# PRODUCT TECHNICAL STATEMENT



# Viking Mercury FC

Version: VMFC-PTS-V1

### **Product description**

The Viking Mercury FC Membrane is a modified-bitumen, torch-on, damp-proof membrane (DPM) waterproofing system for vertical and horizontal tanking applications. It is primarily applied to the outside of a sub-structure of a building (such as a foundation or basement) to prevent water ingress.

Other forms of tanking where Mercury FC can be used include under floor slabs, behind masonry walls, the lining of substrates of in situ or precast concrete; retaining walls, cellars, lift shafts, tunnels, plaza decks, roof gardens and planter boxes

Viking Mercury FC comprises of a 4mm thick reinforced-polyester and fibreglass SBS (Styrene butadiene styrene) modified-bitumen membrane which is torch-applied for maximum adhesion to a compatibly primed surface. The inherent reinforcement in the sheet maximises the tensile strength necessary to deal with latitudinal movement of the substrate. The Mercury FC system consists of the membrane, bituminous primer, bituminous gum, protection boards and drainage boards, Mercury FC has a cold flexibility down to -20 degrees Celsius. Being 4mm thick, it possesses very high puncture resistance as well as very high chemical resistance. Mercury FC resists hydrostatic pressure and is mechanically strong.

Mercury FC comes in rolls 4mm thick x 1.0m wide x 10m long. It is BRANZ Appraised No.864 and holds a 20-year product warranty. Viking Roofspec is an active member of the Waterproofing Membrane Association Inc. (W.M.A.I.); an incorporation of companies whose goal is to lift the standard of waterproofing in New Zealand.

The W.M.A.I. is formulating a "Tanking Code of Practice" for the Department of Building and Housing.

### Purpose and use

Viking Mercury FC Membrane has been appraised for use:

- On buildings subject to non-specific design under floor slabs complying with NZS 3604 and behind concrete
  masonry basement walls and under floor slabs complying with NZS 4229; and,
- on buildings subject to specific design with substrates of insitu or precast concrete complying with NZS 3101 or concrete masonry complying with NZS 4230; and,
- · where subsoil drainage and free draining granular backfill has been placed behind basement walls.
- Viking Mercury FC Membrane must be adequately protected against damage during backfilling and in service.
- The product must be installed by Viking Roofspec approved installers.

## **Conditions**

- The product can be used on substrates of plywood, concrete, PIR Polyiso Insulation, or SIP's, subject to specific structural and weathertightness design.
- The weathertightness design of junctions for each specific structure is the responsibility of the building designer.
- The product will assist with meeting the provisions of the New Zealand Building Code clauses B1 and B2, provided it is employed in accordance with the supplier's installation and maintenance requirements.
- The product is suitable for use in all Climate Zones as defined in NZBC H1/AS1 and all Exposure Zones as defined in NZS3604.

## Compliance with the New Zealand Building Code

This system will, if employed in accordance with the supplier's installation and maintenance requirements, assist with meeting the following provisions of the building code:

- Clause B2 Durability: Performance B2.3.1, B2.3.1(a), B2.3.2, B2.3.2(a)
- Clause E2 External moisture: Performance E2.3.3
- Clause F2 Hazardous building materials: Performance F2.3.1

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## **Design Requirements**

Product specification and incorporation of Viking Mercury FC Membranes into the building design shall be carried out by a designer/architect/engineer or a building professional who:

- Is qualified to design the buildings covered under the 'Scope' of use of this product.
- Has ready access to the technical specifications including installation details and standards referenced in the BRANZ Appraisal No. 864 where the design limitations are outlined for the scope of this PTS.
- Accessories in the Viking Mercury FC system include bituminous primer (20L), bituminous gum, protection boards and drainage boards.

## **Installation Requirements**

Installation of the Viking supplied system shall be carried out by a Viking Roofspec trained and licensed installer. Installation shall be undertaken in accordance with all relevant technical information related to the selected installation method, including information contained within the current Viking PDS and Viking Installation Guide

#### **Quality assurance**

- BRANZ Appraisal No. 864
- Masterspec 4131VM: Viking Mercury FC
- Tanking Code of Practice
- Viking Mercury FC PTS
- Viking Mercury FC PDS
- Viking Mercury FC Detail

## **Warranty information**

Viking Mercury FC Tanking Membranes are backed by Vikings 20-year product warranty with Certificate of Workmanship provided by Viking Approved Applicator companies. Viking Roofspec only supply Viking Mercury FC Membrane systems to our Approved Applicator network of Viking Licensed Installers.

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