



Product Data Sheet

Durabit Reo

Waterproofing Membrane Internally Reinforced with Micro Fibres.

Description

Durabit Reo is 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
- AS4654.2 Exterior for non UV exposed applications
- the 'Green Star' environmental criteria.

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 Grey and Blue, other colours available but 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 as well as AS4654.2 Exterior, non-exposed waterproofing applications making it ideal for:

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

The product exhibits excellent chemical resistance and has been formulated to inhibit biological growth.

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 with Duram Primeseal) and metal (if primed with a metal primer).

Note: Particle Board is not regarded as a suitable substrate for very wet areas and particularly shower recesses and should be replaced with CFC sheeting. As a minimum, Particle Board should be sealed with one to two coats of Duram Primeseal. All joints and corners must be sealed with a polyurethane sealant and a reinforced fabric used in conjunction with the membrane.

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

Benefits and Advantages

Durabit Reo is a versatile membrane suitable for many demanding waterproofing applications:

- It meets the criteria of AS4858 and is applied in accordance with AS3740.
- It meets the criteria of AS4654.2 exterior, in non-exposed membrane applications.
- Not a hazardous product and not flammable. Water based.
- Meets the 'Green Star' environmental criteria.

- Very low VOC levels.
- Contains micro fibres (internally reinforced) eliminating the need to use external reinforcing.
- Permanently flexible but not as flexible as Durabit EF.
- Suitable for contact with drinking water.
- Formulated for wet area and under tile applications.
- Does not re-emulsify after proper curing.
- Inhibits mould and biological growth.
- Tough, durable and flexible.
- Dries fast.
- Compatible with most tile adhesives.
- Easy to apply.
- Virtually odourless.
- Will not stain grout or tiles.

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 appropriate Duram primer applied at no less than 1 Lt per 4m² and allowed to dry. Duram Primeseal must be used for areas where what is adhered to membrane is UV exposed, 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 MC.

Alternative primers such as Duram WB Primer and Duram Azcoseal may be used in areas where what is adhered to Durabit is not exposed to UV where the moisture content of the surface is very low applied at no less than 1 Lt 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 with the manufacturer's instruction and tool off to form a solid, covered 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 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 angles 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 with each coat being at least 500 microns.

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

Durabit Reo is suitable for use with a reinforcing fabric (Durascrib) 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 Lts per sqm., i.e 0.75 Lts per sqm. per coat. A 15 Lt pail will cover 10 sqm. for 2 coats.

Non Tanking Walls: Minimum 0.75 Lts per sqm. at 0.5mm dry film thickness

Reinforced: Minimum: 2.0 Lt per sqm.

The dry film thickness of the membrane on floors and tanking areas must be at least 1mm with each coat being at least 500 microns (0.5mm).

Primers

Minimum 1 Lt per 4sqm.

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 25°C at 50% RH: Touch dry - 4 to 6 hours per coat. Set - 12 hours. Re-coat - as soon as first coat is dry and within 7 days. Full cure 36 to 72 hours. Ensure membrane is fully cured before tiling or topping.

If recoating after 7 days, advice from Duram should be sought prior to recoating or reactivating existing system.

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 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 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.

Tensile Bond	2N/mm after 14 days
Application temperature range	10 to 35°C
Elongation	> 300% (Class 111 Extensibility)
Moisture Vapour Transmission	0.26 g/sqm/24 hours

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Conditions of Use and Disclaimer

The information contained in this Material Data Sheet is given in good faith based upon our current knowledge and does not imply warranty, express or implied. The information is provided and the product is sold on the basis that the product is used for its intended purpose and is used in a proper workmanlike manner in accordance with the instructions of the Product Data Sheet in suitable and safe working conditions. Under no circumstances will the Company be liable for loss, consequential or otherwise, arising from the use of the product.

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