

DESCRIPTION

SHIELDCRYL 304® is a Liquid Applied Single Component Synthetic Resin Base Elastomeric Waterproofing Membrane with Root Inhibitor Characteristics.

USES

SHIELDCRYL 304® is suitable to be applied:

- For Damp-proofing and protection of concrete surfaces
- For Roofing & Planters waterproofing works
- For Wet Areas & Balcony's waterproofing solution
- For Exposed Air Resistant Barrier
- Over Wood Surfaces where waterproofing is required
- Over Metal Surfaces for waterproofing and protection barrier
- over Exterior masonry buildings as waterproofing and decorative finish

ADVANTAGES

- High abrasion resistance
- Prime-less
- Excellent UV Resistance
- Hard wearing
- Good Stain Resistance
- Non-Toxic
- Crack bridging >2mm
- Seamless
- Fiber Reinforcement embedded for higher tensile strength
- Low VOC

COMPLIANCE

Complies with ASTM C 957-1998, ASTM C 1305, IB Code 2015, Section 803.1.1, ASTM E 84, ASTM E 283 Air Leakage

MATERIAL DATA

Type	Synthetic Acrylic Resin
Form	Grey (for Damp proofing) & White, other color are upon request
Packing	1USG & 5USG Pack
Storage	24 month in unopened packaging, between 5°C and 35°C

TECHNICAL DATA

Property	Value	Test Method
Density	1.3 ± 0.1	ASTM D 70
Solid Content	75 ± 1%	ASTM D 1353
Tensile Strength	>3.0 N/mm ²	ASTM D 412
Elongation at Break	>300%	ASTM D 412
Bonding Strength	>0.5	ASTM D 624
UV Resistance @ 1000 hours	pass	ASTM D 822
SRI (Solar Reflectance Index)	101	ASTM E 1980
Solar Reflectance	0.81	ASTM C 1549
Initial Emittance	0.92	ASTM E 408
Shore A Hardness	>40	ASTM D 624
Crack Bridging Ability @ 2.0mm	No Cracks	ASTM C 1305
Peel Adhesion Strength Test (concrete)	>9.0N/mm	ASTM C 903
Hydrostatic Pressure Resistance @ 3.0mm	>650 Kpa	ASTM D 5385
Pliability Test	No Cracks	ASTM D 146 cls 14
Resistance to Bacteria	No Attack	ASTM D 4299
Resistant to Algae	No Attack	ASTM G 29 - 75
VOC Content	<10gm/l	EPA 24
Permeability	Nil	BS EN 12390
Water Vapor Penetration	<157mg/m ² /d	ASTM E 96
Resistance to chemicals	Limited effect	Visual Check
Flame Spread Index (FSI)	0.00 Class A	ASTM E 84, UL 723
Smoke Developed Index (SDI)	0.00 Class A	ASTM E 84, UL 723
Service Temperature	-30 to +70°C	ASTM

APPLICATION DETAILS

Surface Preparation

Substrate should be sound, clean and free from dirt, dust, laitance and all loosely adhering particles. All cracks larger than 1mm should be filled with cement base concrete repair.

Application

Optional Priming: For old and suspected grease infected concrete, apply one coat **BAYPRIMER PU4060®** "ready to Use" on the substrate with a ratio of 0.25-0.5ltr /m² for 10-15min to achieve touch dry.

Waterproof Coating: Apply 2 coats **SHIELDCRYL 304®** at 500 microns per coat using roller, airless spray or brush. All edges and touch up are to be applied using a brush, covering all hidden areas if available.

For improved Tear and Puncture Resistance characteristics over the edges and joints, apply one layer of Reinforcement sheet in between the 2 coats of **SHIELDCRYL 304®**.

Method of application:

1. Optionally apply 1 coat **SHIELDCRYL PRIMER50®** @ a ratio of 100-200 gm per m²
2. Apply 1 coat of **SHIELDCRYL 304®** 500microns WTF
3. Optional: Apply 1 layer reinforcement sheet
4. Apply final Coat **SHIELDCRYL 304®** 500microns WTF

Wall Coating: Apply 1 coat **SHIELDCRYL PRIMER50®** at a rate of 100-200gm/m² in 1 coat and allow to dry for 24 hours. Then apply Two coats **SHIELDCRYL 304®** at a rate of 150 microns per coat to achieve a homogeneous finish.

Damp Proofing coating: Apply two direct coats over the concrete surface at a rate of 200 microns per coat, with a recoating period of 24 hours. For Cement blocks, apply at a rate of 300 microns per coat in Two coats, to achieve a proper penetration to the porous areas to achieve water tight finish.

Note: Damp Proofing may be required on High thicknesses, in which the system can tolerate up to 1.0 mm Dry Film thickness if required in 2-3 coats.

DILUTION

BAYPRIMER PU4060® Requires No Thinning (SB)

SHIELDCRYL PRIMER50® Requires no Dilution

Dilute **SHIELDCRYL 304®** 10-20% water for the 1st coat

Dilute **SHIELDCRYL 304®** 5-10% water for the final coat

Allow for a slow speed mixing up to 3 min

THEORETICAL SPREADING RATE

0.75m²/ltr @ 1.0mm DFT

Minimum 2 coats are required

Recoat: 1-2 hours depending on the weather conditions

CURING

1-2 hours touch dry

24 hours for Water testing

24-36 hours full curing from the date of final application

SHIELDCRYL 304®

Liquid Applied Synthetic Resin Waterproofing and Air resistance Barrier

PRODUCT DATA SHEET
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SAFETY

Protection Measures

SHIELDCRYL 304® is synthetic Acrylic resin based and there is risk of cauterization in the event of contact with the eyes; will lead to dehydration and thereof irritation in case of contact with skin. So while mixing and applying the product, protect with safety goggles and protective gloves

- Splashes to skin must be washed off with water and Soap
- Splashes to the eyes must be rinsed with clean warm water. Seeking medical attention is highly recommended and mandatory

TRANSPORTATION

Non-Hazardous Material

TOXICITY

Non-Toxic

Updated Technical Data Sheet

For Updated Technical Data sheet, kindly scan the QR Code here-under



WATERPROOF PRODUCT

Important Notice:

The above data is based on our experience and extensive laboratory tests. It may be considered to be a general advice only and cannot be granted to meet the requirements for all the intended uses. It is the responsibility of the end user to ensure that the product is suitable for the purpose for which he wishes to use it. In view of many varying factors that are encountered during the application of the product it does not exclude the end users from not conducting their own test before actually using the product. We are thus only responsible for the quality of the product itself and not responsible for its performance, nor would we accept any liability whatsoever or howsoever arising from the use of this product. Any such matters should be specifically agreed to in writing by us. Bayshield reserves the right to modify the contents of the data sheet from time to time without notice as a system requirement in updating our products from time to time.