

# DUO HT 4 Slates/F C180 FC LANDSCAPE

## Fire-resistant waterproofing membrane

February 2024

### DESCRIPTION & APPLICATION:

A flexible waterproofing membrane with a dual reinforcement and a double polymeric bitumen coating. The upper coating consists of TPO (Thermoplastic PolyOlefins) - modified bitumen, resulting in a high mechanical resistance and is UV resistant. The undercoating consists of SBS (Styrene Butadiene Styrene) - modified bitumen with high elasticity and strong adhesion properties.

The composite reinforcement of polyester and glass scrim, (180 g/m<sup>2</sup>) combine to provide strength and stability. The upper side is finished with optimally pressed in coloured slates and the underside is finished with a sacrificial film. The selvedge with a width of 8 cm is coated with SBS modified bitumen to ensure a SBS-SBS seal. This provides an easy application technique and perfectly sealed joints.

This membrane has been especially designed for fire-resistant applications and meets the requirements of the class Broof(t1) following ENV 1187. The coating is enriched with root resistant additives and the membrane is therefore especially used as a cap sheet for root resistant waterproofing systems (green roofs) for single or multi-layer torched applications.

### PACKAGING:

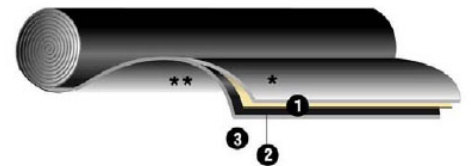
Roll size: 8 m, Roll weight: 37 kg, Number of rolls on a pallet: 23.

### TECHNICAL DATA:

Characteristics	Test Method	Units	Expression of Result	Value
Length x width	EN 1848-1	m x m	MLV ≥	8 x 1
Thickness	EN 1849-1	mm	MDV ± 5%	4
Visual defects	EN 1850-1	-	Pass/No Pass	Pass
Straightness	EN 1848-1	-	Pass/No Pass	Pass
External fire performance (1) (2) (3)	ENV 1187	-	In accordance with EN 13501-5	Broof(t1)
Reaction to fire	EN 13501-1	-	In accordance with EN 13501-1	F
Resistance to root penetration (*)	EN 13948	-	Pass/No Pass	Pass
Tensile strength (L/T)	EN 12311-1	N/50 mm	MDV ± 20%	880/880
Elongation (L/T)	EN 12311-1	%	MDV ± 15	50
Resistance to static loading	EN 12730	kg	MLV ≥	L25
Resistance to impact	EN 12691	mm	MLV ≤	I10
Dimensional stability	EN 1107-1	%	MLV ≤	0.3
Flexibility at low temperature TPO/SBS - initial - after aging (EN 1296)	EN 1109	°C °C	MLV ≤	-15/-20 -5/-5

CodeMark

CMNZ70151



- \* coloured slates
- 1. Upper coating in TPO-plastomer modified bitumen
- 2. Composite reinforcement 180 g/m<sup>2</sup> of polyester and glass scrim
- 3. Under coating in SBS elastomer bitumen
- \*\* sacrificial film



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### TECHNICAL DATA continued:

Characteristics	Test Method	Units	Expression of Result	Value
Flow resistance at elevated temperature - initial - after aging (EN 1296)	EN 1110	°C °C	MLV ≥	110 100
Joint strength: shear resistance	EN 12317-1	N/50 mm	MDV ± 250	750
Watertightness	EN 1928		Pass/No Pass	Pass
Adhesion of granules	EN 12039	%	MDV ± 5%	10

(\*) ATG 2825 from UBAtc  
(1) Test report

MDV: Manufacturer's Declared Value  
MLV: Manufacturer's Limiting Value  
NPD: No Performances Declared

### SCOPE OF USE:

DUO HT 4 Slates/F C180 FC Landscape is used as root-resistant cap sheet in the DUO & DUOTHERM Green Roof & Deck waterproofing systems. The product is torch-applied over an approved system base sheet to form a two-layer waterproof membrane designed for green roofs, roof gardens, planter boxes and courtyards. It is suitable for new builds and refurbishments, residential and commercial construction, in any location and wind zone in New Zealand.

Suitable for other waterproofing applications with written approval by Equus Industries Ltd.

### CONDITIONS OF USE:

The membrane shall be used overlaid with an Equus approved drainage mat, loose laid to ensure no penetrations to the membrane, that ensures free water drainage and adds protection to the membrane.

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 Ltd. Any installation must be done in accordance with the latest specifications and technical documentation, or with written approval by Equus Industries Ltd.

### BUILDING CODE COMPLIANCE:

**B2 Durability** - B2.3.1 (b), DUO HT 4 Slates/F C180 FC Landscape has a durability of at least 15 years, and a life expectancy of 35 years, when installed with the correct specification, installation and maintenance. See CodeMark CMNZ70151, BRANZ Appraisal 685, DUO Durability Study.

**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 DUO HT 4 Slates/F C180 FC Landscape membrane over correctly designed and constructed substrates, show that the membrane successfully resists the ingress of moisture. See CodeMark CMNZ70151, BRANZ Appraisal 685, DUO Durability Study.

**F2 Hazardous building materials** - F2.3.1 Well known experience with the type of materials used together with in-service history, show that DUO HT 4 Slates/F C180 FC complies with this performance requirement. Refer to SDS at [www.equus.nz](http://www.equus.nz)

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### SUPPORTING DOCUMENTATION:

The following additional documentation supports the compliance statements:

Title (type)	Version	URL
CodeMark Certificate CMNZ70151	30 June 2023	<a href="https://equus.nz/content/reports/codemark-soprema-waterproofing-membranes.pdf">https://equus.nz/content/reports/codemark-soprema-waterproofing-membranes.pdf</a>
BRANZ Appraisal No. 685	27 April 2022	<a href="https://www.equus.nz/content/reports/branz-appraisal-duo-685.pdf">https://www.equus.nz/content/reports/branz-appraisal-duo-685.pdf</a>
DUO Durability Study	2018	<a href="https://www.equus.nz/content/reports/durability-study-duo.pdf">https://www.equus.nz/content/reports/durability-study-duo.pdf</a>

### STORAGE:

Membrane rolls shall be stored in a dry area, always in an upright (vertical) position. Do not lay rolls flat (horizontal) when storing.

### HEALTH & SAFETY:

SOPRADERE QUICK primer is solvent-based and must be used with adequate ventilation. Remove all naked flames and sources of ignition. Adequate ventilation is required to minimise exposure to bitumen fumes during the torching process. Safety Data Sheet (SDS) must be read and understood prior to use of product.

### WARNINGS AND BANS:

Is the building product/building product line subject to warning or ban under section 26 of the Building Act 2004?	No
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### MANUFACTURERS CONTACT DETAILS:

Manufacture location	Belgium
Legal and trading name of manufacturer	Soprema New Zealand Limited
Manufacturer address for service	Level 3, Candida Building 4, 61 Constellation Drive, Mairangi Bay, Auckland 0630, New Zealand
Manufacturer website	<a href="http://www.soprema.com.au">www.soprema.com.au</a>
Manufacturer email	<a href="mailto:info@soprema.com.au">info@soprema.com.au</a>
Manufacturer phone number	+61 3 9221 6230
Manufacturer NZBN	9429050312962