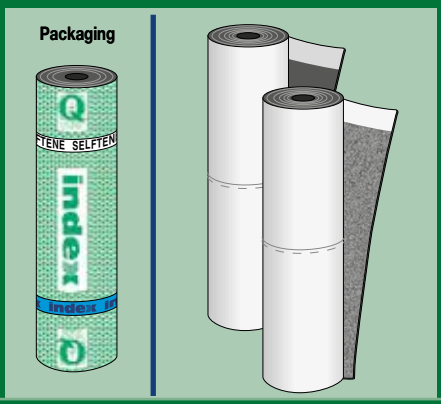


SELFTENE BASE HE POLYESTER
MINERAL SELFTENE HE POLYESTER

ELASTOMERIC DISTILLED POLYMER-BITUMEN SELF-ADHESIVE WATERPROOFING MEMBRANES

GRANTS *LEED* CREDITS

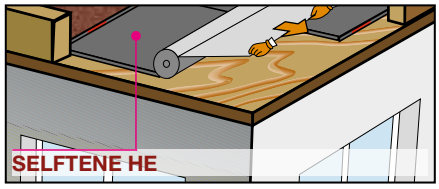
CATEGORY	CHARACTERISTICS			ENVIRONRMENTAL							METHOD OF USE	
SPECIAL ELASTOMERIC FOR SPECIFIC USES	WATERPROOF	SUPER-ADHESIVE	REACTION TO FIRE	ECO GREEN	ASBESTOS FREE	TAR FREE	CHLORINE FREE	RECYCLABLE	NON DANGEROUS WASTE	EXHAUSTED OIL FREE	APPLICATION BY PRESSURE	NAILING

1 PROBLEM

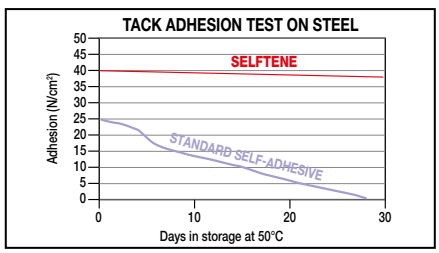
HOW TO LAY THICK PROFESSIONAL REINFORCED MEMBRANES WITHOUT TORCHING OR USING OTHER HEAT SOURCES OR HARMFUL ADHESIVES

The aim is to insulate with thick reinforced membranes without using torching, or melted bitumen or adhesives. The problem concerns: special industrial areas with a risk of fire or explosion, where use of torching is forbidden; laying on easily combustible surfaces, but where it is necessary to create a single-layer or standard double-layer 'stratigraphy', using thick reinforced membranes (professional single- or double-layer waterproofing).

2 SOLUTION



The **SELFTENE HE** series consists of thick elastomeric (SBS) distilled polymer-bitumen membranes reinforced with a non-woven composite polyester fabric stabilised with fibre glass, offering high mechanical resistance and dimensional stability. The bottom face of the membranes is coated with a special self-adhesive elastomeric mass which adheres by simple pressure at ambient temperature. It consists of a special selected mix of Venezuelan bitumen, tackifying resins and radial and linear elastomeric thermoplastic polymers which guarantee long-lasting adhesive properties. The graph shows how, unlike standard bitumen mixes, **SELFTENE HE**'s adhesive mass maintains its adhesive properties during the storage test and the following graph shows how its formulation with special 'anti-freeze' additives allows it to maintain its high adhesive power even at low temperatures during the cold adhesive test. The bottom adhesive face of both membranes is protected by a silicone coated-film, which should be removed during laying. The top face of **SELFTENE BASE HE POLYESTER** is protected by a Flamina film, which makes it possible to make joints by self-adhesion without any waste, no matter how the roll is cut. The top face is provided with a longitudinal overlap strip protected by a strip of bi-silicone coated film which facilitates the laying operations and is only removed when the joints are carried out. Other self-adhesive membranes, or also torch-laid membranes, can be adhered to the top face of **SELFTENE BASE HE POLYESTER.** The top face of **MINERAL SELFTENE HE POLYESTER** is self-protected with slate granules, except of a side strip for overlaps, which is protected by a bi-silicone coated film. Whereas the overlaps of the **SELFTENE BASE HE POLYESTER** type are always sealed by self-adhesion, in the case of **MINERAL SELFTENE HE POLYESTER,** the overlaps at the ends or on the slate, should be sealed by a coat of HEADCOLL adhesive paste, applied between the edges to be joined. Another way of making end joints is to glue, by self-adhesion, the two edges of the **MINERAL** type on a 20 cm-strip of **BASE HE POLYESTER**. In this case, the sheets are not overlapped but are brought together end to end. If possible you can torch the overlap.



ADVANTAGES

- **Safer and quickly.**
- **No special equipment needed.**

APPLICATION FIELDS

SELFTENE HE membranes are used to make very thick waterproof coats with reinforced membranes, in places where it is forbidden to use naked flames. The membranes are also used on laying surfaces sensitive to heat or easily combustible, such as panels in polystyrene foam, wooden roofs, etc.
Where using an open flame may be a hazard for operators, such as unventilated or restricted spaces such as excavations for foundations walls, etc., the **MINERAL** self-protected type is designed to be exposed, whereas **BASE POLIESTERE** should be used in applications not exposed to light or as a

CE INTENDED USE OF "CE" MARKING SPECIFIED ACCORDING TO THE AISPEC-MBP GUIDLINES

EN 13707 - REINFORCED BITUMEN SHEETS FOR ROOF WATERPROOFING
- **Under layer or intermediate layer in multi-layer systems without permanent heavy surface protection**
- SELFTENE BASE HE POLYESTER
- **Upper layer in multi-layer systems without permanent heavy surface protection**
- MINERAL SELFTENE HE POLYESTER
- **Under heavy protection in multi-layer systems**
- SELFTENE HE POLYESTER

EN 13970 - BITUMEN WATER VAPOUR CONTROL LAYERS
- SELFTENE HE POLYESTER

EN 13969 - BITUMEN DAMP PROOF SHEET INCLUDING BITUMEN BASEMENT TANKING SHEETS
- **Membranes for foundations**
- SELFTENE HE POLYESTER

TECHNICAL CHARACTERISTICS

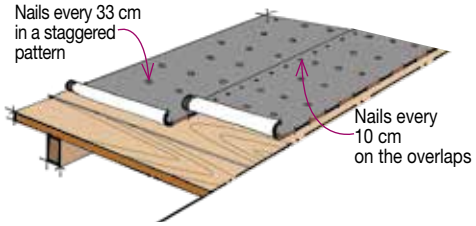
	Standard	T	SELFTENE BASE HE POLYESTER		MINERAL SELFTENE HE POLYESTER
Reinforcement			"Non-woven" composite polyester stabilized with fibreglass		"Non-woven" composite polyester stabilized with fibreglass
Thickness	EN 1849-1	±0.2	2 mm	3 mm	–
Mass per unit area	EN 1849-1	±10%	–	–	4 kg/m²
Roll size	EN 1848-1	≥	1x15 m	1x10 m	1x10 m
Watertightness	EN 1928 – B	≥	60 kPa		60 kPa
Peel resistance	EN 12316-1	-20 N	–		NPD
Shear resistance L/T	EN 12317-1	-20%	350/300 N/50 mm		450/400 N/50 mm
Maximum tensile force L/T	EN 12311-1	-20%	450/400 N/50 mm		450/400 N/50 mm
Elongation L/T	EN 12311-1	-15% V.A.	40/40%		40/40%
Resistance to impact	EN 12691 – A		800 mm		800 mm
Resistance to static loading	EN 12730 - A		10 kg		10 kg
Resistance to tearing (nail shank) L/T	EN 12310-1	-30%	150/150 N		150/150 N
Flexibility to low temp. • after ageing	EN 1109 EN 1296-1109	≤ +15°C	-25°C –		-25°C -20°C
Flow resistance at high temperature	EN 1110	≥	100°C		100°C
Reaction to fire Euroclass	EN 13501-1		E		E
External fire performance	EN 13501-5		F roof		F roof
Thermal specifications					
Thermal conductivity			0.2 W/mK	0.2 W/mK	0.2 W/mK
Heat capacity			2.60 KJ/K	3.90 KJ/K	4.80 KJ/K

In compliance with EN 13707 as the water vapour transmission factor, for reinforced polymer bitumen membranes, the value of μ = 20 000 may be assumed. 3 mm thick **SELFTENE BASE HE POLYESTER** has a permeability to water vapour after artificial aging (EN 1931 ed EN 1296) of μ = 100 000.

base layer under another membrane.
SELFTENE BASE HE POLYESTER can also be used as vapour control layer directly applied over timber surfaces , thus avoiding the extra cost of a nailed protection felt. Thermal insulation boards are then glued or fastened directly on the VCL.

METHOD OF USE AND PRECAUTIONS

- SELFTENE HE membranes stick onto the most commonly used building materials: metal surfaces, Plywood, OSB, polystyrene foam and extruded foam, polyurethane foam coated with polyethylene-coated fibreglass felt, etc. On porous surfaces such as cement and brick, on an old bitumen covering, on old wooden boarding etc., the surface to be covered should be prepared with a coat of 250 to 500 g/m² INDEVER PRIMER E.
- To prevent humidity building up and keep the wood dry and to allow the roof to be disassembled to recover the clean boards and prevent contact with fresh, resinous wood which can stain the underlying material, before gluing the adhesive exposed membrane to the old boards, on wooden roof boards or boards exposed directly to occupied spaces, first cover them with the ROLLBASE HOLLAND vapour separation and diffusion layer nailed on in a staggered pattern with flat head nails every 33 cm and 10 cm on the overlaps. The adhesive membrane is then installed over this layer.



- Visible sheets applied vertically should be secured mechanically at the end; the same is valid for walls in contact with the ground.
- Store the rolls in a dry place indoors and take them to the laying location only when about to be applied.
- Open the package immediately before laying.
- Polymer bitumen membranes are thermoplastic products and therefore they soften in the hottest hours of summer days whereas they harden in cold weather and the product's adhesive power is therefore reduced.
- For slopes over 15% the sets of roof layers including self-adhesive membranes should be carefully designed and if necessary integrated with mechanical fastening.
- **The excellent cold behaviour of SELFTENE HE does not justify the laying of the self-adhesive membrane at low temperatures without precautions. Below +10°C also according to the humidity conditions of the air and the support, particular attention must be paid during laying, if necessary using heating appliances or a "light flame". The temperature of +5°C remains the laying threshold limit.**

PRODUCT FINISHING

"FLAMINA" PE FOIL. Plastic protection film helping prevent coils from sticking to the roll. As it withdraws under the action of the flame right during its installation, it signals the best melting point in order to correctly glue the membrane to the brackets and rises. When not heated, it can be used as a sliding layer.

SELF-PROTECTION WITH SLATE GRANULES. On the visible face of the membrane, a protective coating made up of slate granules of various colours is hot bonded. This mineral shield protects the membrane from ageing caused by UV rays.

REMOVABLE SILICONE-COATED FILM. *The lower face of the membrane is covered in a silicone-coated film which preserves the adhesive mix.*

• FOR ANY FURTHER INFORMATION OR ADVICE ON PARTICULAR APPLICATIONS, CONTACT OUR TECHNICAL OFFICE • IN ORDER TO CORRECTLY USE OUR PRODUCTS, REFER TO INDEX TECHNICAL SPECIFICATIONS •

index
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