Technical data sheet

DIMPLED FACED MEMBRANE FOR FOUNDATIONS AND WALLS

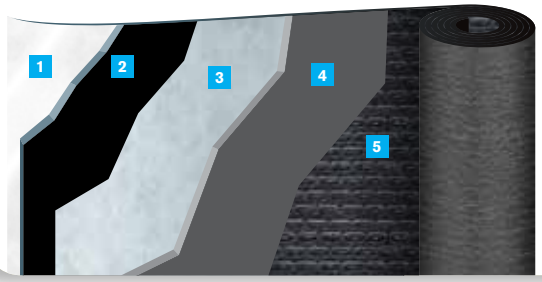
Bituminous membrane for waterproofing foundation walls and vertical embankment

Description

Pre-fabricated waterproofing membrane made of distilled bitumen and elasto-Plastomers (APP type).
DIMPLED FACED MEMBRANE FOR FOUNDATIONS AND WALLS and especially designed for waterproofing foundation walls and vertical embankments, ensuring outstanding performance of both adhesion and workability.
It features a composite spun bond non-woven polyester fabric reinforcement, with good mechanical properties and excellent dimensional stability.
DIMPLED FACED MEMBRANE FOR FOUNDATIONS AND WALLS whose exposed side is protected by embossed dimpled elements, which constitute a durable exterior protection, with features of puncture resistance much higher than normal HDPE sheets generally used.
Therefore, a single product replaces the various products used normally, ensuring a better impact resistance and proper drainage, in addition it allows substantial savings in labour costs.
Moreover the embossed dimpled elements allow the possibility to successfully apply panels made of insulating materials, geotextiles and other materials if the work require their specific use; the particular compound of the DIMPLED FACED MEMBRANE FOR FOUNDATIONS AND WALLS guarantees perfect adhesion of the application materials even during the backfilling of the excavation.
The DIMPLED FACED MEMBRANE FOR FOUNDATIONS AND WALLS is equipped with two side selvedges, which ensure in the overlapping areas the same thickness of the embossed layer. In the overlapping of the head joins and in those particularly complex (foundation slab, etc..) you will have to first apply a 4 mm strip of smooth membrane 14/25 cm wide (pontage) on which will be welded the edges of the DIMPLED FACED MEMBRANE FOR FOUNDATIONS AND WALLS, without further overlap.

Stratigraphy

1. PE film
2. Waterproofing mass
3. Single strand composite polyester fabric
5. Waterproofing mass
6. PE film



Methods of application

Prepare the surface with a bituminous primer either by brush or airless, approx. 200/400 g/m^2.
Position the pre-measured rolls on the vertical application surface, making sure to mechanically fix the upper portion with the appropriate bar and nails.
The membrane is normally applied by gas torch or hot air, making sure to provide for side & head laps, respectively of 10 & 15 cm.
Also lay at the bottom of the excavation and over a excess portion of the dimple sheet an appropriate perforated drainage tube.
For further information and news it is recommended to consult the PLUVITEC technical literature; our Technical office is always available to evaluate particular problems and to provide the necessary assistance to best apply our waterproofing membranes.

Application of insulation or drainage elements

Once the membrane has been applied, by simply torching the surface, it is possible to apply insulation panels or drainage elements which are capable of increasing resistance and drainage to the system.
The presence of the dimples (more than 1000/m^2) allow to glue the insulation panels or geo-textiles in polypropylene and/or polyester without the use of oxidized bitumen, cold adhesives or mechanical fixing.

Fields of use

CE

EN13969 *Retaining walls* (Certificate n° 0958-CPR-2045/1)

	N° layers			Method of application						Type of application			Type				
	Single Layer	Double Layer	Multilayer	Torch	Hot Air	Mixed (Torch / Air)	Cold Bond Glue	Mechanical Fixing	Thermo Adhesive / Self Adhesive	Fully Bonded	Partially Bonded	Loose Laid	Complimentary Layer	Top Layer	Heavy Protection	Anti-root	Other Uses
DIMPLED FACED FOUNDATIONS P 4.8 KG/M^2	▪	▪	▪	▪						▪			▪				

The waterproofing membrane based on distilled bitumen and polymers, as shown in this data sheet does not require the issue of a MSDS, because it does not contain dangerous substances. The information data sheet for the proper use of products is available.

How to apply

DIMPLED FACED MEMBRANE FOR FOUNDATIONS AND WALLS

Application

- Apply, by roller or airless, bituminous primer, approx. consumption 200/400 g/m². (Draw. N.1)
- Position the membrane sheets staggered, making sure to provide side laps of 10 cm; the membranes must be applied to the substrate fully bonded by means of a gas torch or specific hot air machine. (Draw. N.2)
- In the overlapping of the head joins and in those particularly complex (foundation slab, etc..) you will have to first apply a 4 mm strip of smooth membrane 14/25 cm wide (pontage) on which will be welded the edges of the DIMPLED FACED MEMBRANE FOR FOUNDATIONS AND WALLS without further overlap.
- Lay at the bottom of the excavation and over a excess portion of the dimple sheet an appropriate perforated drainage tube. (Draw. N.3)
- After having laid an appropriate bed of drainage material over the tube, back fill.

Recommendations

To best use the technical characteristics of bituminous membranes and guarantee the maximum performance and durability of the jobs where they are used, some simple but fundamental rules must be respected.

- The rolls are to be stored in an upright position, indoors in a dry and ventilated area, away from heat sources. Absolutely avoid the stacking of rolls and pallets for storage or transport to avoid possible deformations which may compromise a perfect installation. It is recommended to store the product at temperatures above 0°C.
- The rolls shall be kept in a warm or heated storage area during application, should the workability of the material deteriorate or become stiff and difficult to install during application, these should be returned to the heated storage area and substituted with new rolls. The rolls that are temporarily stored on the roof before application, shall be kept elevated by being left on their own pallets and shall be covered and protected from the weather.
- The application surface must be smooth dry & clean.
- The application surface must be previously treated with a suitable bituminous primer, to eliminate dust and enhance the adhesion of the membrane.
- In situations of application on vertical surfaces superior to 2 meters or on very sloped substrates, apply suitable mechanical fixings to the head laps, after which they will be sealed when torching the head laps.
- The application must be done at temperature higher than +5°C.
- The application must be interrupted in adverse weather conditions (high humidity, rain, etc.).
- The pallets on which the rolls are packaged are intended for normal warehouse use.
- The materials on stock should be rotated following a first in first out rotation.

Technical data

Technical Characteristics	Measure Units	Reference Norm	P	Tolerance
Type of reinforcement			Polyester	
Upper face finish			PE film	
Lower face finish			PE film	
Length	m	EN 1848-1	7,5 -1%	
Width	m	EN 1848-1	1,08 -1%	
Mass	kg/m²	EN 1849-1	4,8	±10%
Cold flexibility	°C	EN 1109	-15 *	
Shear resistance L / T	N / 5 cm	EN 12317-1	300/200	-20%
Tensile strength L / T	N / 5 cm	EN 12311-1	400/300	-20%
Elongation at break L / T	%	EN 12311-1	35/35	-15
Tearing resistance L / T	N	EN 12310-1	120/120	-30%
Static puncture resistance	kg	EN 12730	10	
Dynamic puncture resistance	mm	EN 12691	700	
Dimensional stability	%	EN 1107-1	-0,3	
Fire resistance		EN 13501-5	F ROOF	
Fire reaction		EN 13501-1	F	
Watertightness	kPa	EN 1928	60	

* Cold flexibility of membrane before dimples.

Sizes & packing

	P 4,8 kg/m²
Rolls size [m]	7,5 x 1,08
Rolls per pallet	25
Square meters per pallet [m²]	202,5

Sizes & packing may vary depending on the type of transportation. The technical data given is based on average values obtained during production. We reserve the rights to change or modify the nominal values without prior notice or advice. The information contained in this data sheet are based on our experience. We cannot take any responsibility for a possible incorrect use of the products. The customer has to choose under their own responsibility a product fit for the intended use.

technical data sheet

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MATCO S.r.l. - Via Quadrelli 69 - 37055 - Ronco All'Adige - Verona - Italy
Tel: +39.045.6608111 - Export tel: +39.045.6608132 - Fax +39.045.6608177
www.pluvitec.com - info@pluvitec.com

Company with certified system