HYDROSHIELD®

An Ideal Waterproofer For Water Retaining Structures

CONTECH CHEMICALS

Chemists to the Building Industry

INTRODUCTION

Water-leakage is a very common problem and source of worry to almost every one connected with building industry. This leakage in turn can cause structural damage and spoil the beauty of the building.

Conventional methods of waterproofing are not very effective and in consequence are short lived. To overcome this problem, we at Contech Chemicals offer a unique revolutionary product HYDROSHIELD® developed under years of rigorous laboratory and practical field tests. HYDROSHIELD® also meets the requirement of IS 2645-1975 and is tested accordingly.

HYDROSHIELD® is supplied in powder and liquid form, which both are mixed in the cement mortar, used for plastering the walls or laying IPS (PCC) on the bottom. In short, very simple solutions for ensuring fully leak-proof water- retaining structure.

FEW HIGHLIGHTS

- Withstands high water pressure.
- Easy to use.
- High adhesive power to concrete and masonry surfaces.
- High abrasion resistance.
- Can be applied on both wet and dry surfaces.
- Non-toxic.
- Cost effective.
- Effective on negative side of the structure also.
- Increases the strength of the mortar.
- Treatment becomes part of the surface.
- Resists extreme hydrostatic pressure on negative or positive side.
- Not hydrophobic.
- Reduces efflorcence.

WIDE RANGE OF USAGE

WATER RETAINING STRUCTURES:

Water tank, Reservoir, Swimming pool, Canal, Siphon duct, Tunnel, Effluent Plant etc.

INDUSTRIAL BUILDINGS:

Cooling Tower Basins, Air washer Plants in Textile mills, etc.

DOMESTIC AND COMMERCIAL BUILDINGS:

Basement, Terrace, Garden terrace, Toilet sunk, Manhole, Porous wall, Damp-proof course, Fountain, Planter etc.

PLUMBING WORKS:

Grouting of pipe holes in water retaining structures, Toilet Sunk etc., as well as joints of C.I and RCC pipelines.

SPECIFICATION FOR WATERPROOFING WITH HYDROSHIELD®

1.1 APPLICATION MANUAL :

1. Cement deposit to be scrapped out from the surface.
2. Pre-wet the surface before starting the work.
3. Apply thick coat of Hydroshield® waterproof slurry on the pre-wetted surface prepared as shown in the table.
4. Construction joints as well as joints between masonry and RCC members to be opened out & filled up with Hydroshield® mortar as mentioned in the table before starting the plastering work.
5. Plaster the walls (mini. 25 mm thick), lay IPS on the bottom in two coats (mini. 65 mm thick),& provide angular fillets (of 75 to 100 mm) with Hydroshield® mortar prepared as mentioned in the table.
6. While preparing slurry or mortar, Sand /Cement / Hydroshield Powder to be mixed in dry state only. Add Hydroshield liquid-water solution in it that could be used in 45 minutes.
7. Surface to be cured for a minimum period of 5-7 days.

1.2 RECOMMENDED PROPORTIONS OF HYDROSHIELD® FOR PREPARING WATER PROOF CEMENT MORTAR :

No.	Type of work.	Cement by parts	Coarse Sand by parts	Stone Chips 6mm Down By parts	**HYDROSHIELD®** Powder per bag of cement	**HYDROSHIELD®** Liquid per bag of cement
1	Slurry Coat	50 Kg.	-	-	35 Kg.	1 Ltr.
2	Providing Plaster on the wall	1	4	-	9 Kg.	1 Ltr.
3	Providing IPS (PCC) / Fillet / Damp-proof course.	1	2	2	9 Kg.	1 Ltr.
4	Filling the cracks/joint.	1	2	-	25 Kg.	1 Ltr.
5	Caulking / Grouting of pipe.	2	3	-	25 Kg.	2 Ltr.
6	Providing Brickbat coba waterproofing on terrace.	1	4	-	-	1 Ltr.

1.3 IMPORTANT GUIDE LINES FOR WATER PROOFING VARIOUS STRUCTURES :

Water tank / Swimming pool / Effluent treatment plant :

- Grout the inlet & outlet pipe holes with Hydroshield® mortar.
- Provide waterproof IPS / Plaster / Fillets using Hydroshield® mortar.

Toilet Sunk / Garden Terrace :

- All necessary plumbing holes should be provided before starting the waterproofing work.
- Provide waterproof IPS / Plaster / Fillets using Hydroshield® mortar. The plaster on the walls must be taken 300 mm above the finished floor level.
- Grout the pipe holes using Hydroshield® mortar after completion of the waterproofing treatment.

In case of garden terrace, we suggest to apply two coats of our Rufferseal liquid on treated surface, to protect it against corrosion.

Humidification plant :

- Grout the inlet & outlet pipe holes with Hydroshield® mortar.
- Provide waterproof IPS / Fillets using Hydroshield® mortar on the bottom of the tank, and also on the slab below the water tank where water tends to spill from the baffle wall. Plaster the ceilings & sidewalls from inside the water tank.
- The holes provided for fixing structural members should also be grouted with Hydroshield® mortar.

Basement / Service pits :

- In the construction of a new basement, provide waterproof IPS / PCC using Hydroshield® mortar on the PCC i.e. below the RCC Raft & provide waterproof plaster using Hydroshield® mortar upto the foundation concrete from outside.
- In the existing basement, provide waterproof IPS of minimum 75 mm thick using Hydroshield® mortar on the original PCC base after removing existing tile or stone finishing. The IPS may be inserted below the sidewalls by providing a groove of 225 mm X 50 mm deep at the bottom of the wall. It may be covered with the RCC slab to withstand the upward water pressure. Provide waterproof plaster using Hydroshield® mortar on the inside of basement wall.

Caulking Pipe Holes :

- Remove the existing mortar around the pipe & make a groove of 25mm X 25mm. in the wall.
- Fill up the groove using Hydroshield® mortar

Joints between RCC Member & Masonry Wall :

- Remove the cement mortar from the joint & provide a groove of 25mm X 25mm.
- Fill up the groove using Hydroshield® mortar.
- The surface may be plastered after the above procedure is completed. For better bonding use our Conbond® polymer based concrete adhesive along with Hydroshield® Powder & cement.

Damp Proof Course :

It is observed that the water by capillary action rises in the ground floor brick masonry walls. This can be stopped by providing waterproof DPC using Hydroshield® mortar at the time of constructing the wall above plinth.

QUANTITY OF HYDROSHIELD® REQUIRED FOR 10 SQ. MTR. OF AN AREA :

Slurry : 7 - 8 Kg. Hydroshield® Powder & 0.20 Ltr. Hydroshield® Liquid

Plaster : 18 Kg. Hydroshield® Powder & 2 Ltr. Hydroshield® Liquid

(Considering consumption of 2 bags of Cement)

IPS : 27 Kg. Hydroshield® Powder & 3 Ltr. Hydroshield® Liquid

(Considering consumption of 3 bags of Cement)

PRECAUTIONS:

Keep out of reach of children, wear suitable protective clothing, gloves, goggles to protect eyes / face / skin. After contact with skin / eye, wash immediately with plenty of clean water and seek medical advice. Proper ventilation should be provided in closed structure.

Note: Whilst the information and/or specification contained here in, are to the best of our knowledge true and accurate, no warranty is given or implied in connection with any recommendation or suggestion made by us, as we do not have any direct control over its application.

OUR OTHER PRODUCTS:

Contech Chemicals - An entity came into existence in 1976. This long journey of excellence has made Contech Chemicals synonymous with quality and trust. We are leading manufacturer of high performance professional grade construction chemicals such as Concrete Plasticizer, Super plasticizer, Retarding Super plasticizer, Concrete Accelerator, Waterproofing Compounds and Coatings, Floor Hardener, Floor Patching Compound, Concrete Adhesive, Tile Adhesive, Tile Grout, Rust Convertor, Anti Corrosive Epoxy Paint, Curing compound, Non-Shrink Grout, Silicon based water repellant, Wall Putty, De-greasing compound for oily floors, Anti efflorescence coating, etc. These chemicals are used in the maintenance and construction of buildings, roads, bridges and irrigation structures.

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