

Non-accessible self-protected roof with TPO

STEEL DECK SUBSTRATE

≥ 3% SLOPE



A⁷

CHARACTERISTICS

SUBSTRATE

- Compliant with standards.

1 PRIMER

(Only for ≥ 35cm waterproofing upstands heights).

- FLEXOCOL TPO.**

2 VAPOUR BARRIER

- VAPORFLAG** PE Foil (200, 300 or 400µ)
- In other cases : refer to vapour barrier documentation

3 THERMAL INSULATION

- Mineral wool** (1 fastener per panel).
- Expanded perlite** (1 fastener per panel).
- EPS, PUR, PIR** (4 fasteners per panel) a fire resistant separating layer **SOPRAVOILE100** must be laid on top.
- The panels must be laid in a staggered pattern with tight joints.
- Please check fire regulations before choosing thermal insulation panels.

4 WATERPROOFING

- FLAGON® EP/PR** is mechanically fastened onto the overlap after which overlaps will be hot air welded. On steel decks, overlaps must be installed perpendicular to the waves.
- TPO membranes are always fastened a few centimetres around the edge of the roof and any pences using:
 - FLAGORAIL** + possibly **FLAGOFIL TPO.**
 - Fasteners with 80mm x 40mm steel plates
 - Then hot air welding on a **TPO COLAMINATED STRIP** fastened onto the substrate.
- For the upstands, a **FLAGON® EP/PR** membrane is welded onto a **TPO COLAMINATED STRIP** fastened onto the substrate.
- The type and density of fasteners are defined according to our specifications depending on geographical area and building height.
- Different colour finishes for TPO membranes are available.

SOPREMA TIPS



- TPO membranes and thermal insulation:** TPO membranes do not require a separating sheet. However, a geotextile (300g/m²) will reduce the spectrum of the thermal insulation panels (self-protected roof) and/or in the case of expanded perlite, to avoid cleaning before hot air welding.
- The positioning of drainage outlets implies a specific designing of the valley structure under water stagnation.
- A 3% slope on the roof avoids water stagnation.

SOPREMA SYSTEM with thermal insulation

CE Marking Technical Approval	FLAGON® EP/PR
	SINGLE PLY TPO SYSTEM
Surface	FLAGON® EP/PR
Total Thickness	1.2mm / 1.5mm / 1.8mm / 2mm / 2.5mm



① Free standing metal upstand fixed on the steel deck ② Thermal insulation panels ③ FLAGON® EP/PR membrane ④ Pre-drilled metal bar: FLAGORAIL ⑤ FLAGOFIL cord ⑥ FLEXOCOL bonding adhesive ⑦ Mechanically fastened colaminated strip ⑧ FLAGON® EP/PR for upstand

TECHNICAL INFORMATION

UPSTANDS

- In case of a ≥ 35cm upstand, **FLEXOCOL TPO** must be used on parapet.
- Use TPO colaminated strip fastened onto the substrate

TECHNICAL ROOF

- Mineral wool Class C (according to UEAtc guideline). Limited to a ≤ 5% slope.
- Use a **FLAGON® WALKWAY TPO** membrane to set the limits of technical areas with a non-slip surface and to increase puncture resistance.

FIRE RATING

- Please contact us for BROOF t2 classification compliant with the EN 13501-5 standard.



SOPREMA

14, rue de Saint Nazaire – BP 60121
67025 STRASBOURG – Cedex 1 – France
Phone.: +33 (0)3 88 79 84 84 – Fax: +33 (0)3 88 79 84 85
e-mail: export@soprema.com

www.soprema.com