

RE-COVER ROOFING WITH EXPOSED TPO WATERPROOF LINER

Cold roof: with sealing element placed on top of the existing proofing system
MECHANICAL FASTENING SYSTEM



■ SUPPORTING ELEMENT or SUBSTRATE

The surface must:

1. Be sound, clean and free from debris and sharp projections that may cause damage to the layers above. In order to correct an existing bituminous wrinkled membrane, remove the wrinkles by cutting/torching.
2. Be stable over time.
3. Be chemically compatible with the new 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%.
6. Where possible, remove all guttering, profiles and all existing waterproofing layers from the vertical upstands.

■ ADJUSTMENT LAYER-COMPENSATION

FLAG geotextile PP, felt, non-woven, polypropylene whose weight ranges from minimum 400 g/m² depending upon the condition of the support.

■ SEALING ELEMENT

FLAGON EP/PR SC, synthetic liner in polyolefin TPO/FPO modified 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 T2 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 galvanized 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 TPO**, a anti-puncturing membrane.

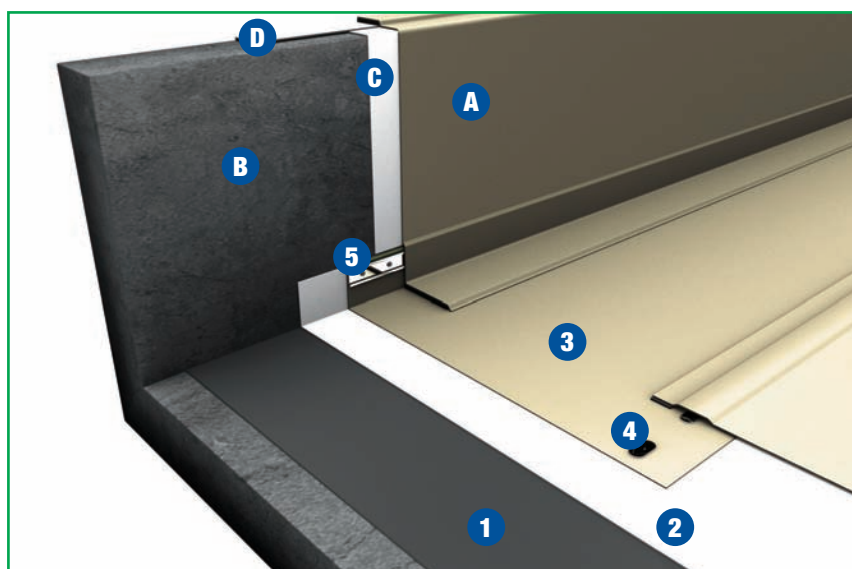
Note 1: to meet the requirements of a waterproof roof system BROOF T2 certified in accordance with UNI EN 13501-5 and UNI ENV 1187, a certified PVC membrane together with all the accessories approved by Flag must be applied. When planning the re-roofing with the BROOF T2 Certification of existing proofing systems, please consult with our FLAG team of experts.

Note 2: The membrane should be mechanically fastened in accordance with UNI EN 1991-1-4:2005 certified instructions provided by the manufacturer.

FLAGON EP/PR SC*

	STANDARD SYSTEM	OPTIMUM SYSTEM	REINFORCED SYSTEM
Sealing element	EP/PR SC - 1.5 mm	EP/PR SC - 2.0 mm	EP/PR SC - 2.4 mm
Adjustment/ Separating layer	Non-woven felt PP ≥ 400 g/m ²	Non-woven felt PP ≥ 400 g/m ²	Non-woven felt PP ≥ 400 g/m ²
Slopes	1.5 % ≤ P ≤ 5 %	1.5 % ≤ P ≤ 5 %	1.5 % ≤ P ≤ 5 %
Existing proofing system	PVC or Bituminous	PVC or Bituminous	PVC or Bituminous

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



Horizontal surface

1. Supporting element: PVC liner or existing bituminous membrane
2. Adjustment/ Separating layer
3. **FLAGON EP/PR SC**
4. Fixing elements
5. Perimeter fixing by pre-drilled bar

Vertical surface

- A. **FLAGON EP/PR SC**
- B. h<50 cm FLEXOCOL TPO vertical gluing layer
 h>50 cm mechanical fixing
 Important Note:
 1_Before gluing, remove the existing proofing system from the upstands.
 2_When removing the existing bitumen from the upstands, a separating layer in non-woven felt must be inserted and mechanical fixing must always be applied.
- 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