

# DUROPROOF PU BLACK ECO

Polyurethane Membrane



## DESCRIPTION

Duroproof PU ECO BLACK is a tough, durable, elastomeric, single pack, liquid applied, moisture curing, cross-linking, polyurethane waterproofing membrane - usually Black in colour.

Duroproof PU ECO BLACK forms a tough, flexible, seamless waterproofing membrane designed for both vertical and horizontal surfaces that bonds well to most suitably primed building substrates.

Duroproof PU ECO BLACK is formulated as an anti-sag membrane, that although easy to apply by roller or brush, it can be applied on to vertical surfaces without slumping to achieve the required film thicknesses.

## FEATURES

- Single pack - no mixing.
- Fast curing (usually within 24 hour)
- Anti-sag (maintains required thickness without slumping on vertical surfaces)
- Elongation 360% - AS 4654.1 Class III as per AS/NZS 4858 - 2004
- Will not bleed or stain grout or tiles.
- Good chemical resistance.
- High strength and puncture resistant.
- Provides seamless membrane (no joints or laps)
- Easily repaired and maintained.
- AS 4654.1 Compliant
- Formulated to provide long term protection.
- Tar free.
- Easy to apply.

Duroproof PU ECO BLACK meet AS4654.2 (Exposed Membrane) when exposed areas are top coated with Duroproof ATC.

## SUITABLE SURFACE

- Tiled or covered areas
- Shower recess & wet areas (floors and upturns)
- Decks, balconies, terraces & podiums
- Retaining walls
- Planters and landscaped areas
- Structural slabs
- Roofs (covered by pebbles or top coated with Duroproof ATC)

## SUITABLE SURFACE

- Concrete, cement and cement block work
- FC Sheeting
- Hebel
- Render
- Brick
- Plaster Board
- Masonry

Surface should be sound, stable, dry, clean and free of dirt, dust and contaminants and suitably primed.

## SPECIFICATION

The information contained in this product data sheet is typical but does not constitute a full specification as conditions and specific requirements may vary from project to project. The instructions should be considered as a minimum requirement but the applicator or contractor must use their skill, knowledge and experience to carry out additional works as may be necessary to meet the requirements of the project. Specification for specific projects should be sought from the Company in writing.

## LIMITATIONS

In exposed areas, Duroproof PU ECO BLACK should be used and then top coated with Duroproof ATC or covered with pebbles, tiles or other suitable topping.



## PRECAUTIONS IN USE

Risk is considered low when properly used but precautions on can, label and / or data sheets should be observed. Do not use in confined areas with poor ventilation. Product is flammable.

## PRIMING AND SURFACE PREPARATION

Good preparation is essential. Surfaces must be sound, stable, dry, clean and free of dust, loose, flaking, friable material and substances that may diminish adhesion

### PRIMING

Surfaces should be suitably primed with Durotech WBE HIBUILD epoxy primer applied at no less than 1 Lt per 4m<sup>2</sup> or Durotech PU PRIMER applied at 7m<sup>2</sup> per Lt and allowed to dry.

Where there is a risk of evaporation of entrapped moisture in the substrate or water vapour transmission, which may cause the membrane to bubble, apply two coats of either Durotech WBE HIBUILD EPOXY or DUROPROOF PU PRIMER. Excessively porous, friable and dusty surfaces may require an additional priming coat. Durotech Epoxy primer.

## DETAILING PREPARATION

Corners: Prime as required.

Apply an adequate flexible polyurethane sealant, in accordance the manufacture's instruction and tool off to form a solid coved 450 fillet extending at least 10mm on to the adjacent surfaces. Allow to cure. Apply the Duroproof membrane directly over the sealant and on the adjacent surfaces.

For Additional waterproofing protection the following additional steps should be taken Lay a strip of Duroproof Flashing tape over the cured polyurethane sealant pressing it firmly on the surface. Apply the Duroproof membrane directly over the tape and on the adjacent surfaces

## JOINTS, GAPS AND CRACKS

General Joints, gaps and cracks should be suitably filled and sealed with an appropriate elastomeric sealant, preferably a polyurethane sealant, and allowed to cure. Recommendation: The movement of small cracks should not be underestimated and should be at least covered with a flexible polyurethane sealant or additional coats of membrane. Large or Live Cracks

Large cracks should be routed out to form a 'V' and then filled and sealed with a polyurethane waterproof joint sealant as per the manufacturer's instructions. The sealant should be finished slightly proud of the surface and allowed to cure. After priming, as required, lay a strip of Duroproof flashing Tape over the join or crack pressing it firmly on to the substrate. The Duroproof membrane is then applied directly to the Duroproof Leak-Seal Tape and extending at least 75mm onto the adjacent surfaces. If the Duroproof flashing Tape is not used then a suitable bond breaker tape at least 48mm wide should be laid over the join or crack and apply a fully reinforced Duroproof membrane consisting of a base coat of membrane in to which the reinforcing fabric is embedded, a saturating coat of the Duroproof membrane ensuring that the fabric is entirely saturated and covered and then allowed to cure. At least one or two further coats are applied as per the Duroproof membrane's Product Data Sheet extending at least 75mm on to the adjacent surfaces. Joins - Particularly in CFC Sheeting and Timber Sheeting Ideally the sides of the sheets should be fully coated with a flexible polyurethane waterproof joint sealant prior to butting the sheets together. If not, the joins should be suitably filled and sealed with an appropriate elastomeric polyurethane waterproof sealant and finished flush with or preferably slightly proud of the surface and allowed to cure. After priming, as required, lay a strip of Duroproof Leak-Seal Tape over the join, pressing it firmly on to the substrate. The Duroproof membrane is then applied as described under 'Large or Live Cracks'. If the Duroproof flashing tape is not used, then follow the procedure as described under 'Large or Live Cracks'.

**Waste Outlets, Penetrations and Angles:** Waste Outlets:

Floor wastes and puddle flanges should be rebated in to the floor to allow water to readily drain. Fill all gaps and perimeters with a polyurethane joint sealant. Plastic or metal angles: Where required by the Building Code such as internal hobs and exterior door barriers and also plastic corner angels under wall boards, they should be securely embedded in to a continuous, gap free bed of a polyurethane sealant/mastic.

## APPLICATION

Apply PU Black by brush, roller, broom and squeegee in a minimum of two coats, usually a day a part so that the minimum dry film thickness in 1.2mm. The minimum wet coat thickness per coat is 0.5mm.

## REINFORCED SYSTEM

In areas such as corners and over joints and cracks the membrane should be used in conjunction with a reinforcing fabric (Duroproof polypropylene or fiberglass matting). This application consists of applying a base coat in to which the reinforcing fabric is laid followed by the application of a saturating coat ensuring that the product is worked well in to the fabric and that no wrinkles or bubbles are present and that fabric is entirely saturated and covered with product. Allow to cure. Apply one or two further coats of products.

## COVERAGE

The stated average coverage rate may vary depending upon type, condition, porosity, texture of the surface and application technique.

On average, the minimum final coverage of PU black is approximately 1.8 kg/ m<sup>2</sup>. applied over 2 coats in order to achieve a dry film thickness (DFT) of 1.2mm

Coverage is stated after proper priming.

## COLOURS

Black

## DRYING & CURING

Drying and curing of the product is affected by type, dryness and porosity of the surface, temperature, humidity, ventilation, climate conditions and application technique and therefore drying and curing can only be given as a guide.

Curing is dependent upon temperature, humidity, type of substrate and application technique. Generally, PU Black will be dry to touch within 10 to 12 hours with full cure within 24 hours.

## STORAGE

Keep in cool, dry place away from heat, flame or combustible material. Product contains flammable solvents. Class 3 Dangerous Goods must be declared prior to transportation. Available in 15 Lt pails.

Self-life: 6 - 12 months in unopened container but best used within 6 months. As this is a polyurethane some skinning of the product may occur. This should be cut out and removed. Balance of the product will be suitable for use.

## CLEAN UP

Avoid spills. They are difficult to clean particularly off porous surfaces. For wet spills use a cloth and Duroproof Solvent. Do not clean off carpets as it is better to allow product to cure and then shave the carpet. Equipment should be immediately cleaned with Duroproof Solvent.

## TILING, TOPPING OR TOP COATING

Duroproof PU ECO BLACK is suitable for topping with sand:cement mix at a minimum of 25mm thickness.

Roofs should be covered with Geo-textile and pebbles or top coated with ATC.

## SAFETY & PRECAUTIONS

PU Black is solvent based. The use of solvent resistant gloves and goggles (against splashes) are recommended. If spraying, which is very rare, the use of self-contained breathing apparatus is recommended. If swallowed do not induce vomiting, give plenty of water to drink. Seek urgent medical advice. If in eyes, flush thoroughly with clean water, holding lid open to ensure any trapped product may be flushed away. If on skin, remove contaminated clothing and wash skin with soap and water. If inhaled, unlikely due to viscosity of the product, remove person to fresh air and apply artificial respiration if required and seek urgent medical attention. Product is flammable when wet. Keep away from all sources of ignition. Ensure adequate ventilation. Vapours may collect in low lying areas.

For full safety data refer to the products Material Safety Data Sheet. Observe precautions as per label.

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