Product Data Sheet

Durabit Reo

Waterproofing Membrane Internally Reinforced with Micro Fibres.

Description

Durabit Reo a water based, polymer emulsion waterproofing membrane which incorporates micro fibres thereby internally reinforcing the product.
Durabit Reo is a modified Durabit EF membrane with the addition of the micro reinforcing fibres. It meets the criteria of AS4858:2004 Wet Area Membranes.
Durabit Reo is an elastomeric, environmentally friendly membrane designed for both internal and (non-exposed) external application. It cures to form a durable, odourless, impervious, seamless membrane that resists re-emulsifying after it has fully even if immersed in water. Durabit Reo, available in white, black, grey and blue,minimum quantities apply, does not stain grout or tiles and has excellent resistance to hydrostatic pressure.

Being internally reinforced, the need for external reinforcing is eliminated thereby making it easier and quicker to use.

Uses

Durabit Reo 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 Reo 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 which 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 possble 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 Reo may be applied to slightly damp surfaces but the product will not fully cure is 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 Reo is not designed for long term direct exposure to UV and should be tiled, topped or painted. Durabit Reo is not designed as a trafficable membrane although infrequent maintenance foot-traffic would be acceptable.

Benefits and Advantages

Durabit Reo a versatile membrane suitable for many demanding waterproofing appications:
- It meets the criteria of AS4858:2004 and is applied in accordance with AS3740.
- Not a hazardous product and not flammable. Water based.
- Contains micro fibres (internally reinforced) iliminating the need to use external reinforcing.
- Permanently flexible but not as flexible as Durabit EF.
- Suitable for contact with drinking water.
- Forumlated 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 hygience 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 ad equate if the surface has a solid off-white appearance. Particle board and bitumen surfaces should 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 45º 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 3 coats of Durabit Reo 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.
Durabit Reo is suitabe for use with a reinforcing fabric (Durascrim) or Leak Seal Tape.

Coverage

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

Durabit Reo

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 fo the membrane must be at least 1mm.

Primers

Minimum 1 litre per 4m².

Colours

Durabit Reo is available in grey & blue. 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 Reo is a fast drying water based product. Expected curing at 25ºC at 50% RH: Touch dry - 4 to 6 hours per coat. Set - 12 hours. Full cure 36 to 72 hours. 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 4 & 15 Lt pails.

Clean Up

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

Tiling, Topping or Top Coating

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

Moisture Vapour Transmission	0.26 g/sq.m./24 hours
Tensile Bond	2N/mm ater 14 days
Application temperature range	10 to 35*C

Conditions of Use and Disclaimer

The information contained in this data sheet is given in good faith based upon our knowledge and current information and does not imply warranty. The information is provided and the product sold on the basis that the product is used for its intended use and applied in a proper workman like manner in accordance with the instruction in this data sheet onto suitable and correctly prepared surfaces which shall remain sound, stable, free of structural defects, cracking, spalling concrete cancer, negative pressure, movement or other conditions that may effect the performance of the product. Deviations from application instructions may diminish or negate the performance of the product. Under no circumstances will the Company be liable for any loss, consequential or otherwise, arising from the use of the product. Liability is limited to the replacement of proven faulty product.

Not classified as a hazardous product according to the criteria of Worksafe Australia

Identification

Product Name:	Durabit Reo
Other Names:	Duram Durabit REO
U.N. Number:	N/A
Class:	N/A
Hazchem Code:	N/A
Poison Schedule:	N/A
Pack Sizes:	4ltr & 20 Litre Pails

Physical Description

Appearance:	Coloured thick creamy liquid, mixes with water.
Boiling Point:	100% (Water)
Vapour Pressure:	As for water.
Percent Volatiles:	N/A
Specific Gravity:	1.09
Flash Point:	N/A (Water Based)
Flammability:	N/A (Water Based)
Water Solubility:	Miscible.

Ingredients

Chemical	CAS No.	Proportion
Minor ingredients, unspecified water	7732-18-5	30-60 %
S.B.R. Latex		> 60%

No other ingredient information disclosed.

Uses:

Durabit REO has been specifically designed for most non-exposed waterproofing requirements, including long term waterproofing of wet areas within buildings:
(shower recesses, bathroom, laundries) concrete & timber decks, concrete slabs and more.

Health Warning Information

Health Effects

Swallowed: Material is regarded as low oral toxicity. Considered an unlikely route of entry in commercial and industrial environments. The liquid is discomforting to the
gastro- intestinal tract if swallowed. Ingestion may result in nausea, abdominal irritation, pain and vomiting.

Eye: The liquid is discomforting to the eye's and is capable of causing a mild, temporary redness of the conjunctiva (similar to windburn). Temporary impairment
of vision and or other transient eye damage / ulceration. The vapour is mildly discomforting to the eye's.

Skin: Mildly irritating. May affect skin with prolonged contact such as dermatisis. Avoid exposure to skin that is cut, damaged or irritated.

Inhaled: Not normally a hazard due to non-volatile nature of product. Overexposure is unlikely in this form. Inhalation of vapour is more likely at higher than

normal temperatures.

CHRONIC HEALTH EFFECTS: Principal routes of exposure are usually by skin contact with the material and inhalation of vapour. Prolonged or repeated skin contact may cause drying with cracking. Irritation and possible dermatitis following. Avoid contact with unprotected skin, inhalation of vapour or ingestion. Observe good occupational work practices.

First Aid

Swallowed: Do not induce vomiting. Give plenty of water to drink. Rinse out mouth. Seek medical assistance or contact the Poisons information Service (Australia 13 1126 and New Zealand 03 4747000).

Eye: Flush thoroughly with clean water, holding eye lid open to flush product from under the lid. Removal of contact lens after injury should be done by a skilled or medical person.

Skin: Remove contaminated clothing, and wash with soap and water. Seek medical attention in event of irritation.

Inhaled: If fumes or combustion products are inhaled: Remove to fresh air. Lay patient down keep warm and rested. Other measures are usually unnecessary.

Advice to Doctor

Treat symptomatically.

Precautions in Use

Product is considered low risk.

Exposure Standards
Non assigned. Refer to individual constituents.
S.B.R. Latex: Non assigned, refer to individual constituents.
Ammonium hydroxide as ammonia ES TWA: 25ppm, 17mg / m3: STEL:35 ppm,24 mg / m3.
Ammonium hydroxide - as ammonia.
ES TWA: 25ppm, 17mg/m3,STEL: 35ppm, 24mg/m3.
TLVTWA: 25ppm, 17mg/m3, STEL: 35ppm, 24 mg/m3.

ENGINEERING CONTROLS
Use in well ventilated areas. General exhaust is adequate under normal operating conditions.

Exposure Limits

Refer above.

Ventilation

Product should be applied in areas with adequate ventilation.

Personal Protection

Gloves: Rubber or PVC. Do not use solvent to clean the skin.
Eyes: Safety goggles. The wearing of contact lenses poses an additional risk. Soft lenses may absorb irritants and all lenses concentrates them.
Feet: Wear safety footwear.

Safe Handling Information

Storage and Transport

Store in cool, dry area and place out of the reach of children. Product is not flammable. Avoid freezing.
Store in original containers. Observe manufacturers storing and handling recommendations.
Check containers are labeled and leak-free.

Storage incompatibility: None known.

Transportation Restrictions: None.

Spills and Disposal

Clean up spills immediately. Avoid breathing vapours and contact with skin and eyes. Prevent spills from entering the drains or sewers. Absorb product with sand, earth or absorbent material and dispose to land fill in accordance with local

council regulations.

Major spills unlikely due to individual size of containers.

Fire / Explosion Hazard

Product is not readily combustible under normal conditions. However, it will breakdown under fire conditions and the organic component may burn.
Heat may cause expansion or decomposition with violent rupture of the containers. Decomposes on heating and may produce toxic fumes of carbon monoxide (CO)
May emit acrid smoke. Combustion products include ammonia.