### **ROOFING IN TPO BALLASTED BY GRAVEL**

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:

- 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 %

#### **ADJUSTMENT LAYER-COMPENSATION**

**FLAG geotextile PP**, felt, non-woven, polypropylene whose weight ranges from minimum  $500~\text{g/m}^2$  depending upon the condition of the support.

#### **■ SEALING ELEMENT**

**FLAGON EP/PV** synthetic membrane manufactured in TPO modified polyolefin, dimensionally stabilised by a 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.

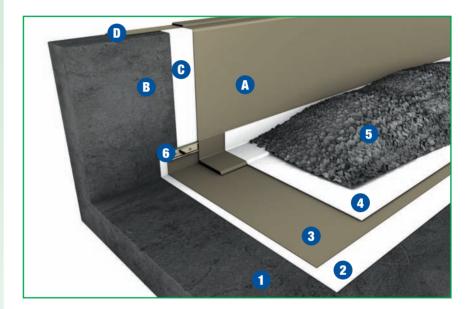
#### **■ FILTRATION LAYER**

**FLAG geotextile PET**, felt, non-woven, polyester whose weight ranges from minimum  $400~\text{g/m}^2$  depending upon the condition of the support.

## ■ BALLASTING AND PROTECTION LAYER (GRAVEL)

River-washed, round gravel 12/35 mm, loose-laid to a minimum depth > cm 5.0 in order to prevent wind from lifting or moving the dry-laid stratification package.

	FLAGON EP/PV		
	STANDARD SYSTEM	OPTIMUM System	REINFORCED System
Finishing	GRAVEL	GRAVEL	GRAVEL
Filtration layer	Non-woven felt PET ≥ 400 g/m <sup>2</sup>	Non-woven felt PET ≥ 400 g/m <sup>2</sup>	Non-woven felt PET ≥ 400 g/m²
Sealing element	EP/PV - 1.5 mm	EP/PV - 2.0 mm	EP/PV - 2.4 mm
Adjustment layer	Non-woven felt PP ≥ 500 g/m²	Non-woven felt PP ≥ 500 g/m²	Non-woven felt PP ≥ 500 g/m²
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. Filtration layer
- 5. Ballasting layer (Gravel)
- 6. Perimeter pre-drilled bar

#### 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

Flag S.p.A. - SOPREMA GROUP

v. Industriale dell'Isola 3 24040 Chignolo d'Isola (BG) T.+39.035.0951011 F.+39.035.4940649 e-mail:info@flag.it website:www.flag.it

For technical information: tech-office@flag.it

