# DUROMASTIC BE-3

# Bitumen emulsion waterproofing sealer

(formerly Flintkote Type 3 waterproofing sealer)

Revised June 2022

#### **DESCRIPTION**

**Duromastic BE-3** bitumen emulsion is a single-pack, non-fibrated, stable water-borne coating which cures to form a firm and flexible bitumen waterproofing membrane.

**Duromastic BE-3** is designed for use on horizontal and vertical surfaces.

**Duromastic BE-3** is suitable for use as a waterproof membrane on concrete, asbestos cement, roofing felt, polystyrene, mastic asphalt, slates, tiles and metal surfaces.

#### PRODUCT FEATURES

- Easy to apply by brush, soft broom or a large commercial airless sprayer.
- Forms a seamless and lap free membrane over the substrate.
- Water-based and non-toxic.
- Cures to form a flexible resilient waterproofing barrier over a wide range of temperatures.
- No flow or sagging of the film at elevated temperatures even on vertical surfaces.
- Excellent adhesion to the concrete substrate prevents lateral migration of water underneath.
- Can be applied to slightly damp concrete surfaces when primed with Duromastic EP Hibuild epoxy primer.

# **USE AREAS**

#### Waterproofing

Typical applications include concrete roofs, asbestos cement roofing, exposed metal roofs, rejuvenation of asphalt roofs, retaining walls, external concrete walls, floor slabs, bathrooms, kitchens, balconies and planter boxes and as a non-toxic lining to water tanks.

#### Insulation

Provides a vapour barrier for cold storage rooms, mushroom houses and similar installations. Suitable for application in food stores.

#### **Metal Protection**

As a protective coating against corrosion of iron roofing, pipes, structural steelworks and other metal equipment.

#### Water tank sealing

To seal and waterproof concrete water tank walls and floors.

## SPECIFICATION CLAUSE

Liquid applied bituminous waterproof membrane where shown on the drawings shall be **Duromastic BE-3** bitumen emulsion obtained from Regis Coatings. It should be used in accordance with the current product data sheet from Regis Coatings Ltd.

# **PACKAGING**

Duromastic BE-3 is available in 4, 10 and 20 litre pails.

## **Complementary Products**

Duromastic EP Hibuild 4, 8 and 20 litre packs
Duromastic SB-4 4 and 20 litre pails
Fibreglass CSM 1 metre wide x per metre
Gilsonite Aluminium 4 and 20 litre pails



### **APPLICATION INSTRUCTIONS**

#### **Surface Preparation**

Surfaces shall be dry, clean and free from dust, dirt, oil, grease, moss and loose material.

#### Priming

Dry porous surfaces such as concrete or brick may be primed with a coat of Duromastic BE-3 thinned 50% with water, EXCEPT where the concrete is likely to be damp. If damp, apply a primer coat of Duromastic EP Hibuild epoxy sealer.

Mild steel or structural steel surfaces should be primed with Syncro Zinc Primer or Duromastic SB-150 Bitumen Paint.

Rusted roofing iron does not normally require any additional primer before Duromastic BE-3 application.

#### **Membrane Application**

Stir the emulsion thoroughly before use. **Duromastic BE-3** may be applied by brush or soft broom for a minimum of 2 coats. Allow to dry between coats and apply each coat at right angles to the previous coat. **Duromastic BE-3** normally dries within 24 hours of application. For maximum durability, the coating can be reinforced with **Fibreglass CSM** or woven fibreglass. Protect from rain and frost until cured.

In water tanks, allow a minimum of 7 days for the **Duromastic BE-3** to dry and fully cure before re-filling the tank with water. Drying conditions must be warm and dry with good ventilation.

# **Roofing application**

Apply one heavy coat using a brush, soft broom or large commercial airless sprayer at 4  $\,\mathrm{m^2}$  per litre.

For exposed surfaces subjected to direct sunlight, allow to cure for 4-5 weeks, then apply 1 top coat of **Gilsonite Aluminium** at 6-9m<sup>2</sup>/litre. (Refer to the Regis Gilsonite data sheet).

# **CLEANING OF TOOLS**

Equipment and tools should be cleaned immediately after use with cold water. Dried material can be removed with mineral turps.







PRODUCT DATA SUMMARY	Actual values may vary from the samples tested.	
Property	Test	Typical Values
Colour when wet		Brown
Colour when dry		Black
Appearance		Thick, smooth cream
Solids content		>50%
Specific gravity		About 1.0
Surface drying time		4 to 6 hours depending on temperature and humidity
Coverage		Approx 2 - 4 sqm / litre per coat on concrete surfaces Approx 4 - 6 sqm / litre per coat on metal surfaces
Flash point		Waterbased, non-flammable
Heat resistance at 100°C		No flow sag or blistering
Water vapour transmission	ASTM E96	5g/m²/24 hours
Tensile strength, reinforced with Fibreglass	ASTM D412	2N/mm²
Shore A hardness, reinforced with Fibreglass	s ASTM D2240	50
Crack bridging, reinforced with fibreglass	ASTM C836	Able to bridge 2mm crack
Chemical and water resistance		Resistant to water, alcohol, most salt solutions, some dilute acids and alkalis. Not resistant to oil, solvents and some detergent solutions.



Flammability: Non flammable.

**Skin contact:** Wear impervious gloves. Occasional contact is unlikely to have any adverse effect except on particularly sensitive skin. As a general precaution, avoid repeated or prolonged contact. Remove skin contamination when wet with water. Use a proprietary hand cleaner if the product has dried.

**Eye Contact:** As eyes are a sensitive area, contact should be avoided. Wear safety glasses while mixing and applying. In the event of accidental contact, irrigate immediately with plenty of clean water. Consult a doctor.

**Inhalation:** Use in well ventilated areas and avoid inhalation. This product is not likely to cause breathing difficulty, but if breathing problems occur, move the person to fresh air and obtain medical attention.

**Oral ingestion:** With proper handling oral ingestion should not occur. The possibility can be minimized by not consuming food in the working area and by washing hands thoroughly before eating and drinking.

Spillage: Unused material should be disposed of in accordance with local regulations. Do not dispose of unused material into drains.

**Disposal of containers:** Do not leave empty containers on the work site where any residue could be a hazard to children or animals. Reseal the lids and remove all containers to a central disposal point.



# **SUPPLIED BY:**

#### **Regis Coatings Ltd**

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Email: sales@regiscoatings.co.nz Website: www.regiscoatings.co.nz The information provided in this technical bulletin is as up-to-date and correct in detail as possible and is intended to give a fair description of the product and its capabilities. The user of these materials must satisfy themselves with the suitability for a particular application. If unsure about use with certain chemicals, please contact the manufacturer.

