BONDIT™
Construction Chemicals
(An ISO 9001-2015 Company)
A Bond to Build

BONDIT COAT WB 109

(Elastomeric, solvent-free protective, waterproofing coating with antibacterial and antifungal properties)

PRODUCT DESCRIPTION

Bondit Coat WB 109 is a Two-Component system obtained in the process of mixing Component-A (White Liquid containing high-performance emulsions and specially selected modifiers) and Component-B (Blue Liquid containing Synthetic Cross-Linkable Polymers and modifiers) in 1:1 ratio. Bondit Coat WB 109 upon curing forms a tough, flexible and durable coating with antibacterial and antifungal properties.

FEATURES & BENEFITS

- Excellent resistance to bacterial and fungal growth.
- Easy to apply (brush or roller applied),
- High Elasticity-Will bridge Drying Shrinkage & Hair-Line Cracks,
- Elastomeric- high crack bridging capability,
- Excellent adhesion to most of the substrates,
- Excellent Alkali and UV Resistance,
- Highly Resistant to Carbon Dioxide and Chloride Ions,
- Excellent resistance to dirt picks up,
- Suitable for contact with drinking water – allows for safe waterproofing of reservoirs with drinking water,
- Solvent-Free, Non-Toxic & Eco-Friendly,
- Meets National & International Standards.

AREA OF APPLICATION

- Interior and exterior for horizontal and vertical applications,
- Potable water tanks as a coating / lining material,
- To protect concrete from water, carbonation and salts,
- Over new or old concrete, concrete block, plaster, cement render, asbestos board & other surfaces requiring waterproofing,
- Waterproofing of old as well as new flat / slope concrete roof/ terrace/ podium,
- Refurbishment of old concrete roof like brick bat coba, concrete screed/plaster, old acrylic coating,
- Waterproofing / protective coating of asbestos sheet roof.

APPLICATION INSTRUCTIONS

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Sai Prithvi Arcade,
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WATERPROOFING

Surface preparation

- All damaged, defective, deteriorated or hollow sounding areas must be removed and made good before proceeding.
- Chase out all holes and voids and fill with appropriate Mortar from Bondit to provide a smooth and level surface; mortar joints should be flush pointed. Dusty substrates must be grinded and dedusted.
- The substrate must be clean and free from all traces of surface laitance and contamination such as dust, dirt, waxes, oils, bitumen, old adhesives, paint, grease, weak cement screeds and renders, shutter release and curing agents, sealing compounds, etc. by wire brushing and pressure washing.
- Cut back any protrusions. Organic or fungal growth must be removed using an effective fungicide. The substrate must have a moisture content of 5% or less before waterproofing is commenced.

Cracks

- Thorough inspection shall be done to locate / identify any shrinkage cracks. All major shrinkage cracks, if any, shall be filled with polymer-based crack filling ready to use paste form crack filling material up to 5 mm wide cracks and wider cracks need to be filled with polymer modified mortar.
- Cracks should be cut to V-Shape and filled with appropriate polymer modified mortar.
- Chase out all holes and voids and fill with appropriate polymer modified mortar to provide a smooth and level surface; mortar joints should be flush pointed.

Priming

Bondit Coat WB 109 shall be diluted with 20% water and applied as primer coat on the concrete surface to seal the pores and stabilize the surface. The primer also functions as an adhesion promoter for the top coats.

Mixing

1. Bondit Coat WB 109 can be mixed with a mechanical mixer with a high shear mixer or a suitable drum mixer that creates a forced action mixing.
2. Use slow speed an electric drill fitted with a spiral paddle (approx.400 rpm)
3. Maintain the mixing ratio as given,
4. Place Part-A (White Liquid), start mixer while stirring with a mixing paddle attached to a drill, slowly add the Part-B (Blue Liquid).
5. Mix for 3 - 5 minutes to ensure a uniform lump free consistency,
6. Part-A (White Liquid) Part-B (Blue Liquid Component) should be stirred/shaken well for 30 sec prior to use.

How to apply

- After the application primer coat allow it to reach touch dry for 2- 3 hours,
- Stir Bondit Coat WB 109 to a homogeneous smooth consistency and apply it horizontally with soft nylon brush, roller or squeeze to thickness of 500-600 microns in single coat,

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- Allow it to dry for approx. 4-5 hours. When the applied coat becomes sufficiently dry (no foot print observed) apply second coat vertically.

  For superior performance **Bondit Epoxykote FG** can be used as an alternative with excellent durability, mechanical toughness and suitable for potable water as certified by CFTRI.

Clean Up

Wash all tools and equipment with fresh, clean water immediately after use. The residues of Bondit Coat WB 109 can only be removed mechanically.

TECHNICAL DATA

Parameters	Test Method	Typical Values
Appearance of dry film		Aqua blue
Specific gravity		1.30 ± 0.05
Drying time @30°C, RH 65%		2 HOURS
Solid %		≥ 55
%Elongation (14 days)	ASTM D412	≥ 150%
Tensile Strength, MPa (14 days)	ASTM D412	≥ 0.75 N/mm^2
Hardness Shore A	ASTM D2240	≥ 40
QAV Resistance, 1000 hrs	ASTM G 154	No crack/colour change
Crack Bridging	EN 1062	2 mm (no crack)
Full cure @30°C, 60% RH		14 days
Water Vapour Permeability	ASTM D1653	13
Water penetration @5 bar	DIN 1048 PART 5	NIL
Fire Resistance	EN ISO 11925-2	Passes test
Dirt Pick up Resistance	ASTM D 3719	Passes test

Antibacterial Activity

Inhibition Zone (mm)			
Bacterial Zone Identification	**Applied Conc. For antibacterial growth (mg/mL)**	**Pseudomonas aeruginosa**	**Staphylococcus aureus**
Type a	5	No zone of inhibition	No zone of inhibition
Type b	10	No zone of inhibition	No zone of inhibition
Type d	25	No zone of inhibition	No zone of inhibition
Type e	50	No zone of inhibition	No zone of inhibition
Ref. Std.-c	Ref. Standard[$]	14.2 ± 0.1	21 ± 0.2

$- Applied concentration for antibacterial growth on reference standard adopted for microbial Amoxicillin is 10mg/ml

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Antifungal Activity

Inhibition Zone (mm)		
Fungal Zone Identification	**Applied Conc. For antifungal growth (mg/mL)**	**Candida albicans**
Type a	5	No zone of inhibition
Type b	10	No zone of inhibition
Type d	25	No zone of inhibition
Type e	50	No zone of inhibition
Ref. Std.-c	Ref. Standard$^{\$}$	18.1 ± 0.2
$- **Applied concentration for antifungal growth on reference standard adopted for microbial Gentamycin is 10 mg/ml**		

PRECAUTIONS

- Reinforcement rods and other sharp materials should not be dragged over the Bondit Coat WB 109 membrane, as this can puncture the same,
- Bondit Coat WB 109 shall always be used without dilution,
- Do not apply coating thickness more than 600 microns in one go. For higher coating thickness apply multiple coats,
- There should not be any rain during and after application of final coating for at least 6-8 hours,
- 24 Hours Pond test shall be carried out after 72 hours of final coating application,

PACKING SIZE

25 kg, 50 kg

SHELF LIFE & STORAGE

Shelf life: 6 months. Should be stored in clear and dry conditions in an unopened container at ambient temperature.

HEALTH & SAFETY

- Use protective clothing, goggles and respiratory mask.
- If any spillage into eyes, wash with plenty of water immediately and if irritation persists, seek medical treatment. Keep it away from children.
- The material should be applied under good ventilation in order to avoid any vapour inhalation.

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