

## RAZON ENGINEERING COMPANY PRIVATE LIMITED

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## **AN ISO 9001-2008 COMPANY**

## **RAPID GROUT RG-117**

Due to honey combining, improper vibration, silt in sand, low pH of gauging water used, incorrect w/c ratio. The impermeability of R.C.C is low. In case of water retaining structure such as water tank, terrace R.C.C., sewerage treatment tank, basement, swimming pools, aqueducts, etc., low impermeability causes water leakages leading to corrosion of steel reinforcements & accelerated concrete deterioration.

It is imperative to correct the impermeability coefficient of this R.C.C. member to stop seepage. This correction can be achieved by either coating the R.C.C. member from positive side of seepage using one of our appropriate coatings or injecting cement slurry using our Rapid Grout.

If plain cement slurry is injected, high water cement ratio is used to achieve reasonable volume of injection. Here water is used as carrier, but water itself fills up large volume of cavities, this water on evaporation opens other capillaries infact defeating the very purpose of injecting cement slurry. Cement is used as plugging medium. Cement content in slurry should be maximum. But at maximum cement content, slurry ceases to flow.

Besides cement in presence of excess water takes longer time to set. In presence of water stream "wash out effect" tends to wash away cement. If the system is water-logged presence of algae does not allow effective cement bonding nullifying the entire injection operation.

Our Rapid Grout completely takes care of all above handicaps. Lower water cement ratio can be used, proportion of 3 kgs cement, 5 ltrs water & 50ml-200ml Rapid Grout gives similar flow characteristics as 1 kgs ement & 5/8 ltrs water. The special composition of Rapid Grout eliminates "wash-out-effect". The high bond features of Rapid grout Slurry ensures higher bonding & grabbing action in face of algae covered substrate. The cement setting is faster even in waterlogged conditions. The effect of Rapid Grout on impermeability co-efficient of the matrix being grouted is enhanced tremendously & hence the plugging effect is instantaneous, the seepage or leakage stops immediately.

An efficient grout must have following features:

- 1. Optimum packing capacity upto 80-90%.
- 2. Easy flowing properties.
- 3. High anchoring and bonding characteristics.
- 4. The grout must be able to facilitate fast agglomeration of cement particles in the presence of plain water stream from opposite direction.
- 5. Slight expansion in case of cementetious grouting to off set cement shrinkage.

Mix cement and water. The water used here is used as carrier & cement is used as plugging medium, or bonding medium to plug effectively. Use minimum possible water, restricting its use to 1.5-2 times the weight of cement. Use Rapid Grout upto 600 ml per bag of cement. Use pressure grouting or gravity grouting following common/usual procedure.

Rapid Grout is a unique product offering all the above advantages. Unlike epoxy or polyurethane grouts, which are expensive, and require expensive equipment and highly skilled operators, our Rapid Grout is mixed with cement, it is economical, does not require skilled personnel and can be grouted with ordinary grouting equipment, at conventional grouting pressure.

Add 500-600 ml of Rapid Grout to 50-80 litres of water, stir thoroughly, slowly add 50 kg cement to this, stirring continuously to ensure homogenous grout, and colloidal solution of uniform consistency. This may be grouted in the usual manner. Rapid grout ensures uniform colloidal solution by electrochemical forces & guarantees uniformity of grouting.

Ensure sufficient grout is kept ready for continuous uninterrupted grouting, till the grout movement ceases completely. Seal grouting hole with Strextra - NSG 110.

**Packing:** Rapid Grout is available in 50 kg and 200 kg barrels.

Rapid	Cement	Water	Viscosity	Shrinkage	Setting	Pressure	Water	Colloidal
Grout					time	grouting	Proofing	solution
								quality
Nil	10kgs	50ltr	600cps	Yes	120min	Gravity grout or	Poor	Poor
						2kgs/sq.cm		
						pressure grout.		
100ml	10kgs	25ltr	200cps	Nil	120min	Gravity grout or	Excellent	Excellent
to					or lesser	2kgs/sq.cm		
150ml					if more	pressure grout		
					R.G. is			
					used			

NO	PRODUCT – DATA		
1	Colour	Dark honey coloured.	
2	Specific gravity	1.2	
3	PH	7-8	
4	Dosage	200ml to 600 ml per 50 kgs cement	
5	Packing	35 kgs, 50 kgs, 200 kgs	
6	Storage/ life	1-2 years to be stored in cool dry place	
7	Toxicity	Nil	
8	Corrosion	Nil	
9	Consistency	Free flowing liquid	
10	Cement Compatibility	Excellent with OPC or PPC	
11	Typical Applications	For increasing impermeability coefficient of any	
		RCC member tunnels, aqueducts, terrace, dams,	
		cannals, basements, swimming pools etc.	

## **OTHER PRODUCTS:**

Recrystalline Waterproof Powder Polymer Water proofing compounds

White Water Proofer Epoxy waterproofing compounds

Rubberised Instant Waterproofer Poly urethane Waterproofing compounds

It is strongly recommended that site trials be conducted using site conditions and available raw materials to evaluate the product. Since site materials and conditions are beyond our control and since above suggestions and recommendations are based on our site trials and laboratory product evaluation & trials, and since methods of use at site are beyond our control. Hence, no guarantee can either be implied or enforceable