

ROOFING IN PVC-P WITH GREEN ROOF (SOPRANATURE)

Cold roof: with sealing element placed on top of the supporting element without thermal insulation
TOTALLY INDEPENDENT SYSTEM • REINFORCED CONCRETE SUBSTRATE



■ SUPPORTING ELEMENT or SUBSTRATE

The surface must:

1. Be smooth and free from debris and irregularities that may cause damage to the layers above
2. Be stable over time
3. Be chemically compatible with the roofing system components
4. Have an adequate slope. A flat or sub-horizontal roof must have a slope ranging from 1.5 and 5%.

Important Note: structural load capacity must be considered before choosing and specifying each particular system. The structure's ability to support the additional weight (dead and live load) of a SOPRANATURE system must first be evaluated and approved by a professional engineer charged to the client.

■ ADJUSTMENT LAYER-COMPENSATION

FLAG geotextile PP, felt, non-woven, polypropylene whose weight ranges from minimum 500 g/m² depending upon the condition of the support.

■ SEALING ELEMENT

FLAGON SV, synthetic membrane in PVC-P dimensionally stabilised with a layer of glass fibre (50 g/m²), resistant to weathering, ultraviolet rays and to root growth. It has a signal layer and it is hot air welded on the sheet overlaps.

The perimeter fixing at the base of the upstand must be performed with Flag pre-drilled bar in **galvanised sheet iron**.

Insert **FLAG anti-puncturing** joint at the junction between two adjacent bars and hot-weld the tear prevention curb **FLAGOFIL PVC**.

Anti-root membrane, FLL certified.

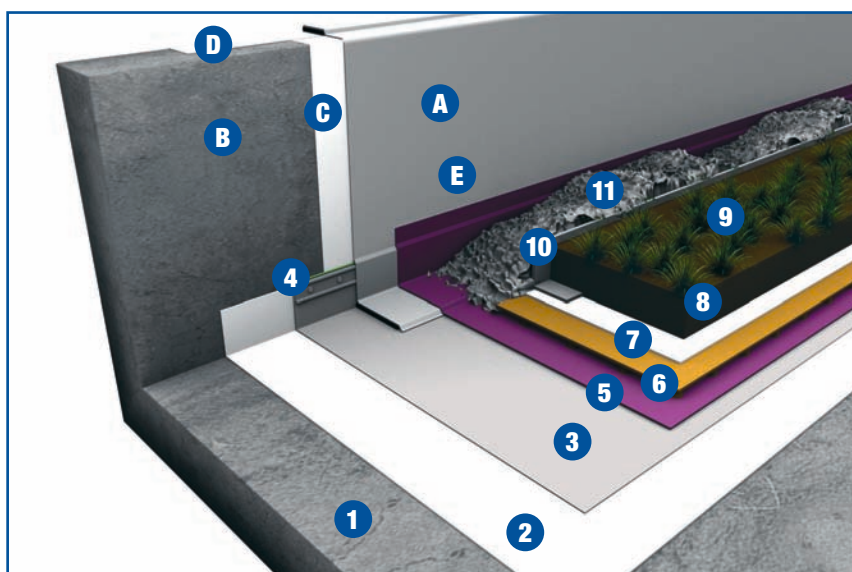
■ PROTECTION LAYER

FLAGON TS, anti-puncturing liner made of a coated PVC film, 0.40 mm thick coupled to 120 g/m² non-woven felt in polyethelene. The unrolled sheets must be welded on the outside edges to provide a complete homogeneous coating.

■ SOPRANATURE SYSTEM

Installation of green roof system by means of SOPRANATURE package as described below.

	FLAGON SV		
	STANDARD SYSTEM	OPTIMUM SYSTEM	REINFORCED SYSTEM
Finishing	SOPRANATURE	SOPRANATURE	SOPRANATURE
Protection layer	FLAGON TS	FLAGON TS	FLAGON TS
Sealing element	SV - 1.8 mm	SV - 2.0 mm	SV - 2.4 mm
Adjustment layer	Non-woven felt PP ≥ 500 g/m ²	Non-woven felt PP > 500 g/m ²	Non-woven felt PP > 500 g/m ²
Slopes	1.5 % ≤ P ≤ 5 %	1.5 % ≤ P ≤ 5 %	1.5 % ≤ P ≤ 5 %



Horizontal surface

1. Supporting element
2. Adjustment layer
3. **FLAGON SV**
4. Perimeter fixing by pre-drilled bar
5. Protection layer
6. SOPRALITHE/SOPRADRAIN
7. SOPRAFILTRE
8. SOPRAFLOOR
9. SOPRANATURE vegetation layer
10. Curb
11. Perimeter in gravel

Vertical surface

- FLAGON SV**
- h<50 cm FLEXOCOL V vertical gluing layer
h>50 cm mechanical fixing
- Separating layer in non-woven felt (non-adhered roof system)
- Possible finishing elements:
 - Flagmetal termination strip and flashing
 - Flagmetal strip under cap
 - Flagmetal perimeter profile
- Provide mechanical anchoring on the vertical upstands (galvanised sheet iron or equivalent).

SOPRANATURE SYSTEM

It must be in accordance with all the technical specifications applicable to SOPRANATURE vegetated roofing systems. The green roofing system includes 4 components:

1. Drainage panel (**SOPRALITHE** or **SOPRADRAIN**);
2. Filter (**SOPRAFILTRE**);
3. Growing medium (**SOPRAFLOOR**);
4. Vegetation layer (**SOPRANATURE**) different systems are available: extensive (**Toundra**, **Pampa**, **Garrigue**) and semi-intensive (**Green e Landes**).

- It is recommended that a Soprema representative be consulted to find the right technical and financial solutions to suit the particularities of any individual project (in accordance with the selected roof system and the geographical weather conditions).

Flag S.p.A. - SOPREMA GROUP

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ROOFING IN TPO WITH GREEN ROOF (SOPRANATURE)

Cold roof: with sealing element placed on top of the supporting element without thermal insulation
TOTALLY INDEPENDENT SYSTEM • REINFORCED CONCRETE SUBSTRATE



■ SUPPORTING ELEMENT or SUBSTRATE

The surface must:

1. Be smooth and free from debris and irregularities that may cause damage to the layers above
2. Be stable over time
3. Be chemically compatible with the roofing system components
4. Have an adequate slope. A flat or sub-horizontal roof must have a slope ranging from 1.5 and 5%.

Important Note: structural load capacity must be considered before choosing and specifying each particular system. The structure's ability to support the additional weight of a SOPRANATURE system must first be evaluated and approved by a professional engineer charged to the client.

■ ADJUSTMENT LAYER-COMPENSATION

FLAG geotextile PP, felt, non-woven, polypropylene whose weight ranges from minimum 500 g/m² depending upon the condition of the support.

■ SEALING ELEMENT

FLAGON EP/PV, synthetic membrane in PVC-P dimensionally stabilised with a layer of glass fibre (50g/m²), resistant to weathering, ultraviolet rays and to root growth. It has a signal layer and it is hot air welded on the sheet overlaps.

The perimeter fixing at the base of the upstand must be performed with Flag pre-drilled bar in **galvanised sheet iron**.

Insert **FLAG anti-puncturing** joint at the junction between two adjacent bars and hot-weld the tear prevention curb **FLAGOFIL TPO**.

Anti-root membrane, FLL certified.

■ PROTECTION LAYER

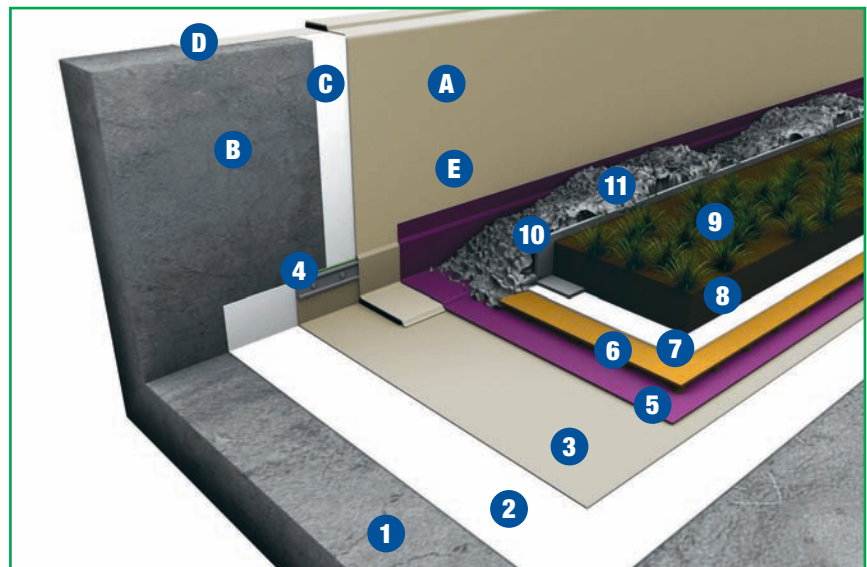
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■ SOPRANATURE SYSTEM

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FLAGON EP/PV

	STANDARD SYSTEM	OPTIMUM SYSTEM	REINFORCED SYSTEM
Finishing	SOPRANATURE	SOPRANATURE	SOPRANATURE
Protection layer	FLAGON TS	FLAGON TS	FLAGON TS
Sealing element	EP/PV - 1.8 mm	EP/PV - 2.0 mm	EP/PV - 2.4 mm
Adjustment layer	Non-woven felt PP ≥ 500 g/m ²	Non-woven felt PP > 500 g/m ²	Non-woven felt PP > 500 g/m ²
Slopes	1.5 % ≤ P ≤ 5 %	1.5 % ≤ P ≤ 5 %	1.5 % ≤ P ≤ 5 %



Horizontal surface

1. Supporting element
2. Adjustment layer
3. **FLAGON EP/PV**
4. Perimeter fixing by pre-drilled bar
5. Protection layer
6. SOPRALITHE/SOPRADRAIN
7. SOPRAFILTRE
8. SOPRAFLOOR
9. SOPRANATURE vegetation layer
10. Curb
11. Perimeter in gravel

Vertical surface

- A. **FLAGON EP/PV**
- B. h<50 cm **FLEXOCOL TPO** vertical gluing layer
h>50 cm mechanical fixing
- C. Separating layer in non-woven felt (non-adhered roof system)
- D. Possible finishing elements:
 - Flagmetal termination strip and flashing
 - Flagmetal strip under cap
 - Flagmetal perimeter profile
- E. Provide mechanical anchoring on the vertical upstands (galvanised sheet iron or equivalent)

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