



EcoThane Installation Guide



Designed for;

Flat Surface Applications

Suitable for application onto;

**Felt / Asphalt / Timber / Concrete / PVC /
GRP / Single Ply**

EcoThane

A one component liquid waterproofing composition, which after polymerisation produces an elastomeric, cold applied polyurethane membrane.

The membrane cures in a continuous and elastic form, as a totally adhered layer.

This waterproofing layer guarantees total water-tightness and withstands building movements.

Its fast-curing rate allows its use as a base coat, reinforcing layer or topcoat, especially in low temperature applications.



Feature & Benefits

- Refurbishment / New Build
- Single component – no mixing
- Cold applied – no heat required
- Elastic – retains flexibility
- Fully bonded
- Hard wearing
- Fast curing

Colours Available

- Light Grey

Certifications

- CE



Typical Coverage Rate Table (Flat Roof area):

	Standard ECOTHANE system 20 year expected durability	
Main certificates	CE	
Container Size	5kg / 25 kg.	
Colours Available	Light Grey	
Substrate condition	Smooth	Rough
Primer	If required	
EcoThane First Coat	1.25 kg/m ² (smooth surface)	1.5 kg/m ² (rough surface)
Reinforcement matting	225 gsm fibreglass fleece reinforcement matting	225 gsm fibreglass fleece reinforcement matting
EcoThane Second Coat	0.75 kg/m ²	1 kg/m ²

EcoThane should only be applied to structurally sound areas. Areas that do not meet this requirement must be treated accordingly to leave a substrate suitable for liquid application. Dirt, dust, organics and any other loose materials must be removed by scraping or brushing with a stiff bristle brush and power washing with a biocide wash before application of the first coat and detailing (for further information on recommended Biocide contact ECOPROOF Technical Support).

Cut Reinforcement matting to size. Matting is available in 1250mm. Pre-cut to size before applying EcoThane. Apply EcoThane to the detail area and immediately lay the Reinforcement matting into the wet coating and begin to embed with a suitable roller/brush. For best results complete all vertical/ detailing applications first and allow to dry before completing the main application. For vertical applications due to viscosity of product an additional application of product may be required post initial cure.

Overlaps between strips of Reinforcement matting must be at least 50mm with feathered edges. Ensure there is sufficient material to saturate these overlap areas.



Use a loaded roller to ensure full saturation of the reinforcement matting. Coverage rates are governed by the substrate. Refer to the specification and/or ECOPROOF Seamless Waterproofing Systems technical department for further details.

Ensure full coverage of the surfaces and monitor by taking wet and dry film thickness readings. The coating must maintain its thickness across all details including penetrations and abutments.

The reinforcement matting must be applied to follow the contours of the substrate making sure the reinforcement matting does not tent. If tenting does occur, realign the matting if possible to remove the crease or cut the length of the crease and allow the matting to fold over itself. Treat with EcoThane as required ensuring full saturation.

Once cured, inspect the membrane for bubbles or fish mouths and any pinholes. If such areas are found, ensure they are cut back and lightly abraded to give a smooth finish. Pinholes should be treated with additional product and left to cure before application of the top coat.



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Primers;

EcoThane Concrete Primer (2 part)

For use on Concrete and Asbestos where the surface has a moisture content of <6%.

Applied by brush or roller at average coverage rate of 0.3kg / m² depending on porosity of the surface.

For additional information please consult separate EcoThane 2-Part Concrete Primer Technical Data Sheet

EcoThane PU Primer

For use on non-porous surfaces such as single ply, PVC, GRP etc.

This is our etching primer and softens the surface it is being applied to and provides a sufficient key for the main EcoThane membrane.

This primer can also be used to reinstate the EcoThane when overcoating, if left exposed for longer than 14days.

Applied by brush or roller at average coverage rate of 0.1kg / m².

For additional information please consult separate EcoThane PU Primer Technical Data Sheet.

EcoThane Dry Porous Primer Flex

For use on timber and felt.

Applied by brush or roller at a coverage rate of 0.15kg per m² depending on the porosity of the surface.

For addition information please consult separate EcoThane Dry Porous Primer Flex Technical Data Sheet.



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EcoThane Metal Primer

For use on metal.

Applied by brush or roller at a coverage rate of 0.15kg per m².

For additional information please consult separate EcoThane Metal Primer Technical Data Sheet.

First Coat application EcoThane;

EcoThane is a cold liquid applied, high performance, high build polyurethane coating for use on most roof surfaces including asphalt, bituminous felt, concrete, single ply surfaces. This forms the first coat for the EcoThane liquid applied roofing system

EcoThane is a viscous, semi Thixotropic, high solids liquid polyurethane that cures with the moisture in the air to form a seamless and durable waterproofing coating. It also contains an accelerant that reduces significantly its curing time against standard single component polyurethane.

Once the detail areas are complete, begin installation on to the main roof area. Ensure overlaps onto the existing reinforced EcoThane sections are by at least 50mm. Apply a layer of EcoThane and embed into the Reinforcement matting. Apply additional material where required.

Thoroughly mix EcoThane using a paddle mixer at a low rpm. Ensure the product is completely homogenous and then leave to rest to let excess air disperse before application. This can be checked by waiting until surface bubbles disappear in the drum. This will reduce the likelihood of pinhole formation in the membrane.

EcoThane should be applied by brush or short pile roller at a typical coverage rate of 1.25 kg/m² on smooth roof surfaces and rising to 1.5 kg/m² on rough roof surfaces. Coverage must be sufficient to fully embed and saturate the Reinforcement Matting before application of the second coat.

Whilst the EcoThane is still wet ensure the Reinforcement matting is saturated and fully embedded in to the EcoThane.

Use a loaded roller to ensure full saturation of the reinforcement matting. Coverage rates are governed by the substrate. Refer to the specification and/or ECOPROOF Seamless Waterproofing Systems technical department for further details.



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Ensure full coverage of the surfaces and monitor by taking wet and dry film thickness readings. The coating must maintain its thickness across all details including penetrations and abutments.

Cure times stated below are approximate. Specific onsite conditions (% relative humidity in the air, direct sun on the roof etc.) may cause variations with cure times.

ECOTHANE (first COAT)		
Container Size	5kg / 25 Kg.	
Coverage rates (typical)	1.25 kg/m ² (smooth surface)	20 m ² / 25 kg. drum
	1.5 kg/m ² (rough surface)	16.6 m ² / 25 kg. drum
Allowance should be made for additional coverage rates for embedment of the reinforcement matting fabric at low temperatures		

ECOTHANE second layer;

Thoroughly mix EcoThane using a paddle mixer at a low rpm. Ensure the product is completely homogenous and then leave to rest to let excess air disperse before application. This can be checked by waiting until surface bubbles disappear in the drum. This will reduce the likelihood of pinhole formation in the membrane.

Once the first coat of EcoThane has fully cured the whole area will need to be snagged using a piece of 80 grit sandpaper or similar to remove all wicks.

Apply the second coat of EcoThane at a coverage rate of 0.75kg per m² using a brush or short piled roller.

Ensure that the total roof area and base coat have been over coated with the topcoat in accordance with the ECOPROOF Seamless Waterproofing Systems recommendations.

Cure times stated below are approximate. Specific onsite conditions may cause variations with cure times.



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ECOTHANE(second COAT) WET ON WET		
Container Size	5kg / 25 kg.	
Coverage Rates (typical)	0.5 kg/m ²	50m ² / 25 kg. drum
Typical Drying Times at 15°C	Touch Dry	8 hours
	Minimum over coating	12 hours
	Full Cure	7 Days

Visually inspect the wet coating checking for defects such as pinholes, discontinuity and exposed matting. Undertake corrective measures as required.

Once cured, inspect the membrane for lifting or fish mouths and any pinholes. Such areas if affected should be cut back and lightly abraded to give a smooth finish. Pinholes should be treated with additional product and left to cure.

Allow the membrane to fully cure before reinstating or installing any plant equipment onto the roof area.

Storage;

All materials must be stored undercover and storage areas must be kept between 5°C and 25°C. Materials should never be exposed to freezing conditions or excessive temperature changes. Once opened, containers should be used immediately. Unopened ECOTHANE can be used up to 12 months after the date of manufacture.