AQUAPOXY

Water-Based Epoxy Coating for Dampness Prevention

ASTRAL TRUBUILD™

TECHNICAL DATA SHEET VER NO. N.1

Trubuild Aquapoxy is a high performance, two-component epoxy resin based waterproofing compound. Part A consists of epoxy resin and Part B consists of curing agent. After mixing both the parts, it can be thinned down with water. It has good chemical resistance, adhesion, hardness, toughness and mechanical strength.

One of the major advantages of Trubuild Aquapoxy over solvent-based epoxy is that it can be applied on a damp surface also. It is non-toxic, hence eco-friendly.

FEATURES & ADVANTAGES

EXCELLENT RESISTANCE TO EFFLORESCENCE

- Excellent vapour barrier
- Water dilutable
- Excellent porosity sealer
- Economical
- Non-toxic, hence eco-friendly
- Easy cleaning
- Anti-fungal & microbial properties
- Odourless
- Can be applied on damp surface
- Paintable

EXCELLENT RESISTANCE TO WATER INGRESS

- Can exhibit positive water pressure up to 10 bar
- Can exhibit negative water pressure up to 0.5-1 bar
- When mixed with OPC white cement, cracks can be filled
- Can be used for priming concrete for PU coatings
- Can also be used on stone, tiles & asbestos sheet etc

COMPATIBLE FOR MULTIPLE SURFACES

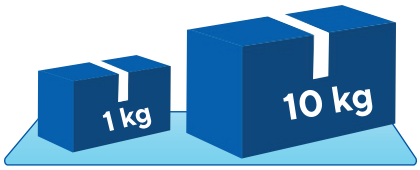
CFTRI CERTIFIED

AREAS OF APPLICATION




• Underground/overhead tanks, hatcheries & aqua farms, breweries & food processing industries. • Toilet and kitchen walls, anti-efflorescence coating. • Primer before paint, roof coatings & floor coatings. • Used in food & drug industries. • Mix with cement to fill cracks and plug tie rod holes in concrete • Can be used on asbestos & GI metal sheets.

PACKAGING



METHOD OF APPLICATION

Surface preparation: Surface preparation is the first and the most important step before the application to get the results and to avoid failure. The substrate must be cleaned and free of dirt, paint, oil, grease, sludge, blistered & loose plaster, fungus & moss etc. by thorough wire brushing followed by sanding with emery paper. This is recommended all the joints. Remove the dust by compressed air, a paint brush, or wiping with a water-soaked cloth. Fill all cracks up to 5mm by Trubuild Crackfill Paste and greater than 5mm by PMM. All the construction joints should be treated with PMM using Trubuild SBR 333.

Mixing: The Part A (Base) & Part B (Hardener) components should be mixed separately in their individual packs. The entire content of Part-B hardener) should be poured into Part-A (base) & thoroughly mixed using a slow-speed stirrer/mixing paddle for 5 minutes. Then, add watering the below-mentioned ratio & mix it for another 5 minutes before application until it becomes homogeneous.

APPLICATION SURFACE	PART A	PART B	WATER BY WT.
Concrete/Cementitious	1	1	1
Tiles/Metal Roof GI Sheet	1	1	0.5

Application:

RCC Tank Waterproofing Application: After completing waterproofing with Aqualock Flexi on the RCC surface, followed by plastering, allow the plaster surface to cure completely. Then, apply two to three coats of Aquapoxy using a brush, with each coat applied perpendicular to the previous one at an interval of 8-10 hours. Allow the final coat to cure for at least 24 hours for hard curing.

Note: For negative-side applications, three coats are recommended. Always use a water-based exterior coating as a topcoat when applied on walls. For high-gloss tiles, use a grinder to remove the gloss before application to ensure better adhesion. Curing time may vary depending on ambient temperature. In high humidity, it may take 3-5 days for complete curing. Once fully cured, clean the surface thoroughly with plenty of water 2—3 times before storing water in the tank.

Putty Preparation: In case of persistent dampness problems use a coat of putty prepared with Trubuild Aquapoxy as directed below. Stir the contents of both base and hardener individually to achieve uniform consistency for each. Mix base and hardener together and mix thoroughly to achieve homogeneous mixture. Mix 1 part of prepared Trubuild Aquapoxy with one part of white cement and stir well to achieve a proper consistency of putty.

Efflorescence Treatment of wall: Remove all the plaster along the wall 1 foot above the top point of efflorescence on wall then clean the brick surface and its joint help feu fresh portable water and then apply two coats of Trubuild Aqualock flexi followed by Polymer plaster with the help Tubuild SBR 333. Once the plaster is complete apply two to three coats of Trubuild Aquapoxy followed by any paint coating. For application of putty, it is recommended to sprinkle the sand on the last coat of Aquapoxy and let it dry for 24 hours before proceeding with putty application.

Crack filling: Open the cracks with the help of a grinder and make a V-groove. Make the surface dust-free by using water and an air blower. Then apply 1 coat of Trubuild Aquapoxy in the crack and then fill it with epoxy putty made from Trubuild Aquapoxy in the crack with a stiff consistency with approx.(B:H:Water:Cement=1:1:1.5) by wt., within half hour and leave it for 4-6 hour and then apply single coat of Trubuild Aquapoxy upon the crack and leave it for 24 hours. Note: the consistency can be changed as per requirement.

TECHNICAL DETAILS

PROPERTIES	STANDARD	RESULTS	TEST METHOD
Appearance	Visual	Opaque	In house
Colour	Visual	Off white	In house
Consistency after mixing	Visual	Free flow	In house
Fungal-microbial resistance	Visual	Excellent	In house
Pot Life at 30°C	Minutes	Approx. 120	In house
Efflorescence resistance	Visual	No yellowing / blisters	SS 500-2015
Water absorption, 24 hr	%	Nil	Rilem Tube
Surface Dry Time at 30°C	Minutes	Approx. 45	ASTM D 1640-2014
Hard Dry time at 30°C	Hrs	24	ASTM D 1640-2014
Interval between two coats (30°C)	Hrs	6-8	ASTM D 1640-2014
Pull off Adhesion to Concrete (B:H:W = 1:1:1)	N/mm^2	Min. 1.5, Excellent	ASTM D 7234-2022

PROPERTIES	STANDARD	RESULTS	TEST METHOD
Pull off Adhesion to Tiles (B:H:W = 1:1:0.5)	N/mm²	Min. 1.5, Excellent	ASTM D 7234-2022
Pull off Adhesion to Metal (B:H:W = 1:1:0.5)	N/mm²	Min. 1.5, Excellent	ASTM D 4541-2022
Depth of Water Permeability @10 Bar & Negative Hydrostatic pressure up to 3.5 Bar	mm	Nil, Nil, Pass	EN 12390-8-2019 & ASTM D 7088-2017
Water Vapour Transmission	g/m²/day	1.14, Excellent	ASTM E 96-2024
Food Grade - CFTRI certified	mg/in²	0.054, Pass	USFDA - 175:300, Aug-2024
Chemical resistance (24 hrs)	-	-	-
Alkali Solution (5% NaOH)	Visual	No colour change & no blister observed	ASTM D 1308-2020
Acid Solution (5% HCl)	Visual	No colour change & no blister observed	ASTM D 1308-2020
Soap Solution	Visual	No colour change & no blister observed	ASTM D 1308-2020
Detergent Solution	Visual	No colour change & no blister observed	ASTM D 1308-2020
Lubricant Oil	Visual	No colour change & no blister observed	ASTM D 1308-2020

COVERAGE

- Approx. 70–80 sq.ft/kg/coat for waterproofing
- Approx. 20–25 sq.ft/coat / 3 kg mix for wall putty

Note:

Coverage may vary due to porosity and undulation of the substrate. In case the putty becomes stiff, a little water can be added to attain right consistency.

HANDLING PRECAUTIONS

Mandatory and recommended industrial hygiene procedures should be followed whenever our products are being handled and processed. For more details, please refer MSDS.

STORAGE

Container should be stored in a dry and cool area. Protect the material against direct sunlight. Storage temperature should be 10 to 30 °C. Product should remain in their original, unopened containers.

SHELF LIFE

18 months from date of manufacture when stored in a cool and dry place.

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