# **Product Data Sheet**

Bituflex

#### **Rubberised Bituminous Waterproof Membrane**

#### Description

Duram Bituflex is a water-based 'rubberised' latex / bituminous waterproofing compound incorporating elastomers and reinforcing agents. It is formulated to a brushable consistency, but with sufficient body to provide a high build waterproofing membrane. Bituflex is user friendly and non-hazardous. Although black in colour it will not stain grout or tiles and it will not re-emulsify after fully curing.

Duram Bituflex is designed as a highly economical general purpose waterproofing membrane.

#### Uses

Bituflex is designed as an economical waterproofing short to medium term solution for many non-exposed applications, i.e covered, tiled or topped including: non-timer wet areas, retaining walls. decks, patios, balconies and terraces etc.

#### **Suitable Surfaces**

Bituflex is suitable on most commonly used construction substrates including: Concrete cement, cement render FC sheeting and compressed sheeting, plaster board, block work and brick.

Bituflex can be applied to damp surfaces but freedom from surface water and continual dampness is essential. The product will not cure if surface remains damp. The drying process takes longer if applied to a damp surface than having allowed the surface to dry before applying the product.

# 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

• Bituflex is designed for short to medium term waterproofing protection. If a long term solution is required then products such as Durabit EF, Multithane, Crystoflex, Duram 195 should be considered.

• Bituflex is not designed for exposure to the sun.

• Bituflex will not become waterproof until it had fully dried and cured. Protect from rain until it has cured.

• Bituflex is not compatible with acid based sealants. Ideally Bituflex should be coated with Duram Primeseal before applying sealant to it. Neutral cure sealants are preferred.

• Bituflex is not a trafficable membrane.

# **Benefits and Advantages**

- » Economical
- » Easy to apply.
- » Has excellent adhesion.
- » Will not stain grout and tiles after proper tiling.
- » Flexible.
- » Compatible with most tile adhesives.

#### **Precautions in Use**

Do not apply in areas exposed to the weather if rain is imminent.

Product is considered safe to use if use as intended. Follow precautions in the MSDS and data sheet.

## **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 Lt per 4m<sup>2</sup> 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.

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 Lt per 3m<sup>2</sup> to 4m<sup>2</sup>. 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 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 (self-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

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. The perimeter of waste outlets and around bases of penetrations should be sealed with a polyurethane sealant and allowed to dry.

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 by brush, roller or soft broom, usually in two or more coats of at least 500 microns thick.. The succeeding coats should be applied at right angles to the preceding coats. For best results allow each coat to dry then apply next prior to the surface becoming contaminated. If subsequent coats are applied to 'non-cured' coats inter-coat bubbling may result. If used unreinforced the minimum dry film thickness must be 1mm.

Bituflex can be used fully reinforced using fibreglass or Durascrim (polyester fabric). Ensure that the fabric is free of bubbles and wrinkles and is fully saturated and covered.

#### **Reinforcing 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) the 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.

Unreinforced: Minimum of 0.8 Lts per m<sup>2</sup> per coat. Combined coats of at least 1.6 Lts per m<sup>2</sup>. Reinforced: 1.0 Lts per m<sup>2</sup> per coat. Combined coats 2.0 Lts per m<sup>2</sup>.

## Colours

Dries black.

# **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.

Generally at 25oC at 50RH: Touch dry: 4 to 6 hours Fully dry: 12 to 24 hours. Full cure: 36 hours

# Storage

Keep in cool dry conditions. Do not let product freeze. Product is non flammable and non-hazardous. Available in 4 & 15 Lt containers.

# Clean Up

Wet spills can be cleaned with water. However, it is difficult to remove all residue particularly on porous surfaces.

# **Tiling, Topping or Top Coating**

Bituflex is compatible with most tile adhesives. Ensure adhesive is compatible with flex of the surface. Do not tile until product has fully cured. Rubbing with damp cloth that produces no stain indicates full cure. Adequate expansion joins should be installed in accordance with good tiling practice as per AS3951.1:1991. Bituflex can be topped with sand:cement topping.

# **Safety & Precautions**

The use of gloves and goggles against splashes are recommended. If in eyes, flush thoroughly with clean water, holding open to ensure trapped product may be flushed away. If swallowed, give water to drink and seek medical advice. If inhaled, unlikely due to products viscosity, remove to fresh air and apply artificial respiration if required and seek medical attention. If on skin, remove contaminated clothing and wash skin with soap and water.

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

# **Tests and Technical Data**

Originally tested and approved by ABSAC under Durabit.

Solids	50% to 55%
Hydrostatic pressure	180Kpa
resistance	
Elongation	>450%
Application	10*C to 35*C
temperature ramge	

Issued: 1 May 2012 | Valid to: 31 May 2015

#### **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.

#### **Material Safety Data Sheet**

Bituflex

#### **Rubberised Bituminous Waterproof Membrane**

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

# Identification

Product	Bituflex
Name:	
Other	Rubberised
Names:	Bitumen/Latex
	Emulsion
U.N.	N/A
Number:	
Class:	N/A
Hazchem	N/A
Code:	
Poison	N/A
Schedule:	

#### Physical Description

Appearance:Dark brown<br/>to black<br/>thixotropic<br/>viscous<br/>liquidBoiling Point: +- 100\*C<br/>Vapourmm of Hg at<br/>Pressure:Pressure:25\*C: 30<br/>+- 45%Volatiles:

# IngredientsChemicalCAS<br/>No.WaterN/A 30% to 60%

Latex N/A 30% to 60% Emulsion

Bitumen N/A 30% to 60% Emulsion

Pack Sizes: 15 Litre Pails

Specific 1.05 - 1.1 Gravity: Flash Point: N/A Minor N/A <5% Ingredients Flammability: N/A Water Soluble (will & Solubility: Thickeners re-emsulsify when uncured)

# Uses:

General purpose waterproofing compound

# **Health Warning Information**

#### **Health Effects**

Swallowed: Irritating, possible nausea - will affect digestive tract if swallowed in volume. Eye: Irritation - prolonged contact may damage eye, possibly long term.

Skin: Mildly irritating. May affect skin with prolonged contact.

Inhaled: Irritating - may cause nausea with prolonged contact. Inhalation unlikely due to viscosity of the product.

#### **First Aid**

Swallowed: Do not induce vomiting. Give plenty of water to drink. Seek medical assistance or contact the Poisons information Service.

Eye: Flush thoroughly with clean water, holding eye lid open to flush product from under the lid.

Skin: Remove contaminated clothing, and wash with soap and water.

Inhaled: Product is water based. Treat for drowning. Remove person to fresh air and perform artificial respiration if required and seek urgent medical assistance.

#### **Advice to Doctor**

Treat symptomatically.

## **Precautions in Use**

Product is considered low risk.

#### **Exposure Limits**

N/A

#### Ventilation

Product should be applied in areas with adequate ventilation.

#### **Personal Protection**

Gloves: Rubber or PVC. Eyes: Safety goggles. Protective clothing and the wearing of suitable masks is recommended.

# **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.

Suitable containers: Plastic pails as recommended by manufacturer. Check containers are labeled and leak free.

#### **Spills and Disposal**

Prevent spills from entering the drains or sewers. Absorb product with sand or earth or absorbent material and dispose to land fill in accordance with local council regulations. Product will dry and become inert.

#### Fire / Explosion Hazard

N/A.

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