ROOFING IN TPO FOR PEDESTRIAN TRAFFIC BALLASTED WITH LOOSE LAY PAVING SYSTEM

Warm roof: with sealing element placed on top of the 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 roof system components
- 4. 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:
- dry laid on VAPOR FLAG.
- dry laid on **ELASTOVAP**.
- totally adherent by **SOPRAVAP 3 in 1**.

SEALING ELEMENT

FLAGON EP/PV synthetic liner manufactured in TPO/FPO modified polyolefin, 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.

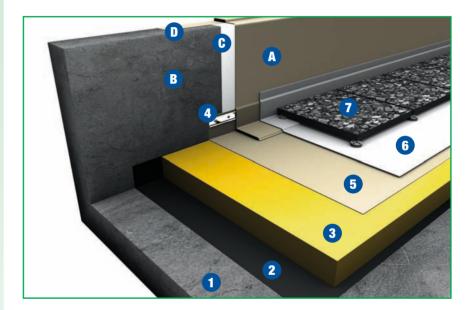
■ PROTECTION LAYER

FLAGON TS anti-puncturing liner made of a coated PVC film, 0.40 mm thick coupled to 120 g/m 2 non-woven felt in polyethelene. The unrolled sheets must be welded on the outside edges to provide a complete homogeneous protection layer.

■ BALLASTING AND PROTECTION LAYER

It is effected using pre-cast concrete square paving slabs dry-laid on a bed of sand.

	FLAGON EP/PV		
	STANDARD System	OPTIMUM System	REINFORCED SYSTEM
Finishing	RAISED FLOOR	RAISED FLOOR	RAISED FLOOR
Protection layer	FLAGON TS	FLAGON TS	FLAGON TS
Sealing element	EP/PV - 1.5 mm	EP/PV - 2.0 mm	EP/PV - 2.4 mm
Insulation element	YES	YES	YES
Vapour Barrier	YES	YES	YES
Slopes	1.5 % ≤ P ≤ 5 %	1.5 % ≤ P ≤ 5 %	1.5 % ≤ P ≤ 5 %



Horizontal surface

- 1. Supporting element
- Vapour Barrier
- 3. Insulation element4. Perimeter fixing by pre-drilled bar
- 5. FLAGON EP/PV
- 6. Protection Layer FLAGON TS
- 7. Pre-cast concrete square paving slabs

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

