

EXPOSED ROOF SYSTEM IN PVC-P

Warm roof: with sealing element placed on top of the insulation element

MECHANICAL FASTENING SYSTEM REINFORCED CONCRETE SUBSTRATE



■ SUPPORTING ELEMENT or SUBSTRATE

The substrate must:

1. Be smooth, sound, clean 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. be suitable for mechanical fixing
5. have an adequate slope. A flat or sub-horizontal roof must have a slope ranging from 1.5 and 5 %.

■ VAPOUR BARRIER

It depends upon the hygrometry of the underlying structures. For further details please refer to the booklet "Vapour Barrier".

A vapour retarder may consist of:

- **VAPOR FLAG** polyethylene film
- Bitumen: **ELASTOVAP**
- Bituminous polymer membrane: **SOPRAVAP 3 in 1**

■ INSULATION ELEMENT

- It must have an adequate compressive resistance (UNI EN 826).
- The insulation boards should be fully bonded in order to avoid unabsorbed water and allow the overlaps to be adequately hot air welded.
- Compatible with the warm roof system.
- Laying:
 - mechanical fixing on **VAPOR FLAG**.
 - mechanical fixing on **ELASTOVAP**.
 - totally adherent by **SOPRAVAP 3 in 1**.

■ SEPARATING LAYER

Heat treated **FLAG** geotextile PET, felt, non-woven, polyester whose weight ranges from minimum 200 g/m² depending upon the condition of the support.

■ SEALING ELEMENT

FLAGON SR M2, synthetic membrane in PVC-P reinforced with a polyester mesh, resistant to tearing under wind stress, resistant to ultraviolet rays, to puncturing, to weathering, and to root growth. It has signal layer and it is heat welded on the sheet overlaps. It's BROOF T3 certified membrane according to UNI EN 13501-5 and UNI ENV 1187 fire classification from external fire exposure (note 1). Mechanical fixing by expansion fixing plugs and distribution plates for concrete substrate (note 2). 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**.

■ PROTECTION

Where pedestrian traffic and pedestrian transit for maintenance operations is possible, the system must be protected by means of **FLAGON WALKWAY PVC**, a anti-puncturing membrane.

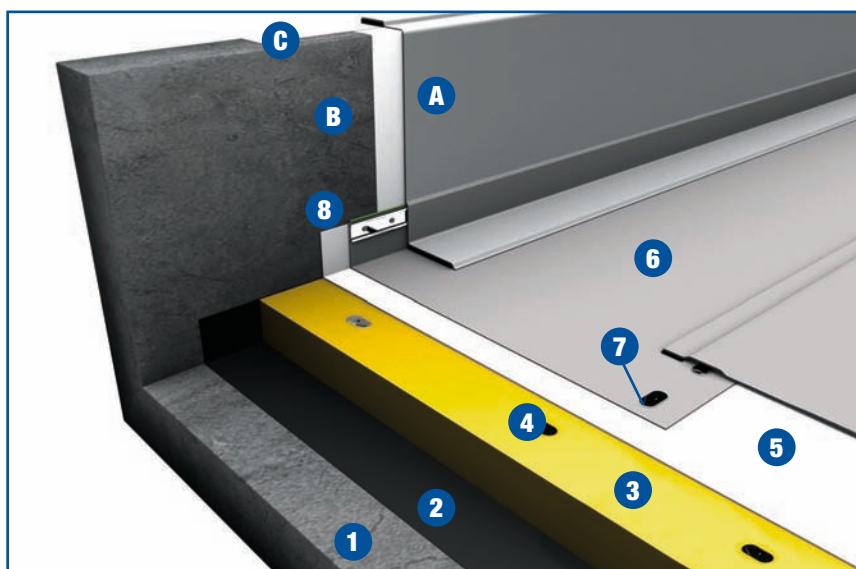
Note 1: to meet the requirements of a waterproof roof system BROOF T3 certified in accordance with UNI EN 13501-5 and UNI ENV 1187, a certified PVC membrane together with all the accessories approved by Flag must be applied.

Note 2: the membrane mechanical fixing to be used must be in accordance with UNI EN 1991-1-4:2005 provided by the manufacturing company.

FLAGON SR M2*

	STANDARD SYSTEM	OPTIMUM SYSTEM	REINFORCED SYSTEM
Sealing element	SR M2 - 1.5 mm	SR M2 - 2.0 mm	SR M2 - 2.4 mm
Separating layer	Non-woven felt PET ≥ 200 g/m ²	Non-woven felt PET ≥ 200 g/m ²	Non-woven felt PET ≥ 200 g/m ²
Insulation element	YES	YES	YES
Vapour Barrier	YES	YES	YES
Slopes	1.5 % ≤ P ≤ 5 %	1.5 % ≤ P ≤ 5 %	1.5 % ≤ P ≤ 5 %

*If a fire certificate in accordance with UNI EN 13501-5 and UNI ENV 1187 is not required, standard FLAGON SR can be used.



Horizontal surface

1. Supporting element
2. Vapour Barrier
3. Insulation element
4. Fixing elements
5. Separating layer
6. **FLAGON SR M2***
7. Membrane fixing elements
8. Perimeter pre-drilled bar

Vertical surface

- FLAGON SR M2**
- 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

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