



Block P530 Boscoseal PU-D

LIQUID APPLIED HYBRID PU ELASTOMERIC WATERPROOFING MEMBRANE

TECHNICAL SHEET 02/02/2023

SMART ADVANTAGES

- Chemical resistant
- Single component, ready-to-use, eliminates the use of heating pots, blowtorches and sealing tapes.
- Water miscible & solvent free
- Simple and easy application using roller, brush, squeegee, mason's midget trowel, or airless spray equipment.
- High build and thixotropic
- Excellent UV resistance and weather ability
- Excellent & tenacious adhesion to cured concrete, porous & non-porous substrates with primer.
- Long terms resistance to ponded water (with a protection course)

DESCRIPTION

Block P530 Boscoseal PU-D is an elastomeric liquid applied hybrid PU styrene acrylic dispersion based waterproof coating formulated to give a long-lasting, maintenance free and superior waterproofing coating protection for concrete substrates. Block P530 Boscoseal PU-D offers the most advance waterproofing technology and is designed and guaranteed to provide long-term performance and security of a waterproof environment. Block P530 Boscoseal PU-D coating forms a tough rubber like membrane when fully cured. Economical & eco-friendly, completely free from coal tar, bitumen and other hazardous ingredients.

COVERAGE

0.5kg/m² X 3 coats

Note: Theoretical coverage rate only applies to a smooth non-porous substrate. When estimating practical coverage rates, it is normal practice to add 10% to 20% to the theoretical estimate to account for wastage, surface irregularities, porosity, application method, opacity, the preceding coat to dry out fully before application of subsequent coat

FUNCTIONAL CHARACTERISTICS

Block P530 Boscoseal PU-D is recommended waterproofing or vapour barrier protection of

- Foundations & basements
- Kitchens & bathrooms
- Exposed roofs, domes, balconies, terraces
- Car park deck roofs
- Inverted roofs & sunken slabs
- Wet areas, kitchens, bathrooms, toilets, shower areas and pools. All permanently immersed concrete substrates, after waterproofing application, should be protected by cement concrete screed (or) other protection courses.
- Damp proof membrane for sandwich construction
- Renovation & refurbishment of old waterproofing systems, including torch on waterproofing systems



TECHNICAL CHARACTERISTICS	
Appearance	Smooth thixotropic gel
Colour	Grey
Density (30°C, ASTM D1475)	1.33 ± 0.1 g/cm ³
Viscosity (ASTM D2196)	15 150-35 000 cps
Solid content (ASTM D1644-01, ASTM D2369)	63-66%
Adhesion to concrete (ASTM D4541-09)	0.95-1.05 N/mm ²
Shore A hardness (ASTM D2240-05)	50-63
Water permeability (BS EN-12390 at 5 bar, 72h)	Nil
Resistance to water (ASTM D2939)	No blistering
Low temperature flexibility (ASTM D1227)	-5°C
Heat resistance (ASTM D5147-M14/ ASTM D1227 at 121°C, 2h)	No flowing, dripping, blistering or sagging
Abrasion resistance	Good
Chemical resistance (ASTM D543)	Dilute acids & alkalis, ground salts, sewage, chloride, sulphates, sewage and bacteria
Reaction to fire	E- Non flammable
Accelerated weathering (ASTM D4799:03)	No cracks or blisters, slight discoloration
Application temperature	5°C to 115°C
Touch dry	4-6 h
Re-coat interval at 35°C	Minimum 6-15h
Full-cure at 35°C	7-10 days (for water ponding test and service)

Mechanical properties tested after 14-28 days curing @ ambient temperature.

APPLICATION

SUBSTRATE PREPARATION

- All concrete surfaces must be structurally sound, cured for 28 days, clean and free from dust, grease, curing compounds, paint coatings, mould release oil, laitance and other loose debris.
- Surface should ideally have a "sand paper" profile roughness and prepared in such a way as to provide a clean surface free of protrusions so that a continuous film of Block P530 Boscoseal PU-D can be properly applied and will adhere firmly to the surface. Recommended methods for preparing concrete are by sand or captive shot blasting, wire brushing or by pneumatic (scabbling) tools.
- Concrete surfaces should have a slope of at least 1% to allow water run-off. Allow surfaces to be pressure-jet washed slightly moistened (free of surface water, saturated-surface-dry condition). Application of coating, especially in hot climates over 35°C, high pressure water jetting is the most preferred method of surface preparation, since substrate roughening, mechanical cleaning, and substrate saturation are simultaneously achieved.
- If bond of Block P530 Boscoseal PU-D to the substrate is highly critical (or) a poor quality substrate is anticipated (or) higher tensile strength of coating required, reinforce membrane all over with 30-60g fiber glass or Boscoseal F100 chop strand rematt to increase tenacity, bond and performance

- All shrinkage and non-structural cracks should be pre-treated with 1.0mm thick coating of Block P530 Boscoseal PU-D extending at least 50mm on both sides of the crack.
- Right angles or corners should have angle fillets installed with polyester or fiberglass reinforcement mat. Allow all repair and preparatory works to cure for at least 24 hours prior to application of waterproofing system.
- For expansion joints, fill level with surface of concrete with a suitable joint sealant (Bostik PU Sealant). Apply 50mm width strip of flexible self-adhesive tape (or) Block P530 Boscoseal PU-D in 2 coats. Where movement is expected between concrete elements. Sharp corners as between parapets, concrete deck and junctions should be treated with angle fillet.
- For exposed roof coating, when there is a moisture trapped in the concrete surfaces to the treated, an approved venting system consisting of a perforated base felt together with vents shall be used in accordance with the vent manufacturer's application procedures and recommendations.

PRIMING

On the absorbent surface, primer is required. Apply one coat of Boscoprime SC at 1.0 kg/m² or diluted Block P530 Boscoseal PU-D with water in 1 to 1 ratio at 2-4m²/kg. Allow it to dry out completely before over-coating with Block P530 Boscoseal PU-D.

For priming & neat coat application, mix product thoroughly (for at least 3-4 minutes) with a heavy-duty mechanical drill (slow speed / high torque) fitted with a proprietary paddle, and move mixed contents to a new pail to break down all settlement. Mix again inside new pail (avoid air entrapment); this will ensure that a smooth, streak-free solution. Application should commence immediately after mixing.

MIXING

Block P530 Boscoseal PU-D does not require any mixing. Stir product to an even smooth consistency before use.

PLACING

- Block P530 Boscoseal PU-D can be apply by brush, shorthaired pile roller, mason's flat margin trowel/ margin float/ midget trowel or sprayed using an airless sprayer (Minimum pressure 220 bar, minimum output 5.0 L/min).
- Application should commence immediately after mixing. For more details on application equipment, please contact Bostik Malaysia - Technical Department. Allow primer coat & first coat to dry out prior to second coat application. The second coat should be applied in the opposite direction (right angles) to the first coat as this will allow the polymer in the mix to be distributed more uniformly.
- If better tensile properties are anticipated on the coating system, use Boscoseal F100 (or) any 30-60 g fibre glass reinforcement between first and second coats, all over the surfaces to be waterproofed (a third coat may be definitely required in this case).
- For exposed waterproofing works, a fiberglass reinforcement is necessary to enhance durability & performance of the coating system. To ensure compliance to standards, minimum dry film thickness of 1.0mm recommended.

CURING

Allow full cure of Block P530 Boscoseal PU-D for 7-10 days before subjecting the waterproofing system to actual service conditions.

PRECAUTION

- Do not apply the coating on dusty, porous substrates without priming. Porous surfaces should first be rendered with 1:2 cement sand screed, surface prepared and primed as noted above (refer priming section)

- Provide adequate ventilation when installing in confined areas or spaces, to allow the product to cure fully.
- Do not let the coated areas into service (or) conduct water ponding tests, before full cure of 7-10 days (After the 2nd or 3rd coat application) is achieved.
- On exposed areas, slight discoloration of colours and/or darkening effect can be anticipated.
- Due to raw material & filler properties, slight variation in colour between batches is possible.
- Block P530 Boscoséal PU-D is a waterproof coating, but not a trafficable coating. Only flat soled rubber shoes should be worn during application to avoid indentation damage or puncture to coating during application and during service.
- Block P530 Boscoséal PU-D is neither a vapour barrier, nor designed to stop water leaks with a hydrostatic head of water pressure, or concrete substrate with rising moisture. Water leaks should be completely sealed prior to application of coating.
- Not recommended for direct permanent immersion, unless coating is protected by a cement concrete screed or other approved protection course.
- If the pail is opened for application, use all contents of pail immediately. Chances of firm formation very high at elevated temperatures.
- Ensure that the product or applied substrate is not subjected to rainfall or water-contact during application (and) until full cure of product (7-10 days) is achieved.

CLEANING

All brushes, rollers, trays, buckets and surrounding shall be clean by scrubbing with water before the product sets. Once hardened, can be removed only with white spirit, Xylene or similar solvent.

For disposal, allow the waste to cure. Seal it into a suitable container and bury in landfill. Use licensed waste disposal contractor and consult the local authorities when disposing.

PACKAGING

Block P350 Boscoséal PU-D comes in 20kg plastic pail container or 200kg drums (200 kg drums on special order only).

STORAGE

Store material between 5°C and 30°C in cover and dry place out of direct sun light. The Block P530 Boscoséal PU-D has a shelf life of 6 to 9 months from date of manufacturing if stored properly in original, sealed and unopened container.

In tropical climates, the product must be stored in air-conditioned environment. Failure to comply with the recommended storage conditions may result in considerable premature deterioration of the product. Stir the product thoroughly prior to usage. If stored for longer periods, viscosity might increase, settlement might occur and film formation will take place. All PU modified products are greatly susceptible to attack by moisture & humidity if not stored properly.

HEALTH AND SAFETY

As with all construction chemical product caution should always be exercised. Always use PPE such as protective clothing, eye goggles, mask and rubber hand gloves when handling this product. Proprietary amine additives used to enhance product stability may cause a pungent smell when the pail is opened. Avoid contact with skin or eyes. If spilled on the skin, wash immediately with soap and plenty of water. Accidental splashes on the eyes should be immediately cleansed with water and medical attention sought. Should any of the products be accidentally swallowed, do not induce vomiting, but call for immediate medical assistance. For further details, refer product's SDS.

For more detailed information refer to Safety Data Sheet.

The application recommendations are defined by standards of use. They are imperative to respect them, but they don't need a previous try, especially for the first use or particular inconvenient of support, site or environment. Consult our safety data sheet for precautions to use.



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Environmentally preferred coating

DISCLAIMER

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