POLYGLASS®

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MAPEI GROUP

Adds value!

The new technology of Self-Adhesive membranes

NOW AVAILABLE FOR VERTICAL APPLICATION

ADESO®

SELF-ADHESIVE TECHNOLOGY

ADESO®
SELF-ADHESIVE TECHNOLOGY

ELASTOFLEX SA P, ELASTOFLEX SA P Mineral, SPIDER P, SPIDER P Mineral, POLYVAP SA, ADESOSHIELD SA, ADESOGUARD and POLYSTICK TU PLUS

THE SELF-ADHESIVE MEMBRANES WITH *ADESO*® TECHNOLOGY

Self-Adhesive

WHY SELF-ADHESIVE TECHNOLOGY?

The new generation of ***ADESO***® Self-Adhesive membranes is the most innovative modified bitumen roofing product available in the industry.

ADESO® Self-Adhesive membranes are unique with several years of proven performance in the field as experienced by various contractors, buildings owners, architects and roofing professionals, which puts POLYGLASS® ahead of the competition.
ADESO® Self-Adhesive membranes comprise the latest in bitumen adhesive technology as well as proven waterproofing compounds with various surfaces available.
Installed with care and attention to details, ***ADESO***® products will provide long lasting and durable roof covering.

The revolutionary concept of manufacturing ***ADESO***® Self-Adhesive membranes utilizing POLYGLASS®, patent-pending dual compound technology, patented granule-free end lap, ***FASTLap***®, and patent-pending factory-applied treatment, ***SEALLap***®, makes POLYGLASS® the industry leader in the residential and commercial roofing market.

ADVANTAGES

Advantages

Safe application

POLYGLASS® SA Self-Adhesive membranes with ***ADESO***® Technology eliminate the need for torching or mopping, i.e., no naked flame on your roof.

Clean and neat application

No bitumen bleed-out and no mess caused by hot mopping or torching.
No empty cans to dispose of.

Easy to use

Fast and easy installation. Application of POLYGLASS® SA Self-Adhesive membranes with ***ADESO***® Technology is quicker than traditional and conventional systems.

Ecological Odourless

Environmentally friendly!
No more fumes, odours and noise.

Wide variety of substrates

POLYGLASS® SA Self-Adhesive membranes with ***ADESO***® Technology adhere to numerous approved substrates, including insulations.

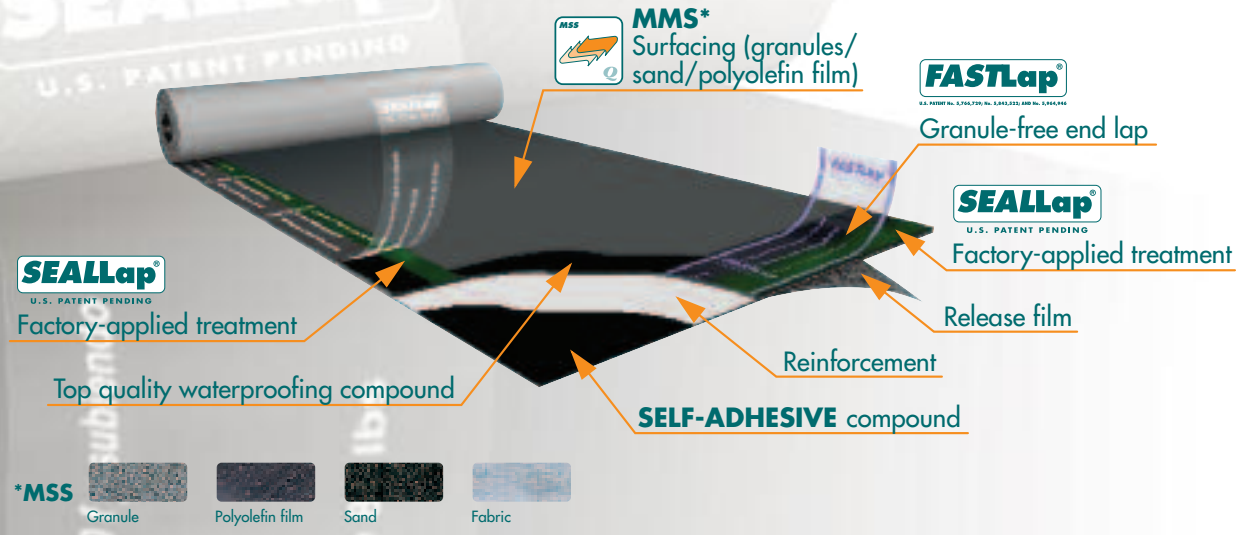
Vertical walls

Insurance premium reductions can be obtained when utilizing POLYGLASS® SA Self-Adhesive membranes with ***ADESO***® Technology.

SELF-ADHESIVE MEMBRANES

What is *ADESO*® Technology?

ADESO® Technology is a revolutionary concept of manufacturing dual compound Self-Adhesive membranes using a professional waterproofing formulation on the top weathering side and an aggressive Self-Adhesive formulation on the bottom side of the reinforcement.



FEATURES OF *ADESO*®

"MVACC" (Multiple Variable Advanced Compound Coating) Manufacturing Process

Manufacturing process that allows application of two distinct compounds on opposite sides of reinforcement.

Benefits

- "True" **APP, SBS** and **TPO** compound on the top surface as in torch or mop products means proven performance.
- Excellent walkability compared to membranes with Self-Adhesive compound on the top surface as well.
- Ability to make self-adhesive compound very tacky without altering properties of the top compound.

SBS Dual Compound

Manufacturing process that allows application of **SBS** compound on the weathering surface and a Self-Adhesive compound on the bottom surface of the reinforcement.

Benefits

- Top quality **SBS** compound on the top surface as in torch or mop products means proven performance.
- Excellent walkability compared to membranes with Self-Adhesive compound on the top surface.
- Ability to make Self-Adhesive compound very tacky without altering properties of the top compound.

APP Dual Compound (patented)

Manufacturing process that allows application of **APP** compound on the weathering surface and a Self-Adhesive compound on the bottom surface of the reinforcement.

Benefits

- Top quality **APP** compound on the top surface as in torch or mop products means proven performance.
- Excellent walkability compared to membranes with Self-Adhesive compound on the top surface.
- Ability to choose **APP** based Self-Adhesive membranes in warm areas or in summer to avoid softness issues and better UV resistance.
- Ability to make Self-Adhesive compound very tacky without altering properties of the top compound.

TPO Dual Compound (patented)

Manufacturing process that allows application of **TPO** compound on the weathering surface and a Self-Adhesive compound on the bottom surface of the reinforcement.

Benefits

- **TPO** compound on the top surface as in torch or mop products means proven performance.
- Excellent walkability compared to membranes with Self-Adhesive compound on the top surface.
- Ability to make Self-Adhesive compound very tacky without altering properties of the top compound.

FEATURES OF ADESO®

Patented process through which granulated sheets are manufactured with granule-free roll endlaps. Endlap is protected by removable film.

Benefits

- No need for heating and scraping granules at ends.
- Less time needed for installation.
- Reduced material and labour costs.
- Ensures quick, clean and easy lapping of rolls.
- Stronger, more reliable seams.
- Aesthetically attractive finish.
- Fewer call-backs and repairs.

Unique factory-applied adhesive treatment at the membrane overlap sections to enhance sealability.

Benefits

- Instant bonding between adjacent membranes, even under low temperature conditions.
- No need for adhesive or mastics.
- Less time needed for installation.
- Reduced material and labour costs.
- Ensures quick, clean and easy lapping of rolls.
- Significantly higher endlap strength.
- Immediate watertightness of roof.

MSS Multiple Surfacing Solution

Flexible manufacturing process that facilitates application of a variety of customized surfacing, to provide a wide array of roofing solution.

Benefits

- Skid-resistance.
- UV resistance.
- Long-term exposure.
- Good aesthetics.
- Non-abrasive surface.
- "Stickable" surface.
- Non-staining surface.
- High resistance to contaminants.

FASTLap®

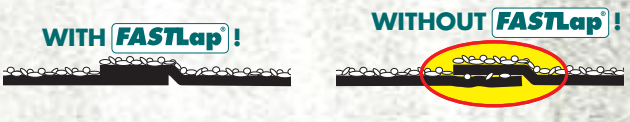
Prevents imperfect seams

The sealing of the end laps between two rolls of granular modified bitumen membranes has long been an arduous and troublesome operation. If granules are not heated and embedded satisfactorily, a reliable and durable seam may not be achieved (peeling effect).

If the granular areas are overheated, the reinforcement may warp, be damaged or loss of modified compound may occur.

FASTLap® patented technology from POLYGLASS®, prevents imperfect seams, thanks to a special release film, that ensures granule-free roll ends.

This release film is truly clean and simple to remove, minimizing the effort and time required to achieve a perfect end seam.



SEALLap®

Enhances sealability

SEALLap® is a unique patent-pending, factory-applied treatment on the overlap areas (side lap and end lap) of rolls to enhance sealability.

Advantages

INSTANT BONDING
Instant, permanent bond between adjacent membranes, even under low temperature conditions.

COST SAVINGS
No need for use of external adhesive or mastics to ensure lap bond.

LABOUR SAVINGS
Factory applied adhesive on the overlap areas translates to less time to install roofing membrane.

ENVIRONMENTALLY FRIENDLY
No need for external adhesive or mastics as required for competitor membranes. Therefore no empty cans or tubes of mastics to dispose of after roof installation.

THE PRODUCT RANGE

ELASTOFLEX SA P
ELASTOFLEX SA P Mineral

ELASTOFLEX SA P and **ELASTOFLEX SA P Mineral** are excellent quality prefabricated bituminous membranes, made with ***ADESO***® technology, the new compound layering system from Polyglass SpA.
ELASTOFLEX SA P and **ELASTOFLEX SA P Mineral** are made from an elastomeric compound, (SBS), reinforced with a staple polyester and longitudinal glass fibres. This reinforcement allows the product an excellent dimensional stability and good working capabilities on-site.
ELASTOFLEX SA P is protected by a polyethylene film on its upper side while the mineral version is protected by an even layer of mineral slate chips which can be natural or coloured.
On the upper side, apart from the innovative patented granule free roll end ***FASTLap***® the mineral membranes are also treated with ***SEALLap***® which is a feature that enhances bonding at laps.These patented treatments guarantee excellent membrane bonding even in the most difficult situations.
ELASTOFLEX SA P and **ELASTOFLEX SA P Mineral** have an adhesive underside protected by a monosilicon polyethylene film to be removed at the time of application.

POLYVAP SA

POLYVAP SA is a high quality double-adhesive bituminous membrane made with ***ADESO***® technology, the new compound layering system from Polyglass SpA.
POLYVAP SA is made from a special elastomeric (SBS) self-adhesive compound reinforced with an aluminium film.
This reinforcement allows the product an excellent dimensional stability, good mechanical characteristics a complete vapour barrier and excellent on-site workability. **POLYVAP SA** has both sides protected by a monosilicon polyethylene film which is removed when the membrane is applied.
Being self-adhesive on both sides, **POLYVAP SA** grants an excellent adhesion both on the laying surface and on the materials to be laid on the top of the membrane (either insulation boards or waterproofing membranes).

SPIDER P
SPIDER P Mineral

SPIDER P and **SPIDER P Mineral** are excellent quality prefabricated bituminous membranes, made with ***ADESO***® technology, the new compound layering system from Polyglass SpA.
SPIDER P and **SPIDER P Mineral** are made from an plastomeric compound, (APP), reinforced with a staple polyester and longitudinal glass fibres. This reinforcement allows the product an excellent dimensional stability and good working capabilities on-site.
SPIDER P is protected by a polyethylene film on its upper side while the mineral version is protected by an even layer of mineral slate chips which can be natural or coloured.
On the underside, apart from the innovative patented granule free roll end ***FASTLap***® the mineral membranes are also treated with ***SEALLap***® which is a feature which enhances bonding at laps.
These patented treatments guarantee excellent membrane bonding even in the most difficult situations.
SPIDER P and **SPIDER P Mineral** have an adhesive underside protected by a monosilicon polyethylene film to be removed at the time of application.

ADESOSHIELD SA

ADESOSHIELD SA is a prefabricated bi-adhesive bituminous membrane of excellent quality, made using ***ADESO***® technology, the new compound's stratification process developed by Polyglass SpA.
ADESOSHIELD SA is realized with an adhesive elastomeric compound, (SBS), and reinforced with a non-woven reinforced tissue of flocking polyester, reinforced and stabilized with longitudinal glass fibre. This armour gives the product great dimensional stability, guaranteeing great mechanical performances and workability. Both sides of **ADESOSHIELD SA** are covered with a protective film made of monosiliconated polyethylene which must be removed just before its application.

THE PRODUCT RANGE

ADESOGUARD

ADESOGUARD is a prefabricated self-adhesive bituminous membrane modified with high quality polymers, produced using ***ADESO***® technology, the new compound stratification system designed by Polyglass SpA.
ADESOGUARD is produced with an elastomeric compound (SBS), armed with a reinforced glass mat coat and presents a high density polyethylene film (HDPE) on the upper side which makes the external part of the compound more mechanically resistant, making the product particularly useful for foundations, for waterproofing vertical surface, (walls, percolating water) or as an antihumid when applied under the floor.
Lateral and end-lap overlap are totally adhesive in order to guarantee maximum overlapping bonding.
ADESOGUARD's adhesive lower side is protected with a monosiliconized polyethylene film, divided longitudinally in two parts, which must be removed right before the application.
ADESOGUARD is a versatile membrane, with great mechanical resistance, dimensional stability and extreme adhesion properties.
These characteristics make **ADESOGUARD** particularly remarkable as a sealing element for the waterproofing of walls.

POLYSTICK TU PLUS

POLYSTICK TU PLUS is a high quality self-adhesive bituminous membrane made with ***ADESO***® technology, the new compound layering system from Polyglass SpA.
POLYSTICK TU PLUS is a bituminous waterproofing membrane, reinforced with glass fibres and polyester that have high mechanical properties.
POLYSTICK TU PLUS, is specifically designed to be used as underlaying for tiles.
The tiles can be directly applied on **POLYSTICK TU PLUS** using glues or mortar.
For roofs with slope higher than 30%, **POLYSTICK TU PLUS** can also be used with a mechanical fixing system under the overlaps.
POLYSTICK TU PLUS has an excellent high temperature resistence.
POLYSTICK TU PLUS is provided with an innovative self-adhesive overlap feature ***SEALLap***®.
SEALLap® is a special overlap with adhesive glue on top, adding extra safety to the overlapping process.
POLYSTICK TU PLUS is equipped with a polyestere fleece on top of the membrane which grants a good grip during the application.

ADESO
SELF-ADHESIVE TECHNOLOGY

DATA SHEET

TEST METHOD	DATA SHEET	UNIT OF MEASURE	TECHNICAL VALUE			
			ELASTOFLEX SA P	ELASTOFLEX SA P Mineral	SPIDER P	SPIDER P Mineral
EN 1848-1	LENGTH	m	15 (-1%)	≥10	15 (-1%)	≥10
EN 1848-1	WIDTH	m	1 (-1%)	1 (-0,5% +1,5%)	1 (-1%)	1 (-0,5% +1,5%)
EN 1848-1	STRAIGHTNESS	mm/10 m	Through	Through	Through	Through
EN 1849-1	THICKNESS	mm	2 (±0,2)	NPD	2 (±0,2)	NPD
EN 1849-1	AREIC MASS	kg/m²	NPD	3,5 (±10%)	NPD	3,5 (±10%)
EN 1928-B	WATERTIGHTNESS	kPa	Through	-	Through	-
EN 1928-A	WATERTIGHTNESS	mm/H_2O	-	W1	-	W1
EN 1928-B EN 1296	WATERPROOFING AFTER ARTIFICIAL AGEING	kPa	Through	-	Through	-
EN 1928-B EN 1847	WATERPROOFING AFTER EXPOSURE TO CHEMICAL AGENTS	kPa	Through	-	Through	-
EN 13897	WATERPROOFING QUALITIES AFTER ELONGATION AT LOW TEMPERATURES	%	-	-	-	-
EN 13501-5	BEHAVIOUR WITH EXTERNAL FIRE	-	F_{Roof}	F_{Roof}	F_{Roof}	F_{Roof}
EN 13501-1	REACTION TO FIRE	-	F	F	F	F
EN 12316	JOINT PEELING RESISTANCE	N/50 mm	-	-	-	-
EN 12317	JOINT TRACTION RESISTANCE	N/50 mm	-	-	-	-
EN 12311-1	TENSILE STRENGHT MAX Longitudinal Transversal	 N/50 mm N/50 mm	 400 (-20%) 300 (-20%)	 400 (-20%) 300 (-20%)	 400 (-20%) 300 (-20%)	 400 (-20%) 300 (-20%)
EN 12311-1	ELONGATION AT BREAK Longitudinal Transversal	 % %	 35 (-15) 35 (-15)	 35 (-15) 35 (-15)	 35 (-15) 35 (-15)	 35 (-15) 35 (-15)
EN 12691-A	BLOW RESISTANCE	mm	≥700	≥700	≥700	≥700
EN 12730-A	RESISTANCE TO STATIC LOADS	Kg	≥10	≥10	≥10	≥10
EN 12310-1	RESISTANCE TO LACERATION Longitudinal Transversal	 N N	 130 (-30%) 130 (-30%)	 130 (-30%) 130 (-30%)	 130 (-30%) 130 (-30%)	 130 (-30%) 130 (-30%)
EN 1107-1	DIMENSIONAL STABILITY	%	-	≤0,3	-	≤0,3
EN 1108	STABILITY FORM AFTER CYCLES OF BAD WEATHER	mm	-	-	-	-
EN 1109	LOW TEMPERATURE FLEXIBILITY	°C	≤-20	≤-20	≤-10	≤-10
EN 1109	LOW TEMPERATURE FLEXIBILITY TOP	°C	-	-	-	-
EN 1109	LOW TEMPERATURE FLEXIBILITY UNDER	°C	-	-	-	
EN 1110	SHIFT RESISTANCE AT HIGH TEMPERATURE	°C	≥100	≥100	≥110	≥110
EN 1109 EN 1296	COLD FLEXIBILITY AFTER THERMAL AGEING	°C	-	≤-10	-	-
EN 1110 EN 1296	SHIFT RESISTANCE AFTER THERMAL AGEING	°C	-	-	-	≥100
EN 1296	WATERPROOFING AFTER THERMAL AGEING	μ	-	-	-	-
EN 1296 EN 1297 EN 1928	WATERTIGHTNESS AFTER ARTIFICIAL AGEING PROCESS	mm/H_2O	-	W1	-	W1
EN 1296 EN 1297 EN 12311-1	MECHANICAL PERFORMANCES AFTER ARTIFICIAL AGEING TENSILE STRENGHT MAX Longitudinal Transversal ELONGATION AT BREAK Longitudinal Transversal	 N/50 mm N/50 mm N/50 mm N/50 mm	 - - - -	 ±30% initial value ±30% initial value ±30% initial value ±30% initial value	 - - - -	 ±30% initial value ±30% initial value ±30% initial value ±30% initial value
EN 1297	AGEING FOR LONG EXPOSITION TO A COMBINATION OF UV, HIGH TEMPERATURE AND WATER	kPa	-	-	-	-
EN 12114	AIR PERMEABILITY OF BUILDING COMPONENTS AND BUILDING ELEMENTS	-	-	NPD	-	NPD
EN 12039	GRANULE ADHESION	%	-	≤30%	-	≤30%
EN 1931	WATER VAPOUR TRANSMISSION PROPERTY	μ	20000	20000	20000	20000
EN 1847 EN 1931	WATER VAPOUR TRANSMISSION PROPERTY AFTER EXPOSITION TO CHEMICAL AGENTS	kPa	-	-	-	-
EN 1296 EN 1931	WATER VAPOUR TRANSMISSION PROPERTY AFTER EXPOSITION AGEING PROCESS	kPa	-	-	-	-
EN 1850-1	VISIBLE DEFECTS	-	ABSENT	ABSENT	ABSENT	ABSENT
ASTM D 1000	PEELING	N/10 mm	≥20	≥20	≥20	≥20
MEMBRANE USE			**MULTI-LAYER** U.L. - S. **FONDATION** R.D.	**MULTI-LAYER** F.L. - S. **UNDER TILE**	**MULTI-LAYER** U.L. - S. **FONDATION** R.D.	**MULTI-LAYER** F.L. - S. **UNDER TILE**

F.L.: Finishing Layer - **U.L.:** Under Layer - **R.D.:** Rising Dampness - **S.:** Sight.

ADESO
SELF-ADHESIVE TECHNOLOGY

DATA SHEET

TEST METHOD	DATA SHEET	UNIT OF MEASURE	TECHNICAL VALUE			
			POLYVAP SA	ADESOSHIELD SA	ADESOGUARD	POLYSTICK TU PLUS
EN 1848-1	LENGTH	m	15 (-1%)	15 (-1%)	15 (-1%)	≥20
EN 1848-1	WIDTH	m	1 (-1%)	1 (-1%)	1 (-1%)	1 (-0,5% +1,5%)
EN 1848-1	STRAIGHTNESS	mm/10 m	Through	Through	Through	Through
EN 1849-1	THICKNESS	mm	2 (±0,2)	2 (±0,2)	1,8 (±0,2)	2 (±0,2)
EN 1849-1	AREIC MASS	kg/m²	NPD	NPD	NPD	NPD
EN 1928-B	WATERTIGHTNESS	kPa	Through	Through	Through	W1
EN 1928-A	WATERTIGHTNESS	mm/H_2O	-	-	-	-
EN 1928-B EN 1296	WATERPROOFING AFTER ARTIFICIAL AGEING	kPa	-	-	Through	-
EN 1928-B EN 1847	WATERPROOFING AFTER EXPOSURE TO CHEMICAL AGENTS	kPa	-	-	Through	-
EN 13897	WATERPROOFING QUALITIES AFTER ELONGATION AT LOW TEMPERATURES	%	-	-	Through	-
EN 13501-5	BEHAVIOUR WITH EXTERNAL FIRE	-	-	-	-	-
EN 13501-1	REACTION TO FIRE	-	F	F	F	F
EN 12316	JOINT PEELING RESISTANCE	N/50 mm	-	-	-	-
EN 12317	JOINT TRACTION RESISTANCE	N/50 mm	400/150 (-20%)	300/200 (-20%)	300 (-20%)	-
EN 12311-1	TENSILE STRENGHT MAX Longitudinal Transversal	 N/50 mm N/50 mm	 500 (-20%) 200 (-20%)	 400 (-20%) 300 (-20%)	 500 (-20%) 400 (-20%)	 300 (-20%) 200 (-20%)
EN 12311-1	ELONGATION AT BREAK Longitudinal Transversal	 % %	 4 (-2) 4 (-2)	 50 (-15) 50 (-15)	 100 (-20) 100 (-20)	 3 (-2) 3 (-2)
EN 12691-A	BLOW RESISTANCE	mm	≥600	≥600	≥300	-
EN 12730-A	RESISTANCE TO STATIC LOADS	Kg	-	-	≥5	-
EN 12310-1	RESISTANCE TO LACERATION Longitudinal Transversal	 N N	 100 (-30%) 100 (-30%)	 150 (-30%) 150 (-30%)	 200 (-30%) 200 (-30%)	 70 (-30%) 70 (-30%)
EN 1107-1	DIMENSIONAL STABILITY	%	-	-	≤0,3	≤0,2
EN 1108	STABILITY FORM AFTER CYCLES OF BAD WEATHER	mm	-	-	-	-
EN 1109	LOW TEMPERATURE FLEXIBILITY	°C	≤-25	-	≤-25	-
EN 1109	LOW TEMPERATURE FLEXIBILITY TOP	°C	-	≤-25	-	≤-10
EN 1109	LOW TEMPERATURE FLEXIBILITY UNDER	°C	-	≤-25	-	≤-10
EN 1110	SHIFT RESISTANCE AT HIGH TEMPERATURE	°C	-	-	-	-
EN 1109 EN 1296	COLD FLEXIBILITY AFTER THERMAL AGEING	°C	-	-	-	-
EN 1110 EN 1296	SHIFT RESISTANCE AFTER THERMAL AGEING	°C	-	-	-	-
EN 1296	WATERPROOFING AFTER THERMAL AGEING	μ	-	≤±50% initial value	-	-
EN 1296 EN 1297 EN 1928	WATERTIGHTNESS AFTER ARTIFICIAL AGEING PROCESS	mm/H_2O	-	-	-	W1
EN 1296 EN 1297 EN 12311-1	MECHANICAL PERFORMANCES AFTER ARTIFICIAL AGEING TENSILE STRENGHT MAX Longitudinal Transversal ELONGATION AT BREAK Longitudinal Transversal	 N/50 mm N/50 mm N/50 mm N/50 mm	 - - - -	 - - - -	 - - - -	 ±30% initial value ±30% initial value ±30% initial value ±30% initial value
EN 1297	AGEING FOR LONG EXPOSITION TO A COMBINATION OF UV, HIGH TEMPERATURE AND WATER	kPa	-	-	-	-
EN 12114	AIR PERMEABILITY OF BUILDING COMPONENTS AND BUILDING ELEMENTS	-	-	-	-	NPD
EN 12039	GRANULE ADHESION	%	-	-	-	-
EN 1931	WATER VAPOUR TRANSMISSION PROPERTY	μ	70000 (±30%)	95000 (±30%)	20000	20000
EN 1847 EN 1931	WATER VAPOUR TRANSMISSION PROPERTY AFTER EXPOSITION TO CHEMICAL AGENTS	kPa	≤±50% initial value	-	-	-
EN 1296 EN 1931	WATER VAPOUR TRANSMISSION PROPERTY AFTER EXPOSITION AGEING PROCESS	kPa	≤±50% initial value	≤±50% initial value	-	-
EN 1850-1	VISIBLE DEFECTS	-	ABSENT	ABSENT	ABSENT	ABSENT
ASTM D 1000	PEELING	N/10 mm	≥20	≥20	-	-
MEMBRANE USE			VAPOUR BARRIER	VAPOUR BARRIER	FONDATION R.D.	UNDER TILE

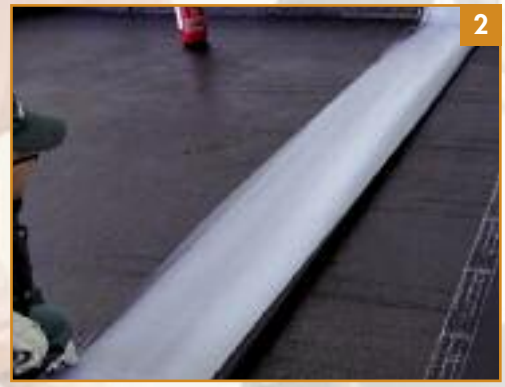
F.L.: Finishing Layer - **U.L.:** Under Layer - **R.D.:** Rising Dampness - **S.:** Sight.

HOW TO APPLIED

ELASTOFLEX SA P, ELASTOFLEX SA P Mineral, SPIDER P, SPIDER P Mineral, POLYVAP SA, ADESOSHIELD SA, ADESOGUARD and POLYSTICK TU PLUS

1. Remove the roll from its package.
2. Unroll the membrane on the surface which you want to waterproof and align it with a reference point (perimeter wall, the eaves' line, etc.). ***(Figure 1)***

3. Fold the roll in order to halve its width (approximately 50 cm). ***(Figure 2)***



4. Remove the monosiliconated polyethylene film and lay out the roll on the surface which you want to waterproof. The monosiliconated film is pre-cut in half. Only remove the part which you want to apply. ***(Figures 3 and 4)***

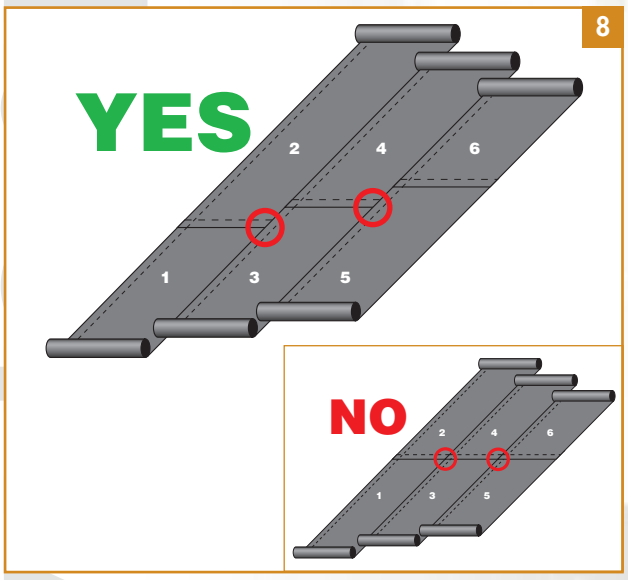
5. Turn the membrane on its opposite side and repeat the process described in point 4, paying attention not to cause the formation of air bubbles.
6. The gluing process of the membrane must be performed with care. Roll on the overlaps with the appropriate metallic roll in order to apply constant pressure on the product. ***(Figure 5)***

7. In case of low temperatures (but, higher than 5 °C), in order to increase the adhesion of the surmounts, it's possible to heat the upper part of the overlaps with a hot air tool (Leister) or with a propane-fuelled flameless burner.
8. All technical parts (sockets, exhalers, internal and external corners, etc.) must be done with a hot air Leister and a pressing roll. ***(Figure 6 and 7)***

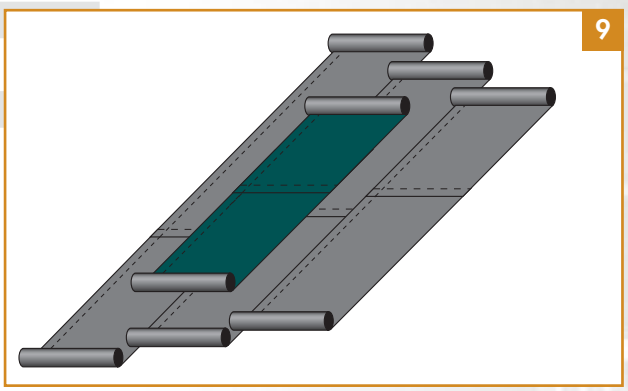
HOW TO APPLIED

9. The laying of the membrane must always be made with the overlaps pointing in the direction in which the water flows. Try to always avoid overlaps in the direction of slopes.

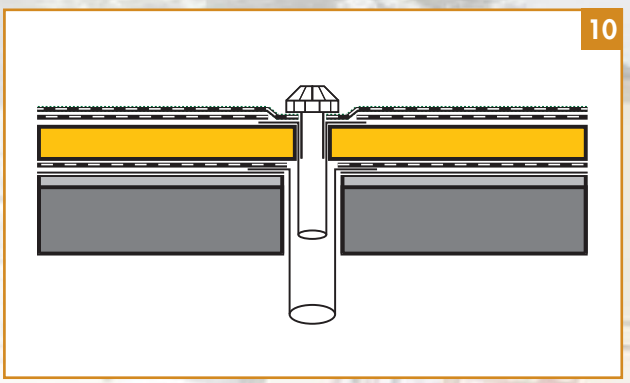
10. The laying of the membranes must be staggered longitudinally. ***(Figure 8)***



11. All the membranes forming the second waterproof layer must be laid in the same direction the first layer has been laid in, placing them between the longitudinal and lateral overlaps of the lower layer's sheets. ***(Figure 9)***



12. In case a steam barrier is used, a metal or rubber socket must be attached to each rain drainage system. ***(Figure 10)***



13. When making the continuity (membrane welding) waterproof between the membranes, either with a black finish or with a slate finish, in case the ***SEALLap***® and ***FASTLap***® longitudinal and lateral selvages are absent, the welding must be performed with a hot air Leister or with a pressing roll. ***(Figure 11)***

HOW TO APPLIED

POLYVAP SA and ADESOSHIELD SA

1. The membrane will be laid, in total adherence, on the wooden or concrete attic after the application of the bituminous Primer, by removing the self-adhesive monosiliconated film from its back side. ***(Figure 12)***

2. The sheets will have to overlap for at least 10 cm laterally and 15 cm longitudinally. ***(Figure 13)***

3. The welding is made with direct contact between the overlaps.

4. Particular attention will have to be paid when turning and welding the steam barrier on its vertical sides at least 5 cm above the level arranged for the insulating layer. ***(Figure 14)***

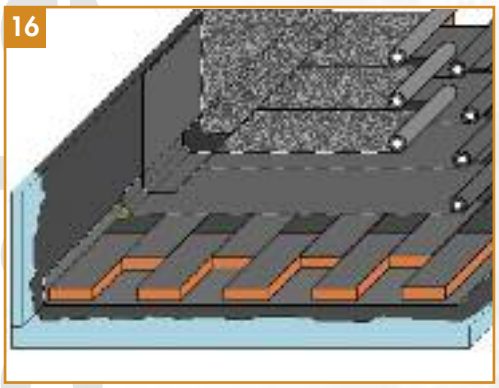
5. Before laying the panel, the monosiliconated film must be removed from the front side in order to allow the correct gluing of the insulating panel. ***(Figure 15)***

HOW TO APPLIED

VERTICAL WELTS.
Smooth and gritted versions

1. All vertical welts both of the perimeter and of the parts which emerge from the covering, must be seamless. ***(Figure 16)***

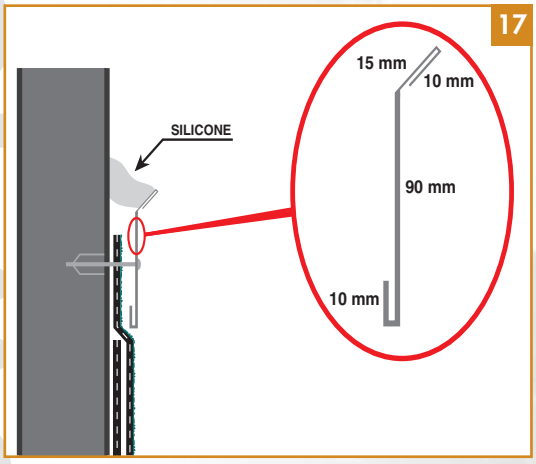
16



2. Weld the sheets at least 30 cm above the expected maximum level of the meteoric waters.

3. Mechanically fix the upper side of the waterproof sheet with a properly sealed metallic soaker flashing (stainless steel, copper, pre-painted zinc sheet metal). ***(Figure 17)***

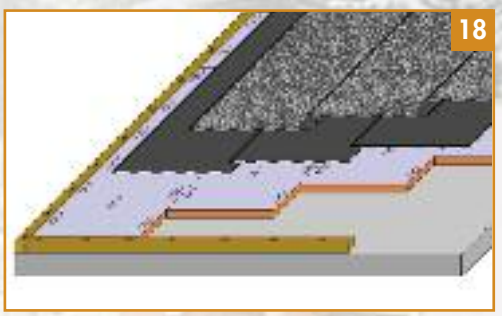
17



4. For vertical welts of more than 30 cm, it is advised to mechanically fix the sheet below the surmount by using a wall plug and a metallic washer, which must then be covered by another sheet. (below the surmount).

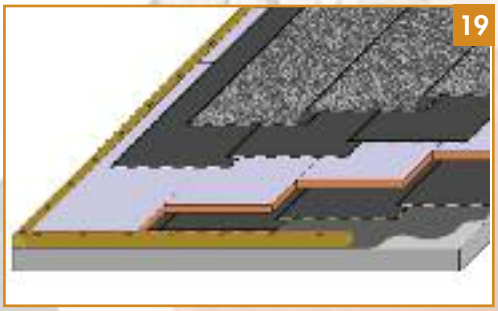
5. If used on pitched coverings, the thermal insulating layer must be mechanically fixed or glued.
The laying of the sheets must follow the slope.
At the top of the pitch, the membrane must be welted for approximately 20÷30 cm and be fixed mechanically.
If you need to cover a surface the slope of which is higher than 30% the mechanical fixing must also be made below the surmount. ***(Figure 18)***

18



6. In the pitched coverings with a bi-adhesive steam barrier (Polyvap SA and Adesoshield SA), the insulating layer must be glued to the membrane itself. ***(Figure 19)***

19



HOW TO APPLIED

VERTICAL APPLICATIONS

The use of self-adhesive membranes of the ***ADESO***® series, for the realization of vertical surfaces and earth retaining walls, is particularly easy, practical and effective.
The advantages of ***ADESO***® products are their low weight and the fact that they are easy to handle, making their application simple and customer friendly.

1. The wall which you need to waterproof must be treated in advance with an appropriate bituminous primer, which must be left to dry properly, in order to avoid the presence of protruding oils on the treated surface. ***(Figure 20)***


20

2. Apply the special trapezoidal profile, the angular edge "Bordangolo", at the foot of the foundation wall; this will allow the membrane to be welted with a 45' angle in order to avoid the bending of the waterproofing product ***(Figure 21)***.
The profile can be replaced with a cement mortar cove edge.


21

3. Remove the roll of self-adhesive membrane from its packaging. The product must be kept in its packaging until the moment of application. ***(Figure 22)***


22

4. Unroll the product on the ground and cut out a piece of the right dimension. ***(Figure 23)***


23

5. Fix one of the top ends of the sheet for approximately 30 cm, in order to hold the sheet vertically. ***(Figure 24)***


24

6. Right afterwards remove the entire monosiliconated protective film. ***(Figure 25)***
The monosiliconated film is divided in two halves, which makes their removal easier.


25

HOW TO APPLIED

7. Paying particular attention you need to fit the sheet horizontally where the angular edge "Bordangolo" is. You can remove eventual air bubbles by passing your hand on the external surface of the waterproof coat. ***(Figure 26)***.

8. At this point, you're ready to apply the second waterproofing sheet. Part of the second sheet will be placed on top of the first sheet, for 10 cm, on the appropriate area for overlapping, called lateral overlap. ***(Figure 27)***

9. This time, the fixing of the upper side of the sheet will help you keep the sheet in position, until you're able to remove half of the monosiliconated sheet. ***(Figures 28 and 29)***

10. Remove the polyester film protecting the area for the overlapping. ***(Figure 30)***

11. Roll on the areas in which the sheets overlap with the appropriate pressing roll. This operation is very important, as it guarantees perfect adhesion between the two sheets. ***(Figure 31)***

12. The upper part of the sheet, near the top of the wall which you need to waterproof, must be further secured in order to avoid possible detachment due to the oxidizing action of air on the border of the membrane. The fixing can be made with a propane fuelled scarfing tool ***(Figure 32)***, or with a hot air leister ***(Figure 33)***, and eventually by fixing it mechanically ***(Figure 34)***, better if made with an automatic nail gun. ***(Figure 35)***

HOW TO APPLIED

13. At this point, your wall is perfectly waterproof and you can now move on to the application of POLYFOND KIT, which is a sheet made of high density HDPE polyethylene, to protect and waterproof the vertical surface. ***(Figure 36)***

14. The textured HDPE sheet is available in various dimensions. ***(Figure 37)***

15. This time as well the application is made by fixing the top part of the sheet mechanically ***(Figure 38)***, with the textured side facing the surface, facing the polymer bitumen membrane.

GENERAL ADVICE

Precautions and general application advice:

- Self-adhesive products must only be applied when the environmental temperature is not lower than 5 °C (moreover always avoid excessive atmospheric humidity).
- Before application it is always necessary to apply 300 gr/mq of the POLYPRIMER HP 45 PROFESSIONAL bituminous primer.
- The monosiliconated polyethylene sheet placed on the self adhesive side of the membrane must be removed immediately before laying the membrane.
- The polyethylene sheet is pre-cut longitudinally in order to make its removal easier.
  The sheets must overlap for at least 10 cm following the eventual surmount line printed on the polyethylene film.
  The membranes using ***ADESO***® technology have longitudinal and lateral overlaps on which the sheets must overlap. (***FASTLap***® and ***SEALLap***®)
- In case the temperatures are low it is useful to heat the surface of the compound in order to increase the adhesion of the product.
- Make a 45' cut at the corners of contiguous sheets. ***(Figure 39)***


39

- The sheets which form the first waterproof layer and those of the second layer must be laid in the same direction. The sheets of the second layer must be staggered in relation to those of the first layer, at least for the width of the first layer's sheets overlaps. Try not to make more than three sheets overlap. ***(Figure 40)***


40

- The areas in which the sheets overlap must always be pressed with the appropriate pressing roll.
- The self-adhesive membrane rolls , also when partially used, must be kept in the shade and inside their packaging.
- The self-adhesive compounds are sensitive to low temperatures and to high humidity. During the winter it's better to keep them indoors.

STOCKING

Advice for stocking products using ADESO® self-adhesive technology.

- Products which use **ADESO®** self-adhesive technology must be stocked indoors, in a dry place, away from sunlight and with an appropriate temperature.
- Avoid keeping the product outside its packaging for long periods when the external temperature is higher than 29 °C.
- Do not remove the roll from its packaging until the moment of application.
- Keep the product away from sunlight and excessively high temperatures.
- The removal of the monosiliconated protective film can cause electrostatic energy discharge.
- Do not place pallets one on top of the other.
- Always keep the rolls standing vertically.

WHAT NOT TO DO

1. Do not apply the coating membrane when the weather is bad.
2. Do not remove the roll from its packaging before the application.
3. Do not block the structure's existing ventilation.
4. Do not apply on dirty, wet, dusty or humid surfaces.
5. Do not leave the roll outside its packaging during the night.
   If possible use the entire product which has been removed from its packaging on the same day.
6. Do not apply when the weather is cold or humid and/or when the attic is very humid (the temperature of the areas in which the various materials are in contact should be at least 10 °C).
7. Avoid making the four sheets overlap (membrane overlap).

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Fairfield Hotel
Las Vegas - Nevada, 2000

Assumption of Mary Church
Dobrova - Slovenia 2010

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02/11 - 2000