

# FLAGON TPO-THERM WARM ROOF SYSTEM

Single layer TPO waterproofing with vapour barrier and thermal insulation

January 2025

## PURPOSE AND SCOPE OF USE:

The EQUUS SOPREMA FLAGON TPO-THERM warm roof system is a light-weight, thermally insulated roofing system consisting of the FLAGON TPO single layer membrane applied over a thermal insulation board and vapour barrier. A warm roof system guarantees a continuous and efficient thermal resistance (R-Value) as per the New Zealand Building Code's H1 requirements. This system is designed for use on exposed flat roofs and decks.

FLAGON TPO provides a UV resistant, puncture resistant membrane, that is installed with adhesive and hot air meaning a totally flameless installation for the residential and commercial industries. Suitable for use over plywood, concrete, insulated panel or other approved substrates. Suitable for roofs, decks, balconies, gutters and other waterproofing applications on new builds or renovations.

FLAGON TPO is available in a naked or fleece-backed option, depending on project requirements. The naked TPO is a more economical option, but the fleece-backed TPO is more aesthetically forgiving over imperfect substrates.

FLAGON TPO can be overlaid with Fixplus or other approved pedestals, pavers and decking, Kraitec Step walkway tiles, and Soprasolar or other approved solar panel supports.

## PRODUCTS:

The system encompasses a selection of the products below. Refer to standard specifications P3601 and P3602 for full specification details. Technical datasheets and specifications can be found on <https://equus.nz>

FLAGON EP/PR	FLAGON EP/PV-F
FLAGON EP	Cantac Roof-Tac Adhesive
FLEXOCOL A89 Adhesive	FLAGON Termination Bar and other premanufactured accessories
FLAGMETAL and accessories	NOVA-SK or approved vapour barrier
COLTACK EVOLUTION 750 or approved PU Foam	Mechanical Fixings
Eurothane Silver PIR Board	SOPRA-ISO PIR Board
SOPRAROCK Mineral Wool Insulation	Permabase Dek

## SPECIFICATIONS:

TPO-THERM on plywood substrate
TPO-THERM on concrete substrate
TPO-THERM on metal substrate
TPO-THERM on insulated panel substrate
Masterspec 4422EF EQUUS SOPREMA FLAGON TPO Roof & Deck Membrane

## COLOUR:

Standard membrane colour of Basalt Grey, or available in sand grey with a higher solar reflectance.

## CONDITIONS OF USE:

In areas of regular foot traffic or higher than for normal maintenance traffic, the membrane must be overlaid with Fixplus pedestals and pavers or decking, Kraitec Step walkway tiles or other approved protection.

The product must be installed by a Certified Equus Applicator. Verification of their status can be confirmed by a current applicator certificate or by contacting Equus Industries. Any installation must be done in accordance with the latest specifications and technical documentation, or with written approval by Equus Industries Ltd.

# FLAGON TPO-THERM WARM ROOF SYSTEM

Single layer TPO waterproofing with vapour barrier and thermal insulation

January 2025

## BUILDING CODE COMPLIANCE:

**B2 Durability** - B2.3.1 (b), FLAGON TPO-THERM has a durability of at least 15 years when installed with the correct specification, installation and maintenance. See BRANZ Appraisal 1157, BRANZ Appraisal 1169.

**E2 External moisture** - E2.3.1, E2.3.2, E2.3.7 Test data, together with in-service history in New Zealand and internationally, of the correctly installed FLAGON TPO-THERM Warm Roof over correctly designed and constructed substrates, show that the membrane successfully resists the ingress of moisture. See BRANZ Appraisal 1157, BRANZ Appraisal 1169.

**E3 Internal moisture** - E.3.3.1 FLAGON TPO-THERM Warm Roofs provide the habitable buildings with adequate thermal resistance and R-Values that are equal to or above those specified in E3/AS1. See BRANZ Appraisal 1169.

**F2 Hazardous building materials** - F2.3.1 Well known experience with the type of materials used together with in-service history, show that FLAGON TPO-THERM complies with this performance requirement. Refer to SDS at [www.equus.nz](http://www.equus.nz)

**H1 Energy efficiency** - H1.3.1 (a) FLAGON TPO-THERM Warm Roofs provide the building with adequate thermal resistance and R-Values that are equal to or above those specified in H1/AS1 and H1/AS2. See BRANZ Appraisal 1169.

## SUPPORTING DOCUMENTATION:

The following additional documentation supports the above statements:

Title (type)	Version	URL
BRANZ Appraisal No. 1157	11 May 2021	<a href="http://www.equus.nz/content/reports/branz-appraisal-flagon-tpo-1157.pdf">www.equus.nz/content/reports/branz-appraisal-flagon-tpo-1157.pdf</a>
BRANZ Appraisal No. 1169	02 Nov 2022	<a href="http://www.equus.nz/content/reports/branz-appraisal-warmroof-1169.pdf">www.equus.nz/content/reports/branz-appraisal-warmroof-1169.pdf</a>
Technical Datasheets for products listed on page 1 of this document		Technical datasheets can be found on <a href="http://www.equus.nz">www.equus.nz</a> .

## WARNINGS AND BANS:

Is the building product/building product line subject to warning or ban under section 26 of the Building Act 2004?	No
--	----

## MANUFACTURER CONTACT DETAILS:

Manufacture location	New Zealand
Legal and trading name of manufacturer	Equus Industries Ltd.
Manufacturer address for service	4 Sheffield Street, Blenheim 7274
Manufacturer website	<a href="http://www.equus.nz">www.equus.nz</a>
Manufacturer email	<a href="mailto:info@equus.nz">info@equus.nz</a>
Manufacturer phone number	03 578 0214
Manufacturer NZBN	9429032000306