

Flintkote Ultra

Elastomeric SBS modified bituminous waterproofing membrane



Shell Bitumen

DESCRIPTION

FLINTKOTE ULTRA is a liquid applied, single-pack elastomeric waterproofing coating that provides long lasting waterproofing on applications which require enhanced elongation characteristics. **FLINTKOTE ULTRA** is made of SBS rubber modified bitumen which cures to form a seamless waterproofing membrane that is durable, highly flexible and elastomeric. Its excellent elastomeric property allows the cured membrane to accommodate thermal stress typically found in roofing application.

ADVANTAGES

- Easy to apply by brush, trowel and sprayer.
- Completely seamless and lap free membrane over the substrate.
- Suitable for use over any shape of substrate and easily conforms to protrusions and difficult details.
- Safe to use – water based formulation with no harmful vapour.
- Excellent elastomeric property of the cured film accommodates thermal movement in the substrate without cracking.
- Excellent adhesion to the substrate prevents lateral migration of water underneath.
- No flow or sagging of the film at elevated temperatures even on vertical surface.
- Can be applied to damp surface without standing water such as green concrete surface.

USES

Waterproofing

Typical applications will include concrete roofs, asbestos cement roof, exposed metal roofs, rejuvenation of asphalt roof, retaining walls, external concrete walls, above-grade floor slabs, bathrooms, kitchens, balconies and planter boxes.

SPECIFICATION CLAUSE

Supplier Specification

Liquid applied elastomeric SBS rubber modified bituminous waterproof membrane where shown on the drawings shall be **Flintkote Ultra** obtained from Shell. It should be used in accordance with Shell's current product data sheet.

Performance Specification

Liquid applied, water based elastomeric waterproofing membrane where shown on the drawings shall be made of SBS rubber modified bitumen. The membrane when cured shall be capable of an elongation of not less than 1000%. Its tensile strength shall be not less than 0.3 N/mm² for unreinforced membrane. It shall be used in accordance with in Shell's current product data sheet.

APPLICATION INSTRUCTIONS

Surface Preparation

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

Priming

Porous surfaces such as concrete or brick and metal surfaces should be primed with **Flintkote PF4** Bitumen Paint or **Flintkote Penetration Primer** at a coverage of 0.1-0.15 ltr/m². Allow to dry prior to **Flintkote Ultra** application.

Membrane Application

Stir the emulsion well before use. **Flintkote Ultra** may be applied by roller, brush or spray for a minimum of 2 coats at a coverage of 0.75-1 ltr/m² per coat. Allow to dry between coats and apply each coat at right angles to the previous coat.

Flintkote Ultra normally cures within 24 hours of application. Where improved strength and puncture resistance is required such as exposed roofing system, **Flintkote Ultra** can be reinforced with **Flintkote FG4** fabric or equivalent. Protect from rain and frost until cured.

For exposed surface subjected to direct sunlight, apply 2 coats of **Flintkote Decoralt** or **Flintkote Aluminium** on the cured membrane.

COVERAGE

Coverage rates will vary depending on the actual surface environment and application. The typical coverage is about 1.5-2 litres /m² for a 2 coats application. 1.5 litres/m² coverage gives about 1mm dry film thickness.

HEALTH AND SAFETY

Flammability: Non-flammable

Skin Contact: 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: Unlikely to cause damage, no special precautions are necessary. However, as eyes are a sensitive area, contact should be avoided. In the event of accidental contact, irrigate immediately with plenty of water.

CLEANING OF TOOLS

Clean immediately after use with water. Use kerosene or white spirit if the material has dried. During work, place tools in water when not in use.

STORAGE

A minimum of 12 months in original sealed containers stored under cover at temperature between 5 °C and 40 °C. Must be protected from freezing conditions.

PACKING

Flintkote Ultra	18, 200 litre
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Ancillary Products

Flintkote PF 4 Bitumen Paint	18, 200 litre
Flintkote Penetration Primer	18, 200 litre

Complementary Products

Flintkote Decoralt	18 litre
Flintkote Aluminium	18 litre
Flintkote FG4 fabric	1m x 100m per roll

Note: Please confirm with the local Shell Company for product availability

PRODUCT DATA SUMMARY

PROPERTY	TEST	TYPICAL VALUES
Colour, Wet		Brown
Colour, Dry		Black
Appearance		Thick, smooth cream
Solid Content		>55% by volume
Specific Gravity		1
Surface Drying Time		About 6 hours, depending on temperature and humidity
Coverage		0.75 – 1 litre/m ² per coat, 2 coats minimum
Flash Point		Water based, non flammable
Heat Resistance, 100 °C		No flow, sag or blistering
Water Vapour Transmission	ASTM E96	9 g/m ² /24 hours
Tensile strength	ASTM D412	
■ unreinforced		0.3 N/mm ²
■ reinforced with FG4 fabric		2.0 N/mm ²
Elongation at break	ASTM D412	
■ unreinforced		>1000%
■ reinforced with FG4 fabric		>190%
Shore A Hardness	ASTM D2240	>50
Adhesion to Substrate	ASTM D4541	0.2N/mm ²
Crack Bridging	ASTM C836	Able to bridge 2mm crack
Water Penetration Test (2m waterhead, 6 hours) (Reinforced with FG4 Fabric)	DIN 1048:Pt 5	Passed: No leakage observed
Accelerated Weathering (2000 hours exposure)	ASTM G53	No defects observed
Chemical and water resistance		Resistant to water, alcohol, most salt solutions same dilute acids and alkalis. Not resistant to oil, solvents and some detergent solutions

Typical values may represent average values from samples tested.

Important Note

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