



AQUA BOND REPAIR (ABR)

(Styrene Butadiene Rubber Based Latex)

Aqua Bond Repair(ABR) is styrene butadiene rubber based milky white material. It is a multi-functional material. All kinds of cement concrete made with ABR have excellent compressive and tensile strength. ABR modified cement plaster has smooth finish and the concrete has excellent bonding and waterproofing properties.

WHERE TO USE: For water proofing terrace, water tanks. As a bonding coat for old and new construction. As floor repair mortar for chemical plants, engineering units, railway platforms etc. For repairing damaged columns and beams of structures. As passivator coat for protecting steel from corrosion.

HOW TO USE: Clean reinforcement with Aqua Rust Kleen by brush & scrub vigorously with a wire brush. Clean with a jet of water. Remove loose particles, dust and neutralize the surface. Apply passivator coat: 1 part cement, 1 part Aqua Bond Repair. Coat on cleaned reinforcement. Apply bond coat: 1 part cement, 1 part of sand, 1 part of Aqua Bond Repair on the entire surface which is to receive subsequent polymer modified mortar. Prepare polymer modified mortar: 50kg cement, 125kg zone II sand, 10 liters of water. Apply this on tacky bond coat of approx. 12.5mm of thickness per coat. Finish surface as desired using sponge, etc.

COVERAGE: Depends on usage.

STORAGE: Store at cool and dry place.

ADVANTAGES:

- ABR modified cement slurry has excellent adhesion and thus it joins new construction to old construction.
- It imparts flexibility to cement and thus plasters made out of ABR are crack free.
- It reduces the water demand of cement. Concrete made with ABR has excellent compressive and tensile strength.
- ABR modified cement concrete is denser and water tight.
- It is non-flammable and non-toxic and thus it is eco friendly.



- ABR modified mortar has excellent chemical resistance.
- ABR modified mortar has excellent wear and tear resistance.

PRECAUTION: ABR tends to form a skin if exposed to atmosphere conditions. So material should be tightly closed. Use the ABR mixed mortar within 25 minutes. Provide mortar thickness of 10-15 mm. Do not add more water then recommended. Use rubber gloves for pressing ABR mortar

| SHELF LIFE: | PACKAGING: |
|---------------------------------------|--|
| 2 years from the date of manufacture. | 150ml bottle, 500ml, 1 & 5Ltr can, 10 & 20Ltr drums. |

| PROPERTIES | PRODUCT ATTRIBUTES |
|-----------------------|---|
| Base | Styrene butadiene rubber |
| Colour & nature | Milky white liquid |
| Freeze thaw stability | Whithstands 5 cycle. However it is advised to store at 27°C |
| Solids Content | 40% |
| Anti Oxidant | Yes |
| Bactericide | Yes |
| рН | 8 - 8.5 |
| Stabilization | Non - ionic |
| Anti foam | Yes |





SUPER BOND REPAIR (SBR)™

Acrylic Polymer (Latex Power)

Super Bond Repair(SBR) is white a liquid acrylic polymer for waterproof coating, bonding agent, repair-mass-in-fill and non-shrink polymer cement grout system. It is a multipurpose bonding agent.

WHERE TO USE: It is useful for waterproofing. It is useful in bonding on old/construction joints. It is useful for patching motor for concrete. It acts as a protective layer against chemical attacks with cement. It is used as an injection into hard strata.

HOW TO USE:

(A) SURFACE PREPARATION: Clean and remove all debris, oil, grease and other surface contaminants, then thoroughly dampen the prepared surface with water preferably overnight.

(B) APPLICATION:

| APPLICATION | PROPORTION | YIELD |
|--|--|---------------------------------|
| Waterproofing / protective coating passivator coat | 2kg fresh OPC, 1ltr SBR, 0.4 ltr water | 4 - 6 sq.m/ ltr of SBR |
| Boat coat | 3kg OPC, 3 kg zone all sand, 1ltr SBR, 0.6 ltr water | 5 - 7 sq.m/ltr of SBR |
| Repair mortar | 25kg fresh OPC cement, 62kg zone II sand, 3ltr SBR, water 3-5ltr | 0.04M ³ |
| Injection | 2 part fresh OPC, 1 part SBR | 1.5ltr |
| Screed | 4.5kg fresh OPC, 7.5 zone II sand 1ltr, SBR, 0.6ltr water | 1.1-1.4sq.m at 5mm thickness |

ADVANTAGES:

- Excellent bonding properties.
- Very high waterproofing property.
- Resistant to abrasion & chemical attacks, static cracks.
- Resilient hardened film of mortar, which allows concrete to breath.
- Unaffected by UV rays and hence durable.
- Eco-friendly, non-toxic and non-flammable.



COVERAGE: Depends on usage.

STORAGE: Store at cool and dry place.

PRECAUTION: Use the Super Bond Repair (SBR) mixed mortar within 20-25 minutes. Do not add more water

than recommended.

| SHELF LIFE: | PACKAGING: |
|---------------------------------------|--|
| 1 years from the date of manufacture. | 150ml bottle, 500ml, 1 & 5Ltr can, 10 & 20Ltr drums. |

| PROPERTIES | RESULT |
|---|----------------------------------|
| Appearance | Milky white liquid |
| Specific gravity | 1.03 ± 0.01 Kg/Ltr |
| Viscosity (B4 cup) | 23 sec |
| Solid content | 26 ± 1% |
| Bond strenght | Double than normal cement slurry |
| Coverage (Waterproofing slutrry coating) | 35 to 4aq.ft / Ltr for 2 coats |





$extbf{RUST}$ $extbf{KLEEN}^{ imps}$

(Rust Cleaning Agent)

RUST KLEEN is a water based rust release agent suitable for pre-treatment of metal iron before applying any coating. On application of Rust Kleen, rusted surface gets clean easily and safely. It can be applied by brush or cotton cloth.

WHERE TO USE: Rust Kleen is suitable for removing rust from iron surface from anywhere in construction.

HOW TO USE: Shake well the container before opening. Apply it over the rusted iron by brush liberally. Allow it to react for 5-10 minutes. Rub the surface with wire brush. It is necessary that a second coat be applied in the same way. After wire brushing, clean the surface with damp cloth and water, before applying any coat.



Apply RUSTCLEAN by brush and allow it to react for 5 to 10 minutes.



Scrub vigorously with a wire brush.



Clean the surface with jet of water, to ensure surface becomes neutral.



Apply any kind of coating over pretreated/ cleaned iron body.

ADVANTAGES:

- Easily applicable by brush.
- Does not contain flammable/inflammable solution.
- Greatly reduces man power/work time.
- Economical.

COVERAGE: Depends on usage and surface's area and condition.

STORAGE: Store in a normal & dry condition with sealed pack.



PRECAUTION: Recommend use of hand gloves, goggles and masks. In case of eye or skin contaminations wash well with soap and cold water and seek medical advice if necessary. The brushes and other tools should be cleaned with soap water.

| SHELF LIFE: | PACKAGING: |
|---|----------------|
| 12 months from the date of manufacture. | 1 & 5Ltr Cans. |







AQUA INSTA PLUG™

(Instant Plugging Mortar)

Aqua Insta Plug is a cementitious dry powder with special selected additives with exceptionally good fast setting and strength developing characteristics. It needs only addition of water to produce ultra rapid set plugging mortar.

WHERE TO USE: Can be effectively used in number of situations where very quick setting is required. It is used for plugging running leaks from concrete structure, basement, cellars, bricks, tunnels and joints of masonry of water storage reservoirs. For patching, caulking, joint filling, pointing and waterproofing of concrete segments, sewage systems, pipes, well foundations and mines.

HOW TO USE:

(A) PREPARATION: Area to be plugged should be cut back up to 15mm & given good mechanical key. Do not feather edge. Surfaces should be brushed cleaned to remove loose material, dust and grease contaminations by de-greasing. All surfaces must be damped down with clean water prior the application of Aqua Insta Plug.

- **(B) MIXING:** Aqua Insta Plug has to be used after mixing with gauge water depending upon its application. As a guide line the water powder ratio to be mixed as explained below:-
- For anchoring plugging (Pourable consistency): 2 pbw of Aqua Insta Plug and 1 pbw of water.
- For filling cracks and holes to prevent water peculations (Filling consistency): 3 pbw of Aqua Insta Plug and 1 pbw of water.
- For casting machinery foundation (Flowing consistency): 3 pbw of Aqua Insta Plug and 2 pbw of water.

(C) APPLICATION: It has to be quickly used for mixing because it starts hardening within few minutes. Add water in one go. Do not re-temper. Mix only as much material as required for the immediate application.

ADVANTAGES:

- Easy to use: Needs only addition of particular amount of water which has to be added and mixed according to its application.
- Fast setting: This product sets fast to give immediate relief from leaks.
- Durable: Low porosity of the patch ensures that the performance of the repair is extra strong. It forms a dense hard durable mass upon setting.
- Chloride free: The product is free from chloride, sulphates and nitrates; hence no risk to RCC.
- Compatibility: Being cementitious, it is compatible for use in all concrete structures, stones, clay, bricks, etc. It shows least shrinkage.
- Stable: Similar thermal capability as concrete.



CURING: Standard concrete procedures should be followed.

COVERAGE: Depends on usage and changes according to the types of surfaces.

STORAGE: Store in cool & dry place with original sealed pack.

PRECAUTION: It is non toxic non flammable, avoid contact with skin. If it splashes on the eyes, wash with plenty of water and seek medical advice.

| SHELF LIFE: | PACKAGING: |
|---|---|
| 12 months from the date of manufacture. | Available in 1kg box, 20 boxes in a carton. |

| PROPERTIES | RESULT |
|-------------------------|--|
| Appearance | Free flowing powder |
| Colour | Grey |
| Application temperature | 5 - 45°C |
| Initital setting time | 30 - 60 sec. depending on temprerature mixed moprtar |
| Bulk density | 1.10 - 1.30 kg/Ltr |





Aqua Krack-X Shrinkfree is composed of best quality polymer, properly selected fillers & additives. It is fast drying flexible, very light weight, soft putty like material used for filling cracks in plastered surfaces because it is 100% shrink free, water resistant after drying and bonds strongly to cementitious substrates.

WHERE TO USE: Internal & external surface cracks on plaster upto 10mm width.

HOW TO USE:

(A) SURFACE PREPARATION: Surface must be free from dust, oil, grease, and loose particles, etc. Moisten the surface before applying Aqua Krack-X Shrinkfree. Fine hairline cracks must be widened up to 1mm minimum and then filled. For filling Aqua Krack-X Shrinkfree on the internal surfaces, existing POP or painter's putty must be removed till plaster surface is exposed.

(B) APPLICATION: Press Aqua Krack-X Shrinkfree firmly into the crack 'one time only' with a spatula or putty knife and level the surface. Handball application can also be used as per the convenience. Care must be taken to avoid formation of cavities or bubbles during application. Allow it to dry in ambient conditions for 5-6 hrs before painting. For best results, 7 days air curing is advised. Further POP or painters putty application can be taken up once it is fully dry.

(C) CLEANING: Clean tools and equipments by soap & water. Wash hands with soap and warm water.

ADVANTAGES:

- Shrinkage: Non-shrink even after curing, prevents from cohesive and adhesive failure on exposure.
- User friendly: One pack, very soft paste, easily applicable by fingers or putty knife.
- **Application:** Applied as a one time filling (does not require second time application, as required in other acrylic sealants).
- Sanding: No sanding is required.
- Staining: Does not migrate any liquid component into concrete surface thus preventing staining.
- Staining: Does not migrate any liquid component into concrete surface thus preventing staining.
- Non-toxic: It is non-toxic; hence user friendly
- Adhesion: Excellent adhesion to cementitious surface prevents water leakages through cracks.
- Sagging: Non-sag nature helps in filling of vertical and overhead cracks.
- Saving: Saves time, labour and energy.
- Paintability: UV and weather resistance properties increases the life expectancy of the surface.

COVERAGE: 1kg bucket covers approx. 20-25 meter at 5mm depth.

STORAGE: Store in a cool & dry place, away from sunlight.

PRECAUTION:

HEALTH & SAFETY PRECAUTIONS: As with all the chemical products, caution should always be exercised. Protective clothings, such as gloves and goggles, should be worn (see packaging for specific instructions). Treat any contact to the skin or eyes with fresh water immediately. Should any of the products be accidentally swallowed, do not induce vomiting but call for medical assistance immediately. Ensure that the container is available for the medical attendant to examine any



relevant instructions and content details. Reseal all containers after use and ensure that the product is stored as instructed on the safety section of the labeling.

OTHER: Not for cracks in POP or painter's putty. Not recommended for use under the rain. Not meant for structural cracks in concrete, slab, construction joints. Jet or Power washing on walls is not advisable prior to the application. During application below 10°C, drying time will be delayed. Container to be tightly closed after application. If the filler compound becomes too dry, add potable water in the ratio of 1 teaspoon in 250 ml of Aqua Krack-X Shrinkfree.

| SHELF LIFE: | PACKAGING: |
|---|--------------------|
| Shelf life is 12 months from the date of manufacturing. | 500g & 1kg bucket. |

| PROPERTIES | RESULT |
|------------------------------|---|
| Appearance | Smooth & rhick white paste |
| Base | Acrylic specially added fillers |
| Drying time@ 30°C, hrs | 5 - 6 |
| Full curing time@ 30°C, days | 7 |
| Specific gravity | 1.4 +/- 0.02 |
| Shrinkage % | 20 |
| Water resistance | Excellent |
| Coverage | 30 - 35 running materials/ kg for depth of 5mm width of 5mm |





KRACK FILL

(White Base Crack Filler Powder)

Aqua Krack Fill Shrinkfree is composed of best quality polymer, properly selected fillers & additives. It is fast drying flexible, very light weight, soft putty like material used for filling cracks in plastered surfaces because it is 100% shrink free, water resistant after drying and bonds strongly to cementitious substrates.

WHERE TO USE:

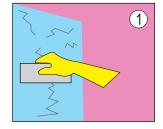
It is an ideal material for filling the static cracks for external and internal walls. It is non-hazardous and thus it can be used for capping works of water tanks and water reservoirs. It can be used to fill small joints and cracks in the toilet. It can be used on external plaster as it is not affected by carbonation and UV rays. It can be used in water-retaining structures as it can withstand water pressure.

HOW TO USE:

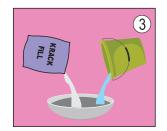
(A) SURFACE PREPARATION: The cracks, which are to be repaired, should be static ones. Clean the surface of oil, grease or any other contaminant. Clear all loose particles completely. Neutralize the surface with adequate cleaning using water. If the cracks are less than 2mm in width, widen them to a width of between 2 to 4mm. Make the cracks into "V" shaped grooves & dampen them but ensure they do not have standing water.

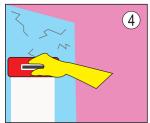
(B) MIXING: KrackFill is a superfine powder. It has to be mixed with water in the ratio of 3.5:1 by volume. Allow the creamy paste formed after the addition of water to stand for 7 to 10 minutes and then remix the paste and use it with the help of a trowel.

(C) APPLICATION: First, clean the cracked walls and make a "V" shaped groove. Sprinkle water on the prepared groove to remove loose particles. Mix waterin the ratio of 3.5:1 by volume with KrackFill and allow the paste to stand for 5-7 minutes. Apply the paste over the cleaned "V" shaped groove and dampen it.











ADVANTAGES:

- It is cement-based material and thus it bonds very well with all kinds of cement civil works.
- It is a do-it-yourself product.
- It does not require skilled labour.
- It has 2 hours of pot life, so the job can be completed comfortably with ease.
- It does not require water curing.
- It does not get affected by UV rays.
- It is not affected by carbonated attacks.

COVERAGE: Depends upon crack size and usage.

STORAGE: Keep KrackFill in a cool, dry place. Protect the material from direct sunlight.

PRECAUTION: Clean the tool s with potable water before the material sets.

| SHELF LIFE: | PACKAGING: |
|--|---|
| For better results use within a year from the date of manufacturing. | 1kg pouch and 20 pouches per master carton. |







SFMC 40 & 70[™]

(Super Fine Micro Concrete)

Super Fine Micro Concrete(SFMC) is a cement based high strength, fast-setting repair mortar for repairing damaged columns, beams and structure. It is self leveled; hence easy to use and economical. It is cement based; hence it has excellent bonding. It requires only on site addition. It is available in 2 grades, 40 & 70.

PROPERTIES: SFMC is a high strength precision repair material. It exhibits the following properties: Increased bond strength. Reduces co-efficient of creep. High tensile and flexural strength.

WHERE TO USE: SFMC is ideal for repairing damaged beams and columns. It is suitable for structural repair and can also be used in canals and bridges.

HOW TO USE:

(A) SURFACE PREPARATION: The structure to be repaired should be free from oil, grease, dust, debris or any foreign particles. The surface should be cleaned mechanically using a brush, sand blasting etc. and finally the loose particles must be cleaned by pressure water jetting or with an air blower. Put shutters as required but not more than 5 feet height at a time.

(B) MIXING: SFMC powder is to be mixed with water in a ratio of 1:0.17. Take the required quantity of water in a cleaned ghamela or bucket and add the powder gradually under continuous stirring till you get a flowing mortar. It is better to do mechanical mixing to have uniformity.

(C) APPLICATION: Gradually pour the water-mixed mortar in the shuttered framework. Start water curing after 12 hours of application. Allow it to cure for 24 hours before de-shuttering the framework. After de-shuttering, clean out the unwetted cured material. SFMC attains strength in 1-3 days and ultimate strength in 28 days.

ADVANTAGES:

- It is cement-based, so it is eco-friendly.
- It is a do-it-yourslef product. It does not require skilled labour.
- It achieves an excellent bond with present concrete.
- It attains strength very quickly.
- It has excellent tensile and flexural strength.

COVERAGE: 1.2m² per 25kg bag at 10mm thickness.

STORAGE: Store in normal & dry condition with sealed pack.

PRECAUTION: Clean the tools with water before the material sets.



| SHELF LIFE: | PACKAGING: |
|--|------------|
| For better results use within one year from the date of manufacturing. | 25kg bag. |

TECHNICAL SPECIFICATIONS: SFMC 40

| PARAMETER | SPECIFICATION |
|----------------------------------|---|
| Physical appearance | Grey powder |
| Base | Cementitious powder modified with chemicals |
| Wet density | Approx. 2.25g/ml |
| Water/powder ratio, by weight | 0.16 |
| Compressive strenght (ASTM C109) | 1 Day = Minimum 10 Mpa 7 Day = Minimum 30 Mpa 28 Day = Minimum 40 Mpa |

| PARAMETER | SPECIFICATION |
|----------------------------------|---|
| Physical appearance | Grey powder |
| Base | Cementitious powder modified with chemicals |
| Wet density | Approx. 2.30g/ml |
| Water/powder ratio, by weight | 0.14 |
| Compressive strenght (ASTM C109) | 1 Day = Minimum 25 Mpa 7 Day = Minimum 45 Mpa 28 Day = Minimum 65 Mpa |