



**Sealco**  
Waterproofing Systems

# FlameSEAL Torch-on

Modified Bitumen Membrane



TUFFSEAL™

FLAMESEAL Modified Bitumen Membrane



## PRODUCT DESCRIPTION

### FLAMESEAL® TORCH-ON MEMBRANE

The FlameSEAL® membrane system is comprised of a full range of torch-on membranes used in a wide range of waterproofing applications. The FlameSEAL® system may be fully torched, mechanically fixed or cold-applied using a bitumen adhesive depending on the performance required.

### WHY FLAMESEAL®

FlameSEAL® has many outstanding product features, making it the ultimate choice when selecting torch-on products.

Its superior qualities of tensile strength, elongation and tear resistance sets FlameSEAL® apart as the ideal durable solution for your waterproofing requirements.

In particular, FlameSEAL®...

- Has high tensile strength and tear resistance.
- Has excellent puncture resistance.
- Is BEAL Appraised.

### AREAS OF USE

FlameSEAL® membrane systems are used in a variety of waterproofing applications including;

- Flat roofs and gutter
- Below ground Tanking
- Decks and Balconies
- Podiums, car-decks and ramps
- Water tanks

### SINGLE OR TWO LAYER SYSTEMS?

One of the advantages of a torch-on system is that a variety of systems can be used depending on the situation. As long-term performance and durability are our over-riding goals, Sealco strongly recommend two-layer systems be installed wherever possible. In roofing applications, fully torched, mechanical and peel & stick double layer system is required. In below ground tanking applications, single layers are often installed, however a two-layer system is also a recommended option as it provides greater protection against water penetration and mechanical damage by other trades or installations.



### BEAL APPRAISED

The FlameSEAL® system has been BEAL appraised as an Acceptable Solution in terms of New Zealand Building Code compliance and the products *comply with NZBC Acceptable Solution E2/AS1 Paragraph 12.2*

Please contact Sealco Ltd for a copy of this BEAL Appraisal Certificate.

You can also download the certificate on our website

[www.sealco.co.nz](http://www.sealco.co.nz)



Full system specifications, drawings & installation information can be viewed and downloaded from the BituFLAME page on our website:

[www.sealco.co.nz](http://www.sealco.co.nz)

## Durability & Performance

### ROOFING APPLICATIONS

When fixed according to specification, the FlameSEAL® system will meet the NZBC B2.3.1(b) requirements, being durable for 15 years.

The durability opinion given by BEAL for the FlameSEAL® system states that when subjected to normal conditions of environment and use, the system is expected to have a service life of at least 15 years.

### TANKING APPLICATIONS

When fixed according to specification, the FlameSEAL® system will meet the NZBC B2.3.1(a) requirements of 50-year durability.

### PRODUCT WARRANTY

On completion of each contract a product warranty for a period of up to 20 years is provided on request from the approved installer. Sealco FlameSEAL® roofing membrane has proven to perform well in excess of 15 years from the extremes of the harsh New Zealand climate conditions

Product characteristics (Typical Values)	FlameSEAL by SEALCO	standard
<b>Cap sheet</b>	<b>COMBO</b>	
Thickness	4,5 kg/m <sup>2</sup>	EN 1849-1
Maximum slates loss	< 5% chip loss	EN 12039
Modified bitumen top coating	APP - modified bitumen	
Reinforcement	180 g/m <sup>2</sup> composite reinforcement	
	Satbilized Polyester	
Overlap coating	APP-to-SBS modified bitumen	
Overlap joint strength: shear resistance	750 N/50mm	EN 12317-1
Overlap joint strength: peel resistance	150 N/50mm	EN 12316
Tensile strength: (longitudinal)	850 N/50mm	EN 12311-1
Tensile strength: (transversal)	850/750 N/50mm	EN 12311-1
Elongation: (longitudinal & transversal)	45%	EN 12311-1
Flow resistance at elevated temperature:	150°C (APP) 100°C (SBS)	EN 1110
External fire performance (= fire retardance)	Froof (International Code)	EN 13501-5
Expected lifetime Codemark	(cert. BBA) <b>30+ years</b>	
Suitable for potable water collection	Yes	
Durability testing in New Zealand	Yes, 15+ years' service in NZ	

### WARM & GARDEN ROOFS

FlameSEAL® membrane may be used in ballasted or garden roof applications where gravel and soil is installed on top of the membrane. The FlameSEAL® thermal adhered or peel & stick membranes are also suitable for our WarmSEAL insulated warm roof system. See our Sealco WarmSEAL & GreenSEAL information for more details.



### APPROVED APPLICATORS

By choosing FlameSEAL®, you can have the added protection of a Sealco Licensed applicator complete the installation. Licensed applicators are the premier installers of Sealco Products, and once the job has been registered with Sealco Ltd, and complete to Sealco's Standards a material warranty will be issued.



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## System Components

### FLAMESEAL® PRIMER

A solvent based, bituminous primer designed to penetrate concrete or ply surfaces and provide a bondable surface. Supplied in 20ltr metal pails.

### BITUBOND® ADHESIVE

A water-based bitumen adhesive used for glue-fixing torch-on membranes to gutters, parapets and other tricky detailing areas. Supplied in a 10ltr plastic pail.

### FLAMESEAL® BASE SHEET

An APP-modified bitumen membrane with a with 180gsm spun-bound composite polyester reinforcement. FlameSEAL® BS has a thin torch-off polyethylene film or polyester mat on the underside, and polyethylene film on the top surface. FlameSEAL® BS is used as the base sheet in 2-layer systems or as the under flashing membrane. A variety of FlameSEAL® BS base sheets are available including peel & stick base sheets. Please contact your Sealco representative for advice.

### FLAMESEAL® CAP SHEET

An APP-modified bitumen with a 180gm/m<sup>2</sup> spun bond composite polyester reinforcement. FlameSEAL® CS has a thin torch-off polyethylene film on the underside, and polypropylene mat or mineral chip finish on the top surface. A variety of FlameSEAL® CS cap sheets including peel & stick cap sheets are available. Please contact your Sealco representative for advice.

### FLAMESEAL® RE-ROOF MEMBRANE

A Specifically designed re-roof membrane compatible with SBS and APP modified bitumen membranes. It's very low viscosity bitumen enable it to be used directly over old granule-finished torch-on membranes. Available in 1mx10m rolls in mineral finish.

### FLAMESEAL® CARPARK

An APP-modified bitumen membrane specially designed for bridges, tunnels, car parks with concrete or asphalt overlay. Available in 1.0m x 10.0m x 5mm rolls.

### FLAMESEAL® ANTI-ROOT TANKING

An APP-modified bitumen with 180gsm spun-bound composite polyester reinforcement specially designed for roof gardens, where vegetation is foreseen and contains special additive with very high resistance to root penetration.

### CHRYSTALGLAZE CLEAR COAT

A clear coating to assist with weather wear and to lock in the mineral chip to reduce chip loss and extend the life of the membrane. Supplied in a 10ltr pail.



### SPECIFICATION GUIDELINES\*

- Plywood and / or concrete substrates to be clean and fully dry/cured. Plywood to be tight butted, securely fixed and well supported to prevent movement.
- Slope to be sufficient to drain all surfaces
- All substrates to be primed, ensuring good, even coverage and penetration.
- All torch-on membranes to be torched to substrate and all laps seam welded.
- VentRITE Roof Vents to be installed on all skillion type roof spaces.

Approved Installer:



Warehouses:  
CHRISTCHURCH H/O  
AUCKLAND



P O Box 35-190  
Shirley  
CHRISTCHURCH 8640



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