



Product Data Sheet

Durabit EF

Latex Based Waterproofing Membrane

Description

Durabit EF (EF is for Extra Flexible) a water based, polymer emulsion waterproofing membrane. It has been tested by CSIRO (report 2947) and meets the criteria of AS4858:2004 Wet Area Membranes and 'Green Star' environmental criteria.

Durabit EF is an elastomeric, environmentally friendly membrane designed for both internal and (non-exposed) external applications. It cures to form a durable, odourless, impervious, seamless membrane that resists re-emulsifying after it has fully even if immersed in water. Durabit EF, available in white, black, grey and blue, does not stain grout or tiles and has excellent resistance to hydrostatic pressure.

Uses

Durabit EF has been formulated for most waterproofing applications requiring long term waterproofing and meets the criteria of AS4858:2004 Wet Area Membranes and Contact With Drinking Water Test AS/NZS4020:2002 making it ideal for:

- Shower recesses & wet areas.
- Tiled or topped - decks, terraces, balconies, podiums, roofs.
- Retaining walls, planter boxes.
- Water tanks and immersed conditions.

Suitable Surfaces

Durabit EF is suitable for suitably primed: Concrete, cement, cement render, block work, brick, masonry, FC sheeting and CFC sheeting, plaster board and timber, plywood and particle board (if primed with Duram Primeseal) and metal (if primed with a metal primer).

Note: We do not regard particle board as a suitable substrate for wet areas and if possible should be replaced or covered with CFC sheeting - particularly in shower recesses. If covered we recommend that the particle board be coated with 2 coats of Duram Primeseal and joins and corners sealed with a polyurethane sealant prior to laying the CFC sheeting.

Durabit EF may be applied to slightly damp surfaces but the product will not fully cure as the surface remains damp. This process takes longer than if the surface was allowed to dry before application. The surface must dry before the membrane can dry. Freedom from surface water, continual dampness is essential.

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

Durabit EF is not designed for long term direct exposure to UV and should be tiled, topped or painted. Durabit EF is not designed as a trafficable membrane although infrequent maintenance foot-traffic would be acceptable.

Benefits and Advantages

Durabit EF a versatile membrane suitable for many demanding waterproofing applications:

- It meets the criteria of AS4858:2004 and is applied in accordance with AS3740.
- Meets the 'Green Star' environmental criteria.
- Very low VOC levels.
- Not a hazardous product and not flammable. Water based.
- Permanently flexible (tested to class 111 - highest tensibility).
- Suitable for contact with drinking water.
- Formulated for wet area and under tile applications.
- Does not re-emulsify after proper curing.

- Tough, durable and flexible.
- Dries fast.
- Compatible with most tile adhesives.
- Easy to apply.
- Virtually odourless.
- Will not stain grout or tiles.
- Available in range of colours.

Precautions in Use

The product is considered safe to use if used correctly, as intended and proper industrial hygiene and practices are used. Always observe safety precautions.

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 Duram Primeseal applied at no less than 1 litre per 4m² and allowed to dry. Duram Primeseal must be used for roof and exposed areas, timber and particle board surfaces, bitumen or where there is a risk of entrapped moisture in the substrate which may cause the membrane to bubble.

Priming is adequate if the surface has a solid off-white appearance. Particle board and bitumen surfaces should be primed with 2 coats of Duram Primeseal.

Alternative primers such as Duram WB Primer, may be used in non-exposed areas and where the moisture content of the surface is very low applied at no less than 1 litre per 4 m².

Excessively porous, friable and dusty surfaces may require an additional priming coat.

Please refer to the product data sheets of the stated primers.

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 or 45° fillet extending at least 10mm on to the adjacent surfaces. Apply the Duram 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 Duram Leak-Seal Tape (stick-stick, butyl mastic waterproofing membrane with a polyester backed reinforcing fabric) over the cured polyurethane sealant (as described above) pressing it firmly on the surface. Apply the Duram membrane directly over the tape and on the adjacent surfaces.

Joins, Gaps and Cracks

General

Joins, 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 Duram Leak-Seal Tape over the join or crack pressing it firmly on to the substrate. The Duram membrane is then applied directly to the Duram Leak-Seal Tape and extending at least 75mm on to the adjacent surfaces.

If the Duram Leak-Seal is not used then a suitable bond breaker tape (such as duct tape) at least 48mm wide should be laid over the join or crack and apply a fully reinforced Duram membrane consisting of a base coat of membrane in to which the reinforcing fabric is embedded, a saturating coat of the Duram 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 Duram 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 Duram Leak-Seal Tape over the join, pressing it firmly on to the substrate. The Duram membrane is then as described under 'Large or Live Cracks'.

If the Duram Leak-Seal 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. Gaps and perimeters should be sealed with a polyurethane 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

Stir well. Apply by brush, roller, soft broom or spray.

Apply in a minimum of two coats. To perform correctly the dry film thickness of the membrane must be at least 1mm to 1.2 mm with each coat being at least 500 microns.

The second should be applied as soon as the first is dry and within 7 days of the first coat, beyond which the first coat should be cleaned and re-activated.

Durabit EF is suitable for use with a reinforcing fabric (Durascrim) and Leak Seal Tape.

Reinforced System

In areas such as corners and over joins and cracks the membrane should be used in conjunction with a reinforcing fabric (Duram Durascrim or fibreglass 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.

Durabit EF

Unreinforced: Minimum 1.5 litres per sq.m., i.e 0.75 litres per m² per coat. A 15 litre pail will cover 10 sq.m. for 2 coats.

Reinforced: Minimum: 2.0 litres per m².

The dry film thickness of the membrane must be at least 1.2mm with each coat being at least 500 microns (0.5mm)

Primers

Minimum 1 litre per 4m².

Colours

Durabit EF is available in white, grey, blue, black. Special colours available upon request but minimum orders will apply.

Drying and 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.

Durabit EF is a fast drying water based product. Expected curing at 25°C at 50% RH: Touch dry - 4 to 6 hours per coat. Set - 12 hours. Recoat - as soon as possible after first coat is dry and within 7 days. Full cure 36 to 72 hours per coat. Ensure membrane is fully cured before tiling or topping.

Storage

Store in cool, dry area. Product is not flammable. Do not allow to freeze. Shelf life - about 12 months. Available in 1, 4, and 15 Lt pails.

Clean Up

Wet spills can be cleaned with water, but spills should be avoided.

Tiling, Topping or Top Coating

Durabit EF is compatible with most tile adhesives and 3:1 sand:cement beds.

Ideally the beds should be sealed / waterproofed to prevent the bed absorbing and holding water. Selection of the tile adhesive should be compatible with the flexibility of the substrate. Two pack adhesives systems are preferred. Tiling must be done in accordance with AS3958.1-1991 and adequate expansions joints installed.

Safety & Precautions

Durabit EF is user friendly and safe to use if used correctly as intended. Nevertheless, protect eyes and skin and observe the safety precautions on the can and data sheet.

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

Tests and Technical Data

Durabit EF complies with AS4858:2004 Wet Area Membranes as tested by the CSIRO Test Report 2947 with a Class III High Extensibility classification. Durabit EF complies with AS/NZ 4020:2002 Contact With Drinking Water.

Application temperature range	10 to 35°C
Tensile Bond	2N/mm after 14 days

Moisture Vapour Transmission 0.26 g/sq.m./24 hours
Elongation > 300% (Class 111 Extensibility)

MSDS

Material Safety Data Sheet

Durabit EF

Latex Based Waterproofing Membrane

Not classified as hazardous according to the criteria of Worksafe Australia.

Identification

Product Name: Durabit EF
Other Names: Duram Azcoflex TR.
U.N. Number: N/A
Class: N/A
Hazchem: N/A
Code:
Poison: N/A
Schedule:
Pack Sizes: 4 ltr & 15 ltr pails.

Physical Description

Appearance: Whitish viscous liquid coating.
Boiling Point: Not known but approximates water.
Vapour Pressure: N/A
Percent Volatiles: N/A
Specific Gravity: +-1.2
Flash Point: Not Flammable.
Flammability: N/A
Water Solubility: Resin component +40 is insoluable.

Ingredients

Chemical	CAS No.	Proportion
Fillers	N/A	40-60%
Pigment & unspecified minor ingredients.		
Water	7732-18-5	20-30%
Copolymer	Proprietary	40-60%

Uses:

Azcoflex TR is designed to be used on:

- * All roofing materials.
- * Parapets.
- * Old bitumen roofs.
- * External walls.
- * Pedestrian traffic roofs.

Health Warning Information

Health Effects

Swallowed: Single oral dose adverse effects not expected. May cause nausea and vomiting.

Eyes: Avoid eye contact. Mild to moderate irritation.

Skin: Unlikely because of viscous nature of the product. Inhalation overexposure not anticipated but may cause irritation. Chronic effects not known.

First Aid

Swallowed: Do not induce vomiting. Give plenty of water to drink and seek immediate medical attention.

Eyes: Immediately flush eye with clean water holding lid open to ensure any trapped material can be flushed and seek medical attention.

Skin: Remove contaminated clothing, wash with soap and water. Do not use solvents to remove material.

Inhaled: Remove person to fresh air. Seek immediate medical attention.

Advice to Doctor

Treat Symptomatically.

Precautions in Use

Toxicity data includes that the product is not harmful to health provided the product is used correctly. No LD50 tests are available.

Exposure Limits

Exposure limits are not established.

Ventilation

Good ventilation is required.

Personal Protection

The use of rubber gloves, safety boots and goggles (against splashes) is recommended.

Safe Handling Information

Storage and Transport

Store in a cool dry area in sealed containers. Not classified as dangerous goods.

Suitable containers: Plastic pails as recommended by manufacturer.

Check containers are labeled and leak free.

Spills and Disposal

Soak up spill with absorbent material such as sand and collect in suitable containers. Prevent product from reaching drains. Dispose in accordance with accredited waste disposal authorities by incineration or landfill.

Fire / Explosion Hazard

Product should not decompose explosively. Extinguishing media is water, CO₂, foam or dry powder.