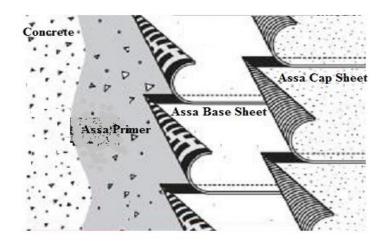


Two Ply Heat Welded Modified Bitumen Mineral Surfaced Roofing System. For use over approved concrete decks or other approved insulations on inclines up to 6" per foot.



GENERAL. This specification is for use over any type of approved structural deck which is not nailable and which provides a suitable surface to receive the roof. Poured and precast concrete decks require priming with **Assa Asphalt Primer** prior to application.

This specification is also for use over **Assa Roof Insulations**, or other approved roof insulations which are not nailable and which provide a suitable surface to receive the roof. Specific written approval is required for any roof insulation that is not supplied by **Assa**. Insulation shall be installed in accordance with the appropriate **Assa** insulation specification detailed in the Assa Industrial Roofing Systems Manual. This specification can also be used in certain re-roofing situations.

Design and installation of the deck and/or roof substrate must result in the roof draining freely, to outlets numerous enough and so located as to remove water promptly and completely. Areas where water ponds for more than 24 hours are unacceptable and will not be eligible for a Assa Guarantee.

Apply over clean, dry, dust and debris-free substrates. Prime concrete decks prior to application with **Assa Roof Primer**.

When re-roofing, remove all prior roofing materials down to a clean debris-free substrate and properly close-off all abandoned roof penetrations.

FLASHING. Flashing membrane applications shall consist of a Polyester base ply 4k and cap ply both torch applied.

WARRANTY: **Assa** offers warranties for periods of 10, 15, and 20 years for this system. Total System Warranties and Warranties requiring special rider conditions may be acceptable upon technical review and approval prior to bid.

SBS Torch Specifications

Assa SBS 9K

ASSA SBS 9k Mineral Cap sheet polyester reinforcement and Assa SBS Smooth Base Sheet fiberglass or polyester reinforcement.

Torch Technique Applications.

Materials requested per 1,000 ft2 of roof area.

Primer : Assa Roof Primer10 gallons Preparation : Assa Roof Cement for all penetrations
Base: Assa SBS Sheet 4k Polyester/fiberglass10.5 rolls
Cap: Assa SBS 5k Polyester Mineral Cap10.5 Rolls
Finish: Assa Aluminum Roof Coating (Laps)
Ecological finish: Assa White Reflex (Opcional) 8 kilos

Torch Technique Application

APPLICATION. Start at the low point of the roof. Unroll the material and allow relaxing. Install with traditional torch roofing techniques ensuring proper heating of the roofing material as not to expose the reinforcement.

Do not heat the substrate. Position successive rolls providing a minimum 6" end lap and 4" side lap. Asphalt bleed out shall be 1/4" to 3/8" on all seams. Laps shall be rolled with a 6"-wide roller immediately after heat welding.

Details and flashing may be installed using Assa SBS Polyester with torch applied techniques. Check project details for proper installation requirements.

All laps shall be checked for perfect adhesion. Paint all seams edge and all obscure areas with **Assa Aluminum Roof Coating** or Assa ecological White Reflex roof coating.

WARRANTY INSPECTION. Upon completion of the project, the authorized roofing contractor shall complete and submit the **Assa** Systems Project Completion Notice to **Assa** Technical Customer Services.

MAINTENANCE: All roofing systems require some periodic maintenance. Assa offers a repair and maintenance service program in conjunction with our warranted systems.

TECHNICAL SERVICES: Assa Technical Services can provide upon request specifications, drawings, and in-field support-including periodic job inspections. Contact the Assa's Technical Services for additional information at (787) 287-7249.





ASSA SBS MINERAL (HELASTOPLAN Membrane), are made up of an "inversion phase" compound of distilled bitumen, selected for industrial use, SBS rubber and polyolefins. The elastomer, a thermoplastic rubber made up of radial styrene-butadiene copolymer blocks (SBS) forms the continuous polymeric matrix of the compound and the bitumen forms the dispersed phase. The polyolefins, which have higher heat resistant properties, are added to the compound in the form of bitumen-SBS to increase the rigidity of the membrane and to make it easier to apply during the summer months while most of the elastic properties of the bitumen-rubber compound remain unchanged. The ultimate elongation is higher than 1,500%, the flexibility in cold conditions

is -20°C and the high adhesive properties also remain. The compatibility with other bitumen and the peeling strength of the joints is notably higher than that of normal polymer modified bitumen membranes. The membranes are produced in various weights and with various reinforcements.

ASSA SBS HELASTOPLAN SMOOTH POLYESTER and MINERAL HELASTOPLAN POLYESTER are reinforced with a composite, high weight, rot-proof, "non woven" polyester fabric, stabilized with fibreglass mat. This reinforcement has a high tensile strength, is flexible and has optimal dimensional stability in hot conditions which reduces the problems of the banana effect and the retraction of head lap joints as it is 2 to 3 times more stable than normal reinforcements in "non woven" polyester fabric.

ASSA SBS HELASTOPLAN/V is reinforced with rot-proof fibreglass mat which is strengthened longitudinally and has high dimensional stability properties.

The ASSA SBS HELASTOPLAN POLYESTER and HELASTOPLAN/V membranes are coated on both faces with Flamina film, which retracts during torch-on and guarantees the welding of the joints and a fast and reliable adhesion. Also the underside of MINERAL HELASTOPLAN POLYESTER is coated with Flamina film, while the upper face is protected with hot bonded and pressed slate granules, with the exception of a slate free, lateral overlap strip, protected with Flamina film which melts during torch-on.

	Standard	т	HELASTOPLAN POLYESTER "Non-woven" composite polyester stabilized with fibreglass		MINERAL HELASTOPLAN POLYESTER "Non-woven" composite polyester stabilized with fibreglass		HELASTOPLAN/V Fibreglass		
Reinforcement									
Thickness	EN 1849-1	±0,2	3 mm	4 mm	-		:-:	-	-
Veight	EN 1849-1	±10%	-	-	-	+	2 kg/m²	3 kg/m²	4 kg/m²
Weight MINERAL	EN 1849-1	±15%	÷	-	4,0 kg/m ²	4,5 kg/m²	-	-	-
Roll size	EN 1848-1	2	1×10 m	1×10 m	1×10 m	1×10 m	1×20 m	1×10 m	1×10 m
Watertightness • after ageing	EN 1928 - B EN 1926-1928	2	60 kPa 60 kPa		60 kPa 60 kPa		60 kPa 60 kPa		
Shear resistance L/T	EN 12317-1	-20%	600/400 50 mm		-		_		
Maximum tensile force L/T	EN 12311-1	-20%	700/500 50 mm		700/500 50 mm		300/200 50 mm		
Elongation L/T	EN 12311-1	-15% V.A.	40/45%		40/45%		2/2%		
Resistance to impact	EN 12691 - A		1250 mm		_		-		
Resistance to static loading	EN 12730 - A		15 kg		-		-		
Resistance to tearing (nail shank) L/T	EN 12310-1	-30%	160/200 N		160/200 N		70/70 N		
Dimensional stability L/T	EN 1107-1	S	-0.25/+0.10%		-0.25/+0.10%		·=		
Flexibility to low temp. • after ageing	EN 1109 EN 1296-1109	< +15°C	-20°C		−20°C −15°C		-20°C		
Flow resistance at high temperature	EN 1110	2	100°C		100°C		100°C		
Reaction to fire Euroclass	EN 13501-1		E		E		E		
External fire performance	EN 13501-5		F roof		F roof		Froof		

Compliant with EN 13707 in terms of the resistance factor to steam penetration for reinforced polymer-bitumen membranes, the value of μ = 20 000 may be considered, unless declared otherwise.