



RAZON ENGINEERING COMPANY PRIVATE LIMITED

660, Taboot Street, P.O.Box No.49, PUNE-411001 [India] Ph:26130791, Telefax: 26130017

E-mail: razonengg@gmail.com, Website: www.razonengg.com



AN ISO 9001-2015 COMPANY SUPER IWP (S.I.W.P)

Cement requires theoretically around 40% moisture for its complete hydration. Generally much higher water cement ratio is used. Excess water has to be used for workability and mortar plasticity. This excess water has deleterious effect on strength impermeability and concrete life.. Bleeding and segregation effect concrete strength adversely. Super IWP increases workability at reduced water cement ratio hence suppressing bleeding and segregation and its adverse effects. Super IWP increases workability at reduced water cement ratio, hence suppressing all negative effects of high water cement ratio.

Further, green concrete is allowed to strengthen for initial period of 12-24 hours whereafter it is water cured. In this initial period skin layer of concrete is rapidly depleted of its moisture, this rapid moisture loss leads to network of fine and continuous surface cracks. Subsequent daily cyclic rise and fall of temperature causes further crack formation and propagation, which extend and join other crevices for optimum stress release. These crevices extend up to other crevices or voids where release of stress stabilizes crack progress. This leads to continuous network of crevices and cavities, which reduces impermeability and strength of concrete. This concrete will exhibit leakage and will not be waterproof. It will exhibit lower strength which manifest in lower life of concrete.

SUPER IWP ensures that loss of moisture in the surface region or skin portion is restricted in the initial critical period of 12-24 hours, hence suppressing crevices formation-development-and propagation. As the hydration of cement progresses, its strength develops. After attainment of sufficient strength chances of crevices formation is eliminated. Due to absence of cracks and inter connected voids, the concrete treated with SUPER IWP will exhibit far greater impermeability and hence will be completely waterproof. Also this concrete will exhibit higher strength, greater life
Due to higher strength achievable with SUPER IWP, it is possible to reduce cement content in concrete, hence improving concreting economy.

SUPER IWP is honey coloured liquid which enhances concrete quality, improves cohesiveness, workability, and imparts high wetting characteristics hence eliminating segregation completely in thin & high lintels for basements & swimming pools, water tanks, terrace slabs, sunk slabs etc. SUPER IWP improves strength, improves concrete life.

Mix cement and aggregates as usual. Add water keeping back five litres of water. To this water mix 100 – 200 ml SUPER IWP and add it to the concrete mortar. Mix thoroughly. Dosage of 100 ml- 200 ml is most effective for high water reduction, for high workability, high strength, and high impermeability

No	S.I.W.P per bag cement	W/C	Cement	Slump	Impermeability Co-efficient	28 days strength
1	Nil	0.55	17%	15 – 25 mm	1.1×10^{-7}	20 N/mm ²
2	100	0.45	15%	80 – 100 mm	4.5×10^{-12}	31 N/mm ²

SUPER IWP can be used for casting all kinds of concrete. It can be used for beams, columns, slabs, swimming pools, basements, aqueducts, storage bunkers. It is also found most successful for top terrace waterproofing and ghotai works.

Razon Super IWP at dosage of 100-200 ml alongwith 800-1000 ml of Polymeric WP-257 is used for cementitious mortars based in m-sand, crushed sand for very good workability, water-reduction, waterproofing, homogeneity, and good bonding to substrate. Razon SIWP & Razon PWP-257 are compatible in cementitious mortars prepared using river sand, m-sand, crushed sand, washed sand, etc.

NO	PRODUCT – DATA	
1	Colour	Dark, Amber coloured
2	Specific gravity	1.25
3	pH	7 – 8
4	Dosage	150 – 200 or more if required
5	Packing	35 ltr, 50 ltr, 200 ltr
6	Storage/ life	1 yrs if stored in cool dry place away from sunlight.
7	Sulphates/ chlorides	NIL
8	Cement compatibility	OPC, PPC, GGBS.
9	Test Report	Available IS -2645

OTHER PRODUCTS

Coatings: Rubberised Instant Waterproof Coating • White Water Proofer • Polyurethane Coating - GHF 111 • Triple Layer Polyurethane Waterproof/ Thermal Coating • Primer Coat PU SG 104 • Top Coat PU ALK – 104 • Silver Coat PU 104 • Clear PU Lacquer (gloss) • Clear PU Lacquer (matt) • Coal Tar Epoxy CTE – 110 • Coal Tar Epoxy EP-10 • Epoxy Coating EC-111 • Primer Epoxy Coating PR 111 • Silver Coating SC 203 • Epoxy Floor Coating G-78 AND M-86 • Damp Proofer • Bitumenous Japan Paint 151 • Supreme Waterproof Cement Paint ARCem –101 • Premium Waterproof Cement Paint ARCem –119 • Royal Waterproof Cement Paint ARCem 1100 • Green Chromo Oxide Epoxy Primer •

Sealants : Crack Seal • Rubberised Sealer • Instaset 600 • Instaset 2000 • Instaset 2000S

Admixture: SPRMC 808 S11 B • Super Plasticizer –IWSP (M) – 101 • Super Plasticizer –IWSP (N) – 103 • Accelerator – 2080 • Integral Water Proofer • IWSP –102 • I.W.P. Powder • Intrair (A.E.A) 120N • Master Plaster MP CS 101 • Block Maker BM-10 • Rapid Grout RG –117 • Tile Master TM – 1 • Anchorex 428 • Floor Hardner • Hycrete RJ – 608 • Brick Master • Super Paver • Pipe Master • Toughcrete P109 • Gunning Admixture GS-942 • Non Shrink Grout Admixture NSG A-11

Other Products : Tile Fix # 1 • Tile Fix # 1A • Tile Fix SP # 1 • Strextra NSG 110 •

Strextra - NSG 2024 • Easy Grout • Water Repellent WBWR – 2023 •

Water Repellent SBWR – 5000 • Shutter Coat for Wood & Metal •

Concrete Cure Coating – 111 • Concrete Cure Coating – 103 •

P.A. Bound • P.A. Mortar TH – 4 • PA. Mortar EF – 1 • P.A. Mortar

Slurry • Marble Fix • Floor Repair Mortar • Insta Plugging Mortar •

Pipe Joint Sealer • Tile Joint Sealer [Colour] – Red, White, Black,

Brown, Ivory, Green, Grey, Pink. • Metal Protect • RZ – Polymer

ED Mortar • Special Grouting System • Anti Hack Paint (XRG) •

Tuffar • ADMGP – 1 • P A – Resin 651XXX • Hak Safe AL 111 •

Paint Remover PR – 128 • COLGROUT Admixture CG – 101S •

• Ready Plaster • Best Plaster Putty



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