

COPERPOL 18 HP

Compound
APAO

Cold Flexibility
-25°C

CHARACTERISTICS

COPERPOL 18 HP is highly modified bituminous waterproofing membrane made of distilled bitumen modified with selected poly-olefins and copolymers (APAO), that make it greatly resistant to UV, very adhesive and very flexible at low temperatures. COPERPOL 18 HP is a membrane of un-compromising quality, designed for use by professionals for professional applications where the waterproofing layers really must withstand static and dynamic forces as well as severe weathering and adverse climate conditions.

CARRIER

COPERPOL 18 HP has a tough isotropic and rot-proof spunbond polyester carrier, reinforced and stabilised with longitudinal glass yarns that provide superior dimensional stability and reduce to an absolute minimum the risk of shrinkages caused in time by weathering and by swift thermal excursions.

INTENDED USE ACCORDING "CE" MARK STANDARDS

Top layer in multi-layer systems for roof waterproofing (EN 13707)	COPERPOL 18 HP MINERAL 4,5 kg/m ²
Single layer system for roof waterproofing – Base sheet or top layer in multi-layer system for roof waterproofing also under ballast or other heavy protection finish (EN 13707) – Foundations and ground waterproofing (EN 13969)	COPERPOL 18 HP 4,0 mm
Single layer system for roof waterproofing (EN 13707)	COPERPOL 18 HP MINERAL 4,0 mm (on selvedge) <i>this version is available on demand</i>

AVAILABLE SURFACE FINISHES

Upper surface COPERPOL 18 HP: sand; upon request talc, TEX (non-woven-black polypropylene "ready-to-paint" film) or plastic HDPE film.
COPERPOL 18 HP MINERAL: self-protection by means of slate flakes available in standard grey or other various colours upon request.

Lower surface Polyethylene fast burning film. For cold applications by means of adhesive the use of sand finishing on the lower surface is recommended.

USE & APPLICATION

COPERPOL 18 HP 4 mm and COPERPOL 18 HP MINERAL 4 mm are recommended as single layer in waterproofing systems for flat, pitched or vaulted roofs. In case of direct exposure to weathering agents, COPERPOL 18 HP 4 mm shall be protected with reflective paint in order to prolong the waterproofing lifespan. COPERPOL 18 HP MINERAL 4,5 kg/m² is recommended as a waterproofing cap sheet layer for applications without other types of protection.

Subject to the type of substrate COPERPOL 18 HP membranes shall be installed by means of a propane gas torch, approved adhesives or by mechanical fixing. In any case it is recommended to prepare substrate with fixative bituminous PRIMER W (water base) or PRIMER S (solvent base). For cold applications on primed concrete surfaces use COPERGLUE BASE (over horizontal areas) or COPERGLUE VERTICAL (parapets and elevations) bituminous adhesives. Side laps, head joints and small repairs shall be made using COPERGLUE JOINT adhesive. For cold applications over insulation board (Polystyrene, PUR or PIR) COPERMAST bituminous mastic shall be used.

For correct installation refer to information provided by Copernit Technical Department.

Properties	Test Method	Unit	COPERPOL 18 HP 4,0 mm	COPERPOL 18 HP MINERAL 4,5 kg	COPERPOL 18 HP MINERAL 4,0 mm	Tol.
Length	EN 1848-1	m	10 (-1%)	10 (-1%)	7,5 (-1%)	≥
Width	EN 1848-1	m	1,0 (-1%)	1,0 (-1%)	1,0 (-1%)	≥
Unit weight (<i>versions specified by weight</i>)	EN 1849-1	kg/m ²	--	4,5	--	±10%
Thickness (<i>versions specified by thickness</i>)	EN 1849-1	mm	4,0	--	4,0 (on selvedge)	±5%
Tensile strength (at break) L/T	EN 12311-1	N/5 cm	900/700	900/700	900/700	±20%
Elongation (at break) L/T	EN 12311-1	%	45/45	45/45	45/45	±15
Tear resistance (nail test) L/T	EN 12310-1	N	200/200	200/200	200/200	±30%
Resistance to static loading	EN 12730 (A)	kg	20	20	20	≥
Impact resistance	EN 12691	mm	1250	1250	1250	≥
Dimensional stability	EN 1107-1	%	±0,3	±0,3	±0,3	≤
Flexibility at low temperature	EN 1109	°C	-25	-25	-25	≤
Flow resistance at elevated temperature	EN 1110	°C	140	140	140	≥
Watertightness (method A)	EN 1928	kPa	60	60	60	≥
Resistance to water vapor diffusion (μ)	EN 1931	--	20.000	20.000	20.000	--
Reaction to fire	EN 13501-1	Class	E	E	E	--
Resistance to external fire	EN 13501-5	Class	F roof	F roof	F roof	--