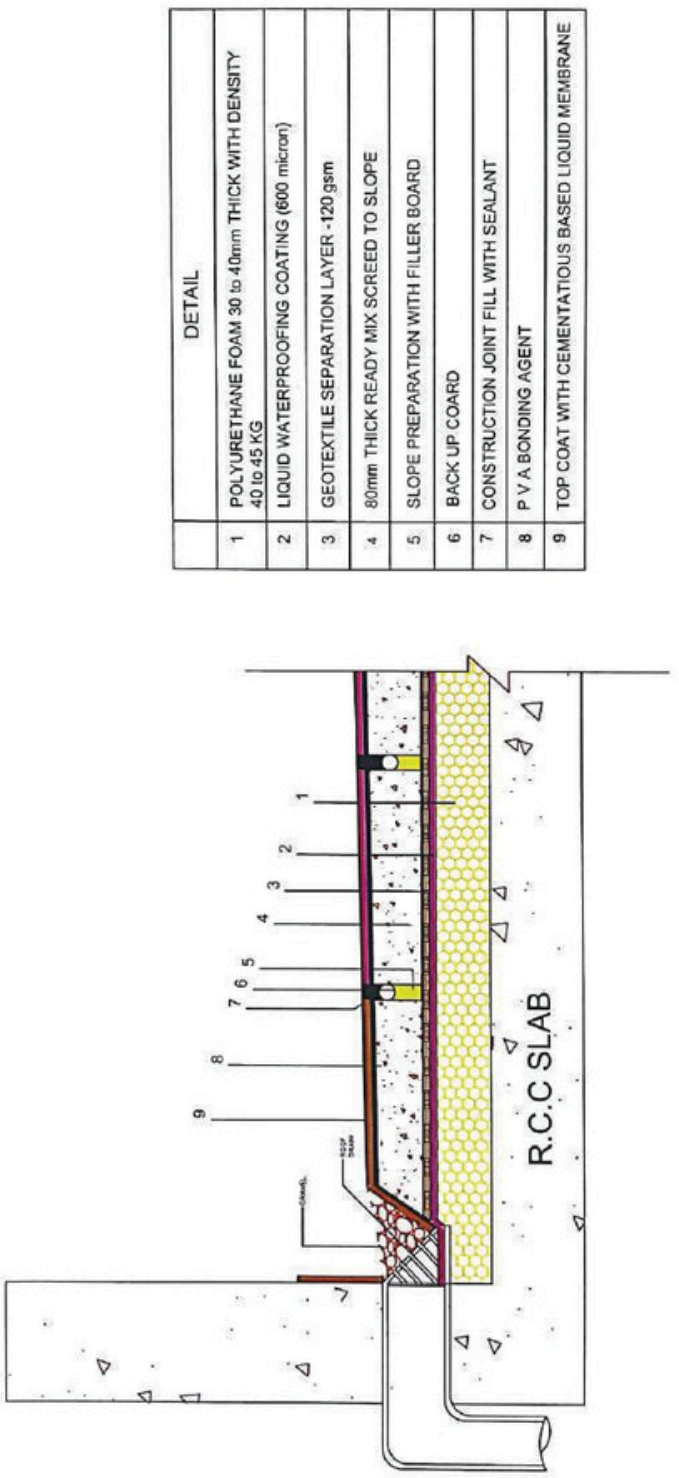
e. The injection should start at the lowest bore packer. Injecting each packer until resin flow from next packer. When this resin flow is Continuous i. e without air bubbles or the packer will not accept more resin the injection ceases,and then proceeds at t the next bore packer.

f. When all bore packers have been completed the pump is switched off and the injection nozzle removed and washed in the cleaning solvent when the resin in the crack has hardened the bore packers are removed using the hammer or mallet.

GENERAL DRAWINGS

COMBO SYSTEM

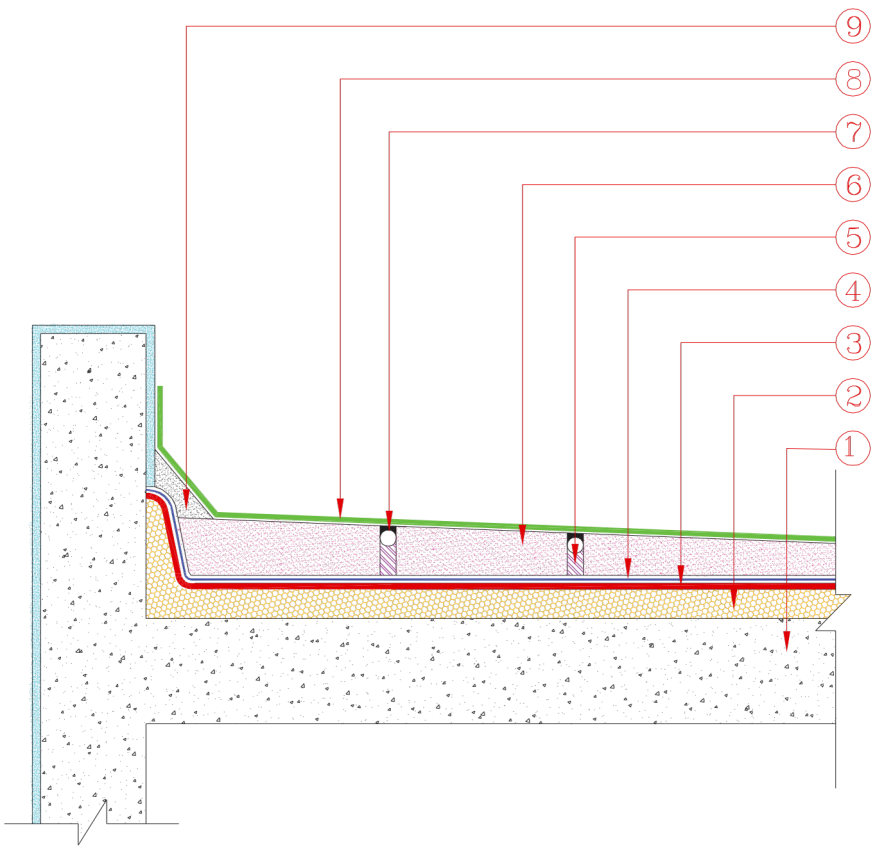
TYPICAL R W O TREATMENT DETAIL
WALL MOUNTED TYPE



	DETAIL
1	POLYURETHANE FOAM 30 to 40mm THICK WITH DENSITY 40 to 45 KG
2	LIQUID WATERPROOFING COATING (600 micron)
3	GEOTEXTILE SEPARATION LAYER -120 gsm
4	80mm THICK READY MIX SCREED TO SLOPE
5	SLOPE PREPARATION WITH FILLER BOARD
6	BACK UP COARD
7	CONSTRUCTION JOINT FILL WITH SEALANT
8	P V A BONDING AGENT
9	TOP COAT WITH CEMENTATIOUS BASED LIQUID MEMBRANE

COMBO SYSTEM

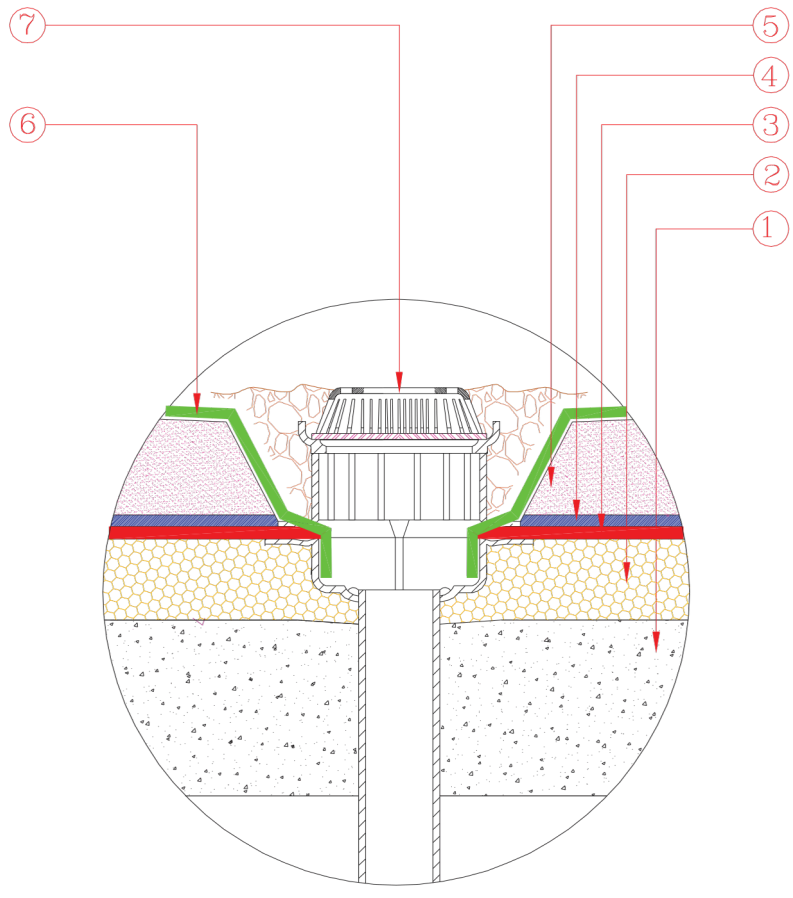
INDEX	
1	ROOF SLAB
2	POLY URETHANE FOAM 30 TO 40MM THICK WITH 40 TO 45 KG DENSITY
3	LIQUID WATERPROOFING COATING (600 MICRON)
4	GEOTEXTILE LAYER – 120gsm
5	SLOPE PREPARATION WITH FILLER BOARD
6	80mm THICK READYMIX SCREED TO SLOPE
7	JOINT SEAL WITH BACK UP ROD & SEALANT
8	CEMENTITIOUS COATING
9	ANGLE FILLET



TYPICAL SECTION OF COMBO ROOF SYSTEM
@ HOR. & VERT. JOINTS

COMBO SYSTEM

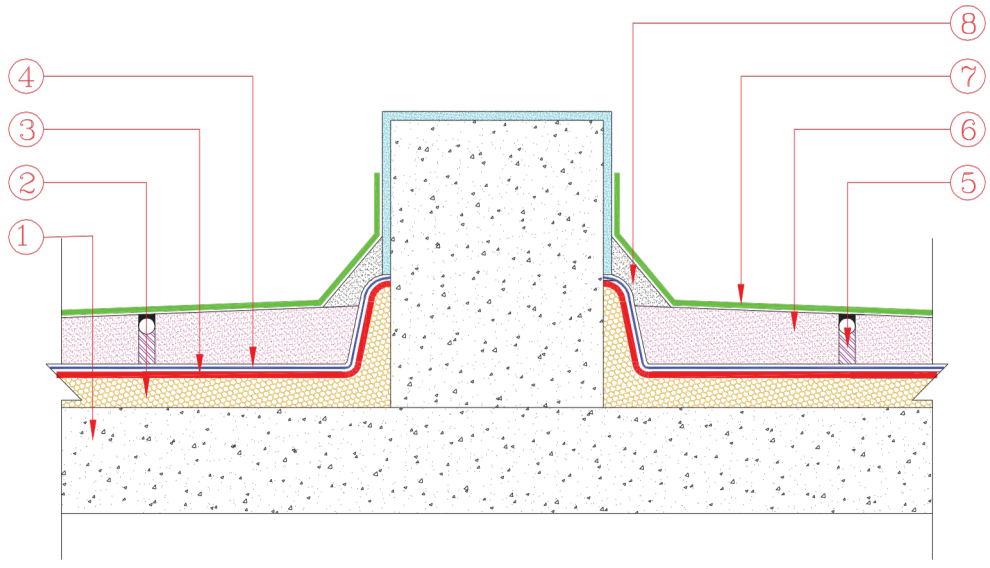
INDEX	
1	ROOF SLAB
2	POLY URETHANE FOAM 30 TO 40MM THICK WITH 40 TO 45 KG DENSITY
3	LIQUID WATERPROOFING COATING (600 MICRON)
4	GEOTEXTILE LAYER – 120gsm
5	80mm THICK READYMIX SCREED TO SLOPE
6	CEMENTITIOUS COATING
7	RAIN WATER OUTLET



TYPICAL SECTION OF COMBO ROOF SYSTEM
@ AROUND RAIN WATER OUTLETS

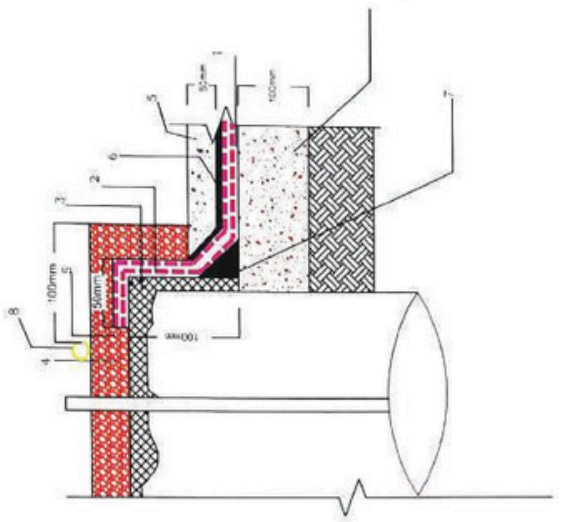
COMBO SYSTEM

INDEX	
1	ROOF SLAB
2	POLY URETHANE FOAM 30 TO 40MM THICK WITH 40 TO 45 KG DENSITY
3	LIQUID WATERPROOFING COATING (600 MICRON)
4	GEOTEXTILE LAYER – 120gsm
5	FILLER BOARD, JOINT WITH BACK UP ROD & SEALANT
6	80mm THICK READYMIX SCREED TO SLOPE
7	CEMENTITIOUS COATING
8	ANGLE FILLET



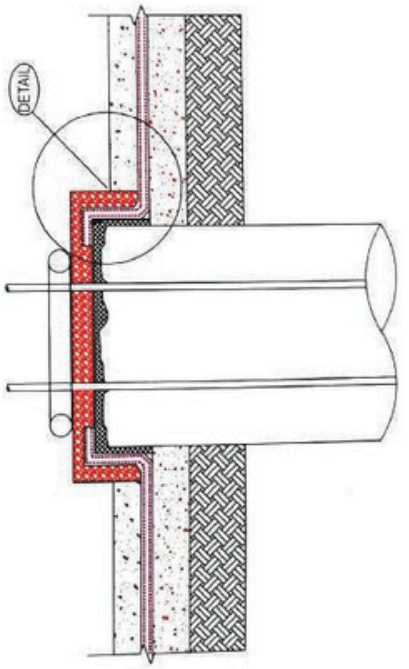
TYPICAL SECTION OF COMBO ROOF SYSTEM
@ FOUNDATION/UPSTANDS

SUBSTRUCTURE WATER PROOFING

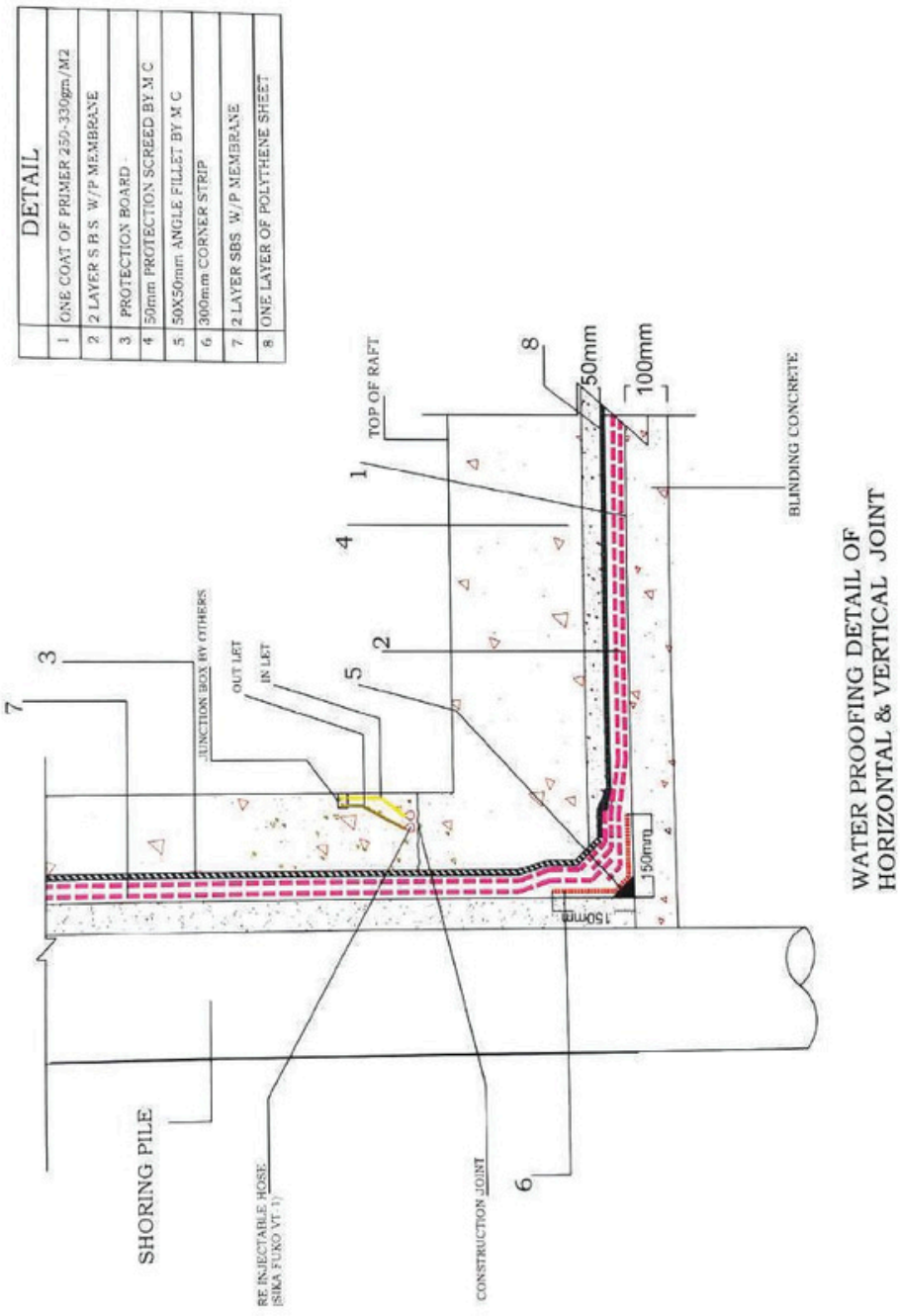


DETAIL AT PILE HEAD UNDER GROUND FLOOR.

DETAIL	
1	ONE COAT OF PRIMER250-330gm/M2
2	2 LAYER S B S W/P MEMBRANE.
3	RE PROFILING-20mmTHICK WITH NON SHRINKAGE GROUGHT.
4	25mm THICK EPOXY TREATMENT
5	50mm PROTECTION SCREED BY M C
6	POLYTHENE SHEET BY MC
7	50X50mm ANGLE FILLET BY M C
8	RE INJECTABLE HOSE.

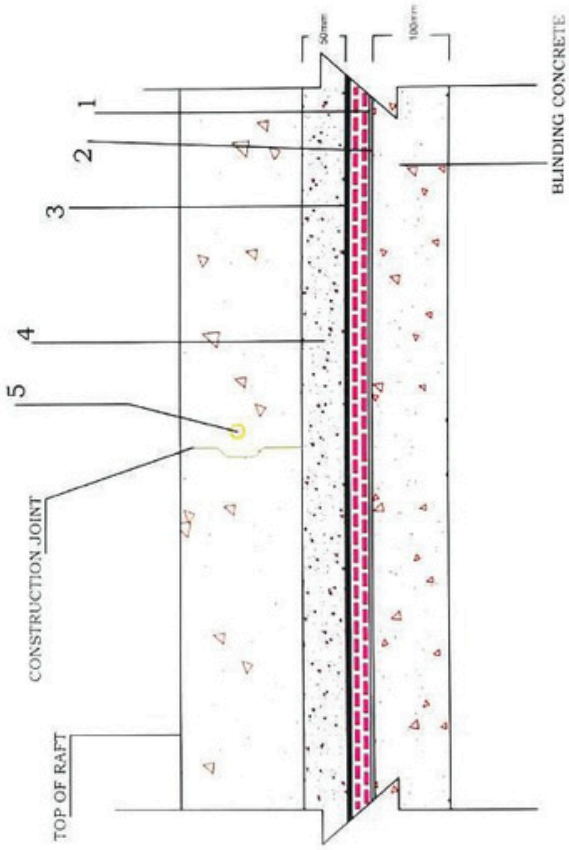


SUBSTRUCTURE WATER PROOFING



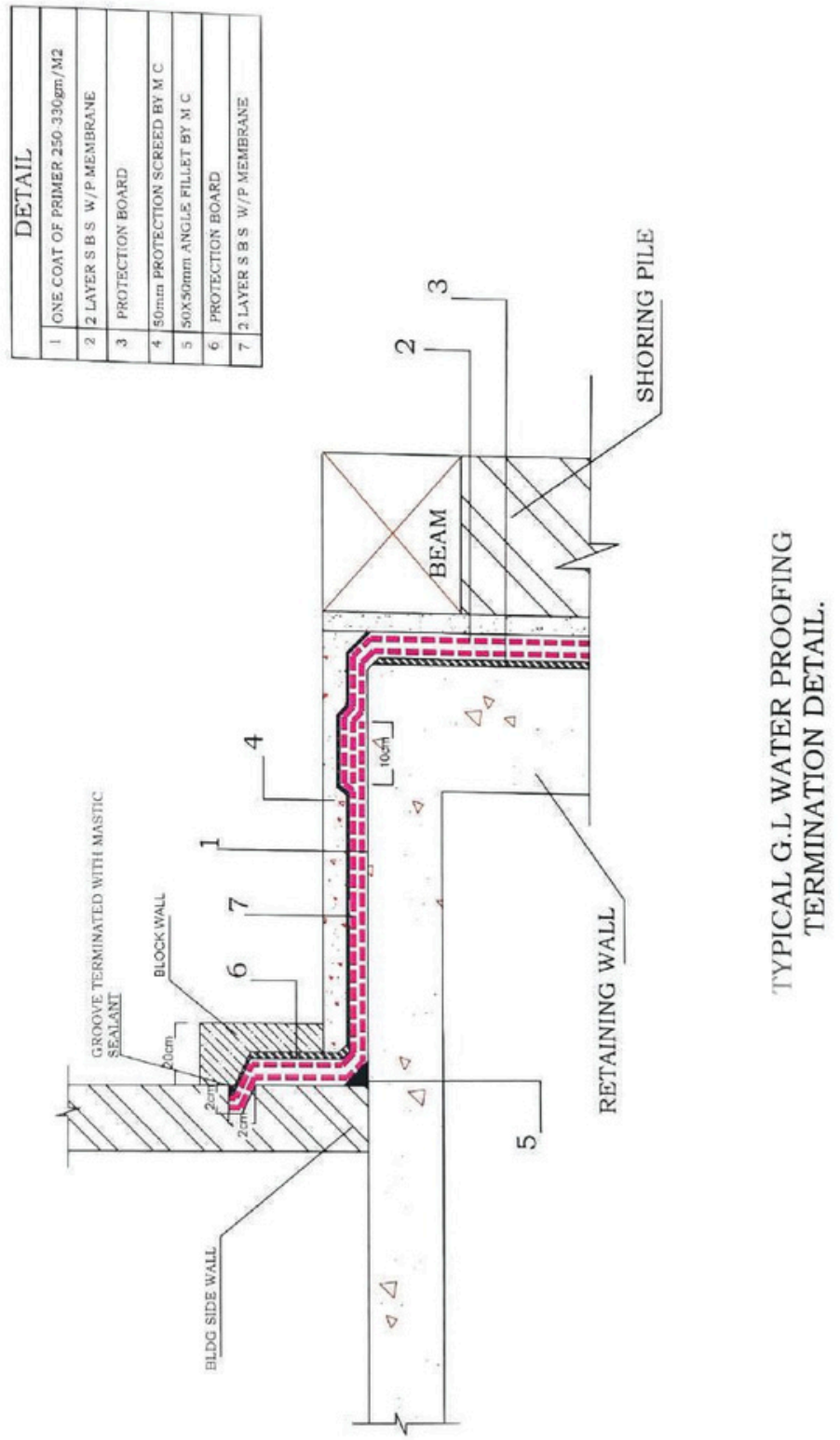
SUBSTRUCTURE WATER PROOFING

DETAIL	
1	ONE COAT OF PRIMER 250-330gm/M2
2	2 LAYER S B S W/P MEMBRANE
3	ONE LAYER OF POLYTHENE SHEET
4	50mm PROTECTION SCREED BY M C
5	RE INJECTABLE HOSE.



WATER PROOFING DETAIL OF
CONSTRUCTION JOINT@RAFT.

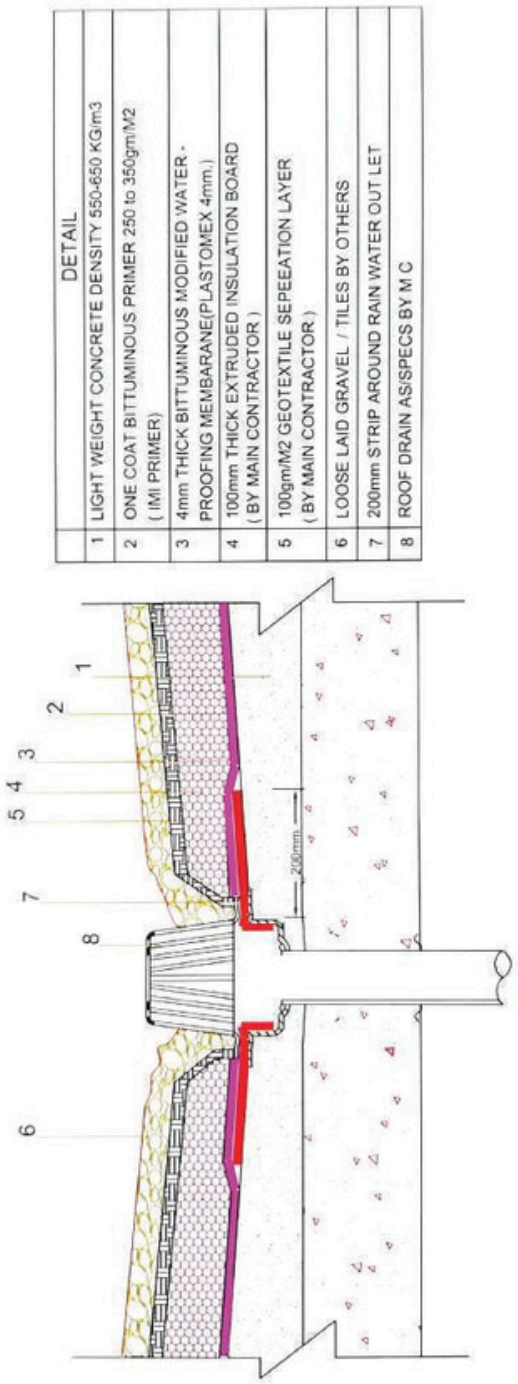
SUBSTRUCTURE WATER PROOFING



TYPICAL G.L WATER PROOFING
TERMINATION DETAIL.

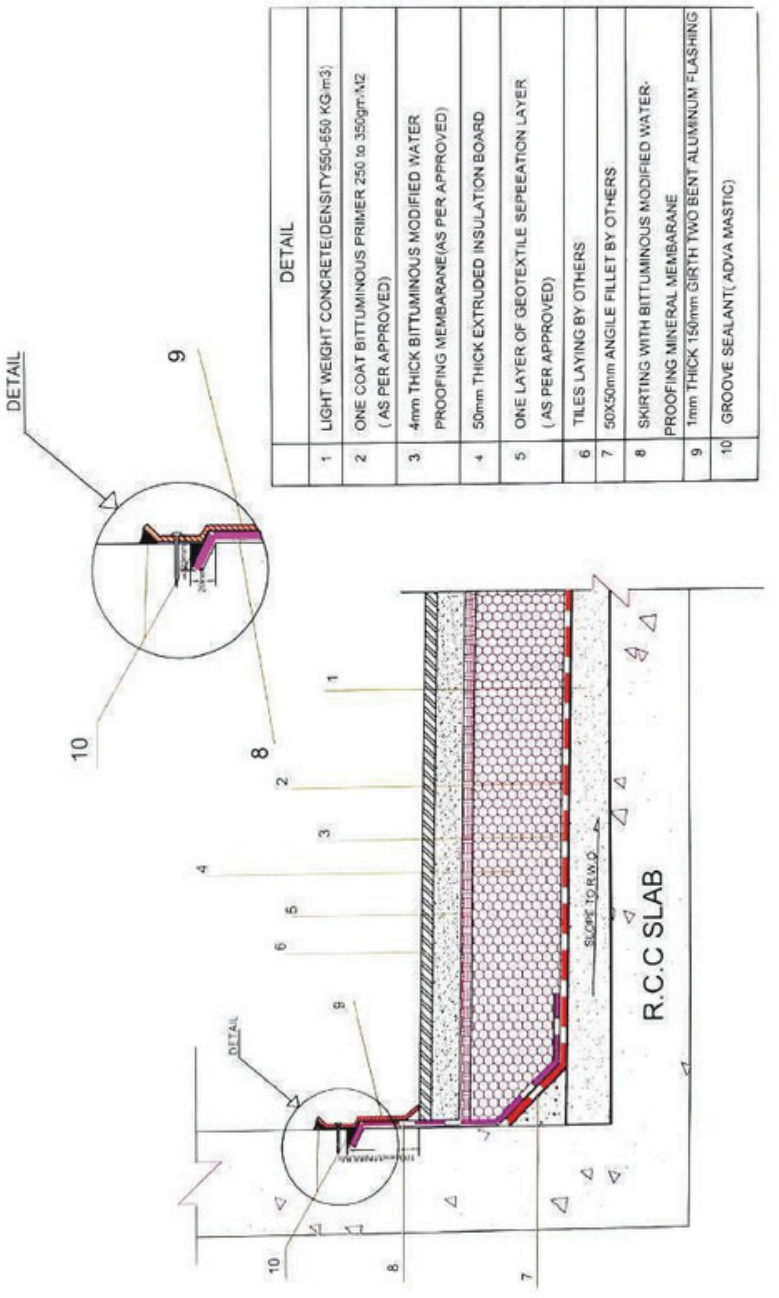
ROOF WATER PROOFING SYSTEM (MEMBRANE)

	DETAIL
1	LIGHT WEIGHT CONCRETE DENSITY 550-650 KG/m3
2	ONE COAT BITTUMINOUS PRIMER 250 to 350gm\M2 (IMI PRIMER)
3	4mm THICK BITTUMINOUS MODIFIED WATER - PROOFING MEMBARANE(PLASTOMEX 4mm.)
4	100mm THICK EXTRUDED INSULATION BOARD (BY MAIN CONTRACTOR)
5	100gm/M2 GEOTEXTILE SEPEEATION LAYER (BY MAIN CONTRACTOR)
6	LOOSE LAID GRAVEL / TILES BY OTHERS
7	200mm STRIP AROUND RAIN WATER OUT LET
8	ROOF DRAIN AS/SPECS BY M C



TYPICAL R W O DRESSING DETAIL

ROOF WATER PROOFING SYSTEM (MEMBRANE)

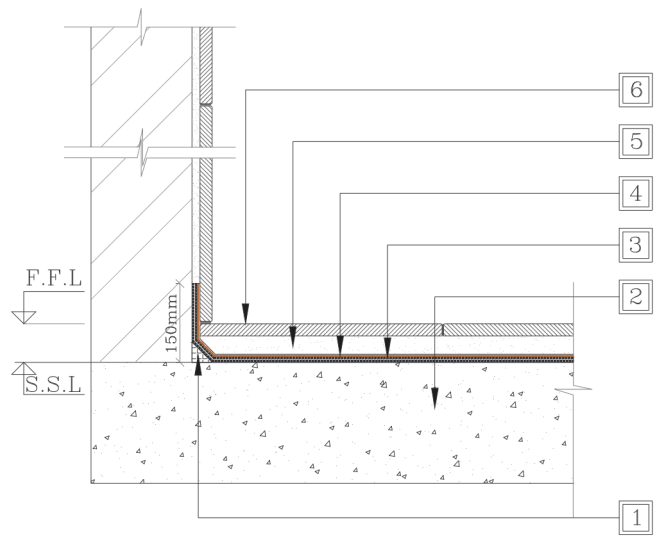


	DETAIL
1	LIGHT WEIGHT CONCRETE(DENSITY550-650 KG/m3)
2	ONE COAT BITTUMINOUS PRIMER 250 to 350gm/M2 (AS PER APPROVED)
3	4mm THICK BITTUMINOUS MODIFIED WATER PROOFING MEMBARANE(AS PER APPROVED)
4	50mm THICK EXTRUDED INSULATION BOARD
5	ONE LAYER OF GEOTEXTILE SEPEEATION LAYER (AS PER APPROVED)
6	TILES LAYING BY OTHERS
7	50X50mm ANGILE FILLET BY OTHERS
8	SKIRTING WITH BITTUMINOUS MODIFIED WATER-PROOFING MINERAL MEMBARANE
9	1mm THICK 150mm GIRTH TWO BENT ALUMINUM FLASHING
10	GROOVE SEALANT(ADVA MASTIC)

TYPICAL ROOF WATERPROOFING DETAIL

WET AREA WATER PROOFING SYSTEM

LEGEND	
1	40X40 ANGLE FILLET
2	STRUCTURAL FLOOR SLAB
3	TWO COATS OF LIQUID APPLIED WATERPROOFING
4	1000 GUAGE POLYTHENE SHEET
5	PROTECTION SCREED
6	FLOOR FINISH



TYPICAL WET AREA WATERPROOFING DETAILS

RECENT PROJECT LIST

LIST OF JOBS DONE BY RUKN AL SHAHAD INSULATION CONTRACTING

S.No.	PROJECT NAME	CONTRACTOR	CONSULTANT	SYSTEM
1	G+4P+14 FLOOR AT MAJAZ, SHARJAH, UAE	BANIYAS BUILDING CONTRACTING	STEPS ENGINEERING CONSULTANTS	"INVERTED SYSTEM ON ROOF AND ONE LAYER MEMBRANE ON WET AREA"
2	"IBIS HOTEL & OFFICE TOWER AT QIASIS, DUBAI, UAE"	KHAN SAHIB L.L.C	CAPITAL ENGINEERING CONSULTANTS	"INJECTION SYSTEM ON BASEMENT"
3	B+G+M+1 AXIOM MULTI USE BUILDING AT DSO	CHINA RAILWAY 18TH BUREAU GROUP	NATIONAL ENGINEERING BUREAU	TWO LAYER MEMBRANE WITH PROTECTION BOARD
4	"COMMERICAL/ RESIDENTIAL BUILDING AT AL NAHDA, DUBAI, UAE"	DARWISH ENGINEERING	THE FRASER NAG PARTNERSHIP	"INJECTION SYSTEM ON BASEMENT"
5	"FIVE COMMERICAL VILLAS IN KHALIFA (A) CITY"	"M/S. ADVANCED CONSTRUCTION SERVICES EST"	M/S. NATIONAL ENGINEERING BUREAU	ROOF WATERPROOFING SYSTEM
6	"G+3 COMMERICAL BUILDING ON PLOT NO. 438/A NABBA,SHARJAH, UAE"	"AL NASAR ENGINEERING AND CONTRACTING"	OSAIS ENGINEERING CONSULTANT	MEMBRANE SYSTEM
7	"VILLA ON PLOT NO.0583, PERMIT NO. 20151222-010"	AL MUTAIRI BLDG. CONT.	Mr. AL ANOUD M M GH AL MUTAIRI	COMBO SYSTEM
8	PROPOSSED G+3 RESIDENTIAL BUIDING ON PLOT NO.373-420 @ ALBARSHA, DUBAI, UAE	M/S. CLASS CONSTRUCTION L.L.C	"M/S. NEW ARCH ENGINEERING CONSULTANT"	ROOF WATERPROOFING SYSTEM
9	PHASE 1 DESIGN CONSTRUCTION AND COMPLETION OF 300 VILLAS	M/S. SHARPOORJI & PALOONJI MIDEAST L.L.C	M/S ARIF @ BINTOUK CONSULTING ARCHITECTS @ ENGINEERS	ROOF WATERPROOFING SYSTEM
10	COSTA COFFEE SHOP RETAIL 1-R GROUT FLOOR THE EDGE DUBAI, UAE	EAST WEST BUILDING CONT. L.L.C	Mr. EMIRATES LEISURE RETAILS L.L.C	MEMBRANE SYSTEM
11	GREEN COMMUNITY WEST EXTENSION PHASE III AT DIP, DUBAI, UAE	M/S SHARPOORJI PALOONJI MIDDLEEAST L.L.C	DEWAN ARCHITECTS & ENGINEERS	TWO LAYER MEMBRANE WITH PROTECTION BOARD
12	MASJID AL ROSTAMANI ON PLOT NO. JAVO2M-002, JEBEL ALI, DUBAI, UAE	AL ARIF CONTRACTING CO L.L.C	AL TURATH ENGINEERING CONSULTANTS	ROOF WATERPROOFING SYSTEM
13	SHARJAH INTERNATIONAL AIRPORT NEW RUNWAY	M/S. NATIONAL CONTRACTING & TRANSPORTING CO. L.L.C	M/S. HALCROW INTERNATIONAL PARTNERSHIP	ROOF WATERPROOFING SYSTEM
14	G+1 COMMERICAL BUILDING ON PLOT NO. 352-2673 @ JUMEIRAH 3RD, DUBAI, UAE	M/S BAIT AL YAZI CONTRACTING	M/S. AL AJMI ENGINEERING CONSULTANT	TWO LAYER MEM+ PROTECTION BOARD
15	B+G+19+2+MEP+ROOF COMMERCIAL AND RESIDENTIAL TOWER ON PLOT NO392-484 3K	CHINA RAILWAY 18TH BUREAU GROUP	AL HAWRAA ENGINEERING CONSULTANT	TWO LAYER MEMBRANE WITH PROTECTION BOARD

LIST OF JOBS DONE BY RUKN AL SHAHAD INSULATION CONTRACTING

Client / Contractor	Category	Work undertaken
Al Seyouh Building Contracting	Underground water tank water proofing	Membrane work
Solomon Cont. LLC	Roof Water proofing	Combo system
Al Khaimah Al Arabia	Plumbing works	
Sharjah LuLu Hypermarket@ King Faizal St., Sharjah.	Water proofing	GRP works
Al Rihab Contracting – American school @ Naad Al Sheba, Dubai.	Water Tank	GRP works
Al Rihab Contracting – Mosqu@ King Faizal St., Sharjah.	Water proofing	GRP Works
Dubai South – Kharafi Contracting	Water Proofing	GRP and Manhole works
Hudayriyat Island	Water Proofing	Membrane work
Al Rihab Contracting – Cantara Residence @ Muwailah, Sharjah.	Water Proofing	GRP works
International School of Creative Science @ Naad Al Sheba, Dubai	Partition work	Sliding door
Khawneej Palace	Civil work	Fountain grating work
Ghantoot Contracting –UAQ Fish farm	Water proofing	GRP Water tank work

- Roof Combo Waterproofing System
- Light Weight Foam Concrete
- Membrane Waterproofing System
- Corrugated shed Roof Insulation
- Crystalline Waterproofing System
- Floor Epoxy Coating/Car Park Epoxy Coating
- Wet Areas, Water Tanks, Planter Box
- Concrete Flooring
- GRP Lamination

ركن الشهد للخدمات الفنية ش.ذ.م.م

Rukn Al Shahad

Technical Services L.L.C.

+971 54 335 3399 info@ruknalshahad.com Dubai - U.A.E

FACEBOOK INSTAGRAM YOUTUBE WEBSITE