

Ramco Super Bond

Ramco offers two specialized types of bonding variants to meet diverse construction requirements:

- 1. Ramco Super Bond Epoxy
- 2. Ramco Super Bond SBR

Ramco Super Bond - Epoxy

Ramco Super Bond – Epoxy is a resin based bonding agent designed to join old and new concrete surfaces, enabling them to act as a single, cohesive unit. It creates a strong, lasting bond between layers, significantly enhancing the durability and integrity of the structure.

It ensures proper adhesion of new concrete to existing surfaces, a critical factor for the structure's overall performance and strength

Application Areas

Concrete Repair

Bonding new concrete to old concrete

Masonry Repair

Precast Joints

Benefits

Superior Bond Strength

Extended Pot Life

Enhanced tackiness time

Mixing Instructions

Preparation: Mix only the required amount to avoid waste, as unused product cannot be used after its pot life.

Proportion: Combine "Resin – (Part A)" and "Hardener – (Part B)" in a 3:1 ratio by weight in a clean container.

Mixing: Use a low-speed stirrer to mix for 2–3 minutes until the consistency is uniform.



Ramco Super Bond - Epoxy Application Guidelines Apply Ramco Super Bond – Epoxy, with a brush over the prepared surface. Place freshly mixed concrete, grout or repair mortar over the bonding agent immediately. Do not allow the bonding agent to dry or become tack-free before applying fresh material. If it dries, clean the surface and reapply the bonding agent. Apply only a thin layer (0.8-1 mm) of the bonding agent to prevent sagging of material caused by excess thickness. **Ramco Super Bond - Epoxy Technical Parameter** Liquid Appearance Mixing Ratio 1 (Part A): 3 (Part B) Colour Part A - clear liquid / Part B - yellowish liquid Tack free time 15 Minutes Pot Life 20 Minutes Pull-out Strength @ 7 days 5 - 6 N/mm² Flexural Strength @ 7 days 42 - 43 N/mm² Compression Strength @ 7 days 94 - 95 N/mm² **Storage instructions:** Store in a covered, dry and moisture-free place.

Ramco Super Bond - SBR

Ramco Super Bond - SBR is a high-performance specifically designed polymer additive for cementitious systems. When added to cement, it forms a reinforcing polymer network that significantly improves bonding strength, durability and flexibility, ensuring long-term performance.

Key Benefits

Waterproofing: Provides superior water resistance by enhancing waterproofing property of mortar.

Improved Toughness: Increases flexibility and minimises cracking of screed.

Excellent Adhesion: Bonds the mortar effectively to various substrates, including concrete, stone and brick.

Mix Cohesion: Makes the mix cohesive and rich.

Application Areas

Beam and Column Joints: Ideal for bonding old and new concrete.

Micro Concrete Applications: Enhances the bonding between old surface and micro concrete.

Repair Mortar Applications: Improves bonding and performance in repair mortars.



Usage Guidelines of Ramco Super Bond SBR

1. Bonding Agent

Mix Ratio: 1 part Ramco Super Bond - SBR: 1 part cement

Steps:

- 1. **Surface Preparation**: Clean the surface to remove dust, grease and loose material.
- 2. **Bonding Coat**: Mix Ramco Super Bond SBR and cement (1:1) and apply as a bonding agent by brush.

2. Waterproofing Applications

Mix Ratio: 1 part Ramco Super Bond - SBR: 2 part cement: 0.5 part water

Steps:

- 1. **Surface Preparation:** Clean and prepare the surface thoroughly.
- 2. **Inspect and Repair**: Identify and rectify cracks or other damages.
- 3. **First Coat Application**: Apply a horizontal coat (0.8–1 mm thick).
- 4. **Drying Time**: Allow adequate drying (6–8 hours).
- 5. **Second Coat Application**: Apply a vertical coat (0.8–1 mm thick).
- 6. **Protective Screed**: Cement Sand admixed with Ramco Super Shield IWP as protective layer is recommended on top of waterproof coating, after 2-3 days of air curing of 2nd coat of application.

3. Repair Mortar

Mix Ratio: 1 Part Ramco Super Bond - SBR : 3 Parts of cement mortar (e.g. 330 ml of Ramco Super Bond- SBR with 1 Kg of cement mortar)

Steps:

- 1. **Mix Ramco Super Bond SBR** and cement mortar to achieve a consistent mortar.
- 2. Apply to damaged areas for effective restoration and durability.



Ramco Super Bond - SBR

Technical Parameters

Appearance	Liquid		
Colour	White		
Tack Free Time	35 min		
Mixing Ratio	Waterproofing Application	Bonding agent	Repair Mortar (Cement : Sand)
	1:2:4 (Water:SBR:Cement)	1 : 1 (SBR : Cement)	For 1: 3-2.5% of cement For 1: 4-5% of cement For 1: 5-10% of cement
Coverage	5 to 6 sq. ft. / litre of slurry in two coats	7 to 8 sq. ft. in two coats	As per required thickness
Compression Strength			Increased by 25% after addition of Superbond SBR
Pot Life	60 min		
Pull-out Strength	> 2.5 MPa @ 28 days		
Water Penetration for Waterproof Application	Nil @ 5 Bar pressure		
Elasticity	> 50%		

Mix Ratio:

1. Waterproof Application	1 Part Ramco Super Bond SBR: 2 Part Cement: 0.5 Part Water	
2. Repair Mortar	1 Part Ramco Super Bond SBR: 3 Part Cement mortar	
3. Bonding Agent Application	1 Part Ramco Super Bond SBR: 1 Part Cement	

Storage instructions: Store in a covered, dry and moisture-free place.



Right Products for Right Applications



