

SABIT MASTER PROOF- SMP

INTRODUCTION

SABIT MASTER PROOF – SMP is the new generation polymer modified bituminous waterproofing membrane, consisting of a central non-woven polyester core, impregnated and coated on both sides with layer of APP (Atactic Polypropylene) polymer modified bitumen and finished with heat fusible polyethylene on both surfaces.

TECHNICAL DATA

Ref F05-21 Issue MEM JANUARY 2020

NO	PROPERTIES	TYPICAL RESULT		TEST METHOD	
1	Roll size, m	10	10	ASTM D 5147	EN 1848-1
2	Thickness, mm	4 or 5	4 or 5	ASTM D 5147	EN 1848-1
3	Unit weight (plain), kg/m ²	4 or 5	4 or 5	ASTM D 5147	EN 1848-1
4	Carrier polyester, g/m ²	180	200	UEATC, M.O.A. T.30	
5	Softening point (°C)	>150		ASTM D 36	
6	Penetration at 25°C, dmm	15-30		ASTM D 5	
7	Cold flexibility, °C	-2 to -5		ASTM D 5147	
8	Tensile strength @23±2°C, N/5cm (KN/m)				
	Longitudinal	900 (18)	950 (19)	ASTM D 5147	EN 12311-1
Transverse	700 (14)	800 (16)	ASTM D 146		
9	Elongation, % @23±2 °C				EN 12311-1
	Longitudinal	45	45	ASTM D 5147	
	Transverse	50	50	ASTM D 146	
10	Tear Strength (N)				
	Longitudinal	450	450	ASTM D4073	
	Transverse	350	400		
11	Tensile strength @23±2°C, N/5cm (KN/m)				
	Longitudinal	900	950	ASTM D 5147	
	Transverse	700	800		
12	Heat resistance at 120 °C	No flow		ASTM D 5147	
13	Puncture resistance @ N	700	900	ASTM D 5147	
14	Resistance of water pressure	No leakage		DIN 52123	
15	Water absorption %	<0.15		ASTM D 5147	

(Variation of ±5% in thickness, ±10% in weight, and 20% in tensile and 15% in elongation is acceptable according to standard)

Note:

Saudi Bitumen Industries Co. Ltd.(SABIT) may modify the technical data sheet without prior notice.

Description

SABIT Master proof- SMP is the ultimate waterproofing membrane. The multilayered design consists of non- woven polyester core, impregnated and coted on both sides with the app (Atactic Polypropylene polymer) modified bitumen and finally finished with heat fusible polyethylene film on both surfaces. **Sabit Masterproof-SMP** modified bitumen waterproofing membrane are produced from a blend of special grade thermoplastic polymers and bitumen. This combination gives the proven waterproofing qualities of bitumen plasticity, excellent resistance to heat, ageing and weathering and ease of application by torch welding. The polyester core gives the membrane high tensile strength, elongation and superior lap joint strength.

Sabit Masterproof- SMP-G is available in two basic finishes

- Finish with polyethylene surface for covered application **Sabit Master proof- SMP**
- Granular surfacing for exposed application **Sabit Master proof- SMP-G**
- Upon request, 3mm thickness is also available

Approximate Coverage Rate

Flat areas: 1.15m² per 1m² area with 10cm side overlaps and 15cm end laps

Base flashing : 0.40m²/linear meter (100x35 cm with 15 cm end laps)

Wastage : 3-5%

Features

- Total impermeability for complete waterproofing
- Good bond ability and seam integrity
- Stability at high ambient temperature
- Good performance at board temperature
- Good flexibility
- Compatible with all roofing and building components

Uses

SABIT Master Proof – SMP could be widely used in all kinds of waterproof engineering projects in all fields, especially for the following types of engineering projects.

- All kind of building roof engineering projects treading, non-treading, planting buildings surfaces, Roof parking lots and converted building surfaces
- All kind of underground waterproof or damp-proof engineering projects
- Water spraying pools, swimming pools, penstocks, water pools and similar works

Limitation

SABIT Master Proof – SMP is not designed to be used in permanently exposed surfaces. Use **SABIT Master Proof-SMP-G** for such purpose or use **SABIT Proof-SMP** with a covering insulation or ballast.

Neither **SABIT Master Proof-SMP** or **SABIT Master Proof-SMP-G** are oil and solvent resistant

Surface preparation

- Clean the surface smooth and free moisture and debris or any kind of substance that would prevent the membrane from adhering properly.
- The roof must have a minimum slope of 1% (10mm per meter) evenly and continuously towards the drain.
- Surface must be primed with SABIT primer D-41.

Membrane installation

- Unroll the membrane making sure the edge (side lap joint) is aligned with the low point of the roof. Re-roll one end of the center of the roll and apply, then proceed with the opposite half. Proceed up the slope with further rolls.
- The end of the propane torch head should be positioned between 150mm and 300mm from the surface depending on the weather condition. Maximum heat is obtained at the blue end of the flame. The welding procedure will be more effective if the torch and thus the flame is moved continuously in rectangular pattern from the roll to the substrate. The movement should be slowed over the joint of the base sheet in order to apply enough heat to soften the bitumen and to fill possible voids. Side lap should be 10cm wide and end laps 15cm wide.
- For the best results, make sure that there is always a small amount of molten bitumen on front of the roll being heat welded.

Packing

SMP, SMP-G, for 4MM = 23 Rolls per pallet

SMP, SMP-G, for 5MM = 16 Rolls per pallet

Storage and handling

- Vertically store the rolls in pallets
- Store under shaded warehouse
- Rolls in pallet should not be stored over the other



Manufacturer's warranty

Subject to conditions and limitation of Saudi Bitumen Industries Co. Ltd.(SABIT) written warranty.