

TECHNICAL DATASHEET

ASCOBOND AR 470

Multi Purpose Acrylic Bonding Agent and Additive
for Repair and Waterproofing



PRODUCT INTRODUCTION

ASCOBOND AR 470 is an extremely versatile liquid bonding agent which is used for cement mortar patching and resurfacing. It increases the compressive, tensile and flexural strength of mortars and reduces the water/ cement ratio. ASCOBOND AR 470 can be used on all exterior and interior surfaces.

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KEY FEATURES

1. Improves the flexural strength, bond strength and impact resistance of mortars and concrete.
2. Minimizes cracks in concrete, stucco and plaster when used as an admixture.
3. Eliminates the need for separate air entraining agents.
4. Highly versatile & can be used easily for a variety of applications.
5. Greatly improves adhesion to substrate.
6. Waterproofing Cementitious systems.
7. Reduces shrinkage cracking.

RECOMMENDED APPLICATIONS

1. Suitable for use on many substrates including concrete, brick, masonry, terrazzo, wood, metal etc.
2. Waterproofing: Balconies, Wet areas, Basements, Swimming pools, Potable water tanks etc.
3. Mortar Patching: Use for filling cracks, floor underlayment to level floors prior to tiling, precast building panels and beams, pavement and bridge deck repairs.
4. Bonding Agent: Use for concrete repairing, excellent bonding with plaster, stucco, cement and slurry coats.
5. Admixture: In Cementitious systems, Improves the durability, water proofing and abrasion resistance properties of mortars. Also use for cement base plaster and stucco mixes and as a base coat to reduce cracking and improve curing.

Complies to BS 6318 , IS 101 ,IS 2645 and ASTM D 2370

TECHNICAL PROPERTIES

Form	Modified Acrylic Latex
Color	Milky White viscous liquid
pH	8 - 9
Specific Gravity	1.01 ± 0.02
Solid Content	> 45 %
Bond Strength	≥ 5.50 N/mm ²
Water Resistance	Up to 3 bar pressure

APPLICATION METHODS:

1. Surface Preparation

All surfaces must be clean and structurally sound. Oil and grease must be removed. For best results the surface of the concrete should be mechanically scarified, although other methods including sand-blasting may be employed.

2. Priming

Use a mix consisting of 2 parts OPC mixed with 1 part ASCOBOND AR 470 gauging liquid (2 parts ASCOBOND AR 470 with 1 part water) by volume. Mix into a smooth paste. This primer is then brushed onto the prepared surface, after ensuring there is no free-standing water, using a stiff brush. It is essential that the topping is applied whilst the priming coat is still tacky. If it is allowed to dry out then the primer must be removed and surface re-primed using the same procedure.

Coverage Priming Coat: 2.5 – 3.5 m² per liter.

3. General Purpose Mortar/Screed

For the majority of applications the following mortar can be used as a render or screed after the surface has been primed as previously described. Thickness is depend up on application but 12-15 mm is normal. On vertical surfaces this is built up in two application, normally time between applications is 6 hours but this is depend up on temperature. Where more than one coat is applied ensure that the intermediate coats are hatched to provide a mechanical key. If the surface dries out completely then the surface should be re-primed.

4. Internal and External Waterproof Renders

Surface preparation is as previously described. Two priming coats should be applied ideally at right angles to one another. The second coat to be applied immediately after the first coat has dried, approx 30

minutes. Thickness of each sealing coat should not exceed 1.5 mm or crazing may occur. Allow the two priming coats to dry out completely for a minimum of 48 hours after which time the surface is again primed and the general purpose mortar applied while the primer is still tacky. Minimum thickness 12-15 mm.

5. Tile Fixing

For Tile fixing mortar, the addition of ASCOBOND AR 470 will increase the flexibility and improve the cohesive and adhesive properties of cementitious tile mortars. When using a thick-bed tiling method, mix the mortar adhesive using a solution of one part ASCOBOND AR 470 to five parts water. With thin-bed tiling methods a solution of 1:3 is recommended.

6. Cement Based Paints

For cement based paints, the addition of ASCOBOND AR 470 will increase flexibility and resistance to moisture, saline encrustation and dirt. The resultant mixture will promote greater adhesive capabilities, improve dispersion and aid brush ability. Mix the paints using a solution of one part ASCOBOND AR 470 to 3-5 parts water.

7. Curing

Curing is essential for all Cementitious products to prevent possible shrinkage cracks and ensure the performance characteristics of the product are achieved.

8. Precautions while in use:

- I. Use all the contents of container in one go otherwise material starts to become hard in contact with air.
- II. For best results mix the contents thoroughly covering bottom of the container before and during application.

1. Health and Safety Guidelines

- i. Use personal protective equipment (PPE) to use ASCOBOND AR 470 for storage and application
- ii. If come in contact with eyes, immediately wash

eyes with plenty of water and seek medical advice.

- iii. Use of safety goggles, nose mask and hand gloves are recommended to protect eyes, skin and mouth while in use. (Material Safety Data Sheets are available through our company's representative or from our ASCOLITE's website)

9. Packaging

Available in 1, 5, 20, 50 & 200 Liter packing in jerry can or bucket with sealed cap.

1 Shelf Life

- i. 18 months from the date of production if stored in original, unopened packaging and in places protected from moisture, sun exposure and frost.

10. MIX DESIGN

Dry blend the sand, cement and aggregates together in the mixer in accordance with the mix design guidelines

APPLICATION	OPC (Kg)	SAND (Kg) ZONE 2	ASCOBOND AR 470 (L)	POTABLE WATER (L)
Bonding Slurry	50	00	10	Until a desired consistency is achieved
Waterproofing Slurry	50	00	20	Until a desired consistency is achieved
Repair Mortar 5-30 MM Thick	50	125	10	Until a desired consistency is achieved
Plaster & Screeds 5-12 MM Thick	50	150	9	Until a desired consistency is achieved
Tile Fixing: Thick Bed Thin Bed	50	100	3	Until a desired consistency is achieved
	50	100	5	